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VOLUME 91

THE HENRY DRAPER CATALOGUE

0^h, 1^h, 2^h, AND 3^h

BY

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AND

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PREFACE.

IN the development of any department of Astronomy, the first step is to accumulate the facts on which its progress will depend. This has been the special field of the Harvard Observatory. An attempt is made to plan each investigation on such a scale that it will not be necessary to repeat it shortly, for a larger number of stars. Speculations unsupported by facts have little value, and it is seldom necessary in such investigations as are carried on here, to form a theory in order to learn what facts are needed. An observer also is likely to be prejudiced if he has already formed a theory to which he thinks the facts should conform. The present work is a good example of collecting facts which it was known would be of value. A few years ago, astronomers learned that many properties of the stars depend on the class of their spectra. The only means of determining this for great numbers of stars in all parts of the sky, is contained in the Harvard collection of photographs. To extract this, promised to be a large undertaking, and it was advisable to make the classification complete for as faint stars as possible, otherwise it might later be necessary to repeat the work. It was accordingly undertaken by Miss Cannon, who, with unflinching enthusiasm, by four years of persistent work, beginning in October, 1911, completed the classification. It was found practicable by means of the investigations contained in H.A. 72, Nos. 6 and 7, 76, Nos. 9 and 12, 80, Nos. 7, 9, and 13, to determine the visual and photographic magnitudes on the International Scale. The best values that can now be found for them are included in the present volume, the first of nine which will be required to contain the entire catalogue. If better values of the magnitudes can be found, they will be substituted in the later volumes.

To prepare this material for publication proved to be laborious. Miss Cannon was aided by several assistants, the average number being five. It was evidently best that she should restrict her own work to those portions which could not readily be undertaken by the others. This included the classification, the revision, and the supervision of the whole. Two years more, making six in all, served to furnish copy for the present volume and a large part of that needed for the later volumes. It is expected that another

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two years will complete the copy for the remaining volumes. Among the assistants who have participated in this work at different times may be mentioned Misses Grace R. Brooks, Alta M. Carpenter, Florence Cushman, Edith F. Gill, Mabel A. Gill, Marian A. Hawes, Hannah S. Locke, Joan C. Mackie, Louisa D. Wells, and Marion A. White. The excellent progress made is largely due to the interest and skill shown by all who have taken part in the work. The generous contribution of Mr. George R. Agassiz of the salaries of two assistants for the entire period has rendered this early publication possible.

To secure the greatest efficiency, it was evidently necessary to employ the methods of scientific management. A loss of one minute in the reduction of each estimate would delay the publication of the entire work by the equivalent of the time of one assistant for two years. It was therefore important to study with care each step in the reduction, including the identification, the preparation of the card catalogue and copy for the printer, the determination of the magnitudes, and the checking of the entire work.

It is important that the paper used in this Catalogue should not be affected by time. Various authorities assured us that paper containing sixty per cent of rags would be practically permanent. The paper actually employed contains eighty per cent, and its trade mark is "All Rag Book Paper."

It is extremely difficult to represent on paper the various classes of spectra. The best result we have so far attained was published in H.A. 64, No. 4. It is accordingly reprinted here as a Frontispiece.

The rapidity with which the remaining volumes can be issued will depend on the means available for publication. The cost of the present volume has been met by the undersigned.

It is hoped that these volumes will form a lasting tribute to the memory of both Dr. and Mrs. Draper.

EDWARD C. PICKERING,
Director of the Observatory of Harvard College.

CAMBRIDGE, U.S., *December 13, 1917.*

THE HENRY DRAPER CATALOGUE.

THE Henry Draper Catalogue originated in the attempt to collect in a single catalogue a description of all the stellar spectra which could be classified on the photographs of the Henry Draper Memorial. It was shown in May, 1885, that by placing a prism in front of the objective of a photographic telescope, excellent spectra could be obtained of all the stars of sufficient brightness in the field of the instrument. The immediate effect was that the photographic image of each star, instead of appearing as a point, was spread into a line, the rays of different wave lengths being diverted by the prism to different points upon the plate. These lines were then broadened into bands by giving a rate to the driving clock differing slightly from sidereal time. The principal lines in the spectra appear in these bands. The advantages of this method are, first, that the spectra of several hundred stars can be obtained on a single photograph, while with a slit spectroscope only one star can be photographed at a time. Secondly, the loss of light is so small that, even if stars are faint, satisfactory spectra can be obtained. Thirdly, the spectra can be identified with certainty, since they occupy the same relative positions on the photographs as stars on a chart plate, or map.

The classification of the spectra required for the Henry Draper Catalogue was begun by Miss Annie J. Cannon on October 2, 1911, and practically completed September 30, 1915. Some additional spectra were taken from later plates, where faint stars had not been classified previously. The total number of spectra classified is 242,093, relating to about 222,000 stars. The greater portion of the northern stars were classified from 709 plates taken with the 8-inch Draper Telescope, mounted at Cambridge. In like manner, 1,409 plates of the southern stars were used, taken with the Bache Telescope, mounted at Arequipa, Peru. Each of these instruments has, for an objective, an 8-inch Voigtländer Portrait Lens, corrected by Alvan Clark and Sons. Two prisms having angles of 13° and 5° were originally used with each instrument. They formed spectra having a dispersion such that for the 8-inch Draper Telescope the intervals between the lines $H\beta$ and $H\epsilon$ were 5.61 and 1.60 mm., respectively.

The corresponding intervals for the Bache Telescope were 5.80 and 2.23 mm. It appeared that the definition was better with the prism giving the larger dispersion attached to the 8-inch Draper Telescope, and with the prism giving the smaller dispersion attached to the Bache Telescope. For this reason, the spectra of much fainter stars could be classified from the photographs taken in Arequipa, than from those taken in Cambridge. Exceptions were made in the case of southern stars which are too dense on plates of small dispersion, and of northern stars so near together that their spectra are superposed on plates of long dispersion. Some northern stars between 0° and $+10^{\circ}$ in declination were also classified from plates of short dispersion taken in Arequipa.

In November, 1900, two prisms, having nearly equal angles of about 6° , were attached to the 8-inch Draper Telescope. They were mounted so that they could be rotated by any desired amount, which was measured by means of a graduated circle. When placed in opposite directions they nearly neutralized each other, while, when turned in the same direction, the dispersion was double that of one of the prisms. The angles adopted were such that the dispersions were the same as those previously employed, 5.61 and 1.60 mm.

A number of photographs showing fainter stars were taken with the 16-inch Metcalf Telescope. The regions selected were the centres of the Harvard Standard Regions described in H.A. 14, 477, and a few others, such as the Pleiades, Praesepe, etc. The distance between the lines $H\beta$ and $H\epsilon$ was here 3.90 mm.

On all of the plates described above, the spectra of the bright stars were dense, so that they could not be classified. Accordingly, spectra taken with a larger dispersion were used. For stars north of declination -20° , from one to four prisms were attached to the 11-inch Draper Telescope. The interval between the lines $H\beta$ and $H\epsilon$ varied from 19.63 to 80.50 mm. These spectra have already been described in H.A. 28, Part 1, but as a different system of classification was there employed by Miss Maury, the spectra were again classified by Miss Cannon. This work was extended to stars of the fifth magnitude, and a few that were fainter, by means of H.A. 56, No. 4. For the southern stars, brighter than the sixth magnitude, the spectra are taken from H.A. 28, Part 2, and H.A. 56, No. 5. From one to three prisms were employed, and the interval from $H\beta$ to $H\epsilon$ varied from 21.57 to 72.15 mm.

From August, 1885, to November, 1894, Seed 26+, from December, 1894, to December, 1899, Cramer Crown, from January, 1900, to May, 1911, Seed G. E. 27, and since June, 1911, Hammer Special plates were generally used.

Substantially the same classification has been used in all the publications of the Henry Draper Memorial, except in the case of H.A. 28, Part 1. Slight changes have

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been introduced from time to time as experience showed that the classification could be improved. For instance, Class H, used in H.A. 27, has been abandoned, since it has been found that it is identical with Class K, when photographed under favorable conditions. The letters were originally applied empirically, a separate letter for each class of spectrum which appeared to be different. Later, it was found that nearly all the spectra fell into the classes B, A, F, G, K, and M, which thus formed a continuous sequence. Intermediate spectra are indicated by numbers representing tenths of the interval. Thus, A₅ represents a spectrum midway between A₀ and F₀. The numeral is omitted when a precise classification cannot be made. Class B was found to precede A, but the letters could not be reversed without causing confusion. Class P, designating gaseous nebulae, and Class O, stars of the fifth type, appear to precede Class B. The unanimous adoption of this system by an International Committee appointed by the Solar Union has secured its universal acceptance. The countries represented on this Committee were Canada, England, France, Germany, Holland, and the United States.

The designations of the lines used in describing the spectra, are generally the same as in the previous volumes. An exception is made, however, in the case of the series of lines first found in the spectrum of ζ Puppis. Professor Pickering showed these lines to be so closely represented by a modification of Balmer's formula, that he assumed them to be due to "hydrogen under conditions of temperature or pressure yet unknown," as stated in H. C. 16, January 12, 1897. The lines were therefore called "additional hydrogen lines," with the specific designations as follows: line 5411, H β ' ; 4541.9, H γ ' ; 4200.3, H δ ' ; 4026.0, H ϵ ' ; 3924.0, H ζ ' ; 3860.8, H η ' ; 3815.7, H θ '. Recent investigators, however, find by experiments in the laboratory that these lines are probably due to helium. They are now commonly called ζ Puppis lines and this designation is accordingly adopted here.

The classification and designation of peculiar spectra present great difficulties. Some spectra are so peculiar that they can not be assigned to any known class, and are marked Pec. in Table I. Others show deviations of various kinds and degrees, and yet resemble the typical spectra in the most essential characteristics. In the latter case, the class which the peculiar spectrum resembles most nearly is given, followed by the letter p. A description of the deviation from the typical spectrum will then be found in the Remarks following Table I. The deviations may occur in several ways, as has already been discussed in H.A. 28, 143. First, in the width of the lines. The difference in the width of the lines, especially whether the lines are diffuse or sharp, was early recognized. On September 8, 1887, the spectra of α Cygni, in which the lines are very sharp, and of α Aquilae, in which they are diffuse, were

photographed on the same plate, to prove that the difference was due to the star and not to the instrument, or condition of the air. Narrow lines will appear hazy, or even double, if the focus is poor, or the air unsteady, and a slit spectroscope is much to be preferred to an objective prism for determining this condition. Whenever the width of the lines appeared to be abnormal, it is noted in the Remarks. With the larger dispersion in H.A. 28 and 56, the deviation from the normal in the width of the lines was always noted, when certainly seen. When the lines are broad, the spectra are designated in H.A. 28, 1, by the letter "b," and in H.A. 28, 2, by Remark 18. When narrow, by the letter "c" and Remark 40, respectively. For convenience of reference, a list of bright stars in whose spectra the lines are narrow, was given in H.A. 56, 162.

Secondly, deviations may occur in the intensity of certain lines in stellar spectra. Numerous spectra in Classes A₀ to A₅, show the double silicon line, 4128.1, 4131.1 to be of increased intensity, and in other spectra the strontium lines 4077.9, 4215.7 are very strong. Lists of a few of these peculiar spectra are given in H.A. 56, 113, 161. The great intensity of these strontium lines in spectra of various classes, such as θ^1 Microscopii of Class A₂, ξ Phoenicis of Class F₀, and ζ Capricorni of Class G₅, is of interest in connection with the relation of these lines to the absolute brightness of the stars, and to the possibility of distinguishing between the so-called "giants" and "dwarfs." Numerous other lines, including those of hydrogen, have also been found to be of abnormal intensity in certain spectra. In the case of C.D.M. $-27^\circ 178$, R. A. $0^h 31^m.7$, Dec. $-27 50'$, the continuous spectrum is Class G₅, but the hydrogen lines are as strong as in Class F₅. In some spectra of Class K₅, or Ma, such as B.D. $+50^\circ 1725$, R. A. $10^h 5^m.3$, Dec. $+49^\circ 58'$, and C.D.M. $-39^\circ 14192$, R. A. $21^h 11^m.5$, Dec. $-39^\circ 15'$, several lines, including 4435 and 4455, are abnormally intense.

A third peculiarity in stellar spectra is the presence of bright, or emission, lines. At least 750 spectra are known to have bright lines. The gaseous nebulae, Class P, the Fifth Type, Class O, the P Cygni Type, and the Novae are discussed in H.A. 76, No. 3. The presence of bright lines in spectra of Class M, characteristic of long period variables, is indicated by the combination, Md. No symbol has ever been adopted to show the presence of bright lines in spectra of Class B, although the use of a suffix, such as " β " or "h," has been suggested. It seemed best, however, to continue to designate these spectra by placing the letter "p" after the class, until some definite action should be taken by the Committee on Stellar Classification. These spectra may easily be found by means of the Remarks following Table I.

The other two deviations consist in a periodic doubling of the lines in the spectrum, also indicated by the letter "p," and in the existence of the lines of two

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classes of spectra completely superposed, designated composite spectra. A large part of the bright stars having composite spectra are known to be double, either visually or spectroscopically. It is assumed that this is always the case, and two lines are accordingly given to such stars.

Miss Cannon has described the classification in full in H.A. 28, 146, and more concisely in H.A. 56, 66. A classification of the gaseous nebulae is given in H.A. 76, 20. For convenience, the classification as used in the present volume is again given below.

Class Pa. Typical nebula, I.C. 418, R. A. $5^h 22^m.8$, Dec. $-12^\circ 46'$. The double line, 3726, 3729, is more conspicuous than the chief nebular lines, 5007.0 and 4959.0. The hydrogen lines $H\alpha$, $H\beta$, $H\gamma$, $H\delta$, $H\epsilon$, and $H\zeta$ are bright.

Class Pb. Typical nebula, The Great Nebula of Orion. Lines 5007.0 and 4959.0 are more intense than in Class Pa.

Class Pc. Typical nebula, I.C. 4997, R. A. $20^h 15^m.6$, Dec. $+16^\circ 25'$. Line 4363.4 is the most conspicuous. Novae usually show this line much stronger than 5007.0 when they first become nebulae.

Class Pd. Typical nebulae, N.G.C. 6826, R. A. $19^h 42^m.1$, Dec. $+50^\circ 17'$, and N.G.C. 6326, R. A. $17^h 12^m.9$, Dec. $-51^\circ 40'$. The chief nebular line, 5007.0, is the strongest line. The greater portion of the gaseous nebulae belong to this and the following class.

Class Pe. Typical nebulae, N.G.C. 7662, R. A. $23^h 21^m.1$, $+41^\circ 59'$, and N.G.C. 7009, R. A. $20^h 58^m.7$, Dec. $-11^\circ 46'$. This class differs from Class Pd in having line 4685.9 present.

Class Pf. Typical nebula, N.G.C. 40, R. A. $0^h 7^m.6$, Dec. $+71^\circ 32'$. A bright band whose centre is at 4650 is the most conspicuous portion of this spectrum and appears to ally it with spectra of Class O.

Class Oa. Typical stars, B.D. $+35^\circ 4013$, R. A. $20^h 8^m.2$, Dec. $+35^\circ 54'$, and C.P.D. $-60^\circ 2578$, R. A. $11^h 5^m.8$, Dec. $-60^\circ 26'$. A broad bright band, whose centre is at 4648, is the most conspicuous portion of these spectra. $H\gamma$ and $H\delta$ are bright, and several other bright bands are seen.

Class Ob. Typical stars, B.D. $+35^\circ 4001$, R. A. $20^h 6^m.5$, Dec. $+35^\circ 53'$, and C.D.M. $-23^\circ 4553$, R. A. $6^h 50^m.0$, Dec. $-23^\circ 48'$. A wide, bright band, whose centre is at the wave length 4686, is the most characteristic feature of these spectra. The hydrogen lines $H\beta$, $H\gamma$, and $H\delta$ are bright, and also those of the ζ Puppis series.

Class Oc. Typical stars, B.D. $+36^\circ 3987$, R. A. $20^h 13^m.3$, Dec. $+37^\circ 7'$ and C.D.M. $-41^\circ 10972$, R. A. $16^h 45^m.3$, Dec. $-41^\circ 41'$. The bands are narrower than in

Classes Oa and Ob, and two well separated lines are seen at 4686 and 4638, the former being twice as bright as the latter. The hydrogen lines are bright, and also the lines of the ζ Puppis series. No dark lines are seen.

Class Od. Typical stars, ζ Puppis and λ Cephei. All lines are dark except 4686 and 4638, which are bright. Seven dark lines of the ζ Puppis series have been photographed. The helium line, 4471.5, is present but very faint in ζ Puppis. Several faint dark lines between $H\beta$ and $H\gamma$ are seen in the spectrum of λ Cephei, but not in that of ζ Puppis.

Class Oe. Typical star, 29 Canis Majoris, R. A. $7^h 14^m.5$, Dec. $-24^\circ 23'$. The spectrum resembles that of ζ Puppis in having all lines dark except 4686 and 4638. Numerous helium and other dark lines are present. Line 4097.5, sometimes attributed to silicon, and the silicon line, 4089.0 are at their maximum intensity.

Class Oe5. Typical star, τ Canis Majoris, R. A. $7^h 14^m.5$, Dec. $-24^\circ 47'$. All the lines are dark. This spectrum is clearly intermediate between those of Classes Oe and Bo. It resembles those of Class Oe in the presence and intensity of the ζ Puppis series, and those of Class Bo with respect to the helium lines. No bright bands are seen, but the strong dark lines 4649.1 and 4685.9 are present.

Class Bo. Typical star, ϵ Orionis. The hydrogen lines are 0.3 as intense as in the spectrum of α Canis Majoris. The ζ Puppis series is present, but much fainter than in Class Oe5. Oxygen lines are strong. Line 4649.1 is slightly more intense than the helium lines 4026.2 and 4471.5, which are equally strong. The triplet 4069.9, 4072.3, and 4075.9 is well marked. Lines 4649.1, 4116.3 and 4089.0, reach their greatest intensity in this class and decrease very rapidly in succeeding classes of spectra.

Class B1. Typical stars, β Canis Majoris and β Centauri. The hydrogen lines are seen from $H\beta$ to $H\gamma$. The ζ Puppis series is not distinctly seen. The lines of helium are more intense while the silicon and oxygen lines are fainter than in Class Bo. Line 4471.5 exceeds 4649.1, while 4120.9 exceeds 4116.3, in intensity.

Class B2. Typical stars, γ Orionis and α Lupi. The lines of helium are at their maximum intensity in this and the following class. Line 4116.3 is not seen, and lines 4089.0 and 4649.1 are faint.

Class B3. Typical stars, τ^A Orionis and α Pavonis. The hydrogen lines are about 0.5 as intense as in α Canis Majoris. The helium lines, while not stronger than in Class B2, are more prominent, due to the disappearance or extreme faintness of the lines, 4069.9, 4072.3, 4075.9, 4089.0, 4116.3 and 4649.1. Helium lines having the greatest intensities are 3819.6, 4009.4, 4026.2, 4144.0, 4387.9, 4471.5, and 4921.9.

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Class B₅. Typical stars, η Tauri and ϕ Velorum. These spectra show an advance towards Class A₀ in the increased intensity of the calcium line, K, and of the double silicon line 4128.1, 4131.1, which is stronger than the helium line 4120.9, and fainter than 4144.0. Line 4481.2 is 0.7 as intense as 4471.5.

Class B₈. Typical stars, β Persei and γ Gruis. The helium lines 4026.2 and 4471.5 are present, together with several lines prominent in the spectra of Class A₀. Lines 4471.5 and 4481.2 are approximately equal. Line K is less intense than 4026.2.

Class B₉. Typical stars, λ Aquilae and λ Centauri. The spectrum is nearly like that of Class A₀, except that 4026.2 is seen and the line K is somewhat fainter than in Class A₀.

Class A₀. Typical star, α Canis Majoris. The hydrogen lines are at their maximum intensity, and line K is 0.1 as intense as H δ , or less. On plates having sufficient dispersion, the calcium line H, at 3968.6, is separated from He, 3970.2, and is nearly as intense as line K. Line 4481.2 is the strongest except the hydrogen lines and line K. On a photograph taken with the 13-inch Boyden Telescope, with the dispersion of three prisms, 93 solar lines were measured.

Class A₂. Typical stars, δ Ursae Majoris and ι Centauri. The line K is 0.3 or 0.5 as intense as H δ . Solar lines are well marked, especially lines 4481.2, 4227.0, and 4233.6. The two latter form a nearly equal pair. No helium lines are seen in this, or any following class.

Class A₃. Typical stars, α Piscis Austrini, and τ^3 Eridani. The line K is more than 0.5 as intense as the compound line H and He, and is 0.8 as intense as H δ . The metallic lines are more numerous and more intense than in Class A₂, while the hydrogen lines are slightly fainter.

Class A₅. Typical stars, β Trianguli and α Pictoris. The line K is 0.9 as intense as the compound line H and He, and more intense than H δ . Line 4481.2 is no longer the most conspicuous among the solar lines. Lines 4299.3, 4300.8, and 4302.5 are well marked.

Class F₀. Typical stars, δ Geminorum and α Carinae. The lines of hydrogen are about 0.5 as intense as in α Canis Majoris. The line K is as strong as the compound line H and He, and about 3.0 as intense as H δ . The lines 4305.8, 4308.0, and 4309.6 and other lines which form the absorption band called G by Fraunhofer, are faint and inconspicuous.

Class F₂. Typical star, π Sagittarii. This spectrum resembles Class F₀, except that there is more appearance of continuity in the band G, due to increased strength of lines 4305.8 to 4315.2.

Class F5. Typical stars, α Canis Minoris and ρ Puppis. The hydrogen lines are 2.0 as intense as in the Sun, and metallic lines are fainter and less numerous. Line 4325.9 is about 0.1 as strong as $H\gamma$. On plates with small dispersion, the Fraunhofer band G appears to be nearly continuous from 4299.3 to 4315.2. The double line 4308.0 and 4309.6 is more intense than 4315.2. Line 4227.0 is well marked among the numerous lines, but is not 0.5 as strong as $H\gamma$.

Class F8. Typical stars, β Virginis and α Fornacis. The spectrum resembles that of the Sun, except that the hydrogen lines are stronger, and a few of the metallic lines are fainter.

Class G0. Typical stars, α Aurigae and β Hydri. The spectrum closely resembles that of the Sun. The hydrogen lines are no longer conspicuous as a series of lines. $H\gamma$ is 1.5 as intense as 4325.9, and 3.0 as intense as the adjacent line, 4337.6, when the dispersion is sufficient to show the two lines separately. The lines 4076.8 to 4077.9, $H\delta$, and 4227.0 are nearly equal in intensity. The band G is continuous on photographs taken with one or two prisms. The continuous spectrum shows no very marked changes in the distribution of light, from $H\beta$ to $H\epsilon$, although there is a slight gradual decrease from $H\gamma$ to $H\epsilon$. The bands H and K are very conspicuous.

Class G5. Typical stars, κ Geminorum and α Reticuli. The hydrogen lines are slightly fainter than in Class G0. $H\gamma$ when combined with 4337.6 is equal to 4325.9; when separated, $H\gamma$ is fainter than 4325.9. Several spaces appear brighter than adjacent portions, and in the distribution of light there is a decided advance towards Class K0.

Class K0. Typical stars, α Bootis and α Phoenicis. The hydrogen lines are fainter than in Class G5 and the light of the continuous spectrum shows a decided decrease from $H\gamma$ to $H\epsilon$. $H\gamma$ is about 0.5 as strong as 4325.9. Line 4227.0 is 3.0 as intense as in Class G0. Bands H and K reach their greatest intensity. Line 4227.0 is 2.0 as intense as the compound line 4172 and nearly 3.0 as intense as lines 4383 to 4385. The band G, extending from 4299 to 4315 is continuous and is more conspicuous than line 4227.0. Several portions appear brighter than adjacent parts, such as from 4077.9 to $H\delta$, 4215.7 to 4227.0, 4470 to 4525 and 4614 to 4648, approximately.

Class K2. Typical stars, β Cancri and ν Librae. The spectrum resembles Class K5 in the increased intensities of several lines, as 4227.0, and a general faintness of the continuous portion towards the end of shorter wave length. The band G is still continuous.

Class K5. Typical star, α Tauri. The bands H and K and line 4227.0 are the most conspicuous absorption lines. The band G is no longer continuous, owing to

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the disappearance of several of the fainter lines. The double lines 4383 to 4385 and 4405 to 4408, form a conspicuous pair, of which the one of shorter wave length is somewhat stronger. Faint breaks in the light are seen at the wave lengths 4762, 4954, and 5168, which are the beginning of the absorption bands of Class M. There is also a sudden diminution in light at $H\beta$, which is nearly as well marked as the similar change at 4762.

Class Ma. Typical stars, α Orionis and γ Hydri. The spectrum is banded. The bands extending from 4762 to 4954 and from 5168 to 5445 are well marked. The change in light at $H\beta$ is much less conspicuous than at 4762. Several bright spaces are seen, such as from 4556 to 4586, and from 4657 to 4668. The lines of the G band are well separated, and line 4315.1 is very faint. Line 4227.0 is the most conspicuous absorption line. The spectrum is faint towards the end of greater wave length, so that bands H and K are generally barely seen.

Class Mb. Typical stars, ρ Persei and γ Gruis. The edges of the absorption bands, at wave lengths 4762, 4954, 5168, and 5445 are strong and appear somewhat like bright bands. These bands fade gradually towards the edge of shorter wave length. Line 4227.0 is very wide and sometimes appears to be as intense as $H\delta$ in the spectrum of α Canis Majoris. Conspicuous bright bands of equal intensity are seen from 4556 to 4586 and from 4614 to 4626. Lines 4299.3, 4300.8, and the compound line 4305.8, 4308.0 and 4309.6 are the only well marked lines remaining of the band G. On isochromatic plates, absorption bands are also seen having edges at the wave lengths 5763, 5816, and 5857, approximately.

Class Mc. Typical stars, W Cygni and RX Aquarii. The continuous spectrum is fainter, and the bright edged bands are stronger, than in Classes Ma and Mb, so that the spectrum appears to be of a fluted character, and on plates of small dispersion many of the dark lines seem to have disappeared.

Class Md. Typical stars, χ Cygni and o Ceti. This designation is used for spectra of any division of Class M, in which at least one hydrogen line is bright. The greater portion of the variable stars of long period have this class of spectrum. The spectra differ widely. Either $H\beta$, $H\gamma$, or $H\delta$ may be the strongest bright line, while the underlying spectrum may belong to Class Ma, Mb, or Mc. The subject is further complicated by changes in the relative intensity of the hydrogen lines and probably in the class of spectrum, connected with the variation in the light of the star. As an example, the spectrum of 154615, R Serpentis, may be cited. On April 25, 1912, the bright line, $H\delta$, was seven times as intense as $H\gamma$, while on April 18, 1914, the two lines were of nearly the same intensity. On the first date, the star was of the ninth magnitude, and the phase was 40 days before maximum. On the

second date, the star was at maximum light, about the sixth magnitude. It is evident that no accurate subdivision of these spectra can be made until observations have been obtained at different points on the light curve. It has therefore seemed best to use the designation Md without numeral, in Table I, and to give additional facts, such as the intensities of the bright hydrogen lines, assuming $H\gamma$ to be equal to 10, in the Remarks. Several spectra which have hitherto been called Md₁, or Md₂ in which $H\beta$ is the strongest bright line, are found to be peculiar and are designated Pec. in Table I. The variable stars R Andromedae, U Cassiopeiae, S Cassiopeiae, R Lyncis, R Canis Minoris, T Geminorum, and R Cygni may be given as examples. These spectra do not show the titanium bands having bright edges at 4762, 4954, and 5168 as in all divisions of Class M, but more nearly resemble the spectrum of π^1 Gruis, which may be placed in a subdivision of Class R, assuming some peculiarities.

Class R. This letter was assigned in 1908, to a few spectra which on photographs of small dispersion, resemble those of Class N between $H\beta$ and $H\gamma$, but which contain so much blue light that the spectrum is visible as far as the calcium bands, H and K. A list of spectra assigned at that time to Class R is given in H. C. 145. A careful study of these spectra shows that they may be subdivided into at least three classes, which are described below.

Class Ro. Typical star, S.D. $-10^{\circ} 5057$, ptm. magn. 7.04, R. A. $19^h 17^m.6$, Dec. $-10^{\circ} 54'$. The distribution of light resembles that in Class G₅ or K₀, and the absorption bands H and K, are well seen. The dark carbon band at 4700 is wide and strong, and the dark band 4395 is about equal to Fraunhofer's G band. Lines 4227.0, 4233.6, 4236.0, and 4239.0 are well marked, and on photographs having small dispersion the appearance at this region is that of a wide, continuous band of absorption. Some spectra have been found during observations for this catalogue, which may be considered to be intermediate between the spectra of Classes K and Ro. One of the best examples is the spectrum of the star S.D. $-19^{\circ} 3634$, ptm. magn. 8.7, R. A. $13^h 1^m.1$, Dec. $-19^{\circ} 31'$. This spectrum contains the wide band of absorption near 4227 as in Class Ro, and a fainter band at 4700. Other peculiar spectra of Class K show the same bands in more or less marked degree, as stated in the Remarks.

Class R₃. Typical star, B.D. $+5^{\circ} 5223$, ptm. magn. 8.8, R. A. $23^h 44^m.0$, Dec. $+5^{\circ} 50'$. The H and K bands of calcium are visible, but they are fainter than in Class Ro, and the continuous spectrum between these bands and $H\gamma$ is not more than 0.5 as intense as in Class Ro.

Class R₅. Typical star, S.D. $-3^{\circ} 1685$, ptm. magn. 7.5, R. A. $6^h 56^m.1$, Dec. $-3^{\circ} 6'$. In the region of shorter wave length than 4240, the continuous spectrum is barely

visible on plates of normal exposure. When the dispersion is small, the spectrum appears to consist of three wide bright bands, whose centres are at the approximate wave lengths, 4300, 4400, 4840, and whose intensities are estimated to be 3, 6 and 10, respectively.

Class R8. Typical star, B.D. $+61^{\circ} 667$, ptm. magn. 7.92, R. A. $3^{\text{h}} 57^{\text{m}}.2$, Dec. $+61^{\circ} 31'$. The spectrum is very faint from 4240 to the violet, so that on photographs of long dispersion, it is difficult to distinguish between this Class and Class Na.

Class Na. Typical star, 19 Piscium, B.D. $+2^{\circ} 4709$, var., R. A. $23^{\text{h}} 41^{\text{m}}.3$, Dec. $+2^{\circ} 56'$. The spectrum is visible as far towards the violet as the bands H and K, but the portion between 4240 and K is even fainter than in Class R8. When the dispersion is short, the dark band 4700 separates the spectrum into two wide bright bands, the portion from 4400 to 4700 being estimated as 0.8 as intense as that from 4700 to 5100. According to this estimate of the distribution of light, spectra of this Class may be designated 0, 8, 10, when compared with those of Class R5, in which the bands were estimated as 3, 6, 10.

Class Nb. Typical star, B.D. $+67^{\circ} 350$, ptm. magn. 7.39, R. A. $4^{\text{h}} 40^{\text{m}}.8$, Dec. $+67^{\circ} 59'$. This spectrum may be designated 0, 6, 10, when the distribution of light is considered. The bright portion from 4400 to 4700 is now only 0.6 as intense as the portion of greater wave length than 4700.

The spectra of some very red stars have recently been obtained with the 24-inch Reflector, using plates stained with pinacyanol or dicyanin. Some examples are the spectra of the variable stars, VX Andromedae, and S Cephei, and also of the stars R. A. $6^{\text{h}} 33^{\text{m}}.3$, Dec. $+22^{\circ} 42'$, and $+49^{\circ} 3673$, R. A. $21^{\text{h}} 51^{\text{m}}.5$, Dec. $+50^{\circ} 1'$. These spectra show no light of shorter wave length than $H\beta$, and probably form later subdivisions of Class N, but it seems wiser to wait until a larger amount of material has been collected, before assigning definite letters to these very peculiar spectra. In the meantime, the facts so far observed are given in the Remarks.

Pec. All spectra which can not be assigned to any known class, considering their principal characteristics. This includes the spectra of Novae, a few variables, very red stars, and some others.

Con. Spectra apparently continuous. This includes the spectra of nebulae without bright lines, or of clusters which resemble such nebulae with the dispersion employed. As these objects appear as surfaces, and objective prisms are used, dark lines would not be visible. Neb. or Cl. is then given in the magnitude column according to the description of the object in H.A. 60, 8.

Table I contains the first 25,763 stars whose spectra have been classified. The entire catalogue will, therefore, fill nine volumes of these Annals. The stars preced-

ing R. A. $4^h 00^m.0$ are contained in the present volume. A description of each column of the table is given below, preceded by its heading.

H.D. A number for reference, to be added to the number in heavy type at the top of the first column. It is recommended that these numbers be preceded by the letters H.D., indicating the Henry Draper Catalogue, when reference is made to their designations in this catalogue. Thus, the first star on page 17 may be referred to as H.D. 101. This notation also conforms to the designations H.A., H.B., and H.C., which are already in use to denote the Harvard Annals, Bulletins, and Circulars, respectively. In like manner, H.N., H.P., H.R., H.S., and H.V. are used to designate the Harvard Nebulae, Photometry, Revised Photometry, Standard Regions, and Variables, respectively.

DM. The number of the star in the Zone of the Bonn Durchmusterung, when its position for 1855 was north of declination -23° . For stars south of this limit, and whose declination in 1875 was north of -52° , the Cordoba Durchmusterung, and for stars south of -52° , the Cape Photographic Durchmusterung, was used. The number of the zone is generally the same as the degree of declination given in the fourth column. When they differ, owing to precession, the number is placed in Italics. The number of the nearest zone is then to be substituted. For stars between 6^h and 13^h of right ascension, the nearest zone is always the northern, for other stars, the southern.

Nearly twelve hundred of these stars are not contained in the Bonn, Cordoba, or Cape Durchmusterungs. They are indicated by the absence of a number in the second column. The spectra of these stars were generally classified from plates taken with the 16-inch Metcalf Telescope.

R. A. 1900. The minutes and tenths of the right ascension for 1900. The right ascension of the first star is given in heavy face figures at the top of the table to the right. These positions are only approximate. Owing to the large number of stars in the Catalogue, they will fall into groups, each containing a number of stars whose right ascension is the same in this table. They are then arranged in the order of declination, the northern star being placed first. It may accordingly happen that, when two stars are near together, the preceding one, as shown by its number in the Durchmusterung, may here follow the other.

Dec. 1900. The declination for 1900, expressed in degrees and minutes.

Ptm. The photometric magnitude. This is taken from H.A. 50 or 54, for stars contained in those works, and is given to hundredths of a magnitude. For other stars, which are north of -62° , the magnitude in the Bonn or Cordoba Durchmusterung is used after reducing it to the photometric scale by means of the tables,

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given in H.A. 72, 214, 245, and H.A. 80, 132. The magnitudes are then given only to tenths. The magnitudes of stars south of -62° , and which are, therefore, not contained in the Cordoba Durchmusterung, are also given only to tenths, and are derived from the photographic magnitudes given in the next column, by subtracting the color index depending on the class of spectrum. The color index is taken from H.A. 80, 151, and has the values for B₀ -0.24 , B₁ -0.22 , B₂ -0.19 , B₃ -0.17 , B₅ -0.12 , B₈ -0.05 , B₉ -0.02 , A₀ 0.00 , A₂ $+0.06$, A₃ $+0.08$, A₅ $+0.14$, F₀ $+0.28$, F₂ $+0.34$, F₅ $+0.42$, F₈ $+0.50$, G₀ $+0.56$, G₅ $+0.78$, K₀ $+1.00$, K₂ $+1.07$, K₅ $+1.18$, M $+1.35$.

Ptg. The Photographic Magnitude. For stars north of declination -19° , in 1875, the magnitudes are derived from the photometric magnitudes, contained in the preceding column, by adding the correction for the class of spectrum given above. For stars south of -19° , the magnitude is taken from the Cape Durchmusterung, first reducing it to the standard scale as described in H.A. 80, 256. It will be noticed that when either the photometric or photographic magnitudes are derived by means of the color index, they are placed in Italics. In the first case, the color index is subtracted, in the second, added. This method is unsatisfactory from its indirectness, but no direct measures are known to exist.

Sp. The Class of Spectrum. A description of the adopted classification will be found on page 5.

Int. The photographic intensity of the spectrum as estimated by Miss Cannon when she observed it. The faintest spectra which could be classified with certainty were estimated as 1, the densest as 10. When a spectrum was too dense to be classified, it was looked for on a plate showing less faint stars. This might be due to a greater dispersion, a larger load on the pendulum of the control clock, a hazy night, or a slower emulsion.

Rem. Remarks are here indicated which furnish much additional information. The letter R refers to additional facts regarding the star, to be found in the Remarks following Table I. When two figures are given they show that the spectrum was classified on another plate. The first figure indicates, in tenths of the interval between two classes, how much the second classification differs from the first. Thus, if the class in column Sp. was F₀, and the spectrum was again estimated F₀, the first figure would be 0; if the second classification was F₅, it would be 5 and if A₅, it would be 5. The average value of the differences of the first 100 of these is ± 0.13 . A comparison of the classification of spectra taken at the Yerkes, Lick, Allegheny, and Mt. Wilson Observatories with those made here is contained in H.A. 56, 263, and gives the average difference ± 0.14 . When the residual was greater

than 5, an estimate on a third plate was made, if practicable. If not, the spectra were re-examined. In case one observation appeared to be wrong, it was rejected, and the facts are given in the Remarks. The second figure indicates the intensity on the second plate. If the spectrum was estimated on a third plate, a hyphen is inserted, and the estimates will be published later. When the estimates of the class differ, the most reliable one is given in Column Sp. The intensities serve to decide which is most likely to be correct; the order of precedence being 6, 5, 7, 4, 8, 3, 2, 9, 10, 1. When the column is not wide enough for a complete remark, it is given in full in the remarks following Table I.

Pl. No. The number of the plate in its series. The letter b indicates that the instrument used was the 8-inch Bache Telescope; the letter c, the 11-inch Draper Telescope; i, the 8-inch Draper Telescope; m, the 16-inch Metcalf Telescope. When the spectrum was taken from H.A. 28, 56, or 76, the volume and page are given and when derived from an unpublished manuscript, the letter m is inserted, instead of the plate number.

Table I is followed by a series of Remarks which give much additional information regarding the individual stars. They include the Bayer designation, additional information regarding the spectrum when it is peculiar, and the position and magnitude of adjacent stars when it is probable that they affect the spectrum. When the stars differ only in declination the spectra are superposed, while equal differences in right ascension are shown at the edges of the spectra. In the case of variable stars, the designation by letter and constellation, and the class are given. Novae are designated by I, long period variables by II, irregular variables by III, short period variables by IV, and Algol variables by V. The magnitude at maximum and minimum, and the period are also given. Parallaxes of 0".1, or more, are inserted from Walkey's Parallaxes of 625 stars. B. A. A. 27, App. Proper motions of 1", or more, are inserted from the list given by van Maanen in A. P. J. 41, 187.

As an example of the facts that can be derived from Table I, it appears that the second star, H. D. 2, is $+56^{\circ}31'42''$, R. A. $0^{\text{h}}0^{\text{m}}0^{\text{s}}$, Dec. $+57^{\circ}13'$ (1900). Its magnitude on the photometric scale is 8.6. From the table in H.A. 72, 217, it appears that its magnitude in the Bonn Durchmusterung is 8.5. Its photographic magnitude is 9.0, found from the photometric magnitude by adding the correction 0.4, since its spectrum is F5. On another plate, the class of spectrum was estimated as F8, intensity 2. The first estimate was made on I 37241, taken with the 8-inch Draper Telescope. The date, length of exposure, and many other facts will be given elsewhere.

TABLE I.
THE HENRY DRAPER CATALOGUE.

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1599	0.0	+67 17	7.7	8.7	Ko	3	..	37909i	51	16838	0.3	-32 59	10.3	9.5	Go	3	..	41067b
2	3142	0.0	+57 13	8.6	9.0	F5	3	3,2	3724ri	52	16293	0.3	-34 4	9.0	10.4	G5	3	..	41067b
3	4550	0.0	+44 40	6.51	6.51	Ao	8	..	37007i	53	10426	0.3	-57 31	7.38	7.4	Ao	6	0,6	41858b
4	5059	0.0	+29 46	8.4	8.7	Fo	3	..	37352i	54	7717	0.3	-60 23	8.4	9.9	Ko	2	..	14382b
5	4825	0.0	+ 1 49	9.0	9.8	G5	3	..	14156b	55	3597	0.3	-68 23	8.7	9.7	Ko	5	2,2	38229b
6	4525	0.0	- 1 4	6.28	7.28	Ko	5	0,7	17321b	56	793	0.4	+80 31	8.9	8.9	Ao	1	..	38964i
7	6090	0.0	- 2 25	9.0	10.0	Ko	2	..	13921b	57	855	0.4	+78 23	9.4	9.5	A2	3	0,2	38964i
8	6018	0.0	- 4 36	10.0	10.6	Go	2	..	14377b	58	3598	0.4	+52 37	7.30	8.30	Ko	4	0,2	3724ri
9	6527	0.0	-21 11	9.2	10.8	K2	3	..	24596b	59	4410	0.4	+46 5	8.4	9.2	G5	2	..	37910i
10	15579	0.0	-43 8	8.8	10.0	G5	3	..	14371b	60	5041	0.4	+16 33	8.6	9.6	Ko	1	..	3813ri
11	7715	0.0	-60 17	8.7	10.0	G5	1	..	14382b	61	6094	0.4	- 2 23	8.6	9.6	Ko	2	..	14156b
12	7716	0.0	-60 23	8.1	9.4	G5	2	..	42095b	62	6242	0.4	- 8 13	7.20	8.38	K5	2	0,6	17321b
13	1083	0.0	-80 31	10.4	11.2	G5	3	..	38135b	63	6227	0.4	-10 10	7.11	7.53	F5	8	3,6	14157b
14	1426	0.1	+68 19	6.98	6.98	B9	7	..	37909i	64	16295	0.4	-33 56	10.7	11.6	G	1	..	41067b
15	4377	0.1	+47 55	8.0	8.8	G5	1	..	38896i	65	15500	0.4	-37 52	7.65	8.9	K2	6	..	41067b
16	5164	0.1	+35 45	8.12	8.54	F5	4	..	37382i	66	15584	0.4	-43 27	7.6	9.1	Mb	3	5,6	37262b
17	5061	0.1	+35 1	6.80	6.86	A2	7	2,8	37382i	67	6795	0.4	-61 47	8.8	9.1	Go	4	..	22068b
18	4750	0.1	+ 2 27	9.4	10.5	K2	2	E	24592b	68	3598	0.4	-68 31	6.91	8.0	Ko	6	5,8	12082b
19	6528	0.1	-21 17	10.0	10.8	F8	3	..	24596b	69	1249	0.4	-79 49	7.82	8.9	Go	6	5,4	38135b
20	16538	0.1	-27 50	9.5	9.4	F8	3	..	45102b	70	2860	0.5	+57 46	8.0	8.6	Ko	2	..	3724ri
21	16836	0.1	-33 2	7.18	8.3	Ko	4	0,4	8586b	71	3109	0.5	+55 9	7.11	8.11	Ko	5	0,3	3724ri
22	15446	0.1	-44 25	8.8	9.8	Ko	4	..	14371b	72	4627	0.5	+43 55	8.0	8.0	Ao	3	2,2	38896i
23	12251	0.1	-52 43	7.1	7.6	Go	4	2,7	41858b	73	4831	0.5	+42 50	8.6	8.4	B2	4	R	38896i
24	4949	0.1	-63 24	8.0	8.6	Go	7	..	22068b	74	6243	0.5	- 8 28	9.5	10.5	Ko	2	..	40911b
25	4241	0.2	+49 13	7.54	7.82	Fo	2	..	37007i	75	6229	0.5	- 9 59	9.2	9.6	F5	1	..	14157b
26	5128	0.2	+ 8 14	8.2	9.2	Ko	2	..	38069i	76	16061	0.5	-35 42	9.1	11.0	Ko	2	..	41067b
27	6091	0.2	- 2 21	8.2	9.0	G5	5	..	14156b	77	16164	0.5	-36 4	9.7	10.7	Go	2	..	41067b
28	6357	0.2	- 6 16	4.68	5.68	Ko	..	0,R	56,71	78	14688	0.5	-48 8	10.1	10.2	Ko	3	..	39670b
29	6226	0.2	-10 24	9.6	10.7	K2	1	..	40911b	79	13763	0.5	-51 49	7.40	8.1	K2	5	0,2	14881b
30	6529	0.2	-21 17	10.2	10.5	F2	5	..	24596b	80	6468	0.5	-61 52	7.6	8.4	G5	6	0,7	42095b
31	6257	0.2	-21 52	8.04	8.2	Ao	6	..	45102b	81	2801	0.5	-72 19	10.7	11.2	F8	1	..	38385b
32	15250	0.2	-39 25	7.00	7.6	G5	9	..	14371b	82	1380	0.6	+69 20	9.2	9.8	Go	1	..	38068i
33	14858	0.2	-46 21	9.7	10.3	Go	5	..	39670b	83	4254	0.6	+46 32	8.5	8.5	Ao	3	..	38896i
34	14334	0.2	-49 42	9.32	9.9	F8	4	2,3	39670b	84	5166	0.6	+36 9	9.4	9.8	F5	2	..	37382i
35	3824	0.2	-65 55	8.8	9.8	Ko	4	..	38229b	85	5032	0.6	+17 17	7.9	8.2	F2	4	..	38102i
36	3143	0.3	+56 44	8.9	9.0	A2	1	..	38872i	86	5042	0.6	+16 17	8.7	9.7	Ko	1	..	3813ri
37	4329	0.3	+49 58	8.07	9.07	Ko	2	..	37937i	87	5063	0.6	+12 51	5.66	6.66	Ko	8	..	9704i
38	4408	0.3	+45 16	8.62	9.69	K2	2	R	37910i	88	6415	0.6	-15 55	8.4	9.6	K5	2	..	14157b
39	4832	0.3	+33 33	7.8	8.3	F8	4	..	37382i	89	6424	0.6	-18 44	9.8	10.8	K	1	..	14623b
40	5026	0.3	+21 40	9.5	10.3	G5	1	..	38102i	90	19035	0.6	-23 4	9.3	9.9	F8	4	..	24596b
41	4934	0.3	+15 48	9.0	9.6	G	1	..	3813ri	91	19834	0.6	-30 31	9.8	10.6	A5	2	..	44361b
42	4935	0.3	+15 46	8.8	9.4	Go	2	..	3813ri	92	4000	0.6	-67 4	9.9	10.5	Go	2	..	38229b
43	4752	0.3	+ 3 2	6.89	7.67	G5	4	..	37378i	93	1830	0.6	-75 45	10.8	11.2	F5	3	..	38135b
44	4526	0.3	- 1 23	10.8	11.4	Go	1	..	24592b	94	5097	0.7	+11 58	8.4	9.4	Ko	1	..	38107i
45	6093	0.3	- 2 0	9.0	9.5	F8	2	..	13921b	95	6319	0.7	- 9 6	9.1	9.9	G5	3	..	40911b
46	6019	0.3	- 4 24	7.73	8.73	Ko	5	..	14156b	96	6317	0.7	- 9 35	9.8	10.6	G5	2	..	40911b
47	6609	0.3	-12 24	9.0	9.8	G5	1	..	14157b	97	6718	0.7	-20 13	9.5	10.8	Go	4	..	24596b
48	6539	0.3	-14 59	7.59	8.59	Ko	7	..	14157b	98	4244	0.8	+49 4	7.46	7.54	A3	6	2,2	38896i
49	6564	0.3	-19 9	9.8	11.1	Go	2	..	24596b	99	4629	0.8	+44 11	7.86	7.94	A3	4	..	37007i
50	19827	0.3	-30 51	9.8	9.6	A5	2	..	41067b	100	4853	0.8	+24 0	7.12	8.30	K5	5	0,5	38880i

100

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	5035	m. 0.8	+17 41	7.7	8.2	F8	6	..	38102i	51	16843	m. 1.2	-33 22	8.5	9.2	Md	6	R	41879b
2	6532	0.8	-21 12	10.0	11.7	Go	2	..	24596b	52	10225	1.2	-56 4	9.2	9.0	F5	7	0,3	14382b
3	6259	0.8	-22 13	10.2	11.3	Go	2	..	24596b	53	4937	1.3	+42 11	8.0	8.6	Go	2	..	37910i
4	19594	0.8	-30 55	7.90	8.9	Go	5	..	41067b	54	4835	1.3	+34 3	8.6	8.9	Fo	2	..	37382i
5	16587	0.8	-42 19	7.8	8.1	Go	8	..	14371b	55	6875	1.3	-17 18	8.9	9.7	G5	2	..	14623b
6	10590	0.8	-53 23	8.4	9.9	F8	3	E	14382b	56	6426	1.3	-18 35	7.48	7.76	Fo	4	..	10109b
7	2803	0.8	-72 20	11.2	11.2	Ao	2	..	38385b	57	6720	1.3	-20 37	10.7	11.0	Ao	4	..	24596b
8	2363	0.9	+63 7	7.36	7.12	B	4	R	38937i	58	6534	1.3	-21 24	10.0	11.1	K2	1	..	24596b
9	3599	0.9	+52 44	8.6	8.7	A2	3	2,2	37241i	59	1	1.3	-48 6	9.3	10.8	K2	3	..	39670b
10	5219	0.9	+39 51	6.71	7.49	G5	7	..	37382i	60	4404	1.3	-64 48	7.97	8.5	F2	7	3,8	22068b
11	4674	0.9	+27 43	6.93	8.00	K2	2	..	37352i	61	1	1.3	-84 40	9.0	10.2	K5	2	..	15165b
12	4885	0.9	+24 22	7.46	8.46	Ko	4	0,4	38880i	62	1383	1.4	+69 37	8.5	9.5	Ko	1	..	38068i
13	5036	0.9	+17 32	8.8	9.8	Ko	1	..	38131i	63	2367	1.4	+62 40	9.2	9.6	F5	2	..	37909i
14	4937	0.9	+15 54	7.9	8.7	G5	3	..	38131i	64	3087	1.4	+55 57	8.0	8.0	Ao	4	I,3-	37241i
15	6359	0.9	-6 16	10.4	10.9	F8	1	..	14377b	65	4834	1.4	+43 13	9.2	9.7	F8	1	..	38896i
16	6320	0.9	-9 24	9.8	10.4	Go	3	..	40911b	66	4704	1.4	+28 29	6.20	7.20	Ko	4	R	37352i
17	19595	0.9	-30 53	9.5	9.5	F8	3	..	41067b	67	4676	1.4	+28 0	6.79	7.79	Ko	3	..	37352i
18	15253	0.9	-39 43	9.3	10.1	Ko	2	..	14371b	68	5066	1.4	+12 16	8.6	9.6	Ko	2	..	38107i
19	14336	0.9	-49 14	10.3	11.5	K5	1	..	39670b	69	6022	1.4	-4 25	10.2	10.5	Fo	2	..	14377b
20	10160	0.9	-55 12	10.0	10.8	G5	1	..	14382b	70	6116	1.4	-5 41	10.2	11.0	G5	1	..	14377b
21	3348	0.9	-69 7	9.6	10.2	G	2	..	38229b	71	6261	1.4	-22 3	8.8	9.6	Fo	6	..	24596b
22	3349	0.9	-69 22	8.8	9.4	Go	5	..	38229b	72	2	1.4	-53 30	8.3	10.2	Ko	2	E	14382b
23	2865	1.0	+57 53	6.10	6.88	G5	6	0,8	37241i	73	1	1.4	-70 28	9.1	9.5	F5	4	..	38385b
24	4237	1.0	+50 49	8.5	9.5	Ko	1	..	37937i	74	546	1.5	+84 51	8.2	8.3	A3	4	..	37281i
25	4631	1.0	+43 30	7.92	9.10	K5	2	3,2	38896i	75	3088	1.5	+55 46	8.4	8.4	B9	2	..	37241i
26	5172	1.0	+9 10	7.74	8.16	F5	4	..	38069i	76	6024	1.5	-4 20	10.2	10.8	Go	2	..	14377b
27	4619	1.0	-0 26	8.2	9.0	G5	3	..	14156b	77	2	1.5	-23 58	10.0	10.2	Go	3	..	24596b
28	6719	1.0	-19 52	9.8	11.1	Ko	3	..	24596b	78	3	1.5	-33 10	9.0	10.4	Mb	2	..	41879b
29	17812	1.0	-32 0	9.4	10.1	Go	2	..	41067b	79	3	1.5	-34 12	10.3	11.0	Ko	2	..	41067b
30	15455	1.0	-43 59	9.3	10.9	Ko	1	..	45096b	80	2	1.5	-38 20	9.7	11.6	Mb	..	M	..
31	15454	1.0	-44 15	9.3	9.5	F2	5	..	14371b	81	2	1.5	-48 9	9.3	10.2	F8	3	..	39670b
32	14794	1.0	-47 0	10.1	11.2	G5	2	..	39670b	82	3	1.5	-52 54	10.8	10.8	A	1	..	39675b
33	4199	1.0	-65 1	10.6	10.6	Ao	2	..	38229b	83	2	1.5	-74 58	10.2	10.6	F5	2	..	38135b
34	2364	1.1	+62 50	9.0	9.3	Fo	2	..	37909i	84	1	1.5	-80 20	9.8	10.1	F2	5	..	38135b
35	2828	1.1	+59 54	8.5	8.8	Fo	2	0,2 R	1897b	85	3289	1.6	+53 57	8.0	9.0	Ko	1	..	38557i
36	4255	1.1	+47 10	8.9	10.0	K2	1	..	38896i	86	4635	1.6	+44 4	8.7	9.1	F5	2	..	37910i
37	6098	1.1	-2 27	8.8	9.3	F8	3	..	14156b	87	4954	1.6	+22 56	8.8	9.1	F2	3	..	38102i
38	6097	1.1	-2 43	9.5	10.5	Ko	1	..	14156b	88	6363	1.6	-6 18	10.2	10.6	F5	2	..	14377b
39	6199	1.1	-11 20	8.2	9.6	Ma	4	R	14157b	89	4	1.6	-25 10	8.2	8.7	F5	3	..	23746b
40	17980	1.1	-24 6	9.8	10.5	F5	2	..	24596b	90	4	1.6	-36 39	7.58	8.7	G5	4	..	41879b
41	18964	1.1	-29 43	7.82	8.0	Ao	4	..	8586b	91	1	1.6	-82 46	9.5	10.5	Ko	1	..	15165b
42	14337	1.1	-49 38	5.77	6.3	Go	..	2,8-	56,117	92	2001	1.7	+65 52	8.0	8.3	Fo	2	..	37909i
43	3599	1.1	-68 43	9.6	10.2	Go	2	..	38229b	93	1900	1.7	+64 48	8.0	8.0	Ao	2	0,2	37909i
44	2107	1.2	+63 37	5.49	5.44	B8	..	0,10	56,71	94	4936	1.7	+38 4	8.2	8.2	A2	3	..	37382i
45	5233	1.2	+40 21	7.02	8.02	Ko	6	5,4	37007i	95	5090	1.7	+30 34	8.2	9.2	Ko	2	0,1	37352i
46	6099	1.2	-1 47	8.0	9.1	K2	3	..	14156b	96	5208	1.7	+19 59	8.35	9.13	G5	3	..	38102i
47	15758	1.2	-3 4	10.4	11.4	Ko	1	..	24592b	97	5262	1.7	+6 5	9.4	9.5	A3	1	..	12386b
48	6611	1.2	-12 34	8.8	9.2	F5	4	..	14157b	98	4933	1.7	+3 54	9.0	9.3	Fo	2	..	12386b
49	6533	1.2	-20 51	10.2	11.4	K5	1	..	24596b	99	4832	1.7	+1 18	9.09	9.59	F8	3	..	14156b
50	16791	1.2	-25 4	9.0	10.2	G5	3	..	45102b	100	6117	1.7	-4 54	8.05	8.55	F8	6	..	14156b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	6723	1.7	20 28	9.8	11.1	Ko	4	..	24596b	51	5243	2.2	+ 7 9	8.0	8.4	F5	4	..	37378i
2	6537	1.7	21 38	9.5	10.5	G5	3	..	24596b	52	4935	2.2	+ 4 1	10.1	11.3	K5	1	..	12386b
3	4	1.7	23 40	6.06	6.4	Fo	..	0,8-	56,117	53	5087	2.2	+ 1 6	9.04	9.60	Go	3	..	14156b
4	1250	1.8	+72 13	7.8	7.9	A3	3	..	38068i	54	..	2.2	+ 0 7	..	..	G5	1	..	24592b
5	2108	1.8	+64 11	8.0	8.1	A5	2	..	38060i	55	6153	2.2	- 7 41	10.4	10.4	Ao	2	..	14377b
6	3291	1.8	+53 25	8.7	8.7	A	1	..	37241i	56	6428	2.2	-17 57	6.18	6.26	A3	..	1,8	56,71
7	5088	1.8	+ 4 54	9.0	9.8	G5	1	..	12386b	57	6	2.2	-27 57	8.2	9.3	Ko	2	..	23746b
8	6025	1.8	- 4 11	8.7	9.3	Go	5	..	14156b	58	8	2.2	-35 47	9.7	11.0	F8	2	..	41067b
9	6026	1.8	- 4 34	10.4	11.2	G5	2	..	14377b	59	-3	2.2	-42 27	8.7	8.9	Go	6	..	14371b
10	6152	1.8	- 7 30	10.0	10.6	Go	1	..	14377b	60	1	2.2	-60 38	8.6	9.6	A2	4	..	14382b
11	6323	1.8	- 8 57	9.5	10.1	Go	1	..	40911b	61	1429	2.3	+68 31	7.9	8.9	Ko	2	..	37909i
12	6	1.8	-31 10	10.0	10.7	Go	2	..	41067b	62	1	2.3	+52 6	9.0	9.0	A	1	..	37241i
13	4	1.8	-39 26	6.94	8.2	Ko	9	..	14371b	63	2	2.3	+19 56	9.4	9.5	A2	1	..	38102i
14	4	1.8	-41 29	9.3	10.4	G5	3	..	45096b	64	1	2.3	+16 45	8.6	9.6	Ko	1	..	38131i
15	5	1.8	-41 34	10.3	10.7	F5	2	..	14371b	65	5209	2.3	+14 7	8.8	8.9	A5	4	..	37368i
16	1	1.8	-46 26	9.9	10.9	Go	2	..	39670b	66	6205	2.3	-11 35	9.0	9.8	G5	1	..	14157b
17	2	1.8	-55 43	8.7	9.9	Ko	4	..	14382b	67	6617	2.3	-12 10	7.7	7.8	A2	6	..	10110b
18	1	1.8	-71 9	8.6	9.7	K2	2	..	12082b	68	8	2.3	-25 55	6.89	7.6	F5	4	..	8586b
19	1140	1.9	+72 39	8.0	8.3	F2	4	..	38068i	69	6	2.3	-32 37	8.7	9.5	G5	3	..	41067b
20	1682	1.9	+66 43	8.5	9.1	G	2	..	37909i	70	8	2.3	-41 2	8.3	9.5	G5	4	..	14371b
21	4708	1.9	+29 4	9.0	9.0	Ao	2	0,2	37352i	71	3	2.3	-43 7	9.2	10.6	F5	3	..	14371b
22	4955	1.9	+22 17	7.9	8.2	Fo	3	..	38102i	72	10	2.3	-47 42	10.8	11.5	Go	2	..	39658b
23	5089	1.9	+ 4 45	8.6	10.0	Ma	1	..	12386b	73	6	2.3	-57 24	7.6	8.7	K2	3	0,2	42095b
24	5760	1.9	- 2 53	10.0	11.1	K2	1	..	13921b	74	7	2.3	-57 44	9.5	9.9	F5	3	..	14382b
25	6570	1.9	-19 23	8.6	8.7	F5	2	..	10109b	75	3	2.3	-74 30	9.3	10.3	Ko	3	..	38135b
26	6263	1.9	-22 23	8.7	9.1	G5	7	..	24596b	76	1	2.3	-77 18	7.9	8.2	Fo	6	5,6	38135b
27	6	1.9	-40 58	9.0	9.2	F2	4	..	14371b	77	2	2.4	+52 58	8.5	8.8	Fo	3	0,2	37241i
28	5	1.9	-44 33	7.56	8.5	G5	8	0,3	14371b	78	2	2.4	+52 13	7.6	8.4	G5	2	..	37937i
29	5	1.9	-57 24	9.5	10.5	Ko	3	..	14382b	79	2	2.4	+39 31	7.50	8.50	Ko	5	..	33227i
30	4418	2.0	+46 11	7.7	8.7	Ko	3	..	37910i	80	3	2.4	+33 47	8.8	9.6	G5	2	R	37382i
31	5242	2.0	+ 6 19	7.8	7.9	A5	5	..	37378i	81	1	2.4	+31 6	7.01	7.79	G5	3	..	37352i
32	4620	2.0	- 0 13	9.4	10.6	K5	1	..	13921b	82	2	2.4	+23 46	8.8	8.9	A5	4	E	38102i
33	6419	2.0	-16 24	8.2	8.6	F5	4	..	14157b	83	8	2.4	-24 23	8.8	9.3	G5	2	..	23746b
34	6264	2.0	-21 50	10.2	11.2	Ko	1	..	24596b	84	6	2.4	-45 12	9.4	10.6	G5	2	..	14371b
35	10	2.0	-31 8	8.1	8.0	Ao	5	..	41067b	85	10	2.4	-56 34	7.4	7.6	F5	6	3,5-	14382b
36	5210	2.1	+19 59	8.0	9.0	Ko	2	..	38102i	86	2	2.4	-70 44	9.4	10.2	G5	2	..	38385b
37	5321	2.1	+10 9	9.17	9.59	F5	2	..	38107i	87	1	2.5	+56 50	8.6	8.6	Ao	1	..	38872i
38	5263	2.1	+ 5 38	9.0	9.1	A3	5	..	12386b	88	3	2.5	+52 33	8.5	8.6	A3	2	0,2	37241i
39	5086	2.1	+ 0 28	10.8	11.6	G5	1	..	24592b	89	1	2.5	+40 29	9.2	9.3	A2	2	..	37382i
40	5761	2.1	- 3 16	9.2	10.2	Ko	3	..	13921b	90	3	2.5	+39 35	6.87	7.65	G5	6	0,7	37382i
41	6265	2.1	-22 35	10.4	11.1	F8	2	..	24596b	91	2	2.5	+38 30	8.00	8.42	F5	4	..	37382i
42	7	2.1	-23 40	9.3	9.9	G5	4	..	24596b	92	1	2.5	+36 37	7.55	7.97	F5	5	..	37382i
43	7	2.1	-38 29	8.7	8.5	Fo	5	..	14371b	93	2	2.5	+ 0 47	9.6	11.0	Mc	1	..	13921b
44	1	2.1	-42 39	9.1	10.7	Ko	3	..	14371b	94	3	2.5	+ 0 33	8.1	8.1	Ao	7	..	12386b
45	412	2.2	+86 14	9.2	9.5	Fo	2	..	37281i	95	1	2.5	- 0 23	9.4	10.6	K5	2	..	13921b
46	3115	2.2	+55 5	8.81	8.81	Ao	2	..	37241i	96	2	2.5	- 5 6	9.0	9.6	Go	4	..	14377b
47	4264	2.2	+47 9	8.4	9.2	G5	1	..	38806i	97	2	2.5	-82 3	9.9	10.2	Fo	4	..	38135b
48	4837	2.2	+34 9	8.8	9.3	F8	1	..	37382i	98	2	2.6	+56 38	8.0	9.0	Ko	1	..	38872i
49	5073	2.2	+25 54	7.30	8.30	Ko	5	0,3	38880i	99	1	2.6	+55 1	7.83	8.39	Go	4	0,2	37241i
50	5430	2.2	+20 25	9.05	9.83	G5	2	..	38102i	100	1	2.6	+42 9	8.8	9.6	G5	1	..	37910i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	5	<i>m.</i> 2.6	<i>o</i> +40 3	8.7	8.8	A5	3	..	37382i	51	I	<i>m.</i> 3.1	<i>o</i> +24 45	8.8	9.2	F5	2	..	3888oi
2	3	2.6	+20 17	9.10	9.52	F5	I	..	38102i	52	3	3.1	- 3 0	6.32	7.32	Ko	4	5,8	17321b
3	3	2.6	- 1 54	9.3	10.3	Ko	3	..	13921b	53	3	3.1	- 5 54	9.2	9.8	Go	3	..	14377b
4	2	2.6	- 2 45	10.7	11.5	G5	I	..	13921b	54	6	3.1	-16 15	9.3	9.9	Go	2	..	14623b
5	2	2.6	- 8 29	8.31	9.09	G5	3	..	14157b	55	3	3.1	-58 26	8.7	10.5	G5	2	..	14382b
6	10	2.6	-39 15	9.7	9.6	Ao	3	..	14371b	56	3	3.2	+49 41	8.0	8.0	Ao	4	..	3791oi
7	7	2.6	-45 41	8.3	8.9	Go	3	0,6	37262b	57	3	3.2	+41 22	8.5	8.5	Ao	4	..	38896i
8	2	2.6	-52 31	9.2	9.9	G5	3	..	39675b	58	4	3.2	+28 32	2.15	2.15	Aop	..	R	28,195
9	1	2.6	-61 12	8.3	8.5	G5	4	..	42095b	59	3	3.2	+ 2 54	8.6	9.4	G5	2	..	37378i
10	5	2.6	-62 53	8.0	9.4	Ma	7	5,3	22068b	60	5	3.2	- 9 23	6.11	7.11	Ko	7	0,8-	17321b
11	1	2.6	-66 9	9.4	10.0	Go	3	..	38229b	61	7	3.2	-15 23	7.02	7.58	Go	8	..	14157b
12	1	2.6	-78 3	9.0	9.8	G5	5	0,3	38135b	62	3	3.2	-19 46	9.43	10.2	G5	4	..	24596b
13	3	2.7	+38 9	7.9	8.0	A3	5	1,4	37382i	63	5	3.2	-22 24	8.4	9.3	Ko	7	2,2	24596b
14	2	2.7	- 0 26	9.8	10.2	F5	3	..	14156b	64	12	3.2	-33 16	8.3	8.9	Ko	4	..	41879b
15	2	2.7	- 3 6	6.33	6.28	B8	8	0,10	17321b	65	10	3.2	-50 17	7.8	10.5	Go	3	..	39658b
16	3	2.7	- 5 25	8.9	9.5	Go	3	..	14377b	66	11	3.2	-54 43	8.34	9.9	K2	2	..	14881b
17	1	2.7	- 6 3	9.3	10.3	Ko	3	..	14377b	67	2	3.2	-59 38	8.5	9.1	Ko	3	..	42095b
18	2	2.7	-11 41	8.8	9.6	G5	2	..	14157b	68	2	3.2	-78 46	8.3	9.3	Ko	5	0,3	38135b
19	13	2.7	-23 4	5.92	5.92	Ao	..	0,9-	56,117	69	1	3.2	-79 10	6.8	6.9	A2	4	..	42719b
20	12	2.7	-36 21	9.1	10.4	G5	3	..	41067b	70	2	3.3	+73 41	7.42	7.42	Ao	7	..	38133i
21	13	2.7	-47 6	8.5	10.0	Ko	5	..	39670b	71	5	3.3	+62 39	6.59	7.37	G5	5	..	37909i
22	13	2.7	-56 49	9.2	10.8	Ko	2	..	14382b	72	8	3.3	+52 42	8.0	8.3	F2	4	3,3	37241i
23	2	2.7	-66 30	6.90	8.0	G5	8	..	38229b	73	4	3.3	+51 47	7.8	8.2	F5	3	5,2	37241i
24	1	2.7	-67 28	8.8	9.4	Go	5	..	38229b	74	6	3.3	+44 25	8.2	9.2	Ko	2	..	3791oi
25	2	2.7	-72 22	10.2	10.3	A2	5	..	38385b	75	3	3.3	+34 22	7.40	7.90	F8	5	..	37382i
26	1	2.8	+70 36	8.5	8.5	Ao	4	..	38068i	76	4	3.3	+18 10	9.6	10.4	G5	1	..	38102i
27	2	2.8	+18 4	9.6	9.7	A5	2	..	38131i	77	2	3.3	+ 6 4	8.0	8.5	F8	3	..	37378i
28	3	2.8	+ 0 13	9.28	9.34	A2	3	1,2	13921b	78	4	3.3	+ 4 14	9.0	10.0	Ko	1	..	12386b
29	11	2.8	-28 53	9.6	9.6	G5	2	..	44361b	79	5	3.3	+ 2 27	10.1	10.5	F5	3	..	24592b
30	6	2.9	+53 14	8.0	8.5	F8	3	0,2 R	37241i	80	4	3.3	-19 47	9.18	10.2	Ko	3	2,1	24596b
31	2	2.9	+36 43	9.2	9.3	A3	3	..	37382i	81	4	3.3	-21 35	9.5	11.7	Ko	2	..	24596b
32	2	2.9	+30 50	7.06	7.20	A5	4	..	37352i	82	6	3.3	-21 58	8.4	8.8	G5	3	0,2	23746b
33	2	2.9	+29 18	7.9	8.2	F2	3	..	37352i	83	11	3.3	-43 30	9.7	10.9	G	1	..	14371b
34	3	2.9	- 8 6	8.2	8.6	F5	6	0,6-	14157b	84	3	3.3	-70 37	8.6	9.8	K5	5	..	38385b
35	3	2.9	- 9 2	9.5	10.0	F8	2	..	40911b	85	2	3.3	-86 36	7.37	7.1	B9	9	..	15173b
36	3	2.9	-14 47	8.96	9.52	Go	4	..	12365b	86	1	3.4	+66 44	8.5	8.8	Fo	3	..	37909i
37	2	2.9	-19 14	8.2	8.7	Ko	6	2,5	24596b	87	7	3.4	+19 43	8.6	9.0	F5	2	..	38102i
38	10	2.9	-44 1	9.7	10.6	Go	2	..	14371b	88	3	3.4	+10 36	8.7	9.0	F2	2	..	38069i
39	9	2.9	-49 12	10.8	11.1	Go	1	..	39658b	89	3	3.4	+ 6 13	8.7	8.7	Ao	3	0,1	12386b
40	12	2.9	-51 49	8.2	9.3	Ko	3	..	14881b	90	7	3.4	+ 3 46	9.4	10.4	Ko	1	..	12386b
41	3	3.0	+30 49	7.30	7.38	A3	4	..	37352i	91	3	3.4	- 7 21	8.0	9.1	K2	4	..	14377b
42	1	3.0	+ 4 22	8.2	9.0	G5	2	..	37378i	92	14	3.4	-24 39	7.75	7.4	F5	6	..	23746b
43	10	3.0	-30 36	9.5	9.5	A2	3	..	41067b	93	22	3.4	-26 33	8.2	10.5	Ma	1	..	23746b
44	17	3.0	-34 6	5.71	6.8	Ko	..	0,8-	56,117	94	13	3.4	-30 38	9.6	9.8	F5	2	..	41067b
45	11	3.0	-40 11	10.1	10.4	F5	2	..	14371b	95	12	3.4	-44 50	9.5	10.0	Ao	4	..	45096b
46	10	3.0	-45 56	8.9	10.0	Ko	3	..	14371b	96	3	3.4	-51 58	9.3	9.9	F2	3	..	39675b
47	3	3.1	+55 52	8.5	8.5	B9	3	0,2	37241i	97	14	3.4	-54 0	9.2	10.2	G5	2	..	14382b
48	4	3.1	+46 9	7.69	8.76	K2	2	..	38896i	98	10	3.4	-57 46	9.0	9.9	Ko	4	..	14382b
49	2	3.1	+41 42	8.7	9.5	G5	1	..	3791oi	99	6	3.5	+53 15	8.4	8.4	Ao	2	2,2	37241i
50	5	3.1	+33 55	8.7	8.8	A2	2	..	37382i	100	8	3.5	+36 4	6.14	6.56	F5	7	0,6	37382i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	6	m. 3.5	° 5 24	9.5	10.1	Go	2	..	14377b	51	6	m. 3.9	° 8 46	8.8	9.8	Ko	3	..	14157b
2	3	3.5	-18 8	6.37	7.72	Ma	6	..	10109b	52	8	3.9	-21 45	7.20	8.2	Ko	5	0,6	23746b
3	2	3.5	-67 4	9.2	9.8	Go	4	..	38229b	53	29	3.9	-26 21	9.8	10.2	Go	3	..	45102b
4	3	3.6	+65 54	8.2	9.0	G5	1	..	37909i	54	28	3.9	-26 47	8.6	10.2	Ko	2	..	45102b
5	3	3.6	+13 35	7.8	8.8	Ko	4	..	37368i	55	19	3.9	-30 30	10.0	10.4	Go	1	..	41067b
6	5	3.6	- 2 46	7.31	8.09	G5	7	0,3	14156b	56	17	3.9	-33 36	9.6	9.6	G5	2	..	41067b
7	2	3.6	- 4 15	10.0	10.5	F8	1	..	14377b	57	15	3.9	-40 18	7.8	8.5	Go	6	..	14371b
8	15	3.6	-33 2	9.1	10.1	Ko	2	..	41067b	58	4	3.9	-60 50	9.4	9.9	F8	3	..	22068b
9	16	3.6	-39 47	var.	var.	Md	1	R	14371b	59	4	3.9	-66 22	10.0	10.6	Go	1	..	38229b
10	3	3.6	-66 59	9.2	9.8	Go	4	..	38229b	60	7	4.0	+44 10	8.1	8.9	G5	2	..	37910i
11	2	3.6	-77 9	9.7	10.3	Go	2	..	38135b	61	7	4.0	+20 30	9.2	9.8	Go	2	..	3888oi
12	7	3.7	+55 19	8.76	8.76	Ao	1	..	37241i	62	2	4.0	+18 22	9.8	10.6	G5	1	..	38131i
13	5	3.7	+40 17	7.87	8.65	G5	4	..	37382i	63	4	4.0	+12 15	8.4	9.5	K2	2	..	38107i
14	11	3.7	+39 56	6.98	8.16	K5	5	..	37382i	64	20	4.0	-28 53	10.3	9.6	F8	2	..	44361b
15	7	3.7	+37 28	9.4	9.5	A2	5	..	37382i	65	17	4.0	-31 53	9.8	10.7	F5	2	..	41067b
16	4	3.7	+36 38	8.6	8.7	A5	3	..	37382i	66	22	4.0	-35 39	7.79	8.3	Fo	5	0,4	12013b
17	3	3.7	+24 54	6.35	7.13	G5	8	5,6	3888oi	67	14	4.0	-49 48	11.8	11.5	G	1	..	39658b
18	5	3.7	+ 7 28	7.34	7.62	Fo	4	..	37378i	68	11	4.0	-53 36	10.4	10.8	F5	2	..	39675b
19	6	3.7	+ 4 36	8.6	9.6	Ko	2	..	12386b	69	19	4.0	-54 34	6.34	7.6	Go	6	0,9	41858b
20	5	3.7	+ 4 32	8.6	9.4	G5	4	5,3	37378i	70	9	4.1	+58 7	8.1	8.1	B9	3	1,2	1897b
21	7	3.7	+ 0 42	10.1	11.3	K5	1	..	24592b	71	4	4.1	+24 44	8.2	8.8	Go	5	..	3888oi
22	6	3.7	+ 0 8	7.63	8.70	K2	5	..	12386b	72	7	4.1	- 0 29	9.8	10.8	Ko	3	..	13921b
23	1	3.7	- 1 41	9.77	9.83	A2	3	..	13921b	73	3	4.1	- 1 19	9.4	9.9	F8	3	..	13921b
24	5	3.7	- 6 39	9.8	10.4	Go	2	..	14377b	74	9	4.1	-22 37	9.8	10.5	Go	2	..	24596b
25	5	3.7	- 8 27	8.8	9.6	G5	2	..	14157b	75	18	4.1	-32 2	9.4	10.4	Ko	2	..	41067b
26	10	3.7	-15 40	9.2	10.0	G5	2	..	12365b	76	24	4.1	-35 18	9.7	11.0	G5	1	..	41067b
27	20	3.7	-35 21	7.88	8.3	F5	4	0,4	12013b	77	17	4.1	-38 51	8.7	10.4	Go	2	..	14371b
28	16	3.7	-37 18	8.3	9.2	F8	5	..	14593b	78	18	4.1	-44 52	10.1	10.9	Go	2	..	45096b
29	9	3.7	-52 53	8.3	8.7	Fo	5	0,3	14881b	79	18	4.1	-50 35	8.3	9.4	Go	2	..	14881b
30	5	3.7	-75 42	10.6	11.2	Go	3	..	38135b	80	20	4.1	-50 44	7.17	6.9	B8	7	1,8	37262b
31	1	3.8	+79 10	6.22	6.30	A3	8	..	37227i	81	22	4.1	-51 10	8.2	9.3	K2	3	..	14881b
32	3	3.8	+58 36	2.42	2.84	F5	..	R	5101c	82	4	4.1	-59 50	9.1	9.6	G5	3	..	22068b
33	7	3.8	+49 18	7.7	7.8	A3	3	3,2	38557i	83	3	4.2	+16 59	7.17	7.73	Go	6	..	37368i
34	3	3.8	+27 41	6.52	6.58	A2	4	0,6	37352i	84	4	4.2	-19 3	9.2	9.9	F8	3	..	24596b
35	2	3.8	+12 15	8.0	8.6	Go	3	..	38107i	85	1	4.2	-73 1	11.1	11.2	A3	4	0,3	22155b
36	6	3.8	-11 41	9.5	9.6	A5	2	..	14157b	86	1	4.3	+83 36	8.6	9.0	F5	4	..	38964i
37	7	3.8	-22 45	7.30	8.4	Ma	5	0,4	23746b	87	11	4.3	+45 50	7.00	6.98	B9	7	..	38896i
38	19	3.8	-36 23	8.8	11.0	Ko	2	..	41067b	88	8	4.3	+42 30	8.1	8.2	A5	4	5,4	37382i
39	16	3.8	-47 37	7.9	8.1	F8	4	..	37262b	89	3	4.3	+18 33	7.8	8.6	G5	4	..	3888oi
40	11	3.8	-49 12	10.5	10.8	G5	3	..	39658b	90	6	4.3	+ 1 44	8.8	8.8	Ao	3	..	14156b
41	4	3.8	-67 19	9.0	9.8	G5	3	..	38229b	91	8	4.3	+ 0 41	7.58	8.36	G5	4	E	37378i
42	7	3.8	-74 48	7.77	8.8	K2	3	2,7	14357b	92	8	4.3	- 0 29	8.8	9.2	F5	5	..	14156b
43	3	3.9	+64 32	7.02	8.02	Ko	5	..	37909i	93	16	4.3	-28 33	5.46	6.3	F2	..	0,9R	56,117
44	12	3.9	+44 59	8.0	9.0	Ko	1	..	38896i	94	20	4.3	-41 37	9.0	9.8	Go	3	..	14371b
45	7	3.9	+40 17	7.17	7.95	G5	6	0,4	37382i	95	19	4.3	-42 27	9.7	10.4	F5	3	..	14371b
46	2	3.9	+22 5	9.3	9.7	F5	2	..	38102i	96	18	4.3	-46 18	3.94	4.94	Ko	..	R	28,195
47	10	3.9	+19 21	7.25	7.67	F5	6	..	37368i	97	5	4.3	-59 37	9.0	9.9	G5	3	..	42095b
48	7	3.9	+17 40	5.69	6.69	Ko	8	..	37368i	98	8	4.3	-74 59	9.3	10.3	Ko	3	..	38135b
49	5	3.9	+ 9 17	8.8	9.6	G5	2	..	38069i	99	..	4.4	+51 0	var.	var.	Md	..	R	M
50	2	3.9	- 0 49	9.8	10.3	F8	2	..	13921b	100	13	4.4	+37 42	9.4	9.8	F5	2	..	37382i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	12	4.4	+19 19	8.7	9.0	F2	1	..	3888oi	51	2	4.9	+75 17	8.57	9.75	K5	1	..	38133i
2	4	4.4	+18 59	7.8	8.6	G5	4	..	37368i	52	6	4.9	+66 44	8.6	8.6	A	2	..	38068i
3	10	4.4	- 5 14	10.0	10.4	F5	2	..	14377b	53	5	4.9	+64 5	8.0	9.0	Ko	2	..	37909i
4	8	4.4	- 9 3	9.8	10.4	Go	2	..	14377b	54	4	4.9	+59 28	8.2	9.2	Ko	2	o,I	3806oi
5	9	4.4	-10 45	8.2	9.2	Ko	3	..	14157b	55	11	4.9	+47 2	9.4	10.4	K	1	..	3791oi
6	21	4.4	-32 4	9.9	10.1	F8	3	..	41067b	56	16	4.9	+45 50	7.7	7.8	A3	4	..	37007i
7	1	4.5	+75 26	8.97	9.97	Ko	1	..	38133i	57	6	4.9	+39 6	8.9	9.2	Fo	2	..	37382i
8	9	4.5	+62 2	8.8	9.2	F5	2	..	37909i	58	9	4.9	+32 59	8.6	8.6	Ao	1	..	37382i
9	9	4.5	+51 28	8.0	9.0	Ko	1	..	37937i	59	6	4.9	+24 39	8.2	9.6	Ma	3	o,R	3888oi
10	7	4.5	-14 44	8.86	9.86	Ko	2	..	14157b	60	8	4.9	+10 36	5.51	5.46	B8	..	o,R	56,71
11	12	4.5	-21 56	8.6	9.0	F5	7	..	24596b	61	13	4.9	- 9 32	7.10	7.38	Fo	6	o,R	1011ob
12	26	4.5	-34 40	9.3	9.2	Go	5	..	41067b	62	35	4.9	-26 26	7.46	7.6	A2	6	o,3	23746b
13	21	4.5	-41 13	8.8	10.1	Ko	2	..	14371b	63	17	4.9	-45 14	7.6	8.4	G5	8	o,4	14371b
14	16	4.5	-49 7	10.5	10.8	Go	2	..	39658b	64	22	4.9	-50 50	8.3	8.7	Go	3	..	14881b
15	10	4.6	+51 29	8.9	9.0	A2	2	..	38557i	65	9	4.9	-62 52	6.62	6.5	A2	8	..	42095b
16	12	4.6	+50 52	8.0	9.0	Ko	1	..	37937i	66	1	4.9	-68 1	9.3	10.3	Ko	2	..	38229b
17	5	4.6	+18 50	8.5	9.1	Go	2	5,2	3888oi	67	12	5.0	+51 42	7.13	7.11	B9	4	o,4	38557i
18	4	4.6	- 4 14	10.0	10.4	F5	3	o,2	14377b	68	16	5.0	-15 43	8.9	9.4	F8	2	..	12365b
19	14	4.6	-22 28	9.5	10.8	K5	3	..	24596b	69	6	5.0	-65 55	8.0	8.8	G5	6	..	38229b
20	24	4.6	-32 23	9.6	10.1	G5	2	..	41067b	70	15	5.1	+57 58	8.6	8.6	A	2	R	38872i
21	23	4.6	-32 39	9.6	10.7	K	1	..	41067b	71	17	5.1	+45 31	5.08	5.36	Fo	..	o,R	731c
22	21	4.6	-38 9	9.3	10.4	Ko	1	..	14593b	72	9	5.1	+42 2	8.6	9.6	Ko	1	..	38896i
23	23	4.6	-46 56	9.3	10.3	F5	4	..	3967ob	73	7	5.1	+24 59	8.6	8.9	Fo	2	..	19643i
24	5	4.6	-52 18	9.3	10.2	A5	2	..	39675b	74	5	5.1	-19 25	10.4	11.0	F8	2	..	24596b
25	5	4.6	-66 35	8.3	9.1	G5	4	..	38229b	75	9	5.1	-20 32	9.5	9.9	F8	5	..	24596b
26	3	4.6	-84 0	9.5	10.5	Ko	1	..	15165b	76	26	5.1	-33 51	10.3	10.1	Go	2	..	41067b
27	5	4.7	+65 11	7.95	7.95	Ao	4	..	37909i	77	20	5.1	-49 42	8.48	8.7	F2	4	..	14881b
28	10	4.7	+42 54	8.9	9.7	G5	1	..	38896i	78	10	5.1	-63 52	8.2	8.5	Fo	7	..	22068b
29	7	4.7	+12 9	8.0	9.0	Ko	2	..	38069i	79	7	5.1	-66 30	10.0	10.6	Go	1	..	38229b
30	7	4.7	+10 51	8.5	8.9	F5	3	..	38069i	80	..	5.1	-71 42	..	..	Fo	3	..	38385b
31	9	4.7	+ 7 54	8.5	9.3	G5	2	..	38069i	81	3	5.1	-79 9	9.6	10.4	G5	4	..	38135b
32	8	4.7	- 2 44	10.7	11.2	F8	1	..	13921b	82	3	5.1	-81 55	9.6	10.0	F5	5	..	38135b
33	9	4.7	- 7 24	8.4	9.2	G5	5	..	14377b	83	16	5.2	+57 56	8.1	8.1	A	2	R	38872i
34	15	4.7	-22 38	9.5	9.9	G5	3	..	24596b	84	11	5.2	+56 36	6.54	6.49	B8	8	o,8-	37241i
35	24	4.7	-36 49	9.9	10.7	A2	3	..	14593b	85	9	5.2	+18 6	8.8	9.8	Ko	1	..	38133i
36	23	4.7	-37 52	7.8	8.6	F5	7	..	14593b	86	14	5.2	- 5 21	10.4	11.0	Go	2	..	14377b
37	20	4.7	-56 45	8.3	8.8	G5	3	..	42095b	87	11	5.2	- 5 49	5.95	6.73	G5	7	o,8	17321b
38	3	4.7	-64 9	7.7	9.1	Ma	7	..	22068b	88	16	5.2	- 9 18	9.3	9.9	Go	3	..	14377b
39	6	4.7	-67 46	9.4	10.0	Go	4	..	38229b	89	17	5.2	-15 13	9.2	10.0	G5	1	..	12365b
40	19	4.8	+49 4	8.2	8.2	Ao	1	..	37937i	90	6	5.2	-19 25	10.7	10.5	F	2	..	24596b
41	10	4.8	+43 32	8.9	9.9	Ko	1	..	38896i	91	5	5.2	-72 32	10.2	11.4	K5	2	o,2	38385b
42	10	4.8	+ 8 1	8.7	9.2	F8	2	..	38069i	92	3	5.2	-78 3	9.3	10.1	G5	4	..	38135b
43	8	4.8	+ 4 17	8.0	8.8	G5	3	..	37378i	93	11	5.3	+59 6	6.70	6.53	B3	5	o,5	1897b
44	10	4.8	+ 3 36	8.2	9.4	K5	2	..	12386b	94	18	5.3	+58 11	9.0	9.0	A	3	R	1897b
45	9	4.8	- 3 7	7.20	8.27	K2	5	3,3	14156b	95	14	5.3	+51 46	7.9	7.9	Ao	3	o,3	1897b
46	29	4.8	-34 20	9.0	9.8	G5	3	..	41067b	96	13	5.3	+51 21	8.2	9.2	Ko	1	..	37937i
47	23	4.8	-41 27	8.3	9.2	Go	5	..	14371b	97	17	5.3	+39 38	9.3	9.3	B8	2	..	37382i
48	21	4.8	-50 25	8.7	9.6	Ko	4	..	39658b	98	7	5.3	+28 6	8.1	9.5	Mb	4	o,4-	3731oi
49	24	4.8	-51 1	9.9	10.3	Go	3	..	39658b	99	7	5.3	+14 51	9.0	9.1	A2	2	..	37368i
50	2	4.8	-79 24	10.6	11.8	K5	1	..	38135b	100	12	5.3	- 6 36	9.0	10.0	Ko	3	..	14377b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	II	5.3	- 7 35	9.8	10.4	Go	1	..	14377b	51	10	5.7	+65 31	8.50	8.50	Ao	2	..	37909i
2	IO	5.3	-12 20	8.6	8.9	Fo	4	..	14157b	52	17	5.7	+47 33	8.2	9.0	G5	3	..	37910i
3	II	5.3	-14 33	8.8	9.4	Go	3	..	14157b	53	18	5.7	+40 1	8.8	8.8	Ao	3	..	37382i
4	18	5.3	-15 0	8.2	8.6	F5	4	..	14157b	54	13	5.7	+ 4 33	8.6	9.7	K2	2	..	12386b
5	8	5.3	-20 57	10.4	11.4	F8	2	..	24596b	55	17	5.7	-22 30	7.66	8.7	Ko	3	..	23746b
6	29	5.3	-23 20	9.8	10.2	F8	3	0,2	24596b	56	36	5.7	-35 25	7.01	7.7	Ko	..	0,5 R	56,117
7	17	5.3	-53 48	10.4	11.4	Ko	1	..	39675b	57	27	5.7	-39 20	9.0	9.5	Go	4	..	14371b
8	5	5.3	-58 5	8.6	9.0	G5	3	..	42095b	58	29	5.7	-51 32	9.4	10.3	Ko	3	0,2	39658b
9	2	5.3	-67 53	9.6	10.0	F5	3	..	38229b	59	16	5.7	-54 58	8.44	9.6	G5	3	..	42095b
10	4	5.3	-79 34	7.80	9.5	F5	8	0,6	38135b	60	5	5.7	-64 12	8.7	9.2	F8	4	..	22068b
11	5	5.4	+60 15	8.56	9.56	Ko	2	..	38060i	61	4	5.7	-73 47	6.76	7.0	A5 G	5	0,9 R	42705b
12	14	5.4	+55 30	8.0	8.0	Ao	4	0,2	37241i	62	4	5.7	-73 47	6.76	7.0	G	5	0,9 R	42705b
13	II	5.4	+32 35	7.15	8.33	K5	3	3,3	37382i	63	14	5.8	+57 4	6.71	7.71	Ko	4	5,2	37241i
14	II	5.4	+23 5	9.7	10.5	G5	1	..	38880i	64	11	5.8	+29 1	8.8	9.4	Go	2	0,2	37352i
15	8	5.4	+14 41	8.2	8.6	F5	4	..	37368i	65	10	5.8	- 2 38	8.3	9.4	K2	4	..	14156b
16	10	5.4	+ 0 13	9.8	10.2	F5	2	..	24592b	66	16	5.8	-14 27	7.76	8.76	Ko	3	..	14157b
17	II	5.4	- 9 51	9.01	9.79	G5	3	..	14377b	67	37	5.8	-35 50	9.0	10.4	F8	2	..	41067b
18	15	5.4	-11 33	9.5	10.3	G5	2	..	14157b	68	6	5.8	-59 44	9.03	9.6	Go	4	..	22068b
19	35	5.4	-31 2	9.0	10.4	K2	1	..	41067b	69	30	5.9	+49 0	8.09	8.15	A2	3	3,4 R	38557i
20	24	5.4	-44 5	9.5	9.8	F5	4	..	14371b	70	12	5.9	+43 45	9.5	9.5	A	2	R	38896i
21	15	5.4	-48 42	8.9	9.6	F2	4	..	39658b	71	9	5.9	+23 26	9.3	10.3	Ko	1	..	38880i
22	4	5.4	-64 51	8.9	9.9	Ko	2	..	38229b	72	7	5.9	-19 8	var.	var.	Mb	4	R	10109b
23	7	5.4	-66 56	9.2	9.8	Go	3	..	38229b	73	26	5.9	-42 49	9.1	10.4	G5	3	..	14371b
24	2	5.4	-71 24	9.1	9.4	F2	5	..	38385b	74	31	5.9	-54 51	11.0	11.1	A3	1	..	39675b
25	2	5.4	-73 42	10.2	11.2	Ko	3	..	22155b	75	7	5.9	-58 3	8.3	8.7	F8	4	..	42095b
26	4	5.4	-78 52	7.7	8.7	Ko	5	5,8	14357b	76	1	5.9	-69 6	10.2	10.2	Ao	3	..	38229b
27	22	5.5	+58 13	8.7	8.7	A	2	..	1897b	77	11	5.9	-74 4	9.7	10.3	Go	4	2,5	22155b
28	21	5.5	+57 28	8.0	8.0	B9	4	0,3	37241i	78	4	6.0	+73 55	7.10	8.10	Ko	4	..	38133i
29	8	5.5	+54 47	8.16	8.94	G5	1	..	38557i	79	8	6.0	+59 26	8.8	8.9	A2	1	..	38872i
30	25	5.5	+48 28	7.84	7.82	B9	5	..	38896i	80	15	6.0	+ 3 35	8.2	9.0	G5	4	..	37378i
31	10	5.5	+12 15	8.4	9.2	G5	3	..	38069i	81	13	6.0	- 7 56	8.8	9.3	F8	6	..	14377b
32	10	5.5	+ 1 44	8.0	9.1	K2	4	..	13921b	82	27	6.0	-24 10	8.8	9.4	G5	2	..	23746b
33	12	5.5	+ 1 30	7.8	8.3	F8	5	..	37378i	83	9	6.1	+14 44	9.6	9.9	Fo	2	..	37368i
34	16	5.5	-22 42	8.8	9.6	Ko	5	..	24596b	84	12	6.1	+10 5	8.5	9.5	Ko	1	..	38069i
35	10	5.5	-74 12	9.9	10.3	F5	3	3,3	22155b	85	13	6.1	+ 7 23	7.88	8.95	K2	4	..	12386b
36	4	5.5	-82 47	5.30	6.5	Ko	..	0,7-	56,117	86	15	6.1	+ 2 6	9.0	10.1	K2	1	..	13921b
37	8	5.6	+66 42	9.0	9.0	A	1	..	38068i	87	9	6.1	+ 0 43	9.8	10.3	F8	2	..	13921b
38	13	5.6	+56 25	7.7	8.7	Ko	2	2,2	37241i	88	7	6.1	- 3 53	6.81	7.59	G5	5	5,8	17321b
39	8	5.6	+36 55	7.75	8.09	F2	4	..	37382i	89	20	6.1	- 9 26	10.4	11.0	Go	1	..	14377b
40	8	5.6	+31 41	8.2	9.6	Ma	2	5,2	37352i	90	26	6.2	+57 16	9.0	9.0	B9	2	..	38872i
41	10	5.6	+30 8	7.91	7.91	Ao	4	1,3	37310i	91	14	6.2	+29 54	8.7	9.5	G5	2	..	37310i
42	10	5.6	+24 16	9.2	9.6	F5	2	E	38102i	92	12	6.2	- 3 2	9.8	11.0	K5	1	..	13921b
43	14	5.6	- 6 14	10.4	11.2	G5	1	..	14377b	93	17	6.2	-16 1	5.05	5.47	F5	10	..	10109b
44	19	5.6	- 9 15	10.2	10.7	F8	2	..	14377b	94	18	6.2	-21 48	8.0	8.7	Go	4	2,7	12365b
45	13	5.6	-13 8	5.94	6.94	Ko	8	5,10	14157b	95	33	6.2	-30 12	8.8	9.8	Ko	1	..	23746b
46	36	5.6	-31 50	7.12	7.9	Ko	4	0,6-	12013b	96	11	6.3	+65 57	8.4	8.4	Ao	2	..	38937i
47	26	5.6	-41 41	8.8	9.6	G5	4	..	14371b	97	12	6.3	+59 13	8.0	8.8	G5	1	7,2	38872i
48	21	5.6	-49 50	10.5	10.8	G5	2	..	39658b	98	28	6.3	+57 39	7.08	6.96	B5	6	2,5	37241i
49	24	5.6	-56 16	9.9	10.2	F2	2	..	14382b	99	20	6.3	+35 57	9.4	9.7	F2	2	..	37382i
50	3	5.7	+74 59	9.2	9.8	G	1	..	38133i	100	10	6.3	+23 16	8.2	8.8	Go	4	..	38880i

THE HENRY DRAPER CATALOGUE.

700

0^h 6^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	13	<i>m.</i> 6.3	<i>o</i> - 3 11	10.4	11.5	K2	1	..	13921b	51	8	<i>m.</i> 6.7	<i>o</i> -72 50	9.0	9.4	F5	2	..	12082b
2	22	6.3	- 8 55	9.8	10.4	Go	2	..	14377b	52	..	6.7	-79 1	..	..	G	1	..	38135b
3	25	6.3	-27 35	9.2	10.2	G5	1	..	23746b	53	5	6.8	+67 52	8.5	8.6	A2	2	..	38068i
4	36	6.3	-32 58	8.30	8.6	Ao	3	0,6	12013b	54	22	6.8	+48 7	7.6	8.6	Ko	2	..	37910i
5	35	6.3	-33 22	8.8	9.2	G5	5	..	41067b	55	13	6.8	+28 3	7.15	7.43	Fo	4	2,6-	37352i
6	28	6.3	-40 56	7.9	8.9	G5	6	..	14371b	56	14	6.8	+22 56	6.65	7.43	G5	6	..	19643i
7	18	6.3	-55 7	9.4	10.2	G5	2	0,1	39675b	57	21	6.8	-11 43	8.59	9.37	G5	2	..	14157b
8	1	6.3	-86 52	8.8	8.8	Ao	3	..	15173b	58	37	6.8	-33 48	9.1	9.2	G5	4	..	41067b
9	15	6.4	+55 24	7.41	7.36	B8	6	1,6-	37241i	59	37	6.8	-36 7	9.0	10.2	Go	2	..	41067b
10	16	6.4	+53 47	8.0	8.0	B9	3	1,2	37241i	60	6	6.8	-73 42	10.6	11.2	Go	4	0,2	22155b
11	21	6.4	+39 50	8.12	9.12	Ko	4	..	37382i	61	19	6.9	+53 4	6.80	7.08	Fo	6	5,5-	37241i
12	13	6.4	+33 8	8.4	8.4	Ao	3	0,2	37310i	62	23	6.9	+47 38	7.46	8.46	Ko	2	..	37007i
13	9	6.4	+19 7	9.6	9.7	A3	1	..	38102i	63	20	6.9	+46 58	7.40	8.40	Ko	5	..	38896i
14	11	6.4	+18 21	8.2	9.2	Ko	4	..	37368i	64	23	6.9	+46 13	8.8	9.3	F8	1	..	38896i
15	16	6.4	+ 4 12	9.8	10.3	F8	4	..	12386b	65	12	6.9	+38 30	8.4	9.4	Ko	2	..	37382i
16	7	6.4	- 1 40	8.42	9.49	K2	3	..	14156b	66	9	6.9	- 0 48	8.4	8.7	Fo	6	..	14156b
17	14	6.4	- 3 38	7.56	8.06	F8	7	0,4	14156b	67	14	6.9	-17 22	9.0	10.0	Ko	2	..	24596b
18	10	6.4	-19 16	9.2	8.7	F5	5	0,5	24596b	68	37	6.9	-23 23	8.0	8.2	Fo	4	0,4-	23746b
19	42	6.4	-26 49	9.3	9.6	A3	2	..	23746b	69	39	6.9	-33 36	9.3	9.8	G5	2	..	41067b
20	26	6.4	-28 21	5.56	7.0	Ko	..	R	56,117	70	32	6.9	-42 44	6.60	7.6	Ko	6	5,10	37262b
21	31	6.4	-47 35	9.7	11.2	G5	2	..	39658b	71	21	6.9	-48 41	8.9	10.8	Ma	3	..	39658b
22	25	6.4	-49 39	9.9	9.6	A5	5	..	39658b	72	36	6.9	-54 46	8.08	9.6	Ko	3	0,2-	42095b
23	22	6.4	-53 41	10.3	11.1	G5	1	..	39675b	73	30	6.9	-56 46	9.7	10.2	F8	2	..	14382b
24	13	6.5	+65 34	7.15	7.15	Ao	6	..	37909i	74	20	7.0	+62 21	8.0	9.1	K2	1	..	37909i
25	16	6.5	+56 43	7.12	7.54	F5	4	5,3	37241i	75	18	7.0	+43 16	8.0	9.4	Mb	1	..	38896i
26	16	6.5	+44 13	8.6	8.7	A3	4	..	37007i	76	22	7.0	+39 20	7.9	8.2	Fo	6	5,4	37382i
27	13	6.5	+ 9 46	8.6	9.2	Go	2	..	38069i	77	10	7.0	- 4 34	9.8	10.2	F5	3	3,2	14377b
28	13	6.5	- 0 26	9.8	9.8	Ao	4	..	13921b	78	16	7.0	- 7 39	8.7	9.1	F5	6	..	14377b
29	17	6.5	- 5 37	8.4	9.5	K2	4	..	13921b	79	16	7.0	- 8 16	8.8	9.8	Ko	3	..	14377b
30	11	6.5	-18 31	9.0	10.1	K2	2	..	24596b	80	19	7.0	-14 22	6.62	7.40	G5	6	..	14157b
31	11	6.5	-19 10	6.92	8.2	G5	6	..	10109b	81	28	7.0	-27 27	9.3	10.2	F2	2	..	23746b
32	35	6.5	-24 12	8.2	8.0	F5	5	0,4	23746b	82	30	7.0	-46 17	9.7	10.3	Go	3	..	39658b
33	41	6.5	-35 1	7.75	8.9	G5	4	..	41879b	83	3	7.0	-80 44	7.21	8.1	G5	8	0,4	38135b
34	29	6.5	-50 11	9.3	9.4	Go	4	..	39658b	84	10	7.1	+22 1	7.82	9.17	Ma	3	..	38102i
35	5	6.5	-73 10	10.1	11.2	K2	1	0,2	38385b	85	18	7.1	+ 1 45	10.1	11.5	Mb	..	..	M
36	27	6.6	+50 56	8.6	8.7	A5	2	..	37937i	86	22	7.1	-15 43	8.9	9.7	G5	2	..	12365b
37	6	6.6	+26 58	8.1	8.5	F5	2	E	38880i	87	14	7.1	-18 30	5.47	6.54	K2	..	3,8	56,117
38	16	6.6	-10 15	8.2	8.6	F5	4	..	14157b	88	26	7.1	-49 35	10.8	11.2	Go	1	..	39658b
39	42	6.6	-35 42	5.19	6.3	F5	..	3,R	56,117	89	24	7.1	-54 56	8.58	9.9	Ko	3	0,2	39675b
40	29	6.6	-56 19	8.4	8.8	Fo	4	5,3	42095b	90	22	7.1	-55 19	7.9	9.1	K5	2	3,2	42095b
41	8	6.6	-59 28	9.0	8.8	Go	4	..	42095b	91	11	7.1	-59 5	8.1	8.4	G5	5	0,4	42095b
42	7	6.6	-60 4	9.2	10.5	K2	1	..	22068b	92	9	7.1	-72 33	10.2	10.6	F5	5	3,3	22155b
43	21	6.7	+47 36	6.30	7.30	Ko	4	..	37007i	93	11	7.1	-76 2	8.1	9.1	Ko	7	0,3	38135b
44	12	6.7	+27 52	7.9	8.3	F5	4	3,2-	37310i	94	24	7.2	+45 23	8.56	9.74	K5	1	R	38896i
45	13	6.7	+ 8 35	7.7	8.5	G5	2	..	37378i	95	17	7.2	+29 2	8.9	10.0	K2	1	0,1	37310i
46	16	6.7	- 2 20	9.8	10.3	F8	3	..	13921b	96	18	7.2	- 6 29	9.8	10.2	F5	2	..	14377b
47	12	6.7	-18 7	9.0	9.8	G5	2	..	12365b	97	39	7.2	-23 51	10.0	10.8	Go	1	..	45102b
48	16	6.7	-20 16	9.5	10.5	Go	3	..	24596b	98	32	7.2	-28 21	8.6	8.8	F5	3	..	23746b
49	30	6.7	-50 13	8.1	9.1	G5	5	..	14881b	99	42	7.2	-36 18	9.4	11.0	F5	1	..	41067b
50	8	6.7	-58 2	9.1	9.9	G5	3	..	14382b	100	20	7.3	+44 10	6.62	7.62	Ko	6	2,6-	38896i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	21	7.3	+44 3	7.58	8.58	Ko	2	2,2	3791oi	51	19	7.8	+28 51	9.0	10.0	Ko	1	5,1	3731oi
2	22	7.3	+43 46	7.20	8.20	Ko	4	..	37007i	52	17	7.8	+11 46	7.8	8.1	Fo	4	..	37368i
3	12	7.3	+31 38	8.7	8.7	Ao	2	..	3731oi	53	11	7.8	- 3 56	7.56	8.01	Ma	4	0,2	14156b
4	18	7.3	+19 40	8.0	8.8	G5	3	..	3888oi	54	18	7.8	- 7 28	8.8	9.8	Ko	4	..	14377b
5	23	7.3	- 9 16	8.8	9.6	G5	2	..	14157b	55	R	7.8	-22 50	9.0	9.9	K5	4	..	24596b
6	14	7.3	-19 5	9.5	10.5	Ko	4	..	24596b	56	49	7.8	-32 27	8.76	9.5	Go	3	..	41067b
7	41	7.3	-32 2	9.4	10.7	Ko	1	..	41067b	57	23	7.8	-48 4	9.5	10.2	Go	3	..	39658b
8	32	7.3	-51 16	9.1	9.9	Ko	4	0,3	39658b	58	11	7.8	-60 4	9.0	9.9	G5	2	5,2	14382b
9	19	7.4	+56 41	7.8	8.9	K2	3	0,2	37241i	59	14	7.8	-61 53	8.2	9.0	G5	4	0,3	22068b
10	14	7.4	+38 44	8.6	9.6	Ko	2	..	37382i	60	4	7.8	-80 46	9.6	10.4	G5	3	..	38135b
11	12	7.4	+24 5	8.2	8.5	Fo	3	..	3888oi	61	16	7.9	+61 29	6.59	6.59	Ao	7	2,4	37909i
12	23	7.4	-22 38	8.8	9.0	Go	5	..	45102b	62	22	7.9	+47 14	8.9	9.0	A3	1	..	38896i
13	29	7.4	-40 11	9.4	11.0	G5	1	..	14371b	63	13	7.9	+34 44	7.90	8.68	G5	3	..	37382i
14	9	7.4	-58 4	9.6	10.2	Go	1	..	14382b	64	19	7.9	+19 39	8.7	9.1	F5	2	3,1	3888oi
15	1	7.5	+87 51	9.2	9.2	A	2	..	37281i	65	7	7.9	+ 6 20	9.0	9.3	Fo	1	..	12386b
16	20	7.5	+56 23	8.9	8.9	Ao	2	..	37241i	66	16	7.9	+ 2 23	8.6	9.1	F8	4	..	12386b
17	22	7.5	+51 23	8.5	8.6	A2	2	..	37937i	67	41	7.9	-30 2	9.68	9.8	F5	3	..	41067b
18	26	7.5	+45 33	6.64	6.98	F2	6	..	37007i	68	42	7.9	-30 37	8.2	9.2	Ko	2	..	23746b
19	12	7.5	+19 13	9.1	9.9	G5	1	..	38102i	69	31	7.9	-44 8	9.7	11.2	K2	1	..	45096b
20	19	7.5	- 1 47	7.28	8.28	Ko	7	0,3	14156b	70	10	7.9	-58 28	7.4	7.4	G5	6	..	42095b
21	14	7.5	-12 15	8.6	8.7	A5	5	0,4	14157b	71	23	8.0	+51 17	8.0	9.2	K5	1	..	37937i
22	23	7.5	-14 10	8.0	8.0	Ao	5	0,4	14157b	72	12	8.0	+20 52	8.8	9.6	G5	2	..	38102i
23	52	7.5	-31 24	8.2	9.2	Go	4	..	41067b	73	21	8.0	+20 11	9.25	10.25	Ko	1	..	3888oi
24	42	7.5	-32 53	9.4	9.5	F8	3	..	41067b	74	11	8.0	+16 22	6.62	7.40	G5	6	..	37368i
25	13	7.5	-62 10	8.8	9.1	Fo	4	..	22068b	75	17	8.0	+ 2 50	9.0	9.5	F8	2	..	12386b
26	..	7.6	+71 32	..	..	Pf	..	R	76,21	76	18	8.0	- 8 15	8.0	9.0	Ko	4	..	14157b
27	6	7.6	+69 3	8.8	9.6	G5	1	..	38068i	77	46	8.0	-23 2	6.67	7.7	Ko	6	5,5	10109b
28	28	7.6	+50 56	8.0	9.2	K5	1	..	38557i	78	48	8.0	-24 30	9.8	10.8	Go	1	..	45102b
29	12	7.6	+37 9	6.57	6.40	B3	..	2,6-	56,71	79	45	8.0	-40 57	9.7	10.5	K2	1	..	45096b
30	10	7.6	+26 33	8.9	9.9	Ko	1	E	3888oi	80	33	8.0	-43 59	9.7	10.0	F5	4	..	45096b
31	11	7.6	+15 1	8.7	9.7	Ko	2	..	37368i	81	9	8.0	-73 39	10.7	11.7	Ko	2	..	22155b
32	13	7.6	+ 5 37	9.4	9.4	Ao	3	..	12386b	82	5	8.0	-78 6	11.0	11.8	G5	2	..	38135b
33	20	7.6	-19 45	9.18	10.8	K2	4	..	24596b	83	40	8.1	+49 10	7.04	7.04	Ao	6	0,7	37007i
34	37	7.6	-27 25	7.85	8.5	G5	3	..	23746b	84	27	8.1	+39 40	8.9	9.0	A5	3	..	37382i
35	39	7.6	-29 54	9.62	10.4	K5	2	..	41067b	85	14	8.1	+18 58	9.1	10.1	Ko	1	..	38102i
36	43	7.6	-33 51	8.8	9.2	F5	4	..	41879b	86	14	8.1	+14 38	2.87	2.68	B2	..	R	2371c
37	37	7.6	-47 49	10.5	12.3	Ko	1	..	39658b	87	16	8.1	+ 0 35	9.4	10.6	K5	2	..	13921b
38	26	7.6	-52 54	8.7	10.8	Ko	3	..	39675b	88	19	8.1	- 5 48	8.2	9.3	K2	5	..	13921b
39	35	7.6	-56 59	9.8	10.2	F5	2	..	14382b	89	16	8.1	-17 43	9.3	9.9	Go	2	..	14623b
40	7	7.6	-64 50	10.0	10.0	Ao	5	..	38229b	90	17	8.1	-17 44	8.2	9.2	Ko	4	0,6	14623b
41	15	7.7	+62 10	8.0	8.8	G5	2	..	37909i	91	47	8.1	-23 30	9.0	10.5	K2	3	..	24596b
42	21	7.7	+55 18	7.91	8.05	A5	4	5,2	37241i	92	40	8.1	-28 23	8.6	9.3	G5	3	..	23746b
43	11	7.7	+35 3	8.4	8.8	F5	2	..	37382i	93	15	8.1	-74 36	9.6	10.6	Ko	4	5,3	22155b
44	17	7.7	- 7 35	9.5	10.1	Go	4	..	14377b	94	7	8.2	+67 30	8.4	8.7	Fo	3	..	38068i
45	30	7.7	-43 44	7.34	8.4	G5	6	5,3	14371b	95	13	8.2	+26 25	6.30	6.72	F5	6	0,8-	3731oi
46	33	7.7	-46 24	9.4	10.9	Ko	2	..	39658b	96	17	8.2	+ 8 22	7.9	8.2	Fo	3	..	37378i
47	14	7.7	-74 39	10.0	11.4	Mb	1	..	38135b	97	21	8.2	- 6 32	10.0	10.6	Go	1	..	14377b
48	6	7.8	+67 37	7.8	8.2	F5	2	..	38068i	98	28	8.2	- 8 53	9.8	10.3	F8	3	..	14377b
49	30	7.8	+49 22	7.02	7.08	A2	6	0,7	37007i	99	15	8.2	-21 11	7.28	7.9	Fo	6	..	10109b
50	13	7.8	+36 51	8.1	9.1	Ko	3	..	37382i	100	51	8.2	-24 18	8.0	8.0	Fo	5	..	23746b

THE HENRY DRAPER CATALOGUE.

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0^h 8^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	38	8.2	-26 53	7.50	8.4	Ko	5	..	23746b	51	32	8.8	+39 25	8.8	10.2	Ma	2	..	37382i
2	40	8.2	-38 23	7.26	8.6	K2	7	..	14371b	52	21	8.8	+32 39	6.06	6.06	Ao	6	0,8-	10404i
3	32	8.2	-43 38	7.3	8.0	Fo	4	5,8	37262b	53	25	8.8	-10 18	8.9	9.9	Ko	2	..	14157b
4	26	8.3	+46 38	8.0	8.1	A2	4	..	37007i	54	23	8.8	-10 27	9.5	10.0	F8	2	..	14377b
5	29	8.3	+40 29	5.73	5.87	A5	..	5,8-	56,71	55	25	8.8	-18 6	7.25	7.13	B5	..	2,6	56,117
6	28	8.3	+39 33	8.4	8.8	F5	4	..	37382i	56	36	8.8	-49 0	8.8	9.9	Ko	3	..	23761b
7	15	8.3	+ 5 54	9.4	10.4	Ko	1	0,1	12386b	57	35	8.8	-49 15	7.11	7.2	A2	9	0,6	14881b
8	23	8.3	- 5 12	9.3	10.4	K2	1	..	14377b	58	33	8.8	-49 46	9.4	9.9	Ko	4	..	39658b
9	47	8.3	-33 42	9.6	10.1	G5	2	..	41067b	59	14	8.8	-59 37	9.4	10.0	Go	2	0,2	14382b
10	11	8.3	-72 5	9.3	10.3	Ko	6	..	22155b	60	5	8.8	-77 18	8.1	9.1	Ko	5	0,2	38135b
11	1	8.3	-87 58	8.4	9.2	G5	5	..	22980b	61	21	8.9	+65 47	8.0	8.1	A3	3	..	37909i
12	15	8.4	+64 18	7.92	8.48	Go	3	..	37909i	62	16	8.9	+60 10	7.76	7.76	Ao	4	2,2	38060i
13	41	8.4	+49 0	8.6	8.7	A2	2	R	37937i	63	17	8.9	+25 7	8.36	9.43	K2	1	..	38880i
14	24	8.4	+43 38	9.2	10.0	G5	1	..	38896i	64	21	8.9	+ 0 19	9.18	9.74	Go	5	..	13921b
15	30	8.4	+42 24	7.44	8.44	Ko	3	0,4	37382i	65	21	8.9	- 0 35	8.4	8.5	A5	6	3,6	14156b
16	27	8.4	+35 36	8.02	8.02	Ao	4	..	37382i	66	12	8.9	- 4 27	7.50	8.50	Ko	6	5,4	14156b
17	17	8.4	+ 0 18	9.43	10.50	K2	2	..	13921b	67	20	8.9	-11 52	8.6	9.4	G5	4	..	14157b
18	10	8.4	-72 56	10.6	11.7	K2	1	0,1	38385b	68	30	8.9	-53 8	8.7	9.6	Go	3	5,1	39675b
19	4	8.5	+75 28	7.57	8.92	Ma	3	..	38133i	69	15	8.9	-59 26	9.9	10.4	F8	1	..	14382b
20	13	8.5	+32 0	8.4	9.4	Ko	2	..	37352i	70	4	8.9	-65 19	10.1	10.5	F5	2	..	38229b
21	18	8.5	+ 6 1	8.6	8.9	F2	4	3,2	12386b	71	5	8.9	-65 49	9.5	10.5	Ko	2	..	38229b
22	20	8.5	- 2 34	10.2	11.0	G5	1	..	13921b	72	23	9.0	+65 39	7.60	8.60	Ko	2	..	37909i
23	48	8.5	-30 8	8.6	8.6	A2	4	..	23746b	73	16	9.0	+54 43	7.72	8.79	K2	1	..	38557i
24	47	8.5	-40 55	9.7	9.8	G5	3	..	14371b	74	25	9.0	+52 18	7.92	7.92	Ao	4	0,3	37241i
25	37	8.5	-46 49	10.3	11.2	Go	2	..	39658b	75	18	9.0	+34 51	8.12	8.54	F5	3	..	37382i
26	12	8.5	-60 28	8.2	9.6	G5	3	..	42095b	76	18	9.0	+25 42	7.02	7.52	F8	3	3,6	37352i
27	5	8.5	-80 4	10.6	10.7	A2	4	..	38135b	77	13	9.0	+13 1	8.5	9.3	G5	2	..	37368i
28	14	8.6	+36 17	9.4	10.6	K5	1	..	37382i	78	31	9.0	-53 6	8.5	9.6	Go	4	2,2	39675b
29	17	8.6	+18 4	8.5	9.3	G5	4	..	37368i	79	39	9.0	-55 55	10.0	10.8	G5	1	..	14382b
30	14	8.6	+16 1	8.8	9.1	Fo	2	..	37368i	80	42	9.0	-57 34	6.8	7.6	F8	6	0,5	42095b
31	18	8.6	+ 7 38	7.8	8.1	F2	4	..	37378i	81	13	9.0	-76 3	10.2	11.2	Ko	3	..	38135b
32	9	8.6	+ 6 23	9.0	9.1	A5	2	R	12386b	82	31	9.1	+43 17	8.0	8.5	F8	3	3,2	37910i
33	37	8.6	-44 13	10.5	11.2	Go	1	..	45096b	83	12	9.1	- 1 7	9.0	10.0	Ko	3	..	13921b
34	12	8.6	-59 19	9.6	10.2	Go	1	..	14382b	84	24	9.1	- 7 45	8.2	8.6	F5	5	0,6-	17321b
35	9	8.6	-66 30	9.0	10.0	Ko	4	..	38229b	85	40	9.1	-43 45	10.3	11.2	G5	1	..	45096b
36	15	8.7	+59 27	7.05	8.05	Ko	3	5,2	37241i	86	39	9.1	-50 50	9.9	10.3	Ko	3	0,2	39658b
37	26	8.7	+43 53	8.8	9.8	Ko	1	..	38896i	87	15	9.1	-75 15	9.0	9.8	G5	6	5,5	22155b
38	31	8.7	+39 52	8.6	9.7	K2	2	..	37382i	88	22	9.2	+ 4 20	8.7	8.8	A5	3	..	14206b
39	19	8.7	+ 5 32	9.4	10.4	Ko	1	..	12386b	89	30	9.2	- 9 24	7.98	8.98	Ko	4	..	14157b
40	19	8.7	+ 0 49	6.87	7.87	Ko	4	..	37378i	90	28	9.2	-15 0	8.8	9.2	F5	2	..	14157b
41	52	8.7	-23 46	6.99	7.7	Ko	6	5,5	10109b	91	59	9.2	-36 22	7.79	9.2	G5	4	..	41879b
42	56	8.7	-26 35	6.12	7.6	K2	6	0,5-	23746b	92	25	9.3	+53 16	8.2	8.2	Ao	4	0,2	37241i
43	57	8.7	-26 51	6.41	7.7	K5	6	3,6	8586b	93	34	9.3	+49 45	8.07	8.02	B8	3	..	37937i
44	39	8.7	-42 46	9.7	9.8	F5	2	..	14371b	94	44	9.3	+44 19	8.6	8.6	Ao	2	..	38896i
45	3	8.7	-68 46	9.4	10.2	G5	3	..	38229b	95	34	9.3	+40 28	7.02	8.02	Ko	2	..	37007i
46	2	8.8	+86 10	9.0	9.6	Go	3	..	37281i	96	18	9.3	+24 56	8.8	9.8	Ko	1	..	38880i
47	5	8.8	+75 28	7.87	8.65	G5	3	..	38133i	97	16	9.3	+16 5	8.6	8.9	F2	4	..	37368i
48	27	8.8	+46 23	8.4	9.8	Ma	..	..	M	98	18	9.3	+ 2 55	9.1	9.6	F8	2	..	14206b
49	28	8.8	+43 57	8.2	8.6	F5	2	..	37007i	99	18	9.3	- 2 46	7.36	8.36	Ko	5	0,3	14156b
50	22	8.8	+41 25	8.4	8.4	Ao	4	..	37382i	100	17	9.3	-21 45	6.85	7.4	F8	6	..	10109b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	29	9.3	-22 8	9.5	9.3	F5	4	..	24596b	51	29	9.7	-14 44	6.86	6.92	A2	9	1,6-	14157b
2	47	9.3	-28 5	7.22	8.0	Go	4	0,5	8586b	52	22	9.7	-17 43	9.5	9.9	F5	1	..	14623b
3	41	9.3	-43 48	8.9	10.3	Ko	3	..	45096b	53	60	9.7	-33 36	8.8	10.1	Ko	2	..	41067b
4	35	9.3	-55 38	6.66	7.6	F5	6	3,7	41858b	54	42	9.7	-44 24	8.7	9.8	Ko	3	..	14371b
5	..	9.3	-69 11	..	..	K2	2	..	38229b	55	44	9.7	-47 11	8.5	10.0	K5	3	..	23761b
6	3	9.4	+86 7	8.9	9.9	Ko	1	..	37281i	56	42	9.7	-49 55	10.3	11.1	Go	2	..	39658b
7	4	9.4	+77 28	8.2	9.2	Ko	2	..	38133i	57	13	9.8	+61 13	9.2	10.2	Ko	1	..	38060i
8	11	9.4	+69 48	8.6	8.9	Fo	3	..	38068i	58	29	9.8	+37 30	8.3	9.3	Ko	2	..	37382i
9	15	9.4	+64 0	8.0	8.1	A2	3	..	37909i	59	15	9.8	+20 58	7.28	8.35	K2	4	..	38880i
10	18	9.4	+61 38	8.5	9.0	F8	2	..	38060i	60	22	9.8	+15 40	8.7	9.5	G5	2	..	37368i
11	35	9.4	+51 4	8.1	8.1	Ao	3	..	37937i	61	19	9.8	+ 8 16	5.87	6.15	Fo	8	0,6	37378i
12	26	9.4	+38 1	8.7	9.5	G5	2	..	37382i	62	15	9.8	- 1 35	8.82	9.82	Ko	3	..	14156b
13	27	9.4	+19 39	4.94	6.29	Ma	..	0,R	56,71	63	20	9.8	- 3 35	7.01	8.36	Ma	5	5,5	17321b
14	26	9.4	- 8 21	5.36	6.71	Ma	8	0,R	17321b	64	30	9.8	-10 7	5.76	5.74	B9	10	..	10110b
15	30	9.4	-14 59	6.96	7.38	F5	4	3,8	10109b	65	55	9.8	-30 44	9.8	10.1	F2	2	..	41067b
16	20	9.4	-17 14	8.8	9.8	Ko	1	..	12365b	66	42	9.8	-46 36	7.3	8.4	Ko	7	0,4-	14371b
17	19	9.4	-19 40	9.28	9.6	A2	2	..	12365b	67	8	9.8	-64 44	9.6	10.6	Ko	3	..	38229b
18	43	9.4	-27 44	8.8	9.4	Go	2	..	23746b	68	12	9.9	+70 0	8.99	9.27	Fo	3	..	38068i
19	46	9.4	-29 29	9.8	9.8	Ko	2	..	41067b	69	19	9.9	+60 13	8.01	9.01	Ko	2	0,1	38060i
20	52	9.4	-40 59	8.3	9.5	Ko	5	..	14371b	70	18	9.9	+59 15	8.2	8.3	A2	2	..	38872i
21	40	9.4	-49 55	9.7	10.5	Ko	2	..	39658b	71	30	9.9	+53 1	7.91	8.91	Ko	3	..	38557i
22	19	9.4	-63 20	6.64	8.8	Ma	8	..	22068b	72	36	9.9	+46 42	8.9	9.0	A3	3	..	38896i
23	2	9.4	-69 29	7.5	7.6	A3	7	0,5	38229b	73	20	9.9	+34 19	8.00	8.34	F2	3	..	37382i
24	14	9.4	-72 2	9.4	9.8	F5	6	..	22155b	74	26	9.9	+32 28	7.55	8.55	Ko	3	..	37382i
25	16	9.4	-75 28	7.1	8.1	Ko	8	0,5	38135b	75	26	9.9	+30 59	6.61	7.79	K5	6	5,3	37310i
26	29	9.5	+62 17	7.42	7.42	Ao	5	..	37909i	76	23	9.9	+ 5 2	8.60	9.10	F8	4	..	14206b
27	17	9.5	+54 25	8.5	8.5	Ao	2	..	38557i	77	37	9.9	-16 37	8.6	8.9	Fo	3	..	12365b
28	32	9.5	+44 15	8.5	8.5	Ao	4	..	38896i	78	66	9.9	-32 43	7.94	8.3	F5	3	0,1-	8586b
29	37	9.5	+41 13	9.0	9.0	Ao	3	..	37382i	79	37	10.0	+46 50	8.6	8.6	Ao	3	..	38896i
30	19	9.5	+ 2 49	8.8	9.9	K2	2	..	14206b	80	38	10.0	+46 21	8.2	9.0	G5	3	..	38896i
31	22	9.5	+ 0 45	7.02	7.44	F5	6	..	37378i	81	46	10.0	+44 38	8.4	9.4	Ko	1	..	38896i
32	2	9.5	-85 33	5.74	8.0	K5	..	0,9	56,117	82	33	10.0	+43 38	6.64	6.62	B9	6	..	38896i
33	38	9.6	+46 14	8.7	9.3	Go	2	..	38896i	83	23	10.0	+26 43	6.06	6.06	Ao	5	0,9	37352i
34	27	9.6	- 9 58	9.2	9.8	Go	4	..	14377b	84	14	10.0	+17 8	9.1	9.6	F8	4	..	37368i
35	29	9.6	-10 29	9.5	10.0	F8	3	..	14377b	85	31	10.0	- 9 57	9.8	10.6	G5	1	..	14377b
36	31	9.6	-13 18	8.00	9.00	Ko	4	..	14157b	86	30	10.0	-17 49	10.0	10.0	Ao	1	..	12365b
37	32	9.6	-15 22	6.89	7.67	G5	7	5,4	14157b	87	51	10.0	-28 3	9.3	10.8	G5	1	..	23746b
38	21	9.6	-19 30	4.68	6.03	Ma	..	0,R	56,117	88	56	10.0	-34 9	9.7	9.8	Go	3	..	41067b
39	67	9.6	-31 35	9.0	9.2	Go	2	..	41067b	89	65	10.0	-35 28	6.29	7.7	Ko	..	2,5-	56,117
40	37	9.6	-40 21	9.7	9.8	Go	3	..	45096b	90	68	10.0	-36 43	7.8	9.8	K5	2	..	42804b
41	27	9.6	-48 26	8.5	10.2	K2	3	..	23761b	91	17	10.0	-71 52	10.2	11.2	Ko	2	..	22155b
42	41	9.6	-50 26	8.2	9.0	Ko	3	..	14881b	92	47	10.1	+44 58	8.0	8.3	Fo	3	..	38896i
43	42	9.6	-56 16	9.9	10.5	Go	1	..	14382b	93	48	10.1	+44 27	8.0	8.5	F8	3	..	38896i
44	27	9.7	+53 31	7.85	8.63	G5	2	5,1	37937i	94	25	10.1	+28 2	8.2	8.6	F5	3	0,6-	37352i
45	30	9.7	+52 5	7.6	7.6	B9	3	..	38872i	95	20	10.1	+24 51	8.9	9.3	F5	4	..	19643i
46	30	9.7	+35 51	8.8	9.2	F5	2	..	37382i	96	61	10.1	-24 27	10.0	11.2	Go	1	..	45102b
47	26	9.7	+23 15	8.2	8.7	F8	2	..	38880i	97	50	10.1	-29 35	9.2	9.2	A3	4	..	41067b
48	13	9.7	+21 43	6.05	6.05	Ao	8	..	19643i	98	20	10.2	+61 34	8.0	8.8	G5	1	..	38060i
49	20	9.7	+ 2 44	9.4	9.8	F5	3	..	14206b	99	25	10.2	+23 31	9.3	10.1	G5	1	..	38880i
50	14	9.7	- 0 52	8.0	8.1	A5	7	..	14156b	100	29	10.2	- 6 42	8.2	9.2	Ko	2	5,3	17321b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	24	10.2	-17 18	7.70	8.04	F2	4	..	10109b	51	25	10.7	+ 2 9	8.5	8.6	A5	3	..	37378i
2	61	10.2	-23 27	8.0	9.0	K0	3	..	23746b	52	29	10.7	- 5 3	10.0	10.6	G0	2	..	14377b
3	67	10.2	-25 3	8.3	10.2	K0	3	..	45102b	53	30	10.7	- 6 9	7.7	8.5	G5	5	0,3	37359i
4	71	10.2	-31 29	8.4	9.2	F8	3	..	41067b	54	28	10.7	-12 33	8.3	8.4	A2	5	2,4	14157b
5	67	10.2	-35 4	8.3	9.2	G5	5	..	41067b	55	69	10.7	-35 42	8.2	9.8	K0	4	..	41067b
6	52	10.2	-42 40	8.9	9.5	F5	6	..	45096b	56	75	10.7	-36 39	9.7	10.4	F8	2	..	41067b
7	49	10.2	-45 13	8.9	10.6	K0	2	..	14371b	57	51	10.7	-46 48	7.7	9.1	K0	4	2,4	23761b
8	3	10.2	-69 6	8.2	8.8	Go	6	5,2	38229b	58	51	10.8	+44 53	8.6	8.6	A0	4	..	38896i
9	35	10.3	+49 30	7.68	8.68	K0	2	0,1	37910i	59	16	10.8	+17 2	9.8	10.4	Go	1	..	38102i
10	29	10.3	+22 29	8.6	8.9	F2	3	3,2	38102i	60	26	10.8	+ 3 41	7.02	7.02	A0	6	..	37378i
11	22	10.3	- 3 20	9.3	9.8	F8	3	..	14156b	61	26	10.8	- 7 29	9.8	10.3	F8	2	..	14377b
12	17	10.3	- 4 13	9.2	9.2	B9	4	0,2	14156b	62	32	10.8	- 9 26	8.6	9.2	Go	4	..	14377b
13	34	10.3	-13 8	9.2	9.8	Go	1	..	12365b	63	23	10.8	-19 30	9.5	10.5	K0	2	..	24596b
14	35	10.3	-13 37	8.6	8.7	A5	5	..	14157b	64	6	10.8	-70 19	9.0	10.2	K5	2	E	38385b
15	69	10.3	-32 36	var.	var.	Md	5	R	15112b	65	3	10.9	+81 7	8.9	9.9	K0	1	..	38964i
16	40	10.3	-40 39	7.7	8.5	G5	8	..	14371b	66	21	10.9	+61 21	9.2	10.2	K0	1	..	38060i
17	54	10.3	-42 44	8.3	8.9	F8	4	..	45096b	67	41a	10.9	+46 27	var.	var.	Md	..	R	M
18	45	10.3	-43 4	10.3	10.9	Go	2	..	45096b	68	26	10.9	+14 8	8.66	9.73	K2	2	..	37368i
19	3	10.4	+84 24	7.91	7.97	A2	5	..	37281i	69	23	10.9	+ 7 34	8.0	8.1	A5	4	..	37378i
20	53	10.4	+48 46	8.0	8.0	A0	4	..	38896i	70	34	10.9	-10 2	8.3	8.8	F8	4	..	14157b
21	50	10.4	+44 58	8.0	8.3	F0	2	..	37007i	71	70	10.9	-22 59	9.8	10.2	G5	2	..	24596b
22	14	10.4	+12 52	8.4	9.5	K2	2	..	37368i	72	18	10.9	-62 6	9.6	10.0	F5	2	..	22068b
23	23	10.4	- 7 19	10.2	10.8	Go	1	..	14377b	73	10	10.9	-64 18	10.3	11.1	G5	2	..	38239b
24	31	10.4	-18 28	9.5	10.1	G	2	..	24596b	74	20	10.9	-71 59	8.8	9.8	K0	5	2,4	22155b
25	58	10.4	-30 44	8.4	9.6	Go	3	..	41067b	75	19	10.9	-72 18	9.8	10.3	F8	4	3,2	22155b
26	4	10.4	-69 24	9.0	10.2	K5	2	..	38229b	76	12	11.0	+72 47	8.6	8.6	A0	2	..	38134i
27	5	10.4	-78 58	10.8	11.6	G5	2	..	38135b	77	27	11.0	+65 24	8.40	9.18	G5	2	..	38060i
28	22	10.5	+58 53	8.0	8.0	B9	4	..	1897b	78	24	11.0	+34 37	8.8	9.4	G	2	..	37382i
29	19	10.5	+38 28	8.6	8.9	F2	3	..	37382i	79	31	11.0	+29 59	8.9	10.0	K2	1	..	37352i
30	31	10.5	+22 53	8.2	8.8	G	2	R	38102i	80	21	11.0	+17 35	9.4	10.0	G	1	..	38102i
31	15	10.5	+22 8	8.2	9.3	K2	2	..	38102i	81	32	11.0	-14 37	9.0	9.8	G5	2	..	14157b
32	19	10.5	+18 20	9.1	9.7	Go	1	..	38102i	82	44	11.0	-50 44	9.1	10.2	K0	5	0,4	39658b
33	25	10.5	+ 5 17	7.21	8.21	K0	4	..	37378i	83	19	11.0	-62 21	9.4	9.9	F8	3	..	22068b
34	27	10.5	- 5 34	9.0	10.2	K5	2	..	13921b	84	13	11.0	-67 29	8.0	8.5	F8	5	2,2	38229b
35	34	10.5	-14 47	9.23	10.01	G5	1	..	14157b	85	41	11.1	+43 3	6.03	6.03	A0	10	..	37007i
36	70	10.5	-24 54	9.25	10.1	Go	2	..	23746b	86	32	11.1	+29 55	9.4	9.5	A2	1	..	37352i
37	64	10.5	-32 58	9.00	9.5	F8	2	..	41067b	87	72	11.1	-32 0	5.69	7.1	K0	..	0,6-	56,117
38	55	10.5	-41 1	7.7	8.9	K0	7	..	14371b	88	51	11.1	-38 7	9.1	10.7	K5	1	..	45510b
39	43	10.5	-50 46	9.9	9.9	Go	4	5,3	39658b	89	50	11.1	-43 14	8.7	9.7	K0	3	2,3	14371b
40	18	10.5	-72 45	10.4	11.2	G5	3	5,2	22155b	90	19	11.1	-59 20	8.4	9.3	K0	2	..	42095b
41	5	10.6	+76 24	6.23	6.21	B9	7	1,7	38820i	91	..	11.1	-78 58	..	..	F5	1	..	38135b
42	16	10.6	+60 27	6.62	7.40	G5	3	..	1897b	92	30	11.2	+53 23	7.36	8.14	G5	2	..	38872i
43	44	10.6	+57 47	8.6	8.6	A0	1	..	38872i	93	45	11.2	+39 45	9.3	9.6	F0	2	..	37382i
44	27	10.6	+41 47	8.9	9.9	K0	1	..	38896i	94	28	11.2	- 0 30	8.8	9.3	F8	4	..	13921b
45	29	10.6	+32 47	8.8	9.2	F5	1	..	37310i	95	38	11.2	-15 2	8.6	9.1	F8	4	..	14157b
46	26	10.6	- 0 26	9.8	11.0	K5	1	..	13921b	96	61	11.2	-28 20	9.3	10.8	Go	3	..	20456b
47	29	10.6	- 7 52	8.8	9.3	F8	4	..	14377b	97	53	11.2	-46 26	9.7	11.2	K5	2	..	39658b
48	33	10.6	-11 35	9.2	10.2	K0	2	..	14157b	98	44	11.2	-49 7	8.5	9.4	Mb	5	0,3-	23761b
49	32	10.7	+38 12	8.3	9.1	G5	3	..	37382i	99	4	11.2	-68 28	8.2	8.3	A2	5	0,8	12082b
50	19	10.7	+10 14	9.07	9.85	G5	2	..	38107i	100	6	11.2	-77 0	9.8	11.2	Mb	..	..	M

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	22	11.3	+62 0	8.6	8.6	A	1	R	3806oi	51	51	11.6	-56 47	8.5	9.1	F8	4	..	14382b
2	29	11.3	+28 44	8.8	9.8	Ko	2	..	37352i	52	23	11.7	+39 15	8.8	9.4	Go	3	..	37382i
3	29	11.3	- 7 35	8.8	9.2	F5	5	..	14377b	53	35	11.7	+29 28	9.3	10.3	Ko	1	..	37352i
4	32	11.3	-19 57	8.2	9.1	G5	5	0,3	24596b	54	34	11.7	+22 43	7.18	8.18	Ko	5	0,5 R	3888oi
5	74	11.3	-23 9	7.7	8.3	G5	4	..	23746b	55	21	11.7	+ 9 42	6.83	8.18	Ma	4	..	38069i
6	54	11.3	-27 42	9.8	11.1	Ko	1	..	23746b	56	24	11.7	-20 46	6.50	6.4	B8	8	..	10109b
7	67	11.3	-34 2	9.6	10.7	G5	1	..	41067b	57	63	11.7	-30 18	9.3	10.1	G5	1	..	41067b
8	23	11.3	-63 43	8.7	9.8	K2	2	..	22068b	58	83	11.7	-31 0	8.6	10.1	Ko	2	..	41067b
9	3	11.3	-71 49	9.4	10.0	Go	6	0,5	22155b	59	73	11.7	-33 15	6.72	7.4	Ko	6	0,6	12013b
10	31	11.4	+54 6	7.47	7.55	A3	6	0,5-	37241i	60	15	11.7	-67 15	7.5	8.5	Ko	6	0,3	38229b
11	43	11.4	+46 44	8.6	8.6	B9	4	..	38896i	61	4	11.7	-70 57	7.25	7.1	A2	6	..	12082b
12	28	11.4	+41 18	8.6	9.1	F8	3	..	37382i	62	4	11.8	+84 38	9.5	9.5	A	2	..	37281i
13	30	11.4	+15 17	8.24	8.38	A5	4	..	37368i	63	6	11.8	+75 35	8.57	8.57	Ao	3	..	38133i
14	25	11.4	-18 49	9.2	10.0	G5	3	..	24596b	64	31	11.8	+56 21	7.32	7.32	Ao	4	0,4	1897b
15	55	11.4	-27 47	9.8	10.4	G5	2	..	23746b	65	33	11.8	+52 41	7.8	7.8	B9	4	0,3	38557i
16	72	11.4	-35 24	9.1	9.5	Go	3	..	41067b	66	26	11.8	+ 3 9	9.4	9.5	A2	5	..	14206b
17	78	11.4	-35 53	9.7	11.3	G5	1	..	41067b	67	32	11.8	- 7 45	8.9	9.5	Go	4	..	14377b
18	55	11.4	-43 34	8.2	8.1	Ko	6	0,3-	23761b	68	41	11.8	-15 17	8.6	8.7	A5	4	..	14157b
19	22	11.4	-52 10	8.6	9.9	Ko	4	..	39675b	69	40	11.8	-16 2	9.3	9.8	F8	2	..	12365b
20	18	11.4	-74 34	9.7	10.3	Go	5	0,3	22155b	70	61	11.8	-42 19	9.7	10.1	F5	3	..	14371b
21	19	11.4	-76 28	6.60	7.7	G5	7	5,9	14357b	71	55	11.8	-47 8	7.9	8.1	F5	3	3,5-	37262b
22	44	11.5	+46 41	9.0	9.0	A	2	..	38896i	72	47	11.8	-50 11	8.9	9.3	F5	3	..	14881b
23	35	11.5	+36 5	6.95	6.95	Ao	5	2,4	37382i	73	42	11.8	-53 13	6.96	7.2	Go	7	0,8	41858b
24	34	11.5	+35 55	7.70	8.26	Go	4	..	38842i	74	13	11.8	-64 25	9.8	10.6	G5	3	..	38229b
25	36	11.5	+35 35	8.6	9.2	Go	2	..	37382i	75	6	11.8	-79 14	10.0	11.0	Ko	3	..	38135b
26	27	11.5	+11 24	8.0	9.1	K2	2	..	38069i	76	13	11.9	+69 22	8.9	9.3	F5	2	..	38068i
27	27	11.5	+ 7 41	6.19	6.97	G5	5	0,4	37378i	77	32	11.9	+57 2	8.9	9.0	A2	1	..	38872i
28	28	11.5	+ 1 18	7.29	8.64	Ma	3	..	37378i	78	25	11.9	+54 26	7.74	7.72	B9	3	..	1897b
29	26	11.5	- 2 4	8.4	8.9	F8	4	0,7-	14156b	79	50	11.9	+47 24	5.82	5.77	B9	9	I,R	37937i
30	31	11.5	- 5 32	9.8	10.2	F5	2	..	13921b	80	34	11.9	+38 8	4.44	4.50	A2	..	0,R	56,71
31	35	11.5	-13 58	7.13	7.21	A3	7	0,6	14157b	81	31	11.9	+30 31	8.2	9.4	K5	2	5,2	37352i
32	34	11.5	-18 27	8.6	9.0	F5	4	0,3	12365b	82	35	11.9	+22 43	9.0	9.3	Fo	3	8,2	3888oi
33	71	11.5	-33 19	7.43	7.9	Ko	3	0,4-	12013b	83	22	11.9	+ 9 49	7.67	8.74	K2	3	..	38069i
34	56	11.5	-37 22	9.3	9.5	F5	3	..	41067b	84	30	11.9	+ 1 48	8.6	9.7	K2	3	..	13921b
35	47	11.5	-44 21	7.6	8.9	Ko	5	0,5-	23761b	85	55	11.9	-29 17	9.6	10.2	F8	2	..	41067b
36	12	11.5	-64 36	9.4	9.8	F5	3	3,5	22068b	86	50	11.9	-44 6	9.4	10.0	F5	3	..	14371b
37	7	11.5	-80 25	6.66	7.2	Go	8	0,10	14357b	87	40	12.0	+62 16	8.6	8.6	Ao	3	..	3806oi
38	38	11.6	+63 0	8.2	8.2	Ao	4	..	37909i	88	24	12.0	+36 31	8.6	9.1	F8	2	..	37382i
39	21	11.6	+60 59	5.80	6.58	G5	5	..	1897 b	89	30	12.0	+24 7	8.3	9.3	Ko	1	..	3888oi
40	60	11.6	+48 55	6.83	8.18	Ma	2	..	37007i	90	36	12.0	+23 2	8.2	8.3	A2	6	..	19643i
41	48	11.6	+46 4	7.35	8.13	G5	4	..	37007i	91	23	12.0	+18 33	9.4	10.0	Go	1	..	38102i
42	33	11.6	+37 39	9.4	9.7	Fo	2	..	37382i	92	20	12.0	- 1 38	9.22	10.57	Ma	2	..	13921b
43	27	11.6	+13 22	7.50	7.58	A3	6	0,4 R	37368i	93	29	12.0	- 2 13	8.6	9.4	G5	4	0,2	14156b
44	37	11.6	-22 6	9.3	9.9	F8	4	..	45102b	94	34	12.0	-12 36	8.6	8.9	Fo	5	..	14157b
45	38	11.6	-22 9	9.5	9.9	F8	2	R	45102b	95	40	12.0	-13 37	9.0	10.0	Ko	1	..	12365b
46	73	11.6	-35 25	8.3	10.7	Ko	2	..	41067b	96	42	12.0	-14 54	9.15	10.15	Ko	1	..	12365b
47	51	11.6	-39 24	10.3	10.4	F5	2	..	14371b	97	56	12.0	-47 15	10.1	11.2	Go	2	..	39658b
48	49	11.6	-44 25	9.2	9.7	F2	3	6,4	23761b	98	14	12.0	-58 43	8.1	8.7	Ko	3	..	42095b
49	54	11.6	-46 10	9.2	10.0	F5	3	..	23761b	99	7	12.0	-65 17	9.3	9.7	F5	3	..	38229b
50	52	11.6	-56 2	7.6	8.7	Ko	3	5,4	41858b	100	29	12.1	+41 44	8.9	9.7	G5	1	..	38896i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	35	12.1	m. 5 0	8.8	9.8	Ko	3	..	13921b	51	34	12.6	o. +41 32	9.7	10.2	F8	1	..	38896i
2	38	12.1	-14 40	9.8	9.8	B8	3	..	14157b	52	39	12.6	+15 47	7.44	7.86	F5	6	..	37368i
3	90	12.1	-31 12	9.2	10.5	Go	2	..	41067b	53	23	12.6	-1 35	10.12	10.90	G5	2	..	13921b
4	14	12.1	-66 12	9.8	10.6	G5	3	..	38229b	54	23	12.6	-4 27	9.5	10.0	F8	3	..	13921b
5	52	12.2	+58 7	8.6	8.7	A2	1	..	38872i	55	35	12.6	-11 46	8.8	9.8	Ko	2	..	14157b
6	41	12.2	+49 44	var.	var.	Nb	..	R	M	56	61	12.6	-42 58	10.1	10.9	F8	2	..	45096b
7	54	12.2	+45 13	8.9	9.5	Go	2	..	38896i	57	59	12.6	-43 11	10.3	10.9	Go	1	..	45096b
8	39	12.2	+35 17	8.67	9.23	Go	2	..	37382i	58	16	12.6	-67 8	8.1	8.5	F5	6	0,3	38229b
9	35	12.2	+15 57	8.4	8.8	F5	4	..	37368i	59	7	12.7	+75 43	7.12	7.10	B9	7	..	38964i
10	33	12.2	+1 55	9.4	10.6	K5	1	..	13921b	60	15	12.7	+72 23	7.50	7.58	A3	6	..	38068i
11	32	12.2	+ 0 2	8.8	9.6	G5	4	..	13921b	61	52	12.7	+40 11	8.17	9.17	Ko	3	2,2	37382i
12	44	12.2	-15 33	9.3	10.3	Ko	2	..	14157b	62	24	12.7	+34 1	8.6	8.9	F2	4	..	37382i
13	26	12.2	-21 2	9.8	10.2	Go	2	..	24596b	63	33	12.7	+30 44	8.7	8.7	Ao	1	0,2	37352i
14	43	12.3	+44 11	7.80	7.86	A2	6	..	37007i	64	38	12.7	+19 41	7.30	8.65	Mb	6	..	37368i
15	40	12.3	+36 0	7.9	8.7	G5	2	..	37382i	65	32	12.7	+7 19	7.40	7.54	A5	4	..	37378i
16	24	12.3	+9 28	8.7	9.3	Go	1	..	38069i	66	28	12.7	+4 24	9.4	10.5	K2	1	..	14206b
17	24	12.3	+8 19	6.62	7.04	F5	5	..	37378i	67	28	12.7	+1 8	6.43	7.21	G5	6	..	37378i
18	31	12.3	+5 27	9.4	9.9	F8	2	..	12386b	68	35	12.7	-0 11	8.7	9.3	Go	4	..	13921b
19	21	12.3	-1 38	9.87	10.65	G5	2	..	13921b	69	31	12.7	-2 25	7.16	7.94	G5	5	0,7	37359i
20	52	12.3	-44 25	7.6	8.8	Go	4	0,5	37262b	70	37	12.7	-6 42	8.7	9.7	Ko	4	R	14377b
21	66	12.3	-44 55	7.9	8.9	F2	5	0,6	23761b	71	15	12.7	-66 13	9.0	10.0	Ko	3	..	38229b
22	49	12.3	-50 12	9.9	10.8	G5	2	..	39658b	72	23	12.7	-72 29	10.9	11.2	F2	5	0,3	22155b
23	10	12.3	-61 49	8.5	8.4	F2	4	..	42095b	73	20	12.7	-74 31	8.6	9.4	G5	6	5,2	38135b
24	7	12.3	-79 20	6.68	6.8	F5	7	0,10	14357b	74	52	12.8	+45 39	7.01	8.01	Ko	4	..	37007i
25	15	12.4	+68 8	8.6	8.6	Ao	2	..	38068i	75	34	12.8	+12 13	6.63	7.41	G5	6	..	37368i
26	44	12.4	+43 27	8.1	9.5	Ma	1	8,1 R	20069i	76	28	12.8	+8 58	8.7	9.1	F5	2	..	38069i
27	25	12.4	+36 59	9.0	9.8	G5	2	..	37382i	77	33	12.8	-7 8	10.0	10.6	Go	1	..	14377b
28	35	12.4	+1 46	9.4	10.5	K2	2	..	13921b	78	68	12.8	-37 27	8.8	11.0	K2	1	..	45110b
29	33	12.4	-0 15	7.83	8.33	F8	7	..	12386b	79	40	12.8	-48 37	9.1	10.8	K2	3	..	39658b
30	30	12.4	-3 26	9.5	10.1	Go	3	..	13921b	80	39	12.8	-48 43	11.2	10.8	G5	1	..	39658b
31	70	12.4	-30 23	9.3	11.0	K5	1	..	41067b	81	51	12.8	-49 51	10.1	10.2	G5	3	..	39658b
32	24	12.4	-52 5	9.4	9.9	F8	4	E	39675b	82	11	12.8	-61 22	7.3	7.6	A5	7	..	42095b
33	5	12.4	-68 1	9.6	10.0	F5	2	..	38229b	83	25	12.9	+61 10	7.9	7.7	Bo	5	R	38060i
34	24	12.5	+58 30	7.8	7.7	B5	4	0,4	37241i	84	39	12.9	+51 52	8.6	9.4	G5	2	..	37937i
35	38	12.5	+53 9	7.8	8.6	G5	2	..	37937i	85	37	12.9	+0 3	7.38	8.16	G5	4	..	37378i
36	38	12.5	+51 24	8.8	10.0	K5	..	..	M	86	36	12.9	-0 6	10.1	11.1	Ko	1	..	13921b
37	46	12.5	+50 53	6.12	5.88	Bo	7	R	37937i	87	25	12.9	-3 55	9.8	10.4	Go	2	..	13921b
38	37	12.5	+29 36	8.7	9.8	K2	1	..	37310i	88	42	12.9	-14 1	6.62	7.18	Go	8	..	14157b
39	27	12.5	+26 2	9.2	9.3	A2	2	..	38880i	89	81	12.9	-26 28	8.1	8.9	G5	3	..	23746b
40	37	12.5	+19 25	9.6	10.4	G5	1	..	38102i	90	10	12.9	-70 3	9.6	10.2	G	3	E	38385b
41	33	12.5	+11 29	8.0	8.1	A3	4	..	37368i	91	9	12.9	-70 26	7.6	8.2	Go	3	..	12082b
42	27	12.5	+0 46	9.4	9.9	F8	3	..	13921b	92	47	13.0	+44 1	7.58	8.65	K2	3	..	38896i
43	30	12.5	-19 37	6.47	7.2	Fo	9	2,6	14199b	93	32	13.0	+3 14	7.12	7.40	Fo	5	..	37378i
44	81	12.5	-31 58	9.1	10.7	G5	1	..	42804b	94	33	13.0	-1 54	10.8	12.0	K5	1	..	13921b
45	67	12.5	-45 13	8.3	9.7	G5	4	0,4	23761b	95	41	13.0	-9 3	9.2	10.0	G5	1	..	14377b
46	58	12.5	-46 54	9.4	10.6	Ko	2	..	23761b	96	40	13.0	-22 23	8.4	9.1	Ko	4	..	24335b
47	49	12.5	-49 2	10.1	10.8	G5	2	..	39658b	97	17	13.0	-66 55	7.4	8.0	Go	6	5,3	38229b
48	1	12.5	-88 55	7.22	7.1	Ao	5	0,7	6472b	98	18	13.0	-67 42	9.1	9.5	F5	4	..	38229b
49	47	12.6	+50 31	8.8	8.9	A5	1	..	38557i	99	24	13.0	-72 33	11.2	12.2	Ko	2	..	22155b
50	45	12.6	+44 1	7.54	8.54	Ko	5	5,4	38896i	100	32	13.1	+61 39	7.13	8.31	K5	4	0,2	38060i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	37	13.1	+56 55	8.6	9.2	Go	1	..	38872i	51	77	13.5	-28 31	8.8	9.5	K2	2	..	23746b
2	67	13.1	+48 57	7.7	8.2	F8	3	..	38896i	52	63	13.5	-47 6	7.56	7.8	F5	6	0,4	23761b
3	40	13.1	+38 11	9.2	9.2	Ao	3	..	37382i	53	59	13.5	-55 59	9.1	10.2	G5	2	..	14382b
4	44	13.1	+36 14	4.51	4.57	A2	..	2,R	56,71	54	16	13.5	-64 14	9.2	9.8	Go	5	..	38229b
5	34	13.1	+30 24	8.56	9.34	G5	1	..	37310i	55	8	13.5	-79 48	7.98	8.3	Go	7	..	38135b
6	39	13.1	+29 49	8.2	9.2	Ko	6	..	37310i	56	26	13.6	+64 40	8.9	8.9	A	1	..	38060i
7	27	13.1	+18 31	8.7	9.3	Go	1	..	38102i	57	30	13.6	+59 46	8.0	8.3	Fo	4	2,2	38060i
8	35	13.1	-7 7	10.2	10.8	Go	2	..	14377b	58	40	13.6	+51 37	7.8	8.8	Ko	3	..	37937i
9	71	13.1	-27 28	9.8	10.4	Go	2	..	23746b	59	26	13.6	+9 40	9.4	10.2	G5	1	..	38069i
10	48	13.1	-46 19	9.2	10.6	Ko	2	..	23761b	60	39	13.6	-8 11	9.2	10.0	G5	3	..	14377b
11	52	13.1	-48 30	9.5	10.2	F8	3	..	39658b	61	38	13.6	-8 37	6.50	7.06	Go	7	5,6-	14157b
12	52	13.1	-50 41	10.5	11.1	F8	2	..	39658b	62	43	13.6	-22 36	9.8	10.2	Ko	1	..	45480b
13	25	13.1	-52 14	9.2	10.2	Ko	2	E	39675b	63	90	13.6	-32 16	9.7	9.6	F5	3	0,2	41067b
14	22	13.1	-74 14	8.4	9.4	Ko	6	..	38135b	64	52	13.6	-40 51	9.9	9.8	F5	4	..	14371b
15	19	13.1	-74 59	10.4	11.2	G5	3	..	22155b	65	60	13.6	-56 49	10.5	10.5	Ao	1	..	14382b
16	4	13.2	+80 53	9.2	9.6	F5	1	..	38964i	66	17	13.6	-64 2	7.4	7.9	F8	8	..	22068b
17	35	13.2	+41 25	8.4	9.5	K2	1	..	38896i	67	17	13.7	+72 33	7.34	8.34	Ko	4	..	38068i
18	40	13.2	+22 19	8.0	8.4	F5	4	..	19643i	68	43	13.7	+50 8	7.87	8.01	A5	3	..	37937i
19	25	13.2	+10 39	6.20	7.20	Ko	8	0,6	37368i	69	52	13.7	+40 53	9.3	9.3	Ao	3	..	37382i
20	24	13.2	-1 17	10.8	11.1	Fo	2	..	13921b	70	29	13.7	+36 17	9.0	9.1	A5	2	..	37382i
21	34	13.2	-2 35	7.47	8.54	K2	6	0,3	14156b	71	40	13.7	-0 29	9.8	10.3	F8	2	..	13921b
22	32	13.2	-3 11	10.4	11.4	Ko	1	..	13921b	72	44	13.7	-11 30	8.2	8.6	F5	5	..	14157b
23	57	13.2	-44 32	8.7	9.5	Ko	3	0,5	23761b	73	39	13.7	-19 55	9.63	9.6	F5	2	..	45102b
24	48	13.2	-53 31	8.6	9.9	Go	3	E	39675b	74	79	13.7	-30 31	8.2	9.0	Go	6	..	41067b
25	6	13.2	-68 4	9.7	10.0	F2	3	..	38229b	75	53	13.7	-40 41	9.4	10.7	Ko	3	..	14371b
26	18	13.3	+67 57	8.1	9.1	Ko	2	..	38068i	76	61	13.7	-46 38	9.9	10.6	F8	2	..	23761b
27	39	13.3	+52 23	7.9	8.9	Ko	1	..	37937i	77	22	13.7	-61 56	8.8	9.4	Go	2	..	23815b
28	46	13.3	+35 26	8.2	9.3	K2	3	..	37382i	78	15	13.8	+66 45	7.93	7.93	Ao	4	..	37909i
29	29	13.3	+25 36	7.21	7.27	A2	6	0,7	19643i	79	28	13.8	+59 10	8.0	8.3	Fo	3	..	38872i
30	22	13.3	+20 55	8.8	9.1	F2	3	..	38102i	80	24	13.8	+21 48	8.8	9.8	Ko	2	0,2	38102i
31	31	13.3	-21 42	6.74	6.9	Ao	8	..	10109b	81	44	13.8	-9 31	9.5	10.1	Go	1	..	14377b
32	81	13.3	-34 44	8.78	9.2	F2	4	..	41879b	82	54	13.8	-40 14	9.1	9.6	F2	4	..	14371b
33	90	13.3	-36 23	9.7	10.4	F5	3	..	41067b	83	64	13.8	-43 48	6.27	7.1	K2	..	2,5-	56,117
34	74	13.3	-37 4	6.79	8.2	Ko	5	0,7-	12013b	84	20	13.8	-75 47	8.6	9.1	F8	5	3,2-	38135b
35	60	13.3	-51 2	9.7	10.8	Ko	2	..	39658b	85	22	13.8	-76 14	8.9	9.4	F8	6	0,2	38135b
36	26	13.3	-52 41	8.9	10.2	Go	3	E	39675b	86	30	13.9	+58 35	var.	var.	B9	5	R	1897b
37	5	13.3	-69 37	8.3	9.1	G5	4	5,3-	38365b	87	44	13.9	+55 25	8.8	8.8	B8	1	..	38872i
38	48	13.4	+43 14	6.04	6.02	B9	8	..	38896i	88	71	13.9	+49 12	8.6	8.6	Ao	1	..	38896i
39	35	13.4	+30 58	5.80	5.80	Ao	6	0,8	37352i	89	21	13.9	+6 44	8.8	9.9	K2	2	..	15133b
40	36	13.4	+30 16	8.71	9.49	G5	2	..	37310i	90	30	13.9	+4 5	8.8	9.9	K2	1	..	14206b
41	28	13.4	+19 7	8.2	9.0	G5	2	..	38102i	91	40	13.9	-12 9	8.6	8.9	F2	4	..	14157b
42	33	13.4	-2 59	10.7	11.2	F8	2	..	13921b	92	88	13.9	-33 53	9.0	8.9	Fo	4	..	41879b
43	34	13.4	-3 6	10.7	11.2	F8	1	..	13921b	93	85	13.9	-35 32	9.6	10.7	F5	2	..	41067b
44	54	13.4	-50 28	7.8	8.5	Ko	6	2,3	14881b	94	54	13.9	-49 39	9.9	10.2	G5	3	..	39658b
45	9	13.4	-65 38	9.3	10.3	Ko	3	..	38229b	95	12	13.9	-61 24	8.6	9.4	K2	3	..	42095b
46	25	13.4	-72 25	10.0	10.6	Go	5	0,3	22155b	96	45	14.0	+15 46	8.6	8.7	A5	2	..	37368i
47	48	13.5	+62 44	7.58	7.86	Fo	6	..	38060i	97	18	14.0	+13 2	8.0	8.5	F8	4	..	37368i
48	49	13.5	+44 6	7.20	7.26	A2	8	..	37007i	98	91	14.0	-25 0	9.00	9.2	F5	2	..	23746b
49	42	13.5	+22 19	7.11	7.67	Go	6	..	19643i	99	23	14.0	-60 2	9.3	9.7	Ao	3	2,2 R	22068b
50	43	13.5	+15 26	8.8	9.2	F5	2	..	37368i	100	9	14.1	+73 45	9.2	10.2	Ko	2	..	38133i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	34	14.1	+25 55	7.67	8.23	Go	4	..	19643i	51	63	14.6	-54 34	8.4	9.0	F8	4	..	14881b
2	34	14.1	+13 31	8.2	9.2	Ko	2	..	37368i	52	55	14.7	+42 19	8.2	8.5	F2	2	R	37007i
3	40	14.1	-5 36	9.5	9.9	F5	2	..	14377b	53	20	14.7	+12 50	8.6	8.9	Fo	4	..	37368i
4	89	14.1	-24 49	9.15	10.1	G5	3	..	45102b	54	34	14.7	+7 59	9.0	9.3	F2	2	0,2	38033i
5	23	14.1	-59 41	9.2	9.9	G5	2	5,1	22068b	55	46	14.7	-6 1	9.0	10.0	Ko	3	..	14377b
6	6	14.1	-69 8	8.4	9.2	G5	5	0,2	38229b	56	51	14.7	-12 55	8.2	9.2	Ko	3	..	14157b
7	27	14.1	-71 56	9.7	9.8	A3	6	1,4	22155b	57	110	14.7	-31 13	8.2	9.6	F8	4	0,4	42804b
8	24	14.1	-74 2	10.1	11.2	K2	4	..	22155b	58	6	14.7	-78 33	7.9	8.2	Fo	8	..	38135b
9	35	14.2	+55 5	8.31	8.37	A2	3	..	38872i	59	14	14.8	+68 18	7.64	7.98	F2	6	..	38068i
10	43	14.2	+19 26	7.7	8.7	Ko	4	..	37368i	60	50	14.8	+49 33	7.9	8.9	Ko	1	..	37937i
11	31	14.2	+8 29	8.4	8.5	A5	3	E	37378i	61	79	14.8	+48 18	6.27	6.27	Ao	6	..	37007i
12	35	14.2	+3 8	9.0	10.2	K5	1	..	14206b	62	42	14.8	+37 41	7.07	7.63	Go	..	0,6-	56,71
13	42	14.2	-0 3	7.90	8.46	Go	3	..	37378i	63	47	14.8	+15 42	6.77	7.77	Ko	8	..	37368i
14	26	14.2	-4 10	10.2	11.0	G5	2	5,1	13921b	64	33	14.8	+4 7	8.6	9.6	Ko	2	..	14206b
15	71	14.2	-29 3	9.8	9.6	Go	3	..	20456b	65	34	14.8	+1 2	7.8	8.6	G5	3	..	37378i
16	77	14.2	-45 49	9.3	9.8	Ko	3	2,1	23761b	66	37	14.8	-2 12	10.4	11.6	K5	1	..	13921b
17	63	14.2	-57 1	8.7	10.2	Ko	1	..	14382b	67	36	14.8	-3 2	7.05	7.83	G5	6	0,6-	37359i
18	15	14.3	+69 19	8.9	8.9	A	2	..	38068i	68	44	14.8	-20 44	9.8	11.1	Ko	1	..	45102b
19	42	14.3	+51 48	9.5	10.9	Ma	..	..	M	69	95	14.8	-22 57	9.6	10.2	Go	2	..	45102b
20	53	14.3	+43 7	9.0	9.5	F8	3	..	38896i	70	67	14.8	-57 25	8.9	10.2	Go	2	..	14382b
21	32	14.3	+5 12	9.0	10.2	K5	2	..	14206b	71	8	14.8	-67 57	9.0	9.4	F5	4	..	38229b
22	48	14.3	-9 23	3.75	4.75	Ko	..	5,R	2127c	72	5	14.8	-71 13	7.9	8.9	Ko	2	..	12082b
23	52	14.3	-15 23	9.2	10.0	G5	1	..	12365b	73	26	14.8	-74 3	10.2	11.4	K5	2	..	22155b
24	93	14.3	-34 28	9.0	9.0	F5	4	..	41879b	74	80	14.9	+49 13	8.2	8.2	B8	2	..	37007i
25	3	14.3	-83 37	9.7	10.5	G5	1	..	15165b	75	54	14.9	+43 23	7.8	8.9	K2	1	..	38896i
26	10	14.4	+76 1	8.42	9.42	Ko	2	..	38133i	76	37	14.9	+0 36	8.6	9.4	G5	3	0,3	14156b
27	56	14.4	+40 10	6.41	7.41	Ko	6	5,4-	37007i	77	39	14.9	-2 43	10.2	11.3	K2	2	..	13921b
28	36	14.4	-1 49	9.5	10.3	G5	3	..	13921b	78	28	14.9	-3 51	10.7	11.2	F8	2	0,2	13921b
29	39	14.4	-18 14	8.0	8.8	G5	3	0,4	14199b	79	48	14.9	-14 23	9.2	10.0	G5	1	..	12365b
30	56	14.4	-40 41	8.3	8.9	Go	7	..	14371b	80	89	14.9	-28 13	9.6	10.2	F8	2	..	23746b
31	68	14.4	-47 4	7.4	8.9	Ma	5	0,2	23761b	81	13	14.9	-65 28	4.34	4.84	F8	..	R	28,195
32	62	14.4	-54 24	7.9	9.3	K5	3	0,3-	42095b	82	7	14.9	-69 40	8.2	8.8	Go	3	2,5	12082b
33	7	14.4	-68 8	9.4	10.0	Go	3	..	38229b	83	38	15.0	+24 7	7.60	8.38	G5	6	..	19643i
34	25	14.4	-74 40	10.7	11.7	Ko	2	..	22155b	84	32	15.0	+8 58	9.1	9.7	Go	2	..	15133b
35	42	14.5	+57 7	8.4	9.4	Ko	1	..	38872i	85	34	15.0	+5 44	7.19	8.19	Ko	4	..	37378i
36	37	14.5	+55 10	7.91	8.98	K2	1	..	38557i	86	37	15.0	+2 29	7.99	9.34	Ma	2	..	37378i
37	32	14.5	+36 24	7.41	8.41	Ko	3	..	37382i	87	49	15.0	-9 37	8.86	9.86	Ko	2	..	14377b
38	37	14.5	+35 3	8.7	8.7	Ao	2	..	37382i	88	41	15.0	-18 15	6.88	7.88	Ko	5	0,6	14199b
39	42	14.5	-7 47	7.15	7.57	F5	5	3,6-	14157b	89	96	15.0	-25 41	7.58	8.6	Ko	5	..	23746b
40	45	14.5	-22 22	7.79	9.1	Ko	5	..	24335b	90	61	15.0	-49 30	10.5	10.8	Go	2	..	39658b
41	68	14.5	-38 19	9.7	9.9	Ao	2	..	45510b	91	13	15.0	-61 28	8.3	7.8	F8	5	..	42095b
42	24	14.5	-60 15	7.6	8.7	G5	3	..	42095b	92	7	15.0	-77 56	10.5	10.9	F5	3	..	38135b
43	8	14.5	-77 26	9.4	9.4	Ao	5	2,3	38135b	93	12	15.1	+73 59	9.7	9.7	Ao	2	..	38133i
44	38	14.6	+61 31	8.0	7.8	B2	4	..	38060i	94	52	15.1	-13 37	6.87	7.65	G5	5	5,6	14157b
45	33	14.6	+60 5	8.5	9.7	K5	2	..	38060i	95	98	15.1	-32 22	8.7	9.6	F8	3	0,3	42804b
46	53	14.6	+44 9	var.	var.	Pec.	..	R	M	96	91	15.1	-32 54	9.7	11.0	Ko	1	..	42804b
47	31	14.6	+38 58	8.4	9.4	Ko	3	..	37382i	97	92	15.1	-35 41	9.4	10.0	F2	2	..	41067b
48	27	14.6	-1 6	10.1	11.1	Ko	2	..	13921b	98	47	15.2	+56 0	6.79	7.57	G5	5	5,4	37241i
49	71	14.6	-43 39	9.5	10.0	G5	3	7,2	14371b	99	47	15.2	+51 34	9.2	9.2	Ao	2	..	38557i
50	69	14.6	-50 59	7.7	8.7	K5	3	..	14881b	100	83	15.2	+48 38	8.4	8.4	Ao	4	3,2	38896i

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	84	15.2	+48 26	6.64	7.20	Go	6	2,7	37007i	51	31	15.7	- 1 25	8.6	8.7	A5	3	..	14156b
2	60	15.2	+44 22	8.4	9.4	Ko	1	..	38896i	52	30	15.7	- 4 18	9.0	9.5	F8	3	..	14156b
3	57	15.2	+40 22	8.12	8.62	F8	5	..	37382i	53	29	15.7	- 4 40	8.95	10.30	Ma	1	..	14156b
4	52	15.2	+35 53	8.8	8.8	Ao	3	..	37382i	54	49	15.7	-14 11	8.8	9.6	G5	2	..	14157b
5	43	15.2	+30 25	7.64	8.20	Go	4	..	37310i	55	102	15.7	-26 2	8.3	9.5	G5	2	..	23746b
6	42	15.2	+30 23	5.82	5.77	B8	6	0,8	37352i	56	101	15.7	-26 52	9.0	10.2	Ko	3	..	20456b
7	25	15.2	+21 55	8.6	8.9	Fo	3	2,3	38102i	57	25	15.7	-62 16	8.3	9.3	Ko	5	..	22068b
8	34	15.2	+ 4 13	8.0	8.8	G5	3	..	37378i	58	20	15.8	+66 27	7.08	7.08	Ao	8	..	37909i
9	51	15.2	- 9 27	9.0	9.5	F8	5	..	14377b	59	62	15.8	+42 46	8.7	9.7	Ko	1	..	38896i
10	46	15.2	-11 43	8.6	8.9	Fo	5	..	14157b	60	46	15.8	+37 51	9.2	9.7	F8	2	..	37382i
11	100	15.2	-36 28	7.59	8.7	Ko	6	0,3-	12198b	61	30	15.8	+24 24	8.7	9.1	F5	2	..	38880i
12	15	15.2	-73 30	10.4	11.2	G5	3	5,2	22155b	62	44	15.8	+12 13	7.43	7.51	A3	6	..	37368i
13	43	15.3	+61 19	7.08	8.26	K5	3	..	38060i	63	32	15.8	+10 25	6.55	6.55	Ao	8	0,6	37368i
14	62	15.3	+44 57	7.02	7.44	F5	6	..	37007i	64	39	15.8	+ 0 38	9.6	10.7	K2	2	..	13921b
15	57	15.3	+43 9	8.0	8.1	A2	7	0,4	38896i	65	38	15.8	+ 0 21	9.8	9.9	A5	3	3,3	13921b
16	30	15.3	+ 9 23	9.0	9.1	A5	2	E	38069i	66	48	15.8	-20 29	8.07	8.7	F8	3	3,2	14199b
17	45	15.3	- 0 2	9.8	10.2	F5	2	..	13921b	67	103	15.8	-24 11	6.74	6.8	Fo	7	..	23746b
18	46	15.3	- 0 27	9.8	10.6	G5	2	..	13921b	68	26	15.8	-61 55	9.1	9.6	F8	4	..	23815b
19	99	15.3	-25 16	9.0	8.7	Ao	5	..	23746b	69	53	15.9	+55 51	8.5	8.5	Ao	2	..	38872i
20	95	15.3	-33 20	8.4	8.7	G5	5	..	42804b	70	64	15.9	+44 23	8.0	9.1	K2	3	..	38896i
21	71	15.3	-46 16	10.5	10.9	A2	2	..	39658b	71	45	15.9	+37 25	5.20	5.62	F5	..	0,R	56,71
22	64	15.3	-56 33	9.3	10.5	G5	1	..	14382b	72	31	15.9	+24 47	7.86	9.21	Ma	6	..	19643i
23	16	15.3	-73 22	10.0	10.3	Fo	5	7,5	22155b	73	37	15.9	- 3 37	9.5	10.6	K2	2	..	13921b
24	19	15.4	+67 7	8.1	8.9	G5	2	..	37909i	74	91	15.9	-30 15	7.7	8.4	Go	5	..	41067b
25	58	15.4	+63 7	8.7	9.3	Go	2	..	38060i	75	122	15.9	-31 14	10.0	10.8	Go	2	5,I	41067b
26	28	15.4	+21 17	9.4	9.9	F8	2	..	38102i	76	89	15.9	-37 2	9.0	9.6	Ko	3	..	41067b
27	31	15.4	+10 23	7.17	8.17	Ko	6	5,2	37368i	77	53	16.0	+35 19	7.32	7.32	Ao	5	0,4	37382i
28	100	15.4	-23 57	10.7	12.1	Mb	..	..	M	78	32	16.0	- 0 49	10.1	10.9	G5	3	0,2	13921b
29	50	15.4	-48 11	9.7	10.8	Ko	2	..	39658b	79	38	16.0	- 3 28	7.05	8.05	Ko	5	2,7-	37359i
30	27	15.4	-52 32	8.7	9.9	Ko	4	5,3	39658b	80	53	16.0	- 9 40	8.66	9.44	G5	3	..	14157b
31	6	15.5	+77 56	9.0	9.3	F2	1	..	38964i	81	104	16.0	-33 17	9.0	9.6	G5	3	5,3	42804b
32	45	15.5	+32 21	5.97	7.15	K5	6	0,4-	37382i	82	98	16.0	-35 30	8.03	9.0	G5	5	..	12108b
33	37	15.5	+25 56	8.2	9.2	Ko	4	2,3	19643i	83	72	16.0	-39 48	7.18	7.6	F5	9	0,5	14371b
34	41	15.5	+11 47	8.0	8.4	F5	4	..	37368i	84	31	16.0	-63 52	9.5	10.0	F8	5	..	38229b
35	36	15.5	+ 7 38	5.58	6.58	Ko	7	R	37378i	85	12	16.0	-70 11	5.42	5.40	B9	..	1,9R	56,117
36	49	15.5	- 6 5	10.0	10.1	A2	2	..	14377b	86	10	16.0	-77 47	8.1	8.6	F8	6	3,7-	38135b
37	88	15.5	-22 49	10.3	10.8	G5	1	..	45102b	87	2	16.1	+88 53	8.10	9.10	Ko	2	..	37281i
38	120	15.5	-31 7	8.3	10.2	K5	3	5,3	42804b	88	39	16.1	+27 10	8.6	9.1	F8	2	..	37310i
39	70	15.5	-57 44	8.9	9.9	K	1	R	14382b	89	31	16.1	- 3 52	8.2	8.7	F8	4	0,8-	37359i
40	59	15.6	+43 2	9.2	9.2	A	1	..	38896i	90	54	16.1	- 8 50	9.3	10.4	K2	1	..	14377b
41	48	15.6	+32 25	6.98	7.40	F5	6	0,6-	37382i	91	55	16.1	- 9 47	9.22	10.00	G5	1	..	14377b
42	33	15.6	+17 56	7.72	8.50	G5	6	..	37368i	92	104	16.1	-26 49	9.0	9.8	F5	1	..	23746b
43	35	15.6	+ 6 12	9.4	10.5	K2	1	..	15133b	93	6	16.1	-71 44	9.2	10.2	Ko	5	2,3	22155b
44	38	15.6	+ 2 54	8.6	9.6	Ko	4	..	14206b	94	8	16.1	-78 24	10.4	11.0	Go	4	5,3	38135b
45	86	15.6	-37 30	8.8	9.7	Go	3	..	45510b	95	27	16.2	+67 16	6.74	7.74	Ko	7	..	37909i
46	77	15.6	-41 39	9.1	10.8	Ko	1	..	45096b	96	40	16.2	+65 55	8.8	9.1	Fo	2	..	38060i
47	8	15.6	-69 28	9.4	10.2	G5	3	..	38229b	97	37	16.2	+61 8	7.7	8.2	F8	2	..	1897b
48	64	15.7	+45 56	8.2	8.2	B9	3	R	38896i	98	64	16.2	+40 9	8.92	8.92	Ao	4	..	37382i
49	61	15.7	+43 10	8.4	9.4	Ko	1	..	38896i	99	43	16.2	+27 46	8.2	8.6	F5	6	0,4	19643i
50	36	15.7	+ 5 24	9.36	10.14	G5	1	..	14206b	100	41	16.2	+24 8	8.8	9.8	Ko	1	..	38880i

THE HENRY DRAPER CATALOGUE.

1700

0^h 16^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	41	16.2	- 3 17	10.2	10.7	F8	4	..	13921b	51	106	16.6	-35 55	8.7	9.3	F5	5	3,4	12198b
2	52	16.2	- 6 41	10.0	10.4	F5	1	..	14377b	52	85	16.6	-41 56	8.8	11.1	Go	1	..	45096b
3	106	16.2	-33 20	11.7	11.1	Ko	1	..	42804b	53	22	16.6	-66 58	8.8	9.2	F5	4	..	38229b
4	103	16.2	-33 55	10.7	10.7	G5	2	..	42804b	54	9	16.6	-69 6	10.0	10.3	F	2	..	38229b
5	26	16.2	-59 19	9.1	9.3	Go	4	..	22068b	55	27	16.6	-75 26	8.8	9.1	Fo	5,2	..	38135b
6	16	16.2	-65 40	8.3	8.9	Go	4	5,4	38229b	56	42	16.7	+26 38	8.49	8.55	A2	4	..	19643i
7	31	16.2	-72 32	8.7	9.7	Ko	7	0,6	22155b	57	40	16.7	+ 5 20	9.21	10.21	Ko	2	..	14206b
8	27	16.2	-76 19	9.9	10.3	F5	5	3,3	22155b	58	43	16.7	+ 0 21	9.13	9.19	A2	4	1,3	24439b
9	10	16.3	+70 41	8.0	8.1	A2	3	..	38068i	59	51	16.7	- 0 34	8.4	9.5	K2	5	3,2	24439b
10	54	16.3	+55 40	8.4	9.5	K2	1	..	38557i	60	50	16.7	-20 37	var.	var.	Mb	10	0,R	24335b
11	69	16.3	+45 46	8.4	8.4	Ao	2	..	37007i	61	110	16.7	-33 5	9.0	11.0	K5	2	3,2	42804b
12	48	16.3	+37 38	7.00	8.00	Ko	..	0,5	56,71	62	82	16.7	-47 44	9.4	10.7	Ko	3	0,2	39658b
13	37	16.3	+36 52	8.7	9.1	F5	2	..	37382i	63	73	16.7	-54 49	8.75	9.0	Fo	3	..	42095b
14	56	16.3	+35 42	8.6	8.6	Ao	3	..	37382i	64	25	16.8	+16 20	7.8	8.2	F5	6	..	37368i
15	55	16.3	+35 40	8.3	8.4	A5	3	..	37382i	65	110	16.8	-23 12	8.3	8.7	Go	6	..	45102b
16	40	16.3	+26 24	8.12	9.19	K2	1	..	37310i	66	111	16.8	-23 34	7.40	7.9	Go	4	..	23746b
17	34	16.3	+ 8 27	9.1	10.1	Ko	1	..	15133b	67	21	16.8	-66 19	7.4	8.2	G5	6	..	38229b
18	34	16.3	- 1 31	9.4	10.4	Ko	2	0,1	24439b	68	17	16.8	-73 34	11.1	11.7	Go	2	..	22155b
19	55	16.3	- 9 17	9.5	9.6	A3	4	..	14377b	69	43	16.9	+65 38	8.4	8.8	F5	2	..	38060i
20	52	16.3	-11 14	8.8	9.6	G5	2	..	14157b	70	39	16.9	+37 12	7.65	8.43	G5	5	..	37382i
21	104	16.3	-36 22	7.32	8.5	Ma	4	0,6-	12013b	71	30	16.9	+ 6 27	8.61	9.68	K2	2	..	15133b
22	57	16.3	-48 16	9.3	10.1	Go	3	..	23761b	72	41	16.9	+ 6 12	9.4	10.5	K2	1	..	15133b
23	58	16.3	-48 51	9.3	9.8	F8	3	..	23761b	73	59	16.9	- 9 13	9.8	10.4	Go	3	..	14377b
24	21	16.3	-67 29	9.0	10.0	Ko	5	..	38229b	74	56	16.9	-10 28	9.04	9.46	F5	2	..	14157b
25	29	16.3	-74 32	9.6	10.6	Ko	5	5,4	22155b	75	50	16.9	-12 34	8.8	9.8	Ko	2	..	14157b
26	12	16.3	-77 24	10.6	11.4	G5	1	..	38135b	76	108	16.9	-23 56	9.8	9.2	F8	4	..	45102b
27	69	16.4	+57 25	7.8	7.8	Ao	3	1,3	37241i	77	22	16.9	-66 52	7.1	7.1	B9	9	..	38229b
28	66	16.4	+44 19	9.2	10.6	Ma	2	..	20069i	78	52	17.0	+53 3	8.0	8.3	Fo	3	5,2 R	38557i
29	30	16.4	+20 41	9.3	9.9	Go	2	2,2	38053i	79	98	17.0	-27 16	9.0	9.2	Go	2	..	23746b
30	32	16.4	- 4 12	8.9	9.4	F8	3	..	14156b	80	79	17.0	-39 16	10.1	10.2	Go	3	..	14371b
31	12	16.5	+70 56	7.78	8.85	K2	3	..	38068i	81	86	17.0	-42 16	9.2	10.8	Ko	1	..	45096b
32	41	16.5	+65 54	7.7	7.8	A5	4	..	38068i	82	17	17.0	-64 56	9.0	9.8	G5	5	..	38229b
33	55	16.5	+55 28	8.63	8.91	Fo	1	..	38557i	83	6	17.0	-82 10	9.1	9.7	Go	5	..	38135b
34	45	16.5	+27 25	8.4	9.4	Ko	1	..	37310i	84	38	17.1	+59 7	8.6	8.7	A2	2	..	38060i
35	34	16.5	- 3 54	9.5	10.0	F8	2	..	14156b	85	54	17.1	+51 40	8.9	9.9	Ko	1	..	38557i
36	42	16.5	-16 45	8.2	8.6	F5	4	5,8	12365b	86	43	17.1	+24 8	7.68	7.68	Ao	6	2,5	19643i
37	86	16.5	-29 32	5.35	6.13	G5	..	R	56,117	87	37	17.1	- 1 31	9.4	10.4	Ko	2	2,2	13921b
38	84	16.5	-38 24	9.0	9.6	F8	3	..	45510b	88	49	17.1	- 5 45	7.05	7.11	A2	8	0,3-	37359i
39	66	16.5	-49 33	8.9	9.6	F8	4	..	23761b	89	55	17.1	-14 1	8.8	9.2	F5	4	..	14157b
40	64	16.5	-55 8	8.5	9.0	A2	3	..	42095b	90	102	17.1	-27 57	9.8	10.1	Go	3	..	20456b
41	7	16.5	-71 10	9.3	10.3	Ko	4	2,2	22155b	91	80	17.1	-38 57	8.03	8.7	A3	5	..	14371b
42	8	16.6	+74 31	8.6	8.7	A5	3	..	38133i	92	59	17.1	-48 18	9.4	10.1	A5	3	..	23761b
43	48	16.6	+61 38	8.4	8.2	B3	3	..	38060i	93	52	17.2	+53 44	8.6	8.6	Ao	1	..	38557i
44	51	16.6	+52 55	8.2	8.2	B9	3	..	38557i	94	42	17.2	+34 59	7.67	8.85	K5	4	..	37382i
45	46	16.6	+27 43	8.8	9.1	F	2	R	19643i	95	43	17.2	+26 26	var.	var.	Md	..	R	M
46	56	16.6	- 9 19	10.0	11.1	K2	1	..	40845b	96	25	17.2	+12 57	6.40	7.40	Ko	6	..	37368i
47	107	16.6	-25 38	9.2	10.2	Ko	2	..	23746b	97	114	17.2	-25 47	9.0	8.9	F2	4	..	23746b
48	108	16.6	-33 37	9.7	11.1	K2	1	7,1	42804b	98	81	17.2	-44 26	9.3	9.5	F2	6	2,4	14371b
49	109	16.6	-33 39	9.0	9.6	Ko	3	5,2	42804b	99	83	17.2	-46 52	9.4	9.9	F2	3	..	23761b
50	104	16.6	-34 44	8.28	9.0	Go	6	5,2-	12198b	100	22	17.2	-64 45	9.3	10.5	K5	4	..	38229b

1800

0^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	9	17.2	-77 59	5.86	7.6	Ko	..	0,7-	56,117	51	52	17.8	- 0 23	9.0	9.8	G5	3	5,2	24439b
2	42	17.3	+ 4 41	9.4	10.2	G5	1	..	14206b	52	56	17.8	-14 4	9.2	10.3	K2	1	..	12365b
3	112	17.3	-24 24	7.7	8.6	Ko	3	..	23746b	53	108	17.8	-32 16	8.3	9.6	K2	5	..	42804b
4	90	17.3	-42 14	9.3	10.2	Go	2	..	45096b	54	112	17.8	-35 57	7.57	8.7	Go	6	0,5-	41879b
5	91	17.3	-42 30	8.5	8.8	F8	4	..	14371b	55	93	17.8	-37 58	7.12	8.4	K5	6	0,6-	12198b
6	95	17.3	-45 13	8.9	9.5	Go	5	2,4	23761b	56	83	17.8	-39 49	6.84	7.0	Fo	8	0,9	12013b
7	70	17.3	-49 36	9.9	10.4	F8	2	..	39658b	57	68	17.8	-40 51	9.7	9.6	F8	2	..	14371b
8	33	17.3	-63 51	9.4	10.0	Go	3	..	22068b	58	81	17.8	-40 57	9.0	10.2	F8	3	..	14371b
9	13	17.3	-77 21	10.4	11.2	G5	1	..	38135b	59	84	17.8	-46 51	9.2	9.8	G5	2	..	23761b
10	50	17.4	+61 41	8.2	8.0	B3	4	..	38060i	60	21	17.8	-61 36	7.3	7.2	Ao	8	..	42095b
11	53	17.4	+54 5	7.30	8.08	G5	3	..	38872i	61	23	17.8	-64 14	9.0	9.5	F8	4	..	22068b
12	34	17.4	+21 7	8.8	9.9	K2	2	2,1	38053i	62	11	17.9	+78 59	8.7	9.7	Ko	1	..	38964i
13	113	17.4	-24 49	9.2	10.9	Ma	1	..	45102b	63	60	17.9	+53 46	8.6	8.6	Ao	1	..	38557i
14	117	17.4	-25 33	8.6	9.5	G5	3	..	23746b	64	67	17.9	+46 43	8.4	8.5	A3	2	..	38896i
15	101	17.4	-27 35	8.1	8.9	G5	3	..	23746b	65	75	17.9	+45 23	9.9	11.3	Ma	..	..	M
16	88	17.4	-38 7	9.6	11.2	Ko	1	..	45510b	66	58	17.9	- 6 27	9.5	10.0	F8	2	..	14377b
17	83	17.4	-51 33	6.70	7.5	Ko	3	5,8	8623b	67	47	17.9	- 6 55	8.8	9.3	F8	4	3,3	14377b
18	19	17.4	-61 52	8.5	8.8	Ko	3	..	42095b	68	48	17.9	- 7 1	7.7	8.7	Ko	5	5,5	14377b
19	8	17.4	-71 5	9.3	10.3	Ko	3	0,2	22155b	69	41	17.9	-21 13	9.8	10.5	Go	2	..	45480b
20	8	17.4	-80 26	10.3	10.7	F5	4	..	38135b	70	113	17.9	-36 12	9.4	10.5	G5	1	0,1	45510b
21	54	17.5	+53 47	8.4	8.5	A5	2	..	38557i	71	74	17.9	-49 45	9.02	10.1	Ko	3	..	23761b
22	33	17.5	+34 9	9.3	9.3	Ao	1	..	37382i	72	76	17.9	-53 47	8.2	9.3	G5	3	..	14881b
23	49	17.5	+ 1 16	8.85	8.91	A2	5	..	14206b	73	49	18.0	+55 15	7.96	7.94	B9	2	R	1897b
24	43	17.5	- 7 12	9.5	10.0	F8	1	..	14377b	74	59	18.0	+52 10	8.7	9.7	Ko	1	..	38557i
25	56	17.6	+53 44	8.1	8.1	Ao	2	..	38872i	75	63	18.0	+36 8	9.7	9.7	Ao	2	..	37382i
26	49	17.6	+28 55	6.89	6.97	A3	6	..	37310i	76	53	18.0	+19 32	7.8	8.1	Fo	4	0,4-	38102i
27	51	17.6	- 5 4	9.5	10.0	F8	2	..	13921b	77	27	18.0	+17 13	8.8	9.4	Go	2	..	38102i
28	57	17.6	-10 11	8.22	8.72	F8	5	..	14157b	78	38	18.0	- 4 9	8.8	9.2	F5	4	3,2	14156b
29	107	17.6	-35 20	9.0	9.9	G5	3	0,2	41067b	79	58	18.0	-16 30	6.64	7.99	Ma	6	0,6	14157b
30	7	17.6	-82 14	9.1	10.5	Mb	4	..	38135b	80	86	18.0	-46 3	9.5	9.9	F5	3	..	23761b
31	54	17.7	+38 12	6.95	8.30	Ma	..	5,6-	56,71	81	24	18.0	-64 36	10.6	10.6	Fo	3	..	38229b
32	33	17.7	+21 50	7.58	8.08	F8	6	..	19643i	82	48	18.1	+65 39	8.40	8.68	Fo	3	..	38068i
33	58	17.7	- 9 47	8.18	8.96	G5	6	..	14377b	83	100	18.1	+49 13	8.9	8.9	Ao	2	..	38896i
34	60	17.7	- 9 50	8.71	9.71	Ko	2	..	40845b	84	54	18.1	+16 12	9.4	9.8	F5	2	..	37368i
35	60	17.7	-12 46	6.44	7.00	Go	10	..	14157b	85	39	18.1	+ 8 48	8.7	9.3	Go	5	..	15133b
36	45	17.7	-17 7	8.2	9.4	K5	2	..	12365b	86	46	18.1	+ 6 0	9.0	9.1	A3	3	..	15133b
37	95	17.7	-42 47	10.3	10.8	Go	1	..	45096b	87	54	18.1	- 0 24	10.1	11.1	Ko	1	..	13921b
38	30	17.7	-58 53	8.4	9.3	F5	3	..	42095b	88	53	18.1	- 5 7	10.0	10.8	G5	1	..	13921b
39	29	17.7	-59 35	9.2	10.0	G5	3	0,1	23815b	89	123	18.1	-23 38	9.6	10.5	G5	1	..	45102b
40	20	17.7	-61 11	9.6	10.2	Go	1	..	23815b	90	101	18.1	-45 35	9.5	9.8	F8	3	..	23761b
41	9	17.7	-68 11	7.9	8.9	Ko	7	2,3	38229b	91	90	18.1	-47 7	9.9	9.8	Go	2	..	23761b
42	36	17.8	+64 48	7.39	7.67	Fo	4	..	38060i	92	78	18.1	-57 44	8.8	10.2	Go	2	..	14382b
43	52	17.8	+61 45	8.0	9.2	K5	1	..	38060i	93	19	18.1	-73 36	8.6	9.4	G5	3	..	12082b
44	45	17.8	+59 41	8.0	8.0	Ao	4	..	38872i	94	55	18.2	- 0 7	8.6	9.7	K2	4	0,2	24439b
45	48	17.8	+55 14	var.	var.	Md	..	R	M	95	40	18.2	- 0 50	10.1	11.1	Ko	2	5,1	24439b
46	60	17.8	+51 13	8.4	9.8	Ma	..	..	M	96	60	18.2	- 9 11	9.3	10.5	K5	2	..	23760b
47	78	17.8	+47 39	8.4	8.4	Ao	1	..	38896i	97	61	18.2	-10 32	9.8	10.3	F8	2	..	40845b
48	67	17.8	+43 58	7.18	7.24	A2	6	..	37007i	98	63	18.2	-13 43	8.2	8.6	F5	5	..	14157b
49	52	17.8	+20 14	9.15	9.57	F5	1	..	38102i	99	110	18.2	-35 8	9.1	9.7	Ko	5	5,2	41067b
50	42	17.8	+ 8 11	10.1	10.6	F8	1	..	15133b	100	75	18.2	-48 55	8.1	8.7	Ko	2	0,3-	37262b

THE HENRY DRAPER CATALOGUE.

1900

0^h 18^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	9	18.3	+77 17	8.6	9.0	F5	2	..	38133i	51	51	18.7	+56 33	7.7	8.8	K2	1	..	38557i
2	50	18.3	+54 50	8.18	8.24	A2	3	..	38872i	52	72	18.7	+43 43	6.61	6.95	F2	6	0,6R	37007i
3	61	18.3	+53 53	8.9	9.0	A2	1	..	38557i	53	42	18.7	+18 1	9.4	9.7	Fo	2	..	37368i
4	67	18.3	+43 5	8.8	9.6	G5	2	..	38896i	54	43	18.7	+8 28	9.1	10.2	K2	1	..	15133b
5	57	18.3	+38 2	9.53	9.61	A3	1	..	37382i	55	42	18.7	+8 19	9.4	9.8	F5	2	..	15133b
6	45	18.3	+36 53	8.04	8.54	F8	4	..	37382i	56	44	18.7	+7 52	9.6	10.1	F8	2	..	15133b
7	51	18.3	+11 16	8.0	9.0	Ko	4	..	37368i	57	56	18.7	-0 26	8.4	9.2	G5	5	5,2	24439b
8	46	18.3	-3 3	10.0	10.8	G5	3	..	13921b	58	39	18.7	-4 41	9.30	10.37	K2	1	..	13921b
9	138	18.3	-31 36	6.66	6.9	B9	8	0,8	12013b	59	60	18.7	-6 11	10.0	10.1	A5	1	..	14377b
10	118	18.3	-33 44	9.0	9.6	Ko	4	..	42804b	60	62	18.7	-10 1	10.4	10.9	F8	1	..	40845b
11	92	18.3	-47 20	10.5	10.1	F5	1	..	23761b	61	102	18.7	-29 13	8.8	9.6	Ko	2	..	23746b
12	88	18.3	-51 6	8.1	8.9	K2	3	..	14881b	62	105	18.7	-29 56	9.58	11.1	K5	2	..	42804b
13	28	18.3	-60 51	10.3	10.4	A5	1	..	23815b	63	85	18.7	-54 37	7.70	8.4	Ko	4	0,3-	41858b
14	24	18.3	-67 4	10.3	10.6	F	1	..	38229b	64	9	18.7	-79 52	10.3	10.4	A5	5	..	38135b
15	10	18.3	-69 13	9.7	10.0	F2	3	..	38229b	65	52	18.8	+57 7	8.14	8.14	Ao	2	..	38872i
16	6	18.3	-84 18	9.1	9.1	Ao	4	..	15165b	66	64	18.8	+53 16	7.45	7.87	F5	3	3,2	38872i
17	45	18.4	+60 23	6.75	7.09	F2	6	0,5R	38060i	67	58	18.8	+38 1	var.	var.	Pec.	2	R	37382i
18	76	18.4	+44 31	7.7	8.5	G5	4	..	37007i	68	52	18.8	+30 37	9.3	9.4	A2	2	..	37310i
19	50	18.4	+41 31	7.9	8.3	F5	4	..	37382i	69	44	18.8	+3 13	8.2	9.2	Ko	5	..	14206b
20	50	18.4	-7 45	10.4	11.0	Go	1	..	40845b	70	48	18.8	+0 59	9.0	10.0	Ko	5	0,3	24439b
21	48	18.4	-19 26	7.16	8.3	G5	5	0,6	14199b	71	42	18.8	-0 49	9.8	10.6	G5	2	5,2	24439b
22	43	18.4	-21 15	9.8	10.5	G5	1	..	45480b	72	49	18.8	-18 51	10.2	10.8	Go	1	..	45480b
23	101	18.4	-30 24	7.02	8.4	Ma	..	0,3-	56117	73	70	18.8	-49 55	7.92	9.2	Ma	5	0,1-	23761b
24	115	18.4	-36 14	9.6	10.2	Ko	1	0,2-	41067b	74	74	18.8	-55 6	8.30	9.9	K2	2	..	42095b
25	28	18.4	-62 14	var.	var.	Md	..	R	M	75	59	18.9	+52 41	8.9	9.9	Ko	1	..	38557i
26	20	18.4	-65 41	7.4	8.0	Go	6	2,6	22068b	76	62	18.9	+51 28	5.36	5.19	B3	..	5,8	56,71
27	18	18.5	+69 25	8.5	8.9	F5	2	..	38068i	77	83	18.9	+45 20	8.12	8.40	A3	4	0,4-	38896i
28	31	18.5	+67 38	9.2	9.2	Ao	2	..	38068i	78	40	18.9	-4 2	7.7	7.7	Ao	7	0,8-	37359i
29	38	18.5	+64 52	8.6	8.7	A5	2	..	38060i	79	60	18.9	-14 54	8.80	9.36	Go	3	..	12365b
30	47	18.5	+60 56	8.9	9.7	G5	2	..	38060i	80	49	18.9	-18 22	8.0	8.4	F5	5	0,6	14199b
31	63	18.5	+54 8	8.6	8.6	B9	2	..	38557i	81	103	18.9	-38 45	9.9	9.4	Go	3	..	12198b
32	67	18.5	+49 41	8.6	8.6	Ao	1	0,1	38557i	82	91	18.9	-44 51	10.1	10.4	G	2	..	23761b
33	80	18.5	+46 2	9.0	9.1	A2	1	..	38896i	83	96	18.9	-46 58	10.1	10.6	G5	1	..	23761b
34	47	18.5	+36 21	8.9	9.2	Fo	3	..	37382i	84	71	18.9	-50 30	9.9	10.1	Go	3	..	39658b
35	52	18.5	+2 11	7.7	8.0	Fo	3	..	37378i	85	35	18.9	-62 59	7.1	7.9	G5	5	0,7	42095b
36	48	18.5	-3 36	8.2	9.0	G5	5	0,4	14156b	86	53	19.0	+56 24	8.8	8.8	Ao	2	..	38557i
37	59	18.5	-6 18	10.0	10.4	F5	1	..	14377b	87	65	19.0	-9 53	var.	var.	Md	..	R	M
38	84	18.5	-40 58	10.5	11.1	F5	1	..	14371b	88	111	19.0	-27 58	9.3	9.2	F5	2	..	23746b
39	38	18.6	+63 45	8.6	8.6	B9	4	..	38060i	89	143	19.0	-31 50	8.6	10.5	Ko	3	0,2	42804b
40	106	18.6	+48 39	8.2	8.2	Ao	3	..	38896i	90	105	19.0	-45 9	10.3	10.6	F5	1	..	39658b
41	55	18.6	+28 57	9.2	9.8	G	1	..	37311i	91	9	19.0	-71 39	9.8	10.3	F8	4	..	22155b
42	56	18.6	+28 57	8.8	9.4	G	1	..	37311i	92	35	19.0	-76 34	9.1	10.3	K5	4	3,2	38135b
43	41	18.6	+9 5	8.8	9.3	F8	1	..	38033i	93	54	19.1	+56 26	8.0	8.3	Fo	2	..	38557i
44	41	18.6	-1 6	8.4	9.4	Ko	7	5,2	24439b	94	66	19.1	+53 44	9.7	..	R5	..	..	M
45	47	18.6	-18 42	10.4	11.2	G5	1	..	45480b	95	46	19.1	+34 15	9.3	10.7	Ma	..	..	M
46	104	18.6	-30 3	9.0	9.6	Go	3	5,2	42804b	96	46	19.1	+25 51	8.7	9.5	G5	2	..	37310i
47	121	18.6	-33 26	8.8	9.0	F5	2	..	15112b	97	56	19.1	-5 3	8.9	9.3	F5	4	3,3	37359i
48	83	18.6	-54 24	7.9	8.3	A2	6	..	14881b	98	50	19.1	-19 39	9.8	10.8	Go	2	..	45480b
49	32	18.7	+67 24	8.6	9.2	G	1	..	38068i	99	105	19.1	-37 58	7.83	7.9	B9	4	1,8	12013b
50	51	18.7	+59 53	7.41	7.39	B9	4	..	38872i	100	93	19.1	-43 46	9.2	9.5	F5	5	5,3	14371b

2000

0^h 19^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	10	19.1	° 68 16	9.1	10.1	Ko	2	..	38229b	51	35	19.6	° 72 39	Cl.	Cl.	Con.	8	R	12082b
2	15	19.1	° 77 17	7.8	8.2	F5	5	3,7	14357b	52	33	19.6	° 74 4	10.1	10.6	F8	4	..	22155b
3	50	19.2	+65 15	9.05	9.61	Go	2	..	3806oi	53	33	19.6	° 75 48	9.7	10.3	Go	5	0,4	22155b
4	49	19.2	+ 1 0	8.0	8.6	Go	7	..	14206b	54	61	19.7	+52 30	5.72	5.70	B9	8	..	38872i
5	49	19.2	- 1 48	8.2	9.4	K5	4	0,1	24439b	55	72	19.7	+50 11	8.37	8.37	Ao	3	..	38557i
6	64	19.2	- 9 41	10.2	10.6	F5	2	..	40845b	56	117	19.7	+48 31	8.5	8.6	A5	2	..	38896i
7	54	19.2	-17 19	8.9	9.0	A2	3	..	12365b	57	88	19.7	+47 29	7.61	8.11	F8	4	..	37007i
8	122	19.2	-23 57	7.7	8.3	G5	3	..	23746b	58	36	19.7	+ 7 10	9.4	9.9	F8	2	..	15133b
9	73	19.2	-40 14	9.7	10.5	G5	1	..	14371b	59	59	19.7	- 4 49	8.95	10.02	K2	2	2,1	13921b
10	87	19.2	-41 33	9.7	11.2	Go	1	..	14371b	60	68	19.7	- 9 11	9.5	9.9	F5	3	..	23760b
11	69	19.3	+61 17	5.39	5.37	B9	..	0,R	56,71	61	56	19.7	-20 24	9.2	9.7	Go	3	..	24335b
12	112	19.3	+48 58	8.2	8.3	A2	2	..	37007i	62	126	19.7	-33 54	9.3	9.7	F5	2	..	15112b
13	63	19.3	-11 12	9.5	10.1	Go	2	..	40845b	63	63	19.8	+52 17	8.8	8.8	Ao	3	..	38557i
14	126	19.3	-25 24	9.8	10.7	K2	1	..	45102b	64	62	19.8	+29 17	8.6	9.0	F5	4	..	3731oi
15	119	19.3	-36 12	8.5	9.3	K2	3	..	41067b	65	59	19.8	-12 16	8.0	8.3	F2	5	..	14157b
16	93	19.3	-44 42	9.7	9.8	Fo	4	2,3	23761b	66	53	19.8	-19 1	7.04	8.2	G5	6	5,7-	10109b
17	100	19.3	-47 32	10.5	10.7	Go	3	..	39658b	67	52	19.8	-19 34	10.0	11.4	K2	1	..	45480b
18	86	19.4	+47 21	8.5	9.3	G5	1	..	38896i	68	128	19.8	-24 1	8.8	8.6	Fo	3	..	23746b
19	55	19.4	+30 49	6.80	6.78	B9	6	..	3731oi	69	127	19.8	-24 51	8.35	8.6	Fo	3	..	23746b
20	31	19.4	+16 26	8.0	8.1	A3	4	..	37368i	70	95	19.8	-51 36	6.90	7.5	Go	8	2,4	14881b
21	56	19.4	+15 51	8.0	8.4	F5	6	..	37368i	71	91	19.8	-54 33	7.40	7.9	Go	5	0,8	42095b
22	50	19.4	+ 1 10	9.69	10.76	K2	2	..	24439b	72	37	19.8	-72 32	9.2	10.0	G5	4	..	22155b
23	49	19.4	- 2 47	6.28	7.28	Ko	8	0,8-	37359i	73	10	19.8	-78 12	10.7	11.8	K2	2	2,3	23772b
24	58	19.4	- 5 12	7.55	8.90	Ma	4	0,4-	37359i	74	43	19.9	+38 31	8.58	9.14	G	3	..	37382i
25	108	19.4	-27 36	7.8	8.7	G5	4	..	23746b	75	52	19.9	+27 31	8.8	9.9	K2	1	..	3731oi
26	106	19.4	-29 33	8.6	7.8	Ao	4	..	23746b	76	52	19.9	+24 2	8.4	9.2	G5	4	..	19643i
27	104	19.4	-41 54	9.7	10.7	Go	2	..	14371b	77	60	19.9	- 5 4	8.8	8.8	Ao	6	0,5-	14377b
28	79	19.4	-49 29	10.3	10.9	F8	1	..	39658b	78	63	19.9	-16 35	8.4	9.4	Ko	3	..	14157b
29	81	19.4	-55 7	7.75	7.4	Fo	5	5,4	42085b	79	54	19.9	-18 56	9.2	9.9	Ko	1	..	12365b
30	31	19.4	-59 24	9.1	9.3	Go	4	0,3	22068b	80	57	19.9	-20 30	8.6	9.0	Fo	7	0,4-	24335b
31	5	19.4	-83 14	9.2	9.6	F5	2	..	15165b	81	98	19.9	-43 4	9.4	9.9	G5	3	..	14371b
32	73	19.5	+62 40	8.7	8.8	A2	2	..	3806oi	82	11	19.9	-71 35	9.5	10.5	Ko	3	0,1	22155b
33	67	19.5	+53 19	8.5	8.5	Ao	2	..	38557i	83	16	20.0	+71 15	6.94	6.75	B2	7	..	38068i
34	57	19.5	+19 31	8.0	9.0	Ko	4	..	37368i	84	64	20.0	+29 33	8.8	9.6	G5	2	..	3731oi
35	46	19.5	+13 45	6.80	7.80	Ko	6	..	37368i	85	33	20.0	+16 27	8.2	8.6	F5	6	..	37368i
36	59	19.5	- 0 21	8.6	8.7	A5	4	5,2	24439b	86	45	20.0	+ 7 19	10.1	10.9	G5	1	..	15133b
37	110	19.5	-27 28	8.3	8.0	A2	4	..	23746b	87	55	20.0	+ 1 32	9.4	10.4	Ko	3	..	24439b
38	109	19.5	-28 58	9.3	9.6	Go	4	0,3	20456b	88	107	20.0	-42 27	7.5	8.4	G5	4	0,6	37262i
39	84	19.5	-57 12	8.3	9.6	G5	3	..	42095b	89	23	20.0	-58 34	9.1	9.9	F5	2	..	42095b
40	10	19.5	-71 0	9.2	10.3	K2	3	3,2	22155b	90	36	20.0	-76 14	8.5	9.1	Go	7	2,3	38135b
41	34	19.5	-72 49	8.7	9.1	F5	4	..	12082b	91	74	20.1	+43 46	8.7	8.8	A2	2	..	37007i
42	40	19.6	+64 5	8.4	9.5	K2	1	..	3806oi	92	80	20.1	+39 17	7.88	8.88	Ko	4	..	37382i
43	72	19.6	+61 59	9.4	9.5	A2	2	..	3806oi	93	51	20.1	+34 29	7.80	8.98	K5	2	..	37382i
44	86	19.6	+45 52	9.2	10.0	G5	1	..	38896i	94	50	20.1	+31 57	9.3	9.8	F8	3	..	37311i
45	85	19.6	+45 29	8.9	8.9	Ao	1	..	38896i	95	61	20.1	+20 3	8.4	9.0	Go	2	2,2	38102i
46	42	19.6	- 3 46	9.8	10.8	Ko	3	..	13921b	96	62	20.1	+19 20	8.6	9.4	G5	1	..	38102i
47	41	19.6	- 4 1	10.2	11.3	K2	1	..	13921b	97	53	20.1	- 2 23	9.5	10.7	K5	2	..	24439b
48	57	19.6	- 8 29	9.3	9.6	F2	3	..	14377b	98	154	20.1	-31 15	7.56	8.4	Go	4	0,4	12013b
49	61	19.6	-16 18	8.8	9.6	G5	2	..	12365b	99	108	20.1	-42 42	10.3	11.2	Go	1	..	45096b
50	127	19.6	-25 18	9.0	9.8	F8	3	..	45102b	100	22	20.1	-65 26	9.4	10.6	K5	1	..	38229b

THE HENRY DRAPER CATALOGUE.

2100

0^h 20^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	34	20.1	^{m.} -75 23	9.5	10.0	F8	5	0,4	22155b	51	16	20.5	^o -77 49	2.90	3.46	Go	..	R	28,195
2	77	20.2	['] +57 25	7.66	9.01	Ma	1	..	38872i	52	59	20.6	+54 56	7.32	8.32	Ko	3	..	38557i
3	45	20.2	+ 8 30	9.0	10.0	Ko	3	..	15133b	53	46	20.6	+38 18	8.47	8.75	Fo	3	..	37382i
4	61	20.2	- 4 56	9.3	10.4	K2	3	0,1	13921b	54	53	20.6	+34 46	7.97	7.97	Ao	6	0,4	37382i
5	119	20.2	-32 24	8.5	9.3	Go	4	..	41067b	55	52	20.6	+34 38	9.0	9.0	A	3	..	37382i
6	81	20.2	-49 42	9.9	10.4	F5	2	..	23761b	56	47	20.6	+17 53	9.4	10.2	G5	1	E	38102i
7	37	20.2	-52 2	9.0	9.3	F8	3	..	14881b	57	41	20.6	+ 9 51	9.4	10.0	Go	2	..	15133b
8	27	20.2	-67 2	9.3	9.8	F8	2	..	38229b	58	44	20.6	- 1 20	10.8	11.2	F5	1	..	24439b
9	2	20.2	-81 37	10.7	11.0	F2	4	..	38135b	59	44	20.6	- 4 16	10.2	10.7	F8	3	..	13921b
10	44	20.3	+64 50	7.55	7.53	B9	6	..	38060i	60	55	20.6	-19 22	9.0	8.7	F5	5	0,3	24335b
11	45	20.3	+63 18	8.8	9.3	F8	1	..	38060i	61	59	20.6	-20 29	7.8	8.2	F5	6	0,9	14199b
12	57	20.3	+54 27	6.92	7.99	K2	3	2,2	38557i	62	63	20.6	-22 35	9.8	11.1	Ko	1	..	45480b
13	42	20.3	+15 1	8.5	8.9	F5	4	..	37368i	63	134	20.6	-25 32	8.4	9.0	Go	3	..	23746b
14	57	20.3	+ 1 23	5.99	6.77	G5	6	..	37378i	64	113	20.6	-29 42	9.38	10.8	K2	2	..	42804b
15	52	20.3	+ 0 49	9.4	10.8	Ma	1	..	24439b	65	132	20.6	-33 54	10.5	10.5	G5	2	..	42804b
16	43	20.3	- 4 33	9.0	9.4	F5	6	5,3	13921b	66	24	20.6	-65 24	9.6	10.6	Ko	2	..	38229b
17	58	20.3	- 8 7	9.5	10.1	Go	2	..	14377b	67	39	20.6	-72 41	10.4	11.2	G5	3	..	22155b
18	133	20.3	-33 31	10.5	11.7	G5	1	..	42804b	68	24	20.6	-73 11	9.2	10.0	G5	5	..	22155b
19	124	20.3	-35 14	9.4	10.0	G5	3	0,2	12198b	69	10	20.7	+79 30	6.53	6.51	B9	7	..	37227i
20	113	20.3	-45 1	9.62	10.4	G5	2	..	23761b	70	72	20.7	+56 13	6.80	7.36	Go	3	..	1897b
21	31	20.3	-62 46	8.0	8.5	F8	3	6,7	42095b	71	80	20.7	+43 37	8.6	9.7	K2	1	..	38896i
22	27	20.3	-64 31	8.6	9.1	F8	5	..	22068b	72	78	20.7	+40 59	8.8	8.8	Ao	1	..	38896i
23	36	20.4	+67 18	9.2	9.6	F5	1	R	38068i	73	38	20.7	+20 28	8.3	9.3	Ko	5	5,4	38053i
24	77	20.4	+44 0	8.9	9.9	Ko	1	..	38896i	74	42	20.7	+18 30	8.4	8.8	F5	2	..	37368i
25	66	20.4	+35 56	8.2	8.5	Fo	4	..	37382i	75	45	20.7	+ 6 34	8.5	9.5	Ko	2	..	38033i
26	39	20.4	+33 34	8.3	9.1	G5	2	0,1	37382i	76	50	20.7	+ 6 0	9.4	10.4	Ko	1	..	14206b
27	67	20.4	+29 25	9.0	9.1	A2	2	R	37310i	77	52	20.7	-18 7	9.3	10.5	K5	2	..	45480b
28	58	20.4	+22 23	7.9	8.0	A2	6	..	19643i	78	65	20.7	-22 11	7.32	7.7	Ao	10	..	24335b
29	51	20.4	-17 59	7.31	8.38	K2	7	2,5-	24335b	79	128	20.7	-35 23	10.3	9.6	Go	3	2,3	12198b
30	134	20.4	-33 40	9.7	10.3	G5	4	..	42804b	80	98	20.7	-44 24	9.2	8.9	F2	4	2,3	23761b
31	125	20.4	-35 24	9.3	9.3	F8	5	0,4	41067b	81	76	20.7	-50 45	10.5	11.0	Ao	2	..	39658b
32	92	20.4	-39 49	6.95	7.9	Ko	..	5,7-	56,117	82	99	20.7	-51 4	9.3	9.8	Go	2	..	14881b
33	35	20.4	-74 48	9.5	10.3	G5	5	5,3	22155b	83	34	20.7	-59 0	9.3	9.3	Ao	4	..	22068b
34	11	20.4	-78 49	8.8	9.6	G5	5	0,5	38135b	84	32	20.7	-62 40	9.3	9.9	Go	4	5,2	23815b
35	53	20.5	+65 53	8.6	8.9	Fo	1	..	38060i	85	36	20.7	-75 50	9.9	10.9	Ko	4	5,3	22155b
36	49	20.5	+58 33	8.8	8.8	A	2	E	38060i	86	54	20.8	+66 13	8.7	8.7	Ao	1	..	38060i
37	121	20.5	+49 6	8.0	8.0	B8	2	..	37007i	87	51	20.8	+58 39	8.6	8.6	Ao	2	..	38060i
38	41	20.5	+22 9	8.4	8.5	A5	4	..	19643i	88	125	20.8	+48 50	7.9	7.9	Ao	2	..	37007i
39	48	20.5	+ 7 43	10.8	11.3	F8	1	..	15133b	89	69	20.8	+35 16	7.37	7.45	A3	6	1,4	37382i
40	43	20.5	+ 7 8	7.18	8.18	Ko	4	..	37378i	90	63	20.8	+28 23	8.1	9.3	K5	4	..	37310i
41	65	20.5	-16 41	9.0	9.8	G5	2	..	12365b	91	64	20.8	+19 37	6.57	6.52	B8	10	..	37368i
42	158	20.5	-30 56	9.8	11.9	K5	2	..	42804b	92	41	20.8	+ 3 23	8.8	9.1	F2	4	..	14206b
43	136	20.5	-33 11	11.2	12.2	G5	1	..	42804b	93	60	20.8	+ 1 23	8.54	8.54	Ao	7	..	14206b
44	116	20.5	-44 56	8.92	10.1	Ko	2	..	23761b	94	67	20.8	- 6 37	9.8	10.8	Ko	1	..	14377b
45	106	20.5	-47 29	10.8	10.4	G5	2	..	39658b	95	70	20.8	- 8 54	7.8	8.8	Ko	5	0,5	37359i
46	25	20.5	-58 50	9.1	9.9	G5	2	..	42095b	96	71	20.8	-10 7	10.0	10.6	Go	2	..	40845b
47	23	20.5	-65 20	10.0	10.6	G	2	..	38229b	97	66	20.8	-11 0	9.5	10.0	F8	3	..	40845b
48	26	20.5	-65 58	7.8	8.2	F5	5	0,4	22068b	98	66	20.8	-22 36	10.4	11.4	Ko	1	..	45480b
49	12	20.5	-71 15	9.5	10.5	Ko	2	..	22155b	99	118	20.8	-28 16	7.04	8.3	Ko	5	..	23746b
50	35	20.5	-75 36	9.9	10.9	Ko	3	5,2	22155b	100	114	20.8	-29 58	9.8	11.1	F5	1	..	42804b

2200

0^h 20^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	139	20.8	-32 55	10.7	11.1	Go	1	..	42804b	51	28	21.2	-65 30	9.7	10.5	G5	3	..	38229b
2	101	20.8	-51 24	9.1	10.4	F2	4	..	14881b	52	13	21.2	-71 47	9.8	10.2	F5	4	..	22155b
3	38	20.8	-51 58	7.8	8.6	G5	5	..	14881b	53	67	21.3	+52 43	9.2	9.2	Ao	2	..	38557i
4	26	20.8	-65 24	9.2	9.8	Go	3	..	38229b	54	78	21.3	+46 32	7.8	8.9	K2	2	..	38896i
5	2	20.8	-88 13	8.1	8.9	G5	6	..	22980b	55	84	21.3	+43 29	8.7	9.0	F2	1	..	38896i
6	80	20.9	+61 49	8.6	8.9	Fo	2	..	38060i	56	53	21.3	+4 55	10.1	10.9	G5	1	..	14206b
7	72	20.9	+50 43	var.	var.	F2	4	R	38557i	57	70	21.3	-22 14	7.52	8.7	G5	7	..	24335b
8	71	20.9	+50 31	9.2	9.2	Ao	1	..	38557i	58	130	21.3	-26 50	10.0	10.7	Go	1	..	20456b
9	65	20.9	+37 52	9.18	9.24	A2	3	..	37382i	59	81	21.3	-40 12	7.26	7.9	Ko	..	0,7-	56,117
10	54	20.9	+37 5	9.4	9.5	A2	2	..	37382i	60	117	21.3	-42 34	9.1	10.7	Go	2	..	14371b
11	48	20.9	+8 21	9.8	10.4	Go	2	..	15133b	61	116	21.3	-42 51	2.44	3.44	Ko	..	R	28,195
12	44	20.9	+3 20	8.8	9.2	F5	2	..	14206b	62	101	21.3	-44 14	3.90	3.98	A3	..	R	28,195
13	62	20.9	-13 49	9.0	9.4	F5	2	..	12365b	63	39	21.3	-52 12	9.3	9.8	A3	2	..	14881b
14	54	20.9	-18 4	10.0	10.8	G5	1	..	45480b	64	79	21.3	-56 49	8.8	10.2	Go	3	..	14382b
15	160	20.9	-31 37	9.3	11.0	F8	2	..	42804b	65	44	21.4	+33 38	7.80	9.15	Ma	3	0,4	37382i
16	78	20.9	-50 18	10.1	10.6	F8	3	..	39658b	66	57	21.4	+27 56	9.2	10.2	Ko	1	..	37310i
17	22	21.0	+69 12	8.8	9.6	G5	1	..	38068i	67	52	21.4	-3 14	10.4	11.0	Go	3	..	24439b
18	73	21.0	+55 33	8.0	8.0	B9	3	..	1897b	68	58	21.4	-19 15	6.51	7.9	Ma	6	0,8-	14199b
19	126	21.0	+48 29	7.12	8.12	Ko	5	..	38896i	69	164	21.4	-31 42	9.2	9.9	F2	2	..	15112b
20	49	21.0	+18 1	8.6	9.0	F5	4	..	37368i	70	33	21.4	-62 6	9.2	10.3	K2	2	..	22068b
21	62	21.0	-0 7	8.4	9.2	G5	7	5,3	24439b	71	82	21.5	+39 57	8.4	9.4	Ko	3	..	37382i
22	121	21.0	-28 50	8.4	9.5	G5	2	..	23746b	72	57	21.5	+26 38	8.4	8.7	Fo	2	..	37310i
23	115	21.0	-30 21	9.3	10.5	G5	3	..	42804b	73	63	21.5	-0 36	6.40	7.18	G5	8	0,6	37359i
24	162	21.0	-31 18	7.55	8.3	G5	4	0,4	12013b	74	74	21.5	-9 2	10.0	11.0	Ko	1	..	40845b
25	161	21.0	-31 46	9.8	11.2	Ma	1	..	42804b	75	59	21.5	-19 26	9.8	11.1	Ko	2	..	45480b
26	83	21.0	-49 28	9.4	9.8	Fo	4	..	23761b	76	60	21.5	-20 22	9.5	10.8	Go	2	..	45480b
27	30	21.0	-64 34	8.2	9.0	G5	6	..	22068b	77	152	21.5	-23 0	9.2	10.2	G5	4	..	24335b
28	11	21.0	-68 18	8.0	9.0	Ko	7	0,8	38365b	78	141	21.5	-33 35	9.7	10.8	Ko	2	..	42804b
29	13	21.0	-70 30	9.5	10.3	G5	4	5,2	22155b	79	82	21.5	-40 16	9.0	9.3	F8	3	..	12198b
30	74	21.1	+51 53	8.8	9.3	F8	1	..	38557i	80	37	21.5	-59 21	8.8	8.8	A5	3	..	42095b
31	83	21.1	+43 17	9.0	9.8	G5	1	..	38896i	81	31	21.5	-60 21	9.0	10.0	Ko	2	..	23815b
32	55	21.1	+36 45	9.2	9.2	Ao	3	..	37382i	82	3	21.5	-81 24	10.6	11.4	G5	4	..	38135b
33	52	21.1	+31 42	8.6	9.7	K2	2	..	37311i	83	47	21.6	+65 8	8.40	9.40	Ko	3	..	38060i
34	56	21.1	+24 11	7.48	8.26	G5	6	..	19643i	84	58	21.6	+24 5	8.2	9.0	G5	4	..	19643i
35	46	21.1	+3 16	6.89	6.84	B8	6	..	37378i	85	48	21.6	+6 49	9.8	10.2	F5	2	..	15133b
36	54	21.1	+0 37	8.4	9.4	Ko	6	0,5	24439b	86	67	21.6	-14 35	8.2	8.7	F8	4	E	14157b
37	63	21.1	-11 56	8.8	9.3	F8	3	..	14157b	87	60	21.6	-19 39	10.7	11.1	Go	1	..	45480b
38	69	21.1	-13 38	8.8	9.2	F5	3	..	14157b	88	61	21.6	-20 33	10.0	10.8	Fo	2	..	24335b
39	125	21.1	-32 13	9.4	10.3	Ko	3	0,1	42804b	89	118	21.6	-28 58	8.4	9.3	Ko	2	..	23746b
40	96	21.1	-41 17	10.5	11.1	F8	2	..	14371b	90	57	21.7	+65 34	8.4	8.7	Fo	3	..	38060i
41	108	21.1	-47 32	9.7	10.7	K5	3	..	39658b	91	57	21.7	+60 7	7.91	8.91	Ko	3	5,2	38060i
42	89	21.1	-55 14	9.5	10.5	Ko	1	..	45461b	92	35	21.7	+16 31	9.4	10.2	G5	2	..	37368i
43	37	21.1	-74 58	8.8	9.8	Ko	7	0,5	22155b	93	44	21.7	+9 36	8.7	9.9	K5	2	..	15133b
44	74	21.2	+56 5	6.59	6.59	Ao	8	..	1897b	94	51	21.7	+8 46	8.0	8.3	Fo	6	..	38033i
45	84	21.2	+50 2	8.7	9.7	Ko	1	..	38557i	95	52	21.7	+8 0	8.8	9.8	Ko	4	..	15133b
46	52	21.2	+5 33	8.6	9.0	F5	4	..	37378i	96	53	21.7	-3 34	10.0	11.0	Ko	1	..	24439b
47	69	21.2	-22 6	9.5	10.2	Go	3	..	45480b	97	14	21.7	-70 55	9.4	10.2	G5	4	..	22155b
48	126	21.2	-32 33	10.5	11.5	Ko	1	..	42804b	98	37	21.7	-74 11	9.2	10.0	G5	4	0,7	38135b
49	80	21.2	-48 32	10.5	11.3	Go	2	..	39658b	99	17	21.7	-76 53	10.1	10.6	F8	4	..	38135b
50	104	21.2	-50 56	9.1	9.2	F8	4	..	14881b	100	55	21.8	+59 12	7.43	8.43	Ko	3	5,3	38872i

THE HENRY DRAPER CATALOGUE.

0^h 21^m.8

2300

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	91	21.8	+49 26	6.68	6.66	B9	7	..	38896i	51	39	22.2	-59 28	9.1	10.9	G5	2	..	42095b
2	52	21.8	+24 29	6.72	7.14	F5	8	..	19643i	52	29	22.2	-65 10	10.1	10.7	Go	3	..	38229b
3	52	21.8	+17 21	8.6	9.1	F8	3	..	37308i	53	13	22.2	-68 17	8.1	8.5	F5	8	..	38229b
4	49	21.8	+6 35	8.0	9.0	Ko	2	..	38033i	54	15	22.2	-69 52	7.10	9.1	Ko	9	..	38365b
5	46	21.8	-1 28	8.0	8.4	F5	6	0,3	13921b	55	16	22.2	-70 38	9.6	10.2	Go	2	..	22155b
6	45	21.8	-4 31	9.5	10.3	G5	2	..	37359i	56	104	22.3	+46 6	9.5	9.6	A2	1	..	38896i
7	71	21.8	-6 5	8.8	9.3	F8	4	..	14377b	57	47	22.3	+33 28	8.0	8.8	G5	2	..	37311i
8	121	21.8	-27 17	9.8	11.1	G5	1	..	20456b	58	59	22.3	+15 29	6.57	6.71	A5	10	..	37368i
9	12	21.8	-68 44	9.1	10.1	Ko	2	..	38229b	59	52	22.3	+13 53	8.6	9.7	K2	2	..	37368i
10	14	21.8	-70 38	9.7	10.5	G5	1	..	22155b	60	58	22.3	+0 51	8.8	9.9	K2	2	..	24439b
11	86	21.9	+62 11	8.9	8.9	Ao	2	..	38060i	61	79	22.3	-9 12	7.86	8.20	F2	5	0,4	37359i
12	68	21.9	+38 13	7.84	8.84	Ko	3	..	37382i	62	159	22.3	-23 18	8.6	9.6	F2	4	..	24335b
13	59	21.9	+30 37	7.61	8.96	Ma	4	5,4	37311i	63	138	22.3	-26 6	5.95	7.3	G5	..	5,7	56,117
14	68	21.9	+28 31	9.0	9.1	A5	2	..	37310i	64	124	22.3	-30 8	8.3	9.6	Ko	5	..	42804b
15	53	21.9	+25 2	7.90	8.90	Ko	3	..	37355i	65	125	22.3	-30 39	9.6	10.3	F5	3	..	42804b
16	44	21.9	+20 42	8.05	8.13	A3	6	..	38053i	66	146	22.3	-34 26	7.9	9.6	K5	3	0,2	12198b
17	63	21.9	-4 58	9.2	10.0	G5	3	..	37359i	67	134	22.3	-36 58	9.0	10.5	Mb	2	5,1	42804b
18	51	21.9	-21 13	8.4	8.7	Fo	5	2,5	14199b	68	73	22.4	+52 24	8.6	9.0	F5	3	..	38557i
19	84	21.9	-40 7	9.3	9.3	F5	3	0,2	12198b	69	105	22.4	+48 12	8.6	8.6	Ao	1	..	38896i
20	85	21.9	-40 26	9.1	9.0	A3	5	1,5	12198b	70	106	22.4	+46 0	8.9	8.9	Ao	1	..	38896i
21	82	21.9	-50 2	8.8	9.2	F8	3	..	14881b	71	62	22.4	+30 49	9.3	9.4	A5	2	..	37311i
22	100	22.0	+46 0	8.6	9.1	F8	4	..	38896i	72	46	22.4	+21 32	8.2	9.2	Ko	3	..	38053i
23	53	22.0	+8 36	8.7	9.5	G5	3	..	15133b	73	52	22.4	+6 41	8.8	8.8	Ao	4	..	38033i
24	64	22.0	-5 34	7.17	8.17	Ko	7	..	37359i	74	78	22.4	-9 55	9.2	9.6	F5	3	..	3760b
25	73	22.0	-6 37	9.5	10.1	Go	2	..	14377b	75	59	22.4	-18 24	9.3	10.3	Ko	2	..	45480b
26	57	22.0	-7 9	9.8	11.2	Ma	2	5,1	14377b	76	130	22.4	-28 48	6.94	8.0	G5	5	..	23746b
27	157	22.0	-23 51	8.2	9.6	F5	6	5,4	24335b	77	169	22.4	-31 31	10.7	11.9	G5	1	..	42804b
28	4	22.0	-81 43	11.0	11.4	F5	3	..	38135b	78	18	22.4	-70 8	9.9	10.5	G	1	..	22155b
29	85	22.1	+58 0	7.24	7.07	B3	5	5,4	38872i	79	55	22.5	+8 50	9.8	10.4	Go	2	..	15133b
30	55	22.1	+25 44	7.71	8.21	F8	6	..	19643i	80	80	22.5	-9 34	10.8	11.8	Ko	1	..	40845b
31	55	22.1	+5 5	9.35	10.13	G5	2	..	14206b	81	136	22.5	-32 23	7.46	7.8	F2	4	0,6	15112b
32	46	22.1	-4 15	10.4	11.4	Ko	2	..	24439b	82	148	22.5	-34 42	9.0	10.2	K5	2	..	41067b
33	65	22.1	-8 26	8.3	9.1	G5	5	0,3	37359i	83	147	22.5	-34 51	9.42	9.7	Go	3	0,3	41067b
34	77	22.1	-9 29	10.4	10.5	A5	2	..	40845b	84	86	22.5	-50 23	9.7	10.6	K2	3	..	39658b
35	76	22.1	-10 26	7.42	8.20	G5	7	..	14157b	85	40	22.5	-59 46	8.9	10.0	A5	3	..	42095b
36	72	22.1	-10 49	9.8	10.4	Go	2	..	40845b	86	16	22.5	-71 48	9.3	10.1	G5	7	0,4	22155b
37	52	22.1	-21 4	8.9	9.6	F2	3	..	24335b	87	57	22.6	+58 33	9.0	9.0	A	2	..	38060i
38	132	22.1	-37 8	9.4	10.2	K2	2	2,1	42804b	88	66	22.6	+54 42	8.29	9.47	K5	1	..	38557i
39	102	22.1	-41 3	10.5	10.5	Ao	3	..	14371b	89	64	22.6	+27 38	8.1	8.2	A2	4	0,4	37310i
40	33	22.1	-60 26	9.2	9.9	G5	3	..	42095b	90	66	22.6	+23 1	8.1	8.2	A2	6	..	19643i
41	103	22.2	+45 44	9.5	9.5	Ao	1	..	38896i	91	36	22.6	+13 9	9.0	10.1	K2	2	..	37368i
42	56	22.2	+35 2	8.60	..	Nb	1	R	37382i	92	48	22.6	+4 3	8.6	9.7	K2	6	..	14206b
43	60	22.2	+30 21	8.41	9.19	G5	2	..	37310i	93	75	22.6	-16 0	8.8	9.1	Fo	4	..	45480b
44	54	22.2	+2 15	7.7	8.5	G5	8	..	14206b	94	61	22.6	-16 58	7.17	7.67	F8	5	0,8	37411i
45	70	22.2	-14 48	8.76	9.83	K2	3	..	12365b	95	67	22.6	-20 42	6.74	7.0	A2	6	3,8	10109b
46	61	22.2	-19 38	9.8	11.1	Go	2	..	45480b	96	137	22.6	-32 29	10.1	10.5	G5	2	..	42804b
47	122	22.2	-29 52	9.3	9.6	Go	3	..	42804b	97	138	22.6	-32 31	9.7	9.9	G5	3	..	42804b
48	167	22.2	-31 35	8.2	8.7	F8	3	..	15112b	98	18	22.7	+75 40	8.82	9.24	F5	2	..	38133i
49	148	22.2	-32 59	9.0	9.3	G5	1	..	15112b	99	94	22.7	+45 11	8.32	9.32	Ko	3	..	38896i
50	100	22.2	-54 39	8.5	9.9	K2	2	3,3	42095b	100	54	22.7	+7 52	10.4	11.0	Go	1	..	15133b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	81	22.7	- 9 15	10.0	10.8	G5	2	..	40845b	51	92	23.2	+61 57	8.6	8.4	B	2	R	38060i
2	62	22.7	-17 53	9.3	9.4	A5	2	..	45480b	52	51	23.2	+33 15	7.30	8.30	Ko	4	5,4	37382i
3	69	22.7	-19 52	9.73	11.1	K2	2	..	24335b	53	59	23.2	+31 53	6.71	6.71	Aop	6	0,6R	37311i
4	151	22.7	-32 56	9.1	9.6	G5	5	..	42804b	54	47	23.2	+ 9 39	6.02	6.36	F2	10	..	38033i
5	129	22.7	-41 57	7.9	8.7	Fo	5	..	14371b	55	125	23.2	-29 36	6.80	8.2	G5	5	..	15112b
6	127	22.7	-45 48	9.9	10.1	G5	3	..	39658b	56	108	23.2	-41 44	9.7	11.1	G5	1	..	14371b
7	117	22.7	-46 46	9.7	10.1	Go	2	..	42798b	57	88	23.2	-50 18	9.7	9.5	F5	4	..	39658b
8	23	22.7	-61 38	9.6	10.2	Go	3	0,2	23815b	58	88	23.2	-53 31	7.4	8.3	Ko	4	5,5	42095b
9	58	22.8	+34 50	10.1	11.5	Ma	..	..	M	59	94	23.2	-57 48	8.8	10.2	Ko	2	..	14382b
10	51	22.8	+18 58	6.65	7.65	Ko	6	..	37368i	60	97	23.3	+45 14	8.47	8.75	Fo	4	..	38896i
11	55	22.8	+17 21	5.33	6.68	Mb	10	..	37368i	61	54	23.3	+38 33	8.7	9.5	G5	3	..	37382i
12	68	22.8	+ 1 30	9.0	10.1	K2	2	..	24439b	62	53	23.3	+19 9	9.0	9.8	G5	1	E	38102i
13	57	22.8	- 2 14	8.8	9.9	K2	5	0,3	24439b	63	38	23.3	+17 8	9.8	9.8	A	2	..	37368i
14	62	22.8	-17 30	9.5	10.1	Go	2	..	45480b	64	54	23.3	+ 6 32	8.6	9.6	Ko	3	..	15133b
15	127	22.8	-30 4	11.0	11.4	Ao	1	..	42804b	65	175	23.3	-31 33	8.3	9.6	F8	1	..	15112b
16	106	22.8	-51 18	9.2	10.7	A	4	..	14881b	66	41	23.3	-72 26	8.1	8.6	F8	2	..	12082b
17	41	22.8	-59 31	9.2	10.4	G5	3	..	22068b	67	10	23.3	-80 33	10.4	11.0	Go	4	..	38135b
18	34	22.8	-60 44	9.9	10.5	Go	2	5,1	22068b	68	87	23.4	+62 57	8.9	9.5	G	1	..	33411i
19	43	22.8	-63 27	9.4	10.5	K2	3	..	23815b	69	65	23.4	+56 40	7.30	7.86	Go	2	..	1897b
20	19	22.8	-76 53	9.7	10.9	K5	4	3,2	38135b	70	69	23.4	+41 50	8.5	8.5	Ao	3	..	38896i
21	92	22.9	+43 51	5.16	5.22	A2	..	2,10	56,71	71	62	23.4	+36 45	8.2	8.3	A5	4	3,2	37382i
22	67	22.9	+41 38	8.5	9.3	G5	1	..	38896i	72	69	23.4	+33 5	7.55	8.55	Ko	4	2,2	37310i
23	73	22.9	+20 15	7.60	8.60	Ko	4	5,3	38102i	73	57	23.4	+ 8 1	9.6	10.8	K5	1	..	15133b
24	62	22.9	+16 9	8.0	8.4	F5	6	..	37368i	74	54	23.4	- 3 3	9.5	10.1	Go	4	2,2	24439b
25	151	22.9	-25 25	7.6	8.7	F8	3	..	23746b	75	57	23.4	-20 53	6.41	7.0	Go	8	..	14199b
26	150	22.9	-25 51	8.4	9.6	K2	2	..	23746b	76	165	23.4	-23 25	7.7	9.3	Ko	7	0,3	24335b
27	128	22.9	-30 1	9.38	10.8	K5	2	..	42804b	77	126	23.4	-29 51	7.21	7.2	F5	5	..	15112b
28	172	22.9	-31 24	10.0	11.7	G5	1	..	42804b	78	132	23.4	-30 40	9.3	9.6	Go	4	5,3	42804b
29	152	22.9	-33 34	4.96	6.9	Mb	..	5,R	28,195	79	132	23.4	-44 57	9.9	10.7	G5	2	..	23761b
30	35	22.9	-60 37	9.3	10.5	Ko	2	5,2	23815b	80	122	23.4	-46 25	8.5	8.9	Go	4	..	23761b
31	38	22.9	-73 58	10.6	11.2	Go	2	..	22155b	81	109	23.4	-51 11	9.4	9.8	F8	2	..	14881b
32	38	22.9	-76 20	9.8	10.3	F8	5	2,3	22155b	82	94	23.4	-55 11	8.25	9.0	G5	4	..	42095b
33	95	23.0	+44 40	7.9	8.9	Ko	2	..	38896i	83	24	23.4	-61 35	9.1	10.9	G5	2	..	22068b
34	59	23.0	+34 43	8.2	8.3	A5	3	..	37382i	84	88	23.5	+62 55	8.9	8.9	A	2	..	33411i
35	68	23.0	+27 30	8.3	8.8	F8	4	0,4	37311i	85	72	23.5	+54 16	8.4	8.5	A2	1	..	38557i
36	63	23.0	+15 54	6.46	7.53	K2	8	..	37368i	86	113	23.5	+47 51	7.52	8.87	Ma	2	..	37007i
37	64	23.0	- 0 35	10.1	10.9	G5	1	..	24439b	87	81	23.5	-10 7	9.3	10.3	Ko	2	..	40845b
38	72	23.0	-12 13	7.54	8.89	Mb	5	0,5R	14157b	88	75	23.5	-11 48	6.87	7.29	F5	7	5,8	37411i
39	132	23.0	-42 32	8.5	10.8	Ko	2	..	14371b	89	144	23.5	-36 17	8.7	10.2	Ma	2	5,2	45510b
40	36	23.0	-60 50	8.9	10.6	Ko	3	..	22068b	90	93	23.5	-40 28	5.33	6.9	K5	..	5,10	56,117
41	17	23.0	-70 55	9.5	10.5	Ko	1	..	22155b	91	37	23.5	-59 53	9.8	10.4	Go	2	..	22068b
42	76	23.1	+52 29	8.8	9.2	F5	1	..	38557i	92	29	23.5	-66 44	9.3	9.9	Go	3	..	38229b
43	88	23.1	+47 9	8.0	9.1	K2	4	..	38896i	93	21	23.5	-70 6	9.7	10.2	F8	2	..	22155b
44	93	23.1	+39 44	9.4	9.5	A2	2	..	37382i	94	20	23.5	-70 47	9.1	9.9	G5	7	..	22155b
45	61	23.1	+24 23	8.8	8.8	Ao	3	..	37355i	95	..	23.5	-71 0	..	..	A5	2	..	22155b
46	53	23.1	+ 7 8	8.7	9.5	G5	3	..	38033i	96	40	23.5	-76 10	8.3	9.1	G5	6	..	23772b
47	73	23.1	-11 3	9.3	9.9	G	4	..	14377b	97	9	23.5	-79 5	10.1	10.7	Go	4	0,3	38135b
48	55	23.1	-21 28	10.2	11.7	G5	1	..	45480b	98	52	23.6	+63 42	8.0	8.0	Ao	2	..	38060i
49	74	23.1	-21 51	9.5	11.7	Ko	2	..	24335b	99	56	23.6	+38 51	10.1	10.1	Ao	2	..	37382i
50	153	23.1	-25 45	9.5	9.5	F8	3	..	20456b	100	66	23.6	+ 0 13	10.1	10.4	F2	3	..	24439b

THE HENRY DRAPER CATALOGUE.

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0^h 23^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	69	23.6	- 5 23	9.2	9.8	Go	3	..	40845b	51	85	24.1	+30 10	8.66	8.80	A5	2	..	37311i
2	86	23.6	- 9 7	10.0	11.0	Ko	2	..	40845b	52	72	24.1	+28 16	7.8	8.8	Ko	4	..	37311i
3	82	23.6	- 9 58	8.54	9.32	G5	2	..	37411i	53	77	24.1	-12 9	7.66	8.73	K2	3	..	37411i
4	156	23.6	-34 32	8.7	9.3	Ko	3	0,2	12198b	54	67	24.1	-17 46	9.0	9.3	Fo	2	..	45480b
5	42	23.6	-72 41	10.2	11.2	Ko	5	..	22155b	55	141	24.1	-27 57	9.2	10.1	Ko	4	..	20456b
6	60	23.7	+58 55	7.8	8.6	G5	2	..	38060i	56	136	24.1	-30 24	9.8	11.7	K5	1	..	42804b
7	66	23.7	+36 21	6.42	7.20	G5	6	0,8	10404i	57	151	24.1	-32 11	8.7	9.3	F5	2	..	15112b
8	59	23.7	+ 7 50	8.1	9.1	Ko	5	..	38033i	58	96	24.1	-50 36	9.7	9.9	Ao	3	..	39658b
9	76	23.7	-10 52	9.5	9.6	A2	3	..	40845b	59	67	24.2	+56 29	7.25	7.23	B9	3	..	1897b
10	128	23.7	-29 27	8.8	9.3	G5	2	..	15112b	60	91	24.2	+46 56	8.9	9.0	A2	2	..	38896i
11	156	23.7	-33 19	9.6	9.6	Go	4	..	42804b	61	69	24.2	+36 56	9.3	10.7	Ma	..	..	M
12	110	23.7	-41 43	9.6	10.2	G5	3	..	14371b	62	65	24.2	+26 19	8.6	9.4	G5	1	..	19643i
13	98	23.7	-48 53	9.4	10.1	Go	2	..	23761b	63	61	24.2	+25 57	8.1	8.4	Fo	4	5,3	19643i
14	31	23.7	-66 28	8.6	8.7	A2	6	..	22068b	64	66	24.2	+24 21	7.78	8.28	F8	6	..	19643i
15	92	23.8	-50 16	10.1	11.3	K	1	..	39658b	65	50	24.2	- 3 49	10.0	10.5	F8	3	..	24439b
16	35	23.8	-65 17	7.8	8.1	Fo	7	5,8	22068b	66	80	24.2	- 6 11	8.6	9.6	Ko	3	..	37359i
17	42	23.8	-75 58	10.4	11.2	G5	2	..	22155b	67	79	24.2	- 6 27	8.0	8.6	Go	6	..	37359i
18	43	23.8	-76 8	9.7	10.3	Go	3	..	38135b	68	78	24.2	-11 39	9.5	9.6	A2	2	..	37411i
19	6	23.8	-83 42	8.06	8.4	F5	4	..	15173b	69	71	24.2	-14 6	8.8	9.2	F5	3	..	37411i
20	14	23.9	+74 41	8.2	9.2	Ko	3	..	38133i	70	78	24.2	-15 37	8.2	9.3	K2	3	..	37411i
21	75	23.9	+54 49	9.2	9.8	Go	1	..	38557i	71	68	24.2	-18 23	9.5	9.9	F5	2	..	45480b
22	66	23.9	+15 27	8.8	9.8	Ko	2	..	37368i	72	77	24.2	-20 5	9.5	11.1	Ko	2	..	24335b
23	54	23.9	+10 46	8.0	8.3	Fo	4	..	37368i	73	132	24.2	-27 34	7.86	8.9	G5	4	..	23746b
24	58	23.9	+ 9 6	9.0	9.5	F8	2	..	38033i	74	137	24.2	-30 4	9.8	10.8	F5	2	..	42804b
25	59	23.9	- 2 6	10.2	10.8	Go	1	..	24439b	75	107	24.2	-54 51	9.30	10.2	Ko	3	..	45461b
26	87	23.9	- 9 25	10.4	11.0	Go	1	..	40845b	76	25	24.2	-61 20	9.1	10.3	G5	3	..	22068b
27	155	23.9	-25 12	7.15	7.4	A5	5	..	23746b	77	60	24.3	+60 38	9.2	9.3	A2	2	..	38060i
28	135	23.9	-30 18	9.5	10.3	F5	3	..	42804b	78	86	24.3	+52 4	8.6	9.0	F5	1	..	38557i
29	113	23.9	-51 5	6.39	7.0	Ko	4	0,4-	37262b	79	40	24.3	+12 56	9.4	10.0	Go	4	..	37368i
30	99	23.9	-54 59	8.00	8.7	Ko	3	..	42095b	80	71	24.3	- 0 35	10.8	12.2	Ma	1	..	24439b
31	82	23.9	-56 18	8.8	9.9	F	2	..	42095b	81	63	24.3	- 7 4	9.0	9.8	G5	2	..	37359i
32	34	23.9	-64 16	10.0	11.1	K2	2	..	23815b	82	162	24.3	-25 29	9.5	9.5	Go	3	..	20456b
33	22	23.9	-70 14	9.4	10.2	G5	3	..	22155b	83	183	24.3	-31 50	9.6	11.0	Go	2	..	42804b
34	10	24.0	+80 49	8.10	8.10	Ao	3	..	37227i	84	159	24.3	-34 39	9.3	9.9	Go	3	0,2	12198b
35	94	24.0	+61 31	7.7	8.7	Ko	..	0,5-	56,71	85	138	24.3	-38 28	var.	var.	Mb	..	R	M
36	79	24.0	+52 50	8.8	9.8	Ko	1	..	38557i	86	142	24.3	-45 37	9.3	9.2	F8	3	..	23761b
37	71	24.0	+29 1	8.9	9.0	A2	2	..	37311i	87	116	24.3	-51 10	8.6	9.3	G5	5	..	45461b
38	69	24.0	+ 2 8	9.4	10.4	Ko	2	..	24439b	88	18	24.3	-71 51	9.9	10.5	Go	2	..	22155b
39	69	24.0	- 0 31	8.4	9.5	K2	4	..	24439b	89	10	24.4	+76 28	6.35	7.13	G5	5	..	37227i
40	68	24.0	- 0 39	10.8	11.1	F2	2	..	24439b	90	19	24.4	+72 0	8.6	8.6	Ao	3	..	38068i
41	49	24.0	- 1 13	9.0	10.0	Ko	1	..	24439b	91	71	24.4	+32 27	7.77	8.55	G5	4	..	37311i
42	78	24.0	- 8 15	8.9	9.3	F5	4	..	23760b	92	50	24.4	+ 9 51	8.0	9.0	Ko	4	..	38033i
43	181	24.0	-31 19	9.2	11.4	G5	1	..	42804b	93	51	24.4	- 4 2	7.07	8.25	K5	6	5,5	17426b
44	157	24.0	-33 39	10.3	12.2	G5	1	..	42804b	94	70	24.4	- 5 28	9.8	10.9	K2	3	..	24439b
45	147	24.0	-35 27	8.2	9.3	G5	4	0,2	12198b	95	79	24.4	-11 34	9.5	10.3	G5	3	..	23760b
46	140	24.0	-45 10	8.6	8.6	F5	5	0,2	23761b	96	149	24.4	-36 17	8.7	9.0	Go	6	..	12198b
47	99	24.0	-49 39	10.1	10.6	F5	2	..	39658b	97	127	24.4	-46 14	8.7	8.6	Ao	3	2,4	37262b
48	3	24.0	-88 41	9.6	10.7	K2	3	..	22980b	98	83	24.4	-56 12	8.5	9.9	K2	2	..	45461b
49	26	24.1	+68 32	8.5	8.6	A2	2	..	38068i	99	116	24.5	+45 50	8.7	8.8	A3	2	..	38896i
50	98	24.1	+40 17	8.12	8.90	G5	2	..	38896i	100	101	24.5	+44 27	8.9	9.7	G5	2	..	38896i

2600

0^h 24.^m5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	88	24.5	+29 36	8.8	9.2	F5	4	..	37311i	51	114	25.0	-41 1	9.7	10.7	K2	1	..	14371b
2	39	24.5	+17 3	8.6	9.7	K2	2	..	37368i	52	117	25.0	-44 38	8.9	9.5	Go	3	..	23761b
3	51	24.5	+9 21	9.1	9.9	G5	2	..	15133b	53	121	25.0	-51 15	9.1	9.2	F5	3	..	14881b
4	60	24.5	+8 30	10.1	10.6	F8	1	..	15133b	54	101	25.1	+61 48	7.31	7.14	B3	..	0,7	56,71
5	51	24.5	+3 50	9.4	10.4	Ko	2	..	14206b	55	67	25.1	+16 3	8.7	8.7	Ao	4	..	37368i
6	72	24.5	-0 40	10.8	11.4	Go	1	..	24439b	56	53	25.1	+15 14	7.15	8.15	Ko	4	..	37368i
7	64	24.5	-7 23	9.5	9.8	Fo	3	..	40845b	57	64	25.1	+4 49	8.6	8.9	Fo	4	..	14206b
8	112	24.5	-41 13	7.4	7.6	Ko	..	0,6-	56,117	58	85	25.1	-9 47	9.21	9.27	A2	2	..	37411i
9	123	24.5	-47 30	10.3	10.1	A5	2	..	23761b	59	85	25.1	-12 54	9.5	10.5	Ko	1	..	23760b
10	53	24.6	+64 12	7.16	7.16	Ao	7	R	38060i	60	127	25.1	-47 14	9.2	9.9	G5	2	..	23761b
11	75	24.6	+37 47	7.47	7.97	F8	6	0,4	37382i	61	102	25.1	-55 18	9.3	9.6	F8	3	..	45461b
12	57	24.6	+3 24	7.04	8.11	K2	6	3,5-	17426b	62	38	25.1	-62 2	9.4	10.0	Go	3	..	23815b
13	173	24.6	-23 45	9.5	11.1	A2	3	..	24335b	63	29	25.2	+69 14	7.41	7.91	F8	4	..	38068i
14	184	24.6	-31 41	10.0	12.2	G5	1	..	42804b	64	55	25.2	+63 31	8.0	8.5	F8	3	..	38060i
15	163	24.6	-33 8	7.60	8.3	F5	7	0,4-	12198b	65	70	25.2	+56 32	7.65	8.43	G5	1	..	38557i
16	152	24.6	-36 23	9.4	9.6	G5	5	..	12198b	66	66	25.2	+31 38	7.57	7.99	F5	4	..	37311i
17	39	24.6	-65 49	9.3	9.9	Go	4	..	38229b	67	71	25.2	+27 31	8.4	8.5	A2	4	0,4	37311i
18	46	24.6	-76 42	10.2	11.4	K5	2	..	38135b	68	66	25.2	+23 33	8.2	8.2	Ao	4	..	19643i
19	52	24.7	+64 43	8.2	8.0	B	2	..	38060i	69	59	25.2	+6 22	10.1	10.5	F5	1	..	15133b
20	87	24.7	+51 58	8.7	8.7	Ao	1	..	38557i	70	67	25.2	-19 44	8.53	9.0	Go	6	0,3	24335b
21	102	24.7	+44 30	9.2	9.2	Ao	2	..	38896i	71	78	25.2	-22 1	8.8	9.6	Ko	5	..	24335b
22	61	24.7	+9 9	8.0	9.0	Ko	3	..	38033i	72	177	25.2	-23 3	8.8	10.5	Ko	3	..	24335b
23	62	24.7	+8 15	8.5	9.6	K2	2	..	38033i	73	165	25.2	-33 58	10.3	10.7	Go	1	..	42804b
24	51	24.7	-0 53	7.7	8.5	G5	3	..	37359i	74	85	25.3	+54 44	8.8	8.8	B9	2	..	38557i
25	53	24.7	-3 56	10.4	10.7	F2	2	..	24439b	75	95	25.3	+46 59	7.79	8.35	Go	6	..	38896i
26	68	24.8	+59 25	5.92	5.90	B9	8	..	1897b	76	83	25.3	+35 37	8.9	9.0	A5	2	..	37382i
27	119	24.8	+45 24	8.52	8.94	F5	2	..	38896i	77	90	25.3	+29 39	9.4	9.5	A5	2	..	37311i
28	75	24.8	+29 12	5.26	5.54	Fo	..	0,10	56,71	78	72	25.3	+22 56	8.7	8.7	Ao	3	..	37355i
29	52	24.8	-1 40	7.52	7.80	Fo	5	0,6	37359i	79	61	25.3	+7 58	9.4	10.5	K2	2	..	15133b
30	84	24.8	-15 25	6.24	6.58	F2	8	..	37411i	80	60	25.3	+6 40	9.8	10.6	G5	1	..	15133b
31	70	24.8	-17 45	9.2	9.8	Go	2	..	45480b	81	67	25.3	-6 49	9.3	9.9	Go	4	..	40845b
32	154	24.8	-32 40	6.63	7.7	Ko	5	0,4-	12013b	82	99	25.3	-47 58	9.7	11.5	Ko	3	..	39658b
33	162	24.8	-33 54	9.9	11.1	Ko	1	..	42804b	83	98	25.3	-48 13	9.9	11.0	G5	2	..	39658b
34	119	24.8	-51 26	8.9	10.1	Ko	3	..	45461b	84	40	25.3	-74 20	9.5	10.3	G5	5	..	22155b
35	64	24.9	+35 5	8.7	9.0	Fo	2	..	37382i	85	50	25.3	-76 52	9.7	10.0	Fo	4	0,3	38135b
36	63	24.9	-1 51	10.4	10.7	F2	1	..	24439b	86	6	25.3	-81 47	10.0	10.4	F5	4	..	38135b
37	54	24.9	-4 31	6.04	7.22	K5	7	0,8	37359i	87	122	25.4	+46 2	8.6	9.6	Ko	1	..	38896i
38	82	24.9	-6 19	9.8	10.6	G5	3	..	40845b	88	67	25.4	+31 35	8.0	8.3	F2	4	..	37311i
39	83	24.9	-6 39	8.8	9.3	F8	4	..	37359i	89	61	25.4	+17 16	8.7	9.7	Ko	4	..	37368i
40	65	24.9	-19 35	9.18	9.6	F2	5	6,1	24335b	90	58	25.4	+2 42	8.6	9.7	K2	4	..	24439b
41	138	24.9	-30 47	8.8	9.6	Ao	6	..	42804b	91	55	25.4	-0 55	8.4	9.0	Go	6	..	24439b
42	186	24.9	-31 36	9.3	10.5	G5	2	..	42804b	92	81	25.4	-8 38	9.0	9.3	Fo	3	..	23760b
43	156	24.9	-32 50	7.8	9.3	Ko	3	0,2	12198b	93	86	25.4	-15 40	8.3	9.3	Ko	2	..	37411i
44	163	24.9	-33 59	9.3	9.6	G5	3	5,1	12198b	94	81	25.4	-16 28	8.2	8.7	F8	4	0,3	14199b
45	23	24.9	-69 55	9.6	10.4	G5	1	..	22155b	95	81	25.4	-20 24	8.9	10.2	Ao	4	..	24335b
46	40	24.9	-75 20	9.7	9.7	A	5	..	38135b	96	179	25.4	-24 21	5.23	5.31	A3	..	..	28,195
47	60	25.0	+5 56	9.6	10.4	G5	1	..	14206b	97	166	25.4	-33 17	9.4	10.5	G5	2	..	42804b
48	63	25.0	+4 18	6.61	7.03	F5	6	0,6	37379i	98	38	25.4	-60 21	8.6	9.7	G5	5	..	42095b
49	85	25.0	-14 58	9.0	9.4	F5	2	..	12365b	99	37	25.4	-64 46	10.6	11.6	K	2	..	38229b
50	140	25.0	-27 48	9.6	9.6	Go	3	..	20456b	100	33	25.4	-66 43	9.5	10.5	Ko	3	..	38229b

THE HENRY DRAPER CATALOGUE.

2700

0^h 25^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	88	25.5	+55 9	6.78	7.56	G5	4	..	1897b	51	107	25.9	-55 32	7.76	7.8	A3	6	I,3	42095b
2	104	25.5	+40 58	7.53	7.53	Ao	6	0,4-	37367i	52	42	25.9	-64 56	10.6	11.1	F8	2	..	38229b
3	92	25.5	+29 29	9.2	10.3	K2	1	..	37311i	53	32	25.9	-67 29	10.2	10.5	F2	3	..	38229b
4	86	25.5	-10 14	9.3	9.7	F5	1	..	37411i	54	31	26.0	+68 46	9.4	9.4	Ao	2	..	38905i
5	75	25.5	-14 16	8.8	9.6	G5	2	..	37411i	55	74	26.0	+41 59	8.24	8.24	Ao	4	..	37007i
6	159	25.5	-36 30	9.9	10.2	Go	2	..	42804b	56	63	26.0	+38 28	8.8	8.9	A3	3	..	37382i
7	101	25.5	-48 36	8.8	9.8	Go	3	..	23761b	57	43	26.0	+17 12	9.4	10.5	K2	2	..	37368i
8	39	25.5	-59 54	9.33	11.1	K5	1	5,1	23815b	58	75	26.0	+ 2 4	10.1	10.6	F8	3	..	24439b
9	23	25.6	+70 49	9.0	9.0	A	1	..	38068i	59	92	26.0	- 9 23	10.0	10.4	F5	3	3,3	23760b
10	71	25.6	+56 49	7.65	7.65	Ao	2	..	1897b	60	89	26.0	-10 38	6.72	6.80	A3	8	..	37411i
11	94	25.6	+55 27	8.9	8.9	Ao	1	..	38557i	61	90	26.0	-10 38	8.9	9.5	Go	4	..	23760b
12	108	25.6	+49 43	7.42	8.42	Ko	2	..	38557i	62	163	26.0	-32 11	9.1	10.0	Go	3	..	42804b
13	72	25.6	+27 34	9.3	9.9	Go	2	..	37310i	63	163	26.0	-36 48	8.5	9.7	Ko	3	..	12198b
14	69	25.6	+15 28	6.94	6.94	Ao	10	..	37368i	64	149	26.0	-38 21	8.3	9.4	Ko	4	..	12198b
15	57	25.6	+15 4	8.8	9.3	F8	2	..	37368i	65	150	26.0	-42 22	9.3	10.8	G5	1	..	14371b
16	56	25.6	+ 4 8	8.8	9.6	G5	3	..	14206b	66	64	26.1	+38 26	7.32	7.40	A3	7	I,6-	37382i
17	87	25.6	- 9 57	9.8	9.8	Ao	2	..	23760b	67	80	26.1	+33 2	6.08	7.08	Ko	7	0,8-	37382i
18	88	25.6	- 9 58	8.11	9.46	Ma	4	..	37411i	68	105	26.1	-57 9	8.8	9.9	Ko	2	..	45461b
19	68	25.6	-19 10	8.0	8.0	F8	6	3,10	14199b	69	9	26.2	+85 46	8.4	9.4	Ko	4	..	37281i
20	182	25.6	-23 56	11.0	11.3	G5	3	..	24335b	70	15	26.2	+77 34	8.9	9.7	G5	1	..	38964i
21	144	25.6	-28 30	8.4	9.8	G5	3	..	20456b	71	50	26.2	+67 27	8.2	8.5	Fo	3	..	38068i
22	137	25.6	-29 5	9.3	9.6	Ko	3	..	42804b	72	82	26.2	+53 59	4.88	4.83	B8	..	R	28,107
23	103	25.6	-40 4	6.68	7.5	Ko	..	0,8-	56,117	73	81	26.2	+53 25	8.1	8.1	B8	3	..	38557i
24	116	25.6	-41 30	6.31	6.6	Fo	..	..	56,117	74	92	26.2	+52 17	5.69	6.69	Ko	6	0,4	38557i
25	131	25.6	-46 58	var.	var.	Md	..	R	M	75	65	26.2	+38 46	9.0	9.4	F5	3	..	37382i
26	102	25.6	-48 46	5.65	6.4	Fo	7	5,7R	44268b	76	82	26.2	+37 18	8.8	9.6	G5	3	E	37382i
27	106	25.6	-55 36	9.3	11.1	K5	1	..	45461b	77	52	26.2	+20 56	8.8	9.8	Ko	2	..	38053i
28	44	25.6	-63 16	9.5	10.5	Ko	2	..	23815b	78	54	26.2	+20 34	7.90	9.08	K5	3	..	38053i
29	67	25.7	+65 58	6.14	6.02	B5	8	..	38068i	79	53	26.2	+20 16	7.40	8.58	K5	4	..	38053i
30	92	25.7	+42 49	8.1	8.6	F8	3	..	38896i	80	61	26.2	- 3 27	9.0	10.1	K2	5	..	24439b
31	58	25.7	+33 34	8.0	8.4	F5	4	R	37310i	81	55	26.2	- 4 30	9.8	10.8	Ko	3	..	24439b
32	80	25.7	+29 1	8.6	9.6	Ko	3	..	37310i	82	85	26.2	-11 25	9.2	10.3	K2	3	..	23760b
33	57	25.7	+ 3 21	8.8	9.1	F2	4	..	14206b	83	81	26.2	-21 54	8.2	9.0	F2	9	..	24335b
34	59	25.7	- 3 12	9.5	10.7	K5	2	..	24439b	84	151	26.2	-38 10	8.00	8.7	G5	5	..	12198b
35	82	25.7	- 8 1	9.5	10.1	Go	3	..	40845b	85	151	26.2	-42 51	9.7	9.4	F5	4	..	14371b
36	133	25.7	-47 26	9.9	9.9	Go	1	..	42798b	86	129	26.2	-43 51	8.5	9.5	Ko	2	..	42798b
37	132	25.7	-47 36	9.1	8.6	Fo	5	..	23761b	87	122	26.2	-43 55	9.9	9.9	G5	3	..	23761b
38	22	25.8	+76 2	8.37	9.72	Ma	2	..	38133i	88	33	26.2	-73 38	10.4	11.2	G5	5	0,2	22155b
39	97	25.8	+43 24	6.64	6.59	B8	6	..	56,71	89	35	26.3	+66 36	8.2	8.2	B8	3	E	38060i
40	61	25.8	+ 7 11	9.4	10.2	G5	1	..	15133b	90	83	26.3	+53 45	8.2	8.3	A2	1	..	38557i
41	76	25.8	- 0 43	9.4	10.6	K5	2	..	24439b	91	83	26.3	+37 59	9.2	9.3	A5	2	..	37382i
42	83	25.8	- 8 9	9.8	10.6	G5	1	..	40845b	92	57	26.3	+10 59	7.26	7.40	A5	6	..	37368i
43	191	25.8	-30 55	9.8	11.9	Ko	1	..	42804b	93	76	26.3	+ 1 35	9.0	10.2	K5	3	..	24439b
44	192	25.8	-31 38	9.2	11.4	K5	2	..	42804b	94	67	26.3	- 2 34	9.5	10.0	F8	3	..	24439b
45	72	25.9	+59 31	8.6	8.6	A	2	R	38060i	95	83	26.3	-11 47	8.2	8.5	Fo	5	..	37411i
46	69	25.9	+32 10	8.8	9.6	G5	2	..	37311i	96	70	26.3	-17 21	8.3	8.9	Go	3	..	14199b
47	72	25.9	+15 53	8.6	8.9	Fo	2	..	37368i	97	71	26.3	-19 42	9.53	9.6	Fo	4	..	24335b
48	63	25.9	+ 8 46	7.9	9.0	K2	3	..	38033i	98	62	26.3	-21 30	9.8	11.1	Go	1	..	45480b
49	148	25.9	-41 57	9.1	9.4	Go	4	..	14371b	99	166	26.3	-36 2	10.7	11.1	Ao	1	..	42804b
50	100	25.9	-50 18	10.1	11.0	G	2	R	39658b	100	153	26.3	-42 26	9.4	9.6	G5	3	..	14371b

2800

0^h 26^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	114	26.3	-49 12	8.1	8.9	Ko	5	2,3	23761b	51	98	26.8	+57 47	7.02	7.36	F2	4	0,4-	1897b
2	52	26.3	-52 31	9.3	10.4	K5	3	..	45461b	52	86	26.8	+53 24	8.6	8.6	A	1	..	38557i
3	33	26.4	+68 47	8.6	8.6	Ao	5	1,3	38905i	53	85	26.8	+37 44	9.2	9.3	A5	4	2,3	37367i
4	124	26.4	+48 6	7.6	7.7	A2	4	..	37007i	54	72	26.8	+27 6	8.7	9.5	G5	1	..	37355i
5	124	26.4	+45 22	7.57	8.35	G5	4	..	37007i	55	59	26.8	+3 19	8.6	9.0	F5	3	..	14206b
6	73	26.4	+15 28	7.09	8.09	Ko	6	..	37368i	56	70	26.8	+0 58	8.4	8.7	F2	6	..	24439b
7	64	26.4	+8 36	7.29	8.36	K2	5	..	38033i	57	86	26.8	-5 49	9.8	9.9	A2	3	..	40845b
8	75	26.4	-4 50	7.65	8.15	F8	3	..	37359i	58	93	26.8	-9 57	9.2	10.2	Ko	2	..	23760b
9	88	26.4	-12 46	9.8	10.4	Go	2	..	23760b	59	188	26.8	-23 13	10.5	10.8	F8	3	..	24335b
10	185	26.4	-23 45	9.8	10.8	F5	4	..	24335b	60	188	26.8	-24 5	10.0	10.4	Fo	5	..	24335b
11	125	26.4	-44 10	7.6	7.5	A2	8	..	23761b	61	148	26.8	-28 23	9.8	10.4	G5	2	..	20456b
12	40	26.4	-60 51	9.2	10.6	Ko	1	..	23815b	62	198	26.8	-30 58	8.6	9.9	F8	4	..	42804b
13	46	26.4	-63 50	9.6	10.8	K5	2	3,2	23815b	63	197	26.8	-31 29	9.5	11.9	G5	1	..	42804b
14	77	26.5	+36 25	8.1	8.7	Go	5	..	37382i	64	167	26.8	-37 26	8.8	10.5	G5	2	..	45510b
15	66	26.5	+18 55	8.0	8.8	G5	4	..	37368i	65	44	26.8	-72 18	10.6	11.2	Go	3	..	22155b
16	47	26.5	+12 22	7.40	8.40	Ko	6	..	37368i	66	73	26.9	+34 26	6.58	6.66	A3	7	0,6-	37382i
17	68	26.5	-2 36	10.0	11.0	Ko	2	..	24439b	67	70	26.9	-1 47	9.0	9.6	Go	4	..	24439b
18	62	26.5	-3 0	10.2	11.0	G5	1	..	24439b	68	73	26.9	-6 52	8.8	9.8	Ko	3	..	37359i
19	84	26.5	-11 49	8.7	9.3	Go	4	..	37411i	69	80	26.9	-13 52	8.6	9.8	K5	2	..	23760b
20	178	26.5	-25 38	8.3	9.5	K2	3	..	20456b	70	159	26.9	-26 15	9.2	10.1	F8	2	..	20456b
21	165	26.5	-37 45	8.04	9.0	Go	5	..	12198b	71	105	26.9	-53 40	7.2	7.3	A2	6	0,3-	42095b
22	140	26.5	-46 27	7.7	8.6	G5	3	0,5	37262b	72	42	26.9	-74 43	9.37	10.6	Ko	5	..	22155b
23	53	26.5	-52 12	9.5	10.7	K5	2	..	45461b	73	92	27.0	+51 11	7.13	8.13	Ko	4	..	38557i
24	100	26.6	+55 27	7.41	8.41	Ko	2	..	38557i	74	93	27.0	+50 33	8.0	8.1	A2	2	..	38557i
25	85	26.6	+53 16	7.05	8.12	K2	2	..	38557i	75	110	27.0	+44 21	8.9	9.4	F8	2	..	38896i
26	94	26.6	+52 28	7.8	8.9	K2	1	..	38557i	76	99	27.0	+43 18	8.4	8.4	B9	4	..	38896i
27	66	26.6	+17 33	8.1	8.5	F5	6	..	37368i	77	60	27.0	+15 10	8.44	9.51	K2	2	..	37368i
28	45	26.6	+16 43	8.8	9.8	Ko	4	..	37368i	78	68	27.0	+4 39	9.4	10.0	Go	2	..	14206b
29	62	26.6	+3 11	8.4	8.5	A3	5	..	37379i	79	63	27.0	+2 55	9.4	10.0	Go	2	..	14206b
30	69	26.6	-2 21	6.78	6.78	Ao	8	0,8	37359i	80	77	27.0	-5 44	8.9	9.7	G5	5	..	40845b
31	157	26.6	-26 34	9.5	10.4	Go	2	..	20456b	81	95	27.0	-9 58	9.3	10.3	Ko	4	..	23760b
32	170	26.6	-32 52	10.5	11.1	Go	1	..	42804b	82	120	27.0	-54 2	9.2	10.2	G5	2	..	45461b
33	169	26.6	-36 50	9.3	10.0	Go	2	..	42804b	83	43	27.0	-61 54	9.2	9.6	F5	3	3,3	22068b
34	115	26.6	-49 22	4.88	4.94	A2	..	R	28,195	84	50	27.0	-63 31	4.52	4.50	B9	..	R	28,195
35	9	26.7	+84 26	9.2	9.8	Go	2	..	37281i	85	50	27.0	-63 31	4.48	4.54	A2	..	R	28,195
36	101	26.7	+46 35	8.08	8.14	A2	4	..	37007i	86	19	27.0	-70 53	9.7	10.2	F8	3	..	22155b
37	96	26.7	+43 10	9.0	9.0	Ao	1	..	38896i	87	97	27.1	+54 40	8.1	8.1	Ao	2	..	38557i
38	94	26.7	+29 58	9.0	10.1	K2	1	..	37310i	88	99	27.1	+42 57	6.43	6.43	Ao	..	0,6	56,71
39	80	26.7	+27 58	8.6	9.2	G	3	R	37310i	89	79	27.1	+37 12	9.0	9.8	G5	1	..	37367i
40		26.7	+27 57			A2	3	R		99	..	27.1	+25 29	var.	var.	Mc	..	R	M
41	67	26.7	+19 5	7.32	8.50	K5	4	..	37368i	91	61	27.1	+21 12	8.8	9.8	Ko	2	..	38053i
42	66	26.7	+4 17	8.0	8.3	Fo	4	..	37379i	92	71	27.1	+0 38	9.6	10.8	K5	1	..	24439b
43	79	26.7	+1 55	9.0	10.2	K5	2	..	24439b	93	89	27.1	-12 51	8.4	8.9	F8	4	..	37411i
44	78	26.7	-0 44	9.0	9.0	Ao	6	..	24439b	94	74	27.1	-18 47	7.29	8.29	Ko	7	0,10	14199b
45	72	26.7	-7 23	9.5	10.5	Ko	4	..	40845b	95	176	27.1	-33 30	9.7	11.7	Ko	1	..	42804b
46	186	26.7	-23 30	10.5	11.1	A3	3	..	24335b	96	138	27.1	-47 47	9.7	10.1	F5	3	..	39658b
47	108	26.7	-55 26	8.6	9.6	Ko	4	..	45461b	97	25	27.1	-70 3	9.0	10.2	K5	3	..	38365b
48	92	26.7	-56 48	8.5	9.3	Ko	4	..	42095b	98	45	27.1	-72 43	10.0	10.3	Fo	6	5,4	22155b
49	39	26.7	-64 51	10.1	10.7	Go	4	..	38229b	99	25	27.1	-77 37	9.8	10.4	Go	5	..	38135b
50	12	26.7	-69 36	9.0	9.6	Go	5	..	38365b	100	99	27.2	+54 43	8.0	9.0	Ko	1	..	38557i

THE HENRY DRAPER CATALOGUE.

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0^h 27^m. 2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	90	m. 27.2	o 53 34	7.10	8.17	K2	3	..	38557i	51	20	m. 27.7	o 74 56	8.6	8.6	Ao	3	..	38133i
2	191	27.2	-24 41	9.6	11.3	K2	3	..	24335b	52	101	27.7	+54 21	6.14	7.14	Ko	4	..	1897b
3	148	27.2	-27 21	9.8	10.1	F8	3	..	20456b	53	68	27.7	+17 50	7.56	7.90	F2	6	..	38053i
4	24	27.3	+70 26	6.36	6.36	Ao	10	E	38905i	54	74	27.7	+15 38	6.92	7.34	F5	8	..	37368i
5	102	27.3	+62 23	4.24	4.00	Bo	..	R	28,107	55	59	27.7	+11 12	9.0	10.0	Ko	1	..	15133b
6	74	27.3	+59 48	8.9	9.9	Ko	1	..	38060i	56	58	27.7	- 1 0	8.4	9.4	Ko	6	..	24439b
7	78	27.3	+56 38	8.00	8.06	A2	2	..	38557i	57	83	27.7	-14 2	8.2	8.2	B9	5	..	37411i
8	100	27.3	+42 40	8.0	9.1	K2	1	..	38896i	58	76	27.7	-19 14	9.5	9.6	Go	2	..	45480b
9	82	27.3	+27 39	9.0	9.8	G5	2	..	37311i	59	84	27.7	-20 21	9.2	9.9	Go	4	..	24335b
10	79	27.3	+19 45	5.53	6.31	G5	8	5,10	19788i	60	176	27.7	-34 52	9.58	11.1	Ma	2	..	42804b
11	67	27.3	+18 14	7.03	8.21	K5	6	..	37368i	61	178	27.7	-35 59	9.3	9.6	Go	4	..	12198b
12	59	27.3	+ 9 57	8.2	8.3	A5	4	..	38033i	62	127	27.7	-44 37	9.2	9.5	G5	4	..	23761b
13	64	27.3	+ 6 25	5.66	5.66	Ao	10	..	37379i	63	27	27.7	-61 24	9.2	10.0	B9	3	..	22068b
14	78	27.3	- 5 1	9.5	10.3	G5	4	..	24439b	64	67	27.8	+33 18	8.2	8.5	F2	2	..	37311i
15	87	27.3	- 8 4	9.2	10.2	Ko	3	..	40845b	65	47	27.8	+16 33	9.0	10.1	K2	4	..	37368i
16	185	27.3	-25 12	7.30	8.0	F2	5	E	23746b	66	84	27.8	-13 48	8.6	9.4	G5	5	..	23760b
17	201	27.3	-31 22	9.6	11.1	G5	1	..	42804b	67	192	27.8	-23 0	9.3	11.4	Ko	3	..	24335b
18	26	27.3	-61 30	9.1	10.4	F8	3	3,2	23815b	68	196	27.8	-24 52	9.15	9.6	Go	4	0,6	20456b
19	48	27.3	-65 47	9.9	10.5	Go	2	..	38229b	69	180	27.8	-36 18	10.3	11.0	G	1	..	42804b
20	14	27.3	-68 55	8.4	9.4	Ko	6	..	38365b	70	116	27.8	-39 53	8.58	9.0	Go	5	..	12198b
21	13	27.3	-69 30	9.4	10.2	G5	1	..	38229b	71	12	27.8	-78 26	9.8	10.1	Fo	5	0,3	38135b
22	46	27.3	-72 46	11.4	11.4	Ao	2	..	22155b	72	14	27.9	+83 5	8.4	8.5	A2	4	..	37281i
23	68	27.4	+38 18	7.05	7.33	Fo	6	0,6	37382i	73	115	27.9	+62 14	8.0	8.8	G5	2	..	38060i
24	76	27.4	+27 1	6.54	6.54	Ao	8	0,6	19643i	74	76	27.9	+60 0	7.66	7.64	B9	3	..	38872i
25	79	27.4	+22 38	7.00	7.56	Go	8	..	19643i	75	67	27.9	+11 28	9.0	9.4	F5	2	..	15133b
26	68	27.4	+ 7 44	9.6	10.7	K2	2	..	15133b	76	69	27.9	+ 8 22	9.1	9.7	Go	3	..	15133b
27	71	27.4	- 2 10	10.0	10.8	G5	2	..	24439b	77	82	27.9	-18 15	9.0	9.6	Go	4	..	45480b
28	113	27.5	+61 59	8.7	9.3	G	2	..	38108i	78	86	27.9	-22 39	8.9	9.9	Fo	5	..	24335b
29	95	27.5	+52 8	9.0	9.0	Ao	1	..	38557i	79	195	27.9	-23 15	9.8	11.4	Go	3	..	24335b
30	94	27.5	+51 18	8.9	8.9	Ao	1	..	38557i	80	179	27.9	-34 44	9.18	9.0	F2	5	2,3	12198b
31	123	27.5	+49 57	8.2	8.6	F5	1	..	38557i	81	28	27.9	-61 14	9.1	10.6	Ko	2	..	23815b
32	134	27.5	+46 13	8.6	8.7	A2	2	..	38896i	82	107	28.0	+47 6	7.9	8.0	A2	4	2,2	38896i
33	90	27.5	+35 18	7.87	7.87	Ao	6	2,4	37367i	83	82	28.0	+36 38	8.4	9.4	Ko	4	..	37382i
34	66	27.5	+ 7 3	9.6	10.4	G5	1	..	15133b	84	70	28.0	+17 25	8.8	9.2	F5	4	..	37368i
35	151	27.5	-30 50	9.0	12.2	K5	1	..	42804b	85	67	28.0	+ 7 2	9.0	9.6	Go	2	..	15133b
36	176	27.5	-32 37	8.4	9.0	G5	4	5,3	12198b	86	59	28.0	- 1 25	9.4	10.4	Ko	2	..	24439b
37	159	27.5	-38 50	9.9	10.7	K2	2	..	45510b	87	198	28.0	-24 28	9.8	11.3	K5	3	..	24335b
38	144	27.5	-47 37	10.3	10.1	Go	2	..	39658b	88	190	28.0	-25 9	9.8	9.6	F8	5	3,2	24335b
39	22	27.6	+73 55	8.9	9.4	F8	2	..	38133i	89	15	28.0	-68 34	9.4	10.2	G5	3	..	38365b
40	81	27.6	+37 6	9.2	9.6	F5	3	E	37382i	90	..	28.0	-71 19	..	..	Go	2	..	22155b
41	87	27.6	+29 5	8.8	9.1	F2	4	..	37311i	91	47	28.0	-71 56	10.6	10.9	F2	5	..	22155b
42	84	27.6	+27 44	6.38	7.16	G5	6	5,8	37311i	92	114	28.1	+44 35	8.4	9.2	G5	3	..	38896i
43	66	27.6	+ 5 30	9.4	10.2	G5	3	..	14206b	93	115	28.1	+39 33	7.86	8.36	F8	6	..	37367i
44	81	27.6	+ 1 36	9.0	9.6	Go	4	..	24439b	94	69	28.1	+13 17	7.73	8.15	F5	4	..	37368i
45	97	27.6	- 9 35	9.16	9.58	F5	3	..	23760b	95	59	28.1	- 4 24	7.46	8.46	Ko	4	..	37359i
46	80	27.6	-18 39	8.6	9.4	G5	7	..	24335b	96	99	28.1	-10 33	8.6	9.4	G5	2	..	37411i
47	160	27.6	-25 55	6.87	7.8	Ko	8	..	20456b	97	83	28.1	-18 40	9.5	10.3	G5	3	..	24335b
48	150	27.6	-28 32	9.6	10.4	G5	2	..	20456b	98	199	28.1	-24 2	10.5	10.9	F8	4	..	24335b
49	146	27.6	-29 18	8.4	9.3	Ko	7	..	20456b	99	161	28.1	-26 19	9.6	10.7	Go	2	..	20456b
50	56	27.6	-52 33	8.8	9.2	F8	3	..	14881b	100	149	28.1	-29 38	9.5	10.0	G5	2	..	20456b

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0^h 28^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	180	28.1	-32 35	9.9	11.1	G5	2	..	42804b	51	98	28.7	+53 31	7.55	7.55	A0	3	..	38557i
2	181	28.1	-34 20	9.7	9.7	A2	2	..	15112b	52	104	28.7	+43 17	8.4	9.2	G5	1	..	38896i
3	52	28.1	-63 35	5.16	5.22	A2	..	..	28,195	53	80	28.7	+24 53	8.36	9.14	G5	4	..	19643i
4	36	28.1	-66 39	10.4	10.5	A2	4	..	38229b	54	73	28.7	+18 14	8.6	9.0	F5	2	..	38033i
5	26	28.1	-70 3	9.1	10.2	K2	1	..	38365b	55	60	28.7	+10 31	9.0	10.1	K2	1	..	15133b
6	100	28.2	+52 19	8.8	8.8	A0	1	..	38557i	56	85	28.7	-0 45	9.8	10.9	K2	1	..	24439b
7	77	28.2	-6 57	9.8	11.2	Ma	1	..	40845b	57	87	28.7	-18 39	9.0	10.2	K5	3	3,2	24335b
8	89	28.2	-11 17	9.8	10.8	K0	1	..	40845b	58	205	28.7	-23 57	9.5	9.5	F0	4	2,7	20456b
9	198	28.2	-23 28	10.5	11.1	G5	2	..	24335b	59	156	28.7	-30 7	5.62	7.4	K0	..	0,8-	56,117
10	151	28.2	-28 56	9.3	9.9	G5	3	..	20456b	60	168	28.7	-35 44	9.1	9.3	G0	3	5,2	12198b
11	210	28.2	-31 30	9.8	11.1	G0	1	..	42804b	61	128	28.7	-39 14	8.3	7.9	A5	4	0,7	12013b
12	176	28.2	-37 29	8.3	9.9	K0	3	..	12198b	62	112	28.7	-53 45	8.7	9.6	B8	5	..	45461b
13	118	28.2	-40 19	7.9	8.8	K0	5	2,3	12198b	63	47	28.7	-64 28	9.5	10.5	K0	4	..	38229b
14	47	28.2	-75 49	10.0	10.3	F0	4	..	22155b	64	57	28.7	-76 4	10.0	10.3	F0	3	5,3	22155b
15	72	28.3	+9 13	9.1	9.6	F8	3	..	15133b	65	10	28.8	+84 33	8.6	9.6	K0	3	..	37281i
16	60	28.3	-4 35	8.45	8.95	F8	2	..	37359i	66	39	28.8	+66 58	7.31	7.39	A3	4	..	37974i
17	84	28.3	-18 34	9.5	10.0	F8	2	..	24335b	67	107	28.8	+62 22	7.51	7.93	F5	5	..	38060i
18	86	28.3	-20 3	8.2	9.3	K0	5	0,2	24335b	68	118	28.8	+62 2	8.0	8.4	F5	4	..	38060i
19	88	28.3	-22 24	8.4	9.1	F5	7	..	24335b	69	106	28.8	+42 48	8.0	8.1	A3	1	..	38896i
20	202	28.3	-24 51	10.0	11.0	F5	2	..	20456b	70	67	28.8	+2 46	7.8	8.6	G5	5	..	37378i
21	54	28.4	+67 56	8.6	9.6	K0	3	..	37905i	71	66	28.8	-3 45	10.4	10.4	A0	4	..	24439b
22	103	28.4	+43 9	8.1	9.3	K5	1	..	37942i	72	208	28.8	-24 22	9.8	11.3	K0	3	..	24335b
23	67	28.4	+6 6	9.4	10.2	G5	3	..	15133b	73	188	28.8	-33 2	9.3	11.1	K0	2	..	42804b
24	60	28.4	-1 10	7.07	7.15	A3	7	0,6	37359i	74	170	28.8	-35 32	6.57	7.4	G0	7	0,7	15112b
25	149	28.4	-47 30	7.56	7.3	A5	4	3,7	37262b	75	103	28.8	-55 53	7.52	7.9	A2	6	2,4-	42095b
26	27	28.4	-77 1	11.2	11.2	A0	2	..	38135b	76	45	28.8	-59 22	8.6	11.1	K2	1	..	22068b
27	104	28.5	+54 23	8.0	9.0	K0	3	0,2	38872i	77	48	28.8	-64 4	10.3	10.7	F5	2	..	23815b
28	89	28.5	+28 19	9.0	10.0	K0	2	..	37310i	78	137	28.9	+47 32	7.8	7.8	A0	3	..	38896i
29	83	28.5	+19 54	7.60	7.68	A3	4	..	37368i	79	138	28.9	+47 22	7.39	7.89	F8	7	..	38896i
30	73	28.5	+4 23	8.5	8.9	F5	3	..	37379i	80	118	28.9	+44 31	9.0	9.1	A2	2	..	37007i
31	64	28.5	-3 17	8.6	8.9	F0	3	..	37359i	81	77	28.9	+31 5	7.66	8.00	F2	6	..	37311i
32	182	28.5	-37 21	10.7	9.0	G0	6	5,3	12198b	82	65	28.9	+3 15	8.8	9.9	K2	2	..	14206b
33	131	28.5	-41 17	9.0	9.4	F8	4	E	14371b	83	103	28.9	-9 16	9.3	9.9	G0	2	..	23760b
34	127	28.5	-68 43	9.25	10.5	K2	3	..	45461b	84	189	28.9	-33 59	8.3	9.3	K0	4	0,2	12198b
35	16	28.5	-68 43	9.3	10.1	G5	6	..	38365b	85	123	28.9	-40 29	7.54	7.4	B8	10	..	12198b
36	12	28.6	+76 57	8.5	8.6	A2	3	..	38964i	86	49	28.9	-64 14	9.1	10.2	K2	3	..	22068b
37	34	28.6	+68 53	8.6	9.6	K0	1	..	38068i	87	73	29.0	+13 58	8.01	8.29	F0	4	..	37368i
38	70	28.6	+66 12	6.42	6.40	B9	9	..	38905i	88	62	29.0	+9 45	6.79	7.57	G5	7	..	38033i
39	78	28.6	+59 21	7.7	8.3	G0	3	2,3	38872i	89	69	29.0	+5 24	7.76	8.10	F2	4	..	37379i
40	83	28.6	+56 32	8.0	8.0	A0	2	..	38557i	90	80	29.0	-7 38	8.8	9.8	K0	3	..	40845b
41	105	28.6	+42 28	7.9	8.9	K0	2	..	38896i	91	215	29.0	-30 53	8.33	9.3	G5	2	..	15112b
42	68	28.6	+7 8	8.8	9.4	G0	2	..	15133b	92	131	29.0	-39 48	8.28	8.7	F5	5	0,6	14371b
43	62	28.6	-0 56	8.6	9.6	K0	7	..	24439b	93	29	29.0	-61 42	7.8	8.5	A0	8	..	22068b
44	90	28.6	-22 41	9.8	10.5	G5	2	..	24335b	94	45	29.0	-62 27	10.3	10.4	A3	3	1,1	23815b
45	164	28.6	-26 39	7.47	8.7	K0	3	..	23746b	95	36	29.0	-67 19	9.8	10.2	F5	3	..	38229b
46	155	28.6	-28 53	10.0	9.9	G0	2	..	20456b	96	58	29.0	-76 26	9.3	10.3	K0	4	0,3	38135b
47	165	28.6	-38 40	7.24	7.9	G0	5	0,10	12013b	97	99	29.1	+50 54	9.0	9.1	A3	2	..	38557i
48	..	28.6	-80 29	..	..	F5	2	..	38135b	98	131	29.1	+49 41	8.6	8.6	A	1	..	38557i
49	23	28.7	+72 12	9.2	9.2	A0	1	..	38134i	99	71	29.1	+8 8	9.6	10.0	F5	2	..	15133b
50	75	28.7	+58 18	8.6	8.7	A2	1	..	38872i	100	67	29.1	-2 57	8.8	9.3	F8	4	..	37359i

THE HENRY DRAPER CATALOGUE.

3100

0^h 29^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	183	<i>m.</i> 29.1	<i>o</i> -32 51	8.1	9.6	Ma	4	R	12198b	51	86	<i>m.</i> 29.7	<i>o</i> +22 21	8.8	9.1	F2	2	..	38053i
2	48	29.1	-72 35	11.8	12.2	F5	2	..	22155b	52	80	29.7	+ 0 16	9.33	10.33	Ko	3	..	24439b
3	11	29.2	+85 25	8.9	9.0	A2	4	..	37281i	53	87	29.7	- 0 27	10.8	11.9	K2	2	..	24439b
4	96	29.2	+32 43	8.7	9.5	G5	1	..	37311i	54	107	29.7	- 9 2	9.3	10.1	G5	3	5,2	40845b
5	66	29.2	+20 49	9.4	9.8	F5	2	..	38053i	55	158	29.7	-28 35	9.3	11.0	Ko	3	..	20456b
6	74	29.2	+18 31	8.8	9.3	F8	3	..	38053i	56	196	29.7	-33 40	10.1	10.8	Go	2	..	42804b
7	89	29.2	- 6 17	9.2	9.7	F8	3	..	37359i	57	172	29.7	-45 12	9.3	9.8	Go	2	..	23761b
8	192	29.2	-33 20	10.5	11.5	Ko	1	..	42804b	58	117	29.7	-52 56	5.55	6.9	F5	..	3,8-	56,117
9	172	29.2	-35 20	10.1	10.7	F5	1	..	42804b	59	115	29.7	-55 17	10.0	10.8	G5	1	..	45461b
10	188	29.2	-36 35	9.7	10.5	Go	2	..	42804b	60	10	29.7	-79 14	9.6	10.7	K2	4	0,4	38135b
11	140	29.2	-44 38	8.8	9.5	Ko	4	..	23671b	61	9	29.8	+84 8	7.12	7.62	F8	6	..	37281i
12	20	29.2	-71 49	6.10	6.3	A5	..	2,9R	28,195	62	25	29.8	+71 57	8.6	9.8	K5	1	..	38134i
13	46	29.2	-74 14	10.8	11.4	Go	3	..	22155b	63	106	29.8	+58 8	8.2	8.2	Ao	2	..	1897b
14	7	29.2	-84 7	8.9	9.0	A5	2	..	15173b	64	108	29.8	+42 30	8.4	9.2	G5	2	..	38896i
15	74	29.3	+ 8 32	8.7	8.7	Ao	5	..	15133b	65	87	29.8	+36 17	6.82	7.82	Ko	6	0,4	37367i
16	85	29.3	+ 1 55	9.8	10.6	G5	2	..	24439b	66	57	29.8	+12 50	6.49	7.49	Ko	6	..	37368i
17	77	29.3	+ 0 27	8.4	9.4	Ko	7	..	24439b	67	68	29.8	+ 3 51	9.4	10.4	Ko	3	..	14206b
18	175	29.3	-35 10	10.7	11.0	F5	1	..	42804b	68	75	29.8	- 1 51	8.8	9.3	F8	7	..	24439b
19	189	29.3	-36 49	9.3	10.5	Go	2	..	45510b	69	61	29.8	- 3 55	10.4	11.0	Go	1	..	24439b
20	53	29.3	-65 24	10.2	10.5	F2	3	..	38229b	70	109	29.8	- 9 25	9.2	9.7	F8	4	..	23760b
21	18	29.3	-67 58	8.7	9.7	Ko	5	..	38365b	71	161	29.8	-29 20	11.0	11.1	Ko	1	..	20456b
22	35	29.4	+69 12	9.2	9.2	B9	2	..	38068i	72	191	29.8	-32 18	10.1	11.9	K2	2	..	42804b
23	109	29.4	+62 26	7.36	7.64	Fo	6	..	38060i	73	174	29.8	-38 33	7.40	8.3	Ko	7	2,3	12198b
24	109	29.4	+56 3	8.4	8.9	F8	1	..	38557i	74	132	29.8	-54 35	9.8	10.2	F5	2	..	45461b
25	83	29.4	- 5 6	6.96	7.52	Go	6	..	37359i	75	56	29.8	-63 37	9.7	9.6	B5	4	..	22068b
26	82	29.4	- 7 3	6.84	7.18	F2	8	..	37359i	76	90	29.9	+15 58	9.0	9.3	F2	2	..	37368i
27	94	29.4	-11 50	8.8	9.8	Ko	4	..	23760b	77	72	29.9	+ 7 11	8.2	8.7	F8	3	..	37379i
28	115	29.4	-57 38	7.3	8.8	G5	3	..	42095b	78	91	29.9	+ 1 37	9.6	9.9	Fo	3	..	24439b
29	37	29.4	-67 28	9.7	10.5	G5	3	..	38229b	79	94	29.9	-22 26	9.2	9.7	Go	2	..	45480b
30	70	29.5	+61 13	9.5	10.0	F8	1	..	38108i	80	205	29.9	-24 59	9.8	9.6	F5	4	5,3	24335b
31	61	29.5	+10 35	8.6	9.1	F8	3	..	38033i	81	..	29.9	-71 28	..	..	G5	2	..	22155b
32	89	29.5	-19 53	9.08	9.6	F8	5	0,3	24335b	82	59	29.9	-76 16	9.0	10.0	Ko	4	0,3	38135b
33	164	29.5	-27 18	10.3	10.4	Go	2	..	20456b	83	83	30.0	+59 45	8.4	8.7	Fo	2	..	38060i
34	160	29.5	-29 25	9.0	9.3	G5	5	..	20456b	84	100	30.0	+53 39	7.10	7.16	A2	5	..	38557i
35	186	29.5	-37 11	9.3	10.2	F5	3	..	42804b	85	84	30.0	- 7 31	9.2	10.0	G5	4	..	40845b
36	145	29.5	-42 59	6.90	7.0	A2	8	..	23761b	86	219	30.0	-24 2	8.8	8.9	Fo	3	2,8	20456b
37	30	29.5	-58 45	7.4	9.7	Ko	6	..	42095b	87	171	30.0	-26 41	7.66	8.6	G5	5	0,7	20456b
38	..	29.5	-71 13	..	..	Go	2	..	22155b	88	166	30.0	-27 18	10.3	10.1	Go	2	..	20456b
39	10	29.5	-82 13	9.4	10.5	K2	4	..	38135b	89	116	30.0	-57 47	9.3	10.5	Ma	1	R	42095b
40	125	29.6	+61 19	8.4	9.2	G5	1	..	38108i	90	50	30.0	-72 8	11.0	11.4	F5	2	..	22155b
41	87	29.6	+42 9	7.7	8.5	G5	2	0,2	37942i	91	71	30.1	+60 55	8.6	8.4	B	2	R	38060i
42	86	29.6	+20 13	8.95	9.29	F2	2	..	38053i	92	115	30.1	+52 56	7.18	7.18	Ao	6	0,5	38557i
43	68	29.6	- 3 7	10.2	10.7	F8	4	..	24439b	93	69	30.1	+ 3 32	8.6	9.0	F5	4	..	37379i
44	106	29.6	- 8 51	8.6	8.9	Fo	4	0,3	37359i	94	72	30.1	+ 2 40	8.8	9.6	G5	4	..	24439b
45	149	29.6	-45 59	6.80	8.0	Ko	6	0,4	23761b	95	66	30.1	- 1 23	10.1	10.7	Go	2	..	24439b
46	115	29.6	-48 15	9.3	9.5	Fo	4	..	23761b	96	62	30.1	- 4 9	5.24	5.80	Go	10	2,10	37359i
47	56	29.7	+67 23	7.46	8.53	K2	1	..	37974i	97	131	30.1	-40 44	8.7	9.4	Ko	3	..	12198b
48	111	29.7	+55 32	8.2	8.2	Ao	2	..	38557i	98	19	30.1	-68 27	9.4	10.2	G5	2	..	38365b
49	103	29.7	+51 18	7.8	8.3	F8	5	3,2	38557i	99	22	30.2	+74 59	8.2	9.0	G5	3	..	38133i
50	78	29.7	+25 54	8.3	8.6	F2	1	..	37355i	100	111	30.2	+55 10	7.76	7.74	B9	4	4,3	38872i

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0^h 30^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	127	30.2	+39 54	8.6	8.6	Ao	2	..	37367i	51	95	30.6	+28 41	8.8	9.3	F8	1	..	3731oi
2	98	30.2	+36 2	8.6	8.6	Ao	4	..	37367i	52	96	30.6	+28 32	8.8	9.6	G5	4	5,I	3731ii
3	79	30.2	+35 6	7.65	7.65	Ao	6	0,4-	37367i	53	70	30.6	+21 13	8.0	9.1	K2	2	..	38053i
4	83	30.2	+24 34	8.06	8.84	G5	4	..	19643i	54	72	30.6	+20 47	8.6	9.1	F8	3	..	38053i
5	69	30.2	- 3 19	9.2	10.3	K2	6	..	24439b	55	93	30.6	+16 2	7.6	7.9	F2	6	..	37368i
6	120	30.2	-53 49	9.1	10.5	Ko	2	..	45461b	56	105	30.6	-15 17	8.6	8.6	Ao	4	..	3741ii
7	46	30.2	-59 26	9.2	10.0	Go	3	..	42095b	57	169	30.6	-27 25	8.3	9.2	Fo	4	..	20456b
8	60	30.2	-75 59	8.9	9.7	G5	6	0,2-	23772b	58	120	30.6	-48 30	9.5	10.9	G5	1	..	23761b
9	37	30.3	+69 9	8.4	9.5	K2	2	..	38068i	59	49	30.6	-62 38	9.3	10.5	K5	2	..	23815b
10		30.3	+48 29			A2				60	15	30.6	-69 9	8.2	8.2	Ao	8	..	38365b
11	177	30.3	+48 29	7.00	7.06	K	4	R	37942i	61	27	30.6	-70 31	9.6	10.2	Go	3	..	22155b
12	75	30.3	+33 54	7.80	7.86	A2	4	0,4	37367i	62	29	30.7	+70 1	8.26	8.76	F8	2	..	38068i
13	72	30.3	+11 17	8.2	8.8	Go	3	..	38033i	63	118	30.7	+62 52	8.9	9.0	A2	3	..	3806oi
14	75	30.3	+ 7 36	9.0	10.0	Ko	3	..	15133b	64	145	30.7	+48 0	7.42	7.42	Ao	7	..	38896i
15	85	30.3	- 6 56	9.8	9.8	Ao	4	..	40845b	65	98	30.7	+37 42	7.40	8.58	K5	4	..	37367i
16	80	30.3	-18 45	9.3	9.8	F8	4	0,2	24335b	66	105	30.7	+29 28	8.6	9.1	F8	4	..	3731ii
17	81	30.3	-18 58	8.4	8.7	F2	5	0,8	14199b	67	71	30.7	+20 24	8.75	9.93	K5	1	..	19788i
18	164	30.3	-29 48	8.60	9.3	Go	4	2,2	20456b	68	59	30.7	+12 40	6.40	6.82	F5	8	..	37368i
19	205	30.3	-33 7	9.7	11.1	Ko	2	..	42804b	69	76	30.7	+ 5 49	9.0	10.0	Ko	1	..	15133b
20	134	30.3	-49 29	8.8	9.2	Go	5	..	23761b	70	83	30.7	+ 1 4	9.0	9.3	Fo	5	..	24439b
21	47	30.3	-62 28	10.0	11.1	K2	1	0,1	23815b	71	70	30.7	- 1 27	8.6	9.7	K2	5	..	24439b
22	51	30.3	-64 14	9.4	10.2	G5	5	..	22068b	72	93	30.7	- 6 37	9.8	10.3	F8	3	..	40845b
23	128	30.4	+62 8	8.8	10.2	Ma	1	..	38108i	73	93	30.7	- 8 27	8.3	9.1	G5	3	0,2	37359i
24	79	30.4	+58 58	9.0	9.1	A2	2	..	3806oi	74	111	30.7	- 8 45	8.8	9.4	Go	5	..	40845b
25	99	30.4	+35 42	8.8	8.9	A5	4	..	37367i	75	223	30.7	-24 20	9.8	11.0	G5	2	..	24335b
26	78	30.4	+31 41	9.2	10.2	Ko	1	..	3731ii	76	165	30.7	-29 3	10.0	12.2	K	1	..	20456b
27	88	30.4	+26 44	9.4	9.5	A5	2	..	19643i	77	135	30.7	-40 17	7.8	8.4	G5	6	..	12198b
28	70	30.4	+ 3 45	7.8	8.1	Fo	5	..	37379i	78	41	30.7	-60 22	10.1	10.9	G5	1	..	42095b
29	68	30.4	- 1 4	5.93	6.43	F8	8	6,10	17426b	79	41	30.7	-67 21	9.7	10.2	F8	3	..	38229b
30	67	30.4	- 1 38	9.22	10.00	G5	4	..	24439b	80	38	30.7	-73 24	10.5	11.7	K5	4	..	22155b
31	76	30.4	- 2 37	9.3	10.3	Ko	3	..	24439b	81	61	30.7	-76 9	9.1	9.4	F2	5	3,4	23772b
32	82	30.4	-19 6	8.0	8.8	Ko	5	0,7	14199b	82	57	30.8	+68 8	8.6	8.9	Fo	4	..	38905i
33	96	30.4	-22 18	8.6	9.6	Ko	6	..	24335b	83	84	30.8	+59 47	5.76	5.84	A3	7	..	1897b
34	207	30.4	-25 25	7.8	8.7	Ko	4	0,8-	39504b	84	75	30.8	+ 7 4	8.4	8.5	A2	4	..	37379i
35	145	30.4	-44 33	9.9	10.1	Go	2	..	23761b	85	94	30.8	- 6 14	9.8	10.4	Go	3	..	40845b
36	161	30.4	-47 43	8.3	9.5	Ko	3	..	23761b	86	102	30.8	-11 0	9.8	10.2	F5	2	..	23760b
37	141	30.4	-50 53	10.3	10.9	Ko	2	E	39658b	87	212	30.8	-25 26	8.2	9.6	Mb	3	0,5-	20456b
38	109	30.4	-56 45	8.7	8.8	Fo	4	..	42095b	88	197	30.8	-34 14	10.7	10.8	G5	1	..	42804b
39	113	30.5	+54 18	7.70	7.76	A2	4	..	38557i	89	199	30.8	-36 13	10.1	10.5	Ko	2	..	42804b
40	102	30.5	+53 38	5.14	5.02	B5	..	3,8R	1408c	90	10	30.9	+84 12	9.2	9.7	F8	4	..	37281i
41	109	30.5	+43 29	8.8	10.2	Ma	..	..	M	91	110	30.9	+44 6	7.33	7.28	B8	6	..	37007i
42	73	30.5	+ 2 46	9.1	9.9	G5	3	..	24439b	92	99	30.9	+37 17	9.3	9.3	Ao	4	..	37367i
43	92	30.5	- 6 42	9.5	10.3	G5	4	..	40845b	93	82	30.9	+23 29	7.30	8.08	G5	6	0,6	19788i
44	173	30.5	-25 58	8.2	8.0	A3	5	0,8	20456b	94	76	30.9	+ 6 36	7.8	8.2	F5	5	..	37379i
45	136	30.5	-54 6	8.1	8.7	Ao	5	0,5	14881b	95	87	30.9	- 5 36	9.3	10.3	Ko	2	..	40845b
46	37	30.5	-73 6	..	R	Ko	3	..	22155b	96	96	30.9	- 6 7	6.61	7.03	F5	7	..	37359i
47	13	30.5	-78 11	10.4	11.4	Ko	3	..	38135b	97	101	30.9	-16 31	9.5	10.1	Go	3	..	14199b
48	38	30.6	+68 44	8.0	8.6	Go	3	..	38068i	98	85	30.9	-17 7	8.4	9.2	G5	3	..	14199b
49	116	30.6	+62 40	8.5	8.5	Ao	3	..	3806oi	99	86	30.9	-17 13	9.5	9.6	A3	3	..	4548ob
50	91	30.6	+56 45	7.60	8.67	K2	1	..	38557i	100	224	30.9	-24 22	10.0	10.9	A3	3	..	24335b

THE HENRY DRAPER CATALOGUE.

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0^h 30^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	163	<i>m.</i> 30.9	<i>o</i> -46 55	10.3	9.8	Go	2	..	42798b	51	113	<i>m.</i> 31.3	<i>o</i> -9 0	10.0	11.2	K5	3	..	23760b
2	121	30.9	-48 33	5.52	6.4	F8	..	3,6R	28,195	52	104	31.3	-10 55	9.3	9.4	A2	4	..	23760b
3	117	30.9	-55 23	5.94	7.0	Ko	..	0,5-	56,117	53	99	31.3	-11 51	9.2	9.6	F5	1	..	23760b
4	117	31.0	+55 36	8.0	8.4	F5	2	..	38557i	54	98	31.3	-18 10	8.8	9.2	F5	4	3,2	24335b
5	81	31.0	+35 14	8.67	9.67	Ko	2	..	37367i	55	100	31.3	-21 57	9.2	9.6	G5	5	..	24335b
6	71	31.0	-2 51	9.8	10.9	K2	2	..	24439b	56	202	31.3	-34 28	9.0	9.9	G5	2	5,1	12198b
7	88	31.0	-4 46	10.0	11.2	K5	1	..	24439b	57	199	31.3	-37 29	8.7	9.7	G5	3	..	42804b
8	88	31.0	-7 22	9.8	10.8	Ko	2	..	40845b	58	124	31.3	-48 8	8.2	9.2	K2	5	..	42798b
9	112	31.0	-9 22	9.8	10.2	F5	2	..	23760b	59	138	31.3	-49 41	8.58	9.2	G5	5	..	23761b
10	103	31.0	-10 54	8.9	10.0	K2	2	..	23760b	60	105	31.4	+53 21	3.72	3.55	B3	..	0,R	1408c
11	85	31.0	-19 19	8.8	8.8	Ao	6	0,5	24335b	61	75	31.4	+39 4	9.0	9.1	A5	2	..	37367i
12	R	31.0	-22 46	10.0	10.8	Ko	1	..	45480b	62	97	31.4	-8 17	9.8	10.4	Go	3	2,2	40845b
13	213	31.0	-25 11	8.6	9.5	G5	5	0,3-	24335b	63	176	31.4	-27 8	10.0	10.1	Go	2	..	20456b
14	167	31.0	-28 50	9.8	11.1	F8	3	..	20456b	64	227	31.4	-31 46	9.5	11.7	Ko	1	..	42804b
15	199	31.0	-31 57	9.7	10.5	Go	2	..	42804b	65	185	31.4	-38 51	8.2	9.3	Go	5	..	12198b
16	140	31.0	-39 17	9.4	9.6	F5	2	..	12198b	66	35	31.5	+72 21	7.06	6.89	B3	8	..	38068i
17	139	31.0	-54 36	9.1	10.2	Go	2	..	45461b	67	117	31.5	+54 53	8.4	8.4	Ao	1	..	38557i
18	50	31.0	-62 45	9.7	10.7	Ko	2	..	23815b	68	116	31.5	+54 41	7.8	8.9	K2	1	..	38557i
19	47	31.0	-74 34	11.2	12.2	Ko	2	..	22155b	69	101	31.5	+33 10	4.44	4.27	B3	..	R	56,71
20	119	31.1	+52 55	8.0	8.0	Ao	3	..	38557i	70	92	31.5	+26 29	8.2	8.5	F2	4	2,2	19643i
21	98	31.1	+33 6	8.8	8.9	A3	3	..	37310i	71	89	31.5	+0 9	9.8	10.3	F8	2	..	24439b
22	91	31.1	+26 42	6.26	6.21	B8	8	1,8	37355i	72	90	31.5	-16 48	9.2	10.0	G5	3	..	14199b
23	74	31.1	+21 2	8.8	9.8	Ko	1	..	38053i	73	228	31.5	-30 54	8.2	10.5	Mb	3	..	42804b
24	96	31.1	-8 33	10.0	10.8	G5	2	..	40845b	74	155	31.5	-43 48	8.8	8.9	F8	4	..	23761b
25	109	31.1	-15 32	6.56	7.56	Ko	6	..	37411i	75	42	31.5	-60 16	6.90	7.3	A5	..	5,6	56,117
26	220	31.1	-23 24	6.13	7.1	A3	10	0,10	24335b	76	51	31.5	-72 6	10.2	10.6	F5	6	5,3	22155b
27	200	31.1	-32 11	8.8	9.6	Go	6	..	42804b	77	113	31.6	+57 28	7.40	7.38	B9	4	1,4	1897b
28	123	31.1	-50 51	9.3	10.1	Ko	4	E	39658b	78	87	31.6	+24 38	8.2	9.0	G5	1	..	37355i
29	118	31.1	-55 43	8.6	9.3	F2	5	..	45461b	79	76	31.6	+14 41	5.86	5.69	B3	..	0,9-	56,71
30	52	31.1	-64 49	10.5	11.1	Go	3	..	38229b	80	90	31.6	+0 14	9.28	10.06	G5	4	..	24439b
31	16	31.1	-68 54	9.3	9.6	Fo	6	..	38365b	81	171	31.6	-29 24	8.4	9.3	Ko	4	..	20456b
32	183	31.2	+48 24	8.2	9.6	Mb	..	..	M	82	20	31.6	-68 10	10.0	10.1	A2	3	..	38365b
33	107	31.2	+29 18	8.6	9.4	G5	4	..	37311i	83	11	31.6	-79 4	10.4	11.2	G5	4	0,4	38135b
34	73	31.2	+11 40	9.0	9.8	G5	2	..	15133b	84	72	31.7	+21 46	8.6	9.2	Go	1	..	19788i
35	80	31.2	+8 20	7.9	8.7	G5	3	E	37379i	85	99	31.7	+1 19	9.49	10.84	Ma	2	..	24439b
36	110	31.2	-10 33	9.2	10.2	Ko	2	5,1	23760b	86	99	31.7	-8 11	9.5	10.6	K2	2	2,2	19958b
37	70	31.2	-21 18	7.87	8.4	Fo	6	5,10	14199b	87	87	31.7	-19 24	10.0	9.9	F5	2	..	24335b
38	173	31.2	-27 19	8.2	8.9	Fo	4	..	20456b	88	178	31.7	-27 50	8.2	9.5	Gop	4	R	20456b
39	182	31.2	-45 21	10.1	10.4	F8	2	..	23761b	89	168	31.7	-27 58	7.89	8.3	F2	6	..	20456b
40	137	31.2	-48 52	9.4	9.9	Go	2	..	23761b	90	172	31.7	-30 38	9.8	12.2	Ko	1	..	42804b
41	51	31.2	-61 54	8.7	9.2	F8	5	..	22068b	91	213	31.7	-33 50	9.9	10.8	F8	2	..	42804b
42	54	31.2	-64 48	10.7	11.3	Go	2	..	38229b	92	203	31.7	-36 46	9.6	10.8	Ko	1	..	42804b
43	11	31.3	+84 12	9.5	9.9	F5	2	..	37281i	93	125	31.7	-55 23	9.6	10.2	Go	1	..	45461b
44	14a	31.3	+79 48	var.	var.	Md	..	R	M	94	52	31.7	-62 0	9.6	10.4	G5	3	5,2	23815b
45	115	31.3	+54 25	7.26	8.33	K2	4	..	38557i	95	39	31.7	-73 47	7.92	9.1	G5	6	..	23772b
46	113	31.3	+43 57	5.44	6.62	K5	8	..	37007i	96	119	31.8	+42 37	8.2	8.2	Ao	2	..	38896i
47	70	31.3	+21 29	8.4	8.4	Ao	4	0,4	19643i	97	82	31.8	+30 57	8.2	8.5	Fo	6	..	37311i
48	76	31.3	+20 31	8.2	8.3	A3	4	..	19788i	98	80	31.8	+4 52	8.2	8.7	F8	4	..	37379i
49	64	31.3	+12 44	8.4	9.0	Go	4	..	37368i	99	100	31.8	-6 26	10.4	10.5	A5	2	..	40845b
50	71	31.3	-1 8	9.4	9.9	F8	6	..	24439b	100	105	31.8	-11 40	7.85	8.63	G5	3	..	37411i

3400

0^h 31^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	100	31.8	m. o ' -12 13	9.2	9.8	Go	3	..	23760b	51	96	32.3	-20 16	9.5	10.2	Ko	4	..	24335b
2	99	31.8	-18 21	8.6	9.7	K ₂	6	2,3	24335b	52	28	32.3	-70 49	9.0	10.2	K ₅	2	..	38365b
3	222	31.8	-25 2	8.35	8.7	Go	7	0,3-	24335b	53	123	32.4	+62 19	9.4	9.4	A	1	..	38108i
4	221	31.8	-25 3	8.3	8.3	Go	7	0,4	24335b	54	125	32.4	+46 51	7.75	8.17	F ₅	4	..	37007i
5	141	31.8	-49 41	6.81	7.8	G ₇	6	0,10	12226b	55	75	32.4	+22 7	8.4	8.4	Ao	3	..	38053i
6	21	31.8	-71 24	9.0	9.6	Go	7	..	22155b	56	82	32.4	+9 6	9.0	10.1	K ₂	2	..	15133b
7	48	31.8	-74 26	9.1	10.3	K ₅	3	..	23772b	57	80	32.4	+2 35	6.58	7.58	Ko	5	..	37379i
8	43	31.9	+67 6	7.70	8.88	K ₅	1	..	37974i	58	97	32.4	-20 7	8.42	9.0	G ₅	5	0,4-	14199b
9	83	31.9	+58 37	8.0	9.0	Ko	2	5,1	38108i	59	206	32.4	-35 58	7.9	9.0	Go	4	0,3	12198b
10	120	31.9	+54 41	7.7	8.3	Go	3	..	38557i	60	205	32.4	-37 51	6.96	7.9	Go	5	..	12013b
11	84	31.9	+23 28	6.44	7.44	Ko	8	0,8	19788i	61	168	32.4	-47 49	8.5	9.2	G ₅	4	..	23761b
12	78	31.9	+14 36	8.4	8.8	F ₅	2	0,5	37412i	62	59	32.4	-65 4	10.4	10.8	F ₅	3	..	38229b
13	64	31.9	-3 57	8.4	9.4	Ko	4	0,3	23757b	63	29	32.4	-69 59	8.06	7.8	A ₂	8	..	38365b
14	65	31.9	-4 13	9.8	10.4	Go	6	..	24439b	64	7	32.4	-81 50	10.2	11.4	K ₅	4	..	38135b
15	101	31.9	-6 39	8.8	9.4	Go	3	..	37359i	65	67	32.5	+63 16	8.1	9.1	Ko	2	..	38060i
16	90	31.9	-7 6	8.6	9.1	F ₈	3	..	37359i	66	79	32.5	+38 48	9.0	9.3	Fo	4	..	37367i
17	206	31.9	-34 50	10.7	11.0	Fo	1	..	42804b	67	87	32.5	+25 34	8.6	8.6	Ao	4	..	19643i
18	33	31.9	-58 46	8.4	9.2	F ₈	4	..	42095b	68	82	32.5	+20 33	6.97	7.75	G ₅	6	..	19788i
19	43	31.9	-60 26	9.9	10.3	F ₅	3	..	23815b	69	80	32.5	+7 29	8.7	9.9	K ₅	2	..	15133b
20	56	31.9	-65 20	9.8	10.8	Ko	2	..	38229b	70	74	32.5	-0 53	9.0	9.6	Go	4	..	24439b
21	86	32.0	+34 51	5.62	6.40	G ₅	6	5,8	10404i	71	187	32.5	-26 18	8.8	8.7	Go	5	0,4	24335b
22	68	32.0	+10 5	9.4	9.5	A ₂	2	..	15133b	72	60	32.5	-65 25	10.0	10.5	F ₈	2	..	38229b
23	74	32.0	-21 5	9.8	10.3	F ₈	1	..	45480b	73	112	32.6	+50 55	9.2	9.2	A	1	..	38557i
24	175	32.0	-30 16	8.4	10.0	G ₅	3	0,1	20456b	74	86	32.6	+31 39	8.8	9.2	F ₅	2	..	37311i
25	123	32.0	-57 39	9.0	10.2	K ₂	1	..	45461b	75	90	32.6	+1 5	9.6	10.2	Go	3	..	24439b
26	30	32.0	-61 36	9.1	10.3	G ₅	4	5,3	23815b	76	67	32.6	-4 13	10.2	10.7	F ₈	3	..	24439b
27	55	32.0	-75 26	8.5	9.1	Go	6	0,7-	38135b	77	117	32.6	-9 37	8.26	8.82	Go	5	5,3	40845b
28	65	32.0	-76 15	10.3	10.3	Ao	3	..	23772b	78	105	32.6	-16 22	9.0	10.0	Ko	2	..	14199b
29	96	32.1	+56 47	8.9	8.9	Ao	1	..	38872i	79	188	32.6	-26 7	8.3	8.9	F ₂	4	..	20456b
30	128	32.1	+45 3	8.6	10.0	Ma	2	..	38896i	80	143	32.6	-54 40	10.0	10.5	F ₈	3	..	45461b
31	138	32.1	+39 47	6.84	6.84	Ao	8	0,6	37367i	81	30	32.6	-70 28	9.6	10.4	G ₅	2	..	22155b
32	93	32.1	+26 45	8.9	9.3	F ₅	1	..	37355i	82	80	32.7	+39 9	8.6	8.9	Fo	4	..	37367i
33	95	32.1	+15 58	8.7	9.7	Ko	2	..	37368i	83	94	32.7	-5 6	9.5	10.6	K ₂	2	..	24439b
34	65	32.1	+10 53	7.23	7.29	A ₂	7	0,8	38033i	84	102	32.7	-6 17	10.2	10.7	F ₈	2	..	40845b
35	73	32.1	-1 24	9.0	9.4	F ₅	2	..	23757b	85	230	32.7	-23 32	9.3	10.2	G ₅	1	5,3	39504b
36	207	32.1	-32 15	9.7	10.2	Fo	3	..	42804b	86	192	32.7	-44 58	9.16	10.1	Ko	2	..	23761b
37	206	32.1	-32 42	9.7	11.0	F ₈	2	..	42804b	87	129	32.7	-53 34	8.2	9.9	K ₂	3	..	45461b
38	44	32.1	-60 0	10.3	11.1	G ₅	1	..	23815b	88	130	32.7	-54 57	6.42	7.9	Ko	..	0,4-	56,117
39	40	32.1	-73 24	10.0	11.2	K ₅	6	..	22155b	89	91	32.8	+59 46	7.14	8.21	K ₂	4	3,3	38060i
40	13	32.2	+81 56	6.40	6.90	F ₈	6	..	37281i	90	88	32.8	+24 37	8.6	9.1	F ₈	2	..	37355i
41	122	32.2	+62 48	8.9	9.7	G ₅	1	..	38108i	91	77	32.8	+21 56	8.9	9.7	G ₅	1	..	38053i
42	81	32.2	+8 27	9.1	9.9	G ₅	4	..	15133b	92	81	32.8	+5 18	9.26	10.33	K ₂	1	..	14206b
43	225	32.2	-25 19	5.71	6.6	Ko	..	5,7R	28,195	93	92	32.8	-0 7	9.4	10.6	K ₅	1	..	24439b
44	58	32.2	-65 41	6.38	8.1	Ko	..	5,8-	56,117	94	225	32.8	-33 1	10.5	11.7	K ₅	1	..	42804b
45	148	32.3	+47 45	8.0	8.1	A ₅	2	..	37942i	95	58	32.8	-64 22	10.2	10.5	Fo	4	5,2	38229b
46	124	32.3	+46 58	8.30	9.30	Ko	1	..	37942i	96	101	32.9	+56 58	7.6	7.6	B ₉	3	..	3083b
47	96	32.3	+42 0	8.0	8.4	F ₅	4	..	37007i	97	115	32.9	+50 43	7.82	7.88	A ₂	4	..	38557i
48	74	32.3	+21 21	8.8	9.1	F ₂	1	..	19788i	98	133	32.9	+44 39	8.9	9.5	Go	2	..	38896i
49	91	32.3	-4 53	9.8	10.4	Go	2	..	24439b	99	101	32.9	+36 31	8.8	8.9	A ₂	4	..	37367i
50	101	32.3	-8 21	9.3	9.4	A ₅	4	..	40845b	100	70	32.9	+9 17	8.2	9.2	Ko	2	..	38033i

THE HENRY DRAPER CATALOGUE.

3500

0^h 32^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	84	32.9	+ 8 39	9.0	9.8	G5	3	..	15133b	51	81	33.3	- 21 5	9.0	9.6	Ko	2	5,5-	39504b
2	76	32.9	+ 3 51	9.0	9.8	G5	1	..	14206b	52	198	33.3	- 42 9	7.5	7.9	Go	6	..	42098b
3	108	32.9	+ 2 12	7.76	8.76	Ko	3	..	37379i	53	14	33.4	+ 76 19	7.02	8.02	Ko	4	..	37227i
4	107	32.9	+ 2 1	9.4	9.9	F8	1	E	14899b	54	66	33.4	+ 64 58	8.6	8.6	Ao	2	..	38060i
5	103	32.9	- 6 33	8.8	9.2	F5	4	..	37359i	55	110	33.4	+ 54 10	8.4	9.2	G5	2	..	38557i
6	95	32.9	- 17 13	8.2	8.6	F5	5	..	14199b	56	85	33.4	+ 5 29	9.4	9.8	F5	2	..	37376i
7	231	32.9	- 22 53	7.8	9.3	G5	3	5,6	39504b	57	94	33.4	- 7 23	9.8	10.4	Go	2	R	40845b
8	212	32.9	- 34 4	10.3	11.0	K2	1	..	42804b	58	121	33.4	- 9 10	10.7	11.1	F5	2	..	40845b
9	144	32.9	- 54 16	7.6	9.0	Ko	4	0,3	12226b	59	233	33.4	- 25 13	9.2	8.6	A5	4	3,7-	39504b
10	118	32.9	- 56 12	9.1	10.2	Ko	1	..	45461b	60	217	33.4	- 32 35	8.3	9.3	Go	2	..	15112b
11	12	32.9	- 79 1	10.0	11.0	Ko	4	0,4	23772b	61	227	33.4	- 33 13	10.1	11.4	Go	2	..	42804b
12	75	33.0	- 1 3	6.92	7.92	Ko	5	5,6	37359i	62	154	33.4	- 51 17	8.1	7.9	A2	7	..	12226b
13	119	33.0	- 9 24	9.8	9.8	Ao	2	..	23760b	63	36	33.4	- 58 37	9.2	11.1	K5	2	..	23815b
14	105	33.0	- 21 58	9.5	10.8	Mb	3	..	24335b	64	47	33.5	+ 66 15	9.2	10.2	Ko	2	5,1	38905i
15	233	33.0	- 23 44	10.3	10.8	Go	2	..	24335b	65	124	33.5	+ 44 7	7.9	7.9	Ao	4	..	37007i
16	164	33.0	- 41 2	9.0	9.3	G5	3	..	42098b	66	94	33.5	+ 0 7	9.6	10.2	Go	2	..	24439b
17	121	33.0	- 56 13	8.6	10.2	Mb	2	..	45461b	67	122	33.5	- 8 50	9.8	10.2	F5	3	..	23760b
18	22	33.0	- 71 20	9.2	10.2	Ko	3	..	22155b	68	109	33.5	- 11 14	8.0	9.0	Ko	3	..	37411i
19	92	33.1	+ 59 16	6.74	6.74	Ao	6	1,5	38872i	69	109	33.5	- 12 43	9.2	10.2	Ko	3	..	23760b
20	106	33.1	+ 37 29	8.6	9.0	F5	4	..	37367i	70	107	33.5	- 21 50	9.8	9.9	G5	3	..	24335b
21	81	33.1	- 2 16	9.3	9.6	Fo	6	8,3	24439b	71	241	33.5	- 31 48	9.8	12.2	G5	1	..	42804b
22	177	33.1	- 28 11	7.95	9.0	Ko	4	..	20456b	72	127	33.6	+ 62 31	8.9	9.9	K	1	..	38108i
23	179	33.1	- 29 18	9.6	11.1	K2	1	..	20456b	73	117	33.6	+ 50 29	8.6	8.7	A2	2	..	38557i
24	178	33.1	- 30 4	9.0	11.0	Ko	2	5,1	20456b	74	192	33.6	+ 48 49	5.72	6.79	K2	6	..	37007i
25	165	33.1	- 41 27	9.0	9.3	F5	3	..	12198b	75	125	33.6	+ 43 21	8.8	8.8	A	2	..	37942i
26	193	33.1	- 45 25	9.9	9.8	Go	3	..	23761b	76	89	33.6	+ 33 45	8.3	9.5	K5	1	..	37310i
27	54	33.1	- 62 6	9.9	10.9	Ko	2	5,1	23815b	77	84	33.6	+ 21 12	8.3	8.6	Fo	4	..	19788i
28	67	33.1	- 76 52	6.82	7.0	Fo	10	0,8-	23772b	78	86	33.6	+ 9 12	9.0	9.6	Go	2	..	15133b
29	125	33.2	+ 62 18	8.8	10.0	K5	1	..	38108i	79	116	33.6	- 14 47	9.16	10.34	K5	2	..	23760b
30	116	33.2	+ 50 51	8.2	8.3	A3	4	2,2	38557i	80	84	33.6	- 20 51	6.67	6.6	B8	10	..	12238b
31	129	33.2	+ 46 25	6.84	7.62	G5	7	..	38896i	81	244	33.6	- 24 9	7.12	7.3	F5	7	3,5-	12238b
32	85	33.2	+ 19 9	7.8	8.2	F5	4	..	19788i	82	229	33.6	- 33 14	10.3	12.2	K2	1	..	42804b
33	83	33.2	+ 8 3	8.0	8.8	G5	2	..	37379i	83	215	33.6	- 34 0	8.7	9.7	G5	2	0,2	12198b
34	76	33.2	- 1 30	9.0	9.5	F8	6	..	24439b	84	196	33.6	- 45 22	9.9	10.4	Go	1	..	42798b
35	76	33.2	- 3 44	10.4	11.2	G5	3	..	24439b	85	62	33.6	- 65 32	10.6	11.1	F8	1	..	38229b
36	108	33.2	- 7 58	10.0	10.6	Go	2	0,2	19958b	86	53	33.6	- 72 24	10.7	11.2	F8	4	..	22155b
37	98	33.2	- 16 47	8.0	8.8	G5	4	..	14199b	87	16	33.7	+ 76 18	8.67	9.45	G5	2	..	38133i
38	103	33.2	- 20 28	10.4	10.5	Go	1	..	45480b	88	80	33.7	+ 65 20	9.00	9.42	F5	2	..	38905i
39	80	33.2	- 21 45	8.9	9.9	K2	2	2,3	39504b	89	107	33.7	+ 32 39	8.8	8.9	A5	2	..	37310i
40	R	33.2	- 22 50	9.2	9.7	G5	4	0,2	24335b	90	92	33.7	+ 25 47	7.26	8.26	Ko	6	..	37355i
41	235	33.2	- 23 46	10.7	9.9	Ko	3	..	24335b	91	90	33.7	+ 24 48	8.6	9.0	F5	4	0,2	19643i
42	50	33.2	- 74 23	12.1	12.2	A2	2	..	22155b	92	96	33.7	+ 0 24	8.68	9.46	G5	2	E	23757b
43	157	33.3	+ 47 29	8.4	8.5	A2	2	..	37942i	93	77	33.7	- 3 45	10.7	11.3	Go	1	..	24439b
44	110	33.3	+ 36 3	8.0	8.0	Ao	2	..	10404i	94	109	33.7	- 16 13	8.8	9.1	Fo	4	..	14199b
45	88	33.3	+ 31 22	8.6	9.4	G5	2	..	37311i	95	109	33.7	- 20 17	9.0	9.6	G5	4	0,3-	24335b
46	103	33.3	+ 28 46	4.52	5.30	G5	..	5, R	56,71	96	85	33.7	- 21 35	8.9	9.0	F5	5	5,2	24335b
47	84	33.3	+ 7 43	9.0	10.0	Ko	3	..	15133b	97	198	33.7	- 38 33	9.0	9.3	F8	4	..	12198b
48	110	33.3	+ 1 53	9.0	9.4	F5	1	E	14899b	98	169	33.7	- 46 27	7.4	7.5	F8	8	0,3	23761b
49	94	33.3	+ 0 44	8.6	9.0	F5	6	..	24439b	99	22	33.7	- 68 30	8.7	9.1	F5	4	..	38365b
50	93	33.3	- 0 20	9.8	11.0	K5	1	..	24439b	100	17	33.7	- 68 57	8.8	9.6	G5	5	..	38365b

3600

0^h 33^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	68	33.7	-76 10	8.2	8.2	Ao	7	0,7	38135b	51	85	34.2	+20 43	6.08	7.08	Ko	..	5,8R	1654c
2	69	33.7	-76 51	9.1	10.3	K5	3	5,2	38135b	52	84	34.2	-2 31	8.4	8.7	Fo	4	..	37359i
3	86	33.8	+7 22	8.6	9.6	Ko	3	..	15133b	53	78	34.2	-3 23	10.7	11.8	K2	1	..	24439b
4	92	33.8	-19 2	9.2	9.1	Ao	4	2,4	14199b	54	190	34.2	-27 45	10.3	11.3	G5	2	..	20456b
5	234	33.8	-25 40	6.64	8.3	Ko	6	0,5-	12238b	55	186	34.2	-28 40	9.0	10.4	G5	2	..	20456b
6	187	33.8	-27 44	9.6	10.1	Go	2	..	20456b	56	135	34.2	-48 41	9.7	10.1	Fo	2	..	23761b
7	217	33.8	-36 9	9.3	10.8	K5	2	..	42804b	57	132	34.2	-57 13	8.7	9.9	G5	2	..	42095b
8	168	33.8	-41 2	8.3	9.4	Ko	2	..	12198b	58	131	34.2	-57 29	8.2	9.3	A5	4	..	45461b
9	163	33.8	-44 34	9.4	10.4	G5	2	..	23761b	59	41	34.2	-73 45	10.3	10.8	F8	4	..	22155b
10	64	33.8	-63 2	9.5	9.9	F5	3	..	22068b	60	32	34.3	+70 10	7.17	7.17	Ao	7	..	37974i
11	43	33.8	-66 36	7.5	8.1	Go	9	..	38365b	61	89	34.3	+7 40	9.6	10.0	F5	2	..	15133b
12	54	33.8	-72 12	10.6	11.2	Go	3	..	22155b	62	78	34.3	-1 16	10.8	11.6	G5	1	..	24439b
13	14	33.8	-78 2	8.9	9.2	Fo	4	0,3-	23772b	63	113	34.3	-20 25	9.5	9.7	Ko	3	5,2	24335b
14	13	33.8	-79 38	10.1	10.4	Fo	4	..	38135b	64	112	34.3	-20 38	8.8	9.7	K2	5	2,3-	24335b
15	8	33.8	-83 29	9.5	10.5	Ko	1	..	15165b	65	187	34.3	-28 42	8.4	10.4	G5	3	..	20456b
16	78	33.9	+61 9	8.2	8.2	Ao	2	..	38060i	66	207	34.3	-42 27	7.80	8.8	Ko	3	..	42098b
17	85	33.9	+7 2	8.8	9.3	F8	3	..	37379i	67	170	34.3	-43 12	8.9	9.5	Ko	3	..	42098b
18	77	33.9	-1 43	9.57	10.35	G5	2	..	24439b	68	154	34.3	-49 0	9.7	10.4	F8	2	..	23761b
19	108	33.9	-12 52	9.5	9.5	Ao	3	..	23760b	69	136	34.3	-52 54	7.9	9.1	Ko	3	..	12226b
20	103	33.9	-17 17	8.8	10.0	K5	2	..	45480b	70	137	34.3	-53 5	8.2	8.4	F5	5	0,4	12226b
21	93	33.9	-19 25	8.2	9.0	F8	8	0,5-	24335b	71	30	34.3	-77 44	10.4	11.0	Go	3	..	38135b
22	196	33.9	-26 9	8.6	8.0	A3	6	1,8-	20456b	72	79	34.4	+60 18	8.92	9.26	F2	2	..	38060i
23	60	33.9	-64 38	10.3	10.8	F8	2	..	38229b	73	97	34.4	+59 39	8.4	8.4	Ao	3	..	38060i
24	129	34.0	+62 52	8.8	8.8	Ao	2	..	38060i	74	70	34.4	+10 59	7.49	7.99	F8	5	..	38033i
25	120	34.0	+52 1	8.8	9.3	F8	1	..	38557i	75	96	34.4	-0 42	10.1	11.1	Ko	1	..	24439b
26	113	34.0	+36 15	7.8	8.1	Fo	6	..	37367i	76	79	34.4	-1 32	10.4	11.4	Ko	1	..	24439b
27	91	34.0	+30 19	3.49	4.56	K2	..	3,R	1412c	77	242	34.4	-25 5	9.5	10.4	Go	4	0,3-	24335b
28	84	34.0	+2 34	7.41	7.97	Go	5	..	37379i	78	201	34.4	-26 33	8.8	9.2	Go	2	2,3	39504b
29	69	34.0	-4 43	8.80	9.80	Ko	4	..	24439b	79	188	34.4	-28 5	9.8	11.8	Ko	2	..	20456b
30	109	34.0	-21 49	9.0	9.6	G5	2	5,4	39504b	80	133	34.4	-56 54	8.6	9.3	Go	3	..	42095b
31	232	34.0	-33 45	9.6	10.5	G5	3	..	42804b	81	88	34.5	+58 54	7.17	8.17	Ko	4	..	38872i
32	219	34.0	-36 30	8.5	9.3	G5	5	..	12198b	82	121	34.5	+51 20	7.7	8.7	Ko	2	..	38557i
33	217	34.0	-37 1	8.8	10.5	Ko	2	..	42804b	83	137	34.5	+42 17	8.5	8.6	A3	2	..	37007i
34	144	34.0	-50 3	9.1	10.1	Ko	3	..	23761b	84	90	34.5	+7 34	8.1	8.5	F5	6	..	37379i
35	150	34.0	-54 10	8.5	9.9	K5	3	..	45461b	85	79	34.5	-3 38	8.2	8.6	F5	5	..	37359i
36	149	34.0	-54 24	9.2	10.5	Go	2	..	45461b	86	107	34.5	-14 10	9.3	10.1	G5	2	..	23760b
37	130	34.1	+62 41	7.70	8.12	F5	4	..	38060i	87	192	34.5	-27 47	11.0	11.8	Go	1	..	28456b
38	195	34.1	+49 1	8.0	8.8	G5	2	..	37942i	88	56	34.5	-72 15	10.0	10.6	Go	5	..	22155b
39	133	34.1	+43 5	8.2	8.6	F5	2	..	37942i	89	53	34.5	-74 31	7.41	7.8	F2	5	3,9	23772b
40	91	34.1	+25 11	9.11	9.53	F5	2	..	37355i	90	87	34.6	+20 54	5.57	6.57	Ko	..	0,8	1654c
41	98	34.1	+23 8	8.8	9.3	F8	2	..	38053i	91	80	34.6	-1 5	10.8	10.8	Ao	2	..	24439b
42	87	34.1	+7 39	9.4	10.4	Ko	1	..	15133b	92	95	34.6	-5 28	9.2	9.5	Fo	5	0,4	24439b
43	83	34.1	-2 4	10.0	10.6	Go	3	..	24439b	93	112	34.6	-22 7	8.8	9.6	Go	2	0,4	39504b
44	70	34.1	-4 32	9.0	9.0	B9	3	..	37359i	94	189	34.6	-29 38	9.0	10.8	Ko	2	0,1	42804b
45	236	34.1	-25 36	10.0	10.2	Go	1	2,1	39504b	95	186	34.6	-30 23	7.7	9.3	Ko	4	0,3	20456b
46	167	34.1	-43 51	8.0	8.0	Ko	5	..	23761b	96	221	34.6	-36 10	9.6	10.5	F5	2	..	42804b
47	144	34.2	+61 56	9.2	9.2	Ao	1	..	38060i	97	138	34.6	-53 10	9.0	10.5	K2	2	..	45461b
48	112	34.2	+37 41	9.9	11.3	Mb	..	..	M	98	39	34.6	-58 31	6.86	7.1	F8	8	6,3	8623b
49	89	34.2	+32 5	8.8	10.0	K5	1	..	37311i	99	89	34.7	+58 57	7.57	8.64	K2	4	..	32596i
50	93	34.2	+26 12	8.9	9.7	G5	2	..	37355i	100	131	34.7	+46 42	7.7	8.3	Go	3	..	37942i

THE HENRY DRAPER CATALOGUE.

3700

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	85	m. 34.7	o. +38 53	8.6	9.7	K ₂	2	..	37367i	51	45	m. 35.1	o. -60 4	10.2	10.3	A ₅	3	..	42095b
2	106	34.7	+28 50	9.4	10.4	K ₀	1	..	37310i	52	57	35.1	-75 42	9.1	9.4	F ₀	6	5,4	23772b
3	86	34.7	+ 3 6	7.8	8.6	G ₅	3	..	37379i	53	68	35.2	+64 34	8.6	8.7	A ₃	2	..	38905i
4	98	34.7	+ 0 29	8.6	9.7	K ₂	5	..	24439b	54	127	35.2	+54 27	8.7	8.7	A ₀	3	..	38557i
5	71	34.7	- 4 18	10.7	11.9	K ₅	1	..	24439b	55	143	35.2	+44 18	8.8	9.1	F	2	R	37942i
6	110	34.7	- 5 49	9.5	10.3	G ₅	3	0,2	24439b	56	121	35.2	+35 59	8.4	8.5	A ₃	4	..	37367i
7	110	34.7	- 8 33	8.1	8.9	G ₅	4	0,4	37411i	57	101	35.2	+23 14	8.03	9.03	K ₀	2	..	38053i
8	113	34.7	-11 42	6.79	7.21	F ₅	6	..	37411i	58	101	35.2	+16 3	8.6	9.2	G ₀	3	..	37412i
9	255	34.7	-24 44	9.30	11.3	K ₀	2	2,2-	20456b	59	90	35.2	+ 4 44	9.4	10.0	G	1	..	14206b
10	238	34.7	-33 13	9.3	12.2	K ₂	1	..	42804b	60	206	35.2	-26 36	8.2	9.8	K ₅	3	5,4	39504b
11	66	34.7	-63 22	10.1	11.1	K ₀	2	..	23815b	61	190	35.2	-29 7	9.6	10.3	G ₅	2	..	20456b
12	139	34.8	+55 59	2.47	3.47	K ₀	..	R	5105c	62	160	35.2	-39 29	8.4	8.3	A ₃	7	..	12198b
13	138	34.8	+42 55	9.0	9.3	F	2	..	37942i	63	8	35.2	-81 44	9.6	9.9	F ₂	6	..	38135b
14	74	34.8	+ 9 43	8.6	9.4	G ₅	2	..	38033i	64	93	35.3	+58 19	8.9	9.0	A ₂	1	..	38872i
15	118	34.8	-14 51	9.45	10.01	G ₀	2	..	14199b	65	154	35.3	+39 40	7.52	8.52	K ₀	6	..	37367i
16	106	34.8	-16 52	8.8	9.4	G ₀	2	..	14199b	66	119	35.3	+29 28	8.8	9.4	G ₀	2	..	37310i
17	114	34.8	-20 21	10.2	10.8	G	2	..	24335b	67	93	35.3	+24 3	8.2	9.0	G ₅	2	..	37355i
18	249	34.8	-31 5	8.8	11.7	K ₀	2	..	42804b	68	89	35.3	+14 43	8.2	9.2	K ₀	2	..	37412i
19	42	34.8	-73 42	6.90	7.0	A ₀	8	..	12082b	69	100	35.3	+ 0 36	8.4	9.4	K ₀	3	E	23757b
20	72	34.9	- 4 21	10.7	11.5	G ₅	1	..	24439b	70	114	35.3	- 8 12	7.8	8.3	F ₈	6	0,5	37359i
21	113	34.9	-13 38	9.2	10.4	K ₅	2	..	23760b	71	192	35.3	-29 4	10.0	12.2	K ₂	1	..	20456b
22	245	34.9	-25 35	9.0	9.5	G ₀	4	0,3-	20456b	72	226	35.3	-36 38	9.7	10.2	F ₀	2	..	42804b
23	228	34.9	-32 11	10.5	12.2	K ₀	1	..	42804b	73	187	35.3	-47 28	8.7	8.9	G ₀	4	..	23761b
24	98	35.0	+59 46	8.9	9.3	F ₅	2	..	38060i	74	24	35.3	-68 8	9.2	10.2	K ₀	3	..	38365b
25	114	35.0	+37 30	9.0	9.8	G ₅	2	..	37367i	75	19	35.3	-69 18	9.1	9.4	F ₂	7	..	38365b
26	96	35.0	+26 8	8.0	8.5	F ₈	4	..	37355i	76	29	35.4	+72 15	9.2	9.2	A ₀	1	..	38134i
27	100	35.0	+15 17	7.79	8.57	G ₅	4	..	37412i	77	108	35.4	+56 36	8.0	8.1	A ₂	5	3,3	38872i
28	86	35.0	+ 7 5	9.1	10.1	K ₀	2	..	15133b	78	125	35.4	+50 26	8.8	9.0	A ₀	1	..	38557i
29	..	35.0	- 0 48	..	..	F ₅	2	..	24439b	79	87	35.4	- 2 19	8.6	9.0	F ₅	3	..	37359i
30	86	35.0	- 2 19	10.0	10.8	G ₅	3	..	24439b	80	76	35.4	- 3 54	10.7	11.2	F ₈	2	..	24439b
31	80	35.0	- 3 20	9.2	10.3	K ₂	3	..	24439b	81	75	35.4	- 4 42	10.0	11.0	K ₀	2	..	24439b
32	73	35.0	- 4 13	10.7	11.1	F ₅	1	..	24439b	82	90	35.4	-21 32	9.5	9.9	K ₀	2	5,4	39504b
33	113	35.0	- 8 25	8.8	10.0	K ₅	3	..	23760b	83	262	35.4	-23 59	10.5	10.1	F ₅	2	0,3	39504b
34	196	35.0	-27 14	9.5	9.2	F ₂	3	..	20456b	84	237	35.4	-31 53	9.7	11.9	G ₀	1	..	42804b
35	224	35.0	-34 30	var.	8.0	F ₈	6	0,6R	15112b	85	208	35.4	-38 8	8.7	9.3	F ₈	5	..	42804b
36	205	35.0	-37 58	8.07	8.7	A ₂	7	..	42804b	86	143	35.4	-48 22	10.1	10.9	G ₀	2	..	23761b
37	209	35.0	-42 13	8.2	8.7	G ₀	3	..	42098b	87	31	35.4	-70 17	10.0	10.1	A ₂	3	..	38365b
38	57	35.0	-72 50	8.8	8.9	A ₃	6	..	23772b	88	23	35.4	-71 20	10.2	10.5	F ₀	4	..	22155b
39	16	35.1	+81 14	8.58	9.08	F ₈	2	..	38964i	89	16	35.4	-78 17	9.3	10.1	G ₅	4	5,3	38135b
40	122	35.1	+51 24	8.7	8.7	A ₀	1	..	38557i	90	96	35.5	+30 34	8.2	8.6	F ₅	4	..	37311i
41	88	35.1	+38 59	8.2	9.3	K ₂	4	..	37367i	91	108	35.5	+29 7	8.9	9.9	K ₀	1	..	37310i
42	117	35.1	+35 54	7.9	7.9	A ₀	6	..	37367i	92	116	35.5	- 8 0	10.4	11.0	G ₀	2	..	40845b
43	92	35.1	+23 30	7.18	7.26	A ₃	8	1,6	19643i	93	113	35.5	-14 37	9.46	9.88	F ₅	2	..	23760b
44	87	35.1	+ 7 11	9.6	9.7	A ₃	3	..	15133b	94	109	35.5	-17 4	6.46	7.24	G ₅	8	0,8	14199b
45	99	35.1	+ 0 25	10.8	11.1	F ₂	1	..	24439b	95	263	35.5	-24 21	6.24	7.1	K ₀	..	R	28,195
46	82	35.1	- 2 59	10.7	11.2	F ₈	1	..	24439b	96	244	35.5	-33 7	9.7	12.2	K ₀	2	..	42804b
47	74	35.1	- 4 38	8.95	9.95	K ₀	4	..	24439b	97	74	35.5	-52 18	8.7	9.6	K ₀	6	..	45461b
48	129	35.1	- 9 29	9.0	9.1	A ₅	4	..	23760b	98	141	35.5	-53 23	9.0	10.5	K ₅	2	..	45461b
49	110	35.1	-14 26	8.2	9.2	K ₀	3	..	37411i	99	141	35.5	-55 9	8.6	9.6	F ₈	5	..	45461b
50	201	35.1	-45 21	6.02	7.8	K ₀	5	0,10	37262b	100	20	35.5	-69 36	9.8	10.1	F ₀	5	..	38365b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	81	35.6	+65 19	7.10	7.60	F8	5	..	37974i	51	185	36.0	-43 38	9.5	9.8	Go	2	..	42098b
2	126	35.6	+51 39	6.83	6.83	Ao	6	0,6	38557i	52	161	36.0	-50 8	8.6	9.2	Go	5	..	23761b
3	136	35.6	+46 26	8.4	8.5	A5	2	..	37942i	53	129	36.0	-56 4	6.9	8.8	K2	7	0,4	45461b
4	117	35.6	+37 44	9.2	9.7	F8	2	..	37367i	54	..	36.0	-71 17	..	..	G	1	..	22155b
5	98	35.6	+0 13	9.6	10.1	F8	3	..	24439b	55	17	36.0	-77 55	10.4	11.0	Go	3	..	38135b
6	89	35.6	-2 24	10.4	10.9	F8	3	..	24439b	56	83	36.1	+65 36	5.92	6.70	G5	7	..	37974i
7	101	35.6	-4 54	6.12	6.90	G5	7	..	37359i	57	129	36.1	+51 36	8.6	8.6	Ao	2	..	38557i
8	200	35.6	-27 49	8.6	9.2	Go	3	5,2	20456b	58	103	36.1	+27 30	8.4	8.5	A5	6	2,4	37355i
9	195	35.6	-29 58	6.85	6.7	G5	4	0,8	15112b	59	93	36.1	+18 51	8.4	8.5	A5	4	..	38053i
10	194	35.6	-30 25	8.6	8.8	Go	3	0,2	20456b	60	62	36.1	+16 26	9.4	9.8	F5	3	..	37412i
11	252	35.6	-31 43	8.2	10.0	G5	5	..	42804b	61	94	36.1	+8 48	6.53	6.95	F5	8	..	37379i
12	239	35.6	-32 49	9.7	10.2	F5	1	..	15112b	62	91	36.1	-2 3	8.9	9.9	Ko	3	..	23757b
13	228	35.6	-36 3	10.1	10.7	F8	1	..	42804b	63	118	36.1	-10 49	9.8	10.8	Ko	2	..	40845b
14	153	35.6	-53 56	9.8	10.2	F5	2	..	45461b	64	256	36.1	-23 42	9.2	8.8	F2	3	3,5-	39504b
15	24	35.6	-71 39	8.5	9.7	K5	4	..	38365b	65	269	36.1	-24 5	10.5	10.4	F5	1	0,2	39504b
16	53	35.7	+67 14	7.8	8.1	Fo	2	..	37974i	66	165	36.1	-39 49	8.43	9.3	G5	3	..	12198b
17	90	35.7	+38 55	5.42	6.20	G5	8	..	37367i	67	180	36.1	-41 6	9.0	8.4	Ao	6	..	12198b
18	93	35.7	+8 50	8.8	9.8	Ko	3	..	15133b	68	193	36.1	-47 22	8.5	9.8	G5	3	..	23761b
19	86	35.7	+3 56	8.0	8.8	G5	3	..	37379i	69	148	36.1	-48 23	9.2	9.8	G5	4	..	23761b
20	83	35.7	-1 31	9.4	9.9	F8	3	..	24439b	70	144	36.1	-52 54	8.5	9.6	Ko	5	..	45461b
21	117	35.7	-7 46	7.05	7.61	Go	7	..	37359i	71	20	36.2	+76 26	8.82	9.60	G5	1	..	38133i
22	106	35.7	-18 26	8.8	9.8	Ko	4	..	24335b	72	161	36.2	+49 17	7.6	8.0	F5	3	..	37942i
23	46	35.7	-60 1	5.79	6.3	Go	..	0,7 R	56,117	73	138	36.2	+46 54	8.6	8.6	A	1	..	37942i
24	32	35.7	-61 38	8.5	10.0	F8	4	..	22068b	74	88	36.2	+3 3	8.4	9.5	K2	2	..	14899b
25	58	35.7	-72 10	9.8	10.8	Ko	3	..	22155b	75	100	36.2	+0 10	9.6	10.41	G5	4	..	24439b
26	21	35.8	+78 39	8.0	9.0	Ko	2	..	38964i	76	257	36.2	-23 1	9.5	9.9	F8	1	3,3	39504b
27	91	35.8	+39 3	8.2	8.0	B3	4	..	37367i	77	203	36.2	-27 23	9.5	10.7	G5	2	..	20456b
28	90	35.8	+20 29	7.30	8.30	Ko	6	..	38053i	78	196	36.2	-30 4	9.6	10.6	Ko	2	..	20456b
29	91	35.8	+14 16	8.8	9.4	Go	2	..	37412i	79	49	36.2	-59 1	8.4	8.8	F5	4	..	42095b
30	101	35.8	+0 37	9.8	10.9	K2	4	..	24439b	80	55	36.2	-74 19	8.51	8.9	Fo	5	..	23772b
31	84	35.8	-0 50	9.4	9.9	F8	5	..	24439b	81	100	36.3	+59 23	7.35	7.43	A3	3	..	3083b
32	84	35.8	-2 52	10.2	10.3	A2	3	..	24439b	82	120	36.3	+54 14	8.6	8.6	B9	2	..	38557i
33	104	35.8	-4 48	9.35	9.91	Go	4	..	24439b	83	94	36.3	+24 5	5.98	6.12	A5p	8	0,8 R	37355i
34	117	35.8	-11 55	8.8	9.2	F5	3	..	23760b	84	75	36.3	+12 25	7.9	8.5	Go	5	..	37412i
35	195	35.8	-27 55	8.0	8.3	F8	5	0,5	20456b	85	118	36.3	-20 25	9.3	9.3	Ao	6	..	24335b
36	230	35.8	-34 51	9.6	10.2	Go	3	..	42804b	86	211	36.3	-35 5	9.9	10.7	G5	2	..	42804b
37	63	35.8	-64 40	11.3	11.3	Ao	2	..	38229b	87	194	36.3	-47 38	9.4	9.8	Go	2	..	23761b
38	146	35.9	+44 16	8.0	8.8	G5	3	..	37942i	88	145	36.3	-53 46	7.36	7.9	F8	6	0,6	12226b
39	79	35.9	-4 38	8.95	9.73	G5	5	..	24439b	89	31	36.3	-77 23	10.9	11.0	A3	3	..	38135b
40	105	35.9	-5 7	9.0	9.6	Go	5	..	24439b	90	30	36.4	+73 31	8.0	8.0	B9	3	..	38133i
41	102	35.9	-7 40	8.7	9.5	G5	3	..	37359i	91	39	36.4	+70 50	7.30	7.30	Ao	6	..	37974i
42	133	35.9	-10 31	8.9	9.9	Ko	3	..	23760b	92	94	36.4	+38 21	7.8	7.8	B8	6	2,4	37367i
43	108	35.9	-17 51	9.2	10.3	K2	1	..	45480b	93	103	36.4	+26 38	8.2	8.3	A2	4	0,4	37355i
44	196	35.9	-28 13	9.8	10.4	Go	3	..	20456b	94	105	36.4	+19 35	7.7	8.2	F8	6	..	19788i
45	253	35.9	-31 24	7.7	9.6	G5	2	..	15112b	95	93	36.4	-1 50	8.7	9.3	Go	4	..	23757b
46	248	35.9	-33 20	9.9	10.9	Go	2	..	42804b	96	107	36.4	-4 47	8.45	8.73	Fo	3	..	37359i
47	92	36.0	+14 25	9.8	9.8	Ao	2	..	37412i	97	..	36.4	-77 32	..	..	Mb	..	..	M
48	116	36.0	-11 2	9.8	10.2	F5	2	..	40845b	98	33	36.5	+69 48	9.0	9.0	A	1	..	38068i
49	250	36.0	-33 19	9.7	10.3	Go	5	..	42804b	99	70	36.5	+65 15	9.00	9.78	G5	1	..	38905i
50	178	36.0	-41 46	9.3	9.6	F5	2	..	42098b	100	131	36.5	+51 25	8.0	9.0	Ko	1	..	38557i

THE HENRY DRAPER CATALOGUE.

3900

0^h 36^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	164	36.5	+49 58	4.85	4.68	B ₃	..	0,R	56,71	51	107	37.0	+ 0 31	8.4	9.2	G ₅	3	..	37423i
2	102	36.5	+26 13	8.6	9.0	F ₅	2	..	37355i	52	86	37.0	- 1 45	9.37	10.37	K ₀	3	..	24439b
3	101	36.5	+25 16	9.7	9.8	A ₃	2	..	37355i	53	136	37.0	-10 12	9.5	10.9	M _b	2	..	23760b
4	65	36.5	+16 25	9.4	10.0	G	2	..	37412i	54	268	37.0	-25 30	10.5	11.0	G ₀	1	..	39504b
5	94	36.5	+ 5 1	9.00	9.34	F ₂	3	..	37379i	55	51	37.0	-59 51	9.13	9.5	F ₈	3	..	42095b
6	103	36.5	+ 1 12	7.99	8.27	F ₀	5	..	37379i	56	55	37.0	-62 4	9.8	10.4	G ₀	3	..	22068b
7	132	36.5	- 9 2	9.8	10.4	G ₀	2	..	40845b	57	48	37.0	-67 4	9.8	10.2	F ₅	2	..	38365b
8	117	36.5	-13 14	8.8	9.8	K ₀	3	..	23760b	58	59	37.0	-72 10	9.3	10.3	K ₀	6	..	22155b
9	91	36.5	-20 51	7.93	9.3	K ₂	5	2,8-	12238b	59	9	37.1	+86 24	8.7	8.8	A ₃	3	..	37281i
10	257	36.5	-31 52	9.2	11.7	K ₂	2	..	42804b	60	112	37.1	+36 41	8.7	9.8	K ₂	2	..	37367i
11	237	36.5	-34 29	10.3	11.0	K ₀	1	..	42804b	61	106	37.1	+22 17	8.6	9.6	K ₀	2	..	38053i
12	21	36.5	-69 39	9.1	9.4	F ₂	6	..	38365b	62	95	37.1	+14 31	8.6	9.4	G ₅	2	..	37412i
13	7	36.5	-85 48	8.03	9.7	K ₅	4	..	15173b	63	94	37.1	+13 27	8.6	9.0	F ₅	3	..	37412i
14	158	36.6	+40 9	7.05	7.47	F ₅	6	0,6	37367i	64	86	37.1	- 3 35	8.6	9.4	G ₅	3	..	37359i
15	89	36.6	+ 3 6	8.8	9.8	K ₀	1	..	14899b	65	106	37.1	- 6 47	8.8	9.3	F ₈	3	..	37359i
16	101	36.6	- 0 27	9.4	10.5	K ₂	1	..	24439b	66	261	37.1	-22 58	10.5	11.1	K ₀	2	..	24335b
17	264	36.6	-25 45	6.74	7.8	K ₀	6	0,7-	20456b	67	174	37.1	-44 10	9.2	9.5	K ₀	3	..	23761b
18	238	36.6	-34 18	9.3	10.5	K	2	..	12198b	68	22	37.1	-69 1	9.3	9.9	G ₀	3	..	38365b
19	180	36.6	-46 38	4.65	6.0	K ₀	..	5,7R	28,195	69	148	37.2	+40 43	Cl.	Cl.	Con.	6	0,6R	37007i
20	151	36.6	-48 6	9.4	10.4	G ₀	2	..	23761b	70	108	37.2	+27 6	7.41	7.69	F ₀	6	5,6	37311i
21	46	36.6	-66 25	9.5	10.5	K ₀	1	..	38229b	71	91	37.2	+ 4 12	9.4	10.2	G ₅	2	..	14899b
22	25	36.6	-68 44	8.3	8.4	A ₃	8	..	38365b	72	93	37.2	+ 3 37	7.61	8.11	F ₈	4	..	37379i
23	62	36.7	+67 37	8.0	9.0	K ₀	1	..	37974i	73	116	37.2	- 6 11	9.5	10.6	K ₂	1	..	40845b
24	132	36.7	+58 13	6.13	6.11	B ₉	6	..	3083b	74	137	37.2	-10 23	9.5	10.5	K ₀	2	..	23760b
25	101	36.7	+32 4	8.3	8.3	B ₉	6	..	37311i	75	121	37.2	-12 21	6.94	7.94	K ₀	7	..	37411i
26	106	36.7	+19 54	9.0	9.1	A ₅	2	..	19788i	76	112	37.2	-18 17	8.9	9.7	G ₅	3	..	45480b
27	78	36.7	+12 35	8.5	9.5	K ₀	2	..	37412i	77	R	37.2	-22 52	9.3	10.5	K ₀	2	..	24335b
28	99	36.7	+ 8 38	9.0	9.0	A ₀	3	..	15133b	78	262	37.2	-23 33	8.6	9.6	F ₅	2	3,4	39504b
29	115	36.7	- 6 34	9.3	9.7	F ₅	3	3,2	40845b	79	190	37.2	-43 41	7.08	7.3	F ₂	8	..	42098b
30	265	36.7	-25 19	8.3	9.2	G ₅	6	0,3-	24335b	80	143	37.2	-57 3	5.83	6.5	F _{0p}	..	R	28,195
31	206	36.7	-27 48	9.2	10.4	G ₀	2	..	20456b	81	25	37.2	-71 46	9.6	10.2	G ₀	5	..	22155b
32	8	36.7	-87 15	8.5	8.9	F ₅	5	..	15173b	82	10	37.2	-84 38	8.5	8.8	F ₂	4	..	15173b
33	130	36.8	+58 1	7.9	8.9	K ₀	1	..	38108i	83	134	37.3	+51 53	8.6	8.6	A ₀	3	..	38557i
34	135	36.8	+43 23	7.60	8.60	K ₀	4	..	37942i	84	135	37.3	+51 22	8.5	8.6	A ₂	3	..	38557i
35	102	36.8	+31 34	9.0	9.5	F ₈	2	..	37311i	85	117	37.3	- 6 15	10.0	11.1	K ₂	1	..	19958b
36	89	36.8	+ 6 43	9.4	10.4	K ₀	2	..	15133b	86	136	37.3	- 9 43	10.0	10.8	G ₅	2	..	40845b
37	103	36.8	- 0 34	9.6	9.9	F ₂	6	..	24439b	87	33	37.3	-61 39	9.2	11.1	K ₅	1	..	23815b
38	83	36.8	- 4 31	9.5	10.6	K ₂	4	..	24439b	88	10	37.3	-83 35	9.26	8.4	A ₀	7	E	15165b
39	119	36.8	- 8 38	8.4	9.4	K ₀	3	0,2	37359i	89	181	37.4	+45 21	7.37	8.55	K ₅	3	..	37942i
40	81	36.9	+63 45	7.40	7.28	B ₅	4	R	38060i	90	80	37.4	+13 6	9.0	9.8	G ₅	2	..	37412i
41	112	36.9	+57 3	7.8	7.8	B ₉	3	..	3083b	91	78	37.4	+10 34	8.6	8.7	A ₂	4	..	15133b
42	120	36.9	+37 23	9.5	9.6	A ₅	2	..	37367i	92	99	37.4	+ 5 8	7.70	7.78	A ₃	6	R	37379i
43	96	36.9	+23 35	8.3	9.1	G ₅	2	E	38053i	93	104	37.4	- 0 38	9.4	9.9	F ₈	2	..	24439b
44	86	36.9	+11 24	8.2	9.2	K ₀	2	5,2	38033i	94	119	37.4	- 6 16	10.0	10.6	G ₀	1	..	19958b
45	106	36.9	+ 0 29	8.0	9.1	K ₂	2	2,2	37423i	95	122	37.4	-12 42	9.3	10.1	G ₅	2	..	23760b
46	223	36.9	-42 34	8.8	9.3	G ₅	3	..	42098b	96	121	37.4	-20 17	9.8	10.3	G ₀	1	..	45480b
47	152	36.9	-48 41	9.5	10.1	G ₀	3	..	23761b	97	263	37.4	-23 50	9.6	9.9	K ₀	1	0,3	39504b
48	9	36.9	-81 13	7.95	8.6	G ₀	8	..	38135b	98	262	37.4	-31 22	8.3	9.7	G ₀	2	..	15112b
49	152	37.0	+62 13	7.8	7.8	A ₀	4	..	38060i	99	254	37.4	-32 28	9.1	9.5	A ₀	2	..	15112b
50	133	37.0	+51 48	6.93	6.76	B ₃	4	8,4	2929b	100	153	37.4	-53 45	9.1	9.0	F ₈	6	..	45461b

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0^h 37^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	132	37.4	-56 20	7.3	8.3	Go	5	2,5	12226b	51	284	37.8	-24 48	9.3	10.4	Go	2	5,3	39504b
2	67	37.4	-64 30	9.8	9.9	A2	5	0,4	38229b	52	256	37.8	-32 49	10.7	11.5	A5	1	..	42804b
3	68	37.4	-65 4	8.6	8.7	A2	6	2,7	22068b	53	241	37.8	-36 34	7.21	8.7	Ma	3	0,5-	12013b
4	83	37.5	+64 14	10.2	..	Ob	1	..	38060i	54	215	37.8	-45 5	9.5	9.8	F8	3	..	23761b
5	105	37.5	+59 58	8.6	8.9	F2	2	..	38060i	55	171	37.8	-49 2	8.9	9.8	G5	3	..	23761b
6	125	37.5	+29 34	7.9	8.7	G5	6	..	37311i	56	133	37.9	+51 14	8.5	9.5	Ko	1	..	38557b
7	108	37.5	+1 9	8.64	9.14	F8	2	..	37379i	57	171	37.9	+49 21	8.0	8.3	F2	2	..	37942i
8	87	37.5	-0 54	8.6	9.6	Ko	2	..	23757b	58	146	37.9	+46 29	5.02	5.16	A5	..	3,R	56,71
9	87	37.5	-2 45	9.5	9.8	F2	5	8,3 R	24439b	59	127	37.9	+29 40	9.0	10.1	K2	1	..	37310i
10	226	37.5	-26 44	9.0	10.4	F5	2	..	20456b	60	106	37.9	-0 42	9.8	10.4	Go	2	..	24439b
11	245	37.5	-34 33	9.7	9.7	A2	3	..	12198b	61	85	37.9	-4 24	7.35	7.69	F2	6	..	37359i
12	22	37.6	+76 40	8.2	9.4	K5	2	..	38133i	62	97	37.9	-21 10	9.0	9.9	Go	3	..	24335b
13	107	37.6	+34 27	9.3	9.4	A2	2	..	37367i	63	267	37.9	-23 11	9.6	10.3	Ko	3	..	24335b
14	106	37.6	+16 7	6.65	7.65	Ko	5	..	37412i	64	210	37.9	-28 16	9.3	10.4	G5	2	..	20456b
15	99	37.6	+8 10	9.6	10.0	F5	1	..	15133b	65	175	37.9	-39 1	6.07	6.6	Ao	..	0,R	56,117
16	94	37.6	+3 16	8.8	9.3	F8	3	..	14899b	66	199	37.9	-47 45	7.8	9.2	G5	4	..	23761b
17	109	37.6	+0 21	9.78	10.20	F5	2	..	24439b	67	56	37.9	-74 44	9.02	10.3	Ko	4	..	23772b
18	105	37.6	+0 12	8.63	9.13	F8	6	2,4	24439b	68	132	38.0	+35 36	9.2	9.3	A5	2	..	37367i
19	107	37.6	-7 25	9.0	9.6	Go	4	..	40845b	69	112	38.0	+26 39	8.7	8.8	A5	2	..	37355i
20	121	37.6	-8 5	9.8	10.6	G5	2	5,2	19958b	70	80	38.0	+11 10	8.4	9.4	Ko	1	..	38033i
21	116	37.6	-17 15	8.9	9.5	Go	2	..	14199b	71	125	38.0	-11 3	8.6	9.8	K5	4	0,3	23760b
22	122	37.6	-20 11	9.5	9.9	G5	3	..	24335b	72	105	38.0	-19 44	10.2	10.3	F2	2	..	24335b
23	95	37.6	-20 54	9.5	9.3	F5	2	3,5	39504b	73	212	38.0	-27 10	9.5	10.1	F5	2	0,2	39504b
24	206	37.6	-28 27	9.5	11.3	Ko	1	..	20456b	74	47	38.0	-60 11	10.3	10.9	Go	3	..	23815b
25	186	37.6	-46 6	8.1	8.9	F8	5	..	23761b	75	36	38.1	+75 23	7.42	8.20	G5	6	..	38133i
26	60	37.6	-72 31	10.4	11.2	G5	3	..	22155b	76	92	38.1	+60 44	8.6	8.9	Fo	2	..	38060i
27	43	37.6	-73 40	9.8	10.6	G5	4	..	22155b	77	97	38.1	+14 33	8.4	8.8	F5	4	..	37412i
28	96	37.7	+58 30	8.6	8.7	A5	2	..	38108i	78	95	38.1	+6 2	8.7	9.5	G5	2	..	37379i
29	145	37.7	+55 59	7.8	8.8	Ko	1	..	38557i	79	120	38.1	-22 15	8.6	9.0	Ko	7	0,3-	24335b
30	88	37.7	+21 15	9.0	9.4	F5	2	..	38053i	80	220	38.1	-35 52	11.0	10.4	G5	2	..	42804b
31	95	37.7	+2 47	9.1	9.5	F5	4	..	14899b	81	187	38.1	-46 50	9.2	9.8	F8	4	..	23761b
32	112	37.7	+0 19	9.66	10.66	Ko	1	..	24439b	82	159	38.1	-54 40	8.5	9.6	G5	4	0,3 R	12226b
33	88	37.7	-3 23	10.2	10.7	F8	2	..	24439b	83	160	38.1	-54 40	8.10	9.6	G5	4	0,3 R	12226b
34	102	37.7	-19 10	9.8	9.9	G5	3	..	24335b	84	133	38.1	-56 24	8.9	9.9	K5	4	..	45461b
35	104	37.7	-19 37	8.68	9.1	F5	6	5,4-	24335b	85	52	38.1	-59 11	8.5	10.3	K2	3	..	23815b
36	123	37.7	-20 45	7.50	8.4	G5	7	0,R	12238b	86	124	38.2	+1 31	7.8	8.1	Fo	5	..	37379i
37	240	37.7	-35 56	10.5	11.1	Ko	1	..	42804b	87	189	38.2	-46 20	8.6	9.5	Ko	3	..	23671b
38	154	37.7	-53 6	8.8	10.8	K2	3	..	45461b	88	48	38.2	-60 49	5.84	7.6	K2	..	2,6-	56,117
39	56	37.7	-61 55	9.5	10.6	K2	3	..	22068b	89	47	38.2	-66 1	5.46	5.8	F5	..	R	56,117
40	72	37.7	-76 22	8.8	9.1	F2	4	0,4-	38135b	90	58	38.2	-74 14	9.57	10.6	Ko	2	..	23772b
41	13	37.8	+84 30	9.2	9.3	A2	3	..	37281i	91	129	38.3	+54 3	8.6	9.4	G5	1	..	38557i
42	43	37.8	+70 17	6.94	7.94	Ko	5	..	37974i	92	138	38.3	+51 42	9.0	9.1	A2	1	..	38557i
43	108	37.8	+34 49	8.2	9.2	Ko	4	..	37367i	93	96	38.3	+5 37	8.6	9.0	F5	2	..	14899b
44	101	37.8	+8 28	8.6	9.4	G5	4	..	15133b	94	125	38.3	+2 3	7.8	8.1	Fo	5	..	37379i
45	100	37.8	+8 1	8.7	8.8	A3	3	E	37379i	95	126	38.3	+1 46	8.4	8.8	F5	3	..	14899b
46	91	37.8	+6 17	8.7	9.7	Ko	1	..	14899b	96	88	38.3	-1 25	8.8	9.6	G5	2	..	23757b
47	114	37.8	+0 45	8.6	9.6	Ko	3	..	37379b	97	109	38.3	-6 53	7.52	8.52	Ko	4	0,4	37359b
48	140	37.8	-10 28	6.54	7.04	F8	6	3,10	37411i	98	142	38.3	-9 52	9.24	10.24	Ko	3	R	19958b
49	96	37.8	-20 54	9.2	9.7	Go	2	..	45480b	99	68	38.3	-64 16	9.8	10.8	Ko	2	..	38229b
50	118	37.8	-22 12	8.2	10.8	Ko	6	0,3-	24335b	100	55	38.4	+66 28	8.6	9.1	F8	2	..	37974i

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	139	38.4	+62 30	9.2	9.2	Ao	1	..	3806oi	51	69	38.8	-63 19	10.0	11.1	K2	2	..	23815b
2	219	38.4	+48 31	7.30	8.30	Ko	3	..	37942i	52	8	38.8	-85 58	7.73	8.7	G5	7	..	15173b
3	114	38.4	+37 1	8.2	9.2	Ko	4	..	37367i	53	107	38.9	+30 50	9.2	10.0	G5	2	R	37311i
4	113	38.4	+28 13	9.0	9.5	F8	2	..	3731oi	54	92	38.9	+21 32	8.8	9.3	F8	2	..	38053i
5	104	38.4	+24 21	8.1	8.9	G5	2	..	37355i	55	93	38.9	+17 23	8.1	9.1	Ko	2	..	37412i
6	94	38.4	+20 17	9.22	9.64	F5	1	..	38053i	56	128	38.9	- 8 4	9.8	10.4	Go	3	0,3	19958b
7	70	38.4	+16 49	8.7	9.2	F8	4	..	37412i	57	100	38.9	-20 48	9.2	9.3	A2	4	3,6	39504b
8	81	38.4	+ 9 31	9.1	9.7	Go	3	..	15133b	58	99	38.9	-20 57	9.5	9.1	Ao	3	1,5-	39504b
9	124	38.4	-12 38	9.8	11.0	K5	1	..	40845b	59	101	38.9	-21 37	10.0	10.5	Ko	1	..	45480b
10	107	38.4	-18 49	9.8	9.9	A5	1	..	45480b	60	70	38.9	-63 4	9.7	10.5	G5	3	..	38229b
11	267	38.4	-33 29	8.8	9.8	Go	4	2,2	12198b	61	27	39.0	+74 26	5.59	5.65	A2	..	2,10	56,71
12	222	38.4	-35 25	9.7	11.0	Ko	1	..	42804b	62	45	39.0	+70 28	9.2	10.3	K2	1	..	38134i
13	223	38.4	-38 32	7.72	8.4	G5	6	..	12198b	63	124	39.0	+33 5	7.70	7.78	A3	6	1,4	37367i
14	196	38.4	-43 46	8.9	9.8	K5	3	..	23761b	64	83	39.0	+12 46	8.2	9.0	G5	3	..	37412i
15	75	38.5	+64 46	8.5	8.5	Ao	4	0,2	38905i	65	92	39.0	- 2 47	9.2	10.6	Ma	2	..	24439b
16	159	38.5	+61 37	8.9	8.9	Ao	2	2,2	3806oi	66	122	39.0	- 6 27	9.8	10.1	Fo	2	6,2	19958b
17	148	38.5	+46 25	8.4	8.5	A5	3	..	37942i	67	148	39.0	- 9 59	9.8	10.4	Go	3	2,3	23760b
18	120	38.5	+42 10	8.9	8.9	A	2	..	37942i	68	280	39.0	-25 26	8.6	8.9	Go	5	0,4-	39504b
19	122	38.5	+32 46	7.02	7.16	A5	6	..	37311i	69	225	39.0	-38 1	7.54	7.9	F5	7	..	12198b
20	110	38.5	- 6 57	9.5	10.7	K5	2	5,2	19958b	70	164	39.0	-48 26	8.6	9.2	F5	4	..	23761b
21	144	38.5	-10 33	9.8	10.4	Go	2	..	40845b	71	186	39.0	-51 32	8.6	9.2	F2	3	..	12226b
22	125	38.5	-12 27	9.8	9.8	Ao	3	..	23760b	72	185	39.0	-51 51	10.8	11.3	K2	1	..	45461b
23	268	38.5	-23 11	9.3	9.6	K2	3	2,5	39504b	73	111	39.1	+59 45	8.6	8.9	Fo	2	..	38108i
24	230	38.5	-26 28	8.1	9.5	F8	4	0,4	39504b	74	167	39.1	+40 8	7.46	8.81	Ma	4	..	37367i
25	50	38.5	-66 10	7.12	6.8	A3	..	1,10	56,117	75	95	39.1	+ 7 13	8.8	9.2	F5	3	..	37379i
26	57	38.6	+67 1	7.6	8.6	Ko	1	..	37974i	76	112	39.1	- 7 2	9.8	10.3	F8	2	2,2	19958b
27	165	38.6	+39 53	8.2	9.0	G5	4	..	37367i	77	269	39.1	-31 42	9.3	12.0	K2	1	..	42804b
28	115	38.6	-18 32	2.24	3.24	Ko	..	R	5111c	78	73	39.1	-65 22	8.3	9.3	Ko	7	0,7-	38365b
29	277	38.6	-25 17	9.6	11.3	Go	1	..	39504b	79	165	39.2	+61 59	6.84	7.84	Ko	5	..	3806oi
30	222	38.6	-45 44	7.02	7.5	G5	9	..	23761b	80	183	39.2	+47 44	4.70	4.51	B2	..	3,R	2268c
31	84	38.6	-52 22	9.7	10.7	Ko	2	..	45461b	81	137	39.2	+36 3	9.4	10.8	Ma	..	..	M
32	58	38.7	+66 37	6.85	7.35	F8	5	3,7	37974i	82	83	39.2	+ 9 24	9.4	9.4	Ao	3	..	15133b
33	131	38.7	+53 36	7.33	7.33	Ao	5	0,3	38557i	83	97	39.2	+ 3 35	8.8	10.0	K5	1	..	14899b
34	187	38.7	+45 42	7.52	7.94	F5	4	..	37007i	84	116	39.2	- 4 56	8.8	9.3	F8	8	..	24439b
35	94	38.7	+ 7 0	8.8	9.9	K2	3	..	37379i	85	114	39.2	- 7 27	9.8	10.4	Go	2	0,2	19958b
36	91	38.7	- 3 37	9.3	10.3	Ko	6	0,4	24439b	86	129	39.2	- 8 26	7.7	7.8	A3	6	..	37359i
37	126	38.7	- 8 7	9.5	10.0	F8	5	0,4	19958b	87	150	39.2	-10 7	9.5	10.3	G5	2	..	40845b
38	183	38.7	-44 40	8.02	9.5	K2	3	..	23761b	88	128	39.2	-11 9	4.93	5.93	Ko	..	5,R	56,71
39	161	38.7	-48 4	10.1	10.1	F5	2	..	23761b	89	271	39.2	-30 58	8.6	9.7	F8	5	..	42804b
40	162	38.7	-48 32	8.1	8.3	F5	5	0,3	23761b	90	34	39.2	-61 14	9.5	10.0	F8	3	..	22068b
41	32	38.7	-70 34	9.3	9.4	A2	5	..	38365b	91	23	39.2	-69 11	9.2	10.2	Ko	3	..	38365b
42	181	38.8	+47 19	5.55	5.38	B3	..	2,5	2268c	92	33	39.2	-70 51	9.2	10.2	Ko	3	..	38365b
43	166	38.8	+40 8	8.78	10.13	Ma	5	..	33809i	93	19	39.3	+80 36	8.5	9.3	G5	2	..	38964i
44	101	38.8	+ 7 40	9.6	10.8	K5	1	..	15133b	94	123	39.3	+41 57	8.0	8.8	G5	2	..	37942i
45	126	38.8	-12 33	6.18	6.96	G5	7	..	37411i	95	110	39.3	+26 13	8.7	9.2	F8	2	..	37355i
46	120	38.8	-16 52	9.2	10.2	Ko	3	5,2	23814b	96	93	39.3	- 2 58	10.7	11.5	G5	2	..	24439b
47	98	38.8	-21 37	9.0	9.3	Go	2	2,4	39504b	97	135	39.3	-14 47	9.01	9.51	F8	4	..	23814b
48	266	38.8	-30 59	8.6	9.1	F8	2	..	15112b	98	124	39.3	-22 37	8.2	9.1	Ko	4	5,7-	39504b
49	162	38.8	-54 30	8.5	9.3	F5	7	3,2	45461b	99	225	39.3	-45 47	9.7	11.0	Ko	1	..	42098b
50	42	38.8	-58 1	4.53	4.53	Ao	..	R	28,195	100	75	39.3	-65 36	9.4	9.9	F8	4	0,3	38229b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	47	39.4	+68 39	9.5	9.6	A2	1	..	38905i	51	181	39.8	-50 15	7.7	7.8	A0	7	..	12226b
2	123	39.4	+57 1	8.0	8.0	A0	2	..	3083b	52	59	39.8	-74 17	9.13	10.6	K2	3	..	23772b
3	117	39.4	+19 53	8.6	9.4	G5	3	5,2	38219i	53	138	39.9	+57 29	8.6	8.6	B9	2	..	38877i
4	90	39.4	- 1 15	9.4	10.5	K2	2	..	24439b	54	156	39.9	+47 13	8.8	8.9	A5	2	..	37942i
5	91	39.4	- 1 35	10.1	10.9	G5	3	..	24439b	55	109	39.9	+ 4 37	8.2	8.3	A5	6	..	37379i
6	124	39.4	- 6 11	8.8	9.6	G5	2	..	37359i	56	131	39.9	+ 1 15	8.14	9.14	K0	3	..	37379i
7	130	39.4	- 7 58	10.0	10.8	G5	1	0,1	19958b	57	101	39.9	- 1 48	10.8	11.6	G5	1	..	24439b
8	223	39.4	-27 4	7.73	8.3	G0	5	0,7	20456b	58	100	39.9	- 2 41	9.8	10.3	F8	3	..	24439b
9	213	39.4	-30 40	9.0	9.8	G0	3	..	23766b	59	104	39.9	-20 53	8.8	8.8	F0	4	0,8	39504b
10	261	39.4	-34 26	9.3	9.1	F5	4	..	12198b	60	128	39.9	-21 57	9.0	9.0	F0	3	2,6	39504b
11	181	39.4	-38 59	5.97	7.1	K0	..	0,5 R	56,117	61	274	39.9	-31 56	7.61	8.5	G5	3	..	15112b
12	167	39.4	-48 50	10.5	10.6	G0	1	..	23761b	62	204	39.9	-43 9	8.7	8.6	F2	4	..	42098b
13	61	39.4	-72 6	10.6	11.0	F5	3	..	22155b	63	168	39.9	-53 23	7.8	9.6	K2	5	0,3	45461b
14	77	39.5	+64 33	8.8	9.6	G5	2	..	38060i	64	164	39.9	-54 44	9.60	10.8	K2	1	..	45461b
15	158	39.5	+53 1	8.6	8.7	A2	2	..	38557i	65	165	39.9	-54 52	8.25	9.0	F0	4	..	12226b
16	97	39.5	+ 7 5	8.6	9.6	K0	2	..	15133b	66	157	40.0	+56 14	7.6	7.9	F0	4	..	3083b
17	94	39.5	- 2 47	10.8	10.9	A5	1	..	24439b	67	161	40.0	+42 51	8.0	8.1	A5	3	..	37942i
18	132	39.5	- 7 59	10.4	10.9	F8	1	2,1	19958b	68	117	40.0	+27 25	8.6	9.4	G5	2	..	37355i
19	124	39.5	-13 57	7.63	8.13	F8	4	..	37411i	69	113	40.0	+23 3	7.26	7.21	B8	6	2,6	37355i
20	215	39.5	-30 17	9.2	10.3	G5	1	..	23766b	70	105	40.0	+14 37	8.2	8.5	F0	4	..	37412i
21	51	39.5	-67 32	9.7	10.8	K2	1	..	38229b	71	109	40.0	- 0 18	7.10	7.60	F8	6	3,6	37423i
22	143	39.6	+54 40	5.47	5.47	A0	..	0,9	56,71	72	128	40.0	-12 41	8.0	8.8	G5	4	0,5	37411i
23	159	39.6	+42 55	8.4	8.5	A3	1	..	37942i	73	120	40.0	-17 47	9.0	10.1	K2	1	..	45480b
24	129	39.6	+33 8	8.8	8.8	A	2	..	37311i	74	128	40.0	-19 51	8.68	9.1	F8	6	3,4	24335b
25	125	39.6	- 5 59	9.8	10.4	G0	1	..	19958b	75	282	40.0	-23 25	10.0	9.9	G5	1	..	39504b
26	263	39.6	-34 13	9.0	10.5	Ma	2	R	23766b	76	275	40.0	-32 49	9.6	10.6	G0	2	..	42804b
27	249	39.6	-36 39	9.7	10.5	G5	2	..	42804b	77	144	40.1	+54 26	8.0	8.5	F8	3	..	38557i
28	179	39.6	-49 56	6.93	6.9	A2	9	0,10	12226b	78	144	40.1	+43 20	8.2	9.0	G5	1	..	37942i
29	9	39.6	-86 15	6.80	8.3	K0	8	..	15173b	79	110	40.1	+31 6	8.8	9.9	K2	1	..	37311i
30	66	39.7	+67 19	8.0	9.1	K2	1	..	38905i	80	119	40.1	+29 11	8.6	8.9	F0	2	..	37311i
31	117	39.7	+36 50	8.0	9.0	K0	4	..	37367i	81	102	40.1	- 2 6	10.7	11.7	K0	2	..	24439b
32	103	39.7	+14 21	8.7	9.0	F0	2	..	37412i	82	225	40.1	-28 24	9.2	11.0	K5	1	..	20456b
33	88	39.7	- 4 44	10.0	10.5	F8	4	0,2	24439b	83	252	40.1	-36 31	9.4	9.6	K0	3	..	12198b
34	126	39.7	-15 56	9.2	10.2	K0	2	..	23814b	84	24	40.1	-69 17	9.0	9.4	F5	6	..	38365b
35	126	39.7	-22 9	9.5	9.9	G0	1	..	45480b	85	138	40.2	+54 7	8.0	9.1	K2	2	0,1	38557i
36	230	39.7	-35 38	11.0	10.8	K0	1	..	42804b	86	134	40.2	- 8 43	9.5	10.6	K2	2	..	19958b
37	252	39.7	-37 23	9.3	9.7	G5	2	..	42804b	87	299	40.2	-24 38	9.8	11.5	K0	1	..	39504b
38	226	39.7	-45 32	9.5	9.9	F5	2	..	23761b	88	287	40.2	-25 28	10.3	10.4	F5	1	..	39504b
39	194	39.7	-46 32	9.2	9.9	K2	3	..	23761b	89	226	40.2	-28 19	8.8	8.9	F2	4	..	20456b
40	188	39.7	-51 41	10.5	10.9	G5	2	..	45461b	90	281	40.2	-33 49	9.9	11.2	G5	2	..	42804b
41	49	39.7	-60 33	9.7	10.0	F2	4	..	23815b	91	233	40.2	-38 13	9.0	9.3	F5	4	..	42804b
42	77	39.7	-65 4	10.0	10.5	F8	2	..	38229b	92	194	40.2	-41 48	9.7	10.5	F8	2	..	42098b
43	88	39.8	+65 57	7.6	8.2	G0	3	..	37974i	93	207	40.2	-43 13	6.00	6.14	A5	..	0,10	56,117
44	190	39.8	+45 45	7.8	8.9	K2	2	..	37942i	94	72	40.2	-63 3	6.17	6.6	F5	10	0,9	22068b
45	96	39.8	+21 47	8.6	9.7	K2	1	..	38070i	95	49	40.3	+68 47	6.42	6.76	F2	7	..	37974i
46	97	39.8	+ 2 39	7.7	9.1	Ma	3	..	37379i	96	99	40.3	+60 37	8.6	8.6	A0	3	..	38060i
47	127	39.8	-22 34	5.30	5.44	A5	..	0,7	56,71	97	192	40.3	+45 21	8.67	8.65	B9	3	..	37942i
48	297	39.8	-24 14	10.0	11.0	A3	1	1,3	39504b	98	132	40.3	+29 48	8.8	8.9	A2	4	3,6 R	37310i
49	233	39.8	-35 52	10.7	10.8	G5	1	..	42804b	99	122	40.3	+28 56	8.8	8.9	A2	2	..	37340i
50	253	39.8	-37 13	8.7	9.9	K0	3	..	42804b	100	121	40.3	+28 38	8.8	8.9	A3	6	..	37311i

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	120	40.3	- 5 11	6.44	7.44	Ko	7	0,7	37359i	51	92	40.8	+11 33	8.4	8.9	F8	3	..	37412i
2	119	40.3	- 5 33	9.2	10.3	K2	6	2,4	24439b	52	110	40.8	+ 0 2	7.88	8.66	G5	4	0,3	37423i
3	229	40.3	-27 41	9.5	10.7	Ko	3	..	20456b	53	95	40.8	- 1 21	9.0	10.1	K2	3	..	24439b
4	166	40.3	-54 16	6.32	7.2	F8	8	0,9	11991b	54	97	40.8	- 3 0	9.5	10.0	F8	3	..	24439b
5	44	40.3	-72 55	9.68	10.3	F5	6	..	22155b	55	93	40.8	- 4 11	10.4	10.8	F5	4	3,2-	24439b
6	155	40.4	-10 5	9.0	9.6	Go	3	..	40845b	56	285	40.8	-33 42	10.3	11.7	Go	2	..	42804b
7	128	40.4	-13 26	6.11	6.67	Go	7	..	37411i	57	210	40.8	-43 42	8.8	8.3	F8	3	..	42098b
8	53	40.4	-66 10	6.70	7.3	G5	..	..	56,117	58	210	40.8	-47 6	9.7	9.8	Go	4	..	23761b
9	60	40.4	-74 49	7.72	8.5	F5	5	3,9	14357b	59	191	40.8	-51 11	8.8	10.1	K2	2	..	45461b
10	38	40.5	+72 33	7.7	8.7	Ko	3	..	38068i	60	62	40.8	-74 3	10.5	10.8	Fo	5	..	22155b
11	121	40.5	+36 20	9.7	9.7	A	2	..	37367i	61	69	40.9	+68 0	9.2	9.7	F8	1	..	38905i
12	112	40.5	+25 38	7.86	8.93	K2	4	..	37355i	62	101	40.9	+59 2	6.49	7.27	G5	7	0,4-	38060i
13	104	40.5	+ 7 18	8.0	8.8	G5	4	..	37379i	63	151	40.9	+54 35	9.0	10.1	K2	1	..	38557i
14	99	40.5	+ 6 21	9.4	9.5	A3	3	..	37379i	64	162	40.9	+44 53	7.82	7.90	A3	7	..	37942i
15	93	40.5	- 0 55	9.4	9.9	F8	2	..	23757b	65	102	40.9	+ 5 33	8.6	8.9	F2	6	..	37379i
16	194	40.5	-44 7	9.5	9.9	F8	1	..	42098b	66	113	40.9	+ 4 45	8.8	9.8	Ko	1	..	14899b
17	71	40.5	-64 31	9.5	10.5	Ko	3	..	38229b	67	280	40.9	-31 13	8.2	9.1	Go	6	..	42804b
18	..	40.5	-71 29	..	..	Go	2	..	22155b	68	211	40.9	-43 6	9.5	9.9	G5	2	..	42098b
19	61	40.5	-74 23	8.80	9.5	Fo	6	..	23772b	69	149	40.9	-54 53	9.00	9.6	Go	5	5,3	45461b
20	99a	40.6	+60 59	10.2	11.2	K	..	..	M	70	139	41.0	+51 9	8.9	8.9	Ao	1	..	38557i
21	148	40.6	+54 45	6.52	6.58	A2	..	2,4	56,71	71	146	41.0	+43 45	7.95	8.95	Ko	3	..	37942i
22	158	40.6	+40 16	7.67	8.09	F5	6	..	37367i	72	113	41.0	+30 24	7.36	8.14	G5	6	..	37311i
23	132	40.6	+ 1 57	8.6	9.7	K2	2	..	14899b	73	103	41.0	+23 46	9.0	10.1	K2	1	..	38070i
24	94	40.6	- 1 44	8.72	9.14	F5	3	..	23757b	74	131	41.0	- 6 11	9.5	10.1	Go	4	..	19958b
25	92	40.6	- 4 14	9.3	9.7	F5	7	0,4-	24439b	75	134	41.0	-17 11	8.0	8.3	Fo	5	2,8	12238b
26	135	40.6	-11 38	8.6	9.1	F8	3	..	37411i	76	309	41.0	-24 43	9.50	10.4	Go	2	5,3	39504b
27	106	40.6	-21 27	9.0	9.0	A2	8	1,3-	24335b	77	232	41.0	-28 17	9.8	11.3	Ko	1	..	20456b
28	305	40.6	-24 0	8.8	9.2	G5	5	0,4-	24335b	78	249	41.0	-42 27	7.9	8.8	Ko	4	..	42098b
29	213	40.6	-29 14	9.6	10.1	Ao	3	..	20456b	79	50	41.0	-60 20	9.9	11.1	K5	1	..	23815b
30	229	40.6	-45 34	9.4	8.9	F8	4	..	23761b	80	61	41.0	-62 51	10.2	10.7	F8	2	..	23815b
31	172	40.6	-53 47	8.9	9.6	Go	5	..	45461b	81	42	41.1	+76 0	8.47	8.47	Ao	3	..	38133i
32	73	40.6	-63 45	7.7	8.8	K2	6	..	22068b	82	29	41.1	+74 18	5.39	5.34	B8	..	..	56,71
33	26	40.6	-71 43	8.3	8.7	F5	7	..	38365b	83	143	41.1	+54 4	8.1	8.1	Ao	2	..	38877i
34	143	40.7	+63 6	8.5	9.5	Ko	1	..	38060i	84	186	41.1	+49 44	8.8	8.8	Ao	1	..	38557i
35	160	40.7	+44 18	5.99	5.94	B8	10	..	37942i	85	165	41.1	+46 22	7.35	8.35	Ko	5	..	37942i
36	176	40.7	+39 53	8.7	8.7	Ao	3	..	37380i	86	147	41.1	+43 17	8.4	9.2	G5	1	..	37942i
37	86	40.7	+13 14	9.6	10.4	G5	2	..	37412i	87	108	41.1	+39 5	8.9	10.1	K5	1	..	37380i
38	132	40.7	-16 58	6.32	6.60	Fo	10	..	23814b	88	114	41.1	+30 25	7.61	8.39	G5	4	..	37311i
39	129	40.7	-21 46	9.5	9.9	F8	4	3,1	24335b	89	245	41.1	-25 56	8.2	10.1	G5	3	0,2-	12238b
40	229	40.7	-28 26	8.2	8.9	Ko	4	..	20456b	90	282	41.1	-31 16	7.70	8.1	Go	4	..	15112b
41	281	40.7	-32 35	10.3	11.2	G5	1	..	42804b	91	176	41.1	-48 6	5.79	6.5	Ko	..	R	56,117
42	170	40.7	-40 9	9.0	9.4	Go	3	..	12198b	92	175	41.1	-48 51	8.0	8.3	Go	6	5,4	23761b
43	190	40.7	-49 23	7.5	7.5	A3	6	2,6	23761b	93	117	41.2	- 7 6	8.6	9.0	F5	3	..	14808b
44	62	40.7	-72 48	9.89	10.3	F5	5	..	22155b	94	150	41.2	- 8 52	9.3	10.5	K5	2	5,2	19958b
45	10	40.7	-80 53	9.9	11.0	K2	3	..	38135b	95	132	41.2	-11 59	7.60	8.38	G5	5	5,3	14808b
46	59	40.8	+66 17	9.4	9.4	Ao	1	..	38905i	96	107	41.2	-21 12	8.8	9.4	G5	2	5,5	39504b
47	144	40.8	+62 49	8.6	8.6	Ao	1	..	38060i	97	R	41.2	-22 48	8.8	8.7	F8	4	3,3-	24335b
48	145	40.8	+62 23	8.8	8.8	Ao	1	..	38060i	98	293	41.2	-23 4	5.62	6.9	Ko	..	5,5-	56,71
49	168	40.8	+62 1	8.2	8.3	A2	2	..	38060i	99	215	41.2	-29 23	9.6	9.8	A2	4	..	20456b
50	194	40.8	+47 43	var.	var.	Md	..	R	M	100	275	41.2	-34 8	9.7	10.5	Go	2	..	42804b

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0^h 41^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	157	41.2	-57 52	8.9	10.2	Ko	1	..	23815b	51	126	41.6	-18 44	9.5	10.6	K2	1	..	4548ob
2	45	41.2	-58 29	9.2	10.9	K5	1	..	23815b	52	219	41.6	-29 6	8.8	9.8	G5	4	..	20456b
3	60	41.3	+66 22	9.2	9.7	F8	1	..	38005i	53	288	41.6	-32 10	9.7	12.0	K5	1	..	42804b
4	116	41.3	+59 44	7.65	8.72	K2	3	..	38060i	54	292	41.6	-32 59	10.1	10.6	Go	2	..	42804b
5	188	41.3	+49 45	8.6	8.6	Ao	1	..	38557i	55	293	41.6	-33 41	8.5	9.4	F5	4	3,2	12198b
6	199	41.3	+45 49	7.60	8.38	G5	5	..	37942i	56	36	41.6	-61 17	10.9	10.9	Ao	3	..	23815b
7	101	41.3	+20 57	8.8	9.6	G5	1	..	38053i	57	27	41.6	-68 25	9.5	10.5	Ko	2	..	38365b
8	111	41.3	+14 55	5.58	6.93	Ma	7	..	37412i	58	15	41.6	-78 58	9.8	10.6	G5	2	..	38135b
9	87	41.3	+12 36	7.69	8.69	Ko	4	..	37412i	59	147	41.7	+63 14	8.2	9.0	G5	2	..	38060i
10	158	41.3	-10 0	9.3	9.4	A5	2	2,2	23760b	60	201	41.7	+47 16	8.21	7.97	B	3	R	37942i
11	124	41.3	-17 45	9.0	10.1	K2	1	..	4548ob	61	201	41.7	+45 39	9.5	9.8	F	1	R	37942i
12	129	41.3	-20 39	9.0	10.3	K5	2	0,2	39504b	62	121	41.7	+28 11	8.9	9.9	Ko	1	..	37311i
13	132	41.3	-21 55	9.5	10.5	Ko	2	..	24335b	63	121	41.7	+22 43	8.2	9.0	G5	2	..	38070i
14	247	41.3	-26 5	8.2	9.2	A5	4	..	39504b	64	106	41.7	+7 46	9.4	9.9	F8	2	..	10419b
15	284	41.3	-31 14	9.3	10.6	Ko	1	..	23766b	65	137	41.7	+1 48	8.6	9.6	Ko	2	..	14899b
16	285	41.3	-32 33	8.8	10.3	K2	2	..	23766b	66	121	41.7	-6 53	10.2	10.6	F5	1	..	19958b
17	288	41.3	-33 50	10.5	10.9	F8	3	..	42804b	67	120	41.7	-7 23	9.8	10.6	G5	2	..	40845b
18	242	41.3	-38 25	8.7	10.1	G5	3	..	12198b	68	133	41.7	-14 18	8.6	9.6	Ko	4	0,3	23814b
19	201	41.3	-46 4	9.9	10.6	Ko	1	..	42098b	69	130	41.7	-19 58	9.0	9.9	Ko	3	..	24335b
20	45	41.3	-73 47	10.0	11.0	Ko	3	..	22155b	70	131	41.7	-20 30	9.0	9.6	F2	6	0,4-	24335b
21	121	41.4	+19 39	8.6	8.7	A2	4	..	19788i	71	228	41.7	-30 44	6.83	7.5	G5	4	..	15112b
22	98	41.4	+17 41	9.6	10.0	F5	1	..	38219i	72	251	41.7	-42 16	9.7	10.6	Go	1	..	42008b
23	107	41.4	+13 27	8.8	8.8	B8	5	..	37412i	73	81	41.7	-65 43	10.1	10.2	A2	4	..	38365b
24	104	41.4	-2 3	9.3	9.9	Go	3	..	23757b	74	104	41.8	+58 46	9.2	9.2	A	2	..	38108i
25	118	41.4	-7 14	8.9	9.3	F5	5	0,3	14808b	75	141	41.8	+50 33	8.2	9.3	K2	1	R	38557i
26	314	41.4	-24 3	10.0	10.2	F5	2	5,4	39504b	76	192	41.8	+49 52	8.37	8.35	B9	3	1,2	37942i
27	286	41.4	-32 13	9.4	10.9	G5	2	..	42804b	77	236	41.8	+49 7	7.8	7.8	B9	3	1,2	37942i
28	198	41.4	-44 39	8.5	8.9	F8	5	..	23761b	78	166	41.8	+44 45	9.2	9.2	Ao	2	..	37942i
29	25	41.5	+77 56	7.22	8.22	Ko	3	..	37227i	79	112	41.8	+38 29	8.0	9.0	Ko	4	..	37367i
30	147	41.5	+51 58	8.6	8.6	Ao	2	..	38557i	80	133	41.8	+38 5	9.4	9.4	A	2	..	37367i
31	191	41.5	+50 7	8.62	8.62	Ao	2	..	38557i	81	124	41.8	+36 44	9.0	9.1	A2	1	..	37380i
32	103	41.5	+21 5	7.05	7.55	F8	6	..	19788i	82	96	41.8	+11 25	5.68	6.46	G5	7	0,8	37432i
33	97	41.5	-1 23	9.0	9.3	Fo	2	..	23757b	83	113	41.8	-0 10	8.33	8.75	F5	3	0,2	37423i
34	105	41.5	-2 40	9.5	10.0	F8	5	3,4	24439b	84	116	41.8	-18 51	9.5	10.1	Go	2	..	4548ob
35	159	41.5	-10 7	8.6	9.6	Ko	4	0,4	23760b	85	280	41.8	-33 58	10.7	10.5	A2	2	..	42804b
36	89	41.5	-52 43	10.1	10.6	F8	2	..	45461b	86	261	41.8	-36 35	8.7	8.4	Go	5	..	12198b
37	51	41.5	-60 33	9.5	10.6	K2	2	..	23815b	87	74	41.8	-63 50	9.7	10.2	F8	2	..	22068b
38	21	41.5	-78 38	6.65	7.9	G5	6	0,10	14357b	88	106	41.9	+60 47	8.9	10.1	K5	1	..	38108i
39	20	41.6	+80 48	9.4	9.5	A2	1	..	38964i	89	..	41.9	+32 8	var.	var.	Md	..	R	M
40	37	41.6	+72 8	6.04	7.04	Ko	7	E	37974i	90	101	41.9	+19 1	6.06	6.20	A5	8	2,9	19788i
41	92	41.6	+66 8	8.9	9.5	G	1	R	38068i	91	106	41.9	-1 48	8.6	9.1	F8	5	..	37423i
42	105	41.6	+60 57	8.5	8.8	F	1	..	38060i	92	130	41.9	-16 32	9.2	10.0	G5	3	..	23814b
43	164	41.6	+52 36	8.8	8.8	Ao	1	..	38557i	93	294	41.9	-32 48	9.1	10.3	K2	2	..	23766b
44	130	41.6	+41 25	8.7	9.0	F	4	..	37367i	94	253	41.9	-42 43	9.3	9.7	A5	4	E	39679b
45	117	41.6	+4 48	8.6	9.0	F5	3	..	37379i	95	155	41.9	-55 42	9.2	11.1	Ko	1	..	45461b
46	118	41.6	+4 17	8.7	9.5	G5	1	..	14899b	96	47	41.9	-58 29	7.16	8.2	Ko	5	0,7-	42095b
47	118	41.6	+1 1	8.6	9.6	Ko	3	0,2	14899b	97	46	41.9	-58 49	9.2	11.1	K2	2	..	23815b
48	98	41.6	-3 4	9.5	10.1	Go	5	5,3	24439b	98	..	41.9	-70 56	..	..	F8	2	..	22155b
49	124	41.6	-4 57	7.70	8.48	G5	6	0,4	14808b	99	18	42.0	+81 25	var.	var.	G5	3	0,2R	37227i
50	119	41.6	-7 16	9.8	10.4	Go	2	..	40845b	100	54	42.0	+69 0	8.9	9.9	Ko	1	..	38905i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	
1	133	<i>m.</i> 42.0	<i>o</i> +41	<i>'</i> 42	8.6	8.7	A3	3	E	37942i	51	<i>m.</i> 115	<i>o</i> 42.4	<i>'</i> +24 59	8.6	8.6	Ao	4	..	37355i
2	106	42.0	+23	43	4.30	5.30	Ko	10	o,R	37355i	52	89	42.4	+12 20	8.5	9.0	F8	2	..	37412i
3	107	42.0	+ 8	6	9.1	9.7	Go	3	..	10419b	53	153	42.4	- 8 58	9.2	10.3	K2	3	2,2	19958b
4	139	42.0	-11	42	8.2	9.0	G5	3	5,2	37411i	54	140	42.4	-10 56	9.8	10.3	F8	2	..	40845b
5	118	42.0	-19	27	9.0	9.9	Ko	3	..	24335b	55	252	42.4	-25 56	8.8	10.1	G5	3	o,2-	20456b
6	300	42.0	-23	19	9.2	9.9	G5	1	o,3	39504b	56	258	42.4	-42 43	9.5	10.9	Ko	1	..	42098b
7	321	42.0	-24	46	7.70	7.8	A5	7	2,8	39504b	57	27	42.4	-71 47	9.3	10.1	G5	4	..	22155b
8	253	42.0	-34	53	9.38	9.6	Go	4	..	12198b	58	64	42.4	-74 2	9.8	10.9	K2	3	..	22155b
9	174	42.0	-40	50	9.6	10.9	K2	1	..	42098b	59	21	42.5	+81 4	8.82	8.88	A2	1	..	38964i
10	75	42.0	-63	14	7.4	7.7	Fo	5	..	22068b	60	94	42.5	+64 11	9.2	9.3	A2	2	..	38108i
11	63	42.0	-74	22	9.7	10.3	Go	7	..	22155b	61	107	42.5	+61 3	8.1	8.9	G5	2	..	38060i
12	61	42.0	-75	16	9.8	10.1	F2	4	..	22155b	62	108	42.5	+60 25	8.7	9.5	G5	1	..	38060i
13	119	42.1	+59	47	8.6	8.9	F2	2	..	38108i	63	145	42.5	+35 57	7.72	8.22	F8	6	..	37367i
14	202	42.1	+45	42	8.4	9.4	Ko	1	..	37942i	64	146	42.5	+35 40	8.02	8.16	A5	6	..	37367i
15	99	42.1	- 1	42	8.82	9.60	G5	2	..	32757b	65	99	42.5	- 2 52	7.34	8.52	K5	5	3,4	14808b
16	161	42.1	-10	30	8.9	9.7	G5	3	7,3	19958b	66	232	42.5	-30 2	9.3	10.9	G5	1	..	23766b
17	132	42.1	-15	55	9.5	10.1	Go	2	..	23814b	67	25	42.5	-69 24	9.1	9.4	Fo	4	..	38365b
18	189	42.1	-39	30	8.8	10.0	Ko	2	..	12198b	68	105	42.6	+20 23	6.60	7.10	F8	8	..	19788i
19	192	42.1	-51	21	9.7	10.1	F8	3	..	45461b	69	105	42.6	+ 2 21	8.6	9.1	F8	3	..	14899b
20	174	42.1	-54	39	7.85	8.0	F5	5	3,5-	12226b	70	128	42.6	- 5 3	10.0	10.1	A2	4	..	19958b
21	48	42.1	-58	36	7.3	9.1	Ma	4	o,4R	42095b	71	324	42.6	-24 5	9.2	10.2	Ko	2	5,4	39504b
22	63	42.1	-72	29	9.8	10.8	Ko	4	..	22155b	72	254	42.6	-25 56	8.6	9.8	G5	4	5,4	39504b
23	82	42.2	+64	34	7.06	7.84	G5	4	..	37974i	73	292	42.6	-31 40	8.6	9.8	Ko	5	..	42804b
24	126	42.2	+37	5	8.8	8.9	A5	1	..	37380i	74	190	42.6	-39 33	10.1	9.8	Go	2	..	12198b
25	89	42.2	+11	6	7.7	8.5	G5	3	..	37412i	75	184	42.6	-48 33	9.4	10.6	G5	2	..	23761b
26	104	42.2	+ 6	12	6.20	6.98	G5	5	..	37432i	76	76	42.6	-63 16	8.3	9.3	Ko	3	..	22068b
27	122	42.2	- 7	7	9.8	10.4	Go	2	..	19958b	77	64	42.6	-72 20	9.2	10.3	K2	5	..	22155b
28	134	42.2	-14	39	9.16	9.94	G5	3	..	23814b	78	43	42.7	+69 17	8.7	9.5	G5	1	..	38905i
29	111	42.2	-21	25	9.3	9.9	Ko	1	o,4	39504b	79	95	42.7	+64 9	9.2	9.5	F2	2	..	38108i
30	221	42.2	-29	41	9.0	9.8	F5	4	..	23766b	80	158	42.7	+54 16	8.6	8.6	Ao	2	2,1	38557i
31	255	42.2	-35	7	9.3	10.2	Ko	2	..	12198b	81	117	42.7	+35 12	8.72	9.79	K2	1	..	37380i
32	63	42.2	-62	38	9.1	9.9	G5	3	..	22068b	82	74	42.7	+16 25	9.4	10.0	Go	2	..	37412i
33	77	42.2	-76	28	9.0	9.4	F5	4	3,3	38135b	83	100	42.7	- 3 45	9.8	10.2	F5	3	o,3	23757b
34	11	42.2	-79	59	10.0	10.6	G	2	..	38135b	84	124	42.7	- 7 42	10.0	10.8	G5	1	..	19958b
35	149	42.3	+51	44	8.6	8.7	A2	3	..	38557i	85	127	42.7	-18 37	5.88	6.88	Ko	10	..	12238b
36	143	42.3	+50	54	6.76	6.76	Ao	..	2,4	56,71	86	243	42.7	-27 31	9.2	9.2	Fo	5	o,3	20456b
37	129	42.3	+28	15	9.2	9.6	F5	1	..	37311i	87	272	42.7	-36 54	9.0	10.5	K5	2	..	42804b
38	103	42.3	+18	22	7.52	7.58	A2	6	o,4	37412i	88	53	42.7	-58 54	10.4	10.9	F8	2	..	23815b
39	..	42.3	+ 9	26	..	..	A	1	..	10419b	89	52	42.7	-60 6	8.8	9.7	F2	5	..	23815b
40	133	42.3	-20	30	8.6	9.6	Ko	6	o,3-	24335b	90	46	42.7	-73 9	9.4	10.5	K2	3	..	23773b
41	303	42.3	-25	2	10.0	11.3	G5	1	..	39504b	91	241	42.8	+49 10	7.80	7.86	A2	2	..	2929b
42	257	42.3	-35	37	9.7	10.2	Go	2	..	12198b	92	118	42.8	+25 1	9.2	10.0	G5	2	E	38904i
43	256	42.3	-42	24	9.4	10.8	Ko	1	..	42098b	93	139	42.8	- 6 32	8.2	9.2	Ko	4	5,3	14808b
44	182	42.3	-48	32	9.4	11.0	Mb	2	..	23761b	94	142	42.8	-11 27	8.2	9.3	K2	2	..	14808b
45	90	42.3	-52	33	8.8	10.1	Ko	5	..	45461b	95	302	42.8	-31 54	7.12	8.8	Ko	3	..	15112b
46	147	42.3	-56	10	8.4	9.6	F2	5	o,3	45461b	96	300	42.8	-33 1	9.0	9.7	F5	1	..	15112b
47	12	42.3	-80	13	9.1	10.1	Ko	4	o,4	38135b	97	273	42.8	-37 29	7.67	8.4	Go	6	..	12198b
48	168	42.4	+52	24	8.7	8.7	Ao	1	..	38557i	98	64	42.8	-62 14	10.3	11.1	G5	1	..	23815b
49	126	42.4	+26	34	7.8	8.6	G5	4	..	37355i	99	65	42.8	-72 46	9.97	10.3	Ao	4	..	22155b
50	118	42.4	+25	44	7.06	8.06	Ko	6	..	37355i	100	32	42.8	-77 6	10.0	10.1	A2	4	1,4	38135b

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0^h 42^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.		
1	122	<i>m.</i> 42.9	<i>o</i> +60	<i>i</i> 14	8.26	9.26	Ko	1	..	3806oi	51	47	<i>m.</i> 43.4	<i>o</i> -73	<i>i</i> 22	9.9	10.3	F5	5	..	22155b
2	110	42.9	+59	4	9.2	9.6	F5	2	..	38108i	52	53	43.5	+70	23	7.39	7.37	B9	4	..	37974i
3	166	42.9	+55	16	7.86	7.92	A2	4	..	38877i	53	138	43.5	+32	23	7.70	7.84	A5	4	..	37311i
4	174	42.9	+43	8	8.8	8.9	A3	2	..	37942i	54	129	43.5	+19	41	8.0	9.0	Ko	3	0,2	3807oi
5	106	42.9	+18	56	8.6	9.7	K2	2	..	38219i	55	105	43.5	+18	8	7.62	8.18	Go	6	0,4	37412i
6	101	42.9	- 0	49	8.4	9.2	G5	3	..	23757b	56	107	43.5	+ 7	2	4.55	5.73	K5	..	5,7R	2258c
7	164	42.9	- 9	54	8.11	8.53	F5	6	..	14808b	57	110	43.5	- 2	18	9.2	9.8	Go	3	..	23757b
8	54	42.9	-59	21	9.2	11.2	K5	1	..	23815b	58	97	43.5	- 4	25	9.5	9.9	F5	4	..	19958b
9	66	42.9	-72	51	10.9	11.3	F5	5	..	22155b	59	124	43.5	-19	13	9.3	9.9	Go	2	..	4548ob
10	16	42.9	-79	22	9.9	10.0	A2	4	..	38135b	60	307	43.5	-32	10	9.4	9.8	Go	4	..	23766b
11	44	43.0	+69	47	9.4	9.4	Ao	2	..	38905i	61	265	43.5	-35	49	10.3	10.2	Ko	2	..	42804b
12	71	43.0	+67	55	8.0	8.0	B8	2	..	37974i	62	206	43.5	-44	19	9.2	9.3	Go	2	..	42098b
13	83	43.0	+65	2	8.9	9.3	F5	1	R	38905i	63	248	43.5	-45	26	8.2	9.6	Ko	4	..	23761b
14	150	43.0	+57	17	3.64	4.14	F8	..	R	1450c	64	28	43.5	-68	16	8.3	8.4	A2	8	..	38365b
15	153	43.0	+51	33	6.84	7.34	F8	..	..	..	65	79	43.5	-76	36	9.4	9.5	A2	4	0,3-	23772b
16	153	43.0	+51	33	6.84	7.34	A3	4	R	38557i	66	27	43.6	+77	25	6.75	6.89	A9	6	..	37227i
17	169	43.0	+44	26	8.1	9.2	K2	2	..	37942i	67	46	43.6	+70	14	7.01	6.99	B9	8	..	37974i
18	110	43.0	+23	18	8.9	9.0	A5	3	..	38904i	68	156	43.6	+43	38	7.7	8.5	G5	2	..	37942i
19	110	43.0	+ 8	41	8.02	8.08	A2	4	..	37379i	69	165	43.6	+40	36	7.97	8.97	Ko	4	..	37367i
20	102	43.0	- 3	8	10.2	11.2	Ko	2	..	24439b	70	106	43.6	+17	47	7.62	7.60	B9	6	..	37412i
21	95	43.0	- 4	15	8.2	9.2	Ko	4	..	14808b	71	146	43.6	-15	17	8.2	9.2	Ko	4	..	23814b
22	134	43.0	-22	16	5.45	5.43	B9	..	0,8-	56,71	72	250	43.6	-26	55	8.0	8.6	Ko	6	0,7	39504b
23	240	43.0	-29	54	7.62	7.8	A5	4	..	15112b	73	84	43.7	+64	33	8.0	8.1	A5	2	..	37974i
24	193	43.0	-39	42	9.28	10.6	G5	2	..	12198b	74	125	43.7	+60	14	8.11	8.53	F5	3	..	3806oi
25	97	43.1	+65	31	9.0	9.8	G5	2	7,2R	38905i	75	208	43.7	+45	16	8.92	8.92	Ao	2	..	37942i
26	90	43.1	+ 9	43	8.82	10.00	K5	1	..	10419b	76	76	43.7	+16	24	5.23	5.65	F5	10	0,10	19788i
27	105	43.1	+ 6	45	6.07	7.07	Ko	..	5,4	2258c	77	95	43.7	+12	20	8.4	9.6	K5	1	..	37412i
28	123	43.1	+ 4	46	5.82	6.60	G5	7	5,7R	37432i	78	130	43.7	-18	5	7.87	8.87	Ko	5	..	12238b
29	142	43.1	+ 2	11	8.6	9.4	G5	3	..	14899b	79	126	43.7	-19	5	8.6	8.8	F5	6	0,5-	24335b
30	96	43.1	- 3	51	10.0	10.1	A3	3	2,2	19958b	80	178	43.7	-39	56	8.78	10.1	K2	2	..	12198b
31	306	43.1	-25	37	8.3	9.8	G5	3	0,3-	20456b	81	214	43.7	-46	16	10.3	10.5	Ao	1	..	42798b
32	305	43.1	-32	53	8.7	10.1	K2	3	..	23766b	82	..	43.7	-73	47	..	..	G5	3	..	22155b
33	289	43.1	-34	1	9.0	9.9	K5	3	3,3	23766b	83	33	43.8	+75	3	9.0	9.0	Ao	1	..	38133i
34	53	43.1	-60	0	10.0	10.4	F5	3	..	23815b	84	153	43.8	+62	16	8.6	8.7	A5	3	..	3806oi
35	45	43.2	+69	54	7.99	8.99	Ko	1	..	37974i	85	167	43.8	+40	33	7.42	8.20	G5	6	..	37367i
36	147	43.2	+50	25	5.03	5.01	B9	..	1,9R	56,71	86	127	43.8	+28	11	7.30	8.30	Ko	7	5,4	38904i
37	194	43.2	-39	50	9.23	9.8	Go	2	..	12198b	87	126	43.8	+27	54	9.2	9.6	F5	2	..	37311i
38	76	43.2	-64	26	10.4	10.8	F5	3	..	38229b	88	109	43.8	+21	1	8.8	9.8	Ko	2	..	3807oi
39	102	43.3	- 1	2	8.0	9.0	Ko	3	..	37423i	89	311	43.8	-23	37	9.3	9.3	A5	3	..	39504b
40	145	43.3	-14	51	9.20	10.27	K2	2	..	23814b	90	339	43.8	-24	41	8.6	9.2	G5	5	0,5	39504b
41	247	43.3	-26	55	9.5	11.3	Ko	2	0,1	20456b	91	225	43.8	-29	3	6.66	7.2	Fo	5	0,6	37020b
42	295	43.3	-31	19	8.8	9.8	F8	3	..	23766b	92	296	43.8	-31	48	9.2	11.7	Ko	1	..	42804b
43	100	43.3	-52	23	9.8	11.0	K5	1	..	45461b	93	161	43.8	-55	52	9.9	11.1	K5	1	..	45461b
44	62	43.3	-75	20	10.0	11.0	Ko	3	..	22155b	94	97	43.9	+64	5	8.4	8.9	F8	2	R	38905i
45	33	43.3	-77	28	9.4	9.8	F5	5	3,5	38135b	95	209	43.9	+45	58	7.30	8.30	Ko	4	..	37942i
46	42	43.4	+73	2	8.5	8.5	Ao	2	..	38068i	96	181	43.9	+42	27	8.9	8.9	A	2	..	37942i
47	131	43.4	+56	32	7.20	8.55	Ma	2	0,1	38877i	97	123	43.9	+25	49	9.2	9.6	F5	4	..	37355i
48	98	43.4	+11	37	9.0	9.1	A5	2	..	37412i	98	117	43.9	+14	16	7.09	8.27	K5	5	..	37412i
49	115	43.4	- 0	9	8.28	8.84	Go	3	..	37423i	99	104	43.9	- 3	17	10.2	11.0	G5	1	..	23757b
50	..	43.4	-72	44	Ko	1	..	22155b	100	251	43.9	-45	19	9.1	10.5	Ko	1	..	42098b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	176	44.0	+47 13	6.97	7.03	A2	7	..	37942i	51	226	44.4	-43 7	7.65	7.1	B8	8	1,8	12275b
2	143	44.0	+37 40	7.9	8.4	F8	4	..	37367i	52	169	44.4	-57 45	8.6	9.3	Ao	4	5,4	36882b
3	108	44.0	+21 35	9.4	10.4	Ko	1	..	38219i	53	249	44.5	+48 51	8.20	8.62	F5	3	..	37942i
4	159	44.0	-9 36	10.4	11.2	G5	2	..	19958b	54	144	44.5	+38 12	8.7	9.7	Ko	4	..	37380i
5	141	44.0	-16 56	9.5	10.3	G5	2	..	23814b	55	121	44.5	+34 47	8.7	8.7	Ao	5	..	37380i
6	138	44.0	-20 15	9.2	10.2	Ko	2	5,2	39504b	56	122	44.5	+34 26	7.9	8.3	F5	6	3,8	37311i
7	309	44.0	-25 7	8.3	10.4	Ko	2	0,2	39504b	57	131	44.5	+27 10	6.29	5.82	Fo	8	0,8R	37355i
8	272	44.0	-35 28	9.0	10.2	Ko	3	..	42804b	58	131	44.5	+27 10	6.29	5.82	Fo	8	0,8R	37355i
9	180	44.0	-53 53	8.4	9.3	Ko	3	0,2	36882b	59	132	44.5	+26 22	9.4	10.2	G5	2	..	38904i
10	14	44.1	+85 10	8.33	9.33	Ko	3	..	37281i	60	109	44.5	+5 51	8.0	9.1	K2	5	..	10419b
11	156	44.1	+58 13	8.6	8.6	Ao	2	..	38877i	61	117	44.5	+0 2	9.0	9.8	G5	1	..	23757b
12	159	44.1	+43 32	8.00	8.56	Go	4	..	37942i	62	105	44.5	-3 35	9.5	10.3	G5	1	..	23757b
13	142	44.1	-16 56	10.0	10.6	Go	2	..	23814b	63	253	44.5	-28 10	9.0	8.3	F2	7	0,6	20456b
14	119	44.1	-21 41	7.05	7.9	G5	7	0,7	12238b	64	66	44.5	-62 17	9.9	10.0	A3	3	..	22068b
15	228	44.1	-47 40	8.9	10.2	Ko	2	..	23761b	65	57	44.5	-66 7	8.8	9.6	G5	6	..	38365b
16	55	44.1	-59 36	10.5	10.9	F5	2	..	23815b	66	29	44.5	-68 5	8.1	8.5	F5	9	..	38365b
17	155	44.2	+62 37	8.8	8.8	B9	4	..	38060i	67	65	44.5	-74 34	10.6	11.2	Go	2	..	22155b
18	113	44.2	+23 46	9.3	10.3	Ko	2	..	38904i	68	119	44.6	+59 7	8.0	7.8	B2	4	..	38108i
19	129	44.2	+22 35	8.3	9.3	Ko	4	5,2	38904i	69	145	44.6	+38 10	9.3	10.3	Ko	2	..	37380i
20	111	44.2	-2 9	8.8	8.9	A3	3	..	37423i	70	149	44.6	-11 30	8.2	9.2	Ko	4	..	14808b
21	141	44.2	-6 43	9.0	10.0	Ko	2	..	19958b	71	143	44.6	-12 45	9.5	10.3	G5	1	..	14158b
22	127	44.2	-19 32	9.5	9.9	Go	1	..	45480b	72	347	44.6	-23 55	6.22	6.2	A2	7	1,10	37020b
23	274	44.2	-36 49	7.60	8.1	G5	5	..	12198b	73	190	44.6	-47 58	9.3	10.1	G5	3	..	23761b
24	54	44.2	-60 15	9.1	10.3	Ko	3	..	23815b	74	37	44.6	-60 55	7.6	8.2	A3	5	..	11991b
25	48	44.2	-73 25	10.9	10.9	A	2	R	22155b	75	99	44.7	+63 42	5.45	5.79	F2	7	0,9R	37974i
26	43	44.3	+73 1	7.98	9.16	K5	1	..	38133i	76	99	44.7	+63 42	5.45	5.79	A2	7	0,9R	37974i
27	171	44.3	+40 32	4.42	4.25	B3	..	R	56,71	77	215	44.7	+50 6	8.02	8.44	F5	2	3,2	37942i
28	139	44.3	+29 53	9.2	10.0	G5	1	..	37340i	78	176	44.7	+44 27	6.12	6.12	Ao	10	..	37942i
29	109	44.3	+2 20	8.8	8.9	A2	3	..	14899b	79	123a	44.7	+35 6	var.	var.	Md	..	R	M
30	145	44.3	-14 6	5.84	6.91	K2	..	2,10	56,117	80	127	44.7	+1 8	9.49	9.99	F8	2	..	14899b
31	138	44.3	-21 56	8.4	8.8	F5	4	..	39504b	81	145	44.7	-8 23	8.0	9.0	Ko	3	..	14808b
32	345	44.3	-24 41	6.06	7.1	G5	..	0,6-	56,117	82	137	44.7	-15 56	8.8	9.1	Fo	4	..	23814b
33	300	44.3	-34 23	8.3	9.0	Ko	5	..	12198b	83	123	44.7	-21 40	8.8	9.6	K2	1	..	39504b
34	273	44.3	-34 59	9.88	10.5	G5	2	..	42804b	84	229	44.7	-42 54	8.9	9.7	G5	2	..	42098b
35	258	44.3	-38 51	9.0	9.7	F8	4	..	12198b	85	183	44.7	-54 19	7.8	7.9	F8	6	0,8-	11991b
36	208	44.3	-41 2	9.0	10.4	G5	2	E	12198b	86	67	44.7	-61 59	10.0	10.6	Go	2	..	23815b
37	229	44.3	-47 15	6.24	7.4	Ko	..	..	56,117	87	173	44.8	+56 5	8.6	8.6	Ao	2	..	38877i
38	210	44.3	-49 8	8.2	8.6	A5	5	..	12226b	88	120	44.8	+38 19	9.0	10.2	K5	1	..	37380i
39	57	44.3	-59 27	9.0	9.7	F2	4	..	23815b	89	152	44.8	+35 15	8.67	9.09	F5	4	..	37367i
40	85	44.3	-65 39	9.8	10.2	F5	2	..	38365b	90	104	44.8	-0 46	6.80	7.80	Ko	6	0,5	37423i
41	29	44.4	+78 4	8.2	9.0	G5	1	..	37227i	91	146	44.8	-8 31	9.5	10.5	Ko	2	R	19958b
42	171	44.4	+55 59	8.5	9.3	G5	1	..	38877i	92	322	44.8	-32 24	9.7	10.1	F8	3	..	23766b
43	151	44.4	+35 34	8.8	9.2	F5	4	..	37367i	93	213	44.8	-49 16	9.9	10.1	A2	2	..	23761b
44	141	44.4	+29 54	7.61	8.39	G5	4	..	37340i	94	49	44.8	-57 59	9.1	10.0	F5	4	0,3	23815b
45	114	44.4	+7 25	8.5	8.9	F5	3	..	37432i	95	38	44.8	-61 36	9.1	10.0	A5	3	..	22068b
46	100	44.4	-3 57	9.8	10.8	Ko	2	2,2	23757b	96	19	44.9	+79 17	7.7	7.7	Ao	4	R	37227i
47	315	44.4	-23 46	7.22	7.9	G5	7	5,6	39504b	97	158	44.9	+58 12	7.9	7.9	Ao	3	R	38877i
48	346	44.4	-23 52	8.4	9.2	G5	4	..	39504b	98	132	44.9	+27 50	7.8	8.8	Ko	4	0,4	37355i
49	264	44.4	-26 0	8.8	11.0	Ko	1	..	39504b	99	132	44.9	+23 8	10.1	10.9	G5	2	..	38904i
50	197	44.4	-39 41	9.3	9.8	Go	3	..	12198b	100	111	44.9	+7 9	8.4	9.0	Go	2	..	37432i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	102	44.9	— 4 33	9.8	10.3	F8	3	..	19958b	51	39	45.4	— 61 42	10.1	11.1	Ko	1	..	23815b
2	147	44.9	— 8 38	10.0	11.2	K5	1	..	19958b	52	66	45.4	— 74 7	10.2	10.8	G	3	R	22155b
3	139	44.9	— 16 43	9.0	9.6	Go	3	..	23814b	53	20	45.5	+ 83 10	5.55	5.61	A2	..	..	56,72
4	56	44.9	— 60 7	8.9	10.0	G5	2	..	11991b	54	117	45.5	+ 60 35	9.2	9.2	A	1	..	38108i
5	23	44.9	— 78 49	9.2	9.8	Go	4	5,3	38135b	55	222	45.5	+ 47 40	7.90	8.97	K2	2	..	37942i
6	172	45.0	+ 40 16	7.97	7.92	B8	4	..	37367i	56	148	45.5	— 5 51	8.2	8.5	Fo	6	..	14808b
7	128	45.0	+ 0 40	9.0	10.2	K5	2	3,2	14899b	57	278	45.5	— 35 2	9.9	10.2	Ko	2	..	42804b
8	139	45.0	— 22 39	8.0	8.7	K5	7	5,4	39504b	58	223	45.5	— 46 29	8.7	9.9	G5	3	..	23761b
9	351	45.0	— 24 40	8.2	8.9	Ko	4	0,4	39504b	59	207	45.5	— 51 8	10.1	10.9	K2	1	..	45461b
10	101	45.1	+ 63 47	8.4	8.5	A2	4	2,2	38905i	60	51	45.5	— 57 56	7.3	9.1	Mb	5	0,5-	42095b
11	159	45.1	+ 62 35	8.0	9.1	K2	2	..	38060i	61	..	45.5	— 71 51	..	..	F8	2	..	22155b
12	96	45.1	+ 9 19	9.6	10.7	K2	1	..	10419b	62	67	45.5	— 73 55	11.2	11.0	B	3	R	22155b
13	153	45.1	— 11 11	5.24	5.66	F5	7	R	10132b	63	10	45.5	— 86 26	8.24	8.7	Go	5	..	15173b
14	186	45.1	— 54 43	8.15	8.7	F8	6	0,3-	12226b	64	129	45.6	+ 34 55	9.4	9.9	F8	1	..	37380i
15	64	45.1	— 75 28	4.96	6.7	K5	..	R	28,195	65	123	45.6	— 0 37	8.6	9.2	Go	2	..	37423i
16	15	45.2	+ 84 55	8.2	8.3	A5	4	..	37281i	66	110	45.6	— 51 56	9.9	10.4	F8	2	..	45461b
17	178	45.2	+ 61 16	6.36	7.43	K2	2	..	3083b	67	68	45.6	— 62 51	10.6	10.7	A2	2	..	23815b
18	161	45.2	+ 50 58	6.46	6.60	A5	..	0,4	56,71	68	178	45.7	+ 55 58	8.6	9.2	Go	2	..	38877i
19	127	45.2	+ 34 54	8.6	8.7	A2	4	..	37367i	69	151	45.7	+ 37 30	7.30	8.30	Ko	4	..	37367i
20	116	45.2	+ 23 17	9.9	10.7	G5	2	..	38904i	70	149	45.7	+ 32 59	8.2	8.6	F5	4	0,4-	37311i
21	114	45.2	+ 2 50	8.6	10.0	Ma	2	..	14899b	71	133	45.7	+ 23 12	9.2	9.2	Ao	6	..	38904i
22	145	45.2	— 6 44	9.3	9.9	Go	3	..	19958b	72	119	45.7	+ 7 30	8.5	9.0	F8	2	..	37432i
23	142	45.2	— 16 25	8.2	9.2	Ko	6	..	23814b	73	112	45.7	— 2 27	8.7	9.2	F8	4	..	23757b
24	214	45.2	— 44 32	9.7	9.7	G5	1	..	42098b	74	136	45.7	— 4 50	10.0	10.6	Go	1	..	19958b
25	231	45.2	— 47 25	9.5	10.5	G5	1	..	42798b	75	133	45.7	— 19 3	8.9	9.6	Go	3	5,5-	39504b
26	26	45.2	— 69 40	8.3	9.4	K2	6	..	38365b	76	260	45.7	— 27 58	9.2	9.8	A3	3	E	39504b
27	56	45.3	+ 68 26	8.2	8.3	A2	3	..	37974i	77	233	45.7	— 43 40	9.4	9.9	Ko	3	..	39679b
28	66	45.3	+ 67 2	9.0	10.2	K5	1	..	38905i	78	80	45.7	— 64 18	10.3	11.1	G5	3	..	38229b
29	101	45.3	+ 65 25	8.0	9.0	Ko	2	..	38905i	79	11	45.7	— 86 50	9.1	9.1	Ao	4	..	15173b
30	134	45.3	+ 29 5	9.2	9.7	F8	2	..	37340i	80	57	45.8	+ 71 6	8.00	8.78	G5	2	..	38068i
31	123	45.3	+ 25 2	7.41	8.19	G5	6	..	37355i	81	164	45.8	+ 51 2	6.24	6.24	Ao	..	I,5	56,72
32	117	45.3	+ 23 41	8.2	9.2	Ko	4	..	38904i	82	140	45.8	+ 36 29	8.1	8.2	A2	6	..	37380i
33	111	45.3	+ 20 38	7.80	8.58	G5	4	0,4	38070i	83	154	45.8	+ 35 19	9.22	9.78	Go	1	..	37380i
34	121	45.3	+ 14 57	8.4	8.4	Ao	3	..	37412i	84	124	45.8	+ 25 55	9.4	9.9	F8	2	..	38904i
35	97	45.3	+ 9 51	8.6	8.7	A2	5	..	10419b	85	134	45.8	+ 22 19	8.2	8.2	B9	7	..	38070i
36	114	45.3	+ 6 34	8.6	9.4	G5	1	..	37432i	86	117	45.8	+ 8 41	8.8	9.9	K2	2	..	10419b
37	134	45.3	— 5 40	8.8	9.3	F8	3	..	14808b	87	120	45.8	+ 7 47	9.4	10.6	K5	1	..	10419b
38	164	45.3	— 55 9	9.4	10.5	K2	2	..	45461b	88	128	45.8	+ 5 6	9.40	9.96	Go	1	..	14899b
39	86	45.3	— 65 33	9.0	9.3	F2	7	..	38365b	89	109	45.8	— 2 53	9.8	10.6	G5	2	..	23757b
40	13	45.3	— 80 5	9.5	10.3	G5	3	..	38135b	90	152	45.8	— 15 23	8.9	9.9	Ko	2	..	23814b
41	160	45.4	+ 63 14	7.06	6.89	B3	6	R	38060i	91	358	45.8	— 24 13	8.6	8.6	Go	5	0,4	39504b
42	161	45.4	+ 62 23	9.9	11.3	Mb	..	..	M	92	238	45.8	— 47 2	8.9	10.5	Ko	2	..	23761b
43	215	45.4	+ 46 11	7.85	8.85	Ko	3	..	37942i	93	68	45.8	— 74 2	8.78	10.0	Ko	5	..	23772b
44	110	45.4	+ 18 15	8.8	9.2	F5	2	..	38219i	94	13	45.8	— 84 33	8.5	9.3	G5	2	..	15173b
45	78	45.4	+ 16 27	8.6	9.1	F8	3	..	37412i	95	116a	45.9	+ 33 50	var.	var.	Md	..	R	M
46	122	45.4	— 0 3	8.5	9.5	Ko	3	..	23757b	96	137	45.9	+ 19 53	9.4	9.9	F8	3	..	38219i
47	146	45.4	— 6 2	9.3	9.4	A5	2	..	14808b	97	115	45.9	+ 13 33	8.5	8.8	Fo	3	..	37412i
48	215	45.4	— 41 10	9.3	9.4	Go	3	5,4	42098b	98	115	45.9	+ 6 21	8.4	9.2	G5	6	..	10419b
49	216	45.4	— 43 57	6.41	7.1	Fo	..	..	56,117	99	149	45.9	+ 2 12	7.66	8.22	Go	6	..	37379i
50	233	45.4	— 47 51	9.5	9.3	Ao	4	..	42798b	100	127	45.9	— 21 25	8.9	9.6	Ko	3	..	39504b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	165	46.0	+43 41	7.8	8.1	Fo	3	..	37942i	51	130	46.4	+31 28	8.2	8.3	A2	4	2,4	37340i
2	177	46.0	+40 43	7.22	7.22	Ao	6	..	37367i	52	121	46.4	+7 46	9.6	10.7	K2	1	..	10419b
3	129	46.0	+32 7	7.30	7.80	F8	6	0,6-	37367i	53	141	46.4	-22 0	10.2	10.5	Ko	1	..	39504b
4	137	46.0	+26 49	9.3	10.1	G5	1	..	38904i	54	258	46.4	-30 14	9.3	10.9	K2	1	..	23766b
5	135	46.0	+22 57	9.9	10.5	G	1	E	38904i	55	310	46.4	-34 38	8.7	9.6	Ko	3	..	12198b
6	111	46.0	+18 16	8.7	9.3	Go	2	..	38219i	56	292	46.4	-35 57	8.7	9.3	Go	3	..	12198b
7	154	46.0	-15 43	9.5	10.5	Ko	3	..	23814b	57	174	46.4	-57 34	8.9	9.9	K2	2	..	45461b
8	144	46.0	-16 41	9.5	10.1	Go	2	..	23814b	58	53	46.4	-57 53	9.5	10.3	G5	1	..	45461b
9	219	46.0	-44 41	10.1	10.0	Go	2	..	42098b	59	40	46.5	+73 48	7.56	7.70	A5	4	..	38133b
10	239	46.0	-47 42	8.7	8.4	F5	4	..	23761b	60	188	46.5	+55 43	8.2	9.4	K5	1	..	38877i
11	124	46.1	+59 2	9.2	9.2	A	1	..	38108i	61	117	46.5	+33 21	7.05	8.12	K2	6	2,6-	37340i
12	226	46.1	+47 31	7.60	8.60	Ko	3	..	37942i	62	131	46.5	+31 49	8.2	9.6	Ma	2	0,2	37340i
13	112	46.1	+18 11	9.8	10.9	K2	1	..	38219i	63	138	46.5	+27 13	8.4	9.2	G5	2	0,2	37311i
14	116	46.1	+13 42	9.1	9.5	F5	2	..	37412i	64	109	46.5	-1 1	8.6	9.6	Ko	3	..	23757b
15	138	46.1	-5 35	6.76	7.32	Go	7	..	14808b	65	113	46.5	-3 41	7.03	7.03	Ao	5	2,7	37423i
16	139	46.1	-5 43	8.8	9.3	F8	2	..	14808b	66	137	46.5	-19 3	9.2	9.7	F8	1	..	12238b
17	141	46.1	-13 28	8.2	9.2	Ko	5	..	23814b	67	332	46.5	-23 27	8.6	10.2	K5	2	..	39504b
18	282	46.1	-42 6	9.1	9.2	F8	2	..	42098b	68	58	46.5	-59 37	9.2	10.3	F8	3	..	23815b
19	209	46.1	-51 32	5.22	6.1	F5	..	R	28,195	69	68	46.5	-72 2	9.60	10.0	F8	5	..	22155b
20	36	46.1	-70 41	9.5	10.5	Ko	3	..	22155b	70	126	46.6	+16 10	8.5	9.3	G5	3	..	37412i
21	67	46.1	-72 41	8.9	10.1	K5	4	..	22155b	71	171	46.6	-9 21	7.46	8.46	Ko	5	..	14808b
22	65	46.1	-75 32	9.6	10.6	Ko	3	..	22155b	72	156	46.6	-15 25	9.8	10.9	K2	1	..	45603b
23	14	46.1	-80 45	9.7	10.5	G5	3	..	38135b	73	365	46.6	-24 8	8.0	8.6	G5	5	0,4	39504b
24	222	46.2	+50 14	7.67	8.45	G5	2	5,2	37942i	74	285	46.6	-35 20	9.6	9.6	A5	3	..	42804b
25	257	46.2	+48 27	7.65	8.72	K2	2	..	37942i	75	208	46.6	-39 4	7.12	7.7	F8	9	..	12198b
26	124	46.2	+38 54	9.3	9.8	F8	4	..	37367i	76	..	46.6	-73 41	..	..	B	2	R	22155b
27	141	46.2	+36 44	9.3	9.4	A3	1	..	37380i	77	..	46.6	-75 12	..	..	Ko	2	..	22155b
28	118	46.2	+2 50	6.51	7.29	G5	7	..	37379i	78	122	46.7	+61 12	9.4	9.5	A2	2	..	38060i
29	108	46.2	-1 5	9.0	10.0	Ko	1	..	23757b	79	115	46.7	+3 31	8.0	8.3	F2	4	..	37379i
30	..	46.2	-71 56	..	..	F8	2	..	22155b	80	105	46.7	-4 37	8.35	8.63	Fo	4	..	14808b
31	132	46.3	+59 33	8.8	8.9	A2	3	..	38060i	81	152	46.7	-6 7	9.8	10.3	F8	2	..	19958b
32	223	46.3	+49 28	7.8	7.9	A2	2	..	37942i	82	151	46.7	-6 39	8.0	8.3	Fo	6	..	14808b
33	138	46.3	+23 6	9.4	10.2	G5	2	..	38904i	83	315	46.7	-31 32	8.3	9.5	F8	2	..	23840b
34	111	46.3	+22 5	7.29	8.29	Ko	7	..	38070i	84	42	46.7	-61 4	9.0	10.3	Go	6	..	23815b
35	106	46.3	+12 14	6.76	7.04	Fo	5	0,8	37432i	85	223	46.8	+45 16	8.32	8.32	Ao	4	..	37942i
36	99	46.3	+10 4	8.4	8.9	F8	2	..	37432i	86	119	46.8	+33 44	9.4	10.4	Ko	1	..	37380i
37	130	46.3	+0 23	8.88	9.44	Go	4	0,4	23757b	87	154	46.8	-8 42	8.8	9.4	Go	5	..	14808b
38	140	46.3	-5 14	10.2	10.8	Go	2	..	19958b	88	150	46.8	-17 37	9.5	10.1	Go	2	..	45603b
39	173	46.3	-9 57	7.06	7.40	F2	8	..	14808b	89	224	46.8	-44 8	10.1	10.5	Ko	2	..	39679b
40	142	46.3	-13 39	8.8	9.4	Go	5	..	23814b	90	266	46.8	-44 55	9.70	10.2	Go	2	..	42098b
41	187	46.3	-52 54	8.7	10.5	Go	3	..	45461b	91	214	46.8	-51 0	9.7	10.1	F8	3	..	45461b
42	41	46.3	-60 55	9.1	10.0	F2	5	..	23815b	92	216	46.8	-51 9	9.7	10.7	K2	1	..	45461b
43	40	46.3	-61 2	9.3	10.0	Ao	6	..	23815b	93	50	46.9	+69 25	7.36	8.71	Mb	4	0,3	38068i
44	81	46.3	-64 37	8.3	8.8	F8	8	..	38229b	94	105	46.9	+63 25	8.4	8.7	Fo	4	..	38060i
45	63	46.3	-66 45	9.9	10.5	Go	2	..	38365b	95	172	46.9	+52 12	8.6	8.6	Ao	2	..	38557i
46	12	46.3	-83 3	9.9	10.5	Go	1	..	15165b	96	173	46.9	+51 44	7.9	7.9	Ao	4	..	38557i
47	57	46.4	+68 20	7.12	7.18	A2	4	..	37974i	97	130	46.9	-7 40	8.9	10.1	K5	1	..	19958b
48	103	46.4	+65 21	8.33	8.39	A2	3	..	37974i	98	328	46.9	-25 45	8.3	11.0	Ko	1	..	39504b
49	127	46.4	+59 11	8.9	10.3	Ma	1	..	38108i	99	273	46.9	-27 4	10.0	10.2	Fo	2	..	39504b
50	183	46.4	+47 4	8.51	8.51	Ao	2	..	37942i	100	244	46.9	-29 12	8.3	9.1	K5	7	..	20456b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	210	46.9	-39 2	9.6	9.7	Go	3	..	12198b	51	145	47.3	+30 4	8.4	9.5	K2	1	..	38904i
2	225	46.9	-44 19	9.5	9.9	G5	2	..	39679b	52	124	47.3	+ 8 8	8.6	9.6	Ko	3	..	10419b
3	..	46.9	-74 9	..	..	Ko	2	..	22155b	53	114	47.3	- 3 2	9.5	10.3	G5	1	..	23757b
4	14	46.9	-84 46	8.9	9.9	Ko	1	..	11989b	54	115	47.3	- 3 28	9.8	10.2	F5	2	3,2	19958b
5	191	47.0	+56 5	7.7	7.5	B2	3	3,4 R	38897i	55	163	47.3	-11 16	9.5	9.8	Fo	3	..	14158b
6	185	47.0	+44 36	8.2	9.6	Ma	2	..	37942i	56	154	47.3	-14 27	8.11	8.53	F5	7	..	23814b
7	128	47.0	+25 14	7.74	8.74	Ko	4	0,4	37355i	57	129	47.3	-21 39	7.52	8.1	F5	7	0,8	39504b
8	158	47.0	-15 24	9.5	9.8	Fo	4	..	23814b	58	..	47.3	-23 9	..	..	..	..	..	..
9	146	47.0	-16 4	9.8	10.8	Ko	1	..	45603b	59	334	47.3	-23 9	7.24	7.2	Go	..	0,7 R	56,118
10	144	47.0	-21 57	9.8	9.9	G5	1	..	39504b	60	340	47.3	-32 42	9.1	10.0	F8	3	..	23766b
11	198	47.0	-48 22	9.5	10.4	Go	1	..	42798b	61	296	47.3	-36 18	8.7	8.4	Ao	6	0,6	23840b
12	167	47.0	-55 24	9.0	9.9	F2	3	..	45461b	62	241	47.3	-43 11	8.0	8.1	Fo	5	0,4	12275b
13	..	47.0	-60 9	..	..	Mb	1	..	23815b	63	175	47.4	+51 20	8.6	8.7	A2	2	..	38557i
14	..	47.0	-70 57	..	..	G5	3	..	22155b	64	171	47.4	+43 25	8.6	8.6	Ao	3	..	38917i
15	124	47.1	+60 34	4.93	5.43	F8	..	2,9	2227c	65	198	47.4	+39 43	7.02	7.58	Go	..	2,8	56,72
16	..	47.1	+46 53	var.	var.	Md	..	R	M	66	159	47.4	+38 1	6.48	6.48	Ao	8	..	37367i
17	186	47.1	+44 54	8.7	8.8	A5	2	..	37942i	67	277	47.4	-26 56	8.8	8.9	Ko	5	0,5	39504b
18	120	47.1	+34 6	8.2	9.0	G5	2	..	37380i	68	83	47.4	-64 14	9.2	9.6	F5	4	..	38229b
19	131	47.1	+26 2	8.2	9.2	Ko	2	5,1	38904i	69	19	47.4	-79 46	9.5	10.0	F8	3	3,3	38135b
20	153	47.1	- 6 33	8.6	9.0	F5	4	..	14808b	70	52	47.5	+69 24	9.7	9.7	Ao	1	..	38905i
21	148	47.1	-15 52	8.6	9.6	Ko	7	..	23814b	71	134	47.5	+60 8	7.81	7.87	A2	2	..	3083b
22	148	47.1	-19 57	8.6	9.3	Go	5	5,5	39504b	72	129	47.5	+38 29	8.0	8.6	Go	4	..	37367i
23	265	47.1	-28 10	9.0	9.8	Ko	3	..	20456b	73	139	47.5	+19 32	9.4	10.2	G5	2	..	38219i
24	319	47.1	-31 30	8.6	9.5	A5	3	..	23840b	74	114	47.5	+18 25	8.6	9.7	K2	2	..	38070i
25	190	47.1	-40 51	9.7	10.4	Go	2	..	39679b	75	119	47.5	+ 7 10	8.7	9.3	Go	4	..	10419b
26	247	47.1	-47 14	8.5	9.9	G5	3	..	23761b	76	117	47.5	+ 6 7	8.8	8.9	A2	2	..	37432i
27	69	47.1	-62 28	9.5	10.5	Ko	1	..	23815b	77	149	47.5	-20 26	8.0	9.0	K2	5	0,4	39504b
28	28	47.1	-71 42	7.06	6.8	F2	10	..	38365b	78	130	47.5	-21 32	8.2	8.3	Go	6	0,5	39504b
29	49	47.1	-72 52	9.8	10.6	G5	5	..	22155b	79	295	47.5	-35 9	8.4	9.3	K2	5	2,3	23766b
30	69	47.1	-74 2	11.4	11.2	B	2	..	22155b	80	179	47.5	-57 8	7.4	8.2	F8	5	3,4	36882b
31	126	47.2	+61 6	8.9	8.7	Ao	2	0,1	38108i	81	89	47.6	+64 21	9.9	9.9	A	1	..	38108i
32	143	47.2	+56 41	7.09	7.07	B9	5	..	3083b	82	172	47.6	+55 5	8.21	8.71	F8	1	..	38877i
33	266	47.2	+49 10	8.9	10.3	Mb	..	..	M	83	272	47.6	+49 7	7.17	7.12	B8	6	1,3	37942i
34	152	47.2	+32 25	8.7	9.2	F8	2	..	37311i	84	131	47.6	+38 37	8.3	8.7	F5	2	..	37367i
35	125	47.2	+30 55	8.2	8.8	Go	2	..	37311i	85	111	47.6	+11 43	9.6	9.6	Ao	2	..	37412i
36	117	47.2	+20 52	7.24	7.66	F5	6	0,7	19788i	86	101	47.6	+ 9 16	8.4	9.4	Ko	4	..	10419b
37	83	47.2	+17 8	9.4	9.9	F8	2	..	38219i	87	106	47.6	- 3 49	10.0	11.0	Ko	1	5,1	23757b
38	104	47.2	+13 6	7.40	7.40	Ao	8	..	37412i	88	57	47.6	-59 53	10.1	10.9	G5	2	..	23815b
39	178	47.2	-10 23	7.8	8.9	K2	4	..	14808b	89	64	47.6	-65 53	9.6	10.2	Go	1	..	38229b
40	154	47.2	-12 25	9.3	9.8	F8	3	..	14158b	90	164	47.7	+62 53	9.2	9.6	F5	2	..	38060i
41	152	47.2	-13 46	9.5	10.5	Ko	2	..	23814b	91	227	47.7	+46 3	7.8	7.8	Ao	5	..	37942i
42	226	47.2	-44 15	6.64	7.1	F2	9	..	12275b	92	147	47.7	+29 48	7.71	8.71	Ko	4	0,4	37311i
43	221	47.2	-50 42	8.9	8.9	F2	5	2,4	12275b	93	113	47.7	+17 34	8.8	9.8	Ko	2	..	38219i
44	43	47.2	-60 59	10.1	11.2	K2	1	..	23815b	94	117	47.7	+ 3 17	8.6	9.2	Go	2	..	14899b
45	70	47.2	-74 1	11.5	11.3	B	2	..	22155b	95	175	47.7	- 8 52	9.2	10.0	G5	4	..	19958b
46	41	47.3	+71 21	9.0	9.0	Ao	1	..	38133i	96	146	47.7	-13 29	8.2	8.5	Fo	7	..	23814b
47	75	47.3	+68 3	8.9	8.9	Ao	1	..	38905i	97	147	47.7	-21 58	8.0	8.7	Ko	5	2,4	39504b
48	267	47.3	+48 54	8.21	8.19	B9	2	..	37942i	98	376	47.7	-24 33	5.59	6.8	Ko	..	0,R	56,118
49	189	47.3	+46 35	7.9	7.9	Ao	2	..	37942i	99	347	47.7	-32 10	9.1	10.9	Ko	1	..	23766b
50	127	47.3	+30 51	8.30	8.86	Go	1	..	37311i	100	244	47.7	-43 20	9.7	9.6	A2	4	..	39679b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	254	47.7	−47 51	10.1	10.2	G5	3	..	23761b	51	137	48.3	+35 12	8.77	9.77	Ko	1	..	3738oi
2	124	47.8	+33 23	8.2	9.0	G5	4	..	37367i	52	138	48.3	+34 35	9.3	9.6	Fo	1	..	3738oi
3	113	47.8	− 0 55	8.4	9.0	Go	4	..	37423i	53	129	48.3	+24 23	8.2	8.5	Fo	4	0,3-	37355i
4	118	47.8	− 2 26	8.7	9.5	G5	3	..	23757b	54	116	48.3	+17 51	8.0	8.6	Go	4	..	37412i
5	119	47.8	− 3 11	9.2	10.2	Ko	1	..	23757b	55	126	48.3	+ 2 46	8.6	9.0	F5	4	..	14899b
6	140	47.8	−19 7	8.8	9.1	Go	5	0,3	12238b	56	338	48.3	−25 19	6.44	6.5	F2	..	3,6-	56,118
7	196	47.8	−53 55	9.7	10.5	G5	2	..	45461b	57	228	48.3	−44 27	8.9	9.1	G5	3	..	12275b
8	29	47.8	−71 4	9.5	10.5	Ko	3	..	22155b	58	221	48.3	−51 0	8.1	9.2	Ko	4	0,3-	12275b
9	58	47.9	+68 31	9.2	9.8	Go	1	..	38905i	59	117	48.3	−52 51	10.3	10.7	F5	1	..	45461b
10	106	47.9	+65 54	7.06	7.34	Fo	5	..	37974i	60	70	48.3	−62 7	9.9	10.9	Ko	2	..	22068b
11	234	47.9	+47 59	7.65	8.83	K5	2	..	37943i	61	70	48.3	−72 19	10.0	10.5	F8	4	..	22155b
12	114	47.9	− 1 41	4.92	5.92	Ko	..	5,10	56,72	62	69	48.4	+66 50	9.2	10.0	G5	1	..	38068i
13	60	47.9	−59 33	8.8	10.3	Ko	4	..	23815b	63	186	48.4	+40 57	8.8	8.9	A2	4	..	37367i
14	65	47.9	−65 53	9.4	10.5	K2	2	..	38365b	64	144	48.4	+28 2	7.9	8.7	G5	4	..	3734oi
15	..	47.9	−72 4	..	..	Ko	2	..	22155b	65	118	48.4	+ 5 26	9.4	9.8	F5	3	..	14899b
16	50	47.9	−73 14	9.6	10.6	Ko	3	..	22155b	66	158	48.4	− 6 17	10.2	10.8	Go	1	..	19958b
17	228	48.0	+45 17	8.22	8.50	Fo	3	..	37942i	67	160	48.4	−15 23	8.9	9.3	F5	6	..	23814b
18	148	48.0	+36 53	6.13	7.13	Ko	8	..	37367i	68	84	48.4	−64 17	7.02	7.4	F5	..	3,9	56,118
19	116	48.0	+19 14	7.32	7.74	F5	4	..	19788i	69	20	48.4	−79 3	9.7	10.5	G5	2	..	38135b
20	122	48.0	+13 57	9.1	9.7	Go	2	..	37412i	70	23	48.5	+82 9	8.48	9.48	Ko	2	..	38964i
21	102	48.0	+ 9 22	8.8	10.0	K5	1	..	10419b	71	128	48.5	+60 41	9.4	9.5	A2	2	0,2	3806oi
22	180	48.0	− 9 49	8.61	8.89	Fo	3	..	14808b	72	158	48.5	+ 1 22	8.99	9.55	Go	2	..	14899b
23	281	48.0	−38 41	8.7	9.7	Go	4	..	12198b	73	215	48.5	−39 16	8.7	8.6	A3	6	..	12198b
24	237	48.0	−45 54	9.5	9.9	A5	2	..	42098b	74	250	48.5	−43 21	9.1	9.3	Ko	2	..	42098b
25	51	48.0	−73 34	10.9	11.2	Fo	3	..	22155b	75	229	48.5	−44 19	9.9	10.2	Go	2	..	42098b
26	173	48.1	+54 31	8.2	8.2	Ao	2	0,2	38557i	76	31	48.5	−68 43	8.9	9.7	G5	5	..	38365b
27	191	48.1	+52 43	8.2	8.2	B9	3	..	38557i	77	195	48.6	+55 47	7.20	7.34	A5	5	0,4	38877i
28	179	48.1	+52 9	6.22	6.22	Ao	6	2,7	3083b	78	196	48.6	+42 45	8.38	8.66	Fo	2	..	37942i
29	195	48.1	+42 50	7.25	7.81	Go	4	..	37942i	79	105	48.6	+10 35	8.76	9.76	Ko	3	..	10419b
30	133	48.1	+ 4 28	9.0	9.3	F2	2	..	14899b	80	122	48.6	+ 6 44	8.8	9.6	G5	4	..	10419b
31	156	48.1	− 6 10	8.9	9.9	Ko	3	..	19958b	81	147	48.6	− 5 3	6.64	7.42	G5	7	0,5	14808b
32	143	48.1	−18 11	7.57	7.71	A5	7	2,8	39504b	82	159	48.6	− 8 23	9.8	10.4	Go	1	..	19958b
33	325	48.1	−30 54	7.16	8.0	G5	8	..	23840b	83	167	48.6	−11 13	9.5	9.8	F2	2	..	14158b
34	330	48.1	−33 13	9.3	9.5	F8	3	..	23840b	84	145	48.6	−18 24	9.5	10.5	Ko	2	..	40863b
35	116	48.1	−52 6	8.1	8.6	G5	5	0,4-	12275b	85	150	48.6	−22 45	8.8	9.6	G5	3	0,2	12238b
36	144	48.2	+56 28	7.30	7.58	Fo	4	..	3083b	86	378	48.6	−24 34	9.0	8.9	G5	4	5,3	39504b
37	144	48.2	+28 58	6.72	7.50	G5	6	0,4-	37311i	87	300	48.6	−35 24	9.1	10.0	K5	..	..	M
38	143	48.2	+28 33	7.8	7.9	A2	6	0,6-	37311i	88	278	48.6	−45 7	9.3	9.7	F8	2	..	42098b
39	142	48.2	+27 42	9.4	10.0	G	2	..	38904i	89	89	48.6	−65 23	8.8	9.6	G5	5	..	38365b
40	143	48.2	+27 21	9.0	10.1	K2	1	..	38904i	90	37	48.6	−70 3	6.59	7.5	F8	8	R	38365b
41	120	48.2	+20 52	9.2	10.0	G5	3	..	38219i	91	30	48.6	−71 10	9.5	10.5	Ko	4	..	22155b
42	117	48.2	+18 33	8.6	9.6	Ko	4	..	37412i	92	34	48.6	−76 56	10.2	11.2	Ko	2	..	38135b
43	120	48.2	+ 3 33	7.02	7.30	Fo	6	..	37379i	93	21	48.6	−79 11	9.5	10.5	Ko	2	5,2	23772b
44	157	48.2	− 6 12	9.8	10.4	Go	1	..	19958b	94	45	48.7	+72 37	8.8	9.8	Ko	1	..	38133i
45	336	48.2	−25 30	9.8	10.1	F5	3	0,2	39504b	95	204	48.7	+39 31	9.2	9.2	A	1	R	3738oi
46	201	48.2	−48 28	10.3	10.4	G5	2	..	23761b	96	160	48.7	+32 21	7.35	8.42	K2	4	0,4-	37367i
47	220	48.2	−51 36	8.5	9.8	K2	4	..	45461b	97	133	48.7	+24 57	7.41	8.41	Ko	6	5,4	37355i
48	69	48.2	−72 33	var.	var.	A2	4	R	22155b	98	122	48.7	+20 28	9.2	10.2	Ko	2	..	3807oi
49	138	48.3	+59 48	8.5	8.6	A3	3	..	3806oi	99	180	48.7	− 8 51	8.8	9.4	Go	3	..	14808b
50	175	48.3	+55 13	8.31	8.31	Ao	2	..	38877i	100	150	48.7	−13 20	9.5	10.7	K5	2	..	23814b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	149	48.7	-13 32	9.3	10.3	Ko	2	..	23814b	51	344	49.1	-25 35	9.0	8.3	Fo	6	0,5 R	39504b
2	162	48.7	-14 28	7.54	8.10	Go	8	..	23814b	52	356	49.1	-32 47	9.6	10.0	G5	2	..	23840b
3	151	48.7	-16 11	9.5	10.5	Ko	1	..	45603b	53	252	49.1	-43 42	9.3	9.9	G5	2	..	39679b
4	254	48.7	-29 30	9.2	10.0	F5	2	..	23766b	54	81	49.1	-63 28	9.3	9.6	Fo	6	..	23815b
5	217	48.7	-39 37	8.3	9.1	A5	5	..	12198b	55	15	49.1	-80 29	10.0	10.3	F	3	..	38135b
6	206	48.7	-48 23	9.3	10.4	Ko	3	..	23761b	56	14	49.2	+86 47	8.9	9.7	G5	2	..	37281i
7	58	48.7	-60 13	9.9	10.0	A2	5	..	23815b	57	108	49.2	+65 30	9.2	9.6	F5	1	..	38108i
8	38	48.7	-70 3	7.6	8.1	F8	6	..	38365b	58	149	49.2	+56 44	7.90	9.08	K5	2	..	38877i
9	..	48.7	-70 48	..	..	Fo	3	..	22155b	59	288	49.2	+48 52	7.58	7.58	Ao	5	..	37942i
10	66	48.7	-75 25	8.9	9.5	Go	4	..	23772b	60	121	49.2	+19 12	9.0	9.8	G5	2	..	38219i
11	141	48.8	+59 33	8.7	9.3	G	2	..	38108i	61	123	49.2	- 3 13	10.0	10.0	Ao	2	0,2	23757b
12	136	48.8	+38 31	8.2	8.2	Ao	6	..	37367i	62	157	49.2	-16 58	8.8	9.6	G5	3	..	23814b
13	116	48.8	+21 55	8.7	8.8	A3	4	..	19788i	63	383	49.2	-24 9	10.3	10.7	Go	1	..	39504b
14	120	48.8	+ 5 16	8.16	8.94	G5	2	..	37432i	64	347	49.2	-25 10	9.8	11.3	Ko	1	..	39504b
15	159	48.8	+ 1 30	9.4	9.8	F5	1	..	14899b	65	319	49.2	-37 38	8.4	8.4	F5	4	..	12198b
16	159	48.8	- 6 30	9.5	9.9	F5	2	..	14808b	66	67	49.2	-75 50	10.3	10.9	Go	2	..	22155b
17	285	48.8	-27 0	9.8	10.7	Ko	2	..	39504b	67	122	49.3	+18 38	5.76	5.76	Ao	8	0,10	19788i
18	241	48.8	-46 3	7.8	8.4	Fo	7	..	12275b	68	181	49.3	- 9 17	6.38	6.94	Go	8	..	14808b
19	120	48.8	-52 44	8.9	9.8	Go	5	..	45461b	69	344	49.3	-23 25	9.6	9.6	Go	2	..	39504b
20	44	48.8	-61 37	8.2	8.5	Go	4	2,7	11991b	70	338	49.3	-31 24	8.8	11.2	F5	2	..	23766b
21	111	48.9	+63 50	8.6	8.7	A2	2	..	38905i	71	337	49.3	-32 53	7.87	8.2	F2	6	3,6	23840b
22	163	48.9	+38 11	9.3	9.8	F8	2	..	37380i	72	304	49.3	-41 54	9.2	10.9	Ko	2	..	39679b
23	123	48.9	+23 32	8.8	..	R	1	0,2	38219i	73	242	49.4	+48 9	6.60	7.95	Ma	4	..	37942i
24	140	48.9	+19 32	8.1	8.4	F2	4	6,2	37412i	74	116	49.4	- 0 55	9.4	10.4	Ko	1	..	23757b
25	120	48.9	+18 18	9.0	9.5	F8	2	..	38219i	75	245	49.4	-49 20	6.96	7.4	G5	7	0,7-	12226b
26	163	48.9	-15 10	9.3	10.1	G5	3	..	23814b	76	83	49.4	-63 25	5.64	8.1	Mb	..	0, R	56,118
27	255	48.9	-29 5	8.3	9.8	K5	3	..	20456b	77	52	49.4	-73 40	11.3	11.3	B8	2	..	22155b
28	269	48.9	-30 44	8.3	9.5	Fo	4	..	23840b	78	16	49.4	-84 17	7.96	8.3	F5	5	..	15173b
29	293	48.9	-38 31	9.7	10.4	Ko	3	..	12198b	79	198	49.5	+46 21	7.75	8.75	Ko	2	..	37942i
30	223	48.9	-51 36	8.5	8.9	F5	4	0,3-	12275b	80	126	49.5	+ 8 54	7.8	8.1	Fo	4	..	37432i
31	80	48.9	-63 6	9.6	10.2	Go	4	..	23815b	81	123	49.5	+ 7 1	9.4	9.7	F2	2	..	10416b
32	86	48.9	-64 43	9.46	9.9	G5	2	..	38229b	82	231	49.5	-40 55	9.0	10.3	Ko	2	..	42098b
33	130	49.0	+61 8	8.6	8.6	B9	6	..	38060i	83	179	49.5	-55 8	7.70	8.6	G5	5	0,4-	11991b
34	134	49.0	+58 26	4.95	5.95	Ko	..	0,5 R	56,72	84	45	49.5	-61 49	10.1	11.1	Ko	1	..	23815b
35	165	49.0	+58 1	var.	var.	Mb	..	R	M	85	163	49.6	+41 43	7.8	7.9	A3	4	..	37367i
36	136	49.0	+25 11	8.61	8.89	Fo	4	..	37355i	86	146	49.6	+23 5	5.60	6.60	Ko	..	0,8-	56,72
37	135	49.0	+24 50	8.2	8.2	Ao	6	0,4	37355i	87	153	49.6	-15 59	9.3	10.3	Ko	4	..	23814b
38	183	49.0	- 9 51	8.81	9.81	Ko	2	..	14808b	88	312	49.6	-35 57	8.7	9.6	F5	2	E	14372b
39	146	49.0	-18 32	9.3	10.3	Ko	2	0,2	40863b	89	295	49.6	-38 47	9.7	10.4	G5	3	..	12198b
40	152	49.0	-21 50	8.8	9.6	Ko	3	..	39504b	90	307	49.6	-41 59	9.3	10.6	G5	2	..	39679b
41	258	49.0	-29 21	8.2	10.3	K5	2	..	20456b	91	53	49.6	-73 11	..	11.2	Pec.	3	R	22155b
42	355	49.0	-32 18	9.9	11.2	Ko	1	..	23766b	92	164	49.7	+42 9	8.0	8.0	Ao	3	E	37380i
43	57	49.0	-67 27	9.2	9.7	F8	3	..	38365b	93	146	49.7	+27 39	9.0	9.5	F8	3	3,1	38904i
44	112	49.1	+64 1	7.54	7.62	A3	3	..	37974i	94	125	49.7	+23 33	7.38	8.16	G5	7	..	38904i
45	140	49.1	+38 38	8.4	9.8	Ma	2	..	37367i	95	126	49.7	+20 32	8.6	8.7	A2	5	..	38904i
46	138	49.1	+38 22	8.9	10.0	K2	1	..	37380i	96	126	49.7	+19 8	9.4	9.9	F8	3	..	38219i
47	152	49.1	-16 43	8.2	9.2	Ko	7	..	23814b	97	125	49.7	+18 55	9.4	9.9	F8	3	..	38219i
48	147	49.1	-18 34	9.3	10.3	Ko	3	..	12238b	98	123	49.7	- 2 6	9.5	10.1	Go	2	..	23757b
49	345	49.1	-25 32	9.8	11.0	G	1	..	39504b	99	163	49.7	- 7 46	9.2	9.6	F5	1	..	14808b
50	343	49.1	-25 35	9.0	8.3	Fo	6	0,5 R	39504b	100	155	49.7	-22 0	8.8	9.9	K2	3	..	39504b

THE HENRY DRAPER CATALOGUE.

5300

0^h 49^m .7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	360	<i>m.</i> 49.7	<i>o</i> -32 12	9.1	10.3	G5	3	..	23840b	51	60	<i>m.</i> 50.3	<i>o</i> +68 31	9.4	10.4	K	1	..	38068i
2	54	49.7	-73 39	10.3	11.3	Ko	2	..	22155b	52	112	50.3	+65 40	8.9	9.0	A2	2	0,2	38108i
3	68	49.7	-75 12	7.78	7.9	Go	6	0,4	23772b	53	196	50.3	+45 8	8.02	8.80	G5	2	..	37942i
4	12	49.7	-80 54	8.8	8.9	A2	8	..	38135b	54	294	50.3	-26 9	8.6	10.1	G5	2	..	39504b
5	176	49.8	+53 50	8.0	8.1	A2	2	..	38557i	55	32	50.3	-71 21	9.6	10.1	F8	3	..	38365b
6	195	49.8	+44 33	8.00	9.07	K2	2	..	37942i	56	69	50.3	-74 53	9.6	10.6	Ko	3	..	22155b
7	148	49.8	+27 5	9.4	10.2	G5	1	..	38904i	57	81	50.4	+68 15	6.38	6.66	Fo	5	..	37974i
8	147	49.8	+22 53	8.2	8.6	F5	4	..	19788i	58	116	50.4	+64 15	8.8	8.9	A2	2	..	38060i
9	108	49.8	+12 19	8.30	9.30	Ko	2	..	37412i	59	154	50.4	+37 3	9.0	9.8	G5	2	..	37367i
10	389	49.8	-24 28	9.2	10.1	Ko	2	0,3	39504b	60	127	50.4	+23 17	8.3	8.7	F5	3	..	38070i
11	247	49.8	-49 30	7.8	8.0	F2	5	3,5	12275b	61	149	50.4	+22 36	8.3	9.3	Ko	3	..	38070i
12	23	49.9	+82 34	8.5	9.0	F8	3	..	37281i	62	139	50.4	- 0 31	7.6	8.6	Ko	3	..	37423i
13	28	49.9	+76 56	8.0	8.1	A3	4	..	38133i	63	142	50.4	- 6 57	9.5	9.5	Ao	4	..	19958b
14	210	49.9	+39 51	6.89	6.95	A2	6	..	37367i	64	164	50.4	- 8 24	9.8	9.8	Ao	3	..	19958b
15	150	49.9	+30 8	7.86	7.92	A2	6	0,4	37340i	65	161	50.4	-22 28	8.2	9.3	Ko	5	0,5	39504b
16	126	49.9	+24 1	6.36	7.71	Mb	6	0,6	19788i	66	290	50.4	-45 46	7.4	8.7	Ko	6	..	12275b
17	119	49.9	+17 43	9.1	9.6	F8	4	..	37412i	67	46	50.4	-61 43	10.5	11.1	Go	1	..	23815b
18	87	49.9	+16 22	8.5	8.6	A5	5	..	37412i	68	86	50.4	-63 38	9.5	9.9	F5	5	..	23815b
19	142	49.9	+ 0 15	8.18	8.96	G5	3	..	37423i	69	39	50.4	-70 40	9.1	9.9	G5	3	..	38365b
20	124	49.9	- 3 31	10.2	10.8	G	1	..	23757b	70	72	50.4	-74 25	8.4	8.9	F8	6	..	23772b
21	337	49.9	-34 30	8.7	8.7	F2	6	2,5	23840b	71	40	50.5	+74 45	8.7	9.0	F	3	..	38133i
22	55	49.9	-57 57	7.37	8.8	Ko	5	0,4-	37301b	72	188	50.5	+51 57	8.5	9.3	G5	3	E	38557i
23	66	49.9	-66 25	8.7	9.0	Fo	6	..	38365b	73	234	50.5	+46 7	7.6	7.9	F2	3	R	37942i
24	..	49.9	-71 27	..	..	G5	3	..	22155b	74	146	50.5	+38 38	8.9	8.9	Ao	4	..	37367i
25	3	49.9	-89 10	8.9	9.7	G5	5	..	22980b	75	143	50.5	+31 48	8.0	8.6	Go	4	..	37340i
26	110	50.0	+65 53	8.0	8.0	Ao	2	..	37974i	76	155	50.5	-13 5	7.8	8.2	F5	8	..	23814b
27	114	50.0	+63 18	8.2	9.2	Ko	3	..	38060i	77	355	50.5	-25 12	7.34	7.8	G5	7	0,7	39504b
28	148	50.0	+28 1	7.28	7.42	A5	6	0,6-	37311i	78	312	50.5	-42 31	9.3	10.9	K2	2	..	39679b
29	142	50.0	+19 45	9.0	10.2	K5	1	..	38219i	79	27	50.5	-69 38	8.2	8.5	Fo	7	..	38365b
30	111	50.0	- 4 23	10.0	10.5	F8	2	..	19958b	80	151	50.6	+56 45	7.50	7.50	Ao	5	2,4	38877i
31	344	50.0	-33 10	9.0	9.8	Go	2	..	23840b	81	153	50.6	+29 14	8.8	9.8	Ko	1	..	38904i
32	31	50.0	-71 3	9.9	10.5	Go	3	..	22155b	82	151	50.6	+26 40	5.94	6.00	A2	8	0,8R	37355i
33	54	50.1	+69 55	8.2	8.3	A2	4	R	38905i	83	112	50.6	- 4 32	9.0	9.0	Ao	5	..	14808b
34	201	50.1	+46 36	8.0	8.0	Ao	2	..	37942i	84	167	50.6	- 7 53	6.00	7.07	K2	8	..	14808b
35	145	50.1	+19 19	9.4	9.5	A5	3	E	37412i	85	171	50.6	-11 17	8.8	9.8	Ko	3	..	14158b
36	124	50.1	+ 6 19	7.7	8.7	Ko	3	..	37432i	86	261	50.6	-43 36	8.6	9.6	Ko	3	..	39679b
37	124	50.1	- 2 2	8.9	9.9	Ko	3	..	23757b	87	292	50.6	-44 55	8.02	8.7	G5	6	5,6	12275b
38	162	50.1	- 5 58	8.9	9.3	F5	2	..	14808b	88	216	50.6	-47 57	6.86	7.9	F8	9	..	42798b
39	150	50.1	-17 58	8.7	9.0	F2	5	..	12238b	89	59	50.6	-67 0	9.8	10.8	Ko	1	..	38229b
40	238	50.1	-50 0	9.38	9.6	A2	3	..	45461b	90	..	50.6	-70 17	..	..	Go	2	..	22155b
41	100	50.2	+65 12	9.4	9.4	A	1	..	38905i	91	45	50.7	+75 28	8.72	8.78	A2	2	..	38133i
42	135	50.2	+60 43	7.96	7.96	Ao	5	..	38108i	92	117	50.7	+64 0	7.23	7.57	F2	6	..	38905i
43	172	50.2	+57 26	6.43	7.50	K2	4	..	3083b	93	172	50.7	+62 45	9.0	9.0	Ao	3	..	38060i
44	202	50.2	+46 21	7.80	7.80	Ao	4	..	37942i	94	144	50.7	+60 11	2.25	2.01	Bop	..	R	5125c
45	135	50.2	+25 51	8.8	9.6	G5	2	..	38904i	95	138	50.7	+58 38	4.83	5.83	Ko	..	5,6R	56,72
46	150	50.2	- 5 10	10.0	11.1	K2	1	..	19958b	96	205	50.7	+55 17	8.26	9.44	K5	1	..	38877i
47	138	50.2	- 6 52	8.9	9.9	Ko	2	..	19958b	97	148	50.7	+34 41	6.80	6.80	Ao	8	..	37367i
48	161	50.2	-12 44	10.0	10.8	G5	2	..	14158b	98	135	50.7	+33 21	8.7	8.8	A2	4	..	37367i
49	159	50.2	-17 30	8.2	9.2	Ko	6	5,8	12238b	99	118	50.7	- 1 20	9.4	10.5	K2	2	..	23757b
50	240	50.2	-50 27	9.7	9.9	Go	2	5,2	12275b	100	155	50.7	- 5 4	10.2	10.8	Go	1	..	19958b

5400

0^h 50^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	165	50.7	8 35	8.4	8.7	Fo	5	..	14808b	51	142	51.2	+14 39	8.7	9.7	Ko	5	..	6670m
2	172	50.7	-11 35	9.0	9.6	Go	4	R	14158b	52	141	51.2	+14 27	8.8	8.9	A3	6	..	6670m
3	312	50.7	-38 4	9.0	9.7	Go	3	..	12198b	53	169	51.2	- 8 7	8.2	8.6	F5	6	..	14808b
4	47	50.7	-61 17	8.8	10.4	Ko	2	..	23815b	54	358	51.2	-23 2	10.0	10.0	F5	2	..	39504b
5	69	50.7	-66 0	8.0	8.4	F5	9	..	38365b	55	299	51.2	-26 54	8.4	10.2	Ko	2	5,4	39504b
6	12	50.7	-85 29	8.7	9.1	F5	4	E	15145b	56	183	51.2	-55 33	8.7	9.9	Fo	4	..	45461b
7	41	50.8	+74 57	8.0	8.0	Ao	7	..	38134i	57	40	51.2	-70 4	5.34	6.3	Ko	..	5,R	56,118
8	146	50.8	+59 50	5.54	5.52	B9	..	0,6 R	2277c	58	185	51.3	+62 1	8.6	8.6	B8	3	4,3	38108i
9	147	50.8	+59 30	8.1	8.1	Ao	6	..	38108i	59	137	51.3	+60 53	6.62	7.40	G5	3	..	3083b
10	139	50.8	+59 11	8.8	9.1	Fo	2	..	38060i	60	255	51.3	+48 10	9.5	10.9	Mb	..	..	M
11	154	50.8	+28 39	8.9	9.9	Ko	2	..	38904i	61	156	51.3	+28 34	9.4	10.2	G5	1	..	38904i
12	163	50.8	-16 54	9.3	9.9	Go	5	..	23814b	62	136	51.3	+25 48	8.2	9.6	Ma	4	0,2	37355i
13	152	50.8	-17 50	8.4	9.4	Ko	4	..	12238b	63	121	51.3	+21 19	9.7	10.2	F8	1	..	38219i
14	143	50.8	-19 4	8.2	9.3	K2	5	2,6	39504b	64	108	51.3	+10 7	9.02	9.08	A2	3	..	10419b
15	297	50.8	-26 31	9.0	10.1	Ko	3	5,4	39504b	65	130	51.3	+ 8 41	8.0	9.0	Ko	4	..	10419b
16	208	50.9	+52 49	9.0	9.0	A	1	E	38879i	66	232	51.3	-39 38	9.0	9.7	F5	3	..	14372b
17	128	50.9	+23 45	9.9	10.4	F8	1	..	38904i	67	22	51.3	-79 43	9.7	10.8	K2	3	0,2	38135b
18	127	50.9	+13 24	6.83	7.61	G5	8	..	37412i	68	187	51.4	+54 25	7.15	7.15	Ao	5	0,7	3083b
19	112	50.9	+13 4	9.1	9.5	F5	2	..	37412i	69	202	51.4	+45 3	8.6	8.6	Ao	2	..	37942i
20	173	50.9	-11 9	9.5	10.5	Ko	1	..	14158b	70	123	51.4	+17 25	8.2	8.8	Go	4	..	37412i
21	153	50.9	-18 3	9.8	10.4	Go	1	..	45603b	71	167	51.4	- 5 53	9.5	10.1	Go	2	..	19958b
22	144	50.9	-19 18	8.6	9.6	K2	3	2,3	39504b	72	146	51.4	- 7 15	8.3	8.7	F5	5	..	14808b
23	135	50.9	-21 23	9.8	10.5	F8	2	..	39504b	73	300	51.4	-26 6	7.8	10.1	Ma	4	0,3-	23762b
24	287	50.9	-28 26	9.8	11.5	Ko	2	E	23762b	74	212	51.4	-53 44	6.54	8.5	Ko	6	0,7-	11991b
25	277	50.9	-30 14	9.3	10.9	K5	1	..	23766b	75	..	51.4	-71 36	..	..	G5	2	..	22155b
26	347	50.9	-34 18	9.7	10.2	G5	2	..	23766b	76	74	51.5	+67 13	8.9	9.3	F5	1	..	38068i
27	32	50.9	-68 0	9.3	9.9	Go	5	R	38365b	77	210	51.5	+52 46	7.95	8.95	Ko	2	..	38879i
28	72	50.9	-72 25	9.9	10.5	Go	6	..	22155b	78	149	51.5	+34 52	8.2	8.3	A5	4	..	37367i
29	136	51.0	+61 2	8.6	8.6	Ao	3	..	38060i	79	144	51.5	+31 21	8.1	9.5	Ma	4	0,2	37340i
30	156	51.0	+56 57	7.9	8.9	Ko	2	..	38877i	80	128	51.5	+21 6	9.4	9.8	F5	2	..	38219i
31	205	51.0	+42 27	6.61	7.61	Ko	6	..	37367i	81	90	51.5	+17 11	8.5	8.6	A5	4	..	37412i
32	129	51.0	+24 5	9.4	10.6	K5	1	..	38904i	82	130	51.5	+14 14	8.58	9.76	K5	3	0,1	6670m
33	139	51.0	+15 7	8.64	9.42	G5	3	..	37412i	83	109	51.5	+ 9 39	9.0	10.2	K5	1	..	10419b
34	119	51.0	- 0 56	9.4	10.2	G5	1	..	23757b	84	110	51.5	+ 9 28	8.8	10.0	K5	2	..	10419b
35	114	51.0	- 4 16	7.42	7.84	F5	7	3,6-	14808b	85	147	51.5	- 7 8	9.5	10.0	F8	3	..	19958b
36	165	51.0	- 6 0	8.9	9.5	Go	3	..	19958b	86	171	51.5	-15 12	8.2	8.5	F2	5	..	23814b
37	162	51.0	-11 49	5.49	6.49	Ko	9	0,R	14808b	87	167	51.5	-19 59	7.93	8.2	Ao	7	..	39504b
38	256	51.0	-41 33	9.7	11.5	K2	1	..	42098b	88	28	51.5	-69 10	8.0	8.5	F8	8	..	38365b
39	61	51.1	+70 53	8.9	9.3	F5	2	..	38068i	89	25	51.5	-78 24	9.1	10.1	Ko	4	2,3	38135b
40	208	51.1	+55 42	8.5	9.6	K2	1	..	38877i	90	55	51.6	+69 58	6.86	6.84	B9	6	..	37974i
41	130	51.1	+23 25	9.4	9.5	A2	2	..	38070i	91	107	51.6	+64 51	8.5	8.5	Ao	1	..	37974i
42	168	51.1	- 8 34	7.48	7.98	F8	7	..	14808b	92	193	51.6	+51 42	7.27	8.34	K2	2	E	38557i
43	163	51.1	-12 4	9.5	10.6	K2	2	..	14158b	93	217	51.6	+40 1	8.47	8.75	Fo	4	..	37367i
44	136	51.1	-21 15	8.0	9.0	F8	5	2,5	39504b	94	152	51.6	+34 20	8.2	8.6	F5	4	..	37367i
45	288	51.1	-28 19	6.20	7.5	Ma	4	..	37020b	95	168	51.6	+ 1 19	9.04	10.04	Ko	2	..	14899b
46	157	51.2	+57 7	9.2	9.2	Ao	1	..	38877i	96	362	51.6	-31 43	9.6	10.6	Ao	2	..	23766b
47	182	51.2	+43 39	8.5	8.9	F5	2	..	37942i	97	327	51.6	-36 10	9.0	9.0	A2	5	0,4-	12198b
48	175	51.2	+37 57	3.94	4.00	A2	..	I,R	2925c	98	73	51.6	-74 16	10.0	10.6	Go	4	..	22155b
49	155	51.2	+28 15	8.6	9.4	G5	5	..	38904i	99	74	51.6	-74 51	6.80	7.7	G5	8	..	23772b
50	152	51.2	+27 31	9.4	10.0	Go	2	..	38904i	100	30	51.7	+76 56	8.9	8.9	Ao	2	..	38133i

THE HENRY DRAPER CATALOGUE.

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0^h 51^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	154	51.7	+59 42	8.7	8.8	A5	2	R	38060i	51	175	52.2	+63 11	7.7	7.5	B2	3	R	38558i
2	184	51.7	+53 52	8.5	9.1	Go	2	..	38879i	52	187	52.2	+61 24	9.0	9.8	G5	2	..	38108i
3	127	51.7	+7 1	9.4	10.6	K5	1	..	10419b	53	216	52.2	+55 17	7.81	7.57	B	3	R	3083b
4	126	51.7	+6 51	9.8	11.0	K5	1	..	10419b	54	199	52.2	+51 36	7.15	7.21	A2	6	0,5	38879i
5	146	51.7	+1 9	9.16	10.34	K5	2	..	14899b	55	172	52.2	+41 57	8.25	9.25	Ko	2	E	37380i
6	132	51.7	-3 16	6.97	7.25	Fo	6	5,8-	37423i	56	129	52.2	+20 57	7.06	7.84	G5	4	..	19788i
7	158	51.7	-16 19	10.0	10.6	Go	2	..	45603b	57	140	52.2	+15 39	8.8	9.8	Ko	3	..	6670m
8	408	51.7	-24 12	9.2	9.2	F8	4	2,4	39504b	58	136	52.2	+8 59	8.5	9.0	F8	1	..	37432i
9	358	51.7	-34 22	9.7	9.6	Go	4	..	23766b	59	374	52.2	-32 25	8.8	10.9	Ko	2	..	23766b
10	266	51.7	-43 13	8.1	9.0	Go	4	5,4	42098b	60	207	52.2	-54 20	9.8	10.4	Go	2	..	45461b
11	215	51.8	-53 7	9.3	9.5	Fo	6	..	45461b	61	186	52.2	-55 30	9.1	9.8	Fo	3	..	45461b
12	75	51.8	-74 44	10.0	10.6	G	4	R	22155b	62	91	52.2	-64 30	7.4	8.0	Go	7	..	22068b
13	156	51.9	+59 34	9.5	9.5	Ao	2	..	38108i	63	79	52.3	+66 55	8.4	8.7	F2	2	..	38068i
14	155	51.9	+26 28	8.0	8.1	A3	4	0,4-	37355i	64	160	52.3	+56 27	8.6	8.6	A	1	..	38877i
15	149	51.9	+24 45	8.8	9.3	F8	4	..	37355i	65	170	52.3	-6 38	8.9	9.7	G5	3	..	14808b
16	153	51.9	+22 52	4.62	5.40	G5	..	5,R	56,72	66	159	52.3	-16 33	8.6	9.1	F8	6	..	23814b
17	152	51.9	+19 21	8.6	9.0	F5	2	5,3	19788i	67	287	52.3	-29 54	9.48	10.6	Ko	1	..	23766b
18	126	51.9	+17 43	9.4	10.4	Ko	1	..	38070i	68	360	52.3	-34 25	8.8	9.6	Ko	2	5,2	23840b
19	91	51.9	+16 45	10.4	10.4	Ao	3	..	6670m	69	280	52.3	-47 24	7.9	9.3	K2	3	..	42798b
20	145	51.9	-0 5	8.04	8.32	Fo	3	..	37423i	70	187	52.3	-55 34	9.6	10.8	K5	1	..	45461b
21	121	51.9	-1 1	9.4	9.9	F8	3	..	23757b	71	59	52.3	-60 18	9.1	9.5	Go	3	..	11991b
22	172	51.9	-15 39	8.4	8.7	F2	5	..	23814b	72	73	52.3	-72 11	10.5	11.0	F8	5	..	22155b
23	166	51.9	-17 37	9.5	10.5	Ko	2	5,1	40863b	73	187	52.4	+43 19	8.4	8.5	A2	2	..	37942i
24	303	51.9	-25 54	7.24	7.4	A2	6	0,9-	37020b	74	153	52.4	+34 50	8.6	9.4	G5	1	..	37380i
25	96	51.9	-65 45	9.7	10.5	G5	3	..	38365b	75	157	52.4	+28 27	5.64	6.64	Ko	10	0,R	37340i
26	237	52.0	+45 18	6.24	7.24	Ko	6	..	37942i	76	132	52.4	+24 11	9.5	10.6	K2	1	..	38904i
27	151	52.0	+24 24	9.4	10.0	Go	2	..	38904i	77	322	52.4	-42 5	9.5	10.8	Go	1	..	39679b
28	153	52.0	+19 53	9.0	9.3	F2	2	..	38070i	78	125	52.4	-52 25	9.2	10.1	K2	4	..	45461b
29	139	52.0	+15 49	8.6	8.9	F2	5	2,3	6670m	79	208	52.4	-53 59	10.0	10.1	A3	4	..	45461b
30	134	52.0	+9 0	8.8	9.8	Ko	1	..	10419b	80	47	52.5	+73 26	8.0	9.0	Ko	1	..	38133i
31	320	52.0	-35 12	9.0	8.8	F5	4	..	23840b	81	264	52.5	+47 41	7.65	8.65	Ko	2	..	37942i
32	338	52.0	-37 45	9.0	10.2	Ko	1	..	14372b	82	164	52.5	+36 58	7.31	7.59	Fo	8	..	37367i
33	235	52.0	-38 59	9.3	9.8	Go	2	..	20646b	83	154	52.5	+34 27	8.1	9.1	Ko	2	5,4	37311i
34	24	52.1	+80 0	6.63	6.97	F2	5	..	37227i	84	158	52.5	+29 47	8.6	9.2	Go	2	..	37311i
35	114	52.1	+65 31	9.2	9.2	A	1	..	38905i	85	159	52.5	+28 59	8.6	9.6	Ko	6	..	37340i
36	118	52.1	+63 35	8.6	8.6	Ao	2	1,2	38905i	86	155	52.5	+19 33	9.4	9.5	A5	2	..	38070i
37	260	52.1	+47 34	8.35	8.4	A2	1	..	38879i	87	142	52.5	+15 31	9.8	10.3	F8	3	..	6670m
38	161	52.1	+36 52	8.1	8.9	G5	4	..	37367i	88	149	52.5	+1 15	7.29	8.07	G5	5	..	37423i
39	160	52.1	+36 32	8.2	8.5	F2	4	..	37367i	89	175	52.5	-15 24	8.8	9.6	G5	4	..	23814b
40	138	52.1	+33 38	8.6	9.1	F8	4	..	37367i	90	364	52.5	-22 58	8.4	9.3	F2	4	..	39504b
41	145	52.1	+14 39	9.8	10.8	Ko	2	..	6670m	91	345	52.5	-36 59	8.3	9.0	Go	5	..	12198b
42	120	52.1	+11 54	8.33	9.40	K2	2	..	37412i	92	210	52.5	-54 41	9.0	10.1	F8	2	..	45461b
43	148	52.1	+0 51	8.0	8.1	A3	4	..	37423i	93	48	52.5	-61 7	8.5	10.0	Ko	3	..	23815b
44	146	52.1	-0 12	7.71	8.49	G5	4	..	37423i	94	53	52.6	+72 16	8.9	9.0	A2	2	..	38068i
45	162	52.1	-13 34	9.8	11.0	K5	1	..	45603b	95	188	52.6	+61 35	9.7	9.7	B9	3	..	38108i
46	283	52.1	-30 18	10.3	10.6	A2	2	..	23766b	96	206	52.6	+45 3	7.17	7.25	A3	5	..	37942i
47	236	52.1	-39 29	9.1	10.0	G5	3	..	12198b	97	148	52.6	+38 57	6.60	7.60	Ko	6	..	37367i
48	56	52.1	-58 8	8.6	9.5	G5	2	..	11991b	98	130	52.6	+20 29	8.8	9.1	F2	3	..	38070i
49	76	52.1	-74 7	10.3	10.9	Go	2	..	22155b	99	122	52.6	+11 30	8.6	8.7	A2	3	R	37412i
50	115	52.2	+65 49	6.00	5.98	B9	9	..	37974i	100	176	52.6	+1 33	7.8	8.3	F8	4	..	37423i

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0^h 52^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	177	<i>m.</i> 52.6	-11 1	8.2	8.2	Ao	6	..	14808b	51	134	<i>m.</i> 53.1	+23 59	8.2	8.7	F8	6	3,4	37355i
2	164	52.6	-12 47	8.4	9.5	K2	5	..	23714b	52	132	53.1	+20 34	9.4	9.9	F8	2	..	38219i
3	258	52.6	-50 8	8.9	9.9	Ko	3	..	42088b	53	130	53.1	+19 13	9.1	9.9	G5	1	..	38070i
4	41	52.6	-70 29	9.4	9.9	F8	4	..	38365b	54	135	53.1	+6 18	6.88	7.66	G5	6	..	37422i
5	..	52.6	-71 46	..	..	Ko	2	..	22155b	55	131	53.1	+3 45	8.2	8.3	A5	5	5,4	37423i
6	61	52.7	+68 49	9.2	9.3	A5	2	..	38068i	56	135	53.1	-3 7	8.8	9.8	Ko	3	..	23768b
7	155	52.7	+34 38	9.4	9.7	Fo	4	..	37367i	57	179	53.1	-11 39	9.3	9.8	F8	3	..	14158b
8	140	52.7	+33 26	6.22	7.22	Ko	10	0,8-	37367i	58	172	53.1	-14 37	9.76	10.94	K5	1	..	45603b
9	154	52.7	+27 27	9.3	10.1	G5	3	..	38004i	59	162	53.1	-16 14	6.97	7.39	F5	9	..	23814b
10	124	52.7	+21 40	9.4	10.2	G5	1	..	38219i	60	367	53.1	-23 8	8.0	9.6	K5	3	3,3	39504b
11	130	52.7	+17 37	9.4	9.8	F5	2	..	38070i	61	211	53.1	-54 2	9.9	10.7	G5	2	..	45461b
12	119	52.7	+13 9	6.44	7.22	G5	4	0,8	37432i	62	62	53.2	+68 40	9.7	9.7	Ao	1	..	38905i
13	131	52.7	+7 5	8.2	9.2	Ko	3	..	37432i	63	202	53.2	+51 59	7.8	7.9	A2	5	0,2	38879i
14	129	52.7	+5 19	8.7	9.9	K5	1	R	14899b	64	168	53.2	+36 39	9.0	10.2	K5	1	..	37380i
15	130	52.7	-2 32	9.3	9.7	F5	3	..	23768b	65	126	53.2	+21 53	8.8	9.8	Ko	2	..	38219i
16	161	52.7	-16 19	8.0	8.3	Fo	8	..	23814b	66	124	53.2	+11 36	8.6	9.4	G5	2	5,1	37412i
17	147	52.7	-19 32	7.08	7.5	Ao	10	..	39504b	67	161	53.2	-5 25	10.2	10.7	F8	1	..	19958b
18	209	52.7	-40 5	8.7	9.1	Ao	6	..	12198b	68	163	53.2	-16 0	10.0	10.5	F8	2	..	23814b
19	93	52.7	-64 37	8.4	8.8	F5	5	E	38229b	69	142	53.2	-21 43	8.4	9.1	F5	4	0,3-	12238b
20	..	52.7	-71 21	..	..	Go	4	..	22155b	70	243	53.2	-41 21	10.3	11.5	G5	1	..	39679b
21	20	52.8	+84 4	6.72	7.14	F5p	6	5,6R	37281i	71	127	53.2	-52 49	7.8	9.2	G5	3	..	12226b
22	63	52.8	+70 24	8.74	8.74	Ao	2	..	38068i	72	26	53.3	+80 28	8.30	8.80	F8	3	..	38964i
23	177	52.8	+1 56	7.8	8.8	Ko	2	..	37423i	73	153	53.3	+24 53	8.9	10.1	K5	2	..	38904i
24	131	52.8	-2 19	6.59	7.37	G5	6	5,6	37423i	74	127	53.3	+22 3	8.8	9.2	F5	2	..	38070i
25	160	52.8	-4 47	8.80	9.30	F8	2	..	14808b	75	144	53.3	+15 47	8.0	9.0	Ko	7	5,4	6670m
26	211	52.8	-40 30	8.7	10.0	G5	3	..	12198b	76	314	53.3	-26 25	7.96	8.9	Ko	7	0,4-	39504b
27	55	52.8	-73 40	9.5	10.0	F8	4	..	22155b	77	344	53.3	-36 45	9.7	9.6	Go	2	..	14372b
28	155	52.9	+27 37	9.4	9.9	F8	1	..	38904i	78	57	53.3	-73 32	10.5	10.8	F2	3	..	122155b
29	176	52.9	-15 45	9.8	10.4	Go	3	..	23814b	79	25	53.4	+81 20	var.	var.	Ao	5	1,9R	37281i
30	311	52.9	-26 46	9.2	10.4	Fo	3	..	23762b	80	162	53.4	+28 45	9.2	10.0	G5	1	..	38904i
31	376	52.9	-31 2	8.36	9.8	K2	4	2,3	23766b	81	135	53.4	+24 9	9.3	9.9	Go	2	..	38904i
32	262	52.9	-49 17	8.8	8.6	F5	4	..	12226b	82	132	53.4	-2 11	8.4	9.2	G5	3	..	37423i
33	75	52.9	-62 48	10.1	11.3	K5	2	..	23815b	83	143	53.4	-20 51	9.2	10.6	K2	2	..	39504b
34	29	52.9	-69 40	9.5	10.5	Ko	2	..	38365b	84	308	53.4	-27 38	7.7	9.8	K2	3	2,3	39504b
35	56	52.9	-73 0	Cl.	Cl.	Con.	5	R	22155b	85	257	53.4	-44 0	8.9	9.0	Fo	6	5,5	39679b
36	77	52.9	-74 22	9.1	9.4	Fo	5	..	23772b	86	72	53.4	-66 50	9.3	9.9	Go	3	..	38365b
37	301	53.0	+48 39	7.85	7.85	Ao	5	1,4	38879i	87	34	53.4	-68 2	10.0	10.5	F8	2	..	38365b
38	215	53.0	+46 31	6.75	6.75	Ao	8	E	38879i	88	58	53.4	-73 37	8.7	8.8	A5	7	..	23772b
39	208	53.0	+44 25	8.1	8.9	G5	3	..	37942i	89	178	53.5	+63 5	9.2	9.0	B	2	R	38108i
40	142	53.0	+30 34	8.8	9.6	G5	2	..	37340i	90	154	53.5	+38 24	9.0	9.3	Fo	4	..	37367i
41	131	53.0	+20 52	6.41	6.41	Ao	8	..	19788i	91	136	53.5	+23 20	9.9	10.7	G5	2	..	38904i
42	148	53.0	+14 39	10.8	11.8	K	1	..	6670m	92	133	53.5	+20 33	9.5	10.5	Ko	1	..	38219i
43	141	53.0	-21 12	7.90	8.4	Fo	7	0,7	12238b	93	158	53.5	+20 3	8.7	9.5	G5	2	..	38219i
44	299	53.0	-28 36	9.8	11.8	K2	2	E	23762b	94	133	53.5	+3 41	8.0	8.5	F8	6	0,5	37423i
45	297	53.0	-28 45	9.3	11.0	Go	4	E	23762b	95	153	53.5	-7 31	9.8	10.2	F5	2	..	19958b
46	241	53.0	-41 48	8.3	9.1	Go	4	..	42098b	96	170	53.5	-12 35	9.0	9.4	F5	6	..	23814b
47	226	53.0	-48 6	8.8	9.5	Ko	4	..	23761b	97	170	53.5	-17 20	9.8	10.4	Go	3	..	40863b
48	91	53.0	-63 49	9.5	9.6	A2	7	..	23815b	98	353	53.5	-37 48	9.0	9.6	F5	3	..	14372b
49	189	53.1	+61 24	8.4	9.2	G5	3	5,2	38108i	99	259	53.5	-44 41	8.36	8.7	F5	5	..	12275b
50	161	53.1	+26 15	7.47	8.54	K2	4	2,4-	37355i	100	42	53.5	-70 10	8.4	8.4	Ao	7	..	38365b

THE HENRY DRAPER CATALOGUE.

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0^h53^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	78	53.5	-74 16	9.4	9.5	A5	4	..	23772b	51	155	54.0	+24 34	8.9	10.0	K2	1	..	38904i
2	191	53.6	+61 43	8.9	9.4	F8	3	0,2	38108i	52	149	54.0	- 0 41	8.5	9.5	Ko	3	..	23757b
3	155	53.6	+39 4	8.2	8.6	F5	4	..	37367i	53	134	54.0	- 2 38	9.3	9.9	Go	1	..	23757b
4	150	53.6	+31 57	7.28	7.34	A2	6	0,6-	37311i	54	136	54.0	- 2 59	8.0	9.1	K2	5	3,2	23768b
5	163	53.6	+27 8	7.16	8.16	Ko	6	0,4-	37355i	55	74	54.0	-66 19	8.8	9.9	K2	4	..	38365b
6	146	53.6	+ 5 7	9.25	9.81	Go	2	..	14899b	56	62	54.0	-67 6	7.2	7.8	Go	10	..	38365b
7	174	53.6	- 6 41	9.8	10.3	F8	2	..	19958b	57	15	54.0	-81 15	9.3	10.1	G5	4	..	38135b
8	214	53.6	-40 31	9.0	9.2	Ko	4	..	12198b	58	55	54.1	+73 9	8.4	8.5	A3	2	..	38068i
9	130	53.6	-52 18	8.7	9.3	A2	4	3,4-	12275b	59	141	54.1	+ 8 49	9.0	10.0	Ko	1	..	10419b
10	218	53.6	-54 23	9.8	10.4	Go	2	..	45461b	60	137	54.1	- 2 56	9.3	10.4	K2	1	..	23757b
11	191	53.6	-55 47	9.0	10.1	Ko	3	..	45461b	61	175	54.1	-19 52	7.83	8.8	G5	6	0,3-	12238b
12	95	53.6	-64 26	9.0	9.3	F2	4	..	38229b	62	331	54.1	-38 2	9.7	10.8	G5	1	..	14372b
13	80	53.6	-75 57	9.2	9.2	B8	6	..	23772b	63	263	54.1	-44 29	10.8	10.8	F8	1	..	39679b
14	31	53.7	+76 20	8.37	8.43	A2	3	..	38133i	64	272	54.2	+47 29	7.00	6.95	B8	7	..	38879i
15	65	53.7	+70 28	6.46	6.46	Ao	8	0,10	37974i	65	142	54.2	+13 35	10.1	10.6	F8	2	..	6670m
16	63	53.7	+68 49	8.6	8.6	Ao	2	..	37974i	66	420	54.2	-24 14	9.8	10.4	Go	2	..	39504b
17	220	53.7	+46 18	8.1	8.1	B9	3	..	37942i	67	382	54.2	-25 30	9.0	11.0	Ko	2	..	39504b
18	170	53.7	+36 18	8.8	10.2	Ma	..	..	m	68	312	54.2	-27 4	10.0	10.7	F5	3	..	23762b
19	149	53.7	+15 11	10.8	10.8	Ao	2	..	6670m	69	299	54.2	-29 57	9.58	9.4	A2	4	..	45166b
20	176	53.7	- 6 25	6.70	7.70	Ko	7	..	14808b	70	220	54.2	-54 15	9.6	10.1	F8	4	..	45461b
21	174	53.7	- 8 17	9.5	10.3	G5	3	..	19958b	71	50	54.2	-61 14	6.37	6.3	A3	..	1,8-	56,118
22	173	53.7	-11 55	5.79	6.57	G5	10	5,R	14808b	72	100	54.2	-65 15	8.7	9.7	Ko	3	..	38365b
23	173	53.7	-14 41	9.16	9.94	G5	4	..	23814b	73	101	54.2	-65 18	8.5	8.8	F2	6	..	38365b
24	159	53.7	-18 32	9.5	10.1	Go	2	..	40863b	74	..	54.2	-75 32	var.	var.	Md	3	R	38135b
25	358	53.7	-37 36	9.3	10.0	G5	1	..	14372b	75	109	54.3	+64 37	8.5	8.5	B9	3	..	38905i
26	261	53.7	-43 53	8.8	9.6	G5	3	0,2	45106b	76	181	54.3	+62 30	8.4	8.4	B8	4	..	38060i
27	261	53.7	-50 34	10.1	10.1	A5	3	..	42088b	77	141	54.3	+60 16	9.7	9.8	A2	1	..	38108i
28	309	53.8	+48 26	7.10	7.52	F5	10	..	36956i	78	156	54.3	+24 31	8.8	10.2	Ma	2	..	38904i
29	199	53.8	+40 25	8.37	8.37	Ao	4	..	37367i	79	148	54.3	+15 36	8.6	9.1	F8	5	2,3	6670m
30	96	53.8	+16 23	9.1	9.4	Fo	4	0,2	6670m	80	159	54.3	+ 0 15	7.78	8.78	Ko	4	..	37423i
31	136	53.8	+ 7 11	8.7	9.1	F5	2	..	37432i	81	124	54.3	- 1 13	7.7	8.1	F5	5	0,7	37423i
32	174	53.8	-14 12	8.7	9.0	F2	4	..	23814b	82	289	54.3	-47 3	9.1	9.6	Ko	2	0,1-	39679b
33	178	53.8	-15 13	9.5	10.6	K2	1	..	45603b	83	237	54.3	-51 48	7.7	8.7	K2	5	2,4-	12275b
34	179	53.8	-15 41	9.8	10.2	F5	2	..	23814b	84	35	54.3	-68 44	8.6	9.4	G5	6	..	38365b
35	174	53.8	-20 10	7.26	8.8	Ma	5	0,5-	39504b	85	33	54.3	-71 0	8.8	10.2	Ma	3	..	38365b
36	309	53.8	-27 21	9.5	10.7	Go	3	..	23762b	86	28	54.4	+78 52	8.1	8.2	A2	2	..	37227i
37	297	53.8	-29 54	4.39	4.27	B5	..	R	28,195	87	148	54.4	+59 11	8.6	8.7	A2	2	..	38060i
38	268	53.8	-49 7	8.8	8.9	Ao	4	..	12226b	88	..	54.4	+44 10	6.84	6.82	B9	8	R	38917i
39	58	53.8	-58 14	7.6	8.3	F8	4	0,4	37016b	89	..	54.4	+44 10	6.04	6.02	F5	2	..	37942i
40	96	53.8	-64 19	8.2	9.0	G5	7	..	38229b	90	192	54.4	+43 19	8.9	9.3	F5	2	..	37942i
41	224	53.9	+39 37	7.38	7.38	Ao	6	..	37367i	91	162	54.4	+20 7	8.55	9.11	Go	3	5,2	38070i
42	141	53.9	+14 11	9.1	10.1	Ko	3	5,1	6670m	92	306	54.4	-45 34	9.7	10.5	G	1	..	39679b
43	180	53.9	+ 2 7	8.8	9.2	F5	2	..	37423i	93	235	54.4	-48 20	8.7	9.8	G5	3	..	42798b
44	177	53.9	- 5 57	11.1	11.1	Ao	1	..	19958b	94	51	54.4	-61 19	8.9	9.4	A2	4	..	23815b
45	160	53.9	-18 1	8.9	9.3	F5	5	..	45603b	95	34	54.4	-71 24	8.6	9.0	F5	5	..	38365b
46	149	53.9	-19 3	9.3	10.5	K2	2	..	40863b	96	..	54.4	-74 15	..	..	Ko	2	..	22155b
47	161	54.0	+59 59	7.16	7.94	G5	2	..	3083b	97	163	54.5	+59 55	8.8	8.8	Ao	3	..	38108i
48	162	54.0	+39 8	8.4	8.4	B9	4	..	37367i	98	208	54.5	+51 36	7.8	8.8	Ko	2	..	38879i
49	174	54.0	+37 9	9.0	9.3	Fo	4	..	37367i	99	227	54.5	+46 47	7.55	8.62	K2	2	..	37942i
50	153	54.0	+31 59	7.03	7.45	F5	6	0,6-	37311i	100	226	54.5	+46 21	7.9	8.3	F5	2	..	37942i

5800

0^h 54^m. 5

H.D.	DM.	R.A. 1900	Dec. 1900	Sp.	Ptg.	Ptm.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	158	54.5	+31 20	7.9	8.7	G5	4	..	37340i	51	166	55.0	+59 49	8.0	8.4	F5	3	5,2	38108i
2	143	54.5	+14 5	9.00	9.34	F2	2	R	37412i	52	216	55.0	+42 35	7.85	8.85	Ko	3	..	37942i
3	135	54.5	+3 26	9.4	9.5	A2	4	..	14899b	53	189	55.0	+38 3	8.6	9.6	Ko	2	..	37367i
4	152	54.5	+0 8	8.93	9.03	Ko	2	..	23757b	54	190	55.0	+37 15	7.00	7.00	Ao	8	..	37367i
5	125	54.5	-1 42	8.67	9.45	G5	3	..	23768b	55	147	55.0	+25 53	8.8	9.8	Ko	2	..	38904i
6	135	54.5	-1 51	9.0	9.6	Go	4	0,3	23768b	56	158	55.0	+24 55	9.3	10.3	Ko	1	..	38904i
7	163	54.5	-5 38	9.2	10.3	K2	1	..	19958b	57	135	55.0	+17 41	7.37	8.15	G5	6	..	37412i
8	176	54.5	-12 25	9.8	10.3	F8	2	..	14158b	58	133	55.0	+5 40	9.1	9.6	F8	2	..	14899b
9	340	54.5	-42 17	8.7	9.4	Go	5	..	39679b	59	185	55.0	+2 6	7.92	8.99	K2	3	..	37423i
10	284	54.5	-43 47	8.9	9.6	Go	2	0,4-	45106b	60	137	55.0	-2 3	9.5	10.0	F8	3	..	23768b
11	37	54.5	-77 6	8.1	8.9	G5	6	0,7	23772b	61	136	55.0	-2 33	7.24	7.66	F5	6	0,6-	14808b
12	60	54.6	+69 23	9.4	9.8	F5	2	..	38068i	62	183	55.0	-15 18	10.0	10.6	Go	1	..	45603b
13	179	54.6	+57 50	7.15	7.23	A3	5	1,3	3083b	63	162	55.0	-18 36	8.6	9.4	G5	3	..	40863b
14	165	54.6	-4 59	8.6	9.1	F8	5	..	14808b	64	147	55.0	-20 59	9.5	9.9	Go	3	..	39504b
15	385	54.6	-31 8	8.3	9.7	Fo	3	..	23840b	65	172	55.0	-22 45	9.6	10.5	Go	2	..	39504b
16	357	54.6	-36 2	9.0	9.1	A3	3	..	14372b	66	389	55.0	-24 59	8.80	9.8	F8	4	3,4	39504b
17	27	54.7	+81 34	8.41	8.97	G	2	..	37227i	67	388	55.0	-25 6	8.2	10.2	Ko	3	5,4	39504b
18	160	54.7	+22 53	9.9	10.9	Ko	2	..	38070i	68	321	55.0	-26 24	8.1	8.6	F8	6	6,5-	39504b
19	145	54.7	+8 42	9.4	9.9	F8	2	..	10419b	69	396	55.0	-31 53	7.56	9.1	Ko	6	0,5	20245b
20	131	54.7	+5 56	6.31	7.66	Ma	6	..	37432i	70	161	55.1	+23 9	9.0	9.8	G5	3	..	38904i
21	141	54.7	+2 47	8.8	9.2	F5	3	..	37423i	71	139	55.1	+20 42	7.25	8.32	K2	7	2,4	38904i
22	166	54.7	-4 51	7.85	8.85	Ko	5	..	14808b	72	..	55.1	+17 31	..	..	F8	2	..	38219i
23	177	54.7	-12 28	10.0	10.4	F5	1	..	14158b	73	97	55.1	+16 42	8.0	8.8	G5	5	5,8	37412i
24	395	54.7	-32 30	9.7	10.0	A5	3	..	23840b	74	173	55.1	-17 11	8.4	9.4	Ko	4	..	23814b
25	336	54.7	-35 11	7.69	8.7	Ko	6	0,6-	12198b	75	390	55.1	-30 54	9.8	10.6	Go	1	..	45166b
26	92	54.7	-63 0	9.1	10.2	K2	6	..	23815b	76	391	55.1	-31 48	9.0	10.0	G5	3	0,2	20245b
27	..	54.7	-71 47	..	..	F5	4	..	22155b	77	64	55.1	-58 57	7.5	9.5	Ko	3	5,3	37016b
28	..	54.7	-72 9	..	..	Go	3	..	22155b	78	26	55.1	-78 1	9.9	10.3	F5	2	..	38135b
29	..	54.7	-74 18	..	..	Ko	1	..	22155b	79	34	55.2	+77 48	8.4	9.2	G5	2	..	37615i
30	188	54.8	+37 46	9.4	10.0	Go	4	2,4	37380i	80	66	55.2	+68 24	9.2	9.8	Go	2	..	38068i
31	160	54.8	+35 9	7.67	7.73	A2	6	..	37367i	81	202	55.2	+54 3	8.0	8.1	A2	4	..	38879i
32	173	54.8	+32 17	8.1	9.1	Ko	4	..	37340i	82	198	55.2	+50 21	7.67	7.55	B5	5	..	38879i
33	159	54.8	+31 47	8.8	9.3	F8	1	..	37311i	83	137	55.2	+18 9	7.27	8.05	G5	7	..	37412i
34	168	54.8	-5 43	8.6	9.4	G5	4	..	19958b	84	197	55.2	-9 22	9.2	9.7	F8	3	..	19958b
35	196	54.8	-8 51	7.50	8.28	G5	5	..	14808b	85	148	55.2	-21 36	9.5	10.0	K2	2	..	39504b
36	247	54.8	-41 32	9.7	9.8	F5	5	0,2	39679b	86	392	55.2	-30 59	9.3	10.1	Go	1	..	45166b
37	61	54.9	+70 0	7.84	8.26	F5	3	R	37974i	87	278	55.2	-46 27	8.5	9.6	Ko	3	..	12275b
38	..	54.9	+70 0	..	..	A5	3	..	37974i	88	269	55.2	-49 58	9.58	10.4	Ko	1	..	42088b
39	64	54.9	+68 49	6.67	6.65	B9	8	..	37974i	89	123	55.3	+65 42	8.5	9.1	Go	1	..	37974i
40	224	54.9	+56 5	9.4	10.8	Mb	..	..	M	90	143	55.3	+60 31	8.9	9.3	F5	3	5,2	38108i
41	197	54.9	+50 47	8.6	8.6	Ao	3	..	38879i	91	167	55.3	+19 45	8.6	9.4	G5	4	0,3-	38070i
42	229	54.9	+46 47	7.60	7.66	A2	4	..	36956i	92	142	55.3	+6 49	8.2	8.6	F5	3	..	37432i
43	130	54.9	+11 24	8.0	8.1	A5	4	5,4	37412i	93	179	55.3	-12 33	9.5	9.9	F5	3	..	14158b
44	150	54.9	+4 21	9.4	9.4	Ao	3	..	14899b	94	273	55.3	-44 45	9.72	10.0	G5	1	..	39679b
45	294	54.9	-47 9	9.2	9.6	G5	4	0,2-	23761b	95	226	55.3	-54 41	9.1	10.1	G5	3	..	45461b
46	53	54.9	-61 47	9.3	11.0	G	1	R	23815b	96	212	55.4	+51 31	7.60	7.60	Ao	4	..	38879i
47	..	54.9	-61 47	..	..	..	..	..	..	97	181	55.4	+36 8	7.57	8.57	Ko	6	..	37367i
48	19	55.0	+85 43	4.52	5.52	Ko	..	0,10	1648c	98	148	55.4	+25 38	9.2	9.7	F8	2	..	38904i
49	122	55.0	+65 54	8.9	8.9	B9	1	..	M	99	99	55.4	+16 57	9.4	10.4	Ko	3	0,1	6670m
50	120	55.0	+65 20	8.20	8.98	G5	2	..	37974i	100	152	55.4	+14 19	9.4	10.0	Go	3	..	6670m

THE HENRY DRAPER CATALOGUE.

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0^h 55^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.		
1	147	m. 55.4	° + 8	' 57	8.2	8.5	Fo	2	..	37432i	51	36	m. 55.8	° -68	' 34	9.5	10.1	Go	3	..	38365b
2	149	55.4	-20	49	8.8	9.6	Go	4	..	39504b	52	..	55.8	-71	56	..	..	Ko	2	..	22155b
3	274	55.4	-44	23	10.5	10.8	F8	1	..	39679b	53	281	55.9	+47	49	8.0	9.1	K2	1	..	38879i
4	270	55.4	-50	18	7.6	8.7	Ma	4	0,4-	12275b	54	169	55.9	+39	6	9.0	9.1	A5	4	..	37367i
5	29	55.5	+81	43	8.58	9.08	F8	2	..	38964i	55	164	55.9	+35	2	8.6	9.1	F8	2	..	37367i
6	89	55.5	+68	9	8.0	8.8	G5	3	5,2	38068i	56	166	55.9	+30	6	9.11	9.39	F	2	..	37340i
7	232	55.5	+47	0	8.6	8.9	F2	2	..	37942i	57	132	55.9	+11	52	9.0	9.0	Ao	2	..	37412i
8	138	55.5	+17	58	8.0	8.3	F2	4	..	37412i	58	143	55.9	-2	6	9.2	9.7	F8	3	..	23768b
9	144	55.5	+8	10	9.6	10.4	G5	1	..	10419b	59	209	55.9	-9	54	7.60	7.68	A3	8	..	14808b
10	175	55.5	-17	36	8.7	9.0	Fo	5	2,5	23814b	60	187	55.9	-14	11	9.2	9.8	Go	2	..	45603b
11	179	55.5	-19	55	7.67	9.1	Go	5	0,5-	12238b	61	435	55.9	-24	49	8.55	9.3	F5	5	5,5	39504b
12	394	55.5	-25	39	9.0	9.9	F8	2	..	39504b	62	326	55.9	-27	46	9.6	11.3	K2	2	..	23762b
13	..	55.5	-73	34	..	..	G5	2	..	22155b	63	367	55.9	-36	47	7.00	8.1	Ko	8	0,6	14372b
14	4	55.6	+88	29	6.48	6.54	A2	8	..	37281i	64	248	55.9	-41	39	9.7	10.4	G5	2	..	39679b
15	185	55.6	+63	4	8.2	8.5	Fo	4	..	38068i	65	70	56.0	+70	30	8.4	8.4	Ao	3	..	37974i
16	215	55.6	+44	55	7.00	7.42	F5	4	E	36956i	66	152	56.0	+59	0	7.9	8.2	F2	2	..	38060i
17	166	55.6	+28	29	9.0	9.8	G5	3	..	38904i	67	200	56.0	+50	31	8.4	8.9	F8	3	..	38879i
18	149	55.6	+16	9	9.1	9.2	A2	4	3,2	6670m	68	170	56.0	+38	17	9.3	9.9	Go	2	..	37380i
19	140	55.6	-2	12	7.04	8.39	Mb	7	0,4-	23768b	69	165	56.0	+34	51	8.6	8.7	A3	4	..	37380i
20	183	55.6	-12	43	8.3	9.7	Mb	6	..	23814b	70	164	56.0	+31	17	8.8	9.9	K2	2	..	37340i
21	176	55.6	-17	37	9.5	9.8	Fo	4	2,3	23814b	71	115	56.0	+10	39	8.18	8.96	G5	2	0,1	37412i
22	322	55.6	-27	27	10.0	10.8	F8	2	..	23762b	72	146	56.0	+7	30	8.2	9.0	G5	2	..	10209b
23	319	55.6	-45	38	9.4	9.6	G5	3	..	39679b	73	143	56.0	+2	54	8.8	9.9	K2	2	..	14899b
24	132	55.6	-51	53	9.2	10.4	Ko	2	..	45461b	74	144	56.0	-2	15	9.3	10.1	G5	2	..	23768b
25	198	55.6	-55	2	9.2	10.1	Go	3	..	45461b	75	171	56.0	-5	11	7.38	7.88	F8	6	..	14808b
26	48	55.7	+71	35	9.4	10.2	G5	2	..	38134i	76	397	56.0	-24	58	9.40	9.9	Go	1	..	10629b
27	320	55.7	+49	1	6.90	7.68	G5	2	..	2929b	77	291	56.0	-43	52	9.1	9.0	A5	6	2,3-	39679b
28	150	55.7	+25	57	8.4	9.6	K5	3	..	38904i	78	227	56.0	-53	22	9.2	10.8	K2	1	..	45461b
29	155	55.7	+4	17	8.0	8.4	F5	3	E	37432i	79	78	56.0	-62	0	9.5	10.1	Go	5	..	23815b
30	187	55.7	+2	3	8.6	9.1	F8	2	..	14899b	80	..	56.0	-72	42	..	..	Oa	..	..	76,28
31	131	55.7	-1	34	8.5	9.6	K2	3	..	23768b	81	229	56.1	+55	48	6.93	7.93	Ko	4	..	3083b
32	163	55.7	-18	39	7.8	8.1	Fo	7	0,6	39504b	82	237	56.1	+47	9	7.80	8.22	F5	4	3,4	38879i
33	181	55.7	-20	37	7.22	8.7	Ko	6	0,5-	10629b	83	199	56.1	+43	35	8.6	8.7	A2	2	..	37942i
34	326	55.7	-26	17	7.40	7.6	G5	6	0,7-	12238b	84	184	56.1	+35	28	8.22	9.22	Ko	4	..	37367i
35	220	55.7	-40	38	8.3	9.7	Ko	3	..	14372b	85	162	56.1	+27	47	8.8	9.6	G5	2	..	37340i
36	241	55.7	-51	4	7.8	8.7	Ko	6	0,5-	12275b	86	141	56.1	+17	59	8.0	8.8	G5	3	..	37412i
37	212	55.7	-57	3	9.1	10.1	Go	2	..	45461b	87	145	56.1	+13	28	10.1	10.7	Go	3	..	6670m
38	62	55.7	-58	14	9.1	10.4	Ko	3	..	23815b	88	135	56.1	+11	23	7.82	8.24	F5	4	0,3	37412i
39	55	55.7	-61	52	10.1	10.4	F2	1	..	23815b	89	147	56.1	+7	55	8.1	9.1	Ko	2	..	37432i
40	..	55.7	-71	45	..	..	G5	3	..	22155b	90	222	56.1	-40	5	10.3	10.6	Go	2	..	20646b
41	..	55.7	-72	13	..	..	G5	3	..	22155b	91	322	56.1	-45	52	9.3	9.6	F5	3	3,2	39679b
42	74	55.7	-72	43	neb.	neb.	Con.	4	R	23772b	92	281	56.1	-46	6	9.7	10.0	G5	2	..	39679b
43	..	55.7	-74	13	..	..	G5	2	..	22155b	93	134	56.1	-52	41	9.1	10.1	Go	3	..	45461b
44	180	55.8	+57	17	6.74	6.80	A2	6	0,4	3083b	94	213	56.1	-57	28	8.1	8.9	G5	3	..	37016b
45	139	55.8	+17	19	8.2	8.5	Fo	4	..	37412i	95	30	56.1	-69	41	11.0	10.5	B8	2	..	38365b
46	145	55.8	+8	15	8.6	9.4	G5	2	..	10419b	96	67	56.2	+68	42	8.1	8.9	G5	3	..	37974i
47	132	55.8	-1	24	9.0	9.5	F8	4	..	23768b	97	147	56.2	+30	33	8.2	9.2	Ko	2	..	37340i
48	327	55.8	-26	50	8.4	9.0	Ko	5	0,3-	39504b	98	138	56.2	+23	36	9.9	10.4	F8	2	..	38904i
49	324	55.8	-27	40	10.5	10.8	Go	2	..	23762b	99	172	56.2	-4	57	9.5	10.5	Ko	1	..	19958b
50	77	55.8	-62	46	10.0	10.5	F8	3	..	23815b	100	155	56.2	-19	22	8.2	9.6	Ko	3	0,2	12238b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	399	56.2	-25 18	8.6	9.1	Go	4	2,5	39504b	51	116	56.7	+ 9 33	8.6	9.1	F8	3	..	10419b
2	370	56.2	-35 54	9.0	10.2	F5	1	..	14372b	52	129	56.7	- 4 8	9.5	10.7	K5	1	..	19958b
3	200	56.2	-55 30	9.1	10.1	A2	3	..	45461b	53	190	56.7	- 6 30	9.0	9.6	Go	4	..	14808b
4	65	56.2	-67 49	8.6	9.4	G5	6	..	38365b	54	314	56.7	-28 0	9.0	10.8	K5	1	..	23762b
5	79	56.2	-74 17	9.1	9.5	F5	4	..	23772b	55	260	56.7	-39 28	5.57	6.57	Ko	..	0,7 R	56,118
6	30	56.3	+81 26	7.89	7.89	Ao	4	1,4	37281i	56	252	56.7	-41 36	9.6	9.8	Fo	4	..	39679b
7	50	56.3	+73 38	8.4	8.8	F5	2	..	38133i	57	102	56.7	-65 12	9.5	9.6	A2	4	..	38365b
8	188	56.3	+62 49	9.4	9.4	Ao	2	..	38060i	58	81	56.7	-76 21	8.5	8.9	F5	7	3,7 R	38135b
9	163	56.3	+24 46	6.76	7.54	G5	6	..	10154i	59	240	56.8	+52 19	7.30	7.30	Ao	6	..	38879i
10	151	56.3	+15 31	10.1	10.2	A2	2	..	6670m	60	284	56.8	+47 58	8.0	8.5	F8	2	0,2	37942i
11	188	56.3	- 5 51	8.8	9.2	F5	3	..	14808b	61	182	56.8	+36 39	8.9	9.5	Go	2	..	37380i
12	350	56.3	-42 0	9.3	10.8	G5	2	..	39679b	62	152	56.8	+33 56	9.2	10.3	K2	1	..	37380i
13	228	56.3	-53 7	7.37	7.9	Fo	5	2,5	11991b	63	167	56.8	+23 12	9.4	10.0	Go	2	..	38904i
14	66	56.3	-60 48	8.9	9.3	Ao	2	..	11991b	64	191	56.8	+ 2 0	8.0	8.5	F8	5	3,7	37423i
15	63	56.4	+69 47	7.94	7.94	Ao	4	0,3	38068i	65	156	56.8	- 0 7	9.1	9.4	F2	3	..	37688b
16	115	56.4	+64 35	8.9	9.0	A3	2	..	38108i	66	187	56.8	-15 30	10.0	10.5	F8	2	..	45603b
17	146	56.4	+61 3	8.6	9.2	Go	2	..	38108i	67	183	56.8	-19 57	8.2	9.0	Go	4	0,4-	10629b
18	322	56.4	+48 56	7.8	7.8	Ao	4	0,3	38879i	68	406	56.8	-31 28	9.0	10.1	F5	2	..	20245b
19	144	56.4	+ 6 48	8.2	8.8	Go	2	..	37432i	69	254	56.8	-40 58	9.3	9.2	F2	5	..	20646b
20	134	56.4	- 0 53	8.6	8.9	F2	4	..	23768b	70	136	56.8	-52 22	9.9	11.0	K2	1	..	45461b
21	173	56.4	- 4 58	9.5	10.5	Ko	2	..	19958b	71	102	56.8	-64 50	8.6	9.4	G5	5	0,5	38365b
22	177	56.4	-16 49	8.8	9.1	Fo	7	..	23814b	72	82	56.8	-76 21	9.3	9.8	F8	3	..	23772b
23	298	56.4	-29 26	9.0	9.8	Ko	3	5,2	23762b	73	153	56.9	+61 15	8.4	9.2	G5	2	0,1	38108i
24	43	56.4	-70 49	9.9	10.5	G	1	..	38365b	74	174	56.9	+39 6	8.8	8.8	Ao	3	..	37380i
25	80	56.4	-74 35	9.9	10.3	F5	5	..	22155b	75	186	56.9	+35 50	9.3	9.3	Ao	1	..	37380i
26	196	56.5	+62 5	7.8	8.8	Ko	4	..	38060i	76	166	56.9	+35 9	9.17	9.31	A5	2	..	37380i
27	155	56.5	+58 45	7.7	8.8	K2	2	2,1	38108i	77	151	56.9	+ 7 24	7.84	7.92	G5	2	..	37432i
28	202	56.5	+50 30	6.62	6.70	A3	7	1,7-	3260b	78	191	56.9	-14 40	8.56	8.90	F2	5	..	23814b
29	139	56.5	+23 15	9.4	9.9	F8	2	..	38904i	79	448	56.9	-23 55	8.3	9.1	K2	6	2,5-	39504b
30	153	56.5	+ 9 12	8.0	8.8	G5	2	..	37432i	80	344	56.9	-38 45	6.66	7.7	Ko	..	5,5	56,118
31	159	56.5	- 7 19	7.26	8.33	K2	7	..	14808b	81	255	56.9	-41 26	9.7	11.1	Ko	1	..	39679b
32	212	56.5	- 9 57	8.9	9.3	F5	2	..	14808b	82	37	56.9	-68 38	9.1	10.5	Ma	4	..	38365b
33	304	56.5	-46 53	8.2	9.6	Ko	2	..	20260b	83	72	57.0	+70 53	9.2	9.6	F5	2	..	38134i
34	27	56.5	-78 1	9.5	10.0	F8	4	..	38135b	84	216	57.0	+51 16	6.81	6.69	B5	6	0,6-	3260b
35	171	56.6	+19 19	9.4	10.2	G5	1	..	38219i	85	221	57.0	+44 54	8.7	9.0	Fo	2	..	37942i
36	188	56.6	-10 46	9.0	9.4	F5	2	..	14808b	86	176	57.0	+38 57	8.2	8.3	A5	6	..	37367i
37	180	56.6	-16 48	6.58	7.36	G5	8	..	23814b	87	192	57.0	-13 52	9.2	10.0	G5	2	..	45603b
38	179	56.6	-17 3	10.0	10.6	Go	2	..	23814b	88	334	57.0	-26 25	10.0	9.6	A5	3	0,1	23762b
39	179	56.6	-21 59	9.8	10.5	Go	1	..	39504b	89	198	57.0	-56 42	8.7	9.9	Go	3	..	45461b
40	401	56.6	-32 24	9.6	10.9	Go	1	..	45166b	90	..	57.0	-73 17	..	..	G5	2	..	22155b
41	387	56.6	-33 54	7.75	9.1	Ko	3	..	20245b	91	90	57.1	+66 23	8.9	9.4	F8	2	..	38905i
42	328	56.6	-45 50	9.4	10.0	G5	2	0,1	39679b	92	241	57.1	+47 9	7.76	7.76	Ao	2	..	36956i
43	64	56.6	-58 15	9.1	10.7	K5	2	..	23815b	93	169	57.1	+27 13	6.67	7.09	F5	6	0,6-	37340i
44	95	56.6	-63 41	10.3	11.1	G5	2	..	23815b	94	138	57.1	+ 5 20	8.76	9.32	Go	3	..	14899b
45	44	56.6	-70 43	7.6	7.9	F2	9	..	38365b	95	205	57.1	- 9 23	9.5	10.0	F8	4	..	19958b
46	58	56.7	+72 20	8.7	8.8	A2	2	..	38068i	96	233	57.1	-54 7	8.4	10.1	K5	3	..	45461b
47	116	56.7	+64 18	8.0	8.5	F8	3	..	38905i	97	66	57.1	-67 0	10.2	10.7	F8	2	..	38365b
48	169	56.7	+59 36	9.2	9.2	B9	2	..	38108i	98	158	57.2	+58 34	8.0	9.0	Ko	2	0,1	38108i
49	167	56.7	+31 38	9.3	9.4	A2	4	..	37340i	99	167	57.2	+35 4	8.3	9.1	G5	2	..	37367i
50	168	56.7	+29 37	8.6	9.4	G5	2	..	37340i	100	149	57.2	+13 39	9.8	11.0	K5	1	..	6670m

THE HENRY DRAPER CATALOGUE.

6100

0^h 57^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	158	57.2	+ 4 31	8.4	9.5	K2	4	..	14899b	51	152	57.5	+13 22	9.4	10.2	G5	2	..	6670m
2	190	57.2	-11 47	8.9	10.0	K2	3	..	14158b	52	159	57.5	+ 8 36	6.67	7.09	F5	5	..	37432i
3	186	57.2	-20 12	8.4	8.8	Go	4	0,4-	39504b	53	147	57.5	+ 3 53	8.8	9.4	Go	4	..	14899b
4	315	57.2	-30 32	9.5	10.6	G5	2	..	20245b	54	182	57.5	- 8 33	9.5	10.6	K2	1	..	19958b
5	357	57.2	-42 40	9.5	11.7	K	1	..	39679b	55	170	57.5	-16 40	8.8	9.8	Ko	2	..	23814b
6	289	57.2	-46 45	8.2	7.9	F2	5	..	20260b	56	183	57.5	-22 8	8.2	8.7	G5	5	0,7	10629b
7	58	57.2	-61 24	6.86	7.4	Go	6	0,5 R	44374b	57	250	57.5	-47 56	10.5	10.4	G	2	..	20260b
8	31	57.2	-69 5	9.8	9.9	A5	4	..	38365b	58	232	57.5	-53 42	8.3	9.9	G5	3	0,2	17627b
9	23	57.2	-78 53	9.6	10.1	F8	4	..	38135b	59	103	57.5	-64 46	8.70	10.2	Ko	4	0,4	38365b
10	68	57.3	+69 1	9.2	9.3	A2	2	R	38905i	60	45	57.5	-70 44	9.5	10.5	Ko	2	..	22155b
11	198	57.3	+61 25	9.2	9.8	Go	2	..	38108i	61	81	57.5	-74 25	9.8	10.6	G5	3	..	22155b
12	241	57.3	+52 37	7.75	9.10	Mb	2	..	38879i	62	38	57.5	-77 23	10.6	10.9	F	2	..	38135b
13	289	57.3	+48 11	8.2	8.3	A2	3	0,2	38879i	63	51	57.6	+73 50	6.78	6.78	Ao	8	0,7	37615i
14	243	57.3	+46 50	6.36	6.64	Fo	6	..	36956i	64	147	57.6	+ 6 58	8.0	8.0	Aop	3	R	37432i
15	224	57.3	+42 49	8.0	8.0	Ao	3	..	37942i	65	160	57.6	+ 4 31	9.0	9.1	A2	2	..	14899b
16	209	57.3	+40 48	5.86	5.92	A2	10	0,6	37367i	66	411	57.6	-30 56	9.3	10.6	Ko	2	5,2	23766b
17	153	57.3	+34 8	9.0	9.6	Go	2	..	37380i	67	408	57.6	-32 39	9.9	11.7	G5	1	..	45166b
18	168	57.3	+31 16	5.46	5.44	B9	..	R	56,72	68	282	57.6	-50 12	8.18	8.7	Go	4	0,3	12275b
19	150	57.3	+13 43	8.93	9.71	G5	4	0,1	6670m	69	61	57.6	-61 22	9.1	9.5	Ao	4	..	23815b
20	158	57.3	+ 8 17	6.83	7.11	Fo	4	..	37432i	70	81	57.6	-62 42	8.6	9.0	F5	8	..	23815b
21	159	57.3	+ 5 13	8.51	8.65	A5	4	..	14899b	71	..	57.6	-73 6	..	..	G5	2	..	22155b
22	148	57.3	- 2 35	9.2	9.7	F8	4	..	23768b	72	59	57.6	-73 14	8.03	9.2	Ko	7	..	23772b
23	191	57.3	-11 12	8.4	9.4	Ko	3	..	14808b	73	276	57.7	+50 1	8.2	8.2	A	3	R	38879i
24	182	57.3	-22 8	8.0	9.1	Ko	5	0,4	12238b	74	275	57.7	+49 47	8.02	8.58	Go	3	..	38879i
25	262	57.3	-39 37	9.7	10.0	F5	2	..	14372b	75	170	57.7	+26 45	8.9	9.9	Ko	2	..	38904i
26	59	57.3	-61 50	9.1	10.1	F8	5	..	23815b	76	153	57.7	+14 7	9.6	10.0	F5	3	..	6670m
27	79	57.3	-62 18	10.0	10.1	A5	7	..	23815b	77	192	57.7	- 6 22	9.8	10.3	F8	2	..	19958b
28	130	57.4	+63 46	9.5	9.5	A	1	..	38108i	78	410	57.7	-32 6	5.52	5.58	A2	..	2,R	56,116
29	191	57.4	+63 9	7.8	8.4	Go	3	0,3	38108i	79	336	57.7	-45 43	7.6	8.0	Fo	6	..	20260b
30	157	57.4	+60 32	5.94	6.22	Fo	7	..	3083b	80	283	57.7	-50 16	9.4	9.5	F8	4	0,2	39664b
31	149	57.4	+31 3	9.4	9.8	F5	2	..	37340i	81	32	57.7	-69 7	9.2	10.2	Ko	2	..	38365b
32	170	57.4	+29 27	8.0	9.0	Ko	3	..	38704i	82	200	57.8	+61 18	8.6	8.4	Bo	2	..	38108i
33	156	57.4	+25 47	6.87	7.21	F2	6	2,4	37340i	83	187	57.8	+57 38	8.6	8.7	A2	2	..	38877i
34	167	57.4	+24 20	9.4	10.2	G5	2	..	38904i	84	174	57.8	+20 3	9.0	9.3	Fo	2	..	38070i
35	103	57.4	+16 34	9.6	10.2	Go	3	..	6670m	85	154	57.8	+15 36	8.58	9.58	Ko	4	5,2	6670m
36	165	57.4	- 7 14	9.0	9.5	F8	4	..	14808b	86	153	57.8	+ 7 21	4.45	5.45	Ko	..	5,R	56,72
37	206	57.4	- 8 55	9.8	11.0	K5	1	..	19958b	87	167	57.8	-18 9	10.4	11.2	G5	1	..	40863b
38	408	57.4	-31 20	9.0	10.6	Ko	1	..	23766b	88	158	57.8	-21 4	9.5	10.5	K5	2	..	39504b
39	406	57.4	-32 10	8.7	9.4	F8	4	0,3-	23766b	89	410	57.8	-25 51	9.8	11.1	Ko	2	..	23762b
40	227	57.4	-40 45	8.4	8.8	Fo	6	..	14372b	90	364	57.8	-42 40	9.5	10.0	Go	2	..	39679b
41	361	57.4	-42 5	8.7	10.3	Ko	2	..	39679b	91	289	57.8	-44 38	8.1	8.4	Ko	6	0,7	12275b
42	280	57.4	-50 48	10.1	9.9	Go	3	0,2	39664b	92	220	57.8	-57 33	6.00	7.1	Ko	..	5,7-	56,118
43	230	57.4	-53 52	8.3	8.6	Fo	7	0,3-	45461b	93	75	57.8	-72 5	9.54	10.1	A5	4	3,2	22155b
44	80	57.4	-62 18	9.3	10.1	G5	3	..	23815b	94	277	57.9	+49 54	8.02	8.02	Ao	4	..	38879i
45	70	57.4	-75 52	9.2	10.3	K2	4	..	22155b	95	126	57.9	+12 31	8.09	9.09	Ko	3	5,3-	10209b
46	84	57.4	-76 50	9.5	9.8	Fo	4	..	23772b	96	340	57.9	-27 32	10.3	10.5	F8	2	..	23762b
47	162	57.5	+58 23	7.03	8.21	K5	3	E	38060i	97	350	57.9	-34 55	8.92	9.9	Ko	2	R	23766b
48	291	57.5	+47 20	7.7	7.6	B5	4	4,4	37942i	98	229	57.9	-40 16	9.0	11.5	Ma	1	..	39679b
49	189	57.5	+36 0	8.2	8.3	A3	4	..	37367i	99	201	58.0	+62 12	9.2	10.2	Ko	1	..	38108i
50	177	57.5	+32 47	8.2	9.4	K5	1	..	37380i	100	247	58.0	+52 33	7.9	8.2	Fo	3	..	38879i

6200

0^h 58^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	206	58.0	+43 33	8.6	9.0	F5	3	..	37942i	51	197	58.4	- 6 7	8.8	9.6	G5	3	..	19958b
2	185	58.0	+36 19	8.0	8.0	Ao	8	..	37367i	52	197	58.4	-14 11	9.8	10.6	G5	1	..	45603b
3	177	58.0	- 5 22	5.69	6.47	G5	5	5,10	44048b	53	171	58.4	-15 58	8.8	9.1	Fo	4	..	23814b
4	220	58.0	-10 23	8.7	9.3	Go	3	..	14158b	54	343	58.4	-26 43	7.8	9.0	G5	7	0,4-	23762b
5	457	58.0	-24 39	9.8	10.8	G5	1	..	39504b	55	341	58.4	-27 38	8.8	10.8	K2	2	..	23762b
6	319	58.0	-30 47	9.6	10.1	Go	2	..	45166b	56	67	58.4	-59 44	8.3	10.1	K2	5	..	11991b
7	384	58.0	-36 14	9.3	10.0	Go	1	..	14372b	57	70	58.4	-60 24	10.2	11.3	K2	1	..	23815b
8	251	58.0	-48 45	9.2	9.6	Ao	6	0,5	42088b	58	51	58.5	+71 41	9.4	10.2	G5	2	..	38134i
9	202	58.1	+61 53	8.7	8.7	B9	3	3,2	38108i	59	221	58.5	+51 56	8.7	9.3	Go	2	..	38879i
10	158	58.1	+61 4	5.88	6.38	F8	7	..	3083b	60	210	58.5	+50 42	8.4	8.7	F2	3	..	38879i
11	220	58.1	+51 58	6.27	7.34	K2	6	3,4	38879i	61	246	58.5	+47 5	8.7	8.7	Ao	2	..	38879i
12	158	58.1	+25 47	8.2	8.5	Fo	4	..	37340i	62	199	58.5	+38 9	7.34	8.69	Ma	4	..	37367i
13	168	58.1	+22 31	9.2	9.2	Ao	3	..	38700i	63	188	58.5	+36 55	9.2	9.5	Fo	4	..	37367i
14	138	58.1	+21 16	9.0	9.1	A3	2	..	38070i	64	171	58.5	+34 55	7.22	7.30	A3	6	1,6	37367i
15	137	58.1	+18 20	8.2	9.0	G5	4	..	37412i	65	173	58.5	+26 58	10.1	10.2	A5	1	..	38904i
16	154	58.1	+ 8 4	8.4	9.5	K2	3	..	10419b	66	166	58.5	+ 4 42	7.72	8.00	A5	6	2,4-	14674b
17	458	58.1	-24 25	9.5	9.9	Go	2	..	39504b	67	191	58.5	-15 2	8.8	9.4	Go	3	..	23814b
18	318	58.1	-28 9	9.2	10.5	G5	2	..	23762b	68	322	58.5	-28 24	8.1	8.4	Go	5	..	20245b
19	230	58.1	-40 34	9.0	9.8	F5	3	3,4	14372b	69	325	58.5	-30 4	6.39	7.2	Go	8	..	20245b
20	205	58.1	-56 47	8.7	9.5	G5	2	..	11991b	70	388	58.5	-33 17	9.3	10.6	F5	4	..	20245b
21	79	58.1	-66 12	8.8	9.6	G5	5	..	38365b	71	70	58.6	+68 27	8.6	8.6	Ao	3	..	37974i
22	76	58.1	-72 5	7.8	8.8	Ko	6	0,5	38365b	72	329	58.6	+48 41	7.8	8.1	Fo	5	5,3	38879i
23	278	58.2	+49 32	8.6	8.6	Ao	1	..	38879i	73	156	58.6	+30 59	8.0	9.0	Ko	4	..	37340i
24	328	58.2	+49 12	7.66	8.66	Ko	2	..	37942i	74	160	58.6	+26 3	8.9	9.5	Go	2	..	38904i
25	327	58.2	+48 20	7.12	7.62	F8	10	..	36956i	75	177	58.6	+20 14	9.00	9.42	F5	2	..	38070i
26	245	58.2	+47 6	6.70	6.65	B8p	7	R	38879i	76	155	58.6	+13 24	8.83	9.83	Ko	4	5,1	6670m
27	171	58.2	+28 58	8.8	9.9	K2	2	..	38904i	77	141	58.6	+ 6 14	6.89	6.89	Ao	5	..	37432i
28	165	58.2	+27 48	9.4	9.4	Ao	2	..	38904i	78	187	58.6	-17 7	9.5	10.3	G5	3	0,2	40863b
29	170	58.2	+23 14	8.8	9.4	Go	3	..	38070i	79	292	58.6	-46 26	9.2	9.6	Go	3	..	45106b
30	105	58.2	+16 37	9.0	10.2	K5	2	..	6670m	80	139	58.6	-52 22	8.5	9.2	Ko	4	..	45461b
31	161	58.2	+ 8 15	9.0	9.1	A2	3	..	10419b	81	212	58.6	-55 27	8.6	9.9	A2	5	..	45461b
32	195	58.2	-10 59	9.0	9.8	G5	3	..	14158b	82	208	58.6	-56 36	7.9	9.5	K2	4	..	45461b
33	379	58.2	-37 49	8.4	8.8	G	2	..	20646b	83	98	58.6	-63 22	9.8	10.4	Go	4	..	23815b
34	378	58.2	-37 51	8.5	8.7	F5	3	..	20646b	84	67	58.7	+69 24	9.7	9.7	A	1	..	38905i
35	271	58.2	-39 7	9.0	9.8	Go	2	..	14372b	85	330	58.7	+49 6	8.0	8.1	A2	3	1,2	38879i
36	312	58.2	-47 50	8.1	7.9	Go	6	..	20260b	86	161	58.7	+26 4	8.8	9.4	Go	3	..	38904i
37	71	58.2	-75 20	10.1	11.3	K5	1	..	22155b	87	169	58.7	+24 42	8.9	9.5	Go	3	..	38904i
38	183	58.3	+56 35	7.10	8.10	Ko	3	5,2	3083b	88	174	58.7	+ 0 50	6.07	6.35	Fo	8	..	37423i
39	236	58.3	+55 19	8.31	8.81	F8	2	..	38877i	89	412	58.7	-32 37	7.56	9.4	Ko	5	..	20245b
40	249	58.3	+52 20	8.9	9.2	F	1	..	38879i	90	260	58.7	-41 33	7.16	8.2	K5	3	5,5 R	10635b
41	166	58.3	+27 21	9.0	10.0	Ko	3	..	38904i	91	156	58.8	+13 28	9.4	10.6	K5	1	..	6670m
42	149	58.3	+ 2 42	8.0	9.1	K2	2	..	14899b	92	188	58.8	-17 44	9.8	10.3	F8	2	..	40863b
43	154	58.3	- 2 1	9.0	9.4	F5	5	..	23768b	93	260	58.8	-51 13	10.1	11.0	K2	2	..	39664b
44	383	58.3	-23 43	8.6	9.0	F5	6	3,5-	39504b	94	107	58.8	-64 31	8.7	9.7	Ko	5	0,4	38146b
45	313	58.3	-46 56	5.34	6.6	Ko	..	..	28,195	95	..	58.8	-73 57	..	..	G5	2	..	22155b
46	237	58.3	-54 13	10.8	10.8	A	1	..	45461b	96	72	58.8	-75 0	10.6	11.2	Go	3	..	22155b
47	65	58.3	-57 53	8.7	8.9	Go	6	..	23815b	97	39	58.8	-77 20	9.5	10.6	K2	3	0,2	38135b
48	69	58.4	+69 6	10.2	10.2	A	1	..	38905i	98	68	58.9	+69 47	8.5	9.5	Ko	2	5,1	38068i
49	188	58.4	+57 27	7.6	7.6	B9	4	1,3	3083b	99	215	58.9	+55 15	7.71	7.71	Ao	4	2,2	38877i
50	211	58.4	+53 40	6.78	7.34	Go	5	2,4	3260b	100	212	58.9	+50 29	6.50	6.33	B3	7	2,4	38879i

THE HENRY DRAPER CATALOGUE.

6300

0^h 58^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	174	58.9	+29 9	6.08	6.50	F5	8	0,8	10154i	51	173	59.4	-18 11	10.2	11.2	K	1	..	40863b
2	161	58.9	+14 42	8.6	9.4	G5	4	0,2	6670m	52	172	59.4	-18 31	10.4	10.5	A3	2	..	40863b
3	153	58.9	+6 41	9.0	10.1	K2	2	..	10419b	53	471	59.4	-24 49	8.90	9.3	F8	5	3,5-	23762b
4	210	58.9	-9 39	8.36	9.14	G5	4	..	14808b	54	263	59.4	-41 11	7.22	7.3	A2	8	1,6	42098b
5	196	58.9	-12 12	8.4	9.2	G5	2	..	22104b	55	143	59.4	-52 31	8.7	9.5	F5	5	3,3	45461b
6	173	58.9	-15 55	10.0	10.6	Go	1	..	45603b	56	108	59.4	-64 54	9.3	10.7	Mb	4	0,4-	38229b
7	418	58.9	-30 56	8.2	8.6	F5	4	..	23766b	57	82	59.4	-74 32	10.3	11.3	Ko	3	..	22155b
8	276	58.9	-39 40	9.0	9.4	Go	4	..	14372b	58	86	59.4	-76 20	9.5	10.3	G5	3	..	23772b
9	213	58.9	-55 29	9.1	10.1	A5	2	..	45461b	59	173	59.5	+24 25	8.8	9.8	Ko	3	..	38004i
10	221	58.9	-57 27	9.0	10.1	F2	3	..	39664b	60	143	59.5	+18 22	7.67	8.45	G5	3	..	37412i
11	80	58.9	-66 0	6.22	8.1	Mb	10	..	38365b	61	160	59.5	+14 10	9.8	10.6	G5	2	..	6670m
12	194	59.0	+63 12	8.0	8.6	Go	3	5,2	38060i	62	159	59.5	+13 42	10.4	11.2	G5	3	..	6670m
13	165	59.0	+58 47	8.9	8.9	Ao	1	..	38108i	63	388	59.5	-23 1	9.5	9.9	F2	2	..	39504b
14	249	59.0	+39 27	6.69	6.97	Fo	8	..	37367i	64	345	59.5	-27 42	9.5	9.6	A2	4	..	23762b
15	162	59.0	-0 31	9.8	10.2	F5	2	..	23768b	65	330	59.5	-30 33	10.3	9.7	A2	3	..	20245b
16	136	59.0	-4 37	9.20	9.62	F5	4	3,2	23768b	66	303	59.5	-34 59	9.28	9.6	F5	2	..	14372b
17	295	59.0	-44 47	8.92	9.3	Go	6	5,2	39679b	67	264	59.5	-41 4	7.44	8.0	F5	8	0,7	42098b
18	141	59.0	-51 58	8.8	9.6	F8	4	3,2	45461b	68	304	59.5	-43 51	8.3	8.7	F5	5	3,3-	39679b
19	17	59.1	+86 37	6.40	7.40	Ko	8	..	37281i	69	9	59.6	+87 44	8.9	9.3	F5	2	..	37281i
20	134	59.1	+63 41	8.4	9.2	G5	2	0,1	38060i	70	53	59.6	+74 6	8.6	8.6	Ao	3	..	38133i
21	183	59.1	+38 22	8.4	9.2	G5	4	..	37367i	71	229	59.6	+45 0	8.9	9.3	F5	2	..	37942i
22	168	59.1	-19 6	8.8	9.3	Ao	5	..	40863b	72	202	59.6	+37 57	8.8	9.9	K2	2	..	37380i
23	415	59.1	-32 19	9.0	10.0	Go	2	..	20245b	73	171	59.6	+27 27	9.7	10.3	G	1	..	38904i
24	296	59.1	-44 42	9.76	10.5	F5	2	..	39679b	74	155	59.6	+6 29	7.8	8.3	F8	2	..	37432i
25	242	59.1	-54 42	9.65	10.4	K5	1	..	45461b	75	203	59.6	+1 47	7.32	8.32	Ko	6	0,4	37423i
26	100	59.1	-63 47	9.9	10.7	G5	4	..	23815b	76	201	59.6	-5 51	8.0	8.4	F5	6	5,5	14808b
27	..	59.2	+59 53	..	..	Oa	..	..	76,28	77	186	59.6	-8 12	8.6	9.1	F8	5	..	14808b
28	184	59.2	+32 40	7.9	9.0	K2	4	3,4	37367i	78	348	59.6	-26 8	10.0	11.1	K2	1	..	23762b
29	147	59.2	+20 59	8.8	9.6	G5	2	0,2	38070i	79	344	59.6	-45 6	9.7	10.2	Go	2	..	39679b
30	142	59.2	+18 50	8.8	9.6	G5	2	..	38219i	80	38	59.6	-68 35	9.5	10.5	Ko	2	..	38146b
31	163	59.2	+0 5	8.53	9.71	K5	4	..	23768b	81	71	59.7	+68 35	9.2	9.2	Ao	2	..	38905i
32	185	59.2	-8 43	9.3	10.1	G5	3	..	19958b	82	162	59.7	+60 15	8.21	8.21	Ao	4	0,3	38108i
33	142	59.2	-52 31	9.4	9.9	F8	3	..	45461b	83	161	59.7	+33 56	9.2	9.3	A5	2	..	37367i
34	72	59.2	-60 38	6.9	7.3	F5	6	0,6	11991b	84	156	59.7	+15 43	8.0	9.4	Ma	7	0,4	6670m
35	..	59.2	-67 48	..	..	A5	3	..	38365b	85	161	59.7	+7 22	9.4	10.5	K2	1	..	14896b
36	73	59.3	+70 40	9.5	9.5	Ao	2	..	38068i	86	172	59.7	+5 7	6.17	7.24	K2	6	..	37432i
37	216	59.3	+43 29	8.8	8.9	A2	2	..	38917i	87	179	59.7	+1 4	8.8	9.1	F2	3	..	23768b
38	232	59.3	+42 45	8.0	8.4	F5	4	..	36956i	88	202	59.7	-6 0	8.8	9.1	F2	4	6,4	14808b
39	329	59.3	-29 55	11.0	10.6	F5	2	5,1	23762b	89	174	59.7	-18 29	9.8	10.4	Go	3	..	40863b
40	361	59.3	-35 13	9.0	9.0	Ao	6	..	14372b	90	332	59.7	-30 20	9.6	9.1	F5	4	..	23766b
41	234	59.3	-40 51	10.1	10.8	Go	2	..	39679b	91	389	59.7	-37 50	9.1	9.0	Go	3	..	20646b
42	40	59.3	-77 34	9.7	10.5	G5	2	..	38135b	92	362	59.7	-37 56	9.0	9.8	G5	3	0,2	14372b
43	129	59.4	+65 26	7.10	7.05	B8	4	..	37974i	93	63	59.7	-61 0	8.9	10.7	F8	3	..	23815b
44	195	59.4	+62 20	8.6	8.9	Fo	3	..	38060i	94	..	59.7	-70 42	..	..	G	2	..	38365b
45	169	59.4	+27 59	8.7	9.5	G5	2	..	38904i	95	333	59.8	+48 47	9.2	9.3	A2	1	..	38879i
46	166	59.4	+9 4	8.2	9.2	Ko	3	0,2	14896b	96	175	59.8	+27 14	9.4	9.7	F2	1	..	38904i
47	178	59.4	+0 46	8.8	9.2	F5	2	..	23768b	97	163	59.8	+14 24	5.65	5.99	F2	8	..	37412i
48	146	59.4	-2 54	9.2	10.0	G5	4	..	23768b	98	226	59.8	-10 35	9.2	9.6	F5	2	..	14808b
49	200	59.4	-5 50	8.6	9.2	Go	3	..	14808b	99	171	59.8	-18 51	8.8	9.4	Go	3	..	10629b
50	174	59.4	-16 34	10.2	11.3	K2	2	..	40863b	100	163	59.8	-21 31	9.5	9.9	G5	1	5,2	39504b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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0^h 59^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	390	59.8	-23 2	8.8	9.6	Ko	3	..	39504b	51	191	0.3	-20 23	8.5	8.7	A2	6	..	10629b
2	426	59.8	-31 2	8.04	8.5	F8	5	..	20245b	52	122	0.4	+65 3	9.0	10.0	Ko	1	..	38108i
3	411	59.8	-34 4	6.54	7.7	G5	9	..	20245b	53	336	0.4	+48 33	8.8	8.8	Ao	1	..	38879i
4	295	59.8	-46 50	9.5	11.0	Ko	1	..	39679b	54	217	0.4	+40 26	8.5	9.1	Go	1	..	3738oi
5	35	59.8	-71 23	Cl.	6.8	Con.	9	R	38365b	55	191	0.4	+32 28	7.9	8.2	Fo	5	0,3-	3738oi
6	78	59.8	-72 38	9.6	10.0	F5	8	..	22155b	56	156	0.4	+20 56	5.55	5.61	A2	..	R	56,72
7	..	59.8	-73 5	..	..	Ko	3	..	22155b	57	157	0.4	+20 56	5.82	5.82	Ao	..	..	..
8	180	59.9	+59 47	9.2	9.2	B9	2	..	38108i	58	152	0.4	+17 23	9.1	9.9	G5	1	..	37412i
9	145	59.9	+18 40	7.52	8.87	Mb	3	..	37412i	59	110	0.4	+16 33	9.4	10.0	Go	3	..	667om
10	164	59.9	+14 49	9.4	10.2	G5	3	..	667om	60	142	0.4	+11 55	8.5	8.8	F2	4	..	37412i
11	175	59.9	-18 0	9.2	9.6	F5	4	3,3	40863b	61	196	0.4	-13 26	7.62	8.18	Go	6	0,5	23814b
12	165	59.9	-21 16	7.7	8.3	F5	8	0,9	10629b	62	158	0.5	+20 26	8.1	8.4	F2	4	..	3807oi
13	259	59.9	-48 29	6.86	8.6	Ma	7	..	20260b	63	168	0.5	+14 27	9.25	10.43	K5	1	..	667om
14	78	0.0	+70 24	6.64	6.70	A2	7	..	37974i	64	155	0.5	+ 3 41	8.1	9.1	Ko	6	..	14899b
15	130	0.0	+65 55	8.6	8.6	Ao	4	2,1	38905i	65	180	0.5	+ 0 41	9.1	10.2	K2	3	..	23768b
16	206	0.0	+62 14	6.44	6.52	A3	7	..	38558i	66	372	0.5	-38 6	7.69	8.9	Go	5	..	14372b
17	191	0.0	+57 14	7.10	6.98	B5	5	3,4-	38877i	67	214	0.5	-55 59	8.8	10.4	K2	2	..	45461b
18	255	0.0	+52 17	8.6	8.9	F2	3	..	38879i	68	33	0.6	+77 9	8.1	8.2	A3	1	..	37227i
19	142	0.0	+23 58	9.3	10.1	G5	3	..	38904i	69	181	0.6	+34 59	7.52	7.80	Fo	3	0,2	37367i
20	108	0.0	+16 22	10.8	11.6	G5	1	..	667om	70	205	0.6	+ 1 56	8.7	9.5	G5	3	..	23768b
21	131	0.0	+12 19	8.9	9.5	Go	1	..	37412i	71	196	0.6	-15 3	8.9	9.9	Ko	3	..	40863b
22	122	0.0	+11 10	8.3	9.5	K5	2	..	14896b	72	73	0.6	-74 55	9.5	10.5	Ko	4	..	22155b
23	124	0.0	+11 3	8.9	10.0	K2	2	..	14896b	73	29	0.7	+79 29	6.38	7.38	Ko	4	..	37227i
24	123	0.0	+10 48	8.1	8.5	F5	4	0,3-	37412i	74	141	0.7	+63 15	8.4	9.5	K2p	3	R	38108i
25	162	0.0	+ 7 21	9.4	10.4	Ko	1	..	14896b	75	181	0.7	+59 20	6.78	6.78	Ao	7	..	38877i
26	203	0.0	-14 17	7.51	8.51	Ko	7	..	23814b	76	180	0.7	+31 39	6.64	7.64	Ko	3	..	3734oi
27	177	0.0	-18 21	10.5	11.0	F8	2	..	40863b	77	172	0.7	+28 0	9.1	10.1	Ko	1	..	38904i
28	474	0.0	-24 24	8.9	9.6	Ko	3	5,1	23762b	78	169	0.7	+14 51	7.30	7.64	F2	6	0,8	37412i
29	401	0.0	-36 46	9.0	9.6	Go	2	..	14372b	79	175	0.7	+ 4 22	6.75	7.09	F2	8	..	14674b
30	218	0.0	-55 36	8.8	10.1	Go	3	..	45461b	80	176	0.7	+ 4 22	7.64	7.98	F2	5	..	14674b
31	60	0.0	-72 54	10.0	11.0	Ko	4	..	22155b	81	169	0.7	- 0 11	8.6	9.7	K2	3	..	23768b
32	164	0.1	+ 7 48	8.3	9.1	G5	2	..	37432i	82	229	0.7	-10 31	6.41	7.19	G5	8	..	14808b
33	390	0.1	-37 7	8.8	9.6	Go	2	..	14372b	83	190	0.7	-17 7	9.9	10.2	F2	3	..	40863b
34	239	0.1	-40 0	7.80	8.1	Go	7	..	14372b	84	192	0.7	-20 6	9.6	10.8	K5	1	..	10629b
35	109	0.1	-64 41	9.1	9.9	G5	6	0,5	38146b	85	336	0.7	-28 52	8.1	8.7	Ko	6	..	23762b
36	110	0.1	-65 38	9.5	10.5	Ko	2	..	38365b	86	167	0.8	+33 47	8.5	8.8	Fo	2	..	3734oi
37	72	0.2	+68 18	8.7	8.7	Ao	2	..	37974i	87	165	0.8	+26 12	8.5	9.5	Ko	2	..	38904i
38	187	0.2	+38 51	8.1	9.2	K2	2	..	3738oi	88	111	0.8	+17 12	9.1	9.5	F5	1	E	38103i
39	154	0.2	+20 36	9.1	10.1	Ko	1	..	38219i	89	170	0.8	+ 0 5	9.6	10.4	G5	1	..	23768b
40	167	0.2	+14 53	9.1	10.2	K2	3	2,2	667om	90	199	0.8	-15 25	9.6	10.4	G5	3	..	40863b
41	162	0.2	+13 35	8.8	9.8	Ko	3	0,2	667om	91	352	0.8	-27 29	7.7	8.1	Fo	8	..	23762b
42	195	0.2	-12 57	8.9	9.3	F5	3	..	22104b	92	284	0.8	-39 21	9.0	9.7	Ao	4	..	14372b
43	194	0.2	-15 26	8.9	9.7	G5	3	..	23814b	93	240	0.8	-40 48	7.33	7.2	Fo	5	0,8-	10635b
44	308	0.2	-43 36	7.8	8.7	F2	6	2,5-	39679b	94	227	0.8	-55 36	9.2	10.1	Go	2	..	45461b
45	144	0.2	-52 42	10.1	10.7	Go	1	..	45461b	95	112	0.8	-65 14	7.4	8.4	Ko	8	..	38365b
46	28	0.2	-78 5	7.8	8.6	G5	6	0,7	23772b	96	..	0.8	-67 50	..	..	A5	3	..	38365b
47	139	0.3	+63 53	8.2	8.8	Go	3	..	37974i	97	196	0.9	+56 24	6.58	7.58	Ko	5	0,4	3083b
48	208	0.3	+62 8	8.0	9.0	Ko	2	2,2	3806oi	98	144	0.9	+22 3	8.5	9.0	F8	2	..	3807oi
49	232	0.3	+44 15	8.4	9.0	Go	2	..	37942i	99	155	0.9	+ 2 44	8.1	9.1	Ko	4	0,3	37466i
50	140	0.3	- 3 55	8.9	9.7	G5	3	..	23768b	100	181	0.9	+ 1 11	9.49	10.05	G	2	..	23768b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	186	0.9	— 4 49	8.45	9.45	Ko	2	0,2	14808b	51	..	1.2	—73 51	..	..	Go	2	..	22155b
2	185	0.9	— 5 28	10.1	10.5	F5	1	..	14808b	52	30	1.3	+82 55	9.2	9.3	A2	2	..	37281i
3	197	0.9	—13 35	9.1	10.1	Ko	3	2,3-	39702b	53	258	1.3	+47 12	8.0	8.1	A2	3	1,2	38879i
4	480	0.9	—24 8	8.7	8.7	F8	5	0,6-	39504b	54	183	1.3	+34 38	7.28	7.34	A2	3	0,2	37367i
5	302	0.9	—44 1	9.4	10.0	Go	2	2,2	45106b	55	174	1.3	+22 43	8.1	9.1	Ko	3	..	38070i
6	303	0.9	—46 9	8.8	9.6	G5	2	..	20260b	56	161	1.3	+15 50	9.4	9.7	Fo	4	5,2	6670m
7	267	0.9	—51 10	8.8	9.6	F8	1	..	12636b	57	135	1.3	+12 25	6.22	7.00	G5	6	0,6	37412i
8	82	0.9	—66 49	10.6	11.2	Go	1	..	38146b	58	144	1.3	— 1 17	8.1	8.6	F8	6	0,5	23768b
9	83	0.9	—74 0	9.02	10.0	Ko	4	..	23772b	59	484	1.3	—24 32	6.29	7.6	G5	10	0,R	12238b
10	309	1.0	+48 7	8.10	8.18	A3	3	0,2	38879i	60	430	1.3	—32 24	8.3	8.6	G5	4	..	20245b
11	145	1.0	+21 27	9.1	9.2	A2	2	..	38904i	61	62	1.3	—73 44	10.2	10.5	Fo	5	..	22155b
12	134	1.0	+12 44	8.1	8.7	Go	3	..	37412i	62	73	1.4	+69 5	9.0	10.0	Ko	1	..	38905i
13	207	1.0	+ 1 27	9.4	10.4	Ko	2	..	23768b	63	142	1.4	+63 52	8.6	9.1	F8	2	3,1	38905i
14	218	1.0	— 9 11	8.08	9.08	Ko	5	..	14808b	64	337	1.4	+49 2	6.73	6.73	Ao	3	..	36956i
15	193	1.0	—22 5	8.5	8.8	A5	5	0,5	12238b	65	181	1.4	+26 29	9.2	9.7	F8	1	..	38904i
16	357	1.0	—26 1	8.2	9.6	Fo	5	0,4	23762b	66	165	1.4	+13 22	7.32	7.66	F2	5	0,4-	37512i
17	356	1.0	—26 50	8.1	9.3	Go	4	5,2	23762b	67	173	1.4	+ 8 21	7.70	7.78	A3	4	..	37432i
18	353	1.0	—27 12	9.9	10.5	G5	1	..	23762b	68	167	1.4	+ 7 50	6.90	7.18	Fo	5	..	37432i
19	429	1.0	—32 29	9.1	9.1	Go	3	..	20245b	69	200	1.4	—14 50	9.66	10.66	Ko	3	..	40863b
20	313	1.0	—43 24	8.9	9.6	F8	4	0,2	39079b	70	196	1.4	—20 35	8.9	9.3	Go	4	0,4	12238b
21	71	1.0	—58 20	7.6	7.8	A5	7	5,4	17627b	71	378	1.4	—42 22	7.5	8.9	K2	5	0,3-	39679b
22	201	1.1	+62 59	8.1	8.9	G5	2	0,2	38905i	72	146	1.5	+ 6 8	9.4	10.6	K5	1	..	14896b
23	296	1.1	+50 4	8.05	9.05	Ko	2	..	38879i	73	232	1.5	—10 18	7.42	7.48	A2	8	..	14808b
24	202	1.1	+35 53	8.5	9.1	Go	1	..	37380i	74	195	1.5	—22 13	9.6	9.9	Ko	2	..	39504b
25	179	1.1	+29 10	8.1	8.9	G5	1	..	37340i	75	377	1.5	—38 47	7.9	9.8	Ko	3	..	14372b
26	174	1.1	+27 51	9.3	9.8	F8	1	..	38904i	76	244	1.5	—39 57	9.08	9.8	G5	2	..	14372b
27	159	1.1	+15 47	8.30	8.58	Fo	3	5,7	37412i	77	380	1.5	—42 2	8.6	9.7	G5	5	0,2	37679b
28	182	1.1	+ 0 56	9.1	10.3	K5	2	..	23768b	78	317	1.5	—43 7	8.1	9.1	G5	4	0,3	42098b
29	141	1.1	— 0 47	8.2	8.5	F2	6	6,4	23768b	79	304	1.5	—49 29	9.4	9.6	F8	3	3,3	42088b
30	230	1.1	—10 23	5.59	5.59	Ao	..	..	1627c	80	211	1.6	+62 7	8.4	9.8	Ma	2	0,1,R	38108i
31	194	1.1	—20 7	8.9	9.6	F5	3	..	10629b	81	212	1.6	+61 48	8.9	8.9	Ao	4	0,2-	38060i
32	355	1.1	—27 16	8.1	8.4	A2	8	..	23762b	82	223	1.6	+54 26	5.26	6.04	G5	..	0,6,R	56,72
33	376	1.1	—41 54	8.8	9.7	F8	5	..	39679b	83	312	1.6	+47 32	7.6	8.0	F5	4	3,2	38879i
34	377	1.1	—42 4	8.1	9.2	G5	3	..	42098b	84	229	1.6	+44 6	7.7	8.7	Ko	2	..	37942i
35	247	1.1	—53 22	9.2	10.1	Go	2	..	45461b	85	239	1.6	+43 0	7.25	7.67	F5	2	..	36956i
36	79	1.1	—72 47	8.58	9.2	Ko	6	..	23772b	86	210	1.6	+38 8	7.30	7.80	F8	3	..	37367i
37	61	1.1	—72 56	10.6	10.9	F2	4	..	22155b	87	182	1.6	+28 29	9.1	9.2	A5	1	..	37340i
38	203	1.2	+63 10	8.0	8.8	G5	3	0,3	38108i	88	175	1.6	+28 1	8.5	9.5	Ko	2	..	38904i
39	243	1.2	+55 51	7.40	7.40	Ao	2	..	37342i	89	113	1.6	+17 11	9.1	9.7	Go	2	..	37412i
40	262	1.2	+52 58	6.49	7.49	Ko	4	..	3260b	90	171	1.6	+15 12	10.1	10.2	A2	2	..	6670m
41	310	1.2	+47 43	7.9	9.1	K5	1	..	38879i	91	169	1.6	+ 8 7	7.70	7.78	A3	3	..	37432i
42	182	1.2	+35 3	8.22	9.40	K5	2	..	37380i	92	..	1.6	— 2 1	var.	var.	Md	..	R	M
43	166	1.2	+25 50	9.9	9.9	A	1	..	38904i	93	198	1.6	—20 35	9.6	9.6	F8	2	0,2-	45603b
44	149	1.2	+18 53	7.9	8.3	F5	5	..	38070i	94	374	1.6	—35 20	7.81	8.7	F8	6	..	14372b
45	160	1.2	+16 6	9.4	9.5	A2	4	0,2	6670m	95	324	1.6	—47 15	3.35	4.35	Ko	..	R	28,195
46	207	1.2	—11 31	6.90	7.68	G5	6	5,6	22104b	96	68	1.6	—61 16	9.1	10.1	G5	5	..	23815b
47	178	1.2	—19 22	9.1	9.3	A3	4	..	10629b	97	81	1.6	—72 2	10.9	11.0	A5	4	..	22155b
48	344	1.2	—28 8	9.9	10.2	Fo	2	..	23762b	98	25	1.6	—78 53	8.2	8.2	Ao	7	2,8	38135b
49	66	1.2	—61 23	9.3	11.5	K	1	..	23815b	99	94	1.7	+66 58	8.5	9.5	Ko	1	..	38905i
50	36	1.2	—71 5	9.1	10.5	Ma	4	..	38365b	100	180	1.7	+24 19	9.2	10.2	Ko	1	..	38904i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	136	1.7	+13 4	9.8	10.6	G5	2	..	6670m	51	160	2.1	- 2 16	7.04	7.46	F5	8	3,8	37423i
2	159	1.7	+ 3 17	8.7	9.1	F5	2	..	37423i	52	404	2.1	-23 46	9.2	11.0	K2	1	2,1	39504b
3	146	1.7	- 1 29	8.5	9.5	Ko	4	..	23768b	53	492	2.1	-24 1	10.9	10.8	F5	2	..	23762b
4	189	1.7	- 5 10	8.3	8.6	F2	5	0,4	14808b	54	307	2.1	-46 28	8.6	9.3	Ko	4	5,3	39679b
5	220	1.7	- 9 13	8.5	8.8	F2	3	..	14808b	55	63	2.1	-73 5	8.18	8.5	Go	7	..	23772b
6	76	1.7	-60 32	9.1	11.0	Go	4	..	23816b	56	225	2.2	+54 38	7.7	8.0	F2	3	..	38879i
7	85	1.7	-61 54	9.2	9.5	F2	7	..	23815b	57	267	2.2	+52 18	8.5	9.5	Ko	1	..	38879i
8	86	1.7	-62 40	9.9	10.5	Go	4	..	23815b	58	234	2.2	+43 24	5.16	5.22	A2	..	0,5	56,72
9	82	1.7	-72 25	10.2	10.8	Go	6	..	22155b	59	172	2.2	+33 42	8.7	9.5	G5	1	..	3738oi
10	70	1.8	+70 10	7.54	7.54	Ao	6	..	37974i	60	176	2.2	+22 27	8.6	9.6	Ko	2	R	3807oi
11	222	1.8	+40 44	7.27	7.69	F5	3	..	37367i	61	185	2.2	+ 4 24	8.9	9.3	F5	4	..	14674b
12	213	1.8	+37 31	7.02	7.00	B9	4	..	37367i	62	37	2.2	-71 28	8.1	9.1	Ko	7	..	38365b
13	180	1.8	+19 37	7.25	8.03	G5	4	5,5	37412i	63	209	2.3	+63 10	8.6	9.2	Go	3	2,3	3806oi
14	128	1.8	+11 1	7.10	7.38	Fo	6	0,5	37412i	64	194	2.3	+38 44	8.0	8.5	F8	2	..	37367i
15	130	1.8	+ 9 41	10.4	11.0	Go	1	..	14896b	65	182	2.3	+20 3	8.5	9.3	G5	3	..	38219i
16	177	1.8	-16 2	7.30	7.86	Go	8	5,9	23814b	66	186	2.3	+ 4 39	9.1	9.5	F5	3	..	14674b
17	431	1.8	-25 40	8.7	9.9	Ko	2	..	23762b	67	161	2.3	- 2 2	9.6	9.7	A2	3	..	23768b
18	402	1.8	-33 10	9.6	11.3	Ko	1	..	45166b	68	496	2.3	-24 32	6.26	7.1	A2	10	0,10	12238b
19	417	1.8	-36 12	6.60	6.9	B9	6	..	10635b	69	438	2.3	-25 23	7.58	8.7	Ko	6	0,7	12238b
20	404	1.8	-37 28	8.7	9.3	Go	3	..	14372b	70	348	2.3	-30 9	8.95	9.4	A2	2	..	20245b
21	305	1.8	-44 47	9.9	11.4	Go	1	..	39679b	71	406	2.3	-33 18	11.2	11.3	Go	1	..	45166b
22	77	1.8	-60 36	9.1	9.5	A3	7	..	23815b	72	273	2.3	-48 37	9.4	10.1	K2	2	0,1	39664b
23	83	1.8	-72 16	7.45	8.5	Ko	5	0,8	23772b	73	273	2.3	-51 31	9.1	9.5	Ko	2	..	12636b
24	41	1.8	-77 6	10.3	10.9	G	3	..	38135b	74	42	2.3	-77 27	9.3	10.3	Ko	3	..	38135b
25	169	1.9	+33 28	8.3	9.5	K5	1	..	3738oi	75	74	2.4	+69 10	7.9	7.7	Bo	6	..	37974i
26	190	1.9	- 5 26	8.1	8.1	Ao	6	2,7	10390b	76	200	2.4	+57 44	5.70	5.65	B8	6	..	37342i
27	212	1.9	-14 39	9.46	10.02	Go	2	..	22104b	77	229	2.4	+53 42	6.95	6.95	Ao	6	1,5	38879i
28	403	1.9	-23 23	7.83	8.7	G5	6	0,7	23762b	78	240	2.4	+42 19	7.65	7.65	Ao	2	2,2	37367i
29	247	1.9	-40 24	6.76	8.1	Ko	7	0,4	14372b	79	207	2.4	+35 17	8.97	9.47	F8	1	..	3738oi
30	272	1.9	-48 8	8.1	8.3	Fo	7	..	20260b	80	185	2.4	+31 29	6.29	6.63	F2	3	..	3734oi
31	146	1.9	-52 4	10.1	10.7	Go	3	..	39664b	81	158	2.4	+17 39	8.8	9.8	Ko	1	..	38219i
32	83	1.9	-66 36	9.6	10.8	K5	2	..	38365b	82	362	2.4	-45 10	10.5	10.8	G	1	..	39679b
33	213	2.0	+61 44	9.4	9.4	A	1	..	38108i	83	230	2.4	-55 42	9.0	10.4	Go	2	..	45461b
34	188	2.0	+59 37	8.0	8.8	G5	2	..	38108i	84	223	2.4	-56 38	8.9	10.1	F8	3	..	17627b
35	246	2.0	+55 33	8.4	8.4	Ao	2	..	38877i	85	70	2.4	-61 41	8.5	9.3	Ko	7	..	23815b
36	231	2.0	+52 7	8.6	8.6	Ao	2	..	38879i	86	..	2.4	-74 50	..	..	G5	1	..	22155b
37	144	2.0	+11 34	9.2	10.2	Ko	1	..	10209b	87	303	2.5	+49 50	8.6	8.7	A2	2	..	38879i
38	182	2.0	+ 4 30	9.1	10.2	K2	2	..	14674b	88	240	2.5	+44 17	7.07	7.02	B8	6	..	38917i
39	147	2.0	- 1 8	8.7	9.7	Ko	3	..	23768b	89	139	2.5	+13 9	10.8	11.6	G5	2	..	6670m
40	R	2.0	-22 49	8.1	8.4	F5	6	3,5	12238b	90	129	2.5	+10 48	9.4	9.9	F8	1	..	14896b
41	309	2.0	-48 58	11.8	10.4	G5	1	..	42088b	91	149	2.5	- 1 39	9.6	10.1	F8	2	..	23768b
42	237	2.0	-56 54	9.3	10.7	G5	2	5,1	17627b	92	180	2.5	-19 40	9.28	9.6	Go	3	5,2	10629b
43	72	2.0	-59 0	9.2	10.1	Go	5	..	17627b	93	46	2.5	-70 7	9.8	10.4	Go	3	..	38365b
44	266	2.1	+52 46	8.1	9.1	Ko	1	..	38879i	94	316	2.6	+48 5	8.0	8.1	A2	2	..	38879i
45	266	2.1	+46 19	7.49	8.56	K2	3	..	38879i	95	185	2.6	+20 12	5.63	5.69	A2	..	1,3 R	56,72
46	224	2.1	+41 0	7.22	7.28	A2	7	2,3	38917i	96	116	2.6	+16 53	7.64	7.92	Fo	6	0,8	37412i
47	182	2.1	+24 27	8.8	9.3	F8	3	..	38904i	97	164	2.6	+15 20	8.10	8.66	Go	4	0,7	37412i
48	183	2.1	+ 5 1	9.8	9.9	A3	1	..	14674b	98	161	2.6	+ 3 53	9.4	9.8	F5	2	..	14674b
49	185	2.1	+ 0 51	8.5	8.8	F2	5	3,4	23768b	99	188	2.6	+ 0 54	9.4	10.5	K2	1	..	23768b
50	186	2.1	+ 0 19	9.53	10.09	Go	2	..	23768b	100	153	2.6	- 3 16	8.3	8.4	A2	7	0,3-	23768b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	182	2.6	-16 43	10.3	10.6	Fo	2	..	40863b	51	444	3.1	-25 9	8.7	10.2	K5	1	..	23762b
2	182	2.6	-18 49	9.9	10.7	G5	2	..	40863b	52	308	3.1	-44 41	9.7	10.8	Ko	1	2,1	39679b
3	201	2.7	+57 22	8.6	9.7	K2	1	..	38877i	53	225	3.1	-56 38	8.4	9.2	Go	4	..	17627b
4	168	2.7	+13 17	9.8	10.6	G5	3	..	667om	54	85	3.1	-66 24	10.2	10.8	Go	2	..	38365b
5	192	2.7	-5 16	8.3	9.3	Ko	5	0,3	14808b	55	170	3.2	+61 1	7.8	8.4	Go	4	5,3	38108i
6	238	2.7	-10 19	5.87	6.21	F2	..	0,10	1627c	56	283	3.2	+45 24	7.87	7.82	B8	3	..	38879i
7	216	2.7	-14 42	8.31	9.09	G5	3	..	22104b	57	247	3.2	+44 41	7.70	7.70	Ao	2	..	36956i
8	183	2.7	-16 28	9.0	9.6	Go	3	..	40863b	58	119	3.2	+17 8	8.26	8.54	Fo	7	2,4	667om
9	195	2.7	-17 1	9.3	10.3	Ko	2	..	40863b	59	170	3.2	+13 27	10.8	11.3	F8	2	..	667om
10	252	2.7	-53 53	9.4	10.4	Ko	1	..	45461b	60	130	3.2	+10 19	8.72	9.22	F8	4	..	14896b
11	84	2.7	-66 12	9.5	10.1	Go	3	..	38365b	61	132	3.2	+9 22	6.90	8.25	Ma	4	..	37432i
12	40	2.7	-68 31	9.8	10.2	F5	3	..	38365b	62	176	3.2	+8 51	9.1	9.6	F8	3	..	14896b
13	319	2.8	+47 53	7.93	9.11	K5	2	..	38879i	63	190	3.2	+5 7	5.67	5.95	Fo	8	R	37432i
14	187	2.8	+28 21	6.78	7.06	Fo	3	0,3	10154i	64	219	3.2	-13 47	9.1	9.5	F5	4	..	40863b
15	150	2.8	+21 26	7.50	8.28	G5	5	..	38070i	65	196	3.2	-17 5	10.3	10.7	F5	2	..	40863b
16	118	2.8	+16 40	9.4	9.7	Fo	4	..	667om	66	203	3.2	-22 8	9.1	9.9	K2	2	..	39504b
17	146	2.8	+11 32	9.1	9.2	A2	2	R	14896b	67	391	3.2	-42 1	5.15	5.23	A3	..	1,9 R	56,118
18	221	2.8	-8 45	8.1	8.7	Go	4	0,3	14808b	68	309	3.2	-44 20	8.1	8.4	F5	6	0,5-	12275b
19	203	2.8	-15 25	9.9	11.0	K2	2	..	40863b	69	113	3.2	-63 54	9.1	10.1	Ko	6	..	23815b
20	203	2.8	-19 51	8.08	8.8	G5	5	0,5	10629b	70	..	3.2	-74 41	..	..	G5	3	..	22155b
21	498	2.8	-24 30	10.9	10.5	G5	2	..	23762b	71	18	3.3	+84 34	8.9	9.3	F5	2	..	37281i
22	348	2.8	-28 14	7.9	8.4	G5	6	..	23762b	72	236	3.3	+52 5	8.7	8.8	A2	2	..	38879i
23	335	2.8	-29 14	8.1	9.1	A2	5	..	23762b	73	172	3.3	+31 10	8.7	9.8	K2	2	..	37381i
24	334	2.8	-29 49	8.5	9.7	Ao	2	..	20245b	74	167	3.3	+15 15	8.64	9.64	Ko	4	5,2	667om
25	439	2.8	-32 11	9.3	10.3	Go	2	..	20245b	75	197	3.3	-16 57	10.5	11.1	G	1	..	40863b
26	277	2.8	-40 55	10.5	10.6	Go	2	..	20646b	76	295	3.3	-39 29	10.3	11.1	F5	1	..	14372b
27	364	2.8	-44 55	9.9	10.8	Go	2	..	39679b	77	281	3.3	-41 7	9.3	9.8	K2	2	..	14372b
28	79	2.8	-60 30	8.1	8.9	F2	6	3,5	23815b	78	368	3.3	-45 26	10.3	10.5	Go	2	0,1	39679b
29	29	2.8	-78 50	8.3	8.3	Ao	8	..	38135b	79	281	3.3	-51 41	9.9	11.0	Ko	2	..	39664b
30	209	2.9	+35 34	9.2	9.6	F5	1	..	37380i	80	74	3.3	-58 23	10.2	10.7	F8	3	..	17627b
31	179	2.9	+29 55	8.7	9.7	Ko	2	2,2-	37381i	81	38	3.3	-70 59	9.9	10.5	Go	2	..	38365b
32	172	2.9	+14 36	8.7	9.7	Ko	3	5,2	667om	82	39	3.3	-71 50	9.4	9.9	F8	3	..	38365b
33	188	2.9	+4 34	9.1	9.7	Go	2	..	14674b	83	30	3.3	-78 7	7.4	7.4	B8	8	..	23772b
34	212	2.9	+1 28	6.69	7.47	G5	7	..	14674b	84	306	3.4	+50 10	8.12	8.12	Ao	4	..	38879i
35	389	2.9	-42 17	7.26	7.6	Go	..	0,4-	56,118	85	181	3.4	+29 53	7.46	7.60	A5	3	3,6	37340i
36	306	2.9	-50 35	9.1	9.8	Go	3	..	42088b	86	171	3.4	+14 11	9.8	10.6	G5	2	..	667om
37	176	3.0	+34 1	8.5	8.6	A2	2	..	37380i	87	167	3.4	-2 35	8.3	8.6	F2	6	3,3-	23768b
38	151	3.0	+21 19	8.7	9.3	Go	2	..	38070i	88	212	3.4	-6 42	7.85	8.13	Fo	5	0,7	10390b
39	140	3.0	+13 10	9.4	10.6	K5	2	..	667om	89	206	3.4	-15 42	9.0	10.0	Ko	4	..	40863b
40	183	3.0	-18 10	9.6	10.0	F5	3	..	40863b	90	388	3.4	-38 26	9.6	9.8	F5	3	..	20646b
41	365	3.0	-27 31	8.3	9.6	G5	4	..	23762b	91	370	3.4	-45 51	9.5	10.2	Go	1	..	45106b
42	409	3.0	-33 21	7.9	9.7	G5	3	..	20245b	92	314	3.4	-46 9	9.7	10.8	G5	1	..	45106b
43	366	3.0	-45 7	10.5	10.8	G	1	..	39679b	93	89	3.4	-62 19	5.32	6.2	Ko	..	R	56,118
44	125	3.1	+64 30	8.9	9.0	A5	2	5,2	38108i	94	21	3.4	-83 47	8.19	9.0	Ko	3	..	15173b
45	203	3.1	+57 54	8.5	8.9	F5	2	..	38877i	95	207	3.5	+56 50	6.69	7.03	F2	4	..	37342i
46	220	3.1	+37 54	8.3	9.1	G5	1	..	37367i	96	186	3.5	-19 42	8.78	9.6	G5	3	..	10629b
47	219	3.1	+37 44	8.5	8.9	F5	2	..	37367i	97	372	3.5	-45 20	9.4	9.6	Go	3	..	20260b
48	209	3.1	-12 42	8.1	8.9	G5	5	..	22104b	98	34	3.6	+79 9	5.68	5.68	Ao	..	0,R	3093c
49	204	3.1	-15 15	9.9	10.9	Ko	2	..	40863b	99	74	3.6	+69 22	9.4	9.5	A2	2	..	38905i
50	185	3.1	-16 36	9.9	10.5	Go	1	..	40863b	100	180	3.6	+27 42	9.3	9.6	F2	1	..	38904i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	152	3.6	+21 50	8.6	8.9	Fo	3	..	3807oi	51	152	4.0	+11 29	8.3	8.6	F2	4	2,4	37432i
2	172	3.6	+13 49	10.8	11.6	G5	1	..	667om	52	210	4.0	-12 38	8.9	9.2	Fo	5	..	22104b
3	134	3.6	+10 2	9.4	10.0	Go	2	..	14896b	53	187	4.0	-16 11	10.1	10.9	G5	2	..	40863b
4	164	3.6	+7 0	8.9	9.4	F8	1	..	37432i	54	452	4.0	-32 42	7.9	8.5	Ko	4	5,4	23840b
5	240	3.6	-10 43	3.60	4.60	Ko	..	R	1627c	55	439	4.0	-34 51	8.98	9.6	A5	2	..	20245b
6	503	3.6	-24 47	8.25	8.7	F8	6	0,5	23762b	56	258	4.0	-53 13	8.6	10.1	Go	3	..	45461b
7	412	3.6	-32 56	10.3	10.3	F8	1	..	20245b	57	271	4.1	+39 38	9.1	9.4	F2	2	..	3738oi
8	391	3.6	-38 49	9.0	10.1	G5	2	..	14372b	58	201	4.1	+38 17	8.3	8.4	A2	3	3,2	3738oi
9	279	3.6	-48 6	8.8	9.5	F8	3	..	20260b	59	223	4.1	+37 36	7.60	7.88	Fo	4	2,3	3738oi
10	270	3.7	+52 20	7.8	8.8	Ko	2	..	38879i	60	198	4.1	+35 5	2.37	3.72	Ma	..	R	721c
11	275	3.7	+46 42	4.28	4.23	B8	..	R	56,72	61	152	4.1	+18 24	8.5	8.6	A3	3	E	37412i
12	194	3.7	+34 16	7.26	7.34	A3	4	0,3-	3738oi	62	133	4.1	+10 17	9.42	9.98	Go	1	..	14896b
13	178	3.7	+33 25	7.25	7.31	A2	5	0,3-	3738oi	63	177	4.1	+8 4	9.6	9.7	A3	2	..	14896b
14	181	3.7	+22 37	9.1	9.7	G	2	..	38219i	64	217	4.1	+2 1	8.7	9.0	Fo	3	..	14674b
15	177	3.7	+9 12	7.25	7.23	B9	6	..	37432i	65	158	4.1	-3 26	8.9	9.4	F8	4	..	23768b
16	198	3.7	-17 35	8.7	10.1	Ma	5	..	40863b	66	243	4.1	-10 38	8.5	9.5	Ko	4	..	14808b
17	415	3.7	-32 58	9.0	10.3	G5	3	..	20245b	67	207	4.1	-19 55	9.78	9.9	Go	1	..	45603b
18	257	3.7	-54 23	9.0	10.1	Go	2	5,2	17627b	68	360	4.1	-30 9	7.97	8.2	F5	5	..	20245b
19	227	3.7	-56 30	7.6	9.0	Go	5	..	17627b	69	333	4.1	-47 12	7.22	7.7	A5	9	..	20260b
20	74	3.7	-59 35	8.9	10.1	Ko	4	..	17627b	70	90	4.1	-62 24	7.3	7.4	A2	9	..	23815b
21	134	3.8	+65 37	9.2	10.2	Ko	1	5,1	38108i	71	181	4.2	+58 26	8.2	8.3	A3	1	1,3	38558i
22	146	3.8	+64 7	8.7	8.7	Ao	3	0,2	3806oi	72	227	4.2	+51 13	7.66	8.16	F8	4	..	38879i
23	214	3.8	+63 2	9.2	9.2	Ao	2	..	38108i	73	252	4.2	+45 12	8.42	8.92	F8	3	0,2	38917i
24	217	3.8	+62 11	8.4	9.4	Ko	3	0,3-	38108i	74	272	4.2	+39 56	8.6	8.9	Fo	2	..	3738oi
25	195	3.8	-5 15	8.3	9.1	G5	4	5,3	14808b	75	202	4.2	+39 6	9.2	9.8	G	1	..	3738oi
26	257	3.8	-53 15	8.6	10.1	G5	3	..	45461b	76	180	4.2	+34 5	8.1	8.5	F5	2	..	3738oi
27	..	3.8	-72 21	..	..	G5	2	..	22155b	77	195	4.2	+4 54	8.9	9.9	Ko	3	..	14674b
28	58	3.9	+73 44	8.5	9.5	Ko	2	..	38134i	78	198	4.2	-5 31	8.7	8.8	A2	5	0,4	14808b
29	77	3.9	+68 15	5.34	5.34	Ao	..	1,10	56,72	79	372	4.2	-26 4	8.9	9.6	G5	3	..	23762b
30	136	3.9	+66 13	8.6	9.2	Go	2	..	38905i	80	455	4.2	-31 28	8.2	9.4	Ko	3	5,2	45166b
31	135	3.9	+65 14	9.10	9.44	F2	2	0,1	38905i	81	253	4.2	-40 31	9.7	10.8	K2	1	..	14372b
32	218	3.9	+61 17	8.4	8.4	B9	3	1,3	38108i	82	241	4.2	-55 47	4.13	4.08	B8	..	0,R	28,195
33	236	3.9	+54 13	7.10	8.10	Ko	5	..	38879i	83	91	4.2	-62 41	9.8	10.1	Fo	3	..	23815b
34	269	3.9	+39 16	8.1	8.4	F2	3	2,1	3738oi	84	64	4.2	-73 0	..	10.8	B	3	R	22155b
35	183	3.9	+29 43	8.3	9.4	K2	1	..	3734oi	85	273	4.3	+40 6	8.92	9.48	G	1	..	3738oi
36	148	3.9	+23 56	8.9	9.0	A2	4	..	38904i	86	150	4.3	+23 16	6.65	6.93	Fo	3	5,3	37334i
37	176	3.9	+7 46	9.4	10.6	K5	1	..	14896b	87	510	4.3	-23 55	9.5	10.5	Go	2	..	23762b
38	369	3.9	-26 24	8.2	9.3	Ko	4	R	12238b	88	254	4.3	-39 59	9.3	10.9	Ko	1	..	14372b
39	302	3.9	-38 54	9.7	9.8	Go	2	..	14372b	89	88	4.3	-76 23	9.7	10.8	K2	3	..	22155b
40	98	4.0	+67 15	6.65	7.21	Go	..	2,6	56,72	90	272	4.4	+53 12	8.2	9.0	G5	2	..	38879i
41	147	4.0	+63 39	7.8	7.9	A3	..	1,4	56,72	91	287	4.4	+45 26	8.0	8.1	A2	2	..	36956i
42	271	4.0	+52 27	8.5	8.6	A2	2	..	38879i	92	199	4.4	+35 10	8.47	8.89	F5	3	..	3738oi
43	239	4.0	+51 31	7.81	8.23	F5P	3	R	38879i	93	181	4.4	+33 20	7.02	7.46	F5	4	0,3	3738oi
44	348	4.0	+48 32	7.05	7.05	Ao	2	..	36956i	94	185	4.4	-18 38	10.8	11.2	F5	1	..	40863b
45	213	4.0	+36 2	8.7	9.0	F2	2	3,2	3738oi	95	444	4.4	-34 8	9.0	9.1	Go	3	..	20245b
46	184	4.0	+29 56	8.6	9.8	K5	1	..	37381i	96	335	4.4	-43 11	8.3	9.3	G5	2	..	42098b
47	182	4.0	+22 23	7.48	7.82	F2	7	..	38904i	97	323	4.4	-49 18	9.4	10.4	Go	2	..	39664b
48	156	4.0	+22 3	8.6	8.7	A3	4	1,1	3807oi	98	263	4.4	-53 53	8.3	9.5	F2	3	3,3	17627b
49	141	4.0	+12 49	8.7	9.8	K2	3	..	38103i	99	53	4.5	+74 56	9.2	9.3	A5	2	..	38134i
50	151	4.0	+12 9	8.5	9.1	Go	2	..	38103i	100	207	4.5	+57 34	8.8	8.8	A	1	..	38877i

THE HENRY DRAPER CATALOGUE.

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1^h 4^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	231	4.5	+40 23	7.87	7.93	A2	5	0,4-	38917i	51	185	4.9	+29 20	8.9	9.3	F5	1	..	3734oi
2	181	4.5	+28 10	8.3	8.8	F8	2	..	3734oi	52	183	4.9	+27 55	9.3	10.1	G5	1	..	38904i
3	153	4.5	+19 7	5.60	6.38	G5	3	R	36877i	53	186	4.9	+24 56	6.06	7.24	K5	4	0,3-	3734oi
4	170	4.5	- 2 18	9.6	10.1	F8	2	..	23768b	54	187	4.9	-18 2	9.6	10.4	G5	3	..	40863b
5	188	4.5	-16 35	10.5	11.1	Go	1	..	40863b	55	186	4.9	-18 6	9.9	10.5	G	2	..	40863b
6	356	4.5	-28 40	9.7	11.3	Ko	1	..	23762b	56	210	4.9	-20 46	9.6	9.7	G5	2	..	10629b
7	422	4.5	-33 44	9.7	11.2	Go	2	..	20245b	57	375	4.9	-27 25	10.4	9.9	F5	3	..	23762b
8	437	4.5	-36 40	9.0	10.0	Go	2	..	14372b	58	256	4.9	-40 41	8.7	8.5	Ao	6	2,3	14372b
9	398	4.5	-42 46	9.9	9.8	Go	2	..	39679b	59	81	5.0	+68 50	9.2	10.2	Ko	1	..	38905i
10	336	4.5	-42 56	7.4	8.1	Go	6	2,4	42098b	60	149	5.0	+63 40	5.46	5.44	B9	..	0,R	56,72
11	337	4.5	-43 32	9.1	10.0	F8	2	..	39679b	61	236	5.0	+54 37	4.52	4.66	A5	..	2,8R	56,72
12	320	4.5	-44 18	9.4	10.8	Ko	1	..	39679b	62	355	5.0	+48 37	7.39	8.46	K2	4	..	38879i
13	320	4.5	-46 9	10.3	10.8	Ko	1	..	39679b	63	249	5.0	+42 24	7.7	8.7	Ko	4	..	3738oi
14	115	4.5	-64 51	9.57	10.1	F8	4	2,4	23815b	64	215	5.0	+35 24	9.22	9.36	A5	2	..	3738oi
15	74	4.5	-75 38	10.0	10.5	F8	2	..	22155b	65	170	5.0	+16 3	9.4	10.4	K	1	..	6670m
16	27	4.5	-79 46	9.3	10.5	K5	3	5,3	23772b	66	175	5.0	+15 9	6.36	7.54	K5	6	0,9-	38103i
17	241	4.6	+51 35	7.42	7.48	A2	5	..	38879i	67	174	5.0	- 2 8	8.9	9.4	F8	4	..	23768b
18	228	4.6	+50 28	6.88	7.30	F5	5	0,7	3260b	68	205	5.0	- 7 46	9.3	10.4	K2	1	..	4562ob
19	253	4.6	+45 6	8.87	9.87	Ko	1	..	38917i	69	210	5.0	-14 47	8.21	8.99	G5	3	..	22104b
20	219	4.6	+41 33	5.74	6.30	Go	8	0,4-	3738oi	70	189	5.0	-16 0	10.1	10.7	Go	2	..	40863b
21	177	4.6	+30 26	8.6	9.4	G5	1	..	3734oi	71	43	5.0	-77 12	8.4	9.2	G5	6	5,4	38135b
22	184	4.6	+22 53	9.9	10.0	A3	2	..	38904i	72	127	5.1	+64 29	5.49	5.44	B8	..	1,R	56,72
23	190	4.6	+19 45	9.1	9.5	F5	2	..	38219i	73	216	5.1	+63 0	10.2	10.2	A	1	..	38108i
24	194	4.6	+ 0 42	9.4	10.0	Go	2	..	23768b	74	216	5.1	+35 32	9.3	9.3	Ao	2	..	3738oi
25	171	4.6	- 2 24	10.3	10.6	F	1	..	23768b	75	163	5.1	+17 38	9.4	9.7	F2	2	..	38103i
26	199	4.6	- 5 34	8.9	9.7	G5	2	0,2	14808b	76	227	5.1	- 9 26	6.58	7.36	G5	7	5,7	14808b
27	213	4.6	-12 13	7.32	7.40	A3	8	..	22104b	77	223	5.1	-14 33	9.0	9.5	F8	1	..	22104b
28	209	4.6	-19 56	8.83	9.6	G5	3	5,3	10629b	78	211	5.1	-14 58	8.45	9.23	G5	4	..	22104b
29	265	4.6	-54 28	9.1	9.9	Go	3	0,2	17627b	79	353	5.1	-29 18	8.5	10.0	Go	4	..	23762b
30	81	4.6	-60 5	8.2	8.6	Ao	7	..	23815b	80	322	5.1	-46 48	8.5	9.0	Go	3	..	20260b
31	84	4.6	-72 32	11.2	11.3	A3	3	..	22155b	81	243	5.1	-55 11	9.0	10.4	F8	2	..	39664b
32	..	4.6	-73 44	..	..	Ko	1	..	22155b	82	47	5.1	-70 50	10.0	10.4	F5	2	..	38365b
33	84	4.6	-74 28	9.43	9.4	Fo	4	..	23772b	83	29	5.1	-79 14	10.0	10.6	G	2	..	38135b
34	352	4.7	+48 44	8.5	9.5	Ko	3	..	38879i	84	41	5.2	+77 18	8.4	8.4	Ao	3	0,3	38133i
35	191	4.7	+19 17	8.6	9.1	F8	3	..	38219i	85	140	5.2	+65 20	8.70	9.70	Ko	2	0,1	38905i
36	376	4.7	-44 58	10.3	10.8	G	1	..	39679b	86	218	5.2	+62 49	8.6	9.7	K2	3	0,1	38108i
37	375	4.7	-45 3	9.3	10.0	F8	2	0,2	39679b	87	276	5.2	+39 16	9.4	9.7	Fo	2	..	3738oi
38	334	4.7	-47 40	8.7	9.9	K2	2	..	42088b	88	185	5.2	+27 20	8.1	8.4	Fo	2	0,2	10154i
39	85	4.7	-73 57	10.3	11.3	Ko	3	..	22155b	89	187	5.2	+25 11	9.16	10.23	K2	1	..	38904i
40	28	4.7	-78 58	9.5	10.5	Ko	2	5,2	23772b	90	176	5.2	+15 8	9.29	10.47	K5	1	..	6670m
41	155	4.8	+12 8	9.2	10.2	Ko	1	..	38103i	91	187	5.2	- 7 20	9.4	10.0	G	1	..	4562ob
42	163	4.8	+ 2 32	9.4	9.9	F8	2	..	14674b	92	207	5.2	- 8 16	9.3	9.9	Go	3	..	4562ob
43	307	4.8	-39 44	9.7	11.1	Ko	1	..	14372b	93	376	5.2	-25 58	9.7	10.2	Fo	2	..	23762b
44	286	4.8	-48 27	8.9	10.1	G5	2	..	20260b	94	463	5.2	-32 37	9.6	10.9	Go	2	..	45166b
45	289	4.8	-51 22	9.1	9.9	K2	4	..	42088b	95	291	5.2	-50 56	10.1	11.0	K2	2	..	39664b
46	82	4.8	-60 10	8.4	9.5	F8	5	..	23815b	96	251	5.2	-57 8	7.26	7.6	F8	5	3,7	37016b
47	74	4.8	-61 9	8.6	10.1	Ko	5	..	23815b	97	65	5.2	-73 33	9.26	10.1	G5	3	..	23772b
48	255	4.9	+56 14	8.0	8.0	B9	4	..	37342i	98	57	5.3	+71 52	9.15	9.93	G5	1	..	38134i
49	277	4.9	+46 49	8.8	8.9	A2	1	..	36956i	99	154	5.3	+23 59	8.7	9.5	G5	4	..	38904i
50	214	4.9	+35 54	9.2	10.0	G5	1	..	3738oi	100	186	5.3	+22 56	8.5	9.9	Ma	1	..	38219i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

7000

1h 5m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	156	5.3	+18 18	8.7	9.0	F2	3	E	38103i	51	408	5.7	-35 35	9.3	9.7	Go	3	..	14372b
2	171	5.3	+15 52	10.4	10.7	F	1	..	6670m	52	293	5.7	-41 9	9.7	10.1	Ko	2	..	39679b
3	168	5.3	+6 59	9.1	10.1	Ko	2	..	14896b	53	43	5.7	-71 0	9.5	9.8	Fo	6	..	38365b
4	150	5.3	+6 13	8.9	10.0	K2	2	..	14896b	54	153	5.8	+63 20	9.4	9.8	F5	3	..	38108i
5	220	5.3	+2 1	8.8	10.0	K5	3	..	23768b	55	357	5.8	+49 6	7.6	8.6	Ko	3	..	38879i
6	377	5.3	-26 44	7.39	8.2	Ko	5	5,7	12238b	56	185	5.8	+25 18	9.16	9.94	G5	2	..	38904i
7	310	5.3	-39 42	9.9	10.9	F5	1	..	14372b	57	123	5.8	+16 15	8.26	9.33	K2	4	2,2	6670m
8	40	5.3	-71 12	8.4	9.4	Ko	6	..	38365b	58	465	5.8	-25 10	9.9	10.8	F5	1	..	23762b
9	219	5.4	+63 13	9.0	9.0	A	2	..	38108i	59	359	5.8	-28 18	8.7	8.7	Fo	5	..	23762b
10	199	5.4	+59 58	7.9	8.9	Ko	2	0,1	38108i	60	248	5.9	+52 9	8.6	9.6	Ko	2	..	38879i
11	291	5.4	+45 39	6.86	8.04	K5	2	..	36956i	61	195	5.9	+26 35	9.1	9.1	Ao	3	..	38904i
12	254	5.4	+44 33	9.2	10.2	Ko	1	..	38917i	62	172	5.9	+16 2	9.4	9.9	F8	3	..	6670m
13	135	5.4	+10 37	8.7	9.8	K2	1	..	14896b	63	190	5.9	-7 12	9.3	9.9	Go	2	..	45620b
14	221	5.4	+1 55	6.20	7.20	Ko	7	0,7	37466i	64	269	5.9	-53 16	10.4	10.4	Ao	3	..	39664b
15	330	5.4	-48 53	9.3	11.4	K2	1	..	39664b	65	254	5.9	-57 32	9.1	9.5	F5	3	0,3	39664b
16	88	5.4	-60 3	9.6	10.7	K2	3	..	23815b	66	81	5.9	-59 20	9.1	10.1	G5	4	..	17627b
17	292	5.5	+46 6	7.20	7.18	B9	6	..	38879i	67	75	5.9	-67 20	9.4	9.7	Fo	5	..	38365b
18	235	5.5	+40 42	7.87	8.65	G5	3	..	3738oi	68	37	5.9	-69 23	9.6	10.4	G5	2	..	38365b
19	201	5.5	+37 12	5.75	5.70	B8	8	0,5	3738oi	69	38	5.9	-69 41	9.9	10.4	F8	3	..	38365b
20	121	5.5	+16 25	9.4	9.9	F8	2	..	6670m	70	20	5.9	-84 8	7.40	8.9	Ko	6	..	15173b
21	178	5.5	+14 52	9.4	9.5	A2	4	R	6670m	71	59	6.0	+73 23	7.72	8.28	Go	4	..	38134i
22	136	5.5	+10 28	9.02	9.80	G5	2	..	14896b	72	333	6.0	+47 16	8.0	8.1	A2	3	..	38879i
23	165	5.5	+3 59	8.7	8.8	A3	4	..	14674b	73	294	6.0	+45 24	8.62	9.69	K2	1	..	38917i
24	166	5.5	+3 10	9.1	9.5	F5	2	..	14674b	74	257	6.0	+44 37	8.0	8.0	Ao	3	..	38917i
25	220	5.5	-6 37	7.45	7.51	A2	6	0,8	10390b	75	195	6.0	+19 22	8.9	9.3	F5	2	..	3807oi
26	204	5.5	-16 51	7.58	8.36	G5	5	..	22104b	76	175	6.0	+14 10	8.05	9.05	Ko	6	0,3	6670m
27	434	5.5	-37 5	8.04	9.1	G5	4	0,2	14372b	77	217	6.0	-11 56	8.4	8.9	F8	5	..	22104b
28	234	5.5	-56 29	8.4	10.4	Ko	3	2,2	17627b	78	207	6.0	-17 8	10.8	11.6	G5	1	..	40863b
29	80	5.5	-58 50	8.7	10.1	Go	6	..	17627b	79	466	6.0	-25 8	10.4	10.8	F8	2	..	23762b
30	74	5.5	-67 25	8.5	9.5	Ko	5	..	38365b	80	339	6.0	-43 29	8.2	9.3	G5	3	..	20646b
31	85	5.5	-72 22	8.70	9.3	Go	5	..	38365b	81	384	6.0	-45 46	10.8	11.1	Go	1	..	39679b
32	31	5.5	-78 38	9.5	10.3	G5	3	0,3	23772b	82	81	6.0	-58 13	6.47	6.8	G5	5	5,8	37016b
33	192	5.6	+32 0	8.3	9.1	G5	4	..	3738ii	83	156	6.1	+64 5	7.8	7.8	Ao	2	..	37974i
34	181	5.6	+30 53	5.04	5.18	A5	..	5, R	56,72	84	252	6.1	+43 13	8.0	9.1	K2	3	..	38917i
35	190	5.6	-16 26	10.1	11.1	Ko	1	..	40863b	85	219	6.1	+35 52	7.9	8.0	A2	4	3,3	3738oi
36	463	5.6	-25 26	10.2	10.2	Go	2	..	23762b	86	202	6.1	+34 34	8.2	9.0	G5	2	..	3738oi
37	358	5.6	-27 53	9.2	9.6	F8	3	..	23762b	87	172	6.1	+20 30	4.89	5.89	Ko	..	0,8 R	56,72
38	407	5.6	-35 2	9.1	9.7	A3	2	..	20245b	88	180	6.1	+7 17	9.1	9.6	F8	2	..	14896b
39	328	5.6	-44 37	9.5	10.5	Ko	2	..	20646b	89	175	6.1	-1 49	7.9	8.2	F2	5	..	23768b
40	382	5.6	-45 2	9.16	9.6	Fo	3	..	20260b	90	192	6.1	-7 42	8.9	9.5	Go	2	..	45620b
41	252	5.6	-56 53	8.7	9.8	Go	3	..	17627b	91	191	6.1	-16 14	8.7	9.2	F8	3	..	39702b
42	49	5.6	-70 6	9.0	10.1	K2	4	..	38365b	92	189	6.1	-17 56	10.5	11.0	F8	1	..	40863b
43	246	5.7	+52 11	8.8	8.8	Ao	2	..	38879i	93	195	6.1	-19 20	7.49	9.1	K2	5	0,7	10629b
44	218	5.7	+35 23	8.38	8.80	F5	3	..	3738oi	94	341	6.1	-42 56	8.1	9.7	Ko	3	..	20646b
45	182	5.7	+30 24	8.5	9.9	Ma	1	..	3734oi	95	342	6.1	-43 19	9.5	10.0	A5	1	..	20646b
46	166	5.7	+17 52	8.59	9.09	F8	4	..	38219i	96	296	6.1	-51 16	10.5	11.0	Go	1	..	39664b
47	183	5.7	+9 1	7.15	7.71	Go	3	..	37432i	97	255	6.1	-57 24	7.23	7.1	Fo	6	0,8	37016b
48	202	5.7	-5 23	7.16	7.44	Fo	8	0,8	14808b	98	41	6.1	-69 19	10.0	10.4	F5	3	..	38365b
49	216	5.7	-12 34	8.7	9.7	Ko	3	..	22104b	99	66	6.1	-73 4	11.5	11.3	B	2	R	22155b
50	206	5.7	-17 42	9.0	9.8	G5	3	..	40863b	100	..	6.1	-73 11	Ma	2	..	22155b

THE HENRY DRAPER CATALOGUE.

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1^h 6^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	16	6.1	-82 11	7.79	9.2	Ko	8	..	38135b	51	346	6.7	-43 13	9.9	9.9	Go	2	..	20646b
2	129	6.2	+64 28	7.46	7.74	Fo	4	..	37974i	52	293	6.7	-48 6	9.1	9.9	G5	2	..	45106b
3	223	6.2	+61 21	8.6	8.4	B	2	R	38108i	53	301	6.7	-51 22	9.4	10.1	K5	2	..	42088b
4	224	6.2	+61 14	9.0	9.0	Ao	2	..	38108i	54	45	6.7	-71 1	9.5	10.1	Go	2	..	38365b
5	224	6.2	+41 42	8.1	8.9	G5	3	..	37380i	55	158	6.8	+64 7	9.2	9.5	F2	1	..	38905i
6	190	6.2	+29 34	4.70	5.70	Ko	..	O,R	56,72	56	224	6.8	+62 18	7.7	8.7	Ko	2	..	37988i
7	138	6.2	+9 46	6.65	7.43	G5	4	..	37432i	57	186	6.8	+61 10	6.29	6.27	B9	8	..	38877i
8	176	6.2	-2 32	8.9	9.5	Go	4	..	23768b	58	261	6.8	+44 46	6.60	7.78	K5	4	..	36956i
9	322	6.2	-50 15	8.1	9.3	Ko	2	..	45106b	59	197	6.8	+28 22	8.7	10.1	Ma	1	..	37340i
10	245	6.2	-55 6	10.3	11.3	Ko	1	..	39664b	60	..	6.8	+21 41	var.	var.	Md	1	R	38070i
11	82	6.2	-58 41	10.7	11.3	Go	4	..	17627b	61	139	6.8	+10 38	9.4	9.9	F8	2	..	14896b
12	119	6.2	-64 54	8.96	10.0	Go	6	O,7	23815b	62	156	6.8	-1 0	8.1	8.9	G5	5	..	23768b
13	..	6.2	-73 44	Neb.	Neb.	Pc	..	R	76,21	63	208	6.8	-16 55	10.8	11.4	G	1	..	40863b
14	236	6.3	+50 59	8.2	8.2	Ao	4	..	38879i	64	192	6.8	-18 4	9.0	10.0	Ko	2	..	40863b
15	361	6.3	+49 4	8.7	8.7	Ao	1	..	38879i	65	480	6.8	-31 6	8.9	10.6	K2	2	..	20245b
16	285	6.3	+46 27	8.5	8.5	Ao	3	..	38879i	66	271	6.8	-54 15	8.9	10.1	F8	2	..	17627b
17	239	6.3	+40 35	8.5	8.6	A2	2	..	37380i	67	90	6.8	-60 18	8.6	9.5	Ao	6	..	23815b
18	231	6.3	+37 22	9.1	9.5	F5	2	..	37380i	68	279	6.9	+53 2	8.1	9.1	Ko	2	..	38879i
19	161	6.3	+22 11	7.32	7.40	A3	2	..	37334i	69	238	6.9	+51 4	7.30	7.44	A5	4	..	3260b
20	166	6.3	+3 53	8.7	9.0	Fo	3	..	14674b	70	217	6.9	-15 6	8.3	8.9	Go	4	..	39702b
21	193	6.3	-7 32	9.6	10.7	K2	1	..	45620b	71	195	6.9	-16 36	9.3	9.8	F8	4	..	39702b
22	225	6.3	-14 2	7.67	9.02	Mb	6	..	22104b	72	384	6.9	-26 29	9.1	9.9	Go	2	..	23762b
23	381	6.3	-25 55	9.7	10.2	Go	2	..	23762b	73	242	6.9	-56 43	9.9	10.7	G5	3	..	17627b
24	323	6.3	-50 10	9.3	9.5	Ao	2	..	45106b	74	87	6.9	-66 27	7.8	8.2	F5	9	..	38365b
25	272	6.3	-53 21	8.7	10.1	Ko	3	..	17627b	75	51	6.9	-70 12	9.4	10.4	Ko	2	..	38365b
26	44	6.3	-71 11	9.3	9.8	F8	3	..	38365b	76	59	7.0	+71 58	8.62	8.62	Ao	3	..	38133i
27	157	6.4	+11 49	8.8	9.4	Go	2	..	38103i	77	223	7.0	+57 3	8.0	9.2	K5	1	..	38877i
28	181	6.4	+8 2	9.1	9.9	G5	2	..	14896b	78	254	7.0	+53 52	8.2	8.2	Ao	3	..	38879i
29	190	6.4	-18 25	9.9	10.5	Go	2	..	40863b	79	206	7.0	+34 39	8.2	9.0	G5	2	O,2	37380i
30	322	6.5	+49 59	8.4	8.4	Ao	2	..	38879i	80	185	7.0	+33 35	8.1	9.1	Ko	3	..	37380i
31	177	6.5	+13 59	10.4	11.2	G5	2	..	6670m	81	196	7.0	+31 42	8.3	8.3	B9	2	..	37340i
32	176	6.5	+13 20	8.7	9.0	Fo	5	2,3	6670m	82	192	7.0	+22 43	7.52	7.80	Fo	2	O,2	10154i
33	226	6.5	-5 53	8.9	9.0	A3	3	2,2-	14808b	83	185	7.0	+14 43	9.6	10.0	F5	3	..	6670m
34	217	6.5	-13 23	7.41	7.97	Go	7	..	22104b	84	389	7.0	-26 53	10.4	9.6	A2	3	..	23762b
35	214	6.5	-20 7	9.3	9.9	F5	1	..	10629b	85	376	7.0	-30 28	8.9	10.6	Ko	2	..	20245b
36	469	6.5	-32 47	7.9	9.1	Go	4	..	20245b	86	336	7.0	-44 16	9.4	9.9	Go	2	..	20646b
37	221	6.6	+62 28	8.9	9.0	A3	3	7,2 R	38108i	87	67	7.0	-73 29	7.18	6.9	Ao	10	..	23773b
38	244	6.6	+40 23	7.57	7.85	Fo	4	O,4-	37380i	88	130	7.1	+65 5	9.05	9.05	Ao	3	..	38108i
39	210	6.6	+39 2	9.4	9.4	A	2	..	37380i	89	289	7.1	+46 39	7.7	8.5	G5	2	..	36956i
40	189	6.6	+27 43	8.7	9.2	F8	2	..	38904i	90	212	7.1	+38 20	10.6	10.6	A	1	..	37380i
41	138	6.6	+10 56	8.6	9.4	G5	3	..	14896b	91	221	7.1	+35 44	8.3	9.3	Ko	3	5,2	37380i
42	432	6.6	-23 16	8.5	9.9	K2	3	..	23762b	92	179	7.1	+13 43	10.8	11.8	K	1	..	6670m
43	411	6.6	-41 54	9.7	10.6	F8	1	..	39679b	93	158	7.1	+11 45	7.06	7.48	F5	6	O,6	37432i
44	222	6.7	+62 30	9.2	9.5	F2	2	2,1	38108i	94	207	7.1	-5 2	8.9	8.9	Ao	4	1,4 R	14808b
45	245	6.7	+40 47	7.9	7.9	Ao	3	..	37380i	95	228	7.1	-14 10	8.7	9.0	Fo	3	..	22104b
46	204	6.7	+4 21	8.7	9.5	G5	2	..	14674b	96	194	7.1	-18 21	9.1	10.1	Ko	3	..	40863b
47	161	6.7	-2 47	6.21	7.21	Ko	8	5,8	14808b	97	327	7.1	-46 0	8.7	9.3	Fo	4	..	20260b
48	151	6.7	-3 58	9.3	10.1	G5	1	..	23768b	98	148	7.1	-52 26	10.0	11.0	Ko	1	..	39664b
49	210	6.7	-8 28	8.4	9.2	G5	4	O,4	10390b	99	88	7.1	-66 43	8.0	8.8	G5	8	..	38365b
50	385	6.7	-27 39	9.7	10.5	Ko	2	..	23762b	100	227	7.2	+62 8	8.6	9.6	Ko	1	..	38108i

7200

1h7m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	199	7.2	+28 58	9.4	10.4	Ko	1	..	3738ii	51	161	7.7	+64 6	8.9	9.4	F8	2	..	38108i
2	224	7.2	-11 29	7.9	8.9	Ko	5	5,7	22104b	52	188	7.7	+60 21	7.26	7.09	B3	6	5,3	38877i
3	416	7.2	-35 20	8.7	8.8	Go	5	0,5	14372b	53	300	7.7	+45 43	9.7	10.5	G5	2	..	4415m
4	30	7.2	-78 57	9.2	9.5	F2	7	3,4	23772b	54	187	7.7	+33 35	6.59	6.54	B8	6	..	37512i
5	248	7.3	+41 8	7.36	8.14	G5	6	0,4-	38917i	55	202	7.7	+29 11	8.9	9.5	Go	3	2,2	3738ii
6	205	7.3	+37 9	9.3	9.6	Fo	2	..	3738oi	56	210	7.7	-17 7	10.3	10.9	Go	2	..	40863b
7	194	7.3	+22 56	8.8	9.8	Ko	1	..	38904i	57	188	7.7	-20 59	7.56	8.2	F5	6	0,7	12238b
8	197	7.3	+ 0 27	8.7	9.7	Ko	2	..	14674b	58	374	7.7	-29 35	9.2	11.2	K2	1	..	23762b
9	529	7.3	-23 58	9.5	9.9	F8	2	..	45147b	59	484	7.7	-31 20	6.46	6.7	F5	9	..	20245b
10	301	7.3	-41 16	9.7	10.9	G5	1	..	39679b	60	303	7.7	-41 4	9.6	11.1	G5	1	..	39679b
11	328	7.3	-46 26	8.9	9.7	G5	2	..	20260b	61	398	7.7	-45 2	9.12	9.7	Go	2	..	45106b
12	83	7.3	-59 44	8.48	9.8	G5	5	..	17627b	62	18	7.7	-82 36	9.1	10.1	Ko	1	..	15165b
13	31	7.3	-79 46	9.4	10.5	K2	4	0,3	38135b	63	144	7.8	+65 15	9.5	10.5	Ko	2	0,2	38108i
14	365	7.4	+48 44	7.74	7.80	A2	1	..	36956i	64	296	7.8	+46 40	9.2	10.2	Ko	2	5,2	4415m
15	197	7.4	+31 32	6.57	6.57	Ao	..	0,6	56,72	65	301	7.8	+46 7	8.0	8.4	F5	6	3,3	4415m
16	187	7.4	+15 0	9.8	10.3	F8	3	..	6670m	66	251	7.8	+43 38	7.8	8.9	K2	3	..	38917i
17	156	7.4	+ 6 2	9.1	9.5	F5	1	..	38054i	67	250	7.8	+40 38	8.02	8.80	G5	4	0,3	3738oi
18	223	7.4	+1 57	6.82	7.32	F8	7	..	37466i	68	196	7.8	- 7 19	6.93	7.71	G5	7	0,8	10390b
19	438	7.4	-23 12	9.1	10.2	Ko	2	..	23762b	69	419	7.8	-38 47	9.4	9.8	F8	4	..	14372b
20	387	7.4	-26 50	8.1	9.3	G5	4	..	23762b	70	352	7.8	-47 38	9.5	9.7	F5	2	..	20260b
21	316	7.4	-39 42	7.9	9.1	G5	4	..	14372b	71	369	7.9	+48 15	8.08	8.08	Ao	4	..	38879i
22	68	7.4	-73 17	11.2	11.2	B9	4	..	22155b	72	197	7.9	+27 4	8.8	9.8	Ko	2	..	38904i
23	87	7.4	-74 9	10.0	10.8	G5	2	..	23772b	73	189	7.9	+24 56	8.1	8.2	A2	3	..	38904i
24	131	7.5	+64 18	9.5	10.7	K5	..	..	M	74	143	7.9	+11 13	9.4	10.4	K	1	..	14896b
25	241	7.5	+50 30	8.8	9.6	G5	1	..	38879i	75	144	7.9	+11 9	8.5	9.1	Go	4	2,4	38103i
26	214	7.5	+38 31	8.8	9.6	G5	2	..	3738oi	76	198	7.9	+ 0 33	8.7	9.1	F5	4	..	37466i
27	223	7.5	+35 27	9.3	9.4	A2	2	R	3738oi	77	153	7.9	- 3 54	9.4	10.4	Ko	2	..	23768b
28	204	7.5	+32 36	8.0	8.4	F5	4	0,2	3738oi	78	231	7.9	-14 34	9.4	10.5	K2	2	..	40863b
29	195	7.5	+29 33	6.40	7.40	Ko	..	0,6-	56,72	79	480	7.9	-25 46	8.5	10.8	K5	1	..	23762b
30	195	7.5	+22 18	8.3	8.7	F5	1	..	37334i	80	376	7.9	-29 43	8.58	9.7	G5	5	..	23762b
31	175	7.5	+16 14	8.46	9.46	Ko	5	5,2	6670m	81	441	7.9	-32 54	9.1	10.6	F8	1	..	20245b
32	159	7.5	+11 27	9.4	10.2	G5	3	0,2	14896b	82	151	7.9	-52 17	8.7	10.1	G5	3	..	39664b
33	158	7.5	+ 6 14	9.1	9.6	F8	3	..	14896b	83	277	7.9	-54 38	8.3	10.1	G5	3	..	17627b
34	237	7.5	- 9 45	7.76	8.32	Go	5	0,4	10390b	84	198	8.0	+58 17	7.20	7.62	F5	2	..	37342i
35	418	7.5	-38 28	9.0	10.6	Ma	2	E	39679b	85	224	8.0	+57 45	8.2	8.2	Ao	3	..	38877i
36	302	7.5	-41 28	9.0	10.8	Go	1	..	39679b	86	342	8.0	+47 41	8.16	8.94	G5	2	..	38879i
37	22	7.5	-83 26	8.8	8.9	A2	3	..	15165b	87	211	8.0	+34 24	8.8	9.2	F5	2	..	3738oi
38	36	7.6	+79 23	6.36	6.70	F2	..	0,6	3093c	88	180	8.0	+14 0	9.8	10.8	Ko	1	..	6670m
39	87	7.6	+70 33	7.89	8.89	Ko	3	..	38905i	89	240	8.0	- 8 56	9.6	10.0	F5	3	..	45620b
40	225	7.6	+63 3	9.7	9.7	Ao	2	..	38108i	90	223	8.0	-15 18	9.4	10.4	Ko	4	..	40863b
41	228	7.6	+62 6	8.9	9.2	F2	1	..	38108i	91	321	8.0	-39 51	10.3	10.8	F2	2	..	20646b
42	326	7.6	+49 41	8.0	8.0	Ao	3	..	38879i	92	304	8.0	-41 50	9.9	11.6	Go	2	..	20646b
43	249	7.6	+40 43	8.07	9.25	K5	2	..	3738oi	93	338	8.0	-49 49	8.68	9.2	F2	2	..	12636b
44	125	7.6	+16 22	9.8	10.8	K	1	..	6670m	94	45	8.0	-77 44	8.6	8.9	F2	6	3,6	23772b
45	532	7.6	-24 32	9.9	10.2	G5	2	..	23762b	95	32	8.0	-78 49	10.1	10.1	Ao	3	..	23772b
46	421	7.6	-42 3	9.9	10.6	F8	2	..	20646b	96	5	8.0	-88 57	8.7	9.7	Ko	2	..	15145b
47	350	7.6	-46 58	9.3	9.9	F5	3	..	20260b	97	200	8.1	+31 52	9.1	9.9	G5	2	..	3738ii
48	304	7.6	-51 7	9.3	9.8	Ko	3	..	42088b	98	198	8.1	+29 57	8.7	8.8	A2	1	..	3734oi
49	52	7.6	-70 29	10.7	11.9	K5	1	..	38146b	99	204	8.1	+29 12	6.85	7.85	Ko	..	0,4-	56,72
50	102	7.7	+67 51	9.5	9.6	A2	2	..	38905i	100	192	8.1	+25 55	7.92	8.92	Ko	2	5,1	38882i

THE HENRY DRAPER CATALOGUE.

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1^h 8^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	190	8.1 ^{m.}	+24 28	8.3	9.4	K2	3	0,2	38904i	51	196	8.6 ^o	+28 1	6.63	7.98	Ma	3	5,3	37340i
2	233	8.1	-14 30	9.1	10.1	K0	4	..	40863b	52	197	8.6	+25 17	8.46	9.24	G5	2	..	38882i
3	211	8.1	-17 13	10.3	11.1	G5	2	..	40863b	53	148	8.6	+10 27	9.37	9.37	A0	4	..	14896b
4	47	8.1	-70 53	9.3	9.8	F8	5	..	38365b	54	147	8.6	+10 16	8.97	9.75	G5	2	..	14896b
5	69	8.1	-73 33	9.37	10.0	F5	5	..	22155b	55	212	8.6	+ 4 36	8.2	8.7	F8	6	..	14674b
6	209	8.2	+37 8	8.9	10.1	K5	2	..	37380i	56	229	8.6	+ 2 2	8.7	9.2	F8	3	..	37466i
7	199	8.2	+26 36	8.7	10.1	Ma	1	..	38904i	57	200	8.6	-19 42	9.73	10.0	G0	3	..	40863b
8	194	8.2	+25 42	7.91	8.98	K2	2	..	38882i	58	309	8.6	-41 8	9.0	10.2	G5	2	..	14372b
9	183	8.2	+13 19	8.7	9.0	F0	6	0,3	6670m	59	342	8.6	-49 22	9.3	10.1	K0	2	..	39664b
10	378	8.2	-30 13	8.3	10.0	G0	3	..	20245b	60	88	8.7	+70 34	8.2	8.2	A0	3	..	37974i
11	420	8.2	-35 44	6.96	7.5	K0	..	0,4	56,118	61	201	8.7	+59 13	8.0	8.3	F0	4	0,2	38108i
12	420	8.2	-38 23	5.91	6.8	A5	..	5,8	56,118	62	260	8.7	+51 20	9.4	10.4	K0	..	..	M
13	328	8.2	-50 24	9.3	10.1	K2	2	..	42088b	63	330	8.7	+49 29	8.0	9.1	K2	1	..	38879i
14	78	8.2	-61 46	8.6	10.4	K0	2	..	23815b	64	199	8.7	+29 27	9.1	9.2	A2	2	3,1	38904i
15	83	8.3	+69 5	8.7	8.7	A0	3	..	37974i	65	226	8.7	-12 28	8.7	9.1	F5	5	0,4	39702b
16	162	8.3	+63 32	9.7	10.3	G	1	..	38108i	66	479	8.7	-32 26	8.3	9.4	K0	3	..	20245b
17	186	8.3	+30 42	8.7	9.3	G0	3	..	37381i	67	447	8.7	-33 17	9.6	10.6	G0	2	..	20245b
18	158	8.3	+24 3	4.64	5.64	K0	..	0,8R	56,72	68	153	8.7	-52 4	9.2	9.9	G5	2	..	42088b
19	198	8.3	+23 3	9.2	10.2	K0	1	..	38904i	69	85	8.7	-57 54	10.4	10.4	A0	3	..	17627b
20	181	8.3	- 2 24	9.4	10.0	G0	2	..	23768b	70	194	8.8	+60 20	8.66	8.66	A	3	..	38108i
21	164	8.3	- 3 5	7.24	8.24	K0	5	5,5	14808b	71	286	8.8	+52 18	8.7	8.7	A0	2	..	38879i
22	489	8.3	-30 59	9.2	10.9	G5	2	..	45166b	72	299	8.8	+47 1	8.0	8.4	F5	7	0,3	4415m
23	460	8.3	-36 17	7.50	7.6	A0	5	..	10635b	73	265	8.8	+45 13	9.7	10.7	K0	3	..	6671m
24	333	8.3	-46 11	9.5	11.0	K5	1	..	39679b	74	177	8.8	+15 36	5.85	5.80	B8	10	..	38103i
25	329	8.3	-50 18	8.5	9.2	G0	3	..	12636b	75	230	8.8	+ 1 30	8.8	9.9	K2	2	..	23768b
26	152	8.3	-52 12	9.3	10.1	G0	5	..	39664b	76	210	8.8	- 5 23	7.12	7.46	F2	7	..	14808b
27	278	8.3	-54 34	9.3	10.8	K0	2	..	39664b	77	241	8.8	- 8 51	9.3	10.4	K2	2	..	45620b
28	244	8.3	-56 37	10.2	11.0	G5	2	..	17627b	78	200	8.8	-15 52	8.3	8.4	A5	5	..	39702b
29	84	8.3	-57 54	8.6	8.9	F2	5	..	17627b	79	199	8.8	-16 10	9.9	10.9	K0	3	..	40863b
30	229	8.4	+62 10	8.8	8.8	A0	3	..	38558b	80	220	8.8	-20 33	8.9	10.2	G5	2	..	10629b
31	193	8.4	+60 24	7.46	7.88	F5	4	0,2	38877i	81	448	8.8	-33 21	8.7	10.6	G5	2	..	20245b
32	211	8.4	+59 28	8.8	9.1	F0	2	..	38108i	82	273	8.8	-40 4	7.40	7.6	F0	6	5,8	10635b
33	235	8.4	+37 16	9.3	9.3	A	2	..	37380i	83	77	8.9	+69 34	8.7	8.7	A0	2	..	38905i
34	188	8.4	+33 58	7.03	7.45	F5	4	..	37380i	84	200	8.9	+30 1	7.36	7.36	A0	..	0,6	56,72
35	187	8.4	+ 8 26	8.3	9.1	G5	2	..	37432i	85	214	8.9	- 8 9	8.1	8.9	G5	5	0,3	14808b
36	393	8.4	-26 58	8.3	10.4	K2	2	..	23762b	86	229	8.9	-15 24	9.6	10.2	G0	2	..	40863b
37	353	8.4	-43 12	9.9	10.5	F0	2	..	20646b	87	215	8.9	-17 8	11.2	11.8	G0	2	..	40863b
38	245	8.4	-55 53	10.0	10.8	G5	2	5,1	17627b	88	97	8.9	-62 49	9.0	10.0	K0	6	..	23815b
39	86	8.4	-72 43	10.6	11.4	G5	5	..	22155b	89	90	9.0	+71 13	6.38	7.38	K0	4	..	37615i
40	34	8.5	+81 2	7.72	8.50	G5	2	..	37227i	90	253	9.0	+43 59	9.4	10.6	K5	1	..	4415m
41	284	8.5	+52 29	8.8	8.9	A3	1	..	38879i	91	262	9.0	+42 23	8.8	8.9	A3	3	1,2	37380i
42	302	8.5	+45 33	9.0	10.0	K0	4	0,2	4415m	92	220	9.0	+38 54	7.70	8.48	G5	3	..	37380i
43	213	8.5	+34 29	8.9	9.9	K0	1	..	37380i	93	163	9.0	+18 35	8.1	8.9	G5	1	..	37334i
44	174	8.5	+ 7 3	5.57	5.71	A5	..	R	56,72	94	149	9.0	+11 0	9.4	9.7	F0	2	..	14896b
45	175	8.5	+ 7 3	6.49	6.99	F8	4	R	38054i	95	204	9.0	+ 0 58	8.7	9.7	K0	2	..	23768b
46	178	8.5	+ 6 21	8.9	9.9	K0	3	..	14896b	96	184	9.0	- 2 39	8.7	9.1	F5	4	0,4	23768b
47	157	8.5	- 3 51	8.9	9.7	G5	3	..	23768b	97	227	9.0	-12 22	8.8	9.3	F8	4	..	39702b
48	158	8.5	- 4 9	9.6	10.2	G0	3	..	23768b	98	235	9.0	-14 0	6.84	6.98	A5	7	..	39702b
49	374	8.6	+48 54	7.18	7.16	B9	7	..	38879i	99	191	9.0	-21 3	8.4	9.3	F2	4	2,2	10629b
50	237	8.6	+37 20	9.3	9.3	A	2	..	37380i	100	538	9.0	-24 47	9.60	9.6	F0	3	..	23762b

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1^h 9^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	386	9.0	-30 51	9.4	9.7	Go	3	..	20245b	51	454	9.5	-23 33	9.1	10.5	G5	2	..	23762b
2	497	9.0	-31 39	7.6	8.6	G5	4	..	20245b	52	540	9.5	-24 50	9.30	9.9	Go	4	..	23762b
3	32	9.0	-79 14	9.5	10.5	Ko	4	5,3	38135b	53	359	9.5	-43 4	8.8	9.9	G5	2	..	20646b
4	45	9.1	+77 15	8.5	8.6	A3	2	2,2	38133i	54	360	9.5	-46 58	9.3	9.3	A2	3	..	20260b
5	56	9.1	+74 41	8.7	10.1	Ma	1	..	38134i	55	311	9.5	-51 11	8.6	8.9	Fo	3	..	12636b
6	61	9.1	+73 28	7.06	7.04	B9	6	..	38134i	56	312	9.5	-51 11	8.6	9.2	Fo	2	..	12636b
7	60	9.1	+73 26	8.6	8.6	Ao	4	..	38134i	57	119	9.5	-64 17	9.3	10.1	G5	4	0,4	38146b
8	254	9.1	+43 53	9.2	10.3	K2	1	..	4415m	58	233	9.6	+61 22	7.36	7.78	F5	3	3,3	38877i
9	265	9.1	+43 7	9.5	9.9	F5	2	..	4415m	59	268	9.6	+45 8	10.2	10.6	F5	3	..	6671m
10	213	9.1	+32 27	9.1	9.2	A5	2	..	37381i	60	189	9.6	+30 39	9.2	9.3	A2	2	..	37381i
11	180	9.1	+6 19	9.4	9.9	F8	3	..	14896b	61	201	9.6	+26 3	9.3	9.9	Go	3	..	38904i
12	218	9.1	-17 26	10.3	10.9	Go	1	..	40863b	62	188	9.6	+14 7	9.4	10.0	Go	1	2,1	38103i
13	467	9.1	-34 16	9.0	9.7	F2	2	..	20245b	63	192	9.6	+9 12	7.8	8.2	F5	3	..	37432i
14	81	9.1	-61 52	10.0	10.4	F5	3	..	23815b	64	175	9.6	+2 17	8.9	9.9	Ko	2	E	23768b
15	164	9.2	+63 47	8.9	8.9	Ao	3	0,3-	38905i	65	260	9.6	-10 30	8.1	9.1	Ko	5	..	45620b
16	220	9.2	+59 59	8.0	9.0	Ko	3	0,1	38108i	66	232	9.6	-14 49	9.16	10.16	Ko	4	..	40863b
17	302	9.2	+46 30	9.5	9.5	Ao	3	..	6671m	67	542	9.6	-24 22	9.9	10.2	G5	2	..	23762b
18	303	9.2	+46 6	8.0	9.1	K2	5	3,2	4415m	68	386	9.6	-29 6	9.7	11.2	K2	2	..	23762b
19	255	9.2	+43 22	9.0	10.0	Ko	1	..	4415m	69	312	9.6	-41 13	8.8	10.1	F8	3	..	14372b
20	207	9.2	+31 29	9.3	9.6	Fo	2	5,1	37381i	70	91	9.6	-60 46	9.1	10.4	G5	2	..	23815b
21	185	9.2	-2 43	9.3	10.7	Mb	3	..	23768b	71	35	9.7	+80 20	7.20	7.48	Fo	4	..	37227i
22	163	9.2	-3 50	9.4	10.5	K2	2	..	23768b	72	104	9.7	+68 9	9.2	9.7	F8	1	..	38905i
23	230	9.2	-15 33	9.6	10.1	F8	2	..	40863b	73	305	9.7	+46 36	8.1	9.1	Ko	4	2,2	4415m
24	219	9.2	-16 58	10.8	11.4	Go	2	..	40863b	74	269	9.7	+44 54	9.4	10.4	Ko	2	..	4415m
25	428	9.2	-42 45	9.2	10.4	Ko	2	..	20646b	75	242	9.7	+37 57	7.8	8.6	G5	3	0,2	37380i
26	200	9.3	+25 54	8.7	9.7	Ko	2	..	37340i	76	162	9.7	-1 31	5.82	6.24	F5	8	..	37466i
27	201	9.3	-16 40	9.6	10.7	K2	2	..	40863b	77	457	9.7	-22 58	7.9	9.9	K2	3	..	23762b
28	470	9.3	-36 42	8.3	9.4	G5	3	..	14372b	78	333	9.7	-39 19	9.3	10.4	Go	3	..	14372b
29	310	9.3	-40 58	9.6	11.6	K2	1	..	39679b	79	264	9.7	-55 46	8.4	9.5	F8	2	..	17627b
30	357	9.3	-42 54	7.8	9.3	Ko	3	..	20646b	80	229	9.8	+62 15	8.9	8.9	Ao	2	..	38108i
31	333	9.3	-50 38	10.3	10.1	F8	4	..	39664b	81	245	9.8	+50 20	9.07	9.85	G5	2	..	38879i
32	203	9.4	+58 46	7.9	7.9	B9	3	1,2	38108i	82	291a	9.8	+40 11	var.	var.	Md	..	R	M
33	231	9.4	+56 37	8.6	8.7	A2	2	..	38877i	83	212	9.8	+37 12	8.3	9.1	G5	3	..	37380i
34	215	9.4	+34 21	7.9	8.9	Ko	2	..	37380i	84	206	9.8	+26 39	9.1	9.9	G5	2	..	38904i
35	215	9.4	+32 36	9.1	9.9	G5	1	..	37381i	85	200	9.8	+22 20	8.5	9.1	Go	3	E	38882i
36	213	9.4	+4 41	8.9	9.4	F8	2	..	14674b	86	189	9.8	+14 8	9.1	9.7	Go	2	5,2	10209b
37	189	9.4	-0 23	9.1	10.2	K2	2	..	23768b	87	484	9.8	-31 52	8.7	9.1	F8	3	..	20245b
38	215	9.4	-8 27	8.7	9.3	G	5	..	45620b	88	467	9.8	-37 32	8.3	8.5	F8	6	3,3	14372b
39	216	9.4	-8 28	5.21	5.49	Fo	..	5,10	56,72	89	250	9.8	-56 23	10.3	10.8	F8	1	..	39664b
40	501	9.4	-30 53	9.7	10.0	Go	3	..	20245b	90	46	9.9	+78 6	8.6	9.2	Go	1	..	37615i
41	83	9.4	-61 43	10.7	11.3	G	2	..	23815b	91	304	9.9	+45 54	9.5	9.5	Ao	5	..	4415m
42	88	9.4	-74 26	7.0	7.5	F8	8	..	23772b	92	207	9.9	+0 42	9.1	10.1	Ko	3	..	23768b
43	145	9.5	+65 36	8.5	8.9	F5	3	..	38905i	93	166	9.9	-4 19	9.4	10.0	Go	3	..	23768b
44	243	9.5	+51 12	7.55	8.55	Ko	4	..	38879i	94	238	9.9	-14 17	9.9	10.2	F2	3	..	40863b
45	222	9.5	+38 17	8.7	9.0	Fo	2	..	37380i	95	206	9.9	-16 21	7.30	7.80	F8	6	..	22104b
46	181	9.5	+6 28	6.21	7.21	Ko	..	0,6-	56,72	96	199	9.9	-17 46	8.3	8.4	A3	4	..	10628b
47	175	9.5	+4 4	8.7	9.1	F5	2	..	37466i	97	458	9.9	-23 3	7.6	9.6	K2	5	..	23762b
48	174	9.5	+3 15	9.1	9.6	F8	1	..	14674b	98	432	9.9	-42 25	8.6	9.0	Go	5	..	20646b
49	215	9.5	-5 35	7.46	7.96	F8	5	0,5	10390b	99	281	9.9	-54 14	9.1	10.4	Go	2	..	17627b
50	221	9.5	-17 24	10.3	10.7	F5	2	..	40863b	100	190	10.0	+31 0	9.1	9.9	G5	2	..	37381i

THE HENRY DRAPER CATALOGUE.

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1^h 10^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	246	10.0	m. 0 9 40	9.26	10.26	Ko	1	..	4562ob	51	210	10.5	+ 0 23	6.70	6.76	A2	8	..	37466i
2	313	10.0	-41 5	9.0	10.4	Ko	2	..	14372b	52	221	10.5	-22 16	8.18	9.3	Ko	4	..	23762b
3	106	10.0	-62 58	9.7	10.3	Go	1	..	23815b	53	462	10.5	-23 27	9.4	9.7	A5	3	..	23762b
4	89	10.0	-66 37	9.6	10.1	F8	3	..	38365b	54	121	10.5	-64 37	9.4	10.0	Go	4	0,3	38146b
5	36	10.1	+80 22	6.73	6.73	Ao	7	0,R	37227i	55	17	10.5	-80 39	8.7	8.8	A5	7	0,7	23772b
6	336	10.1	+49 31	8.8	8.8	A	1	..	38879i	56	58	10.6	+74 30	8.9	9.5	Go	2	..	38134i
7	335	10.1	+49 21	7.62	8.80	K5	3	..	38879i	57	198	10.6	+61 7	8.7	9.8	K2	1	..	38108i
8	305	10.1	+45 52	10.2	10.7	F8	2	..	6671m	58	..	10.6	+43 54	..	..	A	3	R	4415m
9	268	10.1	+42 37	8.7	8.7	Ao	2	..	38917i	59	292	10.6	+40 7	8.47	9.25	G5	2	..	3738oi
10	195	10.1	+34 11	8.3	9.1	G5	4	..	3738oi	60	220	10.6	+34 41	8.5	9.3	G5	2	..	3738oi
11	212	10.1	+19 53	7.03	7.09	A2	4	..	37334i	61	205	10.6	+25 14	var.	var.	Na	2	0,I,R	10154i
12	168	10.1	- 3 8	10.1	10.2	A2	1	..	23768b	62	164	10.6	+23 42	9.9	10.5	G	1	..	38904i
13	200	10.1	-18 43	8.09	8.87	G5	4	..	10628b	63	181	10.6	+15 40	7.64	7.70	A2	3	..	38103i
14	396	10.1	-29 55	9.08	10.0	Go	5	..	23762b	64	142	10.6	+ 9 15	7.10	7.44	F2	5	..	37432i
15	338	10.1	-50 47	10.1	10.1	Go	5	0,2	39664b	65	179	10.6	+ 3 6	9.4	9.7	Fo	1	..	14674b
16	313	10.1	-50 57	7.8	8.6	Ko	4	..	12636b	66	211	10.6	+ 0 24	9.2	9.3	A5	3	..	23768b
17	123	10.1	-65 34	8.8	9.2	F5	7	..	38146b	67	546	10.6	-24 29	8.5	9.3	G5	6	..	23762b
18	50	10.1	-71 25	8.1	8.9	G5	8	..	38365b	68	383	10.6	-28 47	8.9	10.5	Ko	3	..	23762b
19	88	10.1	-72 10	10.1	10.4	F2	5	..	22155b	69	400	10.6	-30 6	8.9	10.6	Go	2	..	45166b
20	254	10.2	+55 1	8.6	8.6	Ao	2	..	38879i	70	346	10.6	-46 4	4.88	6.2	Go	..	0,R	28,195
21	256	10.2	+43 38	10.2	10.7	F8	2	..	6671m	71	341	10.6	-50 45	10.5	10.1	A2	4	0,2	39664b
22	152	10.2	+10 15	9.52	9.66	A5	2	..	14896b	72	87	10.6	-59 18	10.4	11.4	Ko	1	..	17627b
23	220	10.2	- 8 34	9.9	10.9	Ko	1	..	4562ob	73	89	10.6	-74 48	8.62	9.2	Go	5	..	23772b
24	233	10.2	-15 41	8.5	9.6	K2	5	..	40863b	74	76	10.6	-75 18	9.9	10.9	Ko	2	..	22155b
25	223	10.2	-20 13	9.0	10.0	G5	4	..	40863b	75	237	10.7	+61 46	9.2	10.2	Ko	1	..	38108i
26	313	10.2	-48 47	9.9	11.8	Ro	..	..	M	76	308	10.7	+45 58	9.4	9.4	Ao	4	..	4415m
27	285	10.2	-53 39	7.4	9.0	Ko	5	5,3	17627b	77	258	10.7	+43 55	8.30	8.28	B9	5	1,4,R	4415m
28	84	10.2	-61 32	7.9	8.3	F5	7	..	23815b	78	223	10.7	+32 36	6.31	7.31	Ko	6	0,3	3738oi
29	185	10.3	+ 6 25	8.3	9.4	K2	2	..	10209b	79	202	10.7	+28 3	9.1	9.6	F8	3	0,2-	38904i
30	461	10.3	-23 25	8.26	8.8	Go	6	..	23762b	80	263	10.7	-10 19	8.5	8.5	Ao	5	..	1039ob
31	335	10.3	-39 22	10.1	10.7	G5	1	..	14372b	81	415	10.7	-45 9	8.3	8.7	F5	5	..	2026ob
32	280	10.3	-39 53	10.5	11.4	F8	2	..	20646b	82	87	10.7	-57 55	7.8	9.5	Ko	6	0,3	17627b
33	412	10.3	-45 48	8.9	9.3	F2	4	..	2026ob	83	90	10.7	-73 52	10.07	10.5	B	4	R	22155b
34	344	10.3	-46 20	9.7	10.8	K2	2	3,I	39679i	84	77	10.7	-75 38	9.1	10.1	Ko	4	..	22155b
35	93	10.3	-60 2	10.3	11.5	K5	1	..	17627b	85	21	10.8	+86 25	8.9	9.5	Go	3	..	3728ri
36	90	10.3	-76 50	10.1	11.3	K5	2	R	22155b	86	223	10.8	+59 44	9.0	9.0	Ao	1	..	38108i
37	106	10.4	+67 38	9.0	9.1	A5	1	..	38905i	87	277	10.8	+55 58	8.0	9.0	Ko	2	..	38877i
38	307	10.4	+46 14	9.9	10.5	Go	2	..	6671m	88	309	10.8	+46 15	9.9	9.9	Ao	2	..	4415m
39	257	10.4	+43 59	8.9	9.7	G5	2	..	4415m	89	270	10.8	+44 27	9.9	10.5	G	2	..	6671m
40	..	10.4	+41 12	var.	var.	Md	..	..	M	90	271	10.8	+42 25	6.69	7.25	G	5	0,5-	3738oi
41	197	10.4	+ 8 14	8.14	8.92	G5	3	..	10209b	91	259	10.8	+40 20	8.37	8.37	Ao	3	..	37512i
42	186	10.4	+ 6 45	9.4	9.9	F8	1	..	14896b	92	230	10.8	-12 4	9.4	10.0	Go	2	R	39702b
43	240	10.4	-14 26	9.1	9.5	F5	4	..	40863b	93	235	10.8	-15 13	10.1	10.5	F5	2	..	39702b
44	R	10.4	-22 50	7.90	9.1	G5	5	..	23762b	94	208	10.8	-18 57	8.5	9.3	F8	4	..	10628b
45	86	10.4	-59 4	9.3	11.0	G5	3	..	17627b	95	384	10.8	-28 48	9.4	10.8	Ko	1	..	23762b
46	357	10.5	+47 33	6.50	6.45	B8	3	..	36956i	96	475	10.8	-37 51	8.7	10.6	K5	1	..	20646b
47	306	10.5	+45 44	10.2	11.3	K2	1	..	6671m	97	255	10.8	-55 54	7.6	9.8	Go	3	5,2	17627b
48	243	10.5	+37 23	9.3	9.6	Fo	2	..	3738oi	98	124	10.8	-65 25	9.5	10.3	G5	4	..	38146b
49	213	10.5	+31 47	9.4	9.5	A5	2	..	3738ri	99	266	10.9	+53 14	8.4	8.7	F2	3	..	38879i
50	213	10.5	+19 59	7.50	8.28	G5	2	..	37334i	100	237	10.9	+35 54	8.7	9.1	F5	2	0,I	3738oi

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1^h 10^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	167	10.9	+23 15	9.1	9.6	F8	2	..	38904i	51	204	11.3	- 7 41	9.1	9.7	Go	3	..	45620b
2	129	10.9	+17 7	8.42	9.49	K2	1	..	38103i	52	549	11.3	-24 26	10.6	10.2	Ao	2	..	23762b
3	130	10.9	+16 18	8.2	9.3	K2	2	..	38103i	53	54	11.3	-71 34	10.3	11.4	K2	2	..	22155b
4	155	10.9	+13 12	8.9	9.9	Ko	1	..	38103i	54	24	11.3	-83 4	8.7	9.3	Go	3	..	15165b
5	153	10.9	+10 57	9.1	9.7	Go	1	..	10209b	55	64	11.4	+71 52	7.08	7.86	G5	4	..	37615i
6	204	10.9	-17 55	8.5	8.9	F5	5	..	45603b	56	273	11.4	+45 13	10.2	10.3	A2	2	..	4415m
7	489	10.9	-32 9	9.7	10.3	F8	2	..	20245b	57	272	11.4	+45 4	8.8	9.8	Ko	3	..	4415m
8	256	10.9	-56 10	7.63	9.2	K5	4	0,2	17627b	58	170	11.4	+23 40	9.3	10.1	G5	2	..	38904i
9	14	10.9	-85 50	9.5	10.5	Ko	3	..	15145b	59	186	11.4	+20 33	7.15	7.57	F5	3	..	37334i
10	67	11.0	+72 52	8.6	8.6	Ao	3	2,3	37615i	60	238	11.4	+ 2 12	7.9	8.2	Fo	6	..	32466i
11	89	11.0	+69 7	9.0	9.1	A2	2	..	38905i	61	233	11.4	-12 38	7.46	8.24	G5	5	5,8	22104b
12	237	11.0	+56 34	8.6	8.6	A	2	..	38877i	62	228	11.4	-13 4	9.9	10.5	Go	1	..	39702b
13	340	11.0	+49 21	8.8	9.4	G	1	..	38879i	63	223	11.4	-22 1	9.1	10.5	Ko	2	..	45147b
14	310	11.0	+47 2	8.6	8.6	B9	5	1,4-	4415m	64	258	11.4	-56 6	9.2	9.9	Ko	2	..	17627b
15	204	11.0	+23 2	6.51	6.51	Ao	3	0,3	10154i	65	108	11.5	+67 17	6.70	6.70	Ao	..	0,7	56,72
16	182	11.0	+15 39	8.1	8.4	F2	2	..	38103i	66	281	11.5	+56 6	6.78	7.78	Ko	3	..	37342i
17	208	11.0	-16 7	10.3	11.5	K5	1	..	40863b	67	312	11.5	+46 51	8.9	9.9	Ko	2	..	4415m
18	478	11.0	-34 33	9.7	9.7	G5	4	..	20245b	68	238	11.5	+41 31	8.6	8.7	A5	3	R	3730i
19	439	11.0	-38 45	10.1	11.0	Go	1	..	14372b	69	229	11.5	+38 56	6.55	6.53	B9	6	1,6	37512i
20	287	11.0	-54 38	9.2	10.1	G5	3	5,2	39664b	70	195	11.5	+31 14	8.3	8.4	A2	2	..	37340i
21	125	11.0	-65 17	9.1	9.7	Go	6	5,4	38145b	71	216	11.5	+ 4 31	8.3	9.3	Ko	2	..	37466i
22	52	11.0	-70 59	10.1	10.7	Go	2	..	38365b	72	172	11.5	- 3 2	5.54	6.10	Go	9	..	23768b
23	39	11.1	+76 16	7.57	8.64	K2	1	..	37227i	73	223	11.5	- 5 24	8.5	8.9	F5	5	0,4	10390b
24	238	11.1	+35 47	8.1	8.7	F2	4	R	37380i	74	244	11.5	-14 5	8.8	10.2	Ma	3	..	40863b
25	206	11.1	+25 55	9.7	10.5	G5	1	..	38904i	75	492	11.5	-31 55	8.4	9.2	G5	3	..	20245b
26	144	11.1	+ 9 42	8.8	9.4	Go	3	..	14896b	76	483	11.5	-34 41	7.93	8.2	A3	6	..	20245b
27	221	11.1	- 5 29	8.8	9.8	Ko	2	0,2	14808b	77	419	11.5	-45 38	9.7	11.1	Go	2	..	39679b
28	468	11.1	-23 50	8.2	9.3	Ko	5	..	23762b	78	290	11.5	-54 15	8.4	8.9	Go	4	0,2	17627b
29	548	11.1	-24 30	7.12	7.6	A5	9	..	23762b	79	271	11.5	-57 47	8.7	10.1	Ko	4	..	17627b
30	515	11.1	-33 1	9.5	10.6	Ko	2	..	45166b	80	99	11.5	-62 38	8.5	9.5	Ko	8	..	23815b
31	462	11.1	-31 11	9.9	10.9	F8	2	..	20245b	81	201	11.6	+61 12	8.0	9.2	K5	2	0,1	38108i
32	349	11.1	-46 21	9.9	10.8	Ko	2	2,1	39679b	82	313	11.6	+46 44	9.7	9.8	A2	1	..	4415m
33	96	11.1	-60 39	8.3	9.5	A2	5	3,7	17627b	83	310	11.6	+45 43	10.2	11.2	Ko	1	..	4415m
34	89	11.1	-72 14	10.1	11.1	Ko	3	..	22155b	84	209	11.6	+29 28	7.9	8.2	F2	2	..	37340i
35	33	11.1	-79 35	9.9	10.5	Go	4	0,3	23772b	85	206	11.6	+27 28	8.1	8.2	A2	4	1,2	38882i
36	240	11.2	+57 6	7.6	7.4	B1	5	R	37342i	86	192	11.6	+ 7 58	9.12	9.68	G	1	..	14896b
37	279	11.2	+55 23	8.41	9.48	K2	1	..	38877i	87	192	11.6	- 1 48	8.9	9.7	G5	4	..	23768b
38	309	11.2	+45 30	9.7	9.7	Ao	4	2,2	4415m	88	173	11.6	- 3 13	8.9	9.7	G5	2	..	23768b
39	248	11.2	+37 55	7.9	8.7	G5	4	0,3	37380i	89	226	11.6	-17 9	8.9	9.9	Ko	3	..	40863b
40	176	11.2	+18 0	8.7	9.5	G5	3	..	37467i	90	344	11.6	-39 14	9.7	10.7	G5	2	..	14372b
41	209	11.2	-16 27	10.3	11.1	G5	2	..	40863b	91	315	11.6	-51 41	10.3	11.0	Go	2	..	39664b
42	227	11.2	-20 20	8.7	9.6	F5	4	..	10629b	92	107	11.6	-63 40	8.9	10.0	K2	5	2,5	23815b
43	284	11.2	-40 28	8.7	9.0	F2	6	2,6-	20646b	93	44	11.6	-69 21	7.4	8.2	G5	7	..	38365b
44	350	11.2	-45 58	10.3	11.7	G	1	..	39679b	94	258	11.7	+54 54	7.41	7.29	B5	5	3,3	38879i
45	90	11.2	-58 33	8.1	10.7	Ma	4	..	17627b	95	301	11.7	+49 13	8.0	8.1	A2	4	..	38879i
46	68	11.3	+72 21	7.18	7.96	G5	4	5,3	37615i	96	..	11.7	+45 51	..	..	A	1	..	6671m
47	271	11.3	+44 23	6.48	7.66	K5	8	0,3	4415m	97	311	11.7	+45 22	10.2	10.6	F5	2	..	6671m
48	207	11.3	+25 30	9.4	10.0	Go	2	..	38904i	98	261	11.7	+43 51	9.7	10.3	G	2	..	6671m
49	177	11.3	+17 21	9.1	9.2	A2	2	..	38103i	99	260	11.7	+43 30	8.6	8.6	Ao	6	2,3	4415m
50	200	11.3	+ 9 6	8.7	9.3	Go	4	..	14896b	100	189	11.7	+ 6 16	9.1	9.9	G5	3	..	14896b

THE HENRY DRAPER CATALOGUE.

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1^h 11^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	245	11.7	-14 31	10.3	10.7	F5	2	..	39702b	51	229	12.1	-17 37	8.03	8.31	Fo	5	..	10628b
2	387	11.7	-28 21	9.1	11.1	K2	2	..	23762b	52	499	12.1	-31 56	8.4	10.0	Ko	2	..	20245b
3	398	11.7	-29 44	9.53	10.3	Go	1	..	20245b	53	445	12.1	-38 39	7.8	9.5	Ko	5	..	14372b
4	467	11.7	-33 15	8.8	9.7	F8	4	..	20245b	54	122	12.1	-64 36	9.4	10.0	Go	5	0,7	23815b
5	466	11.7	-33 34	9.4	10.6	G5	3	..	20245b	55	71	12.1	-73 47	10.1	11.2	K2	4	..	22155b
6	446	11.7	-42 32	6.76	7.6	Ko	4	..	10635b	56	19	12.1	-87 19	8.8	9.8	Ko	3	..	15145b
7	70	11.7	-73 17	10.5	11.3	G5	2	..	22155b	57	151	12.2	+65 37	8.0	8.0	Ao	3	..	38905i
8	78	11.7	-75 9	9.3	10.5	K5	2	..	22155b	58	319	12.2	+46 53	6.41	7.41	Ko	7	2,3	4415m
9	235	11.8	+63 0	8.2	8.2	Ao	4	2,2-	38108i	59	318	12.2	+46 35	8.6	8.7	A3	3	..	4415m
10	392	11.8	+48 29	6.82	6.82	Ao	7	..	38879i	60	312	12.2	+45 56	9.5	10.5	Ko	1	..	4415m
11	315	11.8	+46 24	9.0	9.0	Ao	4	0,2	4415m	61	207	12.2	+23 0	9.1	10.2	K2	1	..	38904i
12	276	11.8	+45 14	10.2	11.0	G5	2	..	4415m	62	185	12.2	+15 50	8.74	9.30	Go	2	..	37467i
13	194	11.8	-7 22	8.9	9.9	Ko	1	..	14896b	63	242	12.2	+1 19	7.89	8.89	Ko	4	..	37466i
14	237	11.8	-10 48	9.3	9.7	F5	3	3,3	45620b	64	271	12.2	-10 30	9.1	9.7	Go	5	..	45620b
15	235	11.8	-12 30	9.9	10.5	Go	2	..	39702b	65	270	12.2	-10 43	9.1	9.5	F5	5	0,5	45620b
16	227	11.8	-17 14	9.1	9.7	Go	4	..	45603b	66	238	12.2	-11 17	9.6	10.4	G5	3	..	39702b
17	205	11.8	-18 42	8.7	9.5	G5	2	..	45603b	67	319	12.2	-41 42	7.5	8.7	Ko	3	..	10635b
18	369	11.8	-43 0	8.3	9.1	F8	2	..	10635b	68	67	12.3	+72 13	8.44	8.86	F5	2	E	38068i
19	371	11.8	-47 22	9.3	10.8	Ko	2	5,2	20260b	69	66	12.3	+72 5	var.	var.	Pec.	..	R	M
20	240	11.9	+61 22	9.2	9.0	B	2	..	38108i	70	110	12.3	+67 16	9.0	9.1	A2	2	..	38905i
21	271	11.9	+53 23	8.0	8.1	A2	4	..	38879i	71	170	12.3	+22 10	8.6	9.0	F5	2	0,1	38882i
22	262	11.9	+44 5	7.25	8.43	K5	4	5,7	36956i	72	192	12.3	+13 43	7.36	8.14	G5	5	..	37467i
23	224	11.9	+34 54	8.27	8.27	Ao	4	2,3	37380i	73	203	12.3	+8 24	var.	var.	Md	..	R	M
24	196	11.9	+31 14	6.86	7.86	Ko	3	..	37340i	74	191	12.3	+6 37	9.1	9.9	G5	2	..	14896b
25	210	11.9	+25 46	9.3	10.7	Ma	1	0,1	38882i	75	244	12.3	-6 10	8.1	8.6	F8	6	0,5	10390b
26	171	11.9	+23 47	9.3	9.8	F8	2	..	38904i	76	473	12.3	-23 45	8.9	9.3	Go	4	..	45147b
27	174	11.9	-2 48	6.83	7.33	F8	7	..	23768b	77	291	12.3	-40 4	7.7	9.0	Go	5	0,2	14372b
28	238	11.9	-15 9	9.6	10.7	K2	3	..	40863b	78	450	12.3	-42 24	8.9	10.4	K2	3	..	20646b
29	229	11.9	-20 38	8.7	9.0	F5	5	..	10629b	79	91	12.3	-74 18	10.0	10.3	F2	4	..	22155b
30	417	11.9	-26 12	8.0	9.6	G5	3	..	23762b	80	277	12.4	+45 11	9.9	10.5	Go	2	..	6671m
31	156	11.9	-52 25	8.7	9.6	Ko	5	0,3	42088b	81	164	12.4	+11 46	9.4	10.2	G5	1	..	10209b
32	40	12.0	+77 2	6.38	7.16	G5	4	..	37227i	82	165	12.4	+5 21	8.06	8.84	G5	4	..	37466i
33	237	12.0	+57 16	6.75	8.10	Mb	4	5,2	38877i	83	213	12.4	-16 10	9.0	9.6	Go	4	..	40863b
34	317	12.0	+47 9	7.68	8.75	K2	3	..	38879i	84	230	12.4	-16 48	10.5	11.1	Go	1	..	40863b
35	146	12.0	+10 5	7.97	8.39	F5	5	..	10209b	85	212	12.4	-19 24	9.6	9.9	Go	2	..	10629b
36	241	12.0	+1 29	7.9	8.7	G5	6	..	37466i	86	526	12.4	-31 27	8.44	9.1	F5	4	..	20245b
37	196	12.0	-0 14	8.7	9.1	F5	3	..	23768b	87	360	12.4	-44 34	8.9	11.1	Ko	2	..	20646b
38	239	12.0	-15 36	9.6	10.6	Ko	3	..	40863b	88	45	12.4	-69 24	4.96	5.46	F8	..	3,R	28,195
39	224	12.0	-22 21	8.3	9.0	F2	4	E	23762b	89	260	12.5	+54 41	9.2	9.2	A	1	..	38879i
40	274	12.0	-57 40	9.2	10.8	F5	2	..	17627b	90	368	12.5	+47 16	8.6	9.7	K2	1	..	38879i
41	144	12.1	+65 4	8.00	9.00	Ko	1	..	37974i	91	159	12.5	+13 3	8.7	9.7	Ko	2	5,2	10209b
42	168	12.1	+63 42	8.7	9.0	Fo	2	..	38108i	92	241	12.5	-14 57	9.9	10.5	Go	2	..	39707b
43	396	12.1	+48 34	8.6	8.6	Ao	3	..	38879i	93	214	12.5	-19 33	9.6	9.9	Go	2	..	10629b
44	262	12.1	+40 29	8.7	8.7	B9	3	..	37512i	94	415	12.5	-30 31	9.4	10.1	Go	3	..	45168b
45	192	12.1	+20 33	8.7	9.5	G5	2	..	38904i	95	371	12.5	-43 4	8.03	7.7	B9	5	..	10635b
46	191	12.1	+13 24	8.7	10.1	Mb	1	..	10209b	96	228	12.6	+60 0	9.2	9.2	Ao	1	..	38108i
47	179	12.1	+4 9	8.3	8.9	Go	4	..	37466i	97	369	12.6	+47 49	8.6	8.7	A2	1	..	38879i
48	178	12.1	+3 51	8.7	9.0	Fo	3	..	37466i	98	313	12.6	+45 36	9.4	10.4	Ko	1	..	4415m
49	236	12.1	-11 58	9.6	10.1	F8	4	..	39702b	99	263	12.6	+43 44	9.9	10.9	Ko	1	..	6671m
50	248	12.1	-14 43	9.11	9.53	F5	3	..	40863b	100	264	12.6	+43 28	10.2	10.3	A2	2	..	6671m

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1^h 12^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	233	12.6	+38 16	8.2	9.2	Ko	4	..	3738oi	51	36	13.1	+78 26	7.36	8.36	Ko	3	2,3	37227i
2	211	12.6	+25 56	7.8	7.9	A3	2	E	37334i	52	91	13.1	+68 34	9.2	9.2	B8	2	..	38905i
3	148	12.6	+ 9 46	8.7	9.7	Ko	1	..	14896b	53	220	13.1	+36 52	6.34	6.42	A3	7	2,7	37512i
4	185	12.6	+ 3 5	5.28	5.34	A2	..	2, R	56,72	54	220	13.1	+33 14	8.1	8.2	A5	4	2,2	3738oi
5	215	12.6	+ 0 38	8.08	8.22	A5	4	..	37466i	55	243	13.1	+ 2 1	8.7	8.8	A5	6	..	37466i
6	225	12.6	- 5 21	9.6	9.7	A2	3	..	4562ob	56	323	13.1	-51 51	9.9	10.7	G5	2	..	39664b
7	272	12.6	- 9 57	9.4	10.0	Go	3	..	4562ob	57	124	13.1	-64 2	9.9	10.0	A2	5	0,4	38146b
8	214	12.6	-16 1	9.6	10.6	Ko	2	..	40863b	58	47	13.1	-67 58	6.91	7.5	F2	5	0,10	42851b
9	207	12.6	-18 4	8.7	9.5	G5	3	..	10628b	59	206	13.2	+61 3	8.9	9.3	F5	2	..	38108i
10	261	12.7	+55 2	9.2	9.2	A	1	..	38879i	60	245	13.2	+56 44	8.0	8.0	Ao	3	E	37522i
11	173	12.7	+23 21	8.5	9.7	K5	1	..	38882i	61	290	13.2	+55 48	8.9	10.3	Mb	..	..	M
12	224	12.7	- 8 11	6.93	6.99	A2	6	2,6	8884b	62	279	13.2	+45 10	7.47	8.54	K2	6	0,3	4415m
13	274	12.7	- 9 53	9.56	10.12	Go	3	..	4562ob	63	265	13.2	+43 36	10.2	11.3	K2	1	..	6671m
14	231	12.7	-12 52	8.3	8.8	F8	6	2,4	39702b	64	301	13.2	+39 25	7.48	8.26	G5	4	5,4	37512i
15	215	12.7	-16 20	10.1	10.5	F5	2	..	40863b	65	212	13.2	+29 18	9.2	9.3	A5	3	..	3738ii
16	231	12.7	-16 58	9.6	10.0	F5	3	..	40863b	66	504	13.2	-32 32	9.1	10.1	Go	2	..	20245b
17	441	12.7	-35 11	8.3	8.5	F8	7	6,6	14372b	67	493	13.2	-37 3	9.0	8.8	F5	5	..	14372b
18	485	12.7	-37 48	9.7	10.0	F8	3	..	20646b	68	327	13.2	-41 48	9.3	10.7	Go	1	..	20646b
19	488	12.7	-37 48	7.85	9.1	Ko	4	5,4	14372b	69	364	13.2	-44 29	9.4	10.5	F5	2	..	20646b
20	449	12.7	-37 53	9.7	10.7	G	2	..	20646b	70	103	13.2	-62 11	9.5	9.9	F5	6	..	23815b
21	47	12.7	-69 0	10.1	10.7	Go	3	..	38365b	71	230	13.3	+32 59	7.9	8.0	A5	3	5,2	3738oi
22	90	12.8	+68 24	8.5	9.5	Ko	3	0,2	38905i	72	210	13.3	+23 7	8.9	10.1	K5	2	..	38882i
23	274	12.8	+53 14	9.2	9.2	Ao	2	..	38879i	73	216	13.3	+ 0 26	9.4	10.4	Ko	3	..	23768b
24	275	12.8	+42 47	7.50	8.68	K5	2	..	36956i	74	238	13.3	-12 4	8.9	10.1	K5	2	..	39702b
25	212	12.8	+25 34	8.6	9.6	Ko	2	..	38904i	75	562	13.3	-24 16	9.9	9.6	A2	2	..	23762b
26	216	12.8	-19 17	9.9	10.2	F5	2	..	10629b	76	515	13.3	-25 4	9.9	10.2	A2	3	..	45147b
27	558	12.8	-24 42	10.4	10.2	F5	2	..	23762b	77	159	13.3	-52 30	10.0	10.4	F5	3	..	39664b
28	492	12.8	-35 54	9.3	10.3	G5	2	..	14372b	78	104	13.3	-62 21	10.0	10.4	F5	4	..	23815b
29	205	12.9	+61 10	8.7	9.0	Fo	3	5,2	38108i	79	55	13.3	-70 46	10.1	10.4	Fo	3	..	38365b
30	278	12.9	+45 7	7.77	8.77	Ko	6	0,3	4415m	80	291	13.4	+55 56	9.0	9.0	Ao	2	..	38877i
31	299	12.9	+39 42	8.6	8.7	A3	2	..	3738oi	81	404	13.4	+48 26	8.9	8.9	Ao	2	..	38879i
32	214	12.9	+29 3	9.3	10.4	K2	1	..	3738ii	82	267	13.4	+44 4	8.6	8.6	Ao	6	..	4415m
33	217	12.9	+26 22	8.5	9.5	Ko	2	..	38904i	83	426	13.4	-27 24	9.9	9.6	Go	4	..	23762b
34	213	12.9	+26 12	9.1	10.1	Ko	1	..	38904i	84	328	13.4	-41 46	9.0	10.7	Go	2	..	20646b
35	195	12.9	+13 51	9.2	10.0	G5	1	..	38103i	85	453	13.4	-42 7	10.1	10.7	G5	1	..	20646b
36	196	12.9	+13 38	9.4	10.0	Go	2	0,1	10209b	86	357	13.4	-46 42	8.2	9.1	G5	4	..	20260b
37	276	12.9	-10 11	9.9	10.4	F8	2	..	4562ob	87	294	13.4	-53 40	8.7	9.9	F8	3	..	17627b
38	277	12.9	-10 28	9.6	9.9	Fo	4	..	4562ob	88	126	13.4	-65 21	10.0	11.0	Ko	2	..	38146b
39	275	12.9	-10 40	10.3	11.1	G5	2	..	39702b	89	247	13.5	+61 49	9.2	10.2	Ko	1	..	38108i
40	424	12.9	-27 33	9.2	9.6	Go	4	..	23762b	90	232	13.5	+59 42	8.5	8.6	A3	3	1,3-	38108i
41	294	12.9	-40 26	8.8	9.2	Ko	4	..	14372b	91	315	13.5	+45 49	9.2	10.2	Ko	1	..	4415m
42	103	13.0	+66 40	8.6	8.6	Ao	3	..	38905i	92	218	13.5	+28 27	8.7	9.7	Ko	2	0,1	38904i
43	236	13.0	+62 20	8.2	9.2	Ko	3	0,1	38108i	93	173	13.5	+21 53	8.9	9.9	Ko	1	..	38882i
44	217	13.0	+58 31	8.5	8.5	A	2	E	38108i	94	182	13.5	+ 3 35	9.1	9.2	A2	4	..	14674b
45	400	13.0	+48 56	8.9	9.0	A2	2	..	38879i	95	167	13.5	- 1 23	8.1	9.1	Ko	3	..	37466i
46	171	13.0	+21 59	9.4	10.0	Go	1	..	38882i	96	563	13.5	-24 0	8.1	8.4	G5	5	..	23762b
47	183	13.0	+18 4	7.86	8.64	G5	3	..	37467i	97	478	13.5	-33 11	9.9	10.9	Go	2	..	20245b
48	394	13.0	-28 44	8.9	9.9	Go	4	..	23762b	98	494	13.5	-34 40	7.62	8.0	A3	7	..	20245b
49	475	13.0	-33 44	9.4	10.1	F8	3	..	20245b	99	325	13.5	-51 34	7.9	8.4	A2	5	..	12636b
50	39	13.1	+79 36	8.0	8.0	Ao	4	..	37227i	100	92	13.5	-66 30	8.9	10.1	K5	3	..	38365b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	105	13.6	+66 42	8.0	8.1	A3	5	0,I-	38905i	51	425	13.9	-26 41	9.7	10.5	F5	3	..	23762b
2	257	13.6	+57 40	7.9	7.8	B5	4	R	38877i	52	398	13.9	-28 2	9.2	10.8	Ko	2	..	23762b
3	269	13.6	+43 55	9.2	9.3	A5	3	..	4415m	53	422	13.9	-30 42	8.5	10.3	Ko	2	..	45168b
4	175	13.6	+24 5	9.1	9.2	A2	3	3,I	38904i	54	501	13.9	-36 47	8.7	8.8	Fo	5	0,3-	14372b
5	200	13.6	+14 59	9.4	10.2	G5	2	..	37467i	55	303	13.9	-40 38	8.3	9.2	G5	4	..	14372b
6	245	13.6	+1 30	9.1	9.7	Go	2	..	14674b	56	82	13.9	-67 10	9.5	10.3	G5	2	..	38365b
7	234	13.6	-20 43	7.82	9.0	Ko	6	..	10629b	57	20	13.9	-87 45	9.8	11.0	K5	1	..	22980b
8	477	13.6	-23 32	7.26	7.4	A3	9	..	23762b	58	207	14.0	+60 43	9.2	9.2	Ao	1	..	38108i
9	479	13.6	-33 40	7.74	8.9	G5	6	..	20245b	59	282	14.0	+52 8	8.0	8.0	Ao	3	5,3	38879i
10	359	13.6	-45 53	9.2	10.8	Ko	1	..	45106b	60	324	14.0	+46 47	8.4	8.7	Fo	4	..	4415m
11	368	13.6	-49 49	10.3	10.4	Go	2	..	39664b	61	280	14.0	+45 6	10.2	10.7	F8	1	..	6671m
12	349	13.6	-50 19	8.2	9.3	Ko	2	E	45106b	62	246	14.0	+42 3	8.5	8.9	F5	2	R	37512i
13	160	13.6	-52 52	8.6	10.1	Ko	2	..	17627b	63	226	14.0	+31 48	8.5	8.9	F5	3	..	37381i
14	105	13.6	-62 6	8.7	9.5	G5	6	..	23815b	64	220	14.0	+26 44	4.67	4.73	A2	..	2,R	56,72
15	106	13.6	-62 32	10.5	10.8	F	3	..	23815b	65	197	14.0	+20 20	8.55	8.97	F5	1	..	37334i
16	81	13.6	-66 55	6.30	6.1	Ao	9	0,10	42851b	66	229	14.0	- 8 31	9.0	9.6	Go	2	..	10390b
17	271	13.7	+43 25	10.2	11.2	Ko	1	..	6671m	67	242	14.0	-11 30	8.8	9.4	Go	6	5,3	39702b
18	195	13.7	+ 6 54	7.9	8.7	G5	3	..	38054i	68	236	14.0	-13 10	9.9	9.9	Ao	3	..	39702b
19	184	13.7	+ 4 7	8.5	8.6	A2	5	..	37466i	69	430	14.0	-27 1	8.3	9.0	Go	6	..	23762b
20	252	13.7	-13 56	8.1	8.9	G5	4	5,3	10628b	70	484	14.0	-33 43	9.3	11.3	K5	2	..	44366b
21	235	13.7	-19 54	8.23	8.6	G5	6	..	10629b	71	448	14.0	-35 21	9.3	9.4	Fo	6	5,3	20245b
22	369	13.7	-49 8	8.3	9.2	F5	4	..	45106b	72	367	14.0	-44 43	8.32	8.8	F2	4	..	20260b
23	350	13.7	-49 52	9.47	9.9	G5	3	..	39664b	73	97	14.0	-60 32	8.7	10.7	G5	2	..	23815b
24	58	13.8	+76 11	7.32	8.32	Ko	5	..	37615i	74	127	14.0	-65 44	7.4	8.8	Mb	..	0,7-	56,118
25	59	13.8	+75 43	6.45	6.53	A3	5	0,9	37227i	75	93	14.1	+68 29	8.5	8.5	Ao	1	..	37974i
26	66	13.8	+74 3	7.22	7.28	A2	6	..	37615i	76	150	14.1	+64 34	8.0	9.0	Ko	2	..	37974i
27	260	13.8	+57 42	5.25	5.67	F5P	6	R	37342i	77	250	14.1	+61 20	9.2	9.8	Go	2	..	38108i
28	352	13.8	+49 58	8.5	9.0	F8	3	..	38879i	78	283	14.1	+51 36	7.30	7.28	B9	5	..	3260b
29	219	13.8	+28 41	8.6	9.8	K5	1	3,I	37381i	79	280	14.1	+42 42	8.0	9.0	Ko	2	..	38917i
30	478	13.8	-23 21	8.7	8.8	Go	5	..	45147b	80	184	14.1	+17 36	7.82	8.82	Ko	3	..	37467i
31	411	13.8	-29 15	7.92	8.9	G5	7	..	23762b	81	202	14.1	+14 16	8.7	9.8	K2	2	2,I	10209b
32	409	13.8	-29 48	9.63	10.6	F8	2	..	45166b	82	177	14.1	- 3 33	9.4	10.2	G5	2	..	23768b
33	359	13.8	-39 32	10.7	11.2	F5	2	..	20646b	83	256	14.1	- 9 27	8.9	9.5	Go	6	..	45620b
34	161	13.8	-52 38	7.4	8.0	A5	7	2,7	12636b	84	279	14.1	- 9 55	8.66	9.44	G5	5	..	45620b
35	299	13.8	-54 46	10.10	10.4	F8	2	..	39664b	85	244	14.1	-15 22	9.1	9.5	F5	3	..	40863b
36	274	13.8	-55 49	8.6	10.1	Go	5	..	39664b	86	329	14.1	-51 2	10.1	11.3	K2	1	..	39664b
37	277	13.8	-57 48	9.9	10.7	G5	2	..	17627b	87	49	14.1	-68 50	10.3	10.9	Go	2	..	38146b
38	91	13.8	-76 29	8.4	8.5	A3	5	R	23774b	88	34	14.1	-78 54	9.1	9.7	Go	6	..	23772b
39	30	13.9	+84 13	9.7	9.7	Ao	2	..	37281i	89	150	14.2	+ 9 30	9.2	9.8	Go	2	..	14896b
40	106	13.9	+67 11	9.0	10.0	Ko	1	..	38905i	90	197	14.2	+ 7 50	7.99	8.99	Ko	5	5,4	14896b
41	323	13.9	+46 27	10.2	10.8	G	1	..	6671m	91	190	14.2	+ 2 45	8.1	9.1	Ko	4	..	37466i
42	316	13.9	+45 29	10.2	10.2	Ao	3	..	6671m	92	509	14.2	-32 6	9.4	11.2	Ko	1	..	45166b
43	205	13.9	+34 13	7.72	8.79	K2	3	..	37380i	93	114	14.3	+67 15	9.7	9.7	A	1	..	38905i
44	176	13.9	+23 52	8.7	9.3	Go	3	5,2	38904i	94	306	14.3	+52 20	8.5	8.9	F5	1	..	38879i
45	211	13.9	+22 31	9.1	9.6	F8	2	..	38904i	95	273	14.3	+43 26	8.0	8.8	G5	4	..	4415m
46	198	13.9	+13 22	8.9	9.9	Ko	1	5,I	10209b	96	240	14.3	+39 13	8.8	8.9	A2	2	..	37380i
47	219	13.9	+ 4 30	8.7	9.2	F8	3	..	37466i	97	197	14.3	+ 6 58	8.7	9.5	G5	2	..	38054i
48	209	13.9	- 6 50	8.9	9.9	Ko	1	..	45620b	98	245	14.3	-15 8	9.6	10.6	Ko	2	..	40863b
49	227	13.9	- 8 14	9.0	9.8	G5	2	..	10390b	99	414	14.3	-29 43	9.03	10.0	Go	4	..	23762b
50	424	13.9	-26 25	8.7	9.3	Go	5	..	23762b	100	426	14.3	-30 30	9.4	10.6	Go	3	..	45168b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	386	14.3	-43 51	6.75	7.9	K2	5	0,3	20260b	51	280	14.8	-55 26	8.4	10.4	Ko	4	..	39664b
2	115	14.4	+67 32	8.0	9.0	Ko	2	..	37974i	52	128	14.8	-65 9	9.6	9.7	A2	6	..	38146b
3	176	14.4	+64 8	6.32	6.32	Ao	8	2,8	37974i	53	281	14.9	+54 6	7.19	7.14	B8	6	0,5	38879b
4	268	14.4	+54 26	7.24	7.80	Go	4	..	38879i	54	286	14.9	+51 27	7.50	7.92	F5	2	..	3260b
5	285	14.4	+51 18	7.54	7.49	B8	4	..	3260b	55	321	14.9	+45 24	9.9	10.0	A5	2	R	6671m
6	282	14.4	+44 34	9.4	10.4	Ko	2	..	4415m	56	..	14.9	+44 51	..	..	G5	1	..	6671m
7	252	14.4	+41 27	6.93	7.21	Fo	5	0,7-	37512i	57	251	14.9	+35 54	8.8	8.9	A3	3	..	3738oi
8	241	14.4	+38 33	8.1	8.9	G5	3	..	3738oi	58	179	14.9	- 2 51	9.1	9.7	Go	2	..	23768b
9	249	14.4	+36 7	8.2	8.8	Go	3	..	37512i	59	247	14.9	-15 26	8.3	8.6	Fo	4	..	10628b
10	207	14.4	+33 58	9.1	9.1	Ao	2	..	3738oi	60	222	14.9	-15 59	9.9	10.7	G5	3	..	40863b
11	161	14.4	+10 26	8.57	9.07	F8	2	..	38054i	61	232	14.9	-17 34	8.5	9.5	Ko	5	5,2	40863b
12	237	14.4	- 5 22	9.4	9.5	A5	2	..	45620b	62	337	14.9	-48 41	8.9	10.1	K2	2	0,1	45106b
13	209	14.5	+60 25	7.66	7.66	Ao	7	0,4	38558i	63	90	14.9	-72 7	10.5	11.5	Ko	2	..	22155b
14	317	14.5	+45 30	9.4	10.4	Ko	1	..	4415m	64	14	14.9	-86 13	9.4	10.4	Ko	3	..	15145b
15	283	14.5	+44 43	9.9	10.7	G5	1	..	4415m	65	49	15.0	+78 12	6.10	6.16	A2	8	R	37227i
16	281	14.5	+42 59	7.26	8.26	Ko	3	2,2	37512i	66	189	15.0	+17 35	8.3	8.7	F5	2	..	37334i
17	230	14.5	+34 26	8.1	8.9	G5	3	..	3738oi	67	199	15.0	+13 16	8.8	9.4	Go	2	2,2	38103i
18	167	14.5	+11 38	8.1	8.5	F5	4	5,3	37467i	68	169	15.0	+11 15	8.5	9.0	F8	2	..	38054i
19	168	14.5	+ 5 39	8.9	10.3	Ma	3	..	37466i	69	201	15.0	+ 6 35	9.1	10.1	Ko	2	..	14806b
20	238	14.5	- 5 26	8.7	9.5	G5	2	..	10390b	70	286	15.0	-10 24	6.64	6.98	F2	6	2,7-	8884b
21	230	14.5	- 8 38	9.6	10.0	F5	5	..	45620b	71	223	15.0	-16 20	6.75	7.31	Go	9	..	10629b
22	245	14.5	-11 12	9.3	9.9	Go	2	..	39702b	72	227	15.0	-21 59	9.0	9.3	F8	3	..	45147b
23	433	14.5	-45 28	8.9	10.2	G5	2	..	20260b	73	407	15.0	-28 46	7.6	9.3	G5	6	..	23762b
24	362	14.5	-46 40	8.7	9.9	F8	3	3,3	20260b	74	418	15.0	-29 24	9.1	10.3	G5	3	..	45168b
25	84	14.5	-67 38	7.3	8.3	Ko	8	..	38365b	75	370	15.0	-39 29	9.3	9.8	Go	2	..	14372b
26	295	14.6	+55 41	7.86	8.20	F2	3	..	38877i	76	309	15.0	-39 53	7.68	8.3	F8	5	2,7	10635b
27	260	14.6	+51 4	7.17	7.15	B9	5	..	3260b	77	303	15.0	-54 22	8.5	9.5	F8	4	..	17627b
28	268	14.6	+40 52	8.9	9.3	F5	3	..	3738oi	78	52	15.0	-69 3	10.1	10.1	Ao	3	..	38365b
29	224	14.6	+37 9	8.9	10.0	K2	1	..	3738oi	79	91	15.0	-72 30	11.0	11.3	F2	3	..	22155b
30	231	14.6	+34 36	7.9	8.7	G5	3	..	3738oi	80	..	15.1	+43 52	..	..	Ao	2	..	6671m
31	201	14.6	- 0 26	8.3	9.3	Ko	3	..	23768b	81	283	15.1	+43 0	9.5	10.3	G5	2	..	6671m
32	251	14.6	- 5 51	8.3	8.8	F8	4	..	10390b	82	248	15.1	+ 1 58	9.1	10.2	K2	1	..	14674b
33	483	14.6	-23 38	8.9	9.3	A5	2	..	23762b	83	181	15.1	- 3 2	8.4	9.0	Go	3	..	23768b
34	94	14.7	+68 42	8.4	9.4	Ko	1	..	38905i	84	505	15.1	-34 15	9.0	9.7	Ko	3	..	20245b
35	200	14.7	+ 6 51	9.4	10.0	Go	1	..	14896b	85	372	15.1	-39 43	8.78	9.8	G5	3	..	14372b
36	171	14.7	- 1 2	6.01	6.43	F5	7	..	37466i	86	57	15.1	-71 24	10.3	11.3	Ko	2	..	22155b
37	259	14.7	- 9 15	10.3	11.1	G5	1	..	45620b	87	213	15.2	+60 44	8.4	8.5	A2	2	..	38558i
38	524	14.7	-25 28	7.7	9.1	G5	5	..	23762b	88	284	15.2	+44 20	9.4	10.2	G5	2	..	4415m
39	431	14.7	-26 11	9.2	10.8	G5	3	..	23762b	89	209	15.2	+ 8 59	8.7	9.3	Go	4	..	38054i
40	452	14.7	-35 1	7.83	8.2	Fo	4	..	10635b	90	234	15.2	-17 23	9.4	10.4	Ko	2	..	40863b
41	307	14.7	-40 32	10.1	9.8	Ko	2	..	14372b	91	213	15.2	-21 27	9.4	10.2	A5	2	..	45147b
42	389	14.7	-43 49	9.3	11.4	Ko	2	..	20646b	92	391	15.2	-43 5	9.1	10.8	F8	2	..	20646b
43	327	14.8	+46 31	8.2	8.3	A2p	5	R	4415m	93	338	15.2	-48 49	9.1	8.6	A2	2	..	12636b
44	320	14.8	+45 49	8.8	9.4	Go	4	5,3	4415m	94	305	15.2	-54 10	7.3	9.0	Ko	5	2,3	17627b
45	318	14.8	+45 43	9.9	10.9	Ko	2	..	6671m	95	284	15.2	-57 39	9.3	11.0	Go	2	..	17627b
46	209	14.8	+33 27	8.7	8.8	A3	3	..	3738oi	96	72	15.2	-73 48	9.8	9.8	Ao	4	..	23772b
47	284	14.8	-10 31	9.1	9.6	F8	4	..	45620b	97	324	15.3	+45 38	9.9	10.9	Ko	1	..	4415m
48	255	14.8	-13 49	9.4	10.5	K2	3	E	40863b	98	323	15.3	+45 31	10.2	11.0	G5	2	..	6671m
49	370	14.8	-44 9	8.1	9.6	G5	4	..	20646b	99	284	15.3	+42 42	7.40	8.40	Ko	3	5,2	38917i
50	385	14.8	-47 9	8.5	9.3	F8	4	3,4	45106b	100	259	15.3	+37 30	8.0	8.6	Go	4	..	3738oi

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	211	15.3	+ 8 38	8.99	9.27	Fo	2	..	38054i	51	178	15.8	+21 50	7.24	8.42	K5	4	3,3	38882i
2	288	15.3	-10 17	9.3	10.7	Mb	..	..	M	52	203	15.8	+ 7 4	8.7	9.2	F8	2	..	38054i
3	215	15.3	-21 0	7.62	9.0	K2	4	..	10629b	53	198	15.8	- 1 50	7.28	7.28	Ao	4	0,8	37466i
4	578	15.3	-24 42	9.40	9.9	F5	3	..	23762b	54	250	15.8	-11 33	9.6	10.4	G5	2	..	39702b
5	517	15.3	-31 54	8.7	9.4	Go	3	..	20245b	55	442	15.8	-27 16	9.9	9.6	Go	4	..	23762b
6	389	15.3	-47 49	7.3	9.3	Mb	5	..	20260b	56	358	15.8	-50 20	9.7	10.1	F5	2	..	42088b
7	85	15.3	-67 12	8.6	8.9	Fo	6	..	38365b	57	359	15.8	-50 39	10.1	10.1	Fo	3	..	39664b
8	214	15.4	+60 59	8.4	8.8	F5	2	..	38108i	58	109	15.8	-63 39	10.5	10.6	A3	4	0,3	38146b
9	201	15.4	+21 6	8.9	9.3	F5	1	..	37334i	59	269	15.9	+57 46	8.2	8.3	A2	2	R	38877i
10	204	15.4	+15 11	7.53	8.31	G5	5	..	38103i	60	358	15.9	+49 36	6.80	7.80	Ko	6	5,3	38879i
11	164	15.4	+12 56	9.4	10.4	Ko	1	..	10209b	61	334	15.9	+46 45	7.7	7.8	A2	7	3,2	4415m
12	374	15.4	-39 6	9.3	10.2	G5	2	..	14372b	62	276	15.9	+44 7	10.2	10.7	F8	1	..	6671m
13	92	15.4	-74 41	8.5	9.5	Ko	3	..	23772b	63	443	15.9	-26 54	9.9	10.8	A5	2	..	23762b
14	241	15.5	+62 16	8.6	9.6	Ko	1	..	38108i	64	435	15.9	-30 21	8.7	10.1	F5	2	..	20245b
15	387	15.5	+47 33	8.04	8.10	A2	2	..	36956i	65	166	15.9	-52 20	8.5	10.2	G5	4	0,2	39676b
16	332	15.5	+47 3	9.9	9.0	Ao	3	..	6671m	66	277	15.9	-56 26	var.	var.	Md	..	R	M
17	198	15.5	+24 38	7.9	8.3	F5	2	..	37334i	67	94	15.9	-58 49	10.8	11.4	Go	2	..	17627b
18	192	15.5	+17 41	8.5	8.9	F5	4	..	37467i	68	129	15.9	-65 30	10.5	10.8	F2	3	..	38146b
19	170	15.5	+ 6 6	8.9	9.3	F5	1	..	38054i	69	336	16.0	+46 57	9.5	10.0	F8	2	..	4415m
20	185	15.5	- 3 46	6.44	7.22	G5	8	..	23768b	70	171	16.0	+11 23	8.7	9.8	K2	4	2,3-	12024b
21	248	15.5	-11 46	6.30	7.30	Ko	5	0,8-	8884b	71	204	16.0	+ 6 27	8.9	9.7	G5	1	..	38054i
22	236	15.5	-17 23	10.1	10.9	G5	1	..	40863b	72	212	16.0	- 7 29	9.3	10.3	Ko	3	..	45620b
23	155	15.6	+65 35	8.9	10.0	K2	1	..	38005i	73	241	16.0	-13 16	8.8	9.4	Go	2	..	10628b
24	262	15.6	+50 34	8.9	9.0	A2	2	..	38879i	74	260	16.0	-13 51	9.6	10.4	G5	2	E	40863b
25	286	15.6	+42 26	8.9	9.7	G5	1	E	38005i	75	533	16.0	-25 4	10.4	10.2	F2	3	..	23762b
26	215	15.6	+28 13	5.60	6.60	Ko	4	0,4R	10154i	76	531	16.0	-25 38	7.54	8.7	Ko	7	..	23762b
27	166	15.6	+10 56	8.5	9.0	F8	2	2,2	38054i	77	514	16.0	-33 56	9.0	10.6	K5	1	..	44366b
28	194	15.6	+ 2 22	9.1	9.2	A5	2	..	14674b	78	95	16.0	-57 52	7.60	7.5	F5	5	3,5	17627b
29	249	15.6	-20 28	7.52	8.4	Go	8	..	10629b	79	86	16.0	-67 19	9.5	10.1	Go	4	..	38365b
30	510	15.6	-36 46	7.44	7.2	Ao	6	0,10	10635b	80	391	16.1	+47 58	8.0	8.1	A2	2	..	38879i
31	357	15.6	-50 32	9.9	9.8	F8	2	..	42088b	81	..	16.1	+46 50	9.7	9.8	A2	3	R	6671m
32	332	15.6	-51 18	10.5	11.0	Go	1	..	39664b	82	337	16.1	+46 50	..	..	A	2	..	6671m
33	79	15.6	-75 29	10.1	11.2	K2	1	..	22155b	83	..	16.1	+44 45	..	..	A	2	..	6671m
34	92	15.6	-76 35	10.4	10.9	F8	2	..	22155b	84	232	16.1	+32 7	8.6	9.4	G5	2	..	37381i
35	20	15.6	-80 35	8.6	10.0	Mb	5	5,3	38135b	85	200	16.1	+24 19	8.5	8.8	F2	3	..	38882i
36	116	15.7	+68 2	8.2	8.5	Fo	2	..	37974i	86	202	16.1	+13 24	9.1	10.1	Ko	1	..	10209b
37	283	15.7	+54 8	8.9	8.9	A	1	..	38879i	87	168	16.1	+11 1	6.89	7.17	Fo	7	..	37467i
38	312	15.7	+52 27	8.9	8.9	Ao	2	..	38879i	88	377	16.1	-49 12	8.0	8.6	F5	5	..	12636b
39	221	15.7	+26 18	8.8	9.4	Go	2	..	38904i	89	305	16.1	-53 10	9.2	10.1	Go	3	..	39664b
40	212	15.7	+ 8 21	9.27	9.77	F8	1	..	14896b	90	58	16.1	-71 38	8.5	8.9	F5	7	..	38365b
41	245	15.7	-12 19	9.6	10.6	Ko	2	..	39702b	91	93	16.1	-73 57	10.4	11.2	G5	3	..	22155b
42	258	15.7	-14 25	7.01	7.79	G5	7	0,8	10628b	92	40	16.2	+78 34	8.4	9.0	Go	2	E	38964i
43	224	15.7	-16 43	9.6	10.1	F8	2	..	40863b	93	315	16.2	+52 46	9.2	9.2	A	2	R	38879i
44	422	15.7	-29 33	7.36	8.2	G5	8	..	23762b	94	215	16.2	- 6 52	9.4	10.5	K2	1	..	45620b
45	434	15.7	-30 7	7.6	8.9	A5	6	0,7	23762b	95	306	16.2	-53 4	9.8	10.4	Go	2	..	39664b
46	378	15.7	-39 38	9.7	10.2	Ko	2	..	14372b	96	90	16.2	-58 56	10.5	11.5	Ko	2	..	17627b
47	369	15.7	-45 59	9.7	9.9	A2	3	..	45106b	97	243	16.3	+62 35	8.6	8.6	Ao	2	..	38108i
48	288	15.7	-57 8	9.3	10.7	G5	3	..	17627b	98	286	16.3	+44 35	9.9	10.2	F	2	..	6671m
49	73	15.7	-73 15	9.8	10.1	F2	5	..	22155b	99	277	16.3	+43 18	8.8	8.8	Ao	4	..	4415m
50	285	15.8	+44 41	9.5	10.3	G5	1	..	4415m	100	180	16.3	+22 1	8.15	8.93	G5	2	..	38882i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	207	m. 16.3	° — 0 41	9.4	9.4	A	1	..	23768b	51	200	m. 16.7	° — 2 32	8.5	8.8	Fo	4	..	23768b
2	256	16.3	— 6 41	6.95	7.51	Go	7	..	10390b	52	262	16.7	— 9 10	9.9	10.9	Ko	1	..	45620b
3	229	16.3	— 22 40	9.6	10.8	G5	1	..	45147b	53	428	16.7	— 29 18	8.1	9.7	G5	3	..	23762b
4	314	16.3	— 40 26	10.5	11.0	K5	1	..	20646b	54	511	16.7	— 37 17	9.3	10.3	G5	2	..	14372b
5	105	16.3	— 60 26	9.7	10.1	F5	1	..	23815b	55	380	16.7	— 44 42	9.5	12.2	K5	1	..	39679b
6	291	16.4	+ 51 15	7.7	8.9	K5	1	..	38879i	56	308	16.7	— 53 0	8.7	9.5	G5	4	..	39676b
7	287	16.4	+ 45 0	4.99	5.99	Ko	..	0,4 R	56,72	57	93	16.7	— 61 51	9.2	10.1	G5	2	..	23815b
8	..	16.4	+ 44 49	..	..	F	2	..	6671m	58	61	16.7	— 70 5	9.8	11.0	K5	1	..	38365b
9	288	16.4	+ 43 4	6.62	6.50	B5	5	0,3-	37512i	59	22	16.7	— 82 4	8.09	8.9	Ko	7	..	38135b
10	217	16.4	— 7 36	9.6	10.2	Go	3	..	45620b	60	92	16.8	+ 69 51	8.9	9.9	Ko	2	..	38905i
11	226	16.4	— 15 53	9.0	10.1	K2	3	..	40863b	61	221	16.8	+ 61 12	8.6	8.6	Ao	3	0,2	38108i
12	379	16.4	— 39 3	8.3	9.5	Go	4	..	14372b	62	197	16.8	+ 18 10	8.0	8.5	F8	2	..	37334i
13	363	16.4	— 50 5	8.07	9.0	Ko	3	..	12636b	63	289	16.9	+ 44 34	10.2	10.2	Ao	3	..	6671m
14	107	16.4	— 60 36	7.4	9.2	Ko	7	0,7	17627b	64	280	16.9	+ 44 6	9.7	10.8	K2	1	..	6671m
15	106	16.4	— 60 50	10.6	11.4	G5	1	..	23815b	65	225	16.9	+ 28 20	8.3	9.3	Ko	2	..	37381i
16	239	16.5	+ 32 43	8.9	9.7	G5	3	..	37381i	66	205	16.9	+ 24 20	8.7	9.3	Go	2	..	38882i
17	224	16.5	+ 26 3	8.9	9.9	Ko	1	..	38904i	67	204	16.9	+ 13 50	8.2	9.0	G5	3	..	37467i
18	169	16.5	+ 10 45	9.4	10.5	K2	3	..	12024b	68	263	16.9	— 14 5	9.9	10.9	Ko	2	E	40863b
19	216	16.5	+ 9 11	8.3	9.5	K5	3	3,2	12024b	69	254	16.9	— 15 34	10.1	10.2	A2	3	..	40863b
20	233	16.5	— 8 32	9.3	9.8	F8	5	..	45620b	70	347	16.9	— 48 3	8.5	9.9	F8	4	..	20260b
21	238	16.5	— 17 16	10.1	10.9	G5	1	..	40863b	71	92	16.9	— 72 20	9.2	9.8	Go	6	..	22155b
22	515	16.5	— 36 8	9.0	9.7	G5	2	..	14372b	72	274	17.0	+ 57 37	6.45	6.87	F5	3	..	37342i
23	342	16.5	— 48 9	9.3	10.5	F8	3	..	20260b	73	322	17.0	+ 52 57	8.6	9.1	F8	2	..	38879i
24	292	16.5	— 57 52	7.10	7.6	F8	6	0,7	37016b	74	182	17.0	+ 21 34	7.15	7.65	F8	5	3,3	38882i
25	93	16.5	— 66 44	9.3	10.1	G5	4	..	38365b	75	139	17.0	+ 16 18	7.8	8.6	G5	6	5,2	37467i
26	69	16.6	+ 72 19	7.16	7.16	Ao	5	..	37615i	76	173	17.0	+ 12 8	9.1	10.1	Ko	3	..	10209b
27	338	16.6	+ 46 23	9.5	9.6	A2	2	..	4415m	77	295	17.0	— 9 59	9.1	9.4	Fo	6	..	45620b
28	..	16.6	+ 44 0	..	..	Go	1	..	6671m	78	243	17.0	— 12 52	9.6	10.4	G5	2	..	39702b
29	258	16.6	+ 41 49	9.2	9.2	Ao	2	E	38055i	79	227	17.0	— 19 29	9.3	9.9	F5	2	..	45147b
30	210	16.6	+ 31 11	7.7	8.7	Ko	5	..	37381i	80	502	17.0	— 23 2	9.7	11.1	Go	1	..	45147b
31	196	16.6	+ 15 52	9.1	9.7	Go	2	..	37467i	81	588	17.0	— 24 39	8.1	9.0	Go	6	..	23762b
32	200	16.6	+ 8 2	8.7	9.2	F8	2	..	38054i	82	451	17.0	— 27 12	9.2	9.3	F8	5	..	23762b
33	199	16.6	+ 7 32	9.4	10.2	G5	1	..	14896b	83	343	17.0	— 41 30	8.7	9.0	F5	4	E	14372b
34	189	16.6	— 3 58	8.9	9.5	Go	3	..	10376b	84	379	17.0	— 46 17	9.2	10.2	G5	2	..	20260b
35	293	16.6	— 10 12	9.6	10.2	Go	1	..	45620b	85	367	17.0	— 50 10	9.3	9.6	A3	3	E	45106b
36	247	16.6	— 12 7	8.9	9.4	F8	3	..	39702b	86	288	17.0	— 55 29	7.8	9.8	Ko	5	..	17627b
37	239	16.6	— 17 1	9.9	10.3	F5	2	..	40863b	87	93	17.0	— 72 22	9.5	10.1	Go	4	5,3	22155b
38	510	16.6	— 37 25	9.3	10.1	F5	2	..	14372b	88	..	17.0	— 74 18	..	..	K2	2	..	22155b
39	317	16.6	— 40 45	9.6	10.1	F5	3	..	20646b	89	80	17.0	— 75 22	10.2	11.3	K2	1	..	22155b
40	50	16.6	— 67 57	9.4	9.5	A5	6	..	38365b	90	293	17.1	+ 52 13	7.9	7.9	Ao	3	..	38879i
41	53	16.6	— 69 26	7.1	7.5	F5	10	..	38365b	91	196	17.1	+ 3 0	8.7	9.5	G5	4	..	14674b
42	21	16.6	— 80 1	9.4	10.0	Go	5	..	23772b	92	247	17.1	— 5 5	8.5	9.7	K5	2	..	45620b
43	118	16.7	+ 67 35	8.8	9.8	Ko	2	5,1	38905i	93	244	17.1	— 13 36	9.9	10.7	G5	2	..	39702b
44	288	16.7	+ 44 46	9.7	10.7	Ko	2	..	6671m	94	498	17.1	— 33 45	7.16	8.5	G5	8	..	20245b
45	289	16.7	+ 43 8	8.6	9.1	F8	4	..	4415m	95	470	17.1	— 42 40	9.5	10.1	A3	4	..	20646b
46	212	16.7	+ 30 28	8.8	9.6	G5	2	..	37381i	96	368	17.1	— 50 16	6.88	7.4	F2	7	..	12636b
47	180	16.7	+ 24 7	8.9	9.5	Go	1	..	38882i	97	285	17.1	— 56 34	9.7	10.7	Ko	2	5,2	39664b
48	198	16.7	+ 15 17	7.49	7.91	F5	6	..	37467i	98	51	17.1	— 68 36	8.6	8.9	F2	6	..	38365b
49	210	16.7	+ 14 40	8.3	8.9	Go	3	..	38103i	99	22	17.1	— 81 45	9.4	9.4	Ao	5	..	15165b
50	172	16.7	+ 12 4	7.04	8.04	Ko	6	..	38054i	100	228	17.2	+ 26 3	8.2	9.2	Ko	4	..	37381i

THE HENRY DRAPER CATALOGUE.

8300

1^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	232	17.2	+ 5 12	9.21	10.21	Ko	1	..	12024b	51	516	17.6	-37 34	6.83	7.0	Fo	7	0,9-	10635b
2	230	17.2	+ 4 43	8.1	8.4	Fo	7	..	37466i	52	370	17.6	-49 54	9.1	9.6	F5	3	E	45106b
3	234	17.2	-22 29	9.6	11.1	Ko	1	..	45147b	53	74	17.6	-73 16	7.1	7.4	Fo	9	..	23772b
4	453	17.2	-27 14	10.2	10.5	F5	3	..	23762b	54	417	17.7	+48 44	8.9	9.0	A2	1	..	38879i
5	444	17.2	-45 40	7.62	8.2	Fo	7	..	20260b	55	291	17.7	+45 7	9.49	10.27	G5	2	..	6671m
6	46	17.2	-77 33	8.0	8.5	F8	7	..	23772b	56	171	17.7	+10 50	6.92	7.92	Ko	6	..	10209b
7	323	17.3	+52 17	7.8	8.4	Go	2	..	38879i	57	211	17.7	+ 6 53	7.27	8.05	G5	5	..	38054i
8	233	17.3	+36 21	9.3	9.3	Ao	2	..	37380i	58	210	17.7	+ 0 12	8.43	8.99	Go	3	..	14674b
9	227	17.3	+28 40	8.7	9.5	G5	2	..	37381i	59	265	17.7	- 9 2	9.9	10.4	F8	3	..	45620b
10	169	17.3	+12 36	9.1	10.2	K2	2	..	10209b	60	536	17.7	-31 57	8.3	10.0	K5	3	..	20245b
11	246	17.3	-12 59	9.4	10.2	G5	2	..	39702b	61	349	17.7	-41 0	9.7	10.7	K2	1	..	20646b
12	235	17.3	-22 4	8.3	9.4	G5	3	..	10629b	62	448	17.7	-44 57	9.9	11.4	K2	1	3,I	39679b
13	454	17.3	-27 46	8.1	9.6	K5	4	R	23762b	63	293	17.7	-54 59	9.60	10.4	Ko	2	..	39664b
14	553	17.3	-31 11	9.2	11.3	Go	1	..	45166b	64	42	17.8	+77 9	8.0	8.4	F5	3	..	37227i
15	337	17.3	-51 28	6.62	7.1	Ko	7	..	12636b	65	293	17.8	+53 50	8.0	8.8	G5	2	5,I	38879i
16	93	17.3	-76 40	7.3	7.8	F8	8	..	23772b	66	..	17.8	+44 39	..	..	G5	1	..	6671m
17	290	17.4	+44 48	7.27	7.25	B9	8	1,2	4415m	67	224	17.8	+29 38	9.7	10.1	F5	2	..	37381i
18	..	17.4	+43 20	..	..	F	2	..	6671m	68	184	17.8	+23 59	8.1	8.2	A5	5	R	38904i
19	270	17.4	+37 20	8.6	9.4	G5	2	..	37380i	69	201	17.8	+15 47	9.1	10.2	K2	1	..	37467i
20	236	17.4	+31 19	7.7	9.1	Mb	3	5,2	37381i	70	187	17.8	- 3 33	9.3	10.1	G5	2	..	23768b
21	141	17.4	+16 41	8.1	8.5	F5	7	0,2	37467i	71	538	17.8	-32 49	9.0	10.1	Go	3	..	20245b
22	170	17.4	+11 9	9.8	10.8	Ko	3	..	12024b	72	230	17.9	+58 25	8.0	9.0	Ko	2	2,2	38108i
23	237	17.4	- 7 49	9.9	9.9	Ao	7	..	45620b	73	398	17.9	+47 51	7.74	8.81	K2	3	..	38879i
24	265	17.4	-14 30	8.8	10.0	K5	3	E	40863b	74	237	17.9	+37 12	5.53	5.53	Ao	8	2,8R	37512i
25	217	17.4	-18 9	10.1	10.1	Ao	3	..	40863b	75	220	17.9	+33 43	6.34	7.12	G5	5	0,7-	37380i
26	457	17.4	-27 24	8.7	9.3	Ko	5	..	23762b	76	238	17.9	+31 16	9.3	9.3	Ao	2	..	37381i
27	346	17.4	-41 13	10.7	11.2	A5	1	..	20646b	77	227	17.9	+27 8	8.7	9.1	F5	3	..	37381i
28	342	17.5	+46 22	8.0	8.8	G5	4	0,3	4415m	78	174	17.9	+12 8	9.6	10.7	K2	1	..	10209b
29	333	17.5	+45 14	8.97	9.03	A2	3	R	4415m	79	218	17.9	+ 8 39	8.0	8.3	Fo	7	..	38054i
30	315	17.5	+40 5	8.37	9.37	Ko	2	5,I	38055i	80	237	17.9	-21 57	8.2	8.6	F2	7	..	10629b
31	158	17.5	+ 9 50	7.47	8.25	G5	6	..	10209b	81	472	17.9	-35 11	7.52	8.5	G5	4	0,3	20245b
32	173	17.5	+ 5 54	8.7	9.7	Ko	2	..	38054i	82	383	17.9	-46 45	8.8	8.4	A2	5	..	20260b
33	190	17.5	+ 4 13	6.96	7.74	G5	6	..	37466i	83	94	17.9	-66 38	9.4	10.6	K5	3	..	38365b
34	223	17.5	+ 1 12	6.48	7.55	K2	7	..	37466i	84	330	18.0	+52 20	8.2	8.2	B9	3	4,2	38879i
35	179	17.5	- 0 58	6.46	7.46	Ko	5	5,5	37466i	85	292	18.0	+44 51	9.7	10.5	G5	1	..	6671m
36	186	17.5	- 3 44	9.6	10.2	Go	1	..	10376b	86	281	18.0	+44 2	8.6	9.8	K5	3	..	4415m
37	193	17.5	- 4 20	7.90	8.90	Ko	4	..	10376b	87	213	18.0	+30 25	8.8	8.9	A2	2	..	37340i
38	255	17.5	-11 8	8.7	8.7	Ao	6	..	39702b	88	226	18.0	+19 57	6.30	7.48	K5	3	..	37334i
39	256	17.5	-20 6	8.9	9.9	Go	3	..	10629b	89	249	18.0	-13 30	8.3	9.3	Ko	6	..	10628b
40	447	17.5	-45 11	9.9	10.5	Go	2	0,1	39679b	90	474	18.0	-35 31	8.3	9.1	G5	5	0,5-	12228b
41	170	17.5	-52 36	8.5	8.8	Ao	5	0,5	17627b	91	388	18.0	-44 7	7.37	7.3	Fo	5	0,7	10635b
42	287	17.5	-56 39	9.8	10.4	Go	2	2,2	17627b	92	172	18.0	-52 45	8.7	10.2	G5	2	..	17627b
43	111	17.5	-63 30	9.7	10.9	K5	3	..	23861b	93	296	18.0	-55 46	8.9	9.9	Go	4	..	17627b
44	71	17.6	+73 36	7.8	7.8	Ao	3	1,4	38972i	94	98	18.0	-58 30	9.9	10.7	G5	2	..	17627b
45	..	17.6	+43 30	..	..	G5	1	..	6671m	95	12	18.1	+88 3	8.04	9.04	Ko	2	..	37281i
46	260	17.6	+35 59	6.72	6.67	B8	6	2,6	37512i	96	121	18.1	+67 25	9.5	10.3	G5	1	..	38905i
47	245	17.6	+32 46	7.8	9.0	K5	3	..	37381i	97	264	18.1	+56 40	7.7	8.9	K5	1	..	37522i
48	203	17.6	+ 8 13	8.5	9.5	Ko	2	..	38054i	98	267	18.1	+50 39	7.62	7.68	A2	5	..	38879i
49	228	17.6	-19 20	8.9	9.9	Ko	2	..	10629b	99	283	18.1	+43 19	8.6	8.7	A2	4	1,2	4415m
50	229	17.6	-19 36	6.44	7.4	F5	10	..	10629b	100	291	18.1	+42 17	8.5	8.9	F5	2	E	38055i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	221	18.1	+22 25	9.2	9.8	Go	2	..	38882i	51	294	18.6	+44 29	10.2	10.7	F8	2	..	6671m
2	172	18.1	+10 20	7.82	8.10	Fo	4	..	37467i	52	241	18.6	+36 22	7.08	7.06	B9	5	3,5	37512i
3	161	18.1	+9 18	8.8	8.9	A5	3	3,3	12024b	53	229	18.6	+19 18	8.5	9.0	F8	1	..	37334i
4	174	18.1	+6 13	8.7	9.3	Go	2	..	38054i	54	175	18.6	+11 25	8.7	9.5	G5	2	E	38103i
5	212	18.1	+0 4	8.7	9.7	Ko	2	..	23768b	55	240	18.6	+4 47	8.9	9.0	A2	4	..	37466i
6	247	18.1	-17 0	7.98	8.54	Go	4	..	10628b	56	259	18.6	-11 16	9.6	10.2	Go	2	5,2	39702b
7	248	18.1	-17 5	7.74	8.30	Go	3	..	10628b	57	252	18.6	-13 34	10.3	10.4	A2	1	..	39702b
8	223	18.1	-21 16	8.1	8.7	F5	5	..	10629b	58	255	18.6	-14 54	8.90	10.08	K5	4	E	40863b
9	439	18.1	-29 1	8.3	10.0	Ko	3	..	23762b	59	232	18.6	-16 45	8.4	8.8	F5	2	..	10628b
10	521	18.1	-37 7	6.76	7.7	G5	5	0,9	10635b	60	259	18.6	-20 7	9.3	9.6	F8	3	..	10629b
11	402	18.1	-47 48	8.9	9.3	Fo	4	..	20260b	61	227	18.6	-20 51	9.4	9.9	F5	2	..	10629b
12	162	18.2	+10 8	8.47	9.47	Ko	3	0,2	14896b	62	463	18.6	-27 44	9.9	11.2	G5	2	..	23762b
13	268	18.2	-14 38	8.96	9.52	Go	2	..	10628b	63	94	18.6	-61 51	7.6	9.5	Ma	6	0,8	17627b
14	232	18.2	-19 26	9.4	9.9	Go	1	..	45693b	64	234	18.7	+61 11	8.9	8.9	Ao	3	..	38108i
15	558	18.2	-31 9	8.3	9.4	F5	5	..	20245b	65	282	18.7	+54 23	8.0	8.1	A2	3	..	37522i
16	353	18.2	-48 13	8.7	9.9	Go	4	..	20260b	66	422	18.7	+48 15	8.5	8.5	B8	3	..	38879i
17	81	18.2	-74 57	9.7	10.3	Go	2	..	23772b	67	254	18.7	+38 32	8.3	9.1	G5	2	..	37380i
18	400	18.3	+47 46	8.04	8.04	Ao	6	..	38879i	68	213	18.7	+14 48	8.9	9.9	Ko	1	..	10467i
19	293	18.3	+44 45	9.4	9.9	F8	2	..	4415m	69	176	18.7	+11 52	9.4	9.5	A5	3	..	10209b
20	318	18.3	+39 24	7.9	8.0	A2	3	2,2	37380i	70	213	18.7	+6 52	10.1	10.4	Fo	2	..	12024b
21	250	18.3	-12 2	9.9	10.3	F5	1	..	39702b	71	236	18.7	-19 0	9.9	9.6	F8	1	..	45693b
22	225	18.3	-21 39	8.3	9.0	Ko	4	..	10629b	72	554	18.7	-25 37	9.7	10.2	Ao	3	..	23762b
23	389	18.3	-43 57	9.4	11.1	K2	1	3,1	20646b	73	560	18.7	-31 47	8.00	8.8	G5	4	..	20245b
24	102	18.4	+70 27	6.52	6.52	Ao	8	..	38134i	74	534	18.7	-34 4	6.94	8.2	Ko	9	..	20245b
25	333	18.4	+52 40	8.6	9.7	K2	2	2,1	38879i	75	109	18.7	-60 43	9.1	9.9	F5	4	0,4	17627b
26	368	18.4	+49 58	8.52	9.52	Ko	2	0,2	38600i	76	95	18.7	-61 31	8.3	9.3	Ko	5	5,8	17627b
27	344	18.4	+46 40	10.2	11.3	K2	1	..	6671m	77	95	18.7	-66 8	10.2	11.0	G5	3	..	38146b
28	240	18.4	+37 0	8.1	8.9	G5	1	..	37512i	78	94	18.7	-72 18	9.1	10.1	Ko	7	0,4	22155b
29	214	18.4	+30 35	9.3	10.3	Ko	1	..	37381i	79	75	18.7	-73 33	8.4	9.4	Ko	3	..	23772b
30	232	18.4	+25 23	8.16	8.50	F2	3	..	37381i	80	94	18.7	-76 4	9.7	10.5	G5	2	..	22155b
31	204	18.4	+7 40	8.7	8.8	A3	7	1,3	12024b	81	255	18.8	+38 30	8.1	8.9	G5	3	..	37380i
32	250	18.4	-13 20	10.5	11.3	G5	1	..	39702b	82	189	18.8	-3 30	9.6	10.6	K	1	..	23768b
33	297	18.4	-55 4	9.0	9.9	F8	3	..	17627b	83	264	18.8	-6 20	7.46	7.96	F8	5	..	10390b
34	292	18.4	-56 19	9.8	10.4	Go	2	0,2	17627b	84	222	18.8	-7 22	9.6	10.7	K2	2	..	45620b
35	296	18.4	-57 15	8.4	9.9	Go	5	..	17627b	85	252	18.8	-11 56	9.0	9.1	A5	3	..	24576b
36	91	18.4	-59 39	7.48	8.3	Go	5	5,4	17627b	86	249	18.8	-17 3	10.3	11.3	K	1	..	40863b
37	89	18.4	-66 54	7.05	7.0	Ao	6	2,10	42851b	87	555	18.8	-24 52	6.66	6.80	A5	10	R	23762b
38	88	18.4	-66 58	9.1	9.1	Ao	3	..	38146b	88	412	18.8	-43 40	8.6	9.6	F5	5	..	20640b
39	35	18.4	-79 36	9.7	10.5	G5	2	..	23772b	89	173	18.8	-52 25	9.3	10.8	Go	2	..	39676b
40	269	18.5	+50 17	8.52	8.52	Ao	4	0,3	38879i	90	..	18.8	-65 49	..	..	F8	3	..	38146b
41	293	18.5	+42 37	6.57	6.57	Aop	3	1,5R	36956i	91	123	18.9	+67 36	4.96	5.96	Ko	..	5,R	56,72
42	200	18.5	+17 17	6.81	7.09	Fo	8	2,3	37467i	92	248	18.9	+63 4	9.0	9.5	F8	2	..	38108i
43	176	18.5	+5 59	8.3	8.4	A2	3	..	38054i	93	297	18.9	+53 52	8.8	8.8	A	1	R	38879i
44	251	18.5	-12 14	9.4	10.4	Ko	2	..	24576b	94	298	18.9	+53 25	8.8	8.8	A	1	..	38879i
45	270	18.5	-14 27	8.9	9.5	Go	6	..	10628b	95	264	18.9	+35 42	9.7	9.8	A2	3	0,2	37380i
46	269	18.5	-14 44	8.16	8.72	Go	7	..	10628b	96	229	18.9	+29 19	8.8	9.3	F8	4	..	37381i
47	222	18.5	-18 28	7.16	8.51	Ma	5	..	10628b	97	231	18.9	+27 4	8.7	9.5	G5	2	..	38882i
48	235	18.5	-18 58	9.1	9.9	G5	1	..	45693b	98	562	18.9	-31 28	5.82	7.5	K5	..	..	56,118
49	484	18.5	-38 13	7.49	8.7	K5	5	..	14372b	99	482	18.9	-35 51	9.7	10.0	Ao	2	..	14372b
50	346	18.6	+46 31	10.2	11.0	G5	1	..	6671m	100	413	18.9	-42 56	9.1	10.5	Go	2	..	20646b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	456	18.9	-45 12	9.9	10.5	G5	1	0,1	39679b	51	224	19.4	+34 9	8.7	8.7	B8	3	..	3738ii
2	174	18.9	-52 11	9.3	10.2	Go	3	..	39676b	52	223	19.4	+27 57	8.9	10.0	K2	1	..	3738ii
3	300	18.9	-55 35	8.4	10.4	Ko	3	..	17627b	53	202	19.4	+17 59	9.1	10.1	Ko	2	..	37467i
4	293	18.9	-56 34	10.2	11.0	G5	1	..	17627b	54	219	19.4	+ 6 29	9.4	9.7	Fo	2	..	14896b
5	127	18.9	-64 16	10.4	11.0	G	3	..	38146b	55	218	19.4	+ 6 24	9.4	10.0	Go	2	..	14896b
6	404	19.0	+47 47	8.5	9.6	K2	1	..	38879i	56	223	19.4	- 7 26	5.98	6.26	Fo	9	..	10390b
7	349	19.0	+46 39	7.8	8.6	G5	4	0,2-	4415m	57	240	19.4	-22 28	9.0	9.3	G5	4	..	10629b
8	265	19.0	+35 33	8.1	8.9	G5	4	..	3738oi	58	101	19.4	-58 0	8.6	9.8	Go	6	..	17627b
9	189	19.0	+21 30	8.1	8.5	F5	2	0,1	38882i	59	95	19.4	-72 7	10.1	11.1	Ko	3	0,3	38146b
10	207	19.0	+13 23	9.1	9.9	G5	3	..	37467i	60	127	19.5	+67 25	9.7	9.8	A3	1	..	38905i
11	243	19.0	- 8 31	6.46	6.60	A5	9	..	10390b	61	243	19.5	+35 12	7.87	8.65	G5	2	..	37512i
12	244	19.0	- 8 42	3.83	4.83	Ko	..	R	1639c	62	256	19.5	-13 6	9.1	9.9	G5	2	..	39702b
13	299	19.0	-10 20	8.78	9.28	F8	6	..	24576b	63	255	19.5	-13 17	9.6	10.6	Ko	1	..	39702b
14	599	19.0	-24 35	8.7	9.4	G5	2	..	23762b	64	262	19.5	-20 4	8.5	9.3	Ko	3	..	10629b
15	459	19.0	-26 43	8.9	10.5	G5	3	..	23762b	65	241	19.5	-22 16	8.9	9.4	Ko	3	..	10629b
16	326	19.0	-40 45	9.9	11.0	Go	2	5,1	20646b	66	564	19.5	-31 0	9.7	11.3	Go	1	..	45166b
17	316	19.0	-54 42	8.56	8.6	Fo	6	..	17627b	67	319	19.5	-54 29	8.2	9.2	G5	5	..	17627b
18	300	19.0	-57 43	9.3	10.4	Go	2	..	17627b	68	304	19.5	-54 54	9.7	10.1	F5	2	..	17627b
19	64	19.0	-70 14	7.5	7.8	F2	9	..	38365b	69	96	19.5	-66 0	10.4	11.0	Go	3	..	38146b
20	63	19.0	-70 42	10.9	11.0	A3	2	..	38365b	70	263	19.6	+61 35	9.2	9.6	F5	2	..	38108i
21	94	19.0	-74 11	9.0	9.5	F8	4	..	23772b	71	337	19.6	+45 30	9.9	10.9	Ko	1	..	6671m
22	295	19.1	+43 10	8.9	9.9	Ko	1	..	4415m	72	300	19.6	+44 36	9.2	10.2	Ko	3	..	4415m
23	177	19.1	+ 5 57	8.1	8.5	F5	3	..	38054i	73	249	19.6	+32 24	8.1	9.1	Ko	4	..	3738ii
24	238	19.1	-19 25	9.9	9.7	Go	2	5,1	10629b	74	225	19.6	+28 2	7.8	8.3	F8	6	..	3738ii
25	96	19.1	-61 24	8.6	10.4	K5	3	3,3	17627b	75	238	19.6	+26 0	8.7	9.8	K2	2	..	38882i
26	273	19.2	+51 10	8.0	8.0	Ao	5	2,3	38879i	76	177	19.6	+12 1	8.8	9.2	F5	3	..	10209b
27	336	19.2	+45 46	10.2	11.2	Ko	1	..	6671m	77	176	19.6	+10 44	9.4	10.6	K5	1	..	12024b
28	296	19.2	+45 5	8.22	8.50	Fo	6	2,3	4415m	78	182	19.6	- 1 30	7.9	8.0	A5	5	0,4	10376b
29	297	19.2	+44 49	9.5	9.6	A2	3	..	4415m	79	265	19.6	-11 8	9.4	9.8	F5	4	5,3	24576b
30	..	19.2	+44 10	..	..	Ao	1	..	6671m	80	252	19.6	-16 46	9.9	10.5	Go	2	..	40863b
31	244	19.2	+36 56	7.9	8.0	A2	4	1,4	37512i	81	548	19.6	-32 20	6.94	7.5	Go	7	2,9 R	44366b
32	254	19.2	-13 15	9.9	10.5	Go	2	..	39702b	82	394	19.6	-44 0	9.4	10.8	Ko	2	..	20646b
33	529	19.2	-37 14	9.7	10.3	F5	2	..	14372b	83	352	19.7	+46 36	7.74	8.52	G5	5	0,4-	4415m
34	361	19.2	-41 28	7.39	8.1	Ko	3	..	10635b	84	282	19.7	+40 50	8.06	8.12	A2	4	3,3	3738oi
35	359	19.2	-41 47	7.6	8.5	F8	3	..	10635b	85	269	19.7	+35 27	8.9	9.7	G5	2	..	3738oi
36	485	19.2	-42 20	9.9	10.7	F8	2	..	20646b	86	223	19.7	+22 25	8.1	8.6	F8	3	..	38882i
37	95	19.2	-74 8	9.6	10.8	K5	3	..	22155b	87	204	19.7	+ 2 50	7.9	7.9	Ao	7	..	37466i
38	248	19.3	+59 43	2.80	2.94	A5	..	R	2293c	88	268	19.7	- 6 30	9.6	10.4	G5	2	..	45620b
39	299	19.3	+42 46	8.8	8.8	B9	3	..	38055i	89	237	19.7	-16 11	6.35	7.13	G5	8	..	10628b
40	245	19.3	+37 12	8.2	8.3	A2	3	0,3	37512i	90	253	19.7	-16 58	9.4	10.4	Ko	3	..	40863b
41	234	19.3	+28 20	8.3	9.5	K5	1	E	38882i	91	431	19.7	-28 34	9.4	10.0	F8	3	..	45168b
42	230	19.3	+19 38	8.1	8.7	Go	1	..	37334i	92	447	19.7	-29 0	7.6	9.1	Ko	7	..	23762b
43	191	19.3	- 3 0	8.3	9.5	K5	2	..	23768b	93	55	19.7	-69 36	7.66	8.6	G5	7	..	38365b
44	538	19.3	-36 14	8.7	9.5	Ko	3	..	14372b	94	302	19.8	+44 15	7.7	8.7	Ko	7	0,2	4415m
45	96	19.4	+69 52	8.0	8.6	Go	2	..	37974i	95	288	19.8	+43 31	9.5	10.1	Go	2	5,1	6671m
46	284	19.4	+54 26	8.5	8.5	Ao	1	..	37522i	96	232	19.8	+19 30	9.4	9.7	Fo	1	..	37334i
47	299	19.4	+45 5	8.57	9.35	G5	3	..	4415m	97	177	19.8	+10 49	9.4	9.8	F5	3	..	12024b
48	298	19.4	+44 28	9.9	10.9	Ko	1	..	6671m	98	179	19.8	+ 5 44	8.9	9.3	F5	2	..	38054i
49	286	19.4	+43 39	9.0	9.0	Ao	4	2,2	4415m	99	195	19.8	- 3 22	6.38	7.16	G5	8	..	10376b
50	287	19.4	+43 32	9.0	9.3	Fo	2	R	6671m	100	224	19.8	- 7 31	8.1	8.2	A3	8	..	10390b

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1^h 19^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	266	m. 19.8	o ' 10 57	8.1	8.9	G5	4	..	39702b	51	493	m. 20.2	o ' -42 1	5.33	7.1	Ko	..	0,7-	56,118
2	225	19.8	-18 44	10.1	11.1	Ko	1	..	45693b	52	99	20.2	-61 9	7.8	9.9	Ma	5	0,7	17627b
3	563	19.8	-25 51	8.1	8.8	A2	6	..	23762b	53	113	20.2	-62 45	9.9	10.3	F5	3	..	23816b
4	398	19.8	-39 26	8.8	9.0	F5	4	..	14372b	54	341	20.3	+52 36	7.69	8.47	G5	4	0,2	38879i
5	10	19.8	-88 39	10.0	11.0	Ko	3	..	22980b	55	291	20.3	+44 1	8.9	10.1	K5	1	..	4415m
6	115	19.9	+67 14	8.6	9.0	F5	4	..	38905i	56	227	20.3	+22 34	9.3	10.7	Mc	..	..	M
7	114	19.9	+66 33	8.0	8.3	Fo	4	0,2	38905i	57	254	20.3	- 5 33	8.9	9.3	F5	4	..	45620b
8	426	19.9	+48 42	8.0	8.0	Ao	5	..	38879i	58	227	20.3	- 7 0	9.4	10.5	K2	1	..	45620b
9	247	19.9	+31 28	8.9	9.5	Go	2	..	37381i	59	226	20.3	- 7 20	10.3	11.3	Ko	3	..	45620b
10	218	19.9	+31 2	8.2	8.7	F8	4	..	37381i	60	274	20.3	-14 11	8.9	9.5	Go	3	..	10628b
11	217	19.9	+30 38	8.5	8.9	F5	4	..	37381i	61	606	20.3	-24 12	10.4	11.7	K5	1	..	45162b
12	234	19.9	+19 50	7.75	7.75	Ao	2	..	37334i	62	332	20.3	-40 25	10.3	10.2	Go	3	..	20646b
13	248	19.9	+ 4 56	8.7	9.3	Go	6	..	14674b	63	391	20.3	-46 14	7.8	9.6	Ko	3	..	20260b
14	205	19.9	+ 2 31	8.7	9.2	F8	4	..	14674b	64	91	20.3	-67 23	8.7	9.5	G5	8	..	38365b
15	221	19.9	- 0 16	8.7	9.7	Ko	3	0,3	23768b	65	53	20.3	-68 30	8.7	9.5	G5	7	..	38365b
16	229	19.9	-21 37	9.3	9.3	F5	3	..	10629b	66	163	20.4	+65 15	9.25	9.25	A	2	..	38108i
17	302	19.9	-57 7	8.7	10.1	G5	4	..	17627b	67	186	20.4	+64 11	7.7	7.8	A3	4	1,2	38108i
18	113	19.9	-63 23	9.9	10.9	Ko	3	..	23815b	68	408	20.4	+47 49	8.7	8.7	A	1	..	38879i
19	95	19.9	-76 41	9.7	10.8	K2	2	..	22155b	69	354	20.4	+47 11	8.8	8.8	Ao	2	..	38879i
20	266	20.0	+62 12	8.4	8.7	F2	2	..	38108i	70	..	20.4	+44 11	..	..	G5	1	..	6671m
21	328	20.0	+40 11	8.67	8.75	A3	2	E	38055i	71	302	20.4	+42 57	6.08	6.58	F8	6	3,3	37512i
22	270	20.0	+35 50	7.8	8.3	F8	5	..	37512i	72	273	20.4	+41 47	7.14	7.42	Fo	5	5,2	37512i
23	226	20.0	+34 6	9.2	9.2	Ao	2	..	37381i	73	228	20.4	+34 4	6.26	6.68	F5	6	0,7-	37381i
24	219	20.0	+31 1	8.1	8.7	Go	4	..	37381i	74	255	20.4	-12 7	9.3	9.6	Fo	5	..	24576b
25	220	20.0	+30 48	8.9	9.0	A2	4	..	37381i	75	254	20.4	-12 40	9.4	9.7	F2	4	..	24576b
26	208	20.0	+15 44	7.39	8.57	K5	4	..	37467i	76	263	20.4	-15 31	8.3	9.1	G5	3	..	10628b
27	270	20.0	- 6 28	6.78	6.78	Ao	7	..	10390i	77	572	20.4	-31 11	8.7	10.0	F2	3	..	20245b
28	552	20.0	-32 5	8.8	9.7	G5	3	..	44366b	78	333	20.4	-40 26	9.7	10.2	Ko	3	..	20646b
29	546	20.0	-34 40	6.70	7.6	G5	10	..	20245b	79	494	20.4	-42 19	9.7	10.7	Go	2	..	20646b
30	382	20.0	-50 2	9.5	9.6	A5	2	..	12636b	80	421	20.4	-43 17	8.7	11.1	Ma	2	..	20646b
31	320	20.0	-53 2	10.6	10.7	A2	2	..	39676b	81	463	20.4	-45 3	6.38	6.6	Ko	7	..	20260b
32	322	20.0	-54 37	9.1	9.9	F5	3	..	17627b	82	..	20.4	-66 7	..	..	Ao	2	..	38146b
33	116	20.1	+66 27	8.1	8.1	A	2	R	38905i	83	56	20.4	-69 36	9.8	10.4	Go	2	..	38365b
34	226	20.1	+23 0	6.07	6.49	F5	4	3,3	37334i	84	294	20.5	+43 49	8.7	9.2	F8	3	3,2	4415m
35	178	20.1	+10 27	9.37	9.79	F5	3	..	12024b	85	193	20.5	+22 3	9.9	10.5	Go	1	..	38882i
36	564	20.1	-25 2	9.5	10.3	Go	2	..	45162b	86	207	20.5	+ 2 27	6.96	7.24	Fo	6	..	37466i
37	467	20.1	-26 47	9.9	10.6	G5	2	..	23762b	87	608	20.5	-24 5	9.9	10.6	G5	2	..	45162b
38	433	20.1	-28 21	8.00	8.8	Go	5	..	23762b	88	25	20.5	-81 32	9.4	10.0	Go	2	..	15165b
39	510	20.1	-33 5	9.1	10.9	Go	2	..	20245b	89	410	20.6	+47 28	8.34	8.40	A2	4	..	38879i
40	420	20.1	-42 57	9.3	10.8	Ko	3	..	20646b	90	355	20.6	+46 34	9.7	9.8	A5	2	..	4415m
41	128	20.1	-63 53	9.8	10.1	Fo	5	R	38146b	91	250	20.6	+31 23	9.4	10.0	Go	2	..	37381i
42	267	20.2	+61 20	9.4	10.4	Ko	1	..	38108i	92	251	20.6	+ 9 3	9.2	9.7	F8	2	0,1	12024b
43	353	20.2	+46 44	9.9	10.5	Go	2	..	6671m	93	232	20.6	+ 8 51	9.1	9.6	F8	3	2,2	12024b
44	339	20.2	+45 14	9.9	11.1	K5	1	..	6671m	94	267	20.6	-11 31	9.1	10.1	Ko	3	..	24576b
45	303	20.2	+44 40	9.2	10.2	Ko	2	..	4415m	95	568	20.6	-24 58	10.6	11.2	Go	1	..	45162b
46	233	20.2	+26 21	8.7	9.5	G5	2	0,1	38882i	96	336	20.6	-39 54	7.74	8.5	G5	5	5,3	14372b
47	228	20.2	+ 9 10	9.6	10.7	K2	1	..	12024b	97	334	20.6	-40 11	9.7	10.7	Ko	2	..	20646b
48	233	20.2	+ 0 57	8.1	8.9	G5	5	..	37466i	98	324	20.6	-54 29	9.6	10.1	F8	3	..	17627b
49	566	20.2	-25 1	9.9	11.2	Go	1	..	45162b	99	115	20.6	-62 21	9.5	10.1	G	3	E	23815b
50	565	20.2	-25 11	9.1	11.2	Ko	1	..	45162b	100	96	20.6	-74 6	9.8	9.8	Ao	6	..	22155b

THE HENRY DRAPER CATALOGUE.

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1^h 20^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	164	20.7	+65 33	7.40	8.47	K ₂	4	0,2	38905i	51	229	21.2	-17 50	9.1	9.7	Go	2	5,I	40863b
2	295	20.7	+44 1	9.7	10.7	K ₀	1	..	6671m	52	355	21.2	-51 48	8.9	9.9	K ₀	3	E	39676b
3	167	20.7	+9 53	7.22	7.22	A ₀	8	..	10209b	53	308	21.2	-55 37	9.1	11.0	K ₂	1	..	39664b
4	276	20.7	-13 55	8.5	9.5	K ₀	3	..	10628b	54	306	21.2	-57 15	9.2	11.2	K ₀	2	..	17627b
5	266	20.7	-15 7	5.19	5.97	G ₅	10	..	10628b	55	97	21.2	-72 32	10.4	11.4	K ₀	4	..	22155b
6	366	20.7	-41 17	9.9	11.6	F ₂	2	..	20646b	56	119	21.3	+66 39	8.6	8.7	A ₃	2	..	38905i
7	114	20.7	-62 58	9.3	10.3	K ₀	4	..	23815b	57	435	21.3	+49 1	8.0	8.0	A ₀	4	I,4	38600i
8	411	20.8	+47 52	8.7	8.7	A	1	..	38879i	58	360	21.3	+46 58	9.2	9.2	A ₀	3	..	4415m
9	341	20.8	+45 40	9.5	10.6	K ₂	1	..	6671m	59	306	21.3	+44 34	9.2	9.2	A ₀	3	..	4415m
10	305	20.8	+43 11	6.93	7.27	F ₂	8	0,4-	4415m	60	..	21.3	+43 34	..	..	A ₃	1	..	6671m
11	304	20.8	+42 18	8.5	8.6	A ₃	3	..	38055i	61	232	21.3	+34 7	7.9	8.7	G ₅	2	..	37381i
12	228	20.8	+22 16	9.1	9.5	F ₅	2	..	38882i	62	230	21.3	+22 46	8.7	9.5	G ₅	1	..	38882i
13	207	20.8	-4 27	6.75	7.75	K ₀	5	..	10376b	63	189	21.3	+18 44	5.63	6.63	K ₀	4	0,3	37334i
14	242	20.8	-19 5	9.3	9.9	Go	2	..	45693b	64	188	21.3	-0 59	8.7	9.3	Go	2	..	10376b
15	569	20.8	-25 14	7.6	8.5	F ₅	7	..	23762b	65	258	21.3	-5 11	8.35	9.13	G ₅	3	..	10376b
16	478	20.8	-26 58	8.2	8.6	A ₃	6	..	23762b	66	281	21.3	-14 25	8.3	8.7	F ₅	6	..	10628b
17	454	20.8	-29 18	8.1	8.8	A ₀	6	..	20245b	67	520	21.3	-23 19	7.12	8.3	K ₀	7	..	10629b
18	393	20.8	-46 8	8.8	9.9	K ₀	3	..	45106b	68	254	21.4	+62 45	8.0	7.8	B	2	..	38108i
19	352	20.8	-51 38	9.2	10.5	K ₅	2	E	39676b	69	240	21.4	+60 48	9.2	9.2	B ₉	2	..	38108i
20	305	20.8	-57 52	8.7	9.9	Go	5	..	17627b	70	361	21.4	+46 27	8.9	10.1	K ₅	2	..	6671m
21	358	20.9	+46 50	9.5	10.0	F ₈	2	..	6671m	71	343	21.4	+45 56	10.2	11.0	G ₅	1	..	6671m
22	..	20.9	+44 40	..	..	F	2	..	6671m	72	..	21.4	+45 48	..	..	Go	1	..	6671m
23	187	20.9	+18 39	5.32	5.60	F ₀	5	R	37334i	73	298	21.4	+43 43	10.2	10.8	Go	2	..	6671m
24	149	20.9	+16 36	9.4	10.2	G ₅	3	..	37467i	74	234	21.4	+33 50	6.28	6.70	F ₅	6	0,8-	37512i
25	183	20.9	+6 8	9.1	10.3	K ₅	2	5,I	12024b	75	246	21.4	+25 59	8.2	8.6	F ₅	3	..	37381i
26	182	20.9	+5 47	9.4	10.6	K ₅	1	..	12024b	76	184	21.4	+10 22	8.82	8.96	A ₅	4	0,3-	14896b
27	195	20.9	+3 55	9.4	10.5	K ₂	1	..	12024b	77	222	21.4	+6 54	9.2	10.3	K ₂	1	..	14896b
28	272	20.9	-9 2	6.89	7.67	G ₅	6	..	10390b	78	221	21.4	+6 46	9.4	9.9	F ₈	3	..	14896b
29	394	20.9	-46 27	8.8	10.2	Mb	1	R	45106b	79	189	21.4	-0 55	6.49	7.49	K ₀	6	5,6	37466i
30	75	21.0	+73 41	7.32	8.10	G ₅	5	..	37615i	80	325	21.4	-54 4	9.0	9.9	F ₅	4	..	17627b
31	304	21.0	+45 10	7.77	7.75	B ₉	7	I,2	4415m	81	61	21.4	-71 12	8.3	8.4	A ₅	7	..	38365b
32	297	21.0	+43 26	9.5	10.1	Go	1	..	4415m	82	99	21.4	-72 2	8.8	9.3	F ₈	7	0,7	22155b
33	238	21.0	+19 33	6.61	7.61	K ₀	3	5,3	37318i	83	98	21.4	-72 51	7.4	7.5	A ₂	7	..	23772b
34	213	21.0	-2 44	7.9	8.5	Go	4	..	10376b	84	308	21.5	+51 17	7.8	8.8	K ₀	3	0,2	38600i
35	395	21.0	-46 28	10.3	9.6	A ₃	2	R	45106b	85	436	21.5	+48 43	8.5	8.5	A ₀	4	I,3	38879i
36	253	21.1	+62 14	8.5	8.5	B ₉	3	..	38108i	86	263	21.5	+39 9	7.8	8.1	F ₀	3	..	37512i
37	238	21.1	+27 3	8.1	9.1	K ₀	3	..	37381i	87	112	21.5	-60 1	6.98	7.8	F ₂	5	3,9-	44374b
38	229	21.1	+23 4	8.8	9.4	Go	2	..	38882i	88	129	21.5	-64 29	9.7	10.0	F ₀	5	..	38146b
39	206	21.1	+17 42	9.1	10.1	K ₀	1	..	37467i	89	98	21.6	+70 2	8.84	9.40	Go	2	..	38134i
40	182	21.1	+11 13	9.8	10.1	F ₂	2	..	12024b	90	..	21.6	+44 40	..	..	A	1	..	6671m
41	249	21.1	+5 7	9.50	10.00	F ₈	2	..	12024b	91	212	21.6	+24 56	7.66	8.73	K ₂	4	2,2	37381i
42	229	21.1	-7 11	8.3	9.3	K ₀	3	..	10390b	92	212	21.6	+15 54	9.2	10.3	K ₂	1	..	37467i
43	491	21.1	-38 42	9.0	9.0	A ₀	5	5,3	14372b	93	209	21.6	+8 5	8.7	9.8	K ₂	3	2,2	12024b
44	342	21.2	+45 17	10.2	11.0	G ₅	1	..	6671m	94	215	21.6	-2 13	9.1	9.5	F ₅	2	..	10376b
45	253	21.2	+36 58	7.98	8.48	F ₈	4	..	37512i	95	261	21.6	-17 3	9.4	9.9	F ₈	2	..	40863b
46	252	21.2	+36 47	7.82	8.60	G ₅	1	..	37512i	96	365	21.6	-48 18	9.9	9.9	A ₅	3	..	45106b
47	239	21.2	+26 43	6.87	7.87	K ₀	5	..	37381i	97	308	21.6	-57 9	9.3	10.8	Go	2	..	17627b
48	212	21.2	+13 26	8.9	10.0	K ₂	3	..	37467i	98	439	21.7	+49 0	8.8	8.8	A ₀	2	0,2	38600i
49	225	21.2	-0 44	8.8	9.3	F ₈	2	..	10376b	99	307	21.7	+44 53	4.96	5.38	F ₅	..	3,9R	56,72
50	259	21.2	-12 44	9.3	10.1	G ₅	4	..	24576b	100	299	21.7	+44 8	10.2	10.5	F	1	..	6671m

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	289	21.7	+40 35	6.38	6.46	A3	5	0,7	37512i	51	560	22.1	-34 41	10.1	9.7	Ko	1	..	44366b
2	243	21.7	+26 59	8.7	9.5	G5	2	..	3738ii	52	397	22.1	-49 21	9.3	10.5	K5	1	..	42088b
3	211	21.7	+3 1	6.42	6.37	B8	7	..	37466i	53	..	22.2	+45 58	..	..	Ao	1	..	6671m
4	260	21.7	-12 10	9.6	10.1	F8	3	..	24576b	54	346	22.2	+45 30	10.2	10.2	Ao	2	..	4415m
5	575	21.7	-25 3	9.5	10.0	F5	3	..	23762b	55	301	22.2	+43 22	8.0	8.0	B9	5	1,3	4415m
6	408	21.7	-38 59	9.6	9.2	F5	4	..	20646b	56	153	22.2	+16 16	9.2	10.3	K2	1	..	37467i
7	433	21.7	-43 23	9.3	11.1	Ko	2	0,1	20646b	57	186	22.2	+5 54	9.1	9.5	F5	2	..	38054i
8	400	21.7	-46 24	8.3	9.3	Ko	3	..	20260b	58	246	22.2	-18 52	9.1	10.1	Ko	2	..	45693b
9	309	21.7	-57 40	8.6	10.7	G5	3	..	17627b	59	475	22.2	-29 59	8.38	9.1	Ko	4	..	23762b
10	130	21.7	-64 53	5.82	7.8	K5	..	0,9	56,118	60	311	22.2	-57 22	8.7	10.1	Go	4	..	17627b
11	99	21.7	-66 40	8.6	8.6	B9	8	..	38365b	61	100	22.2	-66 5	8.9	9.7	G5	6	5,4	38146b
12	67	21.7	-70 0	9.8	10.4	Go	3	..	38365b	62	302	22.3	+43 32	6.56	6.54	B9	6	0,10	38917i
13	47	21.7	-77 8	8.4	9.2	G5	5	..	23772b	63	250	22.3	+4 59	9.55	10.11	Go	2	..	12024b
14	345	21.8	+46 1	9.4	10.4	Ko	2	..	4415m	64	200	22.3	+3 56	9.4	9.5	A5	3	E	37466i
15	239	21.8	+29 16	7.18	7.52	F2	7	..	3738ii	65	231	22.3	-0 28	8.3	8.6	F2	5	..	10350b
16	185	21.8	+10 51	8.5	9.5	Ko	2	..	10209b	66	235	22.3	-21 0	7.11	8.7	Ko	6	..	10629b
17	198	21.8	+3 39	9.4	10.0	Go	2	R	10350b	67	523	22.3	-23 49	9.5	10.2	F8	3	..	45162b
18	228	21.8	-0 33	9.2	10.3	K2	2	0,1	10350b	68	544	22.3	-36 54	9.0	9.1	A2	6	1,3	14372b
19	276	21.8	-9 6	8.62	8.70	A3	4	..	10390b	69	370	22.3	-41 0	7.7	8.9	K5	4	E	45106b
20	556	21.8	-34 26	9.3	10.3	K5	1	..	44366b	70	390	22.3	-50 14	9.9	10.8	Go	2	2,1	39676b
21	367	21.8	-48 25	8.0	8.4	G5	6	..	20260b	71	310	22.4	+44 24	8.6	8.6	Ao	6	1,4	4415m
22	74	21.9	+73 13	8.8	8.8	Ao	2	R	38134i	72	304	22.4	+43 23	9.5	10.1	Go	2	..	6671m
23	105	21.9	+70 24	8.39	8.53	A5	2	3,2	37974i	73	258	22.4	+37 6	8.9	8.9	Ao	2	..	37512i
24	332	21.9	+55 57	8.6	8.6	Ao	1	..	37522i	74	217	22.4	+25 10	8.71	9.13	F5	3	..	38882i
25	276	21.9	+42 5	8.8	9.4	Go	1	..	38055i	75	251	22.4	+4 51	7.33	7.89	Go	7	..	37466i
26	240	21.9	+30 1	8.5	8.8	Fo	4	..	3738ii	76	201	22.4	+3 22	8.9	9.7	G5	2	..	10350b
27	262	21.9	+1 37	9.1	10.2	K2	1	..	10350b	77	309	22.4	-9 49	7.31	8.31	Ko	5	0,5	12248b
28	229	21.9	-0 40	7.9	8.7	G5	6	..	10350b	78	589	22.4	-31 29	8.9	10.0	Go	4	R	44366b
29	262	21.9	-13 34	5.68	5.96	Fo	..	0,9	56,72	79	525	22.4	-33 4	var.	var.	Nb	3	R	12228b
30	615	21.9	-24 48	10.4	11.7	K2	1	..	45162b	80	282	22.5	+51 10	8.7	10.1	Ma	..	..	M
31	576	21.9	-25 40	9.5	10.3	Fo	2	..	23762b	81	420	22.5	+47 48	8.0	8.0	B9	4	1,3	38879i
32	472	21.9	-30 48	7.46	8.5	Ko	5	..	20245b	82	350	22.5	+46 14	10.2	10.3	A3	1	..	6671m
33	523	21.9	-33 4	8.72	10.6	F8	2	..	44366b	83	349	22.5	+46 8	9.5	10.7	K5	2	..	6671m
34	294	22.0	+57 18	8.0	8.0	Ao	3	..	37522i	84	308	22.5	+42 16	7.7	8.5	G5	2	0,1	37512i
35	308	22.0	+44 43	9.9	9.9	Ao	2	..	4415m	85	250	22.5	-7 52	8.90	9.90	Ko	5	..	45620b
36	300	22.0	+44 0	8.7	8.7	B9	5	3,2	4415m	86	248	22.5	-18 54	9.9	9.9	Fo	2	..	45693b
37	334	22.0	+39 48	6.36	6.34	B9	5	..	37512i	87	478	22.5	-30 45	6.84	8.0	Ko	..	5,7	56,118
38	250	22.0	+34 53	8.7	9.1	F5	2	..	37512i	88	507	22.5	-42 3	9.9	11.2	F8	2	..	20646b
39	224	22.0	+30 35	8.7	8.8	A5	4	..	3738ii	89	56	22.5	-67 56	8.4	9.2	G5	6	..	38365b
40	232	22.0	-6 52	9.1	10.1	Ko	3	..	45620b	90	8	22.6	+88 46	2.12	2.62	F8	..	2,6 R	5151c
41	269	22.0	-20 10	8.7	9.0	G5	4	..	10629b	91	297	22.6	+54 45	8.0	8.0	Ao	3	E	38879i
42	409	22.0	-39 46	9.7	10.7	Ko	2	..	20646b	92	313	22.6	+51 22	8.6	8.6	Ao	3	2,3	38600i
43	472	22.0	-45 13	9.7	10.8	G5	1	0,1	39679b	93	311	22.6	+44 36	8.6	9.0	F5	4	0,2	4415m
44	96	22.0	-59 51	8.48	10.1	G5	5	..	17627b	94	251	22.6	-8 7	10.3	11.1	G5	1	..	45620b
45	347	22.1	+52 58	9.2	9.2	Ao	2	..	38879i	95	237	22.6	-20 52	6.86	7.7	F2	9	..	10629b
46	363	22.1	+47 14	7.41	7.41	Ao	3	..	36956i	96	R	22.6	-22 51	6.56	7.7	Ko	9	..	10629b
47	254	22.1	+31 28	6.86	7.86	Ko	5	..	3738ii	97	578	22.6	-25 21	9.7	10.3	Ko	2	..	23762b
48	222	22.1	+21 12	8.9	9.9	Ko	1	..	38882i	98	479	22.6	-30 15	8.9	10.0	F2	2	..	20245b
49	224	22.1	+6 27	8.5	9.5	Ko	2	..	38054i	99	564	22.6	-34 51	9.7	9.7	F2	2	3,1	12228b
50	199	22.1	+3 17	8.3	9.4	K2	6	2,2	12024b	100	373	22.6	-41 28	9.7	10.7	F8	1	..	20646b

THE HENRY DRAPER CATALOGUE.

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1^h 22^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	508	22.6	-42 16	6.66	7.8	K2	4	0,4	10635b	51	311	23.1	-10 34	8.9	9.5	Go	4	..	24576b
2	105	22.6	-58 8	9.3	11.4	G5	2	..	17627b	52	379	23.1	-40 58	9.3	10.4	Fo	3	..	20646b
3	70	22.6	-70 39	9.6	10.7	K2	2	..	38365b	53	315	23.1	-55 36	7.5	8.7	F5	5	..	17627b
4	100	22.6	-72 34	9.6	10.7	Ko	5	0,4	22155b	54	62	23.1	-71 45	9.5	9.8	F2	4	..	22155b
5	45	22.7	+78 38	8.6	9.2	Go	2	..	37615i	55	75	23.2	+72 22	8.15	9.15	Ko	3	0,2	38134i
6	258	22.7	+59 31	7.24	7.66	F5	5	5,2	38877i	56	214	23.2	+ 7 26	8.7	9.3	Go	3	..	38054i
7	283	22.7	+41 44	6.64	7.14	F8	5	3,3	37512i	57	234	23.2	-17 46	7.14	7.42	Fo	7	0,8	10628b
8	259	22.7	+36 34	7.26	7.24	B9	5	..	37512i	58	271	23.2	-20 19	8.9	9.3	G5	3	..	10629b
9	243	22.7	+30 2	6.87	7.29	F5	6	..	37381i	59	251	23.2	-22 33	6.75	7.7	G5	9	..	10629b
10	215	22.7	+15 28	8.7	9.7	Ko	4	..	37467i	60	464	23.2	-29 24	8.16	9.1	Ko	4	..	23762b
11	264	22.7	-12 52	9.9	10.7	G5	1	..	24576b	61	414	23.2	-39 40	8.3	9.3	Ko	4	5,3	12228b
12	480	22.7	-26 27	8.7	9.7	G5	3	..	23762b	62	407	23.2	-44 27	9.4	10.5	Go	2	0,1-	20646b
13	401	22.7	-49 47	8.67	9.9	K2	2	E	45106b	63	406	23.2	-46 22	7.2	8.2	Ko	4	..	20260b
14	313	22.7	-55 27	10.8	10.8	Ao	2	..	39664b	64	305	23.2	-56 12	8.7	10.3	Ko	3	..	17627b
15	78	22.7	-72 59	11.0	11.3	Fo	2	..	22155b	65	260	23.3	+59 44	7.26	7.14	B5	4	..	38877i
16	99	22.8	+70 6	9.50	9.50	Ao	2	..	38134i	66	365	23.3	+46 42	9.5	9.5	Ao	3	..	4415m
17	351	22.8	+45 54	9.7	10.7	Ko	1	..	4415m	67	314	23.3	+44 42	8.9	10.0	K2	3	..	4415m
18	312	22.8	+45 6	8.12	9.12	Ko	5	2,3-	4415m	68	313	23.3	+44 24	9.7	10.5	G5	1	..	6671m
19	188	22.8	+ 5 32	9.8	9.8	Ao	2	..	12024b	69	292	23.3	+37 26	8.7	9.9	K5	..	..	M
20	261	22.8	- 5 0	9.3	10.1	G5	3	..	45620b	70	216	23.3	+ 3 7	9.22	9.78	G	2	..	10350b
21	272	22.8	-11 25	6.25	7.25	Ko	7	5,8	12248b	71	275	23.3	- 6 36	8.5	9.7	K5	4	5,2	12025b
22	264	22.8	-12 28	9.9	10.9	Ko	2	..	24576b	72	265	23.3	-12 46	6.86	7.00	A5	7	2,7-	24576b
23	284	22.8	-14 5	9.6	10.6	Ko	2	..	24576b	73	238	23.3	-20 57	7.36	8.4	G5	5	..	10629b
24	263	22.8	-17 36	9.6	9.7	A2	1	..	45693b	74	R	23.3	-22 51	9.1	9.9	Go	2	..	10629b
25	376	22.8	-41 46	8.8	9.2	F5	5	0,2	20646b	75	495	23.3	-27 38	7.52	8.2	Ko	7	..	23762b
26	177	22.8	-52 2	8.1	8.8	G5	5	..	12636b	76	499	23.3	-38 11	8.7	8.9	A5	5	5,2	14372b
27	35	22.8	-78 35	9.8	10.1	F2	3	..	23772b	77	407	23.3	-46 40	8.0	7.9	Ao	6	..	20260b
28	168	22.9	+64 39	6.94	8.01	K2	3	2,3	37988i	78	315	23.3	-56 57	8.4	9.3	F5	6	..	17627b
29	286	22.9	+51 10	7.22	8.00	G5	3	..	3260b	79	355	23.4	+45 31	9.5	10.5	Ko	1	..	4415m
30	220	22.9	- 2 30	9.0	9.8	G5	2	..	10376b	80	316	23.4	+44 36	10.2	11.0	G5	1	..	6671m
31	213	22.9	- 4 6	8.4	8.8	F5	4	..	10376b	81	315	23.4	+44 20	8.9	9.9	Ko	3	5,1	4415m
32	624	22.9	-24 31	9.4	9.1	A2	5	2,4	45162b	82	283	23.4	- 8 54	9.9	10.4	F8	4	..	45620b
33	585	22.9	-25 51	8.2	8.8	F2	6	0,4	45162b	83	235	23.4	-18 34	8.7	8.7	Ao	6	2,6	10628b
34	178	22.9	-52 29	8.5	9.0	F8	4	..	12636b	84	252	23.4	-22 4	8.9	9.9	G5	3	..	45147b
35	106	22.9	-58 2	10.9	11.4	F8	2	..	17627b	85	451	23.4	-28 34	7.6	7.9	F5	8	..	23762b
36	98	22.9	-59 40	10.3	10.4	A5	3	..	17627b	86	116	23.4	-63 29	10.1	10.6	F8	4	E	38146b
37	36	22.9	-79 44	9.22	9.8	F2	5	..	23772b	87	93	23.4	-67 42	9.4	9.8	F5	4	..	38365b
38	305	23.0	+43 46	8.9	9.4	F8	4	0,2	4415m	88	108	23.5	+70 36	8.6	9.6	Ko	3	2,1	38134i
39	286	23.0	+42 10	8.5	9.3	G5	1	..	38055i	89	173	23.5	+65 44	7.96	9.14	K5	2	..	38905i
40	195	23.0	+23 52	9.3	9.8	F8	2	..	38882i	90	192	23.5	+63 58	8.8	8.8	Ao	1	..	38108i
41	154	23.0	+16 34	6.75	7.17	F5	3	0,2	37334i	91	193	23.5	+63 21	8.0	8.0	Ao	3	..	37988i
42	216	23.0	+13 58	9.1	9.9	G5	2	..	37467i	92	249	23.5	+58 15	7.6	8.4	G5	1	..	37522i
43	221	23.0	- 2 33	6.87	7.15	Fo	7	..	10376b	93	317	23.5	+44 49	9.0	9.8	G5	4	..	4415m
44	57	23.0	-68 21	8.2	9.2	Ko	6	..	38365b	94	..	23.5	+44 29	..	..	Ao	2	..	6671m
45	107	23.1	+71 12	8.6	8.7	A2	3	0,2	38134i	95	288	23.5	+41 46	7.23	7.65	F5	4	0,2	37512i
46	310	23.1	+53 51	8.1	8.1	Ao	2	..	38879i	96	282	23.5	+36 7	7.27	8.27	Ko	3	..	37512i
47	281	23.1	+36 7	8.5	9.6	K2	1	..	37512i	97	226	23.5	+21 13	7.9	8.7	G5	3	0,2	37334i
48	258	23.1	+31 56	8.7	9.9	K5	1	..	37381i	98	215	23.5	+ 7 54	9.1	9.4	Fo	4	..	12024b
49	213	23.1	+ 7 27	6.44	7.44	Ko	7	..	38054i	99	247	23.5	-16 25	8.7	9.5	G5	2	..	45693b
50	312	23.1	- 9 48	9.9	10.5	Go	2	..	45620b	100	591	23.5	-25 40	10.4	10.6	Go	1	..	45162b

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1^h 23^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	453	m. 23.5	o 28 47	9.5	11.2	K2	2	..	23762b	51	633	m. 24.0	o 24 51	8.80	10.0	Go	4	..	45162b
2	407	23.5	-49 1	8.5	9.6	Ko	4	..	20260b	52	484	24.0	-26 16	8.5	10.0	Ko	3	..	23762b
3	63	23.5	-71 23	10.6	10.9	Fo	2	..	22155b	53	449	24.0	-43 50	3.40	4.58	K5	..	3, R	28,195
4	97	23.5	-74 45	9.9	11.3	Ma	..	..	M	54	328	24.0	-53 9	9.3	10.3	Ko	2	..	39676b
5	100	23.6	+70 4	8.79	8.79	Ao	3	2,2	38134i	55	122	24.1	+67 3	9.0	9.5	F8	3	..	38905i
6	300	23.6	+54 20	8.5	8.6	A2	2	..	38879i	56	281	24.1	+61 24	8.2	8.2	B8	3	..	38558i
7	355	23.6	+52 36	8.6	8.7	A3	2	0,2-	38879i	57	370	24.1	+46 30	5.33	6.11	G5	4	0,9 R	36956i
8	356	23.6	+46 9	9.7	11.1	Mb	1	..	6671m	58	292	24.1	+41 30	8.6	9.0	F5	3	..	38055i
9	247	23.6	+26 49	8.7	9.7	Ko	1	..	38882i	59	231	24.1	+ 6 30	9.4	9.9	F8	3	..	12024b
10	184	23.6	+11 57	8.9	10.1	K5	1	E	12024b	60	239	24.1	- 7 22	8.4	8.8	F5	6	0,7	12025b
11	266	23.6	+ 1 59	9.4	10.0	Go	1	..	10350b	61	240	24.1	-18 27	6.67	7.09	F5	9	0,10	10628b
12	193	23.6	- 1 36	8.5	9.0	F8	2	..	10376b	62	634	24.1	-24 20	8.2	9.1	Ko	3	..	10601b
13	254	23.6	- 8 22	10.1	10.6	F8	3	..	45620b	63	597	24.1	-25 19	7.10	7.4	A3	8	..	10601b
14	267	23.6	-12 2	7.9	8.2	Fo	3	5,6-	8884b	64	490	24.1	-30 24	8.9	9.5	K2	4	..	20245b
15	131	23.7	+67 22	9.2	10.2	Ko	1	..	38905i	65	576	24.1	-34 17	6.62	7.0	A3	8	..	44366b
16	356	23.7	+52 50	8.6	8.6	A	1	..	38879i	66	505	24.1	-38 28	7.9	8.9	Ko	5	5,3	14372b
17	366	23.7	+46 18	10.2	10.7	F8	2	..	6671m	67	410	24.1	-49 31	7.10	7.6	Go	6	..	12636b
18	529	23.7	-23 17	9.5	9.4	Go	3	..	10629b	68	80	24.1	-73 16	8.9	9.2	F2	4	..	23772b
19	630	23.7	-23 59	9.2	9.1	F2	3	..	10601b	69	..	24.2	+44 40	..	..	A2	2	..	6671m
20	132	23.7	-65 6	10.1	10.9	G5	4	..	38146b	70	233	24.2	+30 29	8.2	9.0	G5	4	..	37381i
21	102	23.8	+69 45	5.95	6.37	F5	6	E	37308i	71	236	24.2	+22 18	6.75	6.75	Ao	4	0,3-	19385i
22	261	23.8	+59 16	7.25	8.43	K5	3	5,2	38877i	72	187	24.2	+11 53	8.2	8.2	Ao	4	..	38054i
23	230	23.8	+30 22	8.26	8.68	F5	4	..	37381i	73	268	24.2	-12 8	9.4	9.8	F5	2	..	24576b
24	228	23.8	+ 6 47	6.68	7.02	F2	7	..	38054i	74	635	24.2	-23 54	9.7	9.4	Go	4	5,2	45162b
25	285	23.8	-14 9	9.3	9.8	F8	5	..	24576b	75	598	24.2	-25 39	9.2	10.9	Ko	1	..	45162b
26	575	23.8	-32 1	7.89	7.9	A5	5	..	44366b	76	601	24.2	-30 56	9.5	10.1	G5	2	5,1	45166b
27	533	23.8	-33 32	9.3	9.2	Ao	3	..	44366b	77	306	24.2	-56 2	9.2	10.8	G5	2	..	17627b
28	564	23.8	-36 35	8.7	10.0	Ko	1	..	45154b	78	108	24.2	-58 18	8.9	10.4	F5	4	..	17627b
29	483	23.8	-45 36	9.3	9.9	G5	2	..	39679b	79	361	24.3	+45 24	9.5	10.5	Ko	1	..	4415m
30	175	23.9	+65 35	6.16	6.16	Ao	9	0,9	37988i	80	251	24.3	+29 45	9.4	9.9	F8	2	..	37381i
31	359	23.9	+45 16	8.77	8.83	A2	2	1,2-	38917i	81	156	24.3	+16 36	8.5	9.3	G5	3	0,1	37467i
32	242	23.9	+29 2	8.7	9.2	F8	5	..	37381i	82	277	24.3	-10 48	8.9	10.1	K5	2	..	24576b
33	222	23.9	+24 46	6.76	7.76	Ko	6	0,4-	37381i	83	288	24.3	-14 6	10.1	10.9	G5	2	..	24576b
34	245	23.9	+19 58	8.5	9.7	K5	2	..	38882i	84	577	24.3	-32 33	9.0	9.0	F5	2	..	20245b
35	172	23.9	+ 9 55	8.3	9.5	K5	2	..	38054i	85	564	24.3	-37 21	7.52	8.8	Ma	5	0,2-	14372b
36	229	23.9	+ 6 54	10.1	10.9	G5	2	..	12024b	86	86	24.3	-75 52	9.9	10.5	Go	2	..	22155b
37	217	23.9	+ 3 5	9.17	9.73	Go	3	..	10350b	87	362	24.4	+53 8	9.0	9.0	A	1	R	38879i
38	267	23.9	-13 20	9.6	10.4	G5	3	..	24576b	88	317	24.4	+51 34	8.9	9.0	A2	2	0,1	38600i
39	631	23.9	-24 42	10.4	10.6	F8	2	..	45162b	89	306	24.4	+43 21	8.9	9.2	F2	5	6,3	6671m
40	99	23.9	-59 47	9.23	10.1	Go	4	..	17627b	90	260	24.4	+32 3	9.3	9.9	Go	1	..	37381i
41	399	24.0	+49 26	8.6	8.6	Ao	4	1,3	38600i	91	238	24.4	+23 10	7.58	8.08	F8	2	3,2	37318i
42	368	24.0	+46 59	9.2	10.0	G5	2	..	6671m	92	269	24.4	-17 45	9.9	10.2	Fo	1	..	45693b
43	369	24.0	+46 27	9.4	10.4	Ko	2	..	4415m	93	538	24.4	-33 52	9.9	10.4	G5	1	..	44366b
44	318	24.0	+44 14	9.7	10.7	Ko	2	..	6671m	94	451	24.4	-43 49	8.5	8.8	Fo	2	0,2-	41875b
45	290	24.0	+42 7	7.8	8.1	F2	4	..	38055i	95	76	24.5	+72 24	8.34	8.90	Go	4	5,3	38134i
46	191	24.0	+10 18	9.17	9.67	F8	5	..	12024b	96	307	24.5	+43 38	10.2	11.2	Ko	1	..	6671m
47	238	24.0	+ 9 8	8.5	9.6	K2	4	2,2	12024b	97	311	24.5	+43 0	9.9	10.7	G5	2	..	6671m
48	205	24.0	+ 3 17	8.59	9.09	F8	4	..	10350b	98	244	24.5	+29 1	8.9	9.0	A2	4	..	37381i
49	278	24.0	- 6 13	8.1	9.3	K5	3	3,2	12025b	99	248	24.5	+27 11	8.3	9.3	Ko	1	..	38882i
50	286	24.0	-14 33	8.9	8.9	Ao	5	..	24576b	100	210	24.5	+17 51	5.96	6.02	A2	4	0,3	37334i

THE HENRY DRAPER CATALOGUE.

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1^h 24^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	316	24.5	-10 0	7.36	8.14	G5	6	..	12248b	51	491	25.0	-26 8	6.55	7.7	Ko	8	..	10601b
2	242	24.5	-17 48	9.6	10.6	Ko	1	..	45693b	52	582	25.0	-32 32	8.92	9.8	K2	2	0,1	20245b
3	387	24.5	-41 9	8.8	10.4	Ko	2	..	20646b	53	107	25.0	-61 28	9.0	10.1	F8	3	..	23773b
4	412	24.5	-49 18	9.2	9.3	F2	4	..	45106b	54	256	25.1	+60 51	7.7	8.7	Ko	2	..	38108i
5	259	24.6	+62 51	7.46	7.22	Bop	4	R	38558i	55	375	25.1	+46 47	9.5	9.6	A3	4	R	6671m
6	401	24.6	+50 9	8.82	9.60	G5	3	5,2	38600i	56	195	25.1	+10 35	8.7	9.7	Ko	2	..	38054i
7	319	24.6	+44 25	8.0	9.0	Ko	6	2,2	4415m	57	223	25.1	+7 18	9.4	10.2	G5	2	..	12024b
8	236	24.6	+27 58	8.1	8.2	A2	5	..	37381i	58	253	25.1	-16 15	7.87	9.8	K2	4	0,4	45693b
9	200	24.6	+21 50	8.7	9.5	G5	2	..	38882i	59	497	25.1	-30 34	8.7	8.4	F5	7	..	20245b
10	175	24.6	+9 43	8.7	9.2	F8	3	..	38054i	60	456	25.1	-43 40	8.1	9.3	Ko	4	..	20646b
11	285	24.6	-9 18	10.3	10.8	F8	2	..	45620b	61	308	25.1	-56 8	9.2	10.2	F8	3	..	17627b
12	250	24.6	-16 39	8.3	8.7	F5	6	3,4	45693b	62	65	25.1	-71 22	9.1	10.1	Ko	4	..	22155b
13	274	24.6	-20 14	9.4	9.4	F5	3	..	10629b	63	101	25.1	-72 13	7.5	8.3	G5	10	5,10	38146b
14	179	24.6	-52 51	9.3	11.4	Ko	1	..	39676b	64	78	25.2	+74 6	8.6	8.6	Ao	2	..	38134i
15	246	24.7	+28 26	9.9	10.3	F5	2	..	37381i	65	103	25.2	+69 30	6.93	6.91	B9	8	..	38905i
16	196	24.7	-0 57	8.5	9.5	Ko	3	..	10350b	66	133	25.2	+67 53	6.97	7.97	Ko	5	..	37974i
17	240	24.7	-7 7	9.1	9.9	G5	4	0,2	45620b	67	257	25.2	+61 0	7.9	8.4	F8	1	..	38108i
18	270	24.7	-13 44	7.25	7.59	F2	5	..	8884b	68	313	25.2	+43 20	9.9	10.9	Ko	1	..	4415m
19	608	24.7	-25 40	9.9	10.9	Ko	1	..	45147b	69	313	25.2	+43 6	8.0	8.3	F2	5	3,7	38055i
20	389	24.7	-40 52	9.9	10.7	Go	1	..	20646b	70	246	25.2	+33 41	8.03	8.11	A3	4	..	37381i
21	333	24.7	-53 53	9.2	10.0	A5	2	..	39676b	71	257	25.2	+25 50	8.1	8.4	Fo	2	..	37381i
22	100	24.7	-59 30	10.7	11.3	Go	2	..	17627b	72	258	25.2	+25 23	7.61	7.89	Fo	5	2,3	37381i
23	24	24.7	-80 25	8.0	9.7	G5	5	..	23772b	73	258	25.2	-8 26	9.75	10.17	F5	3	..	45620b
24	196	24.8	+63 51	8.6	8.6	Ao	2	0,2	38905i	74	277	25.2	-20 7	8.9	9.0	G5	6	..	10629b
25	373	24.8	+47 4	8.6	9.4	G5	5	..	6671m	75	539	25.2	-23 2	7.7	8.4	Go	5	..	10629b
26	311	24.8	+43 59	9.7	10.5	G5	3	..	6671m	76	381	25.2	-48 27	8.8	9.6	F5	4	..	45106b
27	309	24.8	+43 51	9.9	9.9	A	4	..	6671m	77	275	25.3	+38 59	7.30	7.28	B9	6	..	37512i
28	310	24.8	+43 24	9.4	10.4	Ko	2	..	4415m	78	259	25.3	+25 58	8.5	8.6	A2	3	0,1	37381i
29	262	24.8	+31 41	8.3	9.5	K5	2	..	37381i	79	224	25.3	+7 39	9.4	10.0	Go	3	..	12024b
30	240	24.8	-0 9	8.43	9.43	Ko	3	..	10376b	80	261	25.3	+4 52	8.3	8.9	Go	6	..	12024b
31	275	24.8	-20 20	9.6	9.4	F5	4	..	10629b	81	221	25.3	+2 26	8.69	9.11	F5	4	..	10350b
32	254	24.8	-22 8	5.13	5.13	Ao	..	0,10	28,195	82	545	25.3	-33 34	8.8	10.4	K2	1	..	44366b
33	541	24.8	-33 50	8.7	8.9	Fo	5	..	20245b	83	488	25.3	-45 19	9.7	10.2	Ko	2	..	39679b
34	568	24.8	-35 55	8.7	9.4	F8	3	2,2	14372b	84	440	25.3	-47 16	6.29	7.9	Mb	7	..	20260b
35	116	24.8	-60 3	9.2	10.1	F5	3	..	17627b	85	12	25.3	-88 13	9.7	10.2	F8	4	..	22080b
36	253	24.9	+61 2	7.56	7.56	Ao	3	2,3	37988i	86	134	25.4	+67 27	8.2	8.2	B9	3	..	37974i
37	453	24.9	+48 50	7.11	8.11	Ko	5	..	38879i	87	239	25.4	+22 40	8.1	8.9	G5	1	..	37318i
38	194	24.9	+5 38	5.12	6.19	K2	8	R	38054i	88	243	25.4	+0 51	8.7	9.3	Go	4	..	10350b
39	280	24.9	-6 7	6.74	7.16	F5	6	0,6	10376b	89	612	25.4	-25 34	9.1	10.0	F2	3	..	23762b
40	241	24.9	-7 12	10.1	10.4	F	2	..	45620b	90	508	25.4	-27 28	8.3	9.4	Ko	3	..	23762b
41	278	24.9	-11 26	9.4	10.0	Go	2	2,4	24576b	91	573	25.4	-36 20	9.7	10.1	G5	2	..	45154b
42	390	24.9	-41 22	8.2	9.5	G5	4	5,3	20646b	92	395	25.4	-41 22	9.3	9.8	Go	3	..	20646b
43	520	24.9	-41 58	9.5	10.4	F5	1	..	20646b	93	397	25.4	-41 42	8.7	8.9	Fo	5	0,7	12388b
44	522	24.9	-42 21	8.8	10.2	Ko	2	..	20646b	94	367	25.4	-50 57	10.1	10.5	Go	2	..	39676b
45	255	25.0	+60 32	7.96	7.91	B8	4	..	38974i	95	181	25.4	-52 0	7.9	8.4	G5	4	..	12636b
46	254	25.0	+60 23	8.31	9.38	K2	1	..	38974i	96	109	25.4	-61 36	8.8	9.9	Ko	3	..	23773b
47	320	25.0	+44 50	9.4	9.4	Ao	4	..	4415m	97	119	25.4	-63 4	9.6	10.6	Ko	1	..	23773b
48	190	25.0	+12 8	9.1	9.4	Fo	3	E	12024b	98	26	25.4	-81 23	9.3	10.3	Ko	1	..	15165b
49	198	25.0	-0 51	8.9	9.7	G5	1	..	10350b	99	126	25.5	+66 44	8.0	8.1	A3	4	3,2	38905i
50	242	25.0	-7 11	9.9	10.2	Fo	5	..	45620b	100	262	25.5	+63 5	7.71	7.71	Ao	3	..	37988i

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1^h 25^m 5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	228	25.5	+15 6	8.89	0.45	Go	3	..	37467i	51	365	25.9	+45 53	8.4	8.4	Ao	6	0,4	4415m
2	226	25.5	+14 30	8.1	9.5	Mb	3	..	37467i	52	165	25.9	+17 3	9.1	9.6	F8	2	3,1	37467i
3	222	25.5	+ 2 22	var.	var.	Md	..	R	M	53	225	25.9	+13 20	9.2	10.2	Ko	1	..	37467i
4	199	25.5	- 1 20	8.5	9.6	K2	1	..	10350b	54	579	25.9	-36 48	9.3	10.3	Ko	1	..	45154b
5	613	25.5	-25 50	9.2	9.7	Fo	4	0,3 R	45162b	55	339	25.9	-54 40	8.5	9.6	Fo	3	..	17627b
6	572	25.5	-36 57	8.3	8.8	Fo	4	..	45154b	56	286	26.0	+61 22	8.8	8.8	Ao	2	..	38108i
7	332	25.5	-52 53	7.2	8.7	K5	4	3,4	17627b	57	315	26.0	+57 27	8.5	8.5	Ao	1	..	37522i
8	331	25.5	-53 0	9.0	9.9	Go	2	..	39676b	58	314	26.0	+44 13	9.9	10.9	Ko	2	..	6671m
9	309	25.5	-56 6	8.9	10.5	Ko	2	..	17627b	59	224	26.0	+ 2 22	9.34	10.52	K5	2	..	10350b
10	81	25.5	-73 47	9.3	10.3	Ko	2	..	23772b	60	246	26.0	+ 1 9	9.09	9.65	Go	3	..	10350b
11	322	25.6	+52 6	8.2	8.2	Ao	1	5,1	38879i	61	271	26.0	- 5 28	7.07	8.07	Ko	5	5,4	12025b
12	196	25.6	+ 5 28	8.7	9.5	G5	2	E	38054i	62	403	26.0	-41 10	9.3	8.8	Go	2	..	20646b
13	283	25.6	-11 22	9.3	10.3	Ko	2	..	24576b	63	184	26.0	-52 42	10.7	10.8	A3	2	..	39676b
14	273	25.6	-13 30	9.1	10.2	K2	3	..	24576b	64	111	26.0	-61 44	8.5	9.2	A2	5	..	23773b
15	290	25.6	-14 35	8.9	9.7	G5	3	..	24576b	65	60	26.0	-68 0	7.8	9.2	Ma	6	..	38365b
16	243	25.6	-18 5	9.6	10.2	Go	1	..	45693b	66	102	26.0	-72 27	9.4	9.5	A5	6	0,7	38146b
17	258	25.6	-19 16	10.1	9.9	Go	1	..	45693b	67	325	26.1	+53 58	8.5	8.5	A	1	..	38879i
18	477	25.6	-29 23	8.01	8.6	Ko	6	..	23762b	68	269	26.1	+37 2	8.5	8.9	F5	2	..	37512i
19	430	25.6	-39 24	9.7	11.0	G5	1	..	45154b	69	256	26.1	+30 6	8.41	9.41	Ko	3	..	37381i
20	182	25.6	-52 18	9.3	9.9	F5	4	..	39676b	70	231	26.1	+14 50	3.72	4.50	G5	..	R	1629c
21	334	25.6	-53 1	9.3	9.9	G5	2	..	39676b	71	284	26.1	- 6 4	8.9	10.1	K5	3	3,2	45620b
22	112	25.7	+71 2	8.0	8.5	F8	3	0,2	38134i	72	246	26.1	-18 2	9.3	10.3	Ko	1	..	45693b
23	278	25.7	+38 15	7.15	7.10	B8	3	..	10316i	73	R	26.1	-22 49	9.9	10.5	Ko	1	..	45162b
24	249	25.7	+28 54	7.27	7.83	Go	6	..	37381i	74	311	26.1	-56 42	9.1	10.5	F8	2	..	39664b
25	184	25.7	+12 56	9.1	9.7	Go	2	..	37467i	75	315	26.2	+43 12	9.2	10.2	Ko	1	..	4415m
26	269	25.7	+ 1 43	8.7	8.7	Ao	3	..	10350b	76	309	26.2	+40 33	8.5	8.9	F5	3	..	38055i
27	260	25.7	- 8 35	8.25	9.03	G5	4	5,7	12248b	77	203	26.2	+22 14	8.5	9.3	G5	3	0,1	38882i
28	502	25.7	-26 43	6.00	7.7	Ko	..	0,9	56,118	78	246	26.2	- 7 33	8.1	9.1	Ko	6	0,6	24576b
29	460	25.7	-43 22	9.2	10.2	F8	2	..	20646b	79	324	26.2	- 9 49	8.46	9.02	Go	3	..	12248b
30	385	25.7	-48 52	9.1	9.9	G5	3	..	20260b	80	285	26.2	-11 25	8.5	9.3	G5	6	..	24576b
31	59	25.7	-68 41	7.4	8.4	Ko	7	..	38365b	81	546	26.2	-23 2	9.5	10.2	K2	2	..	45162b
32	76	25.7	-70 38	8.6	8.9	Fo	6	..	38365b	82	506	26.2	-26 48	9.9	10.6	F8	2	..	45162b
33	258	25.8	+58 38	8.0	8.1	A5	2	2,1	38108i	83	461	26.2	-43 13	9.4	10.5	F8	3	0,2	20646b
34	323	25.8	+53 30	7.83	7.78	B8	4	0,3	38879i	84	79	26.3	+72 49	8.4	9.4	Ko	2	..	38134i
35	323	25.8	+51 57	7.8	8.1	Fo	4	..	38879i	85	326	26.3	+54 13	8.7	8.7	A	1	R	38879i
36	164	25.8	+16 39	7.9	8.2	Fo	2	0,2	37334i	86	367	26.3	+45 29	10.2	11.2	Ko	1	..	6671m
37	233	25.8	+ 7 10	9.4	9.8	F5	2	..	12024b	87	247	26.3	+ 0 27	9.4	9.4	Ao	2	..	10350b
38	197	25.8	+ 6 5	8.9	9.5	Go	2	..	38054i	88	325	26.3	-10 4	9.08	9.36	Fo	6	..	45620b
39	244	25.8	+ 0 23	9.68	10.24	G	2	..	10350b	89	286	26.3	-11 38	9.6	9.7	A3	4	..	24576b
40	211	25.8	- 3 26	9.3	10.1	G5	1	..	10376b	90	589	26.3	-31 58	9.0	9.6	K5	2	0,1	20245b
41	274	25.8	-12 58	9.9	11.0	K2	2	..	24576b	91	580	26.3	-36 12	9.0	9.5	F5	2	0,1	14372b
42	292	25.8	-14 41	9.91	10.91	Ko	1	..	24576b	92	518	26.3	-38 18	8.3	8.5	Fo	3	..	10635b
43	543	25.8	-23 45	8.2	9.3	Ko	6	0,3	45162b	93	336	26.3	-53 0	7.01	8.3	K5	6	3,5	17627b
44	617	25.8	-25 28	9.9	10.3	Go	3	2,3	23762b	94	117	26.3	-60 1	9.18	10.1	Go	3	..	17627b
45	503	25.8	-25 55	9.9	9.7	F8	4	0,3	45162b	95	113	26.3	-60 55	8.1	10.7	K5	2	0,1	17627b
46	478	25.8	-29 47	9.33	10.4	Ko	1	..	45168b	96	199	26.4	+64 12	8.6	9.6	Ko	1	..	38108i
47	431	25.8	-39 39	9.3	11.7	K5	1	..	45154b	97	319	26.4	+58 6	8.5	8.8	F2	2	0,2	37522i
48	88	25.8	-75 34	7.6	9.0	Ma	7	..	23772b	98	265	26.4	+34 18	6.28	6.23	B8	3	..	10316i
49	100	25.8	-76 35	9.4	10.5	K2	3	..	23772b	99	252	26.4	+19 51	9.1	9.2	A3	1	..	37318i
50	264	25.9	+63 4	7.30	8.30	Ko	2	..	37988i	100	248	26.4	-18 12	8.7	9.3	Go	4	..	45693b

THE HENRY DRAPER CATALOGUE.

9300

1^h 26^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	241	26.4	-21 38	9.1	9.3	F2	2	..	10601b	51	373	26.9	-51 44	7.7	7.9	Go	5	..	12636b
2	589	26.4	-34 41	10.3	10.3	Go	1	..	44366b	52	320	27.0	+57 49	6.05	7.05	Ko	5	R	38877i
3	269	26.5	+59 56	7.66	7.66	Ao	5	0,3	38974i	53		27.0	+57 49			Ao			
4	303	26.5	+37 45	7.25	8.03	G5	4	E	37474i	54	354	27.0	+55 18	7.31	8.31	Ko	3	..	37522i
5	268	26.5	+32 3	8.2	8.6	F5	4	..	37387i	55	317	27.0	+44 2	9.4	9.8	F5	3	..	4415m
6	233	26.5	+15 7	7.84	9.19	Mb	4	..	37467i	56	249	27.0	+0 50	var.	var.	Ao	3	R	10350b
7	197	26.5	+10 24	7.57	8.35	G5	6	..	37467i	57	213	27.0	-3 15	9.1	9.6	F8	2	..	10376b
8	271	26.5	+2 5	9.04	10.04	Ko	3	..	10350b	58	289	27.0	-6 24	8.8	9.9	K2	5	0,3	45620b
9	326	26.5	-10 13	8.3	9.3	Ko	2	..	12248b	59	250	27.0	-7 14	7.73	8.80	K2	6	2,6	12025b
10	620	26.5	-25 7	9.7	9.4	F8	4	3,1	45162b	60	549	27.0	-23 44	10.2	11.0	Ko	1	..	45162b
11	271	26.6	+60 10	7.26	7.09	B3	5	R	38974i	61	451	27.0	-46 54	9.2	9.9	F8	2	..	45106b
12	167	26.6	+16 28	6.81	7.59	G5	2	0,2	37334i	62	425	27.0	-49 35	3.96	4.96	Ko	..	R	28,195
13	227	26.6	+15 33	8.1	8.9	G5	5	..	37467i	63	81	27.1	+72 58	8.2	9.0	G5	4	0,2	38134i
14	185	26.6	+13 11	9.8	11.2	Ma	..	..	M	64	137	27.1	+67 57	8.6	8.9	Fo	3	..	37974i
15	276	26.6	-12 46	7.15	7.43	Fo	5	5,7-	8884b	65	276	27.1	+60 7	8.21	8.49	Fo	3	2,2	38108i
16	282	26.6	-20 19	9.3	9.4	F5	3	..	45147b	66	315	27.1	+54 26	7.17	8.35	K5	2	0,2	38879i
17	471	26.6	-28 37	8.5	8.3	F5	4	..	23762b	67	371	27.1	+46 3	9.5	9.6	A2	1	..	4415m
18	614	26.6	-31 49	8.68	9.6	K5	3	0,2	20245b	68	..	27.1	+44 37	..	..	Ao	3	..	6671m
19	408	26.6	-40 54	10.3	10.4	Go	2	..	20646b	69	307	27.1	+37 36	7.9	8.3	F5	3	E	37474i
20	121	26.6	-62 36	9.3	10.1	G5	2	..	23773b	70	292	27.1	+35 20	6.76	7.76	Ko	6	0,2	37474i
21	103	26.6	-72 42	10.3	11.1	G5	4	..	22155b	71	227	27.1	+3 10	7.81	8.81	Ko	5	..	10350b
22	315	26.7	+43 25	9.7	9.8	A3	2	..	4415m	72	216	27.1	-3 38	9.6	10.1	F8	2	..	10376b
23	194	26.7	+11 20	9.4	9.5	A2	1	..	38054i	73	250	27.1	-18 13	9.1	9.7	Go	2	5,3-	45693b
24	182	26.7	+9 28	8.5	9.5	Ko	4	..	38054i	74	552	27.1	-22 58	9.5	10.2	G5	3	..	45162b
25	294	26.7	-14 12	8.9	9.5	Go	5	..	24576b	75	518	27.1	-26 2	9.9	10.0	Go	2	..	45147b
26	273	26.7	-17 1	9.3	10.4	K2	2	..	45693b	76	517	27.1	-26 30	9.7	10.9	Ko	1	..	45162b
27	274	26.7	-17 17	8.3	9.3	Ko	5	0,3	45693b	77	506	27.1	-30 48	5.77	7.0	Ko	..	5,10	56,118
28	437	26.7	-39 18	10.5	10.4	F8	2	..	45154b	78	407	27.1	-50 25	7.56	7.9	Fo	5	..	12636b
29	289	26.8	+62 1	7.20	8.27	K2	3	..	37988i	79	118	27.1	-60 10	7.8	9.2	Go	6	..	17627b
30	372	26.8	+53 10	8.9	8.9	Ao	1	..	38879i	80	84	27.1	-73 31	9.8	10.2	F5	4	..	22155b
31	371	26.8	+52 31	8.5	9.3	G5	3	0,2	38879i	81	37	27.1	-79 33	8.09	9.2	G5	7	..	23772b
32	369	26.8	+45 54	10.2	10.2	A	1	..	6671m	82	105	27.2	+69 23	9.2	10.2	Ko	2	..	38905i
33	195	26.8	+11 47	8.9	9.7	G5	4	E	12024b	83	291	27.2	+61 38	7.6	7.6	Ao	2	..	37988i
34	273	26.8	-5 28	8.7	9.3	Go	4	..	45620b	84	328	27.2	+53 21	9.4	9.4	A	1	..	38879i
35	290	26.8	-10 46	7.32	7.38	A2	4	1,7	8884b	85	372	27.2	+45 36	9.7	10.9	K5	2	..	6671m
36	262	26.8	-19 32	7.08	7.7	A3	8	..	10601b	86	252	27.2	+33 21	7.57	7.99	F5	4	0,4	37387i
37	263	26.8	-19 33	7.42	8.4	Ko	4	..	10601b	87	251	27.2	+1 4	8.14	8.22	A3	5	..	10376b
38	486	26.8	-29 35	9.5	10.6	G5	1	..	45168b	88	475	27.2	-28 13	7.32	8.3	Ko	7	..	23762b
39	439	26.8	-38 56	7.84	9.5	K5	2	0,3-	10635b	89	295	27.3	+56 18	8.0	8.5	F8	2	..	37522i
40	133	26.8	-65 24	10.6	11.2	Go	3	..	38146b	90	463	27.3	+48 30	8.38	8.46	A3	3	0,2	38600i
41	49	26.9	+78 38	8.6	8.6	Ao	3	..	37615i	91	..	27.3	+46 6	..	..	A5	1	..	6671m
42	135	26.9	+68 10	8.1	9.1	Ko	4	..	38905i	92	323	27.3	+45 0	9.7	11.1	Ma	1	..	6671m
43	370	26.9	+46 4	9.5	10.7	K5	1	..	6671m	93	318	27.3	+43 23	8.5	8.5	B9	6	0,5	4415m
44	322	26.9	+45 6	9.47	10.54	K2	2	..	6671m	94	310	27.3	+38 4	8.6	8.7	A3	2	..	38055i
45	..	26.9	+44 20	..	..	F8	2	..	6671m	95	251	27.3	+28 42	9.9	10.7	G5	1	..	37387i
46	316	26.9	+43 29	9.0	10.0	Ko	4	..	6671m	96	169	27.3	+16 26	9.4	10.5	K2	1	..	37467i
47	168	26.9	+16 43	9.1	10.2	K2	1	..	37467i	97	198	27.3	+11 22	8.3	9.5	K5	4	..	37467i
48	199	26.9	+11 11	9.1	9.6	F8	3	..	37467i	98	212	27.3	+3 44	8.7	9.8	K2	3	..	10350b
49	504	26.9	-30 30	6.75	7.5	Ko	..	5,8	56,118	99	279	27.3	-15 0	8.50	8.50	Ao	6	0,9	45693b
50	450	26.9	-47 46	9.3	9.3	F8	3	..	45106b	100	277	27.3	-17 22	9.6	9.6	Ao	4	3,2	45693b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	251	27.3	-18 3	8.7	9.0	Fo	7	..	45693b	51	522	27.7	-27 3	8.1	8.1	A3	7	E	10601b
2	507	27.3	-30 40	9.5	10.4	Go	1	..	44366b	52	421	27.7	-46 24	10.1	10.5	Ko	1	..	45106b
3	423	27.3	-44 21	7.8	8.4	F5	3	3,2	12227b	53	104	27.7	-59 38	10.1	10.7	Go	2	..	17627b
4	500	27.3	-45 10	7.90	8.2	F2	3	..	41875b	54	87	27.8	+71 54	7.8	8.6	G5	3	..	37615i
5	134	27.3	-65 38	7.9	8.2	Fo	8	0,2	38146b	55	179	27.8	+65 17	9.05	10.40	Ma	1	..	38905i
6	51	27.3	-77 49	10.0	10.3	Fo	3	..	23772b	56	468	27.8	+49 11	9.0	9.0	A	1	..	38879i
7	113	27.4	+68 26	6.66	7.44	G5	7	..	38905i	57	321	27.8	+44 6	9.7	10.1	F5	2	..	4415m
8	260	27.4	+58 44	4.88	5.88	Ko	..	5,6 R	56,72	58	208	27.8	+22 2	9.3	10.7	Ma	1	..	37318i
9	217	27.4	- 3 34	9.6	10.1	F8	1	..	10376b	59	269	27.8	+ 4 51	8.9	9.7	G5	3	..	10350b
10	328	27.4	-10 1	9.3	9.9	Go	2	..	24576b	60	253	27.8	+ 0 30	9.1	9.7	Go	2	..	10350b
11	651	27.4	-24 9	7.22	7.2	A5	..	2,8	56,118	61	265	27.8	- 8 40	9.15	9.23	A3	3	..	24576b
12	597	27.4	-33 56	9.3	9.4	Go	2	5,2	12228b	62	260	27.8	-16 40	8.1	9.1	Ko	4	0,4	24576b
13	532	27.4	-35 1	9.0	9.2	F5	7	5,3 R	12228b	63	266	27.8	-19 29	8.04	9.0	K2	3	..	10601b
14	420	27.4	-46 5	6.28	6.8	Ao	9	..	41875b	64	584	27.8	-37 38	9.1	10.1	Ko	2	0,1-	12228b
15	467	27.5	+48 59	8.6	8.7	A2	2	2,1	38600i	65	446	27.8	-39 37	9.0	9.8	Ko	3	0,3-	45154b
16	300	27.5	+41 49	8.6	9.6	Ko	2	..	38055i	66	377	27.8	-51 5	8.5	8.4	Fo	4	..	12636b
17	189	27.5	+12 39	8.1	9.1	Ko	3	..	37467i	67	337	27.8	-53 26	9.2	10.0	G5	2	..	39676b
18	213	27.5	+ 3 34	9.4	10.4	Ko	2	..	10350b	68	119	27.8	-60 6	7.8	8.6	F8	7	..	17627b
19	291	27.5	-10 49	8.3	8.6	Fo	7	5,4	24576b	69	448	27.9	+48 4	8.60	8.66	A2	2	..	38600i
20	280	27.5	-13 9	9.3	10.4	K2	1	..	24576b	70	..	27.9	+42 58	..	..	Mb	1	R	6671m
21	265	27.5	-19 5	8.5	8.8	G5	3	..	10601b	71	275	27.9	+36 21	9.3	9.3	B9	2	..	37474i
22	245	27.5	-21 13	9.4	9.9	F8	1	R	45147b	72	204	27.9	+23 27	7.53	8.09	Go	3	0,2	19385i
23	413	27.5	-41 6	9.7	9.8	A3	4	..	20646b	73	247	27.9	- 0 25	8.5	9.5	Ko	3	..	10376b
24	103	27.5	-59 14	8.7	10.1	Ko	3	..	17627b	74	493	27.9	-28 52	9.0	10.6	Go	1	..	45168b
25	120	27.5	-63 10	9.2	10.0	G5	5	5,4	38146b	75	599	27.9	-30 13	8.2	8.9	Fo	5	..	45168b
26	382	27.6	+46 23	9.7	10.0	F	2	..	6671m	76	586	27.9	-37 48	9.0	9.7	Go	4	2,3	45154b
27	..	27.6	+45 9	..	..	Ao	2	..	6671m	77	135	27.9	-65 38	7.31	8.1	Ko	3	..	42851b
28	320	27.6	+43 16	10.2	10.3	A2	2	..	6671m	78	95	27.9	-67 0	7.9	7.9	Ao	2	..	42851b
29	244	27.6	+27 24	9.1	9.9	G5	2	5,1	37381i	79	331	28.0	+51 19	8.9	9.5	Go	2	2,2	38600i
30	245	27.6	+23 12	8.8	9.6	G5	2	..	38882i	80	376	28.0	+45 28	8.6	8.6	Ao	6	1,4-	4415m
31	258	27.6	+20 13	9.5	9.9	F5	1	..	37318i	81	324	28.0	+44 28	10.2	10.2	Ao	1	..	4415m
32	229	27.6	+ 2 32	8.07	8.85	G5	4	..	10350b	82	321a	28.0	+43 45	9.2	10.2	Ko	1	R	4415m
33	281	27.6	-13 22	9.3	9.8	F8	4	..	24576b	83	260	28.0	+29 54	8.1	8.2	A3	5	2,1	37381i
34	259	27.6	-15 58	8.5	9.6	K2	5	2,3	24576b	84	298	28.0	- 9 31	6.60	6.60	Ao	6	..	8884b
35	285	27.6	-20 7	9.1	9.4	F8	3	..	45147b	85	280	28.0	-16 54	9.0	9.0	Ao	5	0,4	45693b
36	519	27.6	-27 18	9.2	9.7	F8	3	..	45168b	86	254	28.0	-18 8	9.1	10.2	K2	1	..	45693b
37	375	27.6	-51 46	10.3	11.1	Ko	2	..	39676b	87	556	28.0	-22 55	8.2	8.7	Ao	5	..	10601b
38	342	27.6	-53 53	7.4	8.4	F5	5	..	17627b	88	536	28.0	-42 1	8.6	8.5	Fo	3	0,2	10635b
39	313	27.6	-56 29	7.5	8.7	Ko	6	..	17627b	89	85	28.0	-73 41	8.6	9.6	Ko	4	..	23772b
40	377	27.7	+52 50	8.1	9.1	Ko	2	2,2	38600i	90	..	28.1	+45 10	..	..	F5	2	..	6671m
41	383	27.7	+46 32	9.7	10.2	F8	2	..	6671m	91	322	28.1	+43 46	8.9	9.7	G5	2	..	6671m
42	319	27.7	+44 4	10.2	11.2	Ko	2	..	6671m	92	323	28.1	+43 34	8.1	8.1	Ao	6	0,5	4415m
43	315	27.7	+40 22	7.52	7.66	A5	5	..	38055i	93	246	28.1	+23 5	7.54	8.32	G5	2	0,2	19385i
44	240	27.7	+30 26	9.2	9.3	A5	2	..	37381i	94	170	28.1	+17 8	9.2	10.3	K2	1	..	37467i
45	258	27.7	+29 22	8.7	9.0	Fo	4	..	37381i	95	231	28.1	+13 38	9.4	10.2	G5	1	..	37467i
46	253	27.7	+28 45	8.9	9.7	G5	4	..	37381i	96	229	28.1	+ 7 42	6.59	7.59	Ko	7	..	38054i
47	230	27.7	+13 57	8.9	9.9	Ko	1	..	37467i	97	249	28.1	-21 36	8.5	10.2	Ma	1	..	45147b
48	203	27.7	+ 5 40	9.4	10.0	Go	2	..	38054i	98	380	28.1	-51 20	10.8	11.6	Ko	1	..	39676b
49	266	27.7	+ 4 16	8.3	9.9	Go	5	..	10350b	99	115	28.1	-61 46	7.2	7.4	Fo	7	..	23773b
50	630	27.7	-25 49	9.2	10.0	G5	3	..	45162b	100	270	28.2	+35 6	7.27	8.62	Ma	4	5,1	37474i

THE HENRY DRAPER CATALOGUE.

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1^h 28^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	202	28.2	+10 29	9.12	9.68	Go	5	..	12024b	51	243	28.6	- 2 9	9.4	9.7	Fo	1	..	10376b
2	271	28.2	+ 4 32	9.4	10.4	Ko	2	..	10350b	52	330	28.6	-10 2	9.9	10.5	Go	1	..	24576b
3	248	28.2	- 0 13	8.7	9.7	Ko	3	..	10350b	53	290	28.6	-20 37	9.3	9.3	A2	3	..	10601b
4	291	28.2	- 6 29	9.4	10.6	K5	2	..	45620b	54	527	28.6	-26 10	7.9	9.1	Ko	2	..	10601b
5	559	28.2	-23 4	9.7	11.0	K2	1	..	45162b	55	431	28.6	-44 32	9.5	10.5	K2	1	..	45106b
6	377	28.2	-40 19	9.9	10.7	Ko	1	..	20646b	56	107	28.7	+69 45	8.2	9.0	G5	3	..	37308i
7	103	28.2	-66 19	9.4	9.7	Fo	5	..	38146b	57	325	28.7	+43 17	8.5	8.5	Ao	4	2,4	4415m
8	470	28.3	+49 3	7.72	7.78	A2	4	..	38879i	58	241	28.7	+20 40	8.9	9.3	F5	2	3,2-	38882i
9	303	28.3	+42 4	8.8	8.8	Ao	1	..	38055i	59	246	28.7	+ 8 29	8.8	9.2	F5	3	..	38054i
10	231	28.3	+15 39	8.7	8.8	A2	5	..	37467i	60	231	28.7	+ 8 9	9.6	9.6	Ao	4	..	12024b
11	206	28.3	+ 6 3	8.7	9.5	G5	2	..	38054i	61	277	28.7	+ 2 4	8.5	8.6	A3	4	..	10350b
12	283	28.3	-13 14	9.3	10.1	G5	3	..	24576b	62	256	28.7	- 7 32	5.88	6.44	Go	8	..	8884b
13	270	28.3	-19 25	8.8	9.4	Ko	2	..	10601b	63	543	28.7	-35 24	9.3	10.4	K5	1	..	45154b
14	269	28.3	-19 40	7.83	8.8	K2	5	..	10601b	64	540	28.7	-42 44	8.3	11.0	G5	1	..	39679b
15	481	28.3	-28 30	10.2	10.6	F8	2	..	45168b	65	427	28.7	-46 25	10.1	10.5	F5	1	..	45106b
16	424	28.3	-46 38	9.9	10.5	G5	1	..	45106b	66	460	28.7	-47 46	9.5	9.9	A3	2	..	45106b
17	136	28.3	-65 7	9.2	10.6	Ma	6	..	38146b	67	321	28.7	-55 15	8.7	10.2	Ko	3	2,3	17627b
18	269	28.4	+60 16	8.71	9.21	F8	3	..	38108i	68	64	28.7	-69 48	9.5	10.1	Go	4	..	38365b
19	304	28.4	+41 52	7.8	8.9	K2	3	..	38055i	69	93	28.7	-75 45	9.4	10.2	G5	3	..	23772b
20	206	28.4	+18 55	8.7	9.3	Go	2	..	37467i	70	206	28.8	+63 38	8.4	8.5	A2	4	..	38974i
21	172	28.4	+17 12	8.3	9.3	Ko	4	..	37467i	71	385	28.8	+46 26	8.96	9.02	A2	3	..	4415m
22	250	28.4	- 0 3	9.4	10.4	Ko	1	..	10350b	72	232	28.8	+ 7 52	9.2	9.7	F8	5	..	12024b
23	254	28.4	- 7 42	9.6	10.2	Go	2	..	45620b	73	216	28.8	+ 3 37	8.7	9.1	F5	6	..	10350b
24	261	28.4	-22 20	9.6	10.2	G5	1	..	45147b	74	287	28.8	-12 6	9.9	11.0	K2	3	..	24576b
25	589	28.4	-37 22	5.49	6.7	Ko	..	0,8	56,118	75	286	28.8	-12 44	8.9	9.5	Go	3	..	12248b
26	415	28.4	-41 46	9.0	11.0	Ko	3	..	20646b	76	513	28.8	-30 27	8.1	8.9	K2	4	E	20245b
27	429	28.4	-49 9	9.2	9.6	Ko	3	5,3	45106b	77	593	28.8	-37 49	8.3	8.4	F5	6	3,6-	12228b
28	410	28.4	-50 2	7.92	9.3	Go	4	..	12636b	78	528	28.8	-38 45	8.2	8.7	Go	2	..	10635b
29	67	28.4	-71 7	9.1	9.5	F5	3	..	38365b	79	188	28.8	-52 43	9.0	10.2	Go	3	..	39676b
30	325	28.5	+44 46	10.2	11.3	K2	1	..	6671m	80	340	28.8	-53 8	9.2	9.3	G5	3	..	39676b
31	277	28.5	+36 44	5.77	5.75	B9	8	..	37474i	81	77	28.8	-70 30	8.7	9.2	F8	7	..	38365b
32	296	28.5	+35 40	8.3	8.4	A2	4	0,2	37474i	82	89	28.9	+71 27	8.9	9.4	F8	2	0,1-	38134i
33	259	28.5	+26 47	9.1	9.2	A2	1	..	38882i	83	273	28.9	+60 58	8.56	9.63	K2	..	..	M
34	231	28.5	+24 42	8.86	8.92	A2	3	..	38882i	84	381	28.9	+45 22	9.9	11.1	K5	1	..	6671m
35	207	28.5	+18 15	8.9	9.9	Ko	1	..	37467i	85	272	28.9	+34 37	7.30	8.30	Ko	4	..	37474i
36	203	28.5	+10 24	8.37	8.87	F8	4	..	37467i	86	231	28.9	+ 2 45	9.4	10.0	Go	2	..	10350b
37	215	28.5	+ 3 15	8.12	8.40	Fo	6	..	10350b	87	245	28.9	- 2 40	8.8	9.4	Go	2	..	10376b
38	276	28.5	+ 1 52	8.7	8.7	Ao	3	..	10350b	88	288	28.9	-12 23	9.9	10.5	Go	2	..	24576b
39	242	28.5	- 2 23	8.7	9.5	G5	2	..	10376b	89	629	28.9	-31 36	9.2	9.9	G5	1	..	44366b
40	658	28.5	-24 41	6.92	7.9	Ko	..	5,7	56,118	90	360	29.0	+55 32	7.06	7.04	B9	4	..	37342i
41	499	28.5	-29 36	8.2	9.6	K5	2	..	44366b	91	337	29.0	+51 19	8.97	10.04	K2	1	..	38879i
42	512	28.5	-45 15	8.8	9.6	K2	3	..	45106b	92	247	29.0	+22 54	8.7	9.7	Ko	1	..	38882i
43	430	28.5	-49 7	8.8	9.0	F8	6	3,2	42088b	93	233	29.0	+ 7 43	9.4	9.5	A3	2	..	38054i
44	411	28.5	-50 14	6.42	7.4	F5	8	..	12636b	94	209	29.0	+ 5 19	9.8	10.3	F8	3	..	12024b
45	105	28.5	-58 54	9.0	9.5	Ao	3	..	17629b	95	279	29.0	+ 1 57	8.1	8.7	Go	3	..	10350b
46	274	28.6	+62 34	6.79	7.79	Ko	4	..	37988i	96	269	29.0	- 8 5	8.73	9.73	Ko	4	0,2-	45620b
47	379	28.6	+46 1	9.2	9.3	A2	2	..	4415m	97	432	29.0	-44 39	8.9	9.6	Ko	3	..	20646b
48	380	28.6	+45 33	8.6	9.6	Ko	2	..	4415m	98	412	29.0	-50 38	8.7	9.3	Ko	3	..	12636b
49	326	28.6	+45 4	8.72	8.86	A5	4	5,3	4415m	99	103	29.0	-74 45	9.67	10.2	Go	3	R	23772b
50	291	28.6	+38 20	8.0	8.1	A3	3	..	37474i	100	104	29.0	-74 50	9.5	10.5	Ko	4	..	22155b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl.No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl.No.
1	84	29.1	+72 50	8.9	10.0	K2	..	..	M	51	507	29.5	-29 49	9.43	9.8	F8	1	..	44366b
2	140	29.1	+67 26	8.9	8.9	A	1	..	38905i	52	565	29.5	-33 3	9.9	9.8	Go	3	..	45168b
3	182	29.1	+65 43	8.30	8.28	B9	5	..	38905i	53	50	29.6	+80 55	7.10	7.10	Ao	5	0,4	37227i
4	382	29.1	+52 50	6.80	6.75	B8	6	1,7	3260b	54	..	29.6	+43 6	..	..	Ko	2	..	6671m
5	382	29.1	+45 42	10.2	11.2	Ko	1	..	6671m	55	238	29.6	+13 52	7.9	8.7	G5	4	..	37467i
6	206	29.1	+10 24	9.12	9.62	F8	6	..	12024b	56	201	29.6	+12 3	7.02	7.10	A3	7	..	37467i
7	252	29.1	-21 32	8.1	8.2	F8	7	..	10601b	57	234	29.6	+7 46	7.19	8.19	Ko	5	..	38054i
8	463	29.1	-47 49	8.3	8.4	Go	5	..	45106b	58	241	29.6	+6 52	9.4	9.8	F5	4	3,2	12024b
9	325	29.1	-57 43	9.2	10.5	Go	3	..	17627b	59	257	29.6	-18 15	10.3	10.3	Ao	1	..	45693b
10	122	29.1	-63 21	9.3	10.1	G5	3	5,5	23773b	60	519	29.6	-30 28	9.1	10.6	K5	1	..	44366b
11	68	29.1	-71 26	9.4	10.4	Ko	3	..	22155b	61	520	29.6	-30 44	9.5	10.4	G5	1	..	44366b
12	81	29.2	+73 47	6.42	6.37	B8	8	1,9	37615i	62	437	29.6	-44 51	8.65	9.9	Ko	2	..	20646b
13	141	29.2	+67 24	8.8	9.4	G	1	..	38905i	63	387	29.6	-50 55	8.2	8.8	Ko	3	5,3	12227b
14	134	29.2	+67 6	7.02	7.02	Ao	5	..	37308i	64	123	29.6	-62 8	9.5	10.1	Go	4	E	23773b
15	327	29.2	+44 50	9.5	10.5	Ko	1	..	4415m	65	96	29.6	-75 7	8.3	8.8	F8	6	..	23772b
16	272	29.2	+32 37	6.57	7.13	Go	6	0,3	37381i	66	266	29.7	+58 57	7.32	7.74	F5	3	0,3	37522i
17	257	29.2	+28 44	8.7	9.7	Ko	3	..	37381i	67	391	29.7	+46 46	8.9	9.7	G5	2	..	4415m
18	532	29.2	-27 25	9.9	10.9	G5	1	..	45162b	68	330	29.7	+44 20	8.9	8.9	Ao	4	..	4415m
19	434	29.2	-44 25	7.6	8.8	Ko	3	5,2	12227b	69	238	29.7	+14 46	8.7	9.1	F5	4	..	37467i
20	333	29.3	+57 59	8.6	8.6	B9	2	..	37522i	70	256	29.7	+0 27	7.02	7.52	F8	7	..	10376b
21	383	29.3	+45 19	9.07	9.07	Ao	4	2,2	4415m	71	250	29.7	-2 32	7.60	8.38	G5	4	..	10376b
22	323	29.3	+42 32	8.5	9.1	Go	2	..	38055i	72	265	29.7	-16 11	5.64	5.70	A2	..	2,R	56,72
23	311	29.3	+41 53	8.4	9.6	K5	..	..	M	73	489	29.7	-27 52	7.6	7.7	A2	6	0,7	10602b
24	293	29.3	-6 38	9.6	10.6	Ko	2	..	45620b	74	611	29.7	-34 50	9.28	10.4	K5	2	..	45154b
25	257	29.3	-6 47	8.9	9.7	G5	5	5,3	45620b	75	544	29.7	-41 56	9.4	9.8	F5	2	E	20646b
26	301	29.3	-8 58	8.20	8.62	F5	4	..	12248b	76	327	29.7	-57 28	10.3	10.8	F8	2	..	17627b
27	256	29.3	-17 54	9.6	10.6	Ko	1	..	45693b	77	116	29.7	-58 5	8.4	9.1	Ko	4	..	17627b
28	379	29.3	-40 25	9.7	10.4	Ko	3	0,2	20646b	78	133	29.7	-64 23	8.7	9.5	G5	6	..	38146b
29	405	29.3	-48 30	9.3	10.8	K2	1	..	42088b	79	65	29.7	-68 53	9.7	10.7	Ko	2	..	38365b
30	115	29.3	-58 14	10.1	10.7	Go	3	..	17627b	80	66	29.7	-69 4	9.8	10.4	Go	3	..	38365b
31	114	29.3	-58 43	8.9	10.4	F8	2	..	17627b	81	210	29.8	+64 1	8.5	8.6	A2	2	..	38108i
32	27	29.3	-80 8	9.3	10.3	Ko	2	..	23772b	82	280	29.8	+60 15	8.96	8.06	Ao	2	..	38108i
33	196	29.4	+64 46	8.6	8.7	A2	2	..	37974i	83	392	29.8	+47 3	9.5	10.3	G5	2	..	6671m
34	285	29.4	+59 42	8.5	9.6	K2	2	..	38108i	84	385	29.8	+45 32	9.7	10.8	K2	1	..	6671m
35	338	29.4	+51 39	7.7	8.8	K2	3	..	38879i	85	..	29.8	+44 56	..	..	Go	1	..	6671m
36	328	29.4	+44 27	8.6	9.1	F8	4	..	4415m	86	246	29.8	+30 48	8.6	8.7	A5	4	5,1	37381i
37	329	29.4	+44 24	8.5	9.3	G5	3	..	4415m	87	245	29.8	+30 16	8.36	9.54	K5	2	..	37381i
38	259	29.4	+28 36	8.3	9.3	Ko	5	..	37381i	88	247	29.8	+20 29	8.7	8.8	A3	1	..	37318i
39	263	29.4	+19 40	8.1	9.1	Ko	3	0,2	37318i	89	233	29.8	+2 47	9.6	10.2	Go	2	..	10350b
40	224	29.4	+17 57	6.05	7.40	Ma	3	0,3	37318i	90	237	29.8	-4 2	6.78	7.78	Ko	5	..	10376b
41	293	29.4	-19 48	9.53	11.3	Go	1	..	45693b	91	273	29.8	-7 53	9.0	9.1	A2	2	..	24576b
42	567	29.4	-23 17	9.4	10.8	Ma	2	..	45162b	92	490	29.8	-28 45	6.96	8.2	Ma	5	5,5	10602b
43	104	29.4	-71 56	9.6	10.4	G5	5	0,4	38146b	93	524	29.8	-29 54	9.53	9.8	F5	1	..	44366b
44	388	29.5	+46 52	9.2	10.0	G5	3	..	6671m	94	516	29.8	-44 54	8.65	9.6	Ko	4	..	20646b
45	389	29.5	+46 23	8.7	8.7	Ao	4	..	4415m	95	277	29.9	+62 53	7.56	7.56	Ao	4	..	37988i
46	326	29.5	+43 55	9.9	10.7	G5	3	..	6671m	96	281	29.9	+60 46	8.6	8.6	Ao	2	..	38108i
47	240	29.5	+6 15	9.1	9.6	F8	4	..	12024b	97	332	29.9	+45 8	10.2	10.6	F5	2	..	6671m
48	212	29.5	+6 5	8.5	8.6	A5	5	..	38054i	98	331	29.9	+44 30	10.2	11.2	Ko	1	..	6671m
49	253	29.5	-0 17	8.1	9.1	Ko	4	..	10376b	99	..	29.9	+43 53	..	..	Ko	1	..	6671m
50	508	29.5	-29 18	7.06	8.0	K2	6	..	44366b	100	357	29.9	+39 19	8.7	8.7	Ao	2	0,2	37512i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	265	29.9	+26 10	7.71	8.21	F8	4	0,2	37381i	51	189	30.3	+10 3	8.5	9.5	Ko	2	..	38054i
2	254	29.9	- 0 30	8.5	9.3	G5	5	..	10376b	52	276	30.3	+ 5 3	9.15	10.15	Ko	2	..	10350b
3	259	29.9	- 7 19	9.9	10.9	Ko	1	..	45620b	53	277	30.3	+ 4 30	8.9	9.9	Ko	3	..	10350b
4	52	29.9	-77 10	8.9	9.0	A2	6	..	23772b	54	274	30.3	- 8 5	8.5	8.9	F5	4	5,3	24576b
5	28	29.9	-81 43	8.8	9.8	Ko	2	..	15165b	55	274	30.3	-19 0	8.7	10.4	K2	2	..	45693b
6	71	30.0	+74 45	9.0	9.6	Go	1	..	38972i	56	577	30.3	-22 55	9.7	10.8	Go	2	..	45162b
7	300	30.0	+61 29	8.8	8.9	A2	2	..	38108i	57	120	30.3	-58 51	8.6	9.4	Ko	4	..	17627b
8	477	30.0	+48 42	8.6	8.6	Ao	2	..	38879i	58	123	30.3	-60 31	8.4	9.7	K2	5	..	17627b
9	393	30.0	+46 36	7.02	7.00	B9	7	0,8	38879i	59	339	30.4	+51 14	7.90	8.04	A5	4	0,3	38600i
10	328	30.0	+43 24	10.2	10.8	Go	2	..	6671m	60	398	30.4	+46 21	9.7	10.5	G5	2	..	4415m
11	325	30.0	+42 59	9.5	9.5	Ao	1	..	4415m	61	390	30.4	+45 16	9.9	10.7	G5	1	..	6671m
12	328	30.0	+40 34	6.39	7.39	Ko	6	0,2	37474i	62	329	30.4	+43 56	10.2	11.2	Ko	1	..	6671m
13	278	30.0	+31 15	8.7	9.1	F5	3	..	37381i	63	285	30.4	+37 6	8.1	9.2	K2	2	..	37474i
14	248	30.0	+27 46	7.00	7.78	G5	6	0,3-	37381i	64	303	30.4	+36 2	7.9	8.0	A5	5	3,2	37474i
15	187	30.0	+ 9 25	9.4	10.2	G5	1	..	38054i	65	251	30.4	+21 11	8.6	9.6	Ko	1	5,1	37318i
16	224	30.0	- 2 51	7.44	7.44	Ao	7	..	10376b	66	240	30.4	+14 9	6.20	6.18	B9	10	..	37467i
17	513	30.0	-29 9	8.3	8.9	K2	3	..	44366b	67	288	30.4	+ 2 8	9.4	10.4	Ko	1	..	10350b
18	384	30.0	-40 24	9.6	10.7	Ko	2	5,2	20646b	68	257	30.4	-20 46	9.6	11.1	K2	1	..	45147b
19	347	30.0	-54 13	10.0	10.3	Fo	2	..	39676b	69	669	30.4	-23 57	8.18	8.8	F5	3	..	10601b
20	137	30.0	-65 22	8.6	8.9	F2	5	..	38146b	70	529	30.4	-30 25	7.19	8.0	G5	6	..	44366b
21	69	30.1	+76 13	8.07	8.15	A3	2	R	38133i	71	330	30.4	-57 31	6.89	6.9	B9	6	0,8	37016b
22	301	30.1	+61 19	8.2	8.7	F8	1	..	38108i	72	107	30.4	-59 49	8.48	9.5	Ko	6	..	17627b
23	339	30.1	+54 11	7.15	7.15	Ao	5	0,4	38879i	73	72	30.5	+74 51	9.4	9.4	Ao	1	..	38972i
24	395	30.1	+46 32	10.2	11.2	Ko	2	..	4415m	74	86	30.5	+72 32	5.50	6.50	Ko	..	5,9	56,72
25	..	30.1	+46 5	..	..	A	1	R	6671m	75	91	30.5	+72 4	8.0	8.8	G5	2	..	38972i
26	387	30.1	+45 51	9.2	9.2	Ao	4	..	4415m	76	117	30.5	+68 56	8.6	9.4	G5	4	..	38905i
27	358	30.1	+39 22	7.94	8.94	Ko	2	5,2	38055i	77	139	30.5	+67 6	8.0	9.2	K5	1	..	38905i
28	259	30.1	+33 20	6.67	7.67	Ko	5	0,5-	37381i	78	462	30.5	+47 35	8.14	9.14	Ko	1	..	38600i
29	292	30.1	-12 36	8.9	9.5	Go	5	..	24576b	79	330	30.5	+44 11	10.2	11.2	Ko	1	..	6671m
30	256	30.1	-20 51	9.6	10.5	Ko	1	..	45147b	80	176	30.5	+16 55	5.88	6.02	A5	4	0,4	37318i
31	666	30.1	-24 12	6.53	7.7	Ko	..	0,7-	56,118	81	293	30.5	-12 22	9.6	10.6	Ko	1	..	24576b
32	421	30.1	-41 20	9.0	10.4	K2	3	2,2	20646b	82	299	30.5	-13 53	7.29	7.85	Go	6	..	12248b
33	433	30.1	-46 12	6.90	7.9	G5	5	0,3	12227b	83	530	30.5	-30 23	9.2	9.5	Go	2	..	44366b
34	318	30.1	-56 2	9.8	10.8	Ko	2	..	39676b	84	614	30.5	-31 54	8.7	9.0	Ko	5	5,4	20245b
35	23	30.1	-82 20	9.0	9.8	G5	1	..	20538b	85	538	30.5	-38 24	9.3	9.8	G5	2	5,2	45154b
36	184	30.2	+65 47	8.8	8.9	A2	1	..	38905i	86	389	30.5	-51 38	9.1	9.0	A3	2	..	12636b
37	268	30.2	+59 7	7.13	7.27	A5	3	..	37342i	87	23	30.5	-87 52	8.2	9.4	K5	4	..	15145b
38	396	30.2	+46 23	9.7	9.7	A	1	..	6671m	88	287	30.6	+60 11	8.66	9.66	Ko	1	..	38108i
39	388	30.2	+45 25	9.0	9.0	Ao	3	..	4415m	89	313	30.6	+51 10	9.2	9.2	Ao	2	0,2	38600i
40	257	30.2	+ 0 46	9.4	9.4	Ao	3	..	10350b	90	400	30.6	+46 49	9.7	9.8	A3	3	..	6671m
41	574	30.2	-23 23	9.4	10.8	Ko	2	..	45162b	91	..	30.6	+43 53	..	..	G5	1	..	6671m
42	613	30.2	-32 24	6.18	7.3	G5	9	..	15113b	92	327	30.6	+43 6	9.5	10.0	F8	2	..	6671m
43	552	30.2	-35 51	8.02	8.4	Ko	5	0,4	45154b	93	284	30.6	-17 18	9.4	9.8	F5	1	..	45693b
44	480	30.2	-43 15	9.4	10.5	Go	2	..	39679b	94	263	30.6	-17 54	9.6	10.7	K2	1	..	45693b
45	24	30.2	-82 33	9.5	10.1	Go	2	..	20538b	95	258	30.6	-21 34	10.1	11.0	Go	1	..	45147b
46	460	30.3	+48 12	6.17	7.17	Ko	..	0,3-	1697c	96	259	30.6	-21 42	8.9	9.3	G5	2	..	10601b
47	397	30.3	+46 48	7.44	8.22	G5	6	5,5	4415m	97	117	30.6	-61 45	8.5	9.4	Ko	4	..	23773b
48	326	30.3	+42 51	9.2	10.2	Ko	1	..	38055i	98	124	30.6	-62 59	7.14	6.9	A5	5	0,9	42851b
49	250	30.3	+20 19	9.7	9.8	A2	1	0,1	37334i	99	54	30.6	-77 25	8.7	9.3	Go	5	..	23772b
50	212	30.3	+19 9	8.8	9.3	F8	1	0,1	37318i	100	463	30.7	+47 49	7.26	7.54	Fo	3	0,2	2089b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	334	30.7	+45 3	10.2	11.2	Ko	1	..	6671m	51	36	31.0	-78 35	8.4	9.2	G5	7	..	23772b
2	314	30.7	+41 26	8.4	8.5	A2	3	E	37474i	52	303	31.1	+61 20	8.0	9.1	K2	3	..	38108i
3	363	30.7	+39 34	8.7	9.3	Go	2	..	38055i	53	281	31.1	+33 9	8.3	8.4	A2	2	0,3	37381i
4	286	30.7	+36 56	8.7	8.7	Ao	3	..	37474i	54	280	31.1	+32 21	8.0	9.0	Ko	3	..	37381i
5	289	30.7	+ 2 12	9.1	9.7	Go	2	..	10350b	55	218	31.1	+ 3 48	7.9	8.9	Ko	5	..	10350b
6	255	30.7	- 0 23	9.4	9.5	A2	3	..	10350b	56	270	31.1	-15 54	5.48	6.48	Ko	..	0,9-	56,73
7	285	30.7	- 5 35	8.3	8.7	F5	6	0,4-	12025b	57	538	31.1	-30 46	9.7	10.2	A5	1	..	44366b
8	294	30.7	-12 27	9.3	9.4	A2	4	..	24576b	58	138	31.1	-65 2	9.5	10.9	Ma	5	..	38146b
9	424	30.7	-50 19	8.5	10.2	K5	4	3,1	39676b	59	345	31.2	+53 36	8.1	8.2	A2	1	..	37522i
10	39	30.7	-79 28	9.2	10.3	K2	3	..	23772b	60	404	31.2	+46 27	7.7	7.7	Ao	7	0,2	4415m
11	202	30.8	+64 14	6.64	7.06	F5p	5	0,7 R	37974i	61	392	31.2	+45 57	7.6	8.0	F5	7	0,1	4415m
12	343	30.8	+58 8	7.06	7.01	B8	3	..	37342i	62	219	31.2	+ 3 16	8.5	8.5	Ao	6	..	10350b
13	391	30.8	+45 32	9.2	9.7	F8	2	..	4415m	63	290	31.2	+ 2 1	10.1	10.9	G5	1	..	10350b
14	331	30.8	+43 46	9.2	10.0	G5	2	5,1	6671m	64	265	31.2	- 6 54	9.1	9.6	F8	4	..	45620b
15	278	30.8	+34 37	8.0	8.8	G5	4	..	37474i	65	267	31.2	-18 35	9.6	10.2	Go	1	..	45693b
16	265	30.8	+26 30	8.1	8.2	A3	4	2,2	37381i	66	263	31.2	-21 41	9.9	11.0	F8	1	..	45147b
17	244	30.8	+ 7 8	6.94	7.44	F8	7	..	38034i	67	554	31.2	-42 50	9.1	9.6	F8	2	E	20646b
18	258	30.8	+ 0 46	8.7	9.1	F5	4	..	10376b	68	69	31.2	-69 32	9.7	10.7	Ko	2	..	38365b
19	296	30.8	-11 53	10.3	11.7	Ma	1	..	24576b	69	270	31.3	+58 48	7.85	7.91	A2	3	0,2-	38108i
20	538	30.8	-25 56	9.5	10.3	Ko	3	..	45162b	70	237	31.3	+ 7 14	9.4	9.9	F8	4	..	12024b
21	290	30.9	+59 22	8.0	8.0	B9	3	1,1	38974i	71	288	31.3	-17 4	10.1	10.7	Go	1	..	45693b
22	482	30.9	+48 34	7.50	7.84	F2	5	..	38879i	72	544	31.3	-27 1	9.5	10.6	Go	1	..	45162b
23	333	30.9	+43 46	9.2	10.2	Ko	1	..	4415m	73	544	31.3	-38 50	10.5	11.4	G5	1	..	45154b
24	332	30.9	+43 16	9.2	9.2	Ao	2	0,2	4415m	74	473	31.3	-39 46	9.0	10.7	Ko	2	..	45154b
25	315	30.9	+42 9	8.8	8.8	Ao	3	..	38055i	75	394	31.3	-40 20	8.4	9.6	Ma	4	R	45154b
26	332	30.9	+40 54	4.18	4.74	Go	..	2,5 R	56,72	76	193	31.3	-52 25	9.3	10.5	G5	2	..	39676b
27	237	30.9	+24 56	9.3	9.8	F8	1	..	38882i	77	109	31.3	-74 22	9.4	10.5	K2	1	..	23772b
28	211	30.9	+23 43	9.1	10.1	Ko	1	..	38882i	78	304	31.4	+61 51	6.61	6.56	B8	3	..	37342i
29	262	30.9	- 7 27	10.3	10.4	A3	1	..	45620b	79	369	31.4	+55 50	8.7	9.7	Ko	1	..	37522i
30	304	30.9	-11 12	9.4	9.9	F8	2	..	24576b	80	394	31.4	+45 27	9.0	9.3	F2	2	..	4415m
31	265	30.9	-17 48	8.5	9.3	G5	4	0,2	45693b	81	217	31.4	+21 56	8.7	10.1	Ma	1	..	37318i
32	651	30.9	-25 1	9.05	10.3	Ko	4	..	45162b	82	218	31.4	+ 6 12	7.14	8.14	Ko	4	..	38034i
33	618	30.9	-32 42	10.5	10.2	F8	2	..	45168b	83	259	31.4	+ 0 43	10.1	10.6	F8	2	..	10350b
34	543	30.9	-38 20	8.3	10.7	Go	2	..	45154b	84	264	31.4	-21 1	8.1	9.2	Ko	3	..	10601b
35	448	30.9	-44 3	9.3	10.8	Go	1	..	39679b	85	265	31.4	-22 8	9.9	11.0	G5	2	..	45147b
36	349	30.9	-54 29	9.3	10.3	Ko	2	..	39676b	86	475	31.4	-39 4	8.7	9.8	Ko	3	2,2	45154b
37	84	31.0	+74 2	8.4	8.4	Ao	4	1,3	38972i	87	474	31.4	-39 8	8.7	10.4	K5	2	3,2	45154b
38	203	31.0	+65 2	7.80	8.80	Ko	2	0,2	37988i	88	110	31.4	-74 13	8.9	9.7	G5	3	..	23772b
39	331	31.0	+54 33	7.62	8.62	Ko	3	0,3	38879i	89	240	31.5	+ 7 20	6.68	8.03	Ma	4	..	38034i
40	315	31.0	+50 49	9.0	9.0	Ao	2	2,2	38879i	90	294	31.5	-13 14	8.7	9.7	Ko	4	..	24576b
41	465	31.0	+48 12	8.0	8.0	Ao	3	2,2	38600i	91	273	31.5	-16 32	8.5	9.3	G5	4	E	24576b
42	321	31.0	+37 56	7.9	8.9	Ko	1	..	37512i	92	545	31.5	-26 26	8.5	9.7	G5	4	..	45162b
43	280	31.0	+35 7	8.22	8.72	F8	3	..	37474i	93	612	31.5	-36 30	9.0	9.3	F8	3	3,2	45154b
44	267	31.0	+28 56	8.2	9.2	Ko	3	..	37381i	94	603	31.5	-36 58	7.8	9.0	Ma	6	0,5-	12228b
45	217	31.0	+ 5 45	9.1	9.6	F8	3	..	12024b	95	395	31.5	-40 27	6.54	7.3	F2	7	..	10635b
46	279	31.0	+ 4 58	9.4	10.0	Go	2	..	12024b	96	123	31.5	-58 39	6.12	6.8	F2	9	..	17627b
47	266	31.0	-18 2	7.10	7.88	G5	7	..	10601b	97	70	31.5	-69 26	9.4	9.8	F5	5	..	38365b
48	469	31.0	-38 59	10.3	11.2	Go	1	..	45154b	98	13	31.5	-88 23	9.4	10.2	G5	4	..	22980b
49	79	31.0	-70 38	9.7	10.7	Ko	4	..	38146b	99	58	31.6	+77 28	6.62	6.60	B9	5	..	37227i
50	69	31.0	-71 22	7.8	8.2	F5	8	..	38146b	100	349	31.6	+57 28	5.74	6.74	Ko	4	..	37342i

THE HENRY DRAPER CATALOGUE.

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1^h 31^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	466	31.6	+47 55	6.76	7.18	F5	4	0,2	2089b	51	445	32.1	-49 23	9.9	10.5	F8	3	..	39676b
2	269	31.6	+20 11	8.80	9.58	G5	2	..	38882i	52	327	32.1	-55 36	9.0	9.9	A3	4	..	39676b
3	253	31.6	+ 8 21	9.4	10.0	Go	3	..	12024b	53	73	32.1	-69 40	10.0	10.4	F5	3	..	38365b
4	589	31.6	-22 56	8.9	9.2	Fo	5	..	45162b	54	53	32.2	+76 20	8.57	8.71	A5	2	..	37615i
5	541	31.6	-29 54	8.58	9.6	Ko	3	5,2	44366b	55	307	32.2	+56 54	8.2	8.3	A3	3	..	37522i
6	540	31.6	-43 30	5.68	6.5	Fo	..	0,R	56,118	56	220	32.2	+22 4	8.1	8.5	F5	3	0,2	37318i
7	488	31.6	-43 30	7.9	9.3	G5	4	..	20646b	57	255	32.2	+ 9 5	8.8	9.9	K2	2	..	38034i
8	139	31.6	-65 48	8.3	9.1	G5	7	..	38146b	58	219	32.2	- 0 52	7.03	7.59	Go	7	..	10376b
9	73	31.7	+75 3	8.6	8.9	Fo	2	5,2	38134i	59	248	32.2	- 4 39	7.75	8.75	Ko	4	..	10376b
10	145	31.7	+67 18	8.9	9.4	F8	3	..	37308i	60	275	32.2	-16 2	9.1	10.1	Ko	1	..	45693b
11	284	31.7	+63 13	8.4	9.4	Ko	1	0,I	38108i	61	623	32.2	-32 48	7.16	8.3	G5	6	..	15113b
12	422	31.7	+50 6	9.22	9.28	A2	2	0,I	38600i	62	120	32.2	-61 28	7.5	7.8	A2	5	..	45176b
13	325	31.7	+38 0	8.3	9.1	G5	3	..	37474i	63	102	32.2	-67 38	8.2	8.3	A3	8	..	38146b
14	308	31.7	+36 13	8.1	8.2	A5	4	0,I	37474i	64	214	32.3	+63 36	8.6	8.7	A3	1	..	38108i
15	215	31.7	+23 23	9.3	10.1	G5	1	..	38882i	65	470	32.3	+47 36	8.2	8.3	A3	4	2,2	38879i
16	204	31.7	+12 14	8.9	9.2	F2	3	E	12024b	66	252	32.3	+30 17	8.26	8.76	F8	4	..	37381i
17	287	31.7	- 4 49	8.95	9.37	F5	2	..	10376b	67	277	32.3	-16 6	9.4	9.7	Fo	1	..	45693b
18	605	31.7	-37 47	10.7	9.9	Ao	2	..	45154b	68	554	32.3	-26 9	8.3	10.6	Ko	2	..	45162b
19	205	31.8	+11 38	5.63	5.91	Fo	10	R	37467i	69	553	32.3	-26 42	9.2	10.6	Ko	1	..	45162b
20	282	31.8	+ 5 7	8.40	8.90	F8	4	..	10350b	70	479	32.3	-39 42	9.1	10.7	K2	2	2,2	45154b
21	217	31.8	- 1 2	8.7	9.3	Go	3	..	10350b	71	104	32.3	-65 52	9.7	10.3	Go	4	..	38146b
22	278	31.8	- 7 57	8.7	9.1	F5	6	3,3	12025b	72	297	32.4	+61 7	8.9	9.0	A2	3	..	38108i
23	624	31.8	-33 53	8.4	8.7	G5	5	E	15113b	73	296	32.4	+60 34	7.11	7.67	Go	4	0,4-	37522i
24	343	31.8	-53 7	9.3	10.8	G5	2	..	39676b	74	..	32.4	+57 39	..	..	Oc	..	..	76,28
25	342	31.8	-53 42	7.5	9.0	Ko	4	..	17627b	75	392	32.4	+52 46	8.8	8.8	A	1	..	38600i
26	292	31.9	+60 19	8.06	9.13	K2	2	3,I	38108i	76	350	32.4	+52 6	8.7	8.8	A2	2	..	38879i
27	467	31.9	+48 7	3.77	4.77	Ko	..	0,5 R	1697c	77	398	32.4	+45 55	8.2	8.8	Go	2	..	38055i
28	229	31.9	+17 42	9.2	10.2	Ko	2	..	37467i	78	339	32.4	+44 24	9.5	9.6	A5	2	..	38055i
29	218	31.9	- 1 16	8.6	9.8	K5	2	..	10350b	79	338	32.4	+44 23	8.9	9.5	G	1	..	38055i
30	289	31.9	-14 54	8.50	8.50	Ao	7	..	24576b	80	336	32.4	+40 24	8.1	8.2	A2	3	..	37474i
31	266	31.9	-21 57	9.4	11.0	F8	1	..	45147b	81	329	32.4	+37 30	9.3	9.3	Ao	2	..	37512i
32	455	31.9	-44 36	9.7	9.9	A2	2	..	45106b	82	291	32.4	+36 43	9.4	10.0	Go	2	..	37474i
33	444	31.9	-49 15	9.9	10.2	F5	2	..	39676b	83	284	32.4	+34 51	7.72	8.79	K2	3	..	37474i
34	326	31.9	-55 45	7.93	8.5	Go	5	..	17627b	84	269	32.4	+25 24	8.71	9.71	Ko	3	..	38882i
35	396	32.0	+45 30	8.4	8.4	Ao	4	2,2	38055i	85	261	32.4	+20 46	8.1	8.1	Ao	2	..	37318i
36	336	32.0	+44 1	8.9	9.9	K	1	..	38055i	86	207	32.4	+11 35	6.88	7.44	Go	7	..	37467i
37	333	32.0	+43 10	8.6	8.6	B9	3	..	38055i	87	296	32.4	-13 14	8.1	9.3	K5	5	..	24576b
38	327	32.0	+37 31	7.9	8.5	Go	3	..	37512i	88	278	32.4	-18 59	9.6	11.0	F8	1	..	45693b
39	239	32.0	+24 40	7.10	8.10	Ko	3	5,2	19385i	89	399	32.4	-40 39	9.0	8.9	F5	6	0,3-	45154b
40	258	32.0	+21 10	8.7	8.8	A2	3	..	38882i	90	344	32.4	-53 44	9.9	10.5	Go	2	..	39676b
41	247	32.0	- 3 48	9.0	9.6	Go	3	..	10376b	91	330	32.4	-55 25	10.1	11.1	Ko	1	..	39676b
42	591	32.0	-22 56	8.1	9.2	Ko	3	..	10601b	92	124	32.4	-58 2	8.9	9.7	Go	4	..	17627b
43	424	32.1	+49 28	8.6	9.7	K2	1	..	38600i	93	52	32.5	+78 50	8.0	8.8	G5	2	..	37227i
44	216	32.1	+24 8	8.3	9.3	Ko	2	..	38882i	94	394	32.5	+52 51	8.9	8.9	Ao	2	..	38600i
45	218	32.1	+22 4	9.1	9.5	F5	1	..	37318i	95	493	32.5	+48 24	9.0	9.1	A2	2	..	38600i
46	192	32.1	+ 9 56	8.7	8.7	Ao	4	..	38034i	96	341	32.5	+44 54	6.34	6.34	Ao	4	..	36956i
47	291	32.1	+ 2 5	9.1	10.2	K2	2	..	10350b	97	305	32.5	+38 51	8.6	8.6	Ao	3	..	38055i
48	268	32.1	-17 47	9.6	9.7	A2	3	1,I	45693b	98	221	32.5	+22 12	8.1	8.7	Go	3	..	38882i
49	266	32.1	-21 11	9.4	10.4	F8	3	..	45147b	99	306	32.5	-10 50	8.8	9.4	Go	4	..	24576b
50	431	32.1	-41 49	8.4	9.5	F8	4	..	45156b	100	298	32.5	-19 52	8.38	9.2	Ko	3	..	10601b

10000

1^h 32^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	660	32.5	-25 31	8.5	8.5	F5	4	..	10601b	51	322	33.1	-56 34	9.5	10.0	F8	3	..	39676b
2	549	32.5	-29 54	8.13	8.9	Ko	4	..	44366b	52	126	33.1	-58 47	6.10	7.7	Ma	5	0,8	37016b
3	531	32.5	-45 19	9.2	9.6	G5	2	..	12227b	53	399	33.2	+52 25	8.2	9.3	K2	3	0,2	38600i
4	140	32.5	-65 48	9.1	9.7	Go	6	..	38146b	54	357	33.2	+51 46	7.6	7.6	B9	4	..	3260b
5	395	32.6	+52 29	8.9	9.7	G5	2	0,2	38879i	55	341	33.2	+40 41	7.12	7.12	Ao	5	..	37474i
6	401	32.6	+45 50	7.59	8.77	K5	2	..	38879i	56	257	33.2	+31 8	7.9	8.9	Ko	5	..	37381i
7	222	32.6	+21 23	7.80	8.22	F5	2	0,2	19385i	57	293	33.2	+ 2 5	7.09	8.09	Ko	7	..	10350b
8	268	32.6	- 7 16	8.1	8.9	G5	6	0,7	12025b	58	264	33.2	+ 0 38	10.4	10.8	F5	2	..	10350b
9	343	32.6	- 9 55	6.40	6.82	F5	5	0,10	8884b	59	269	33.2	- 7 10	8.9	8.9	Ao	5	E	24576b
10	308	32.6	-11 20	9.6	9.9	F2	1	..	24576b	60	270	33.2	- 7 25	9.1	9.9	G5	3	..	10360b
11	278	32.6	-16 30	8.3	9.1	G5	6	0,3	24576b	61	331	33.2	-55 4	9.9	11.1	K5	1	..	39676b
12	110	32.6	-59 26	8.3	8.5	F2	5	..	17627b	62	28	33.2	-80 26	7.26	7.0	Ao	3	2,10	42714b
13	212	32.7	+64 39	8.4	9.2	G5	3	0,2	38905i	63	375	33.3	+55 17	7.61	7.56	B8	3	..	37522i
14	337	32.7	+43 38	7.78	8.06	Fo	4	..	38055i	64	475	33.3	+47 45	8.5	9.1	Go	4	5,2	38879i
15	271	32.7	+29 4	8.7	9.5	G5	3	..	37381i	65	272	33.3	+26 8	8.9	9.7	G5	1	..	38882i
16	194	32.7	+ 9 15	8.2	8.6	F5	5	..	38034i	66	199	33.3	+ 9 23	9.1	9.7	Go	3	..	38034i
17	298	32.7	-13 38	10.1	11.1	Ko	1	..	24576b	67	600	33.3	-22 55	9.1	11.3	K5	2	..	45162b
18	273	32.7	-18 24	9.6	10.4	G5	1	..	45693b	68	632	33.3	-32 34	9.7	9.6	G5	2	..	15113b
19	447	32.7	-49 19	6.86	7.9	G5	6	0,6	12636b	69	449	33.3	-46 11	9.5	9.9	F8	2	0,2	45106b
20	127	32.7	-60 11	8.6	8.8	F5	6	..	17627b	70	332	33.3	-54 59	10.0	10.8	G5	1	..	39676b
21	351	32.8	+52 12	8.8	8.9	A3	3	1,2	38600i	71	427	33.4	+49 59	8.9	8.9	Ao	2	..	38600i
22	342	32.8	+44 40	9.5	9.5	A	1	..	38055i	72	343	33.4	+43 52	5.17	5.95	G5	4	R	36956i
23	370	32.8	+39 46	8.3	8.6	Fo	3	..	38055i	73	296	33.4	+36 18	8.7	9.3	Go	2	..	37474i
24	249	32.8	- 3 57	6.78	7.96	K5	7	..	10376b	74	314	33.4	+36 2	7.07	7.07	Ao	6	..	37474i
25	402	32.8	-40 12	9.6	10.7	Ko	1	..	45154b	75	551	33.4	-27 44	8.5	9.4	G5	3	..	45162b
26	438	32.8	-40 54	9.7	10.7	G5	1	..	45154b	76	560	33.4	-38 13	9.1	10.4	Ko	2	0,2	12228b
27	496	32.8	-42 54	9.1	9.9	Go	3	E	20646b	77	489	33.4	-47 37	8.2	8.2	A5	2	..	41875b
28	199	32.8	-52 38	11.1	12.1	Ko	1	..	39676b	78	201	33.4	-51 57	9.3	10.5	Ko	2	..	39676b
29	104	32.8	-75 11	9.2	10.2	Ko	3	..	23772b	79	323	33.4	-56 46	9.0	10.2	Ko	3	5,2	17627b
30	121	32.9	+68 17	9.2	9.3	A2	1	..	38905i	80	141	33.4	-65 30	9.1	9.5	F5	5	..	38146b
31	354	32.9	+54 6	7.35	7.35	Ao	6	0,3	38879i	81	68	33.4	-68 45	9.8	9.8	Ao	3	..	38146b
32	337	32.9	+40 15	8.47	8.61	A5	3	..	38055i	82	105	33.4	-75 26	8.9	9.3	F5	5	..	23772b
33	335	32.9	+38 8	7.67	8.45	G5	4	..	37474i	83	93	33.5	+71 44	8.9	8.9	Ao	3	0,2	38134i
34	263	33.0	+ 0 42	10.1	10.7	G	2	..	10350b	84	217	33.5	+63 39	8.5	8.5	Ao	2	..	38108i
35	291	33.0	-15 26	9.6	10.4	G5	2	..	24576b	85	344	33.5	+55 8	8.41	8.41	Ao	1	..	37522i
36	685	33.0	-24 20	10.2	10.6	Go	1	..	45162b	86	404	33.5	+45 23	6.66	7.44	G5	3	..	36956i
37	563	33.0	-26 4	8.3	9.4	Go	6	..	45162b	87	337	33.5	+38 3	8.6	10.0	Ma	..	..	M
38	404	33.0	-40 41	8.7	8.5	Ao	7	0,4	45154b	88	224	33.5	+21 26	7.69	7.69	Aop	6	0,4 R	37318i
39	426	33.0	-48 48	7.7	8.1	F5	4	..	12227b	89	183	33.5	+16 43	8.7	9.1	F5	4	..	37467i
40	104	33.0	-67 14	8.9	9.5	Go	4	2,4	38365b	90	584	33.5	-33 30	9.9	10.2	F5	3	..	15113b
41	112	33.0	-76 12	8.5	8.8	F2	6	..	23772b	91	452	33.5	-46 49	10.3	10.8	G5	1	..	45106b
42	40	33.0	-79 1	6.06	7.3	G5	7	5,4	14358b	92	455	33.5	-49 46	10.1	10.8	Go	2	..	39676b
43	355	33.1	+53 38	8.0	8.3	F2	2	..	37522i	93	360	33.6	+52 8	8.6	9.7	K2	2	0,2	38879i
44	496	33.1	+49 6	9.4	9.5	A5	1	..	38879i	94	314	33.6	+38 21	8.2	8.8	Go	2	..	37512i
45	264	33.1	+20 54	6.86	7.93	K2	3	2,2	37318i	95	261	33.6	+27 15	7.26	8.26	Ko	6	2,3	37381i
46	250	33.1	+13 25	8.2	8.3	A3	5	..	37467i	96	276	33.6	+26 27	9.3	9.8	F8	2	..	38882i
47	312	33.1	-10 50	8.2	9.3	K2	3	..	12248b	97	287	33.6	+ 4 38	9.4	10.0	Go	3	..	10350b
48	687	33.1	-24 32	9.4	10.3	K2	3	..	45162b	98	313	33.6	- 9 1	8.9	9.9	Ko	2	..	10360b
49	556	33.1	-38 38	7.29	8.2	K2	6	0,2	45154b	99	280	33.6	-15 58	8.3	8.6	Fo	4	..	12248b
50	405	33.1	-40 9	9.7	10.4	F8	2	..	45154b	100	279	33.6	-16 23	7.52	8.52	Ko	3	..	12248b

THE HENRY DRAPER CATALOGUE.

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1^h 33^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	490	33.6	-47 41	7.8	8.4	Ko	5	R	45106b	51	345	34.1	-53 28	10.3	11.1	G5	1	..	39676b
2	92	33.6	-73 15	8.5	9.7	K5	3	E	23772b	52	193	34.2	+65 58	8.16	8.24	A3	3	..	38905i
3	321	33.7	+42 14	8.9	9.7	G5	1	..	38055i	53	364	34.2	+52 2	8.5	8.8	Fo	4	0,3	38600i
4	239	33.7	+17 34	9.1	9.9	G5	2	..	37467i	54	323	34.2	+50 25	9.2	9.3	A2	3	8,1	38600i
5	313	33.7	-11 12	8.9	9.3	F5	3	..	24576b	55	376	34.2	+40 10	6.78	7.56	G5	4	..	37474i
6	300	33.7	-13 9	9.4	10.4	Ko	3	..	24576b	56	316	34.2	+38 27	7.70	8.12	F5	5	5,2	37474i
7	273	33.8	+58 33	6.88	6.86	B9	4	1,6	37342i	57	281	34.2	+30 2	9.1	9.7	Go	3	R	37381i
8	347	33.8	+54 20	8.2	8.5	Fo	2	..	37522i	58	201	34.2	+10 10	9.17	9.73	Go	2	..	38034i
9	362	33.8	+53 57	7.8	7.8	B8	4	0,4	37342i	59	295	34.2	+ 1 41	9.1	10.1	Ko	1	..	10350b
10	363	33.8	+53 22	6.64	7.71	K2	4	0,2	3260b	60	311	34.2	-14 25	8.8	9.4	Go	4	..	24576b
11	414	33.8	+47 10	9.0	9.1	A2	1	..	38600i	61	670	34.2	-25 32	6.42	5.9	Ao	9	..	10601b
12	315	33.8	+38 50	var.	var.	Md	..	R	M	62	430	34.2	-48 26	7.40	7.4	A3	6	..	12227b
13	244	33.8	+16 8	6.87	7.65	G5	2	0,2	37318i	63	83	34.2	-70 27	9.9	10.7	G5	5	..	38146b
14	249	33.8	+ 7 37	9.1	9.6	F8	2	..	12024b	64	245	34.3	+15 54	6.11	7.11	Ko	3	0,3	37318i
15	242	33.8	+ 2 42	9.1	9.4	F2	3	..	10350b	65	257	34.3	+ 0 6	7.68	7.76	A3	6	..	10376b
16	307	33.8	- 6 14	7.36	7.78	F5	5	0,8	10360b	66	555	34.3	-27 46	9.7	10.0	G5	2	..	45162b
17	347	33.8	-10 44	9.3	10.5	K5	1	..	24576b	67	503	34.3	-43 26	6.82	7.4	Fo	6	0,7	41875b
18	536	33.8	-29 4	9.9	9.9	F5	2	3,2	45168b	68	106	34.3	-67 35	8.7	9.2	F8	5	..	38146b
19	572	33.8	-35 43	8.3	10.2	Ko	2	..	45154b	69	317	34.4	+39 5	7.29	8.29	Ko	5	..	37474i
20	562	33.8	-38 19	9.3	10.7	G5	1	..	45154b	70	264	34.4	+27 49	8.8	8.9	A2	2	..	37381i
21	453	33.8	-46 35	6.96	7.9	Ko	6	0,3	12227b	71	274	34.4	+25 59	8.9	9.9	Ko	1	..	38882i
22	127	33.8	-62 26	8.3	9.1	G5	4	..	23773b	72	243	34.4	+ 3 3	8.5	9.1	Go	3	..	10350b
23	93	33.8	-73 20	9.0	10.2	K5	4	E	23772b	73	267	34.4	+ 0 26	9.4	10.4	Ko	3	..	10350b
24	29	33.9	+84 43	8.01	8.15	A5	4	..	37281i	74	304	34.4	-12 33	8.8	9.6	G5	5	..	24576b
25	218	33.9	+63 40	8.0	7.8	B	2	..	38108i	75	283	34.4	-16 30	8.9	9.0	Ko	3	E	24576b
26	262	33.9	+27 36	7.9	8.7	G5	5	0,3	37381i	76	278	34.4	-18 6	9.6	10.2	Go	2	..	45693b
27	278	33.9	+26 40	9.3	9.9	Go	2	..	38882i	77	614	34.4	-23 38	8.5	9.5	F8	2	..	10601b
28	210	33.9	+11 56	8.5	8.8	Fo	4	..	37467i	78	672	34.4	-25 39	9.5	10.3	F8	5	..	45162b
29	619	33.9	-37 38	9.0	10.2	G5	2	..	45154b	79	457	34.4	-46 8	10.1	9.9	F8	1	..	45106b
30	51	34.0	+81 59	8.8	8.9	A2	3	E	38964i	80	124	34.4	-61 1	7.4	8.2	G5	6	..	45176b
31	363	34.0	+51 22	8.7	8.7	B9	4	1,3	38600i	81	404	34.5	+53 4	7.58	8.65	K2	2	3,1	38879i
32	344	34.0	+41 10	6.91	7.69	G5	4	0,1	37474i	82	251	34.5	+14 45	9.4	10.4	Ko	4	..	37467i
33	279	34.0	+29 35	8.5	8.9	F5	4	..	37381i	83	244	34.5	+ 2 57	8.1	8.7	Go	6	..	10350b
34	242	34.0	+24 57	8.5	9.6	K2	2	..	38882i	84	317	34.5	-11 18	8.9	9.7	G5	4	..	24576b
35	255	34.0	+13 47	6.93	7.93	Ko	6	..	37467i	85	297	34.5	-17 45	9.9	10.3	F5	2	..	45693b
36	224	34.0	- 1 18	9.4	10.2	G5	2	..	10350b	86	279	34.5	-18 18	7.54	7.68	A5	8	..	10601b
37	315	34.0	-11 0	8.1	8.4	Fo	6	5,5	24576b	87	284	34.5	-19 18	9.3	10.4	K2	2	..	45147b
38	667	34.0	-25 34	10.9	10.3	F8	3	..	45162b	88	645	34.5	-33 58	9.0	9.4	Go	4	..	15113b
39	576	34.0	-26 28	9.4	11.2	Ko	1	..	45162b	89	446	34.5	-40 59	9.0	9.2	A2	4	2,3	45154b
40	554	34.0	-27 51	9.9	9.7	F2	2	..	45162b	90	542	34.5	-45 6	7.95	8.6	F8	5	0,2	45106b
41	635	34.0	-32 45	10.3	10.4	K2	1	..	45168b	91	541	34.5	-45 23	9.5	10.2	F5	1	..	45106b
42	620	34.0	-37 2	5.96	6.9	G5	..	5,6	56,118	92	105	34.5	-66 17	9.7	10.0	Fo	4	..	38146b
43	202	34.0	-52 20	8.9	9.9	Ko	4	..	39676b	93	85	34.5	-70 26	9.9	10.7	G5	4	..	38146b
44	334	34.0	-57 44	0.60	0.48	B5	..	R	28,195	94	42	34.5	-79 6	8.9	9.4	F8	5	..	23772b
45	145	34.1	+66 25	7.60	8.38	G5	3	E	37308i	95	122	34.6	+68 34	8.0	8.4	F5	3	..	37308i
46	350	34.1	+54 26	7.50	7.50	Ao	4	0,4	38879i	96	309	34.6	+62 10	7.8	8.8	Ko	3	0,1	38974i
47	231	34.1	- 2 47	9.3	9.9	Go	2	..	10376b	97	260	34.6	+31 14	9.4	9.5	A3	2	..	37381i
48	272	34.1	-21 47	5.68	5.96	Fo	..	0,9	56,118	98	256	34.6	+ 7 54	8.8	9.4	Go	3	..	38034i
49	639	34.1	-32 40	7.40	8.0	Go	8	..	15113b	99	233	34.6	- 3 2	8.7	9.2	F8	4	..	10376b
50	409	34.1	-40 6	9.7	9.5	F8	4	..	45154b	100	293	34.6	-15 13	9.0	10.0	Ko	2	..	24576b

10200

1^h 34^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	334	34.6	-55 4	9.9	10.5	Go	2	..	39676b	51	344	35.2	+37 46	8.06	8.84	G5	1	..	37474i
2	368	34.7	+51 25	9.4	9.9	F8	1	..	38879i	52	305	35.2	-12 38	9.9	10.7	G5	2	..	24576b
3	503	34.7	+48 47	8.6	9.4	G5	3	0,2	38600i	53	621	35.2	-22 53	9.5	10.1	A2	4	..	45162b
4	345	34.7	+42 47	5.54	5.82	Fo	4	..	36956i	54	620	35.2	-23 25	7.47	8.6	Ma	4	..	10601b
5	378	34.7	+40 4	4.90	4.85	B8	..	0,R	56,73	55	514	35.2	-28 47	9.7	10.6	F8	1	..	45168b
6	273	34.7	+33 51	7.8	8.4	Go	3	..	37381i	56	654	35.2	-33 58	9.7	10.5	G5	3	..	15113b
7	266	34.7	+28 6	8.5	9.5	Ko	2	..	37381i	57	572	35.2	-37 59	9.7	10.7	Ko	3	..	10635b
8	312	34.7	-14 3	9.4	10.4	Ko	2	..	24576b	58	336	35.2	-57 19	8.6	9.6	F8	3	..	17627b
9	542	34.7	-29 32	7.41	7.5	A3	8	..	15113b	59	92	35.3	+74 6	6.79	7.57	G5	6	..	37615i
10	460	34.7	-46 16	8.1	9.1	G5	4	0,3	45106b	60	308	35.3	+60 32	6.63	6.58	B8	4	..	37342i
11	504	34.8	+48 36	7.7	8.2	F8	6	..	38879i	61	257	35.3	+15 7	9.04	10.11	K2	2	..	37467i
12	347	34.8	+44 30	8.15	9.15	Ko	2	..	38055i	62	258	35.3	+8 16	6.69	7.03	F2	7	..	38034i
13	347	34.8	+41 6	9.3	10.7	Ma	..	..	M	63	269	35.3	+0 36	9.2	10.2	Ko	2	..	10350b
14	221	34.8	+5 53	9.1	9.9	G5	2	..	38034i	64	259	35.3	-0 34	9.2	9.8	Go	3	..	10350b
15	642	34.8	-32 36	10.5	10.6	Go	2	..	15113b	65	275	35.3	-7 8	9.6	10.2	Go	3	..	10360b
16	650	34.8	-34 4	6.66	7.5	G5	8	..	15113b	66	316	35.3	-9 45	8.26	9.26	Ko	3	..	12248b
17	413	34.8	-39 56	9.58	10.9	Ko	2	..	45154b	67	307	35.3	-12 21	9.3	10.1	G5	3	..	24576b
18	435	34.8	-48 10	9.9	10.2	G5	2	..	45106b	68	573	35.3	-37 58	6.99	7.8	Ko	4	..	12229b
19	402	34.8	-51 38	9.7	11.6	K2	1	..	39676b	69	337	35.3	-56 56	7.2	7.6	F8	6	0,4	17627b
20	30	34.9	+84 33	9.2	9.3	A5	3	..	37281i	70	114	35.3	-59 5	8.2	8.9	F5	5	..	17627b
21	149	34.9	+67 32	5.54	5.54	Aop	..	0,9,R	56,73	71	69	35.3	-68 4	8.1	8.9	G5	7	..	38365b
22	149	34.9	+66 17	7.06	8.06	Ko	5	..	38905i	72	58	35.3	-76 53	9.1	10.5	Ma	4	..	23772b
23	305	34.9	+60 35	9.2	9.2	B9	2	..	38974i	73	406	35.4	+52 52	9.2	9.3	A2	2	0,2	38879i
24	289	34.9	+4 25	9.4	10.2	G5	3	..	10350b	74	416	35.4	+45 54	8.4	8.4	B9	4	1,2	38055i
25	234	34.9	-2 59	9.6	10.1	F8	1	..	10630b	75	221	35.4	+18 53	8.3	8.4	A5	2	0,2	37318i
26	349	34.9	-10 29	8.1	8.6	F8	4	..	12248b	76	270	35.4	-2 6	8.7	9.0	Fo	5	..	10376b
27	513	34.9	-28 12	9.4	10.9	K2	1	..	45162b	77	296	35.4	-4 58	8.8	9.1	F2	3	3,3	10376b
28	651	34.9	-34 1	10.3	10.2	G5	1	..	15113b	78	318	35.4	-10 56	9.6	10.4	G5	3	..	24576b
29	76	35.0	+74 15	8.0	9.2	K5	1	..	38972i	79	309	35.4	-11 49	9.6	10.4	G5	2	..	24576b
30	113	35.0	+69 40	8.4	8.9	F8	3	..	38972i	80	315	35.4	-14 34	10.1	10.6	F8	2	..	24576b
31	342	35.0	+38 4	8.5	9.1	Go	1	..	37512i	81	300	35.4	-17 29	8.3	9.3	Ko	4	5,2	45693b
32	258	35.0	-0 44	7.14	7.56	F5	5	E	10630b	82	450	35.4	-41 1	9.6	10.4	Go	2	..	45154b
33	229	35.0	-1 14	8.7	9.1	F5	2	..	10376b	83	336	35.4	-55 45	9.1	10.0	F8	2	..	17627b
34	235	35.0	-3 27	9.3	9.8	F8	2	..	10630b	84	142	35.4	-65 14	9.9	10.3	F5	4	..	38146b
35	236	35.0	-3 43	10.1	10.4	F2	3	..	10630b	85	295	35.5	+62 55	8.7	8.8	A5	2	R	38974i
36	289	35.0	-7 57	8.9	9.3	F5	4	0,3	10360b	86	424	35.5	+46 19	8.6	9.2	Go	2	..	38055i
37	280	35.0	-18 3	8.1	9.1	Ko	4	..	10601b	87	245	35.5	+3 14	9.1	9.9	G5	2	..	10350b
38	576	35.0	-41 59	9.4	10.2	Ao	2	..	45156b	88	300	35.5	+1 24	9.1	9.7	Go	4	..	10350b
39	436	35.0	-47 55	8.7	9.9	K2	2	..	45106b	89	679	35.5	-25 47	10.2	10.6	Go	2	..	45162b
40	464	35.0	-49 17	7.7	7.5	Ao	7	..	12227b	90	567	35.5	-30 11	9.4	10.6	Go	1	..	45168b
41	358	35.0	-53 56	7.14	7.2	Fo	..	..	56,118	91	106	35.5	-66 6	7.1	7.9	G5	9	..	38146b
42	107	35.0	-67 4	8.4	9.4	Ko	6	0,6	38365b	92	51	35.6	+79 45	8.0	9.2	K5	2	..	37227i
43	326	35.1	+51 3	9.2	9.6	F5	1	..	38879i	93	370	35.6	+58 8	6.21	6.19	B9	5	0,7	37342i
44	256	35.1	+7 7	9.4	9.8	F5	2	..	12024b	94	507	35.6	+48 48	8.4	8.9	F8	4	3,1	38879i
45	257	35.1	+6 35	8.2	9.2	Ko	2	..	38034i	95	280	35.6	+28 39	9.2	9.5	Fo	3	..	37381i
46	274	35.1	-21 1	8.9	10.4	F5	3	..	45147b	96	270	35.6	+27 58	8.9	9.9	Ko	2	..	37381i
47	635	35.1	-36 33	9.0	9.4	F8	3	..	45154b	97	221	35.6	+10 47	8.9	9.7	G5	2	..	38034i
48	359	35.1	-54 34	9.6	10.8	K5	1	..	39676b	98	301	35.6	+2 12	8.3	8.4	A5	6	..	10350b
49	335	35.1	-55 50	9.7	10.5	G5	1	..	39676b	99	276	35.6	-21 31	9.4	11.6	K2	1	..	45147b
50	114	35.2	+70 7	5.26	5.26	Ao	..	..	56,73	100	700	35.6	-24 21	9.1	10.0	Ko	4	..	45162b

THE HENRY DRAPER CATALOGUE.

10300

1^h 35^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
		m.	°	'								m.	°	'					
1	452	35.6	-41 13	9.9	11.7	K5	1	..	45154b	51	203	36.0	+ 9 37	9.4	9.9	F8			
2	579	35.6	-42 49	9.3	10.9	Go	2	..	45156b	52	204	36.0	+ 9 37	9.2	9.7	F8	3	..	38034i
3	440	35.6	-48 31	9.4	9.6	F5	4	5,3	39676b	53	316	36.0	- 5 54	8.8	9.4	Go	4	0,4	12025b
4	224	35.7	+63 24	7.7	8.7	Ko	3	0,I	38974i	54	277	36.0	- 7 14	10.1	10.1	Ao	2	..	10360b
5	372	35.7	+57 47	8.8	8.8	Ao	2	..	37522i	55	623	36.0	-23 17	9.5	10.1	F8	4	..	45162b
6	350	35.7	+44 33	8.7	8.7	Ao	3	..	38055i	56	655	36.0	-32 13	9.0	8.9	Go	5	..	15113b
7	328	35.7	+42 7	5.10	5.60	F8	8	R	37512i	57	481	36.0	-44 22	9.7	10.5	F5	2	..	45156b
8	276	35.7	+25 14	6.26	6.68	F5	7	3,4	37381i	58	469	36.0	-49 16	7.3	8.7	Ma	3	0,3	10623b
9	257	35.7	+22 32	7.56	8.34	G5	2	0,2	19385i	59	207	36.0	-52 6	10.6	11.6	Ko	1	..	39676b
10	230	35.7	+21 59	9.1	9.9	G5	2	..	38882i	60		36.0	-56 42	6.03		G5			
11	261	35.7	+13 17	8.1	9.1	Ko	4	..	37467i	61	329	36.0	-56 42	6.00	6.7	G5		R	56,118
12	258	35.7	+ 6 27	9.4	10.0	Go	2	..	12024b	62	312	36.1	+60 55	6.46	6.41	B8	4	..	37342i
13	270	35.7	+ 1 8	8.49	8.99	F8	5	..	10350b	63	352	36.1	+43 8	7.03	7.03	Ao	7	..	38055i
14	260	35.7	- 0 6	9.2	9.7	F8	3	2,2	10350b	64	277	36.1	+19 20	8.3	9.4	K2	1	7,I R	38882i
15	239	35.7	- 3 7	6.97	7.75	G5	5	..	10630b	65	247	36.1	+18 9	8.3	9.4	A2	2	0,2	37334i
16	297	35.7	- 5 5	9.1	9.6	F8	3	3,2	10360b	66	226	36.1	+ 5 33	8.5	9.3	G5	3	..	38034i
17	355	35.7	-10 20	9.6	10.4	G5	3	..	24576b	67	229	36.1	+ 3 59	9.4	10.0	Go	2	..	10350b
18	301	35.7	-16 47	7.94	8.72	G5	5	R	24576b	68	279	36.1	- 7 34	10.3	10.9	Go	2	..	10360b
19	70	35.7	-68 34	9.3	10.1	G5	3	..	38365b	69	278	36.1	-20 52	9.1	9.8	F2	4	..	45147b
20	321	35.8	+56 41	8.2	8.2	B9	2	..	37522i	70	641	36.1	-36 59	7.80	8.5	G5	2	..	10635b
21	426	35.8	+46 16	8.9	9.0	A2	1	..	38055i	71	500	36.1	-39 17	8.8	10.6	K5	2	..	45154b
22	352	35.8	+45 5	8.82	9.82	K	1	..	38055i	72	337	36.1	-55 39	7.56	9.1	Ko	5	..	17627b
23	324	35.8	+36 3	8.3	8.9	Go	2	..	37474i	73	117	36.1	-75 56	8.8	9.9	K2	3	..	23772b
24	247	35.8	+16 2	8.7	8.8	A5	4	..	37467i	74	27	36.1	-81 56	8.2	9.3	A5	3	..	20538b
25	276	35.8	- 7 7	8.5	9.3	G5	6	5,5	12025b	75	313	36.2	+62 8	8.1	8.1	Ao	4	..	38974i
26	311	35.8	-12 4	9.6	10.2	Go	4	..	24576b	76	295	36.2	+31 32	8.1	9.1	Ko	3	..	37381i
27	703	35.8	-24 43	10.4	11.2	G5	1	..	45162b	77	281	36.2	+28 35	8.6	8.7	A2	4	2,2	37381i
28	651	35.8	-32 1	9.0	9.5	G5	3	..	15113b	78	271	36.2	+27 38	8.8	8.9	A2	3	2,2	37381i
29	586	35.8	-34 59	7.76	8.8	G5	5	..	15113b	79	261	36.2	+ 8 34	8.1	9.2	K2	3	..	38034i
30	361	35.8	-54 6	9.1	9.4	Fo	4	..	39676b	80	293	36.2	+ 4 59	4.68	5.68	Ko	..	0,R	56,73
31	151	35.9	+66 31	9.2	9.3	A2	2	..	38905i	81	302	36.2	+ 2 9	9.1	9.7	Go	3	..	10350b
32	306	35.9	+60 3	7.36	8.43	K2	4	..	38974i	82	272	36.2	+ 0 14	8.78	9.12	F2	4	..	10376b
33	348	35.9	+37 42	8.6	8.6	Ao	3	..	37474i	83	357	36.2	-10 28	9.0	10.0	Ko	3	..	10360b
34	325	35.9	+36 4	8.8	9.4	Go	2	..	37474i	84	523	36.2	-28 32	9.5	10.3	Go	3	0,2	45168b
35	222	35.9	+10 42	9.4	10.0	Go	3	..	12024b	85	547	36.2	-45 32	8.8	9.0	F2	1	..	41875b
36	259	35.9	+ 7 5	8.7	9.5	G5	2	..	38034i	86	117	36.2	-59 46	..	12.0	R3	2	..	42811b
37	246	35.9	+ 3 12	8.6	9.2	Go	5	..	10350b	87	373	36.3	+57 37	7.10	7.44	F2	2	..	37342i
38	315	35.9	- 6 40	8.9	9.7	G5	4	5,4	10360b	88	326	36.3	+38 56	8.5	9.9	Ma	2	..	37474i
39	306	35.9	-12 56	9.4	9.4	Ao	3	..	24576b	89	327	36.3	+38 49	8.8	10.2	Ma	..	..	M
40	307	35.9	-13 29	8.7	9.5	G5	2	..	12248b	90	297	36.3	+34 44	5.45	5.40	B8	..	0,R	56,73
41	297	35.9	-15 23	8.1	9.2	K2	2	..	12248b	91	223	36.3	+11 8	9.6	9.9	Fo	3	..	12024b
42	309	35.9	-20 36	9.1	9.8	Ao	2	..	10601b	92	230	36.3	- 1 0	7.9	8.7	G5	3	..	10630b
43	277	35.9	-20 59	9.6	11.0	F8	2	..	45147b	93	358	36.3	- 9 52	9.56	10.56	Ko	2	..	24576b
44	72	36.0	+75 22	7.12	7.40	Fo	7	..	37615i	94	309	36.3	-13 25	9.4	9.7	F2	3	..	24576b
45	98	36.0	+71 31	9.2	9.3	A2	1	..	38972i	95	310	36.3	-20 1	9.6	9.8	F2	3	..	45147b
46	..	36.0	+51 5	Neb.	Neb.	Pd	..	R	76,21	96	625	36.3	-23 17	10.6	10.4	A3	4	..	45162b
47	323	36.0	+38 59	8.5	8.6	A5	4	..	37474i	97	657	36.3	-32 0	9.7	9.9	Go	2	..	15113b
48	286	36.0	+29 32	6.02	7.02	Ko	4	0,8	37326i	98	658	36.3	-32 24	10.5	10.7	G	2	..	15113b
49	281	36.0	+27 11	8.7	9.5	G5	2	..	38882i	99	512	36.3	-43 37	9.4	10.5	Go	2	..	45156b
50	222	36.0	+23 41	8.1	8.6	F8	3	..	38882i	100	442	36.3	-48 25	9.5	10.2	Ko	3	0,I	39676b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	133	36.3	^m -58 ^o 51	8.7	9.5	F5	3	..	17627b	51	297	36.8	+32 9	8.2	9.0	G5	2	..	3738ri
2	118	36.3	-59 48	9.3	11.3	Ko	2	..	42811b	52	250	36.8	+15 24	9.1	10.1	Ko	1	..	37467i
3	124	36.4	+70 24	8.7	8.7	Ao	2	2,2	38972i	53	315	36.8	-11 49	5.84	6.26	F5	7	0,10	8884b
4	483	36.4	+47 54	8.0	8.0	B8	6	1,4	38879i	54	300	36.8	-14 50	9.61	10.39	G5	2	..	24576b
5	298	36.4	+32 17	8.2	8.8	Go	2	..	3738ri	55	352	36.9	+41 7	8.3	9.3	Ko	3	..	38055i
6	288	36.4	+29 35	8.5	8.8	Fo	3	5,1	3738ri	56	385	36.9	+39 38	8.7	8.8	A5	2	R	37474i
7	282	36.4	+29 1	7.38	7.44	A2	6	2,3	3738ri	57	224	36.9	+10 51	9.6	10.7	K2	2	..	12024b
8	262	36.4	+ 7 24	8.9	9.7	G5	2	..	38034i	58	307	36.9	+ 1 58	9.1	10.1	Ko	2	..	10350b
9	260	36.4	+ 6 31	9.1	9.6	F8	3	..	12024b	59	231	36.9	- 0 59	9.4	9.7	F2	2	..	10630b
10	249	36.4	+ 2 45	8.7	8.8	A5	4	..	10350b	60	303	36.9	-17 31	9.3	9.8	F8	2	..	45693b
11	313	36.4	-12 39	9.6	10.2	Go	3	..	24576b	61	688	36.9	-25 24	R	10.9	Go	1	..	45162b
12	277	36.4	-22 13	8.1	8.4	Fo	4	..	10601b	62	662	36.9	-32 18	9.0	9.2	Go	4	..	15113b
13	527	36.4	-28 25	9.1	10.6	G5	2	5,1	45168b	63	485	36.9	-44 23	9.5	10.5	Go	2	..	45156b
14	660	36.4	-32 17	9.9	9.9	Go	2	..	15113b	64	131	36.9	-60 22	8.6	10.6	K5	3	..	17627b
15	455	36.4	-41 38	9.3	10.3	Go	3	0,2	45176b	65	485	37.0	+48 1	7.00	8.35	Ma	3	5,4	38600i
16	548	36.4	-45 7	9.7	11.1	K	1	..	45156b	66	231	37.0	+ 3 57	9.1	9.6	F8	3	..	10350b
17	281	36.5	+58 28	8.1	8.2	A2	3	2,3	37522i	67	308	37.0	+ 1 49	8.5	8.6	A2	8	..	10350b
18	330	36.5	+41 41	8.6	8.6	Ao	2	..	38055i	68	321	37.0	- 9 17	9.3	9.8	F8	2	..	10360b
19	262	36.5	+30 38	8.8	9.1	F2	3	..	3738ri	69	318	37.0	-14 30	9.9	10.3	F5	2	..	24576b
20	228	36.5	+ 6 2	10.1	11.2	K2	1	..	12024b	70	122	37.0	-59 9	8.6	10.0	Ko	3	..	17627b
21	280	36.5	- 7 18	9.4	10.2	G5	3	..	10360b	71	127	37.0	-60 52	9.1	10.1	A5	2	..	23773b
22	278	36.5	-21 50	9.1	11.0	G5	2	..	45147b	72	125	37.0	-61 30	7.9	8.2	Fo	5	..	12034b
23	529	36.5	-28 30	8.9	10.3	G5	3	5,2	45168b	73	96	37.0	-73 40	9.5	10.5	Ko	3	..	22155b
24	549	36.5	-45 0	10.1	11.1	A	1	..	45156b	74	309	37.1	+59 56	8.0	8.1	A2	3	2,2	37522i
25	307	36.6	+60 3	5.75	5.73	B9	5	1,10	37342i	75	364	37.1	+54 42	8.9	8.9	B8	1	..	37522i
26	295	36.6	+ 4 33	9.1	9.6	F8	5	0,2	12024b	76	279	37.1	+19 47	5.32	6.10	G5	5	5,5 R	37318i
27	304	36.6	+ 1 25	9.1	10.1	Ko	2	..	10350b	77	251	37.1	+15 17	7.62	8.62	Ko	4	..	37467i
28	241	36.6	- 3 28	8.3	9.1	G5	6	..	10376b	78	215	37.1	+13 14	9.1	9.6	F8	3	..	37467i
29	240	36.6	- 3 37	8.7	10.1	Ma	2	..	10630b	79	300	37.1	- 5 27	8.9	9.7	G5	3	5,1	12025b
30	311	36.6	-20 26	9.1	10.1	G5	3	..	45147b	80	322	37.1	- 8 52	8.7	9.7	Ko	2	..	10360b
31	280	36.6	-22 38	8.9	9.5	Ko	2	..	10601b	81	584	37.1	-38 38	6.10	6.4	F2	6	2,7	10635b
32	684	36.6	-25 6	9.7	10.9	Ko	1	..	45162b	82	73	37.1	-68 46	8.8	9.8	Ko	5	..	38365b
33	594	36.6	-35 6	9.3	9.3	Ao	4	..	15113b	83	100	37.2	+71 23	8.2	9.2	Ko	2	2,1	38134i
34	121	36.6	-59 42	9.7	10.3	Go	3	..	42811b	84	127	37.2	+70 33	8.6	8.6	Ao	2	..	38972i
35	143	36.6	-65 4	8.8	9.1	Fo	7	..	38146b	85	318	37.2	+60 49	8.6	8.6	Ao	2	..	38974i
36	229	36.7	+63 22	8.2	9.3	K2	2	0,2	38108i	86	354	37.2	+44 48	6.46	7.46	Ko	3	..	36956i
37	282	36.7	+59 8	6.75	7.53	G5	3	..	37342i	87	226	37.2	+23 51	9.3	10.3	Ko	2	..	38882i
38	384	36.7	+39 53	6.84	7.84	Ko	4	..	37474i	88	261	37.2	+ 6 55	9.2	10.0	G5	1	..	38034i
39	299	36.7	+32 28	7.7	8.8	K2	3	3,4	3738ri	89	323	37.2	-11 36	8.9	9.5	Go	4	..	24576b
40	218	36.7	+11 27	8.7	9.3	Go	4	..	12024b	90	310	37.2	-13 8	8.7	9.1	F5	3	..	12248b
41	230	36.7	+ 4 10	8.7	8.7	Ao	5	..	10350b	91	304	37.2	-17 40	8.9	9.5	Go	4	8,2	45693b
42	306	36.7	+ 2 12	8.3	9.1	G5	5	..	10350b	92	571	37.2	-26 54	9.5	10.0	Go	3	..	45162b
43	305	36.7	+ 1 25	9.4	10.0	Go	3	..	10350b	93	532	37.2	-28 28	8.5	9.4	Go	5	0,4	45168b
44	273	36.7	+ 0 36	9.8	10.6	G5	1	..	10350b	94	316	37.3	+61 21	7.46	8.24	G5	1	..	37988i
45	284	36.7	-18 29	9.0	9.6	Go	6	0,3	45693b	95	391	37.3	+55 23	7.06	7.12	A2	6	1,4	37342i
46	593	36.7	-26 36	9.2	10.6	K2	2	..	45162b	96	365	37.3	+55 7	8.31	8.65	F2	1	..	37522i
47	661	36.7	-33 54	7.26	8.3	G5	7	..	15113b	97	420	37.3	+52 23	6.82	6.90	A3	5	2,5	3260b
48	152	36.8	+67 4	8.1	8.9	G5	3	..	37308i	98	336	37.3	+51 1	6.80	7.98	K5	2	..	3260b
49	331	36.8	+42 12	8.8	8.8	Ao	2	..	38055i	99	356	37.3	+43 13	8.9	8.9	Ao	2	..	38055i
50	351	36.8	+38 1	8.2	9.0	G5	5	..	37474i	100	264	37.3	+30 32	8.01	9.08	K2	3	..	3738ri

10500

1^h 37^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	220	37.3	+11 30	9.6	10.7	K2	1	..	12024b	51	511	37.7	-39 15	10.3	10.4	F2	2	..	45154b
2	206	37.3	+9 45	7.45	7.51	A2	3	E	37468i	52	512	37.7	-39 40	7.9	8.8	G5	3	..	12229b
3	266	37.3	+8 4	9.1	9.9	G5	3	..	12024b	53	461	37.7	-50 32	6.72	7.4	A2	7	2,8	10623b
4	296	37.3	+4 24	9.8	10.4	Go	2	..	10350b	54	408	37.7	-51 2	11.8	11.6	K2	1	..	39676b
5	232	37.3	-1 32	8.1	8.2	A2	5	..	10630b	55	350	37.7	-53 26	8.4	9.3	G5	6	..	39676b
6	278	37.3	-2 40	7.9	8.2	F2	5	..	10630b	56	368	37.8	+54 23	7.20	7.70	F8	3	..	37342i
7	259	37.3	-3 55	8.7	9.2	F8	4	..	10630b	57	304	37.8	-4 50	9.15	9.57	F5	3	3,2	10630b
8	282	37.3	-7 15	8.01	8.35	F2	5	..	10360b	58	316	37.8	-19 51	8.23	9.2	G5	3	..	10601b
9	311	37.3	-13 43	9.9	10.2	F2	2	..	24576b	59	630	37.8	-23 26	9.2	9.8	F8	5	..	45162b
10	292	37.3	-19 41	7.83	8.4	F5	7	..	10601b	60	466	37.8	-41 37	8.3	8.5	A0	5	0,5	12229b
11	664	37.3	-32 40	10.3	9.8	Go	3	..	15113b	61	586	37.8	-42 43	9.4	11.5	Go	2	..	45156b
12	461	37.3	-40 54	9.3	10.4	Ko	2	..	45154b	62	409	37.8	-51 28	10.3	11.4	F8	1	..	39676b
13	473	37.3	-45 55	9.7	9.9	Go	1	..	45106b	63	128	37.9	+71 12	9.2	9.2	A0	2	0,2	38972i
14	75	37.3	-69 40	10.1	10.7	Go	3	..	38146b	64	311	37.9	+59 36	9.2	9.2	A0	1	..	38974i
15	375	37.4	+53 27	8.7	8.7	A0	2	I,1	38879i	65	424	37.9	+52 42	8.05	8.11	A2	4	..	38879i
16	444	37.4	+50 11	4.19	3.95	Bop	..	R	848c	66	218	37.9	+12 26	8.7	9.2	F8	3	..	37467i
17	353	37.4	+40 29	8.7	9.1	F5	4	..	37474i	67	227	37.9	+11 8	10.4	10.9	F8	1	..	12024b
18	231	37.4	+5 24	9.21	9.71	F8	4	..	12024b	68	299	37.9	+4 50	9.1	9.7	Go	2	..	38034i
19	287	37.4	-18 24	7.40	7.90	Go	6	2,5	10601b	69	298	37.9	+4 43	9.1	9.7	Go	2	..	38034i
20	286	37.4	-18 38	8.9	9.4	F8	4	3,2	45693b	70	252	37.9	+2 58	9.6	10.1	F8	2	..	10350b
21	474	37.4	-46 30	8.7	8.6	F0	3	0,2	12227b	71	319	37.9	-12 40	9.6	10.2	Go	3	..	24576b
22	6	37.4	-88 59	9.4	9.5	A2	4	..	22980b	72	318	37.9	-20 40	7.31	8.6	Ko	5	..	10601b
23	78	37.5	+74 19	8.5	8.9	F5	2	..	37615i	73	553	37.9	-29 5	8.9	9.5	F5	3	..	15113b
24	125	37.5	+69 0	7.28	8.06	G5	3	..	37308i	74	110	37.9	-67 41	10.0	11.1	K2	1	..	38146b
25	445	37.5	+50 7	8.42	9.60	K5	..	..	M	75	75	37.9	-68 18	9.6	10.4	G5	3	E	38365b
26	486	37.5	+47 46	9.0	9.0	A0	3	0,2	38600i	76	87	37.9	-70 29	9.1	9.5	F5	5	5,9	38365b
27	357	37.5	+42 31	8.5	9.5	Ko	1	..	38055i	77	491	38.0	+47 42	7.8	7.8	B9	6	1,7	2089b
28	225	37.5	+10 36	8.5	8.8	F0	3	..	38034i	78	300	38.0	+4 36	9.6	10.6	Ko	3	R	12024b
29	297	37.5	+5 14	8.96	10.03	K2	3	..	12024b	79	283	38.0	-22 9	9.3	9.8	F8	3	..	45147b
30	324	37.5	-9 10	7.05	7.83	G5	6	0,7	10360b	80	144	38.0	-65 32	10.7	11.2	F8	3	..	38146b
31	665	37.5	-32 36	9.0	8.7	G5	5	..	15113b	81	123	38.0	-76 31	8.3	8.4	A2	7	..	23772b
32	597	37.5	-35 20	8.2	9.3	G5	4	..	15113b	82	312	38.1	+59 16	8.4	8.5	A2	4	0,3	38974i
33	108	37.5	-67 44	8.4	8.9	F8	7	..	38146b	83	360	38.1	+42 44	7.7	8.7	Ko	3	..	38055i
34	487	37.6	+48 3	8.6	8.7	A2	3	..	38600i	84	304	38.1	-14 59	8.3	9.3	Ko	3	..	12248b
35	312	37.6	-12 49	8.8	9.2	F5	6	..	24576b	85	124	38.1	-59 6	8.6	9.5	Ko	4	..	17627b
36	716	37.6	-24 23	9.7	10.6	K2	2	..	45162b	86	132	38.1	-62 29	8.8	9.1	F0	6	..	23773b
37	666	37.6	-32 49	5.28	6.6	Ko	..	5,R	56,118	87	334	38.2	+56 36	6.18	6.18	A0	5	0,7-	37342i
38	650	37.6	-37 20	5.64	6.2	A0	..	0,8	56,118	88	301	38.2	+31 43	6.42	7.20	G5	5	0,3	37474i
39	61	37.6	-77 0	9.4	10.5	K2	2	..	22155b	89	209	38.2	+9 58	9.8	10.3	F8	3	..	12024b
40	96	37.7	+74 2	9.2	9.3	A2	1	..	38972i	90	303	38.2	+5 6	10.1	10.6	F8	2	..	12024b
41	230	37.7	+63 50	8.6	8.7	A2	3	..	38974i	91	285	38.2	-21 50	10.1	11.0	Go	2	..	45147b
42	298	37.7	+62 28	8.6	9.7	Ko	1	..	38974i	92	695	38.2	-25 11	9.7	11.2	G5	1	..	45162b
43	330	37.7	+57 2	6.14	6.20	A2	6	2,5	37356i	93	76	38.2	-68 30	10.4	10.4	A0	2	..	38146b
44	367	37.7	+54 26	9.2	9.2	A0	1	..	37522i	94	61	38.3	+77 25	8.2	9.4	K5	1	..	37615i
45	384	37.7	+52 2	9.2	10.2	Ko	1	..	38600i	95	104	38.3	+71 45	8.8	9.4	Go	3	2,2	38134i
46	518	37.7	+49 9	7.18	7.16	B9	6	1,5	38879i	96	232	38.3	+64 4	7.8	8.9	K2	2	3,1	38974i
47	357	37.7	+44 55	8.6	8.6	B9	3	..	38055i	97	432	38.3	+45 39	6.48	7.66	K5	2	..	36956i
48	298	37.7	+32 6	8.5	9.7	K5	1	..	37381i	98	361	38.3	+43 9	8.8	9.8	Ko	1	..	38055i
49	221	37.7	+12 4	8.7	9.8	K2	2	E	12024b	99	355	38.3	+40 40	9.3	10.5	K5	1	R	38055i
50	260	37.7	-4 11	5.27	6.05	G5	10	..	10630b	100	356	38.3	+38 1	7.9	8.7	G5	3	..	37474i

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1^h 38^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	307	38.3	+32 15	8.6	9.2	Go	3	..	37381i	51	268	38.8	+7 58	9.1	9.5	F5	2	..	12024i
2	268	38.3	+30 27	9.4	9.8	F5	2	..	37381i	52	305	38.8	+4 30	8.5	9.6	K2	4	..	10350b
3	266	38.3	+14 12	8.6	8.7	A3	5	..	37467i	53	302	38.8	-7 59	7.65	7.65	Ao	3	0,5	8884b
4	304	38.3	+5 9	10.1	10.4	F	1	..	12024b	54	329	38.8	-9 10	8.1	8.9	G5	3	5,5	10360b
5	234	38.3	-1 4	8.6	9.4	G5	2	..	10630b	55	324	38.8	-19 54	8.43	8.9	Go	3	..	10601b
6	284	38.3	-7 34	8.8	8.8	A	7	R	10360b	56	637	38.8	-23 14	8.5	10.1	K2	4	..	45162b
7	77	38.3	-68 10	8.2	8.7	F8	7	..	38365b	57	264	38.9	-0 41	8.5	9.3	G5	3	0,2-	10350b
8	111	38.3	-75 29	8.0	8.4	F5	7	..	23772b	58	309	38.9	-5 16	6.41	7.41	Ko	6	0,9	10630b
9	232	38.4	+5 15	8.06	9.06	Ko	3	..	38034i	59	327	38.9	-6 1	8.9	9.9	Ko	3	0,3	10360b
10	329	38.4	-11 34	8.9	9.3	F5	5	..	24576b	60	729	38.9	-24 40	9.4	10.6	Ko	3	..	45162b
11	286	38.4	-22 7	8.3	8.6	G5	4	..	10601b	61	466	38.9	-50 42	9.9	10.8	F8	2	..	39676b
12	724	38.4	-24 25	9.2	10.3	Ko	3	..	45162b	62	105	39.0	+71 16	9.2	10.4	K5	1	..	38972i
13	589	38.4	-38 31	10.3	10.9	Ko	1	..	45154b	63	236	39.0	+63 19	8.5	9.3	G5	2	..	38974i
14	337	38.4	-56 22	7.4	9.3	Ko	5	0,2	17627b	64	301	39.0	+62 28	8.8	8.9	A2	1	..	38974i
15	130	38.4	-61 17	5.58	7.0	Ko	..	0,8	56,118	65	342	39.0	+56 41	8.8	8.8	Ao	2	0,2	37522i
16	111	38.4	-67 30	9.9	10.9	Ko	1	..	38146b	66	232	39.0	+10 48	9.4	10.2	G5	2	..	12024b
17	305	38.5	+37 10	6.92	6.92	Ao	7	0,3	37474i	67	270	39.0	+9 5	9.1	9.9	G5	4	..	12024b
18	212	38.5	+9 41	9.6	10.7	K2	1	..	12024b	68	269	39.0	+8 59	8.3	8.6	F2	5	..	38034i
19	266	38.5	+9 4	8.9	9.9	Ko	2	..	38034i	69	314	39.0	-13 39	8.8	9.6	G5	2	..	12248b
20	263	38.5	+0 14	9.8	10.4	Go	2	..	10350b	70	469	39.0	-50 15	10.3	10.5	F2	3	..	39676b
21	323	38.5	-14 12	9.6	10.7	K2	3	..	24576b	71	339	39.0	-55 12	7.8	8.4	A2	7	..	39676b
22	291	38.5	-18 6	9.6	10.0	F5	2	..	45693b	72	43	39.0	-79 49	9.26	9.5	Go	5	..	23772b
23	725	38.5	-24 15	10.2	11.4	F8	2	..	45162b	73	362	39.1	+43 13	7.7	8.0	Fo	5	..	38055i
24	647	38.5	-36 2	8.7	9.6	Ko	4	..	45154b	74	310	39.1	+2 7	8.8	9.2	F5	4	..	10350b
25	592	38.5	-42 9	7.9	8.9	Ko	5	5,3	45154b	75	298	39.1	-19 4	10.1	11.3	Go	1	..	45693b
26	211	38.5	-52 24	11.1	12.1	Ko	1	..	39676b	76	698	39.1	-25 45	10.4	11.7	A3	2	..	45162b
27	131	38.5	-60 56	9.7	10.3	Go	1	..	23773b	77	579	39.1	-27 30	9.4	10.9	Go	1	..	45162b
28	108	38.5	-66 20	9.8	10.1	Fo	3	..	38146b	78	127	39.1	-58 55	8.3	9.1	G5	6	..	17627b
29	393	38.6	+39 28	8.1	8.5	F5	5	..	37474i	79	109	39.1	-66 31	8.7	9.5	G5	5	..	38146b
30	254	38.6	+2 51	9.4	9.5	A3	1	..	10350b	80	316	39.2	+59 14	7.78	8.78	Ko	2	5,1	37522i
31	321	38.6	-11 54	8.9	9.5	Go	4	..	24576b	81	277	39.2	+27 58	7.31	7.31	Ao	6	0,3	37381i
32	648	38.6	-36 19	9.3	9.4	F8	4	0,2	45154b	82	288	39.2	+25 18	8.01	8.09	A3	2	..	19385i
33	562	38.6	-45 23	8.8	9.3	F8	2	..	45106b	83	264	39.2	+6 35	9.4	9.7	Fo	2	..	38034i
34	127	38.6	-63 48	9.4	9.5	A5	5	..	23773b	84	315	39.2	-12 50	10.3	10.9	Go	1	..	24576b
35	231	38.7	+64 15	8.6	8.9	Fo	3	..	38905i	85	591	39.2	-30 18	8.5	9.5	G5	2	..	15113b
36	379	38.7	+53 28	9.9	..	R5	..	..	M	86	522	39.2	-39 0	8.7	9.4	G5	2	..	12229b
37	390	38.7	+51 51	9.5	9.5	Ao	1	..	38600i	87	340	39.2	-55 21	8.8	9.3	F5	5	..	17627b
38	303	38.7	+32 1	6.78	6.86	A3	6	1,6-	37474i	88	202	39.3	+65 24	8.9	9.5	Go	2	E	38905i
39	230	38.7	+11 13	9.2	9.6	F5	4	..	12024b	89	234	39.3	+10 24	8.77	9.95	K5	1	..	12024b
40	267	38.7	+9 1	8.8	9.1	Fo	3	..	38034i	90	326	39.3	-14 42	9.81	10.81	Ko	1	..	24576b
41	255	38.7	+3 6	8.1	9.1	Ko	3	..	10350b	91	712	39.3	-31 13	7.9	8.3	A3	5	..	15113b
42	278	38.7	+0 24	8.7	9.5	G5	6	5,5	10350b	92	369	39.3	-54 44	9.5	9.9	F5	2	..	39676b
43	305	38.7	-14 50	9.46	10.24	G5	5	..	24576b	93	28	39.3	-82 47	R	8.3	G5	5	5,4	11089b
44	R	38.7	-22 47	9.5	11.0	Go	2	..	45147b	94	360	39.4	+44 19	8.6	8.9	F2	2	..	38055i
45	636	38.7	-23 40	9.2	9.8	Go	3	..	45162b	95	364	39.4	+42 57	8.5	9.6	K2	1	..	38055i
46	585	38.7	-29 55	9.7	10.6	A2	1	..	45168b	96	292	39.4	+28 15	7.9	9.3	Mb	2	5,2	19385i
47	365	38.7	-54 14	5.56	6.7	Go	..	R	56,118	97	282	39.4	+19 35	6.23	7.01	G5	3	0,3	37334i
48	55	38.8	+80 23	7.23	7.23	Ao	5	..	37227i	98	259	39.4	+2 43	7.02	8.02	Ko	5	..	10350b
49	306	38.8	+36 27	7.32	7.38	A2	6	0,2	37474i	99	311	39.4	+1 29	9.1	10.1	Ko	2	..	10350b
50	268	38.8	+8 22	8.7	9.7	Ko	2	..	38034i	100	295	39.4	-16 28	3.65	4.65	Ko	..	R	56,73

THE HENRY DRAPER CATALOGUE.

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1^h 39^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	734	39.4	-24 6	9.2	10.6	Go	2	..	45162b	51	328	40.0	-14 20	8.8	9.8	Ko	5	..	24576b
2	523	39.4	-39 13	9.7	10.8	G5	1	..	45154b	52	330	40.0	-20 39	8.9	9.2	Go	2	..	10601b
3	129	39.4	-59 37	9.0	10.0	F5	2	..	23773b	53	682	40.0	-34 20	8.7	9.3	G5	3	..	45168b
4	365	39.5	+43 14	9.0	9.0	A	1	..	38055i	54	602	40.0	-42 45	10.3	11.2	Go	1	..	45156b
5	265	39.5	- 0 10	8.7	9.7	Ko	2	..	10350b	55	305	40.1	+63 9	8.0	9.0	Ko	2	0,1	38974i
6	264	39.5	- 3 58	9.1	9.9	G5	2	..	10376b	56	318	40.1	+60 10	7.71	7.66	B8	3	..	38974i
7	322	39.5	-11 48	7.52	8.02	F8	5	..	12248b	57	297	40.1	+58 40	7.46	8.02	Go	2	..	37342i
8	300	39.5	-19 30	9.6	11.6	K5	1	..	45693b	58	342	40.1	+39 7	8.1	9.3	K5	2	..	38055i
9	735	39.5	-24 48	9.30	10.0	F2	4	..	45162b	59	226	40.1	+12 24	9.1	9.2	A5	3	..	37467i
10	663	39.5	-37 46	8.7	9.4	Ko	3	5,2	45154b	60	237	40.1	+10 16	9.6	10.1	F8	3	..	12024b
11	112	39.5	-67 20	8.1	8.6	F8	7	..	38146b	61	273	40.1	+ 8 39	4.50	5.50	Ko	..	5,R	56,73
12	437	39.6	+46 12	8.1	8.9	G5	3	..	38055i	62	614	40.1	-34 54	6.82	8.3	Ko	6	..	15113b
13	304	39.6	+35 13	7.47	7.61	A5	2	0,1-	10316i	63	74	40.1	-71 2	10.7	11.3	Go	4	..	38146b
14	271	39.6	+ 7 55	9.1	9.9	G5	2	..	38034i	64	459	40.2	+49 54	8.9	8.9	Ao	2	..	38600i
15	235	39.6	+ 5 22	9.31	9.81	F8	5	2,2	12024b	65	364	40.2	+44 9	8.6	8.7	A5	3	..	38055i
16	236	39.6	- 1 0	9.1	9.7	Go	1	..	10630b	66	293	40.2	+25 54	8.6	9.4	G5	2	..	38882i
17	367	39.6	-10 6	9.3	10.3	Ko	2	..	24576b	67	336	40.2	-11 16	10.1	10.7	Go	2	..	24576b
18	288	39.6	-21 5	7.8	8.9	Go	5	..	10601b	68	490	40.2	-46 6	9.3	8.9	F8	2	..	45106b
19	677	39.6	-32 16	9.0	8.9	G5	5	..	15113b	69	474	40.2	-50 9	10.5	11.6	Ko	1	..	39676b
20	138	39.6	-58 30	9.3	10.1	G5	5	..	17627b	70	372	40.2	-54 18	9.7	10.5	G5	1	..	39676b
21	155	39.7	+68 6	8.9	8.9	Ao	2	..	37308i	71	114	40.2	-67 10	10.0	10.6	Go	4	..	38146b
22	496	39.7	+47 20	9.7	9.8	A2	2	..	38600i	72	25	40.3	+86 26	8.9	9.3	F5	4	..	37281i
23	235	39.7	+10 30	9.2	9.3	A5	2	..	38034i	73	370	40.3	+43 13	7.40	7.40	Ao	6	..	38055i
24	288	39.7	- 7 10	8.7	9.0	Fo	5	..	12025b	74	343	40.3	+39 8	8.9	9.3	F5	2	..	37474i
25	287	39.7	- 7 16	6.52	7.08	Go	6	..	10360b	75	257	40.3	+24 33	8.5	8.6	A2	3	..	38882i
26	324	39.7	-11 46	9.9	10.7	G5	2	..	24576b	76	250	40.3	- 3 40	7.72	9.07	Ma	4	..	10630b
27	325	39.7	-12 0	8.9	9.9	Ko	4	..	24576b	77	307	40.3	-15 3	7.50	8.28	G5	6	0,5	12240b
28	323	39.7	-12 9	8.9	9.7	G5	5	..	24576b	78	564	40.3	-29 13	7.03	8.3	Ma	6	..	15113b
29	317	39.7	-13 9	9.3	9.8	F8	3	..	24576b	79	476	40.3	-50 35	8.8	9.3	Ao	3	0,3	10623b
30	498	39.7	-44 36	9.1	11.5	Ko	2	..	45156b	80	238	40.4	+63 22	5.74	6.74	Ko	7	..	37308i
31	339	39.7	-56 44	7.6	9.1	Ko	6	5,2	17627b	81	362	40.4	+40 30	8.17	8.59	F5	5	..	37474i
32	113	39.7	-67 33	9.4	9.5	A5	4	..	38146b	82	215	40.4	+10 3	9.6	10.4	G5	2	..	12024b
33	57	39.8	+80 53	7.50	7.50	Ao	4	R	37227i	83	275	40.4	+ 8 4	6.62	6.62	Aop	..	0,8R	56,73
34	309	39.8	-17 20	8.5	9.6	K2	2	..	45693b	84	326	40.4	-12 45	9.6	10.2	Go	3	..	24576b
35	680	39.8	-32 7	9.0	9.5	G5	3	..	15113b	85	301	40.4	-16 23	8.5	9.1	Go	4	0,3	12240b
36	594	39.8	-38 30	9.4	9.7	Go	3	5,2	45154b	86	566	40.4	-29 2	7.9	8.7	G5	5	..	15113b
37	414	39.8	-51 8	8.2	9.3	K5	2	0,4-	12227b	87	606	40.4	-33 19	8.7	9.2	G5	4	..	15113b
38	133	39.8	-61 52	8.4	9.4	Ko	4	..	23773b	88	529	40.4	-39 12	9.6	10.0	F8	3	..	45154b
39	125	39.8	-76 44	7.8	8.2	F5	7	..	23772b	89	574	40.4	-45 45	8.2	8.6	G5	3	..	12227b
40	399	39.9	+51 32	8.4	8.5	A5	4	R	38600i	90	58	40.5	+76 30	8.0	8.8	G5	3	..	38972i
41	364	39.9	+45 10	9.17	9.17	Ao	3	..	38055i	91	524	40.5	+48 58	9.2	9.2	Ao	1	..	38600i
42	290	39.9	+26 38	8.6	9.7	K2	2	..	38882i	92	366	40.5	+45 12	8.27	8.83	Go	2	..	38055i
43	313	39.9	+ 2 1	7.8	8.8	Ko	7	..	10350b	93	295	40.5	+33 15	8.3	8.6	F2	2	..	37474i
44	474	39.9	-41 51	9.0	10.8	Ko	1	2,1	45156b	94	258	40.5	+24 17	8.3	8.4	A5	3	..	19385i
45	139	39.9	-58 11	8.9	10.6	G5	3	..	17627b	95	266	40.5	+ 3 10	6.85	6.93	A3	5	..	37433i
46	145	39.9	-65 24	8.8	9.6	G5	5	..	38146b	96	620	40.5	-26 20	8.5	10.9	K2	1	..	45162b
47	126	39.9	-76 10	8.6	8.4	B3	6	..	23772b	97	591	40.5	-27 5	9.7	10.6	Go	1	..	45162b
48	157	40.0	+67 15	8.5	8.9	F5	3	..	37308i	98	685	40.5	-31 53	8.2	7.8	Fo	8	..	15113b
49	294	40.0	+33 21	8.2	8.2	Ao	3	..	37381i	99	91	40.5	-70 4	9.4	10.4	Ko	7	..	38146b
50	330	40.0	- 6 16	9.9	10.3	F5	2	..	10360b	100	27	40.5	-83 29	5.88	6.4	Go	8	0,R	11989b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	156	40.6	+66 43	8.6	8.9	Fo	3	..	37308i	51	110	41.2	-66 12	9.7	9.8	A5	3	..	38146b
2	338	40.6	-10 46	9.4	10.2	G5	1	..	24576b	52	386	41.3	+53 31	7.20	7.18	B9	4	..	3260b
3	621	40.6	-26 51	8.7	10.0	F8	3	2,2	45162b	53	231	41.3	+11 55	9.8	11.0	K5	2	E	12024b
4	675	40.6	-36 57	9.3	10.2	G5	2	..	45154b	54	243	41.3	+5 40	8.9	10.0	K2	2	..	38034i
5	128	40.6	-63 42	10.0	10.6	Go	5	0,3	38146b	55	242	41.3	+5 26	9.4	10.5	K2	3	2,1	12024b
6	392	40.7	+57 32	6.95	7.95	Ko	2	..	37342i	56	329	41.3	-12 32	9.9	11.0	K2	1	..	24576b
7	439	40.7	+52 22	8.9	9.5	Go	2	..	38600i	57	533	41.3	-39 3	9.6	10.3	F5	2	..	45154b
8	364	40.7	+41 4	7.9	8.7	G5	4	..	37474i	58	374	41.3	-54 30	8.7	9.9	Go	4	..	39676b
9	268	40.7	+2 56	6.93	7.07	A5	8	..	10350b	59	44	41.3	-79 39	6.24	7.2	Ko	..	0,3 R	56,118
10	290	40.7	-22 29	8.3	9.2	Go	3	..	10601b	60	373	41.4	+42 36	7.62	7.62	Ao	6	..	38055i
11	686	40.7	-32 23	9.7	9.5	F5	3	..	15113b	61	239	41.4	+4 3	9.4	10.2	G5	3	..	10350b
12	611	40.7	-42 13	9.3	10.6	Go	2	R	45156b	62	239	41.4	-0 48	8.9	9.9	Ko	1	..	10630b
13	417	40.7	-51 31	8.1	8.7	Ko	3	5,4	12227b	63	595	41.4	-27 50	6.42	6.8	A5	9	E	15113b
14	306	40.8	+63 5	8.0	8.1	A3	3	..	38974i	64	353	41.5	+57 7	8.9	8.9	Ao	1	..	37522i
15	347	40.8	+38 26	8.5	9.0	F8	2	..	37474i	65	461	41.5	+49 22	8.5	9.5	Ko	2	5,2	38600i
16	291	40.8	-2 25	8.1	8.9	G5	2	..	10630b	66	297	41.5	+25 40	7.76	8.76	Ko	2	..	19385i
17	612	40.8	-42 33	9.7	10.4	Go	2	5,1	45156b	67	271	41.5	-0 25	8.7	9.3	Go	2	..	10350b
18	502	40.8	-44 8	8.3	8.7	Fo	4	2,2-	45156b	68	254	41.5	-2 50	8.5	9.1	Go	3	..	10630b
19	478	40.8	-49 59	8.57	9.3	F8	3	2,3	10623b	69	534	41.5	-39 8	9.1	10.4	Ko	2	..	45154b
20	133	40.9	+71 5	8.6	8.6	Ao	3	0,2	38134i	70	28	41.5	-83 45	7.36	8.9	Ko	3	2,3	11089b
21	349	40.9	+38 15	7.53	7.81	Fo	5	5,2	37474i	71	324	41.6	+59 57	8.2	8.5	Fo	2	5,4	38974i
22	240	40.9	+6 2	8.9	9.5	Go	2	..	38034i	72	388	41.6	+53 24	8.0	8.0	Ao	2	..	38879i
23	269	40.9	-4 43	8.15	8.93	G5	3	..	10630b	73	448	41.6	+47 2	8.9	8.9	Ao	1	..	38600i
24	336	40.9	-6 14	5.53	6.31	G5	7	5,8	10360b	74	447	41.6	+45 44	6.32	6.74	F5	8	..	38055i
25	370	40.9	-9 50	9.71	10.13	F5	2	..	24576b	75	262	41.6	+18 12	8.7	9.2	F8	1	..	37318i
26	291	40.9	-22 40	9.3	11.3	G5	1	..	45147b	76	240	41.6	+10 26	10.1	10.1	Ao	3	..	12024b
27	32	41.0	+84 39	9.0	9.8	G5	2	..	37281i	77	272	41.6	-0 18	9.1	9.9	G5	2	..	10350b
28	318	41.0	+32 41	8.1	8.6	F8	3	..	37474i	78	341	41.6	-11 5	7.52	8.30	G5	4	5,3	10360b
29	273	41.0	+30 19	8.11	8.67	Go	2	..	37371i	79	333	41.6	-14 0	8.5	9.3	G5	2	..	12240b
30	704	41.0	-25 33	5.39	6.4	Fo	..	0, R	56,118	80	99	41.7	+72 38	9.0	9.1	A3	2	..	38772i
31	592	41.0	-26 53	7.64	9.7	Ma	4	5,4	45162b	81	449	41.7	+46 42	8.5	8.6	A2	2	..	2089b
32	550	41.0	-27 54	9.2	10.6	Ko	2	5,2	45168b	82	236	41.7	+23 54	8.5	9.1	Go	2	..	38882i
33	664	41.0	-36 36	8.2	9.3	G5	4	0,3	45154b	83	283	41.7	+20 42	8.3	8.3	Ao	5	2,2	38882i
34	351	41.0	-53 50	9.9	10.5	Go	1	..	39676b	84	540	41.7	-42 58	9.7	11.5	G5	1	..	45156b
35	218	41.1	+9 53	10.4	11.8	Ma	..	..	M	85	542	41.7	-43 19	9.2	9.6	G5	2	..	12229b
36	241	41.1	+5 39	9.1	10.2	K2	1	..	12024b	86	541	41.7	-43 46	9.7	10.7	F8	1	..	45156b
37	291	41.1	-6 56	9.1	9.1	Ao	4	..	12025b	87	340	41.7	-56 36	9.4	10.0	Go	3	..	39676b
38	577	41.1	-45 34	8.5	8.3	F5	3	..	12227b	88	140	41.7	-60 13	9.3	9.5	F8	3	..	12034b
39	495	41.1	-46 33	9.1	10.7	Ko	2	..	39684b	89	141	41.7	-60 53	8.2	9.7	G5	2	..	45176b
40	139	41.1	-61 31	7.00	6.6	B9	8	..	45176b	90	114	41.7	-71 58	10.1	10.9	G5	5	..	38146b
41	55	41.2	+79 44	8.7	8.7	Ao	2	..	37227i	91	33	41.7	-81 8	8.9	10.0	K2	2	..	20538b
42	327	41.2	+61 22	8.8	8.8	Ao	2	0,2	38164i	92	329	41.8	+61 21	8.6	8.7	A2	3	2,3	38974i
43	357	41.2	+50 15	8.62	8.62	Ao	4	0,4	38879i	93	502	41.8	+47 42	8.4	9.4	Ko	2	..	38600i
44	295	41.2	+25 25	7.96	8.46	F8	2	..	19385i	94	241	41.8	+10 21	6.97	6.95	B9	8	..	37468i
45	196	41.2	+16 55	6.46	6.74	Fo	3	..	37318i	95	512	41.8	-44 24	8.9	9.3	G5	3	E	45106b
46	269	41.2	+6 35	9.4	10.4	Ko	3	..	12024b	96	141	41.8	-60 23	9.7	10.3	Go	3	..	23773b
47	270	41.2	-0 25	8.5	9.6	K2	1	..	10350b	97	325	41.9	+59 57	9.7	9.7	A	1	E	38164i
48	623	41.2	-26 45	9.1	9.8	G5	3	..	45162b	98	399	41.9	+57 58	8.2	8.0	Bo	4	..	38974i
49	622	41.2	-26 48	7.9	9.5	K2	4	0,4	12241b	99	379	41.9	+55 12	8.0	8.0	Ao	2	..	37356i
50	132	41.2	-59 16	8.4	9.7	G5	4	..	17627b	100	441	41.9	+52 45	8.9	9.9	Ko	2	..	38600i

10900

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	276	41.9	+ 8 16	9.8	10.6	G5	1	..	12024b	51	76	42.4	-71 3	10.2	11.0	G5	4	..	38146b
2	602	41.9	-38 26	9.0	9.7	F2	3	2,2	12228b	52	364	42.5	+51 1	9.4	9.5	A2	1	..	38600i
3	444	41.9	-40 45	9.3	9.4	F8	2	..	12229b	53	372	42.5	+43 56	9.2	10.2	K	1	..	38055i
4	359	42.0	+50 50	9.0	9.6	Go	2	..	38600i	54	234	42.5	+11 46	9.8	10.9	K2	1	..	12024b
5	404	42.0	+39 38	8.7	8.8	A5	4	..	37474i	55	274	42.5	- 0 20	8.1	8.9	G5	5	0,2	10630b
6	313	42.0	+37 6	9.2	9.2	Ao	3	..	37474i	56	260	42.5	- 3 24	8.5	8.9	F5	6	..	10630b
7	285	42.0	+20 55	8.7	10.1	Ma	1	..	37318i	57	312	42.5	- 8 22	8.7	9.8	K2	2	..	10360b
8	258	42.0	- 3 36	8.1	8.4	Fo	7	..	10630b	58	306	42.5	-17 58	7.34	7.40	A2	8	..	12240b
9	751	42.0	-24 30	8.1	9.1	Ko	6	..	12366b	59	738	42.5	-31 52	8.5	10.6	G5	1	..	15113b
10	544	42.0	-42 52	7.8	9.8	K5	3	..	45154b	60	546	42.5	-43 49	8.3	9.8	G5	3	5,3	12229b
11	578	42.0	-45 47	8.6	8.3	F2	3	6,2	12227b	61	343	42.5	-56 40	9.3	9.6	A5	4	..	17627b
12	206	42.1	+65 31	8.5	9.3	G5	2	..	37308i	62	350	42.5	-57 15	9.0	9.9	A5	2	..	39676b
13	240	42.1	+64 21	8.6	9.2	Go	3	..	37308i	63	135	42.5	-64 15	9.8	9.9	A5	3	..	23773b
14	530	42.1	+48 56	8.8	8.9	A2	2	..	38600i	64	305	42.6	+58 17	8.6	8.6	Ao	2	2,2	37522i
15	531	42.1	+48 44	8.8	9.8	K	1	..	38600i	65	443	42.6	+52 37	9.9	9.9	Ao	2	..	38600i
16	376	42.1	+42 48	9.0	9.0	Ao	1	..	38055i	66	287	42.6	+21 10	8.6	8.9	Fo	1	..	37318i
17	242	42.1	+10 28	9.27	10.34	K2	2	..	12024b	67	262	42.6	- 3 44	8.8	9.3	F8	4	..	10630b
18	338	42.1	- 8 56	8.9	9.9	Ko	2	..	10360b	68	631	42.6	-26 11	8.5	10.0	Ko	2	..	45162b
19	376	42.1	-10 5	8.7	9.8	K2	5	..	24576b	69	630	42.6	-42 38	7.5	8.8	K2	3	..	12229b
20	335	42.1	-14 23	6.76	6.74	B9	8	1,10	12248b	70	30	42.6	-80 24	7.88	8.1	Fo	6	..	23772b
21	579	42.1	-45 21	9.7	10.4	Go	2	..	45156b	71	84	42.7	+75 6	6.92	7.34	F5	7	..	37615i
22	538	42.1	-47 26	9.3	9.8	F8	4	..	39684b	72	357	42.7	+60 31	8.7	8.7	Ao	2	..	37988i
23	341	42.1	-56 47	9.3	9.9	Go	4	..	17627b	73	383	42.7	+54 39	9.0	9.0	Ao	2	E	38600i
24	142	42.1	-61 5	9.5	10.1	Go	3	..	23773b	74	371	42.7	+38 7	8.7	8.8	A3	3	..	37474i
25	29	42.1	-80 33	7.71	7.5	A3	9	..	23772b	75	372	42.7	+37 27	6.05	6.83	G5	7	5,3	37474i
26	161	42.1	+67 11	8.5	8.9	F5	3	..	37308i	76	303	42.7	+25 46	8.6	9.7	K2	2	E	38882i
27	207	42.2	+65 47	8.9	9.0	A5	2	..	37308i	77	562	42.7	-28 30	9.7	10.0	G5	2	..	45168b
28	503	42.2	+47 53	8.8	9.8	Ko	1	..	38600i	78	614	42.7	-30 32	10.4	10.7	Go	1	..	45168b
29	449	42.2	+45 25	8.6	9.6	Ko	2	..	38055i	79	116	42.7	-72 36	10.5	10.9	F5	3	..	38146b
30	289	42.2	+ 0 19	7.93	8.71	G5	2	E	37433i	80	306	42.8	+58 59	9.0	9.0	Ao	1	..	38974i
31	653	42.2	-23 40	9.9	11.3	Go	1	..	45170b	81	280	42.8	+30 17	8.16	8.94	G5	2	..	37371i
32	608	42.2	-30 41	9.5	10.1	Go	2	..	15113b	82	203	42.8	+16 27	5.73	5.73	Ao	8	E	38883i
33	624	42.2	-42 40	9.9	11.2	Go	1	..	45156b	83	271	42.8	- 3 49	9.3	9.6	F2	2	..	10630b
34	419	42.2	-51 19	5.46	6.9	Ma	..	0,8	56,118	84	346	42.8	-11 28	9.1	10.2	K2	3	..	24576b
35	82	42.2	-68 28	9.1	9.5	F5	6	..	38146b	85	322	42.8	-13 42	8.4	8.8	F5	3	0,2	12240b
36	38	42.2	-78 44	8.7	9.7	Ko	5	..	23772b	86	319	42.8	-17 42	8.3	9.5	K5	3	..	45693b
37	232	42.3	+12 42	8.5	8.9	F5	3	..	12024b	87	583	42.8	-29 10	7.9	8.9	G5	4	..	45168b
38	232	42.3	+11 27	9.4	10.2	G5	2	..	12024b	88	582	42.8	-29 17	8.7	9.6	Go	2	..	45168b
39	377	42.3	-54 1	5.14	5.14	Ao	..	R	56,118	89	619	42.8	-33 11	8.8	8.9	Ko	3	..	15113b
40	77	42.3	-69 35	9.2	9.5	F2	5	E	38365b	90	486	42.8	-50 35	9.9	10.2	G5	4	..	39676b
41	380	42.4	+54 26	8.2	8.3	A2	2	E	38600i	91	131	42.8	-76 38	9.2	10.2	Ko	4	..	22155b
42	391	42.4	+53 18	9.2	9.2	Ao	2	..	38600i	92	18	42.8	-86 27	9.2	10.2	Ko	2	..	15145b
43	450	42.4	+45 45	9.2	9.3	A3	2	..	38055i	93	352	42.9	+42 13	9.0	9.0	Ao	2	..	38055i
44	311	42.4	+ 4 16	9.1	9.7	Go	3	..	10350b	94	374	42.9	+40 47	8.5	9.7	K5	..	..	M
45	319	42.4	+ 1 31	9.1	9.9	G5	2	..	10350b	95	204	42.9	+16 32	7.32	7.88	Go	2	..	37318i
46	378	42.4	- 9 59	9.1	10.3	K5	1	..	24576b	96	292	42.9	+ 1 1	9.4	10.4	K	1	..	10350b
47	559	42.4	-28 10	8.9	9.1	F5	4	..	45168b	97	244	42.9	- 1 27	8.1	8.2	A3	4	..	10630b
48	445	42.4	-40 26	8.3	8.5	A5	7	..	45154b	98	300	42.9	-21 20	6.69	8.5	Ko	5	0,7	12240b
49	627	42.4	-42 41	9.9	11.2	Go	1	..	45156b	99	658	42.9	-23 19	9.4	10.1	F5	1	..	45170b
50	349	42.4	-57 27	8.8	10.3	Go	2	..	39676b	100	584	42.9	-29 24	9.5	10.4	Go	1	..	45168b

11000

1^h 42^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	487	42.9	-50 8	8.47	9.0	G5	3	0,3	10623b	51	218	43.4	-52 18	8.4	8.8	Ko	5	..	39676b
2	130	42.9	-63 18	9.2	9.8	Go	2	..	23773b	52	148	43.4	-65 22	9.3	9.9	Go	4	..	38146b
3	78	42.9	-69 37	10.3	11.3	Ko	2	..	38146b	53	61	43.5	+81 28	7.18	8.36	K5	3	0,3	37227i
4	334	43.0	+61 39	8.4	9.2	G5	2	..	38974i	54	268	43.5	+15 54	7.64	7.92	Fo	7	0,2	37468i
5	534	43.0	+48 51	8.9	9.7	G5	1	..	38600i	55	678	43.5	-36 48	9.0	9.6	Go	3	5,2	45154b
6	374	43.0	+44 34	8.7	9.0	F2	3	..	38055i	56	450	43.5	-40 3	8.8	9.7	G5	1	..	12223b
7	316	43.0	+32 12	5.82	6.24	F5	7	0,4	37474i	57	522	43.5	-44 27	7.6	8.3	F5	4	..	12227b
8	320	43.0	+1 24	9.19	9.97	G5	3	..	10350b	58	512	43.5	-46 45	6.82	8.2	Ma	4	0,3	12227b
9	660	43.0	-22 53	9.2	10.4	F8	1	..	45170b	59	85	43.6	+74 20	8.6	8.9	F2	2	3,2	38134i
10	111	43.0	-65 53	9.2	9.3	A2	6	..	38146b	60	264	43.6	+24 14	8.00	8.00	Ao	2	0,2	19385i
11	535	43.1	+48 56	8.6	8.7	A2	2	..	38600i	61	224	43.6	+10 12	10.8	11.6	G5	2	..	12024b
12	454	43.1	+46 45	8.2	8.5	Fo	2	..	2089b	62	298	43.6	-2 1	8.7	9.3	Go	1	..	10376b
13	302	43.1	+33 39	8.1	9.5	Mb	3	..	37474i	63	316	43.6	-19 10	9.6	10.4	A5	2	..	45693b
14	242	43.1	+21 54	8.2	8.8	Go	1	..	37318i	64	492	43.6	-41 43	9.3	10.3	G5	4	..	45176b
15	205	43.1	+16 54	8.7	9.1	F5	2	..	37318i	65	514	43.6	-46 33	9.9	10.4	F5	2	..	39684b
16	266	43.1	+15 50	8.7	9.0	F2	4	..	37468i	66	378	43.6	-54 22	9.1	9.9	G5	2	..	39676b
17	322	43.1	+2 13	8.7	9.1	F5	2	..	37433i	67	355	43.6	-56 56	9.9	10.5	Go	2	..	39676b
18	318	43.1	-15 10	8.9	10.0	K2	2	..	24576b	68	126	43.6	-74 3	7.8	8.1	Fo	7	..	23772b
19	307	43.1	-18 39	9.3	9.9	Go	1	..	45693b	69	29	43.6	-83 17	9.0	9.6	Go	3	..	20538b
20	605	43.1	-27 14	9.1	9.7	G5	3	..	12241b	70	538	43.7	+48 46	8.4	8.5	A2	3	..	38600i
21	615	43.1	-30 13	8.5	8.3	B8	6	..	15113b	71	377	43.7	+44 46	8.0	8.0	B9	5	..	38055i
22	633	43.1	-42 15	6.10	7.6	K2	6	0,5	12229b	72	300	43.7	-1 55	9.6	10.4	G5	2	..	10630b
23	552	43.1	-43 8	7.68	7.8	A5	6	3,5	12229b	73	306	43.7	-21 8	8.9	9.0	A5	5	..	45170b
24	352	43.1	-57 25	10.0	10.5	F8	2	..	39676b	74	299	43.7	-22 42	8.3	8.9	G5	5	..	12366b
25	17	43.1	-85 16	5.63	6.9	Ko	..	0,7	56,118	75	639	43.7	-26 5	9.2	10.3	G5	2	..	45162b
26	373	43.2	+43 14	8.6	9.4	G5	1	..	38055i	76	640	43.7	-26 35	9.4	10.0	Go	2	..	45162b
27	353	43.2	+41 30	8.5	8.8	Fo	2	..	38055i	77	515	43.7	-46 12	9.1	9.2	F8	3	..	45156b
28	277	43.2	-0 2	8.7	9.5	G5	3	..	10630b	78	18	43.7	-85 35	9.1	9.9	G5	2	..	15145b
29	342	43.2	-9 44	9.21	10.21	Ko	4	..	24576b	79	305	43.8	+26 0	6.73	6.68	B8	4	3,3	19385i
30	675	43.2	-36 22	9.1	10.2	F5	3	..	45154b	80	321	43.8	-15 15	7.50	8.50	Ko	5	2,4	12240b
31	508	43.3	+47 24	5.99	6.05	A2	8	..	2089b	81	474	43.8	-48 51	9.3	10.5	Ko	2	E	39676b
32	378	43.3	+40 28	8.5	9.0	F8	3	..	37474i	82	149	43.8	-65 17	9.1	9.9	G5	3	..	38146b
33	241	43.3	+23 28	8.6	9.4	G5	1	..	38882i	83	84	43.8	-68 11	9.0	9.8	G5	4	..	38146b
34	288	43.3	+19 36	9.4	10.2	G5	1	E	38883i	84	117	43.8	-72 8	9.1	10.1	Ko	5	..	38146b
35	223	43.3	+9 43	8.9	9.2	Fo	4	..	38034i	85	244	43.9	+24 12	8.1	8.1	Ao	2	0,2	19385i
36	222	43.3	+9 36	9.6	10.6	Ko	1	..	12024b	86	236	43.9	+11 54	8.9	9.0	A2	3	E	12024b
37	270	43.3	+3 11	6.00	6.78	G5	6	..	37433i	87	279	43.9	+8 47	8.5	9.0	F8	4	..	38034i
38	297	43.3	-22 43	9.0	9.5	F5	2	..	45170b	88	294	43.9	+0 51	8.1	8.2	A3	6	0,8	37433i
39	607	43.3	-27 39	9.5	10.6	Ko	1	..	45162b	89	343	43.9	-8 51	8.9	9.7	G5	2	..	10360b
40	471	43.3	-48 43	8.9	9.9	F8	3	E	39676b	90	85	43.9	-67 58	11.4	11.4	A	2	..	38146b
41	493	43.3	-49 55	9.5	10.5	K2	2	..	39676b	91	164	44.0	+67 52	8.0	8.1	A5	4	..	37308i
42	139	43.3	-61 53	8.1	8.5	F5	5	3,8	12034b	92	243	44.0	+64 22	6.94	8.12	K5	3	R	37308i
43	308	43.4	+59 2	8.5	9.5	Ko	1	..	38974i	93	404	44.0	+57 59	7.9	9.1	K5	1	..	37522i
44	355	43.4	+38 58	8.8	9.6	G5	2	..	37474i	94	398	44.0	+53 15	8.43	9.78	Mb	2	R	38600i
45	312	43.4	+34 57	8.12	8.68	Go	4	..	37474i	95	377	44.0	+43 48	8.0	8.0	Ao	4	..	38055i
46	311	43.4	+34 25	7.9	8.7	G5	3	..	37474i	96	237	44.0	+12 6	9.2	9.5	F2	1	..	37468i
47	395	43.4	+33 34	8.5	9.0	F8	2	..	37474i	97	280	44.0	+9 12	9.6	10.4	G5	1	..	38034i
48	289	43.4	+20 2	8.9	9.7	G5	2	E	38883i	98	310	44.0	-21 30	9.4	10.1	Go	3	..	45170b
49	275	43.4	+7 12	7.28	8.28	Ko	6	..	38034i	99	771	44.0	-24 15	9.7	10.6	K2	1	..	45170b
50	687	43.4	-37 39	6.38	7.1	Ko	6	0,7	10635b	100	642	44.0	-26 45	7.17	7.2	A3	8	..	12241b

THE HENRY DRAPER CATALOGUE.

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1h 44^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	615	44.0	-27 3	9.1	10.0	Fo	2	..	12241b	51	416	44.6	+51 27	5.90	6.32	F5	6	3,5	37356i
2	691	44.0	-37 20	9.3	10.2	G5	2	O,I	45154b	52	382	44.6	+37 49	7.66	7.94	Fo	4	5,2	37474i
3	360	44.1	+56 17	7.9	9.0	K2	1	..	37522i	53	286	44.6	+30 54	8.7	9.0	F2	4	..	37371i
4	512	44.1	+48 2	8.5	8.5	B9	5	I,2	38600i	54	243	44.6	+21 47	5.89	6.31	F5	3	R	37318i
5	379	44.1	+38 5	8.1	8.4	Fo	3	..	37474i	55	55	44.6	+21 47	5.89	6.31	Az	3	..	37318i
6	317	44.1	-18 52	8.3	9.2	G5	4	..	12240b	56	285	44.6	+13 44	8.9	9.9	Ko	1	..	37467i
7	772	44.1	-24 21	8.2	8.2	F5	8	..	12366b	57	274	44.6	+ 2 32	8.8	9.1	F2	3	..	10441b
8	589	44.1	-29 46	9.18	10.7	G5	2	..	15113b	58	547	44.6	-47 17	8.9	8.9	F2	3	..	45156b
9	625	44.1	-32 57	9.9	10.6	Go	2	..	15113b	59	32	44.6	-80 14	8.48	8.8	F5	4	3,4	20538b
10	623	44.1	-33 5	9.9	10.7	G5	2	..	15113b	60	65	44.7	+77 42	6.87	7.65	G5	3	..	37227i
11	693	44.1	-36 55	9.6	10.5	K2	1	..	45154b	61	209	44.7	+65 57	8.9	9.5	Go	2	..	37308i
12	638	44.1	-41 59	7.06	7.5	Go	6	O,3	12229b	62	338	44.7	+61 21	9.5	9.5	Ao	1	..	38974i
13	526	44.1	-44 49	8.85	9.3	F5	3	..	45156b	63	366	44.7	+60 26	8.7	9.1	F5	2	..	38974i
14	137	44.2	+70 15	7.74	8.24	F8	4	..	37308i	64	417	44.7	+51 43	9.0	9.4	F5	1	..	38600i
15	316	44.2	+ 5 8	8.60	9.60	Ko	2	..	38034i	65	383	44.7	+37 19	8.3	9.1	G5	2	..	37474i
16	703	44.2	-34 44	9.48	10.2	F8	3	..	15113b	66	287	44.7	+30 19	7.81	8.23	F5	4	..	37371i
17	499	44.2	-50 40	10.5	10.5	Go	2	..	39676b	67	244	44.7	+21 41	8.9	9.9	Ko	2	..	38883i
18	118	44.2	-67 1	8.8	9.3	F8	5	..	38146b	68	286	44.7	+13 52	8.7	9.3	Go	4	..	37467i
19	303	44.3	+26 58	8.1	8.4	Fo	2	..	19385i	69	286	44.7	+ 7 24	8.3	9.3	Ko	3	..	38034i
20	307	44.3	+25 15	8.76	9.54	G5	3	E	38882i	70	279	44.7	+ 6 44	7.9	8.5	Go	7	..	38034i
21	317	44.3	+ 4 56	9.4	9.8	F5	2	..	10441b	71	252	44.7	-11 11	4.77	5.05	Fo	..	O,R	56,73
22	310	44.3	-16 4	8.9	9.2	F2	3	6,2	12240b	72	320	44.7	-19 30	9.6	11.0	Go	1	..	45693b
23	309	44.3	-18 15	9.1	9.7	Go	2	..	45693b	73	623	44.7	-27 34	8.3	10.3	K5	2	3,2	45170b
24	644	44.3	-26 39	8.9	8.8	F5	3	..	12241b	74	573	44.7	-28 16	8.1	9.8	K5	4	0,2	12241b
25	704	44.3	-34 6	8.7	10.0	G5	3	..	15113b	75	705	44.7	-34 47	9.63	10.2	A5	3	..	15113b
26	336	44.4	+59 52	8.0	8.0	B9	6	I,2	38164i	76	548	44.7	-47 21	9.4	9.5	A3	2	..	45156b
27	415	44.4	+52 7	8.8	9.8	Ko	1	..	38600i	77	138	44.7	-76 23	9.1	9.7	Go	4	..	23772b
28	370	44.4	+50 56	8.9	8.9	Ao	3	..	38600i	78	385	44.8	+37 28	8.9	9.5	Go	3	..	37474i
29	358	44.4	+41 38	8.9	9.7	G5	1	..	38055i	79	288	44.8	+30 25	8.2	9.4	K5	1	..	37371i
30	304	44.4	+29 0	8.5	9.3	G5	4	..	37371i	80	333	44.8	+ 2 4	9.1	9.6	F8	2	..	10441b
31	351	44.4	-11 11	6.76	7.32	Go	6	..	10360b	81	353	44.8	-10 51	8.4	8.8	F5	2	..	10360b
32	310	44.4	-18 30	9.6	10.0	F5	4	..	12240b	82	337	44.8	-14 43	8.41	8.83	F5	4	3,4	12240b
33	318	44.4	-18 58	8.2	9.2	Fo	6	..	12240b	83	753	44.8	-31 34	6.42	7.5	Ko	8	..	15113b
34	645	44.4	-26 31	8.2	9.2	Ko	2	..	12241b	84	504	44.8	-48 54	9.4	10.5	K2	2	..	39676b
35	627	44.4	-33 23	8.8	9.8	G5	3	..	15113b	85	64	44.8	-77 51	6.9	7.3	F5	9	..	23772b
36	685	44.4	-36 1	9.3	10.5	F8	2	..	45154b	86	166	44.9	+66 35	8.8	9.3	F8	2	..	37308i
37	548	44.4	-39 9	7.16	7.7	F2	5	..	12229b	87	393	44.9	+54 25	7.08	7.08	Aop	..	O,4R	56,73
38	528	44.4	-44 36	8.2	8.6	F5	3	..	12227b	88	463	44.9	+46 58	7.14	7.09	B8	4	..	2089b
39	119	44.4	-67 20	10.1	10.1	A	3	..	38146b	89	416	44.9	+39 54	8.9	8.9	Ao	3	..	37474i
40	401	44.5	+53 34	8.5	8.5	B8	3	..	37356i	90	349	44.9	+35 34	7.97	7.97	Ao	5	..	37474i
41	446	44.5	+52 40	9.2	9.3	A2	3	..	38600i	91	309	44.9	+30 0	8.7	9.0	Fo	2	..	37371i
42	307	44.5	+26 34	8.5	8.9	F5	2	..	19385i	92	295	44.9	+ 0 30	9.4	10.4	Ko	2	..	10630b
43	R	44.5	-22 50	9.2	9.8	G5	2	..	12366b	93	323	44.9	- 5 21	8.9	10.3	Mc	2	..	10630b
44	556	44.5	-43 44	9.1	10.7	G5	2	..	45156b	94	324	44.9	- 7 47	8.5	9.5	Ko	2	..	10360b
45	348	44.5	-55 16	9.2	10.5	G5	2	..	39676b	95	321	44.9	-19 25	9.0	9.5	Go	2	..	12240b
46	359	44.5	-56 53	8.1	9.3	Ko	5	..	17627b	96	638	44.9	-35 47	9.3	11.0	K5	1	..	45154b
47	151	44.5	-58 2	9.6	10.6	Ko	1	..	39676b	97	531	44.9	-44 17	9.4	11.5	Ko	1	..	45156b
48	137	44.5	-64 6	8.7	9.9	K5	3	..	23773b	98	550	44.9	-47 28	10.5	9.9	F5	2	..	45156b
49	86	44.5	-68 30	9.4	9.8	F5	5	..	38146b	99	357	44.9	-52 57	9.1	10.2	G5	2	..	39676b
50	58	44.6	+80 25	7.60	8.60	Ko	3	..	37227i	100	367	45.0	+57 7	9.5	10.7	K5	M

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1^h 45^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	388	45.0 ^{m.}	+43 2	7.8	8.8	Ko	4	..	38055i	51	378	45.5 ^{m.}	+50 43	9.0	9.0	B9	2	..	3860oi
2	350	45.0	+35 22	7.22	7.64	F5	5	3,2	37474i	52	464	45.5	+46 36	7.46	8.24	G5	5	..	3860oi
3	228	45.0	+9 20	9.6	10.6	Ko	2	..	12024b	53	465	45.5	+45 51	8.0	8.0	B9	5	I,3	3860oi
4	345	45.0	-6 40	8.9	9.5	Go	4	..	12025b	54	464	45.5	+45 19	8.77	8.77	Ao	3	..	38055i
5	306	45.0	-7 12	8.9	9.0	A5	4	..	10360b	55	353	45.5	+35 18	8.97	9.47	F8	2	..	37474i
6	323	45.0	-19 42	9.53	11.0	G5	1	..	45693b	56	296	45.5	+20 38	8.7	9.0	Fo	4	0,2-	37318i
7	317	45.0	-20 54	9.1	10.4	G5	2	5,1	45170b	57	252	45.5	+10 33	5.94	6.22	Fo	9	..	37468i
8	599	45.0	-29 46	10.2	10.6	A	3	R	15113b	58	282	45.5	-4 11	8.3	9.3	Ko	3	..	10630b
9	707	45.0	-34 30	10.7	10.5	F8	2	..	15113b	59	348	45.5	-6 16	9.6	10.2	Go	2	..	12025b
10	434	45.0	-50 58	7.78	7.1	B9	5	..	10623b	60	343	45.5	-12 38	8.9	9.3	F5	2	..	12248b
11	225	45.0	-52 7	7.5	7.9	Ko	8	..	39676b	61	349	45.5	-20 22	9.1	10.7	Ko	1	0,1	45170b
12	167	45.1	+66 15	9.4	9.7	Fo	2	..	37308i	62	553	45.5	-38 54	6.46	7.1	F5	7	..	12229b
13	337	45.1	+59 59	8.6	8.6	Ao	3	2,2	38164i	63	564	45.5	-43 5	9.2	9.8	F8	2	..	12229b
14	407	45.1	+58 9	8.7	8.7	Ao	3	..	38164i	64	552	45.5	-47 16	8.0	7.9	Go	4	..	12227b
15	394	45.1	+54 27	8.0	8.1	A2	3	1,2	3860oi	65	508	45.5	-48 59	9.9	10.0	Fo	2	..	39676b
16	326	45.1	+37 5	7.9	8.9	Ko	3	..	37474i	66	138	45.5	-64 50	8.10	9.0	G5	7	5,7	38146b
17	327	45.1	-17 16	9.4	10.2	G5	2	..	45693b	67	420	45.6	+51 52	8.6	8.7	A2	2	..	37356i
18	347	45.1	-19 48	9.33	11.3	K5	1	..	45693b	68	380	45.6	+44 38	10.2	10.3	A3	1	..	38055i
19	532	45.1	-44 44	7.90	8.9	K2	2	..	12227b	69	320	45.6	+34 58	8.1	8.9	G5	4	..	37474i
20	361	45.1	-57 38	8.3	9.6	Ko	6	..	39676b	70	286	45.6	+7 8	10.1	11.2	K2	1	..	12024b
21	93	45.1	-70 22	8.7	9.5	G5	9	..	38146b	71	249	45.6	+6 3	8.5	9.3	G5	3	..	38034i
22	418	45.2	+51 19	8.7	8.7	Ao	1	..	37356i	72	306	45.6	-2 33	8.5	9.5	Ko	2	..	10630b
23	476	45.2	+49 23	7.7	7.7	B9	6	I,2	3860oi	73	327	45.6	-5 27	9.0	9.4	F5	4	..	10630b
24	387	45.2	+37 32	7.52	8.87	Mb	3	5,1	37474i	74	335	45.6	-12 50	8.1	8.5	F5	5	0,7	12248b
25	241	45.2	+11 32	9.2	10.4	K5	1	E	12024b	75	350	45.6	-20 41	9.4	10.7	Ko	1	2,1	45693b
26	307	45.2	-7 12	7.20	7.70	F8	7	..	10360b	76	730	45.6	-25 2	8.70	9.2	Ko	3	..	12366b
27	332	45.2	-13 10	8.3	9.3	Ko	2	..	12240b	77	695	45.6	-36 2	8.4	8.7	Go	5	..	45154b
28	339	45.2	-14 11	8.5	9.3	G5	3	5,2	12240b	78	565	45.6	-43 28	10.3	11.7	Mc	..	..	M
29	674	45.2	-23 2	9.2	9.8	Go	3	..	45170b	79	594	45.6	-45 17	9.4	10.1	G5	2	..	45156b
30	630	45.2	-33 37	9.4	9.8	G5	3	..	15113b	80	361	45.6	-53 25	9.5	10.3	G5	1	..	39676b
31	640	45.2	-34 57	8.33	9.0	F5	5	..	15113b	81	34	45.7	+84 15	8.1	8.9	G5	3	..	37281i
32	551	45.2	-46 59	8.6	9.2	Go	4	..	39684b	82	453	45.7	+52 56	10.2	10.2	A	..	..	M
33	359	45.2	-53 48	9.2	10.5	Ko	1	..	39676b	83	381	45.7	+44 47	8.6	9.4	G5	1	..	38055i
34	123	45.2	-75 15	8.1	8.7	Go	8	..	23772b	84	246	45.7	+24 10	6.89	7.03	A5	3	5,3	19385i
35	389	45.3	+42 59	8.0	8.1	A5	3	E	2089b	85	296	45.7	+20 3	6.77	7.05	Fo	3	0,5	37318i
36	365	45.3	+38 21	7.72	7.72	Ao	5	0,2	37474i	86	251	45.7	+5 32	8.7	9.7	Ko	4	..	38034i
37	627	45.3	-27 30	9.5	10.3	Go	1	..	45162b	87	678	45.7	-23 15	8.5	10.1	K5	1	..	12366b
38	625	45.3	-27 37	9.7	10.3	G	2	..	12241b	88	781	45.7	-24 15	8.7	9.1	G5	4	..	12366b
39	458	45.3	-40 14	9.7	10.3	Go	2	..	45154b	89	503	45.7	-50 45	9.5	9.9	F8	4	..	39676b
40	360	45.3	-53 30	9.2	10.2	Ko	2	..	39676b	90	33	45.7	-80 42	9.2	10.6	Mb	..	..	M
41	396	45.4	+54 39	5.49	5.32	B3	..	0,7	56,73	91	379	45.8	+50 18	5.64	5.62	B9	7	..	2089b
42	515	45.4	+47 22	8.6	9.6	Ko	1	..	3860oi	92	389	45.8	+37 42	8.6	8.6	Ao	4	5,1	37474i
43	379	45.4	+44 30	8.6	9.4	G5	2	..	38055i	93	321	45.7	+35 11	8.07	8.85	G5	3	..	37474i
44	390	45.4	+42 17	8.5	8.9	F5	2	..	38055i	94	308	45.8	+33 17	8.7	10.1	Ma	..	..	M
45	311	45.4	+25 22	8.21	8.21	Ao	2	..	19385i	95	249	45.8	+3 43	8.7	9.2	F8	3	..	37433i
46	294	45.4	+20 7	9.5	10.1	Go	2	5,1	38883i	96	252	45.8	-0 46	8.3	9.1	G5	3	..	10630b
47	334	45.4	-13 22	7.04	8.39	Ma	5	0,7	12248b	97	309	45.8	-7 37	9.1	9.9	G5	3	..	12025b
48	320	45.4	-21 15	9.6	10.4	Go	2	..	45170b	98	351	45.8	-20 32	9.1	10.1	Go	2	5,2	45170b
49	602	45.4	-29 32	7.42	8.7	Ko	5	..	15113b	99	556	45.8	-39 20	8.3	8.8	F5	3	..	12229b
50	165	45.5	+67 42	8.6	8.6	Ao	3	..	37308i	100	116	45.8	-66 16	8.8	8.9	A5	7	..	38146b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	94	45.8	-70 14	9.0	9.8	G5	8	..	38146b	51	268	46.5	-3 7	7.11	7.45	F2	7	..	10630b
2	405	45.9	+53 25	8.5	8.5	Ao	3	..	37356i	52	326	46.5	-8 13	8.7	9.3	Go	3	..	10360b
3	289	45.9	+8 4	8.1	8.9	G5	4	..	38034i	53	359	46.5	-10 50	3.92	4.92	Ko	..	5, R	56.73
4	605	45.9	-29 10	8.7	9.5	Ko	3	..	15113b	54	636	46.5	-33 8	9.7	9.9	Go	3	..	15113b
5	145	45.9	-62 44	9.7	10.0	F2	3	..	23773b	55	637	46.5	-33 47	9.7	9.9	F2	4	..	15113b
6	95	45.9	-70 34	9.5	10.1	Go	5	..	38146b	56	510	46.5	-50 22	9.5	10.2	G5	3	..	39676b
7	372	46.0	+56 48	8.0	8.0	B9	7	..	38164i	57	511	46.5	-50 47	9.7	10.5	G5	2	..	39676b
8	456	46.0	+52 30	8.9	8.9	Ao	2	..	38600i	58	151	46.5	-65 3	9.0	10.1	K2	3	..	38146b
9	273	46.0	+18 2	8.3	8.9	Go	3	..	38883i	59	30	46.5	-83 52	7.4	8.2	G5	5	0,4	15173b
10	287	46.0	+6 14	9.1	10.1	Ko	4	..	12024b	60	342	46.6	+60 6	8.81	8.81	A	2	R	38146b
11	785	46.0	-24 6	9.5	10.6	Ko	1	..	45170b	61	395	46.6	+37 30	7.9	8.4	F8	4	..	37474i
12	229	46.1	+9 39	9.8	11.0	K5	1	..	12024b	62	314	46.6	+25 42	8.1	8.2	A5	1	..	19385i
13	282	46.1	+8 18	9.1	9.9	G5	2	..	12024b	63	252	46.6	+23 39	6.82	7.82	Ko	6	0,3	38883i
14	290	46.1	+8 2	8.8	9.4	Go	4	..	12024b	64	246	46.6	+12 56	8.9	9.0	A3	3	..	37468i
15	351	46.1	-5 58	9.3	9.8	F8	3	..	10360b	65	310	46.6	-7 22	6.57	7.57	Ko	7	..	10360b
16	76	46.2	+75 44	7.02	7.16	A5	7	..	37615i	66	360	46.6	-10 47	10.1	11.1	Ko	2	..	10360b
17	316	46.2	+58 37	8.8	8.9	A2	2	2,1	37522i	67	343	46.6	-14 8	8.9	9.9	Ko	2	..	12240b
18	481	46.2	+49 19	8.1	8.2	A3	4	..	38600i	68	319	46.6	-16 24	9.3	9.7	F5	1	..	12240b
19	274	46.2	+17 19	8.3	8.8	F8	4	3,2	38883i	69	733	46.6	-24 55	8.85	9.4	F2	4	..	12366b
20	273	46.2	+15 56	8.7	9.7	Ko	3	..	37468i	70	613	46.6	-29 5	10.4	9.6	Ao	4	..	15113b
21	252	46.2	+5 22	8.81	9.59	G5	2	..	38034i	71	712	46.6	-34 9	9.6	10.2	G5	3	..	15113b
22	320	46.2	+4 28	9.4	10.4	Ko	2	..	10441b	72	77	46.7	+75 32	8.37	8.79	F5	2	..	37615i
23	566	46.2	-43 1	7.5	8.6	Ko	3	0,2	12229b	73	210	46.7	+65 42	8.6	9.4	G5	2	..	37308i
24	485	46.2	-48 49	9.5	9.5	F5	4	..	39676b	74	372	46.7	+60 30	8.4	8.7	F2	5	3,3	38164i
25	139	46.2	-64 1	8.5	8.6	A2	8	..	23773b	75	362	46.7	+41 22	8.0	8.0	Ao	4	E	37474i
26	276	46.3	+17 48	6.73	7.51	G5	5	5,3	16948i	76	327	46.7	-8 36	9.3	9.9	Go	2	..	10360b
27	284	46.3	+8 48	8.3	9.7	Ma	2	..	38034i	77	330	46.7	-17 13	8.5	8.9	F5	2	..	12240b
28	291	46.3	+7 55	9.4	10.2	G5	2	..	12024b	78	326	46.7	-19 47	9.13	9.2	Ao	5	..	45693b
29	267	46.3	-3 36	10.1	10.7	Go	1	..	10630b	79	767	46.7	-31 23	7.12	7.8	F8	8	..	15113b
30	325	46.3	-8 34	8.7	9.2	F8	4	..	12025b	80	534	46.7	-46 9	9.7	10.4	Go	2	..	45156b
31	326	46.3	-14 54	9.20	9.20	Ao	2	..	12248b	81	140	46.7	-63 53	8.5	9.6	K2	4	..	23773b
32	487	46.3	-48 18	6.18	6.4	Ko	6	0,5	12227b	82	107	46.8	+72 25	8.8	9.6	G5	1	..	38972i
33	149	46.3	-59 4	9.4	9.5	A3	3	..	45176b	83	378	46.8	+56 45	8.6	9.6	Ko	3	..	38164i
34	105	46.3	-73 7	8.9	9.7	G5	3	..	46019b	84	518	46.8	+48 2	9.0	9.1	A5	2	..	38600i
35	381	46.4	+51 0	6.18	6.18	Ao	5	0,4	37356i	85	390	46.8	+40 59	8.1	8.6	F8	1	..	38055i
36	384	46.4	+44 19	7.48	7.43	B8	4	..	2089b	86	255	46.8	+10 19	7.67	7.95	Fo	4	..	37468i
37	420	46.4	+40 8	8.47	8.61	A5	4	..	37474i	87	292	46.8	+7 35	9.4	10.4	Ko	3	..	12024b
38	340	46.4	+1 56	8.7	9.7	Ko	2	..	10441b	88	288	46.8	-3 59	10.1	10.7	Go	2	..	10630b
39	285	46.4	-4 42	7.28	7.42	A5	8	..	10630b	89	337	46.8	-13 43	7.06	8.06	Ko	6	0,4	12240b
40	720	46.4	-32 45	9.0	9.5	A5	5	..	15113b	90	328	46.8	-15 38	8.9	9.2	F2	3	..	12240b
41	461	46.4	-40 29	10.5	11.2	K2	1	..	45154b	91	490	46.8	-48 0	9.9	10.3	Go	3	..	39684b
42	559	46.4	-47 16	10.1	11.0	F8	2	..	39684b	92	512	46.8	-50 46	9.9	10.3	Ko	2	..	39676b
43	351	46.4	-54 57	8.00	9.1	Ko	4	..	12034b	93	383	46.8	-54 31	9.1	9.9	G5	2	..	39676b
44	364	46.4	-57 41	9.3	10.5	Ko	2	..	39676b	94	152	46.8	-64 52	7.76	8.6	Ko	7	0,8	38146b
45	89	46.4	-68 36	10.0	10.1	A5	4	..	38146b	95	168	46.9	+67 40	7.56	7.56	Ao	5	..	37308i
46	132	46.4	-74 35	10.1	10.2	A2	2	..	46019b	96	322	46.9	-16 8	6.59	7.94	Ma	5	5,8	12248b
47	134	46.5	+68 42	8.0	9.4	Ma	3	..	37308i	97	332	46.9	-16 48	9.1	9.6	F8	1	..	12240b
48	332	46.5	+36 57	6.78	7.28	F8	6	6,2	37474i	98	305	46.9	-22 40	8.4	8.9	Fo	6	..	12366b
49	210	46.5	+16 36	8.5	9.3	G5	2	..	37318i	99	150	46.9	-59 27	7.4	8.4	Ko	5	..	12034b
50	288	46.5	+7 6	8.2	8.3	A3	5	..	38034i	100	149	46.9	-61 31	9.1	10.3	F8	3	..	23773b

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	344	47.0	+59 40	8.2	9.6	Ma	2	..	38164i	51	486	47.5	+49 27	6.98	7.98	Ko	4	..	3860oi
2	316	47.0	+26 0	8.8	8.8	Ao	2	..	19385i	52	326	47.5	+34 18	8.8	9.3	F8	2	..	37474i
3	287	47.0	+ 8 20	8.9	9.3	F5	3	..	38034i	53	313	47.5	+28 19	7.04	8.22	K5	6	0,4	19385i
4	338	47.0	-12 50	8.3	8.4	A5	5	..	12240b	54	292	47.5	+13 41	8.1	8.9	G5	3	..	37468i
5	539	47.0	-44 37	8.8	9.8	G5	3	..	45156b	55	257	47.5	+ 4 9	8.7	9.5	G5	3	..	37433i
6	121	47.0	-67 5	8.8	9.6	G5	5	..	38146b	56	343	47.5	+ 2 0	8.7	9.5	G5	4	..	37433i
7	68	47.0	-77 17	9.0	9.3	F2	6	..	23772b	57	302	47.5	+ 0 45	8.7	8.8	A5	4	5,3	10630b
8	408	47.1	+55 7	6.49	6.55	A2	..	2,8-	56,73	58	309	47.5	- 2 32	9.0	9.1	A3	2	..	10376b
9	299	47.1	+20 35	9.3	9.4	A2	2	0,I	38883i	59	719	47.5	-37 32	7.13	7.5	F8	5	E	12229b
10	391	47.1	-10 5	8.9	9.2	F2	2	..	10360b	60	133	47.5	-63 20	8.9	9.2	Fo	5	..	23773b
11	618	47.1	-29 19	9.2	10.6	G	1	..	15113b	61	92	47.5	-68 19	10.0	10.4	F5	4	..	38146b
12	705	47.1	-36 11	9.1	10.2	Go	2	..	45154b	62	107	47.5	-72 55	7.7	7.7	B9	8	..	46019b
13	514	47.1	-50 42	6.05	6.3	Ao	..	0,8-	56,118	63	348	47.6	+59 25	8.0	8.0	Ao	5	..	38164i
14	444	47.1	-51 10	9.1	9.7	Ko	2	..	39676b	64	317	47.6	+25 31	8.06	8.84	G5	2	..	19385i
15	320	47.2	+63 11	3.44	3.27	B3	..	2,R	1743c	65	250	47.6	+21 31	8.5	9.0	F8	4	3,2	38883i
16	382	47.2	+57 3	8.9	9.0	A3	4	..	38164i	66	296	47.6	+14 23	8.5	9.1	Go	3	..	37468i
17	434	47.2	+55 42	8.5	8.9	F5	3	..	38164i	67	255	47.6	- 1 9	9.1	9.6	F8	2	..	10630b
18	553	47.2	+48 57	7.03	7.81	G5	4	..	3860oi	68	327	47.6	-21 7	8.7	9.2	Go	5	..	45693b
19	392	47.2	+42 54	8.4	8.5	A2	2	E	2089b	69	584	47.6	-28 15	8.1	8.5	F2	6	..	15113b
20	256	47.2	+ 5 43	9.4	9.5	A2	2	..	38034i	70	567	47.6	-39 22	8.3	8.8	F2	4	..	12229b
21	465	47.2	-40 19	6.54	7.6	Ko	7	..	12229b	71	348	47.7	+61 29	8.8	8.8	Ao	2	..	38164i
22	650	47.2	-42 26	9.3	10.0	Ao	2	..	45154b	72	350	47.7	+59 26	8.0	8.4	F5	4	..	38164i
23	569	47.2	-43 52	9.3	9.3	Fo	4	..	45176b	73	394	47.7	+42 26	9.2	9.2	A	1	R	38055i
24	81	47.2	-69 17	10.2	11.0	G5	4	..	38146b	74	427	47.7	+39 23	7.9	8.4	F8	4	..	37474i
25	346	47.3	+59 30	9.5	9.8	F	1	..	38164i	75	234	47.7	+ 9 56	9.4	9.7	F2	3	..	38034i
26	413	47.3	+53 46	9.2	10.6	Mb	..	..	M	76	293	47.7	+ 6 51	9.4	9.8	F5	3	..	12024b
27	386	47.3	+44 8	8.8	9.4	Go	2	..	38055i	77	292	47.7	+ 6 31	9.8	10.1	F2	1	..	38034i
28	394	47.3	+40 14	5.63	6.63	Ko	8	..	37474i	78	310	47.7	- 1 53	9.1	9.9	G5	1	..	10630b
29	424	47.3	+39 41	8.1	8.4	Fo	3	..	37474i	79	273	47.7	- 3 37	9.1	10.1	Ko	1	..	10376b
30	338	47.3	+36 49	7.04	7.46	F5	6	0,2	37474i	80	741	47.7	-25 32	8.7	8.8	A3	6	4,7	45170b
31	325	47.3	+34 48	8.6	8.9	Fo	3	..	37474i	81	647	47.7	-33 2	8.5	7.5	Ao	8	..	15113b
32	245	47.3	+11 56	8.1	8.1	Ao	4	..	37468i	82	511	47.7	-41 9	8.7	9.4	Ko	4	..	45154b
33	289	47.3	- 3 50	9.6	9.9	Fo	3	..	10630b	83	149	47.7	-60 28	10.0	10.3	Fo	2	..	23773b
34	392	47.3	-10 14	8.3	8.7	F5	4	..	10360b	84	555	47.8	+48 48	8.2	8.8	Go	3	..	3860oi
35	686	47.3	-23 39	7.6	8.6	A5	7	..	12366b	85	327	47.8	+34 35	8.7	9.3	Go	2	..	37474i
36	630	47.3	-38 52	9.7	10.3	K5	2	..	45154b	86	329	47.8	+31 27	8.1	8.4	Fo	4	..	37371i
37	539	47.3	-45 59	7.2	7.8	Ko	4	0,3	12227b	87	298	47.8	+14 55	8.3	8.7	F5	4	..	37468i
38	515	47.3	-50 50	9.7	10.1	Ko	3	..	39676b	88	333	47.8	- 5 17	9.1	9.7	Go	2	..	10360b
39	385	47.3	-54 46	7.56	8.7	K2	4	..	12034b	89	340	47.8	-13 14	8.1	9.1	Ko	4	0,7	12240b
40	132	47.3	-63 28	7.6	8.6	Ko	8	..	23773b	90	797	47.8	-36 45	8.7	9.3	A3	4	2,3	12228b
41	31	47.3	-83 15	9.6	10.1	F8	2	..	20538b	91	632	47.8	-38 37	9.7	10.3	Go	2	..	39654b
42	122	47.4	+70 0	8.0	8.8	G5	2	..	38972i	92	542	47.8	-46 16	9.3	8.9	F5	2	..	12227b
43	312	47.4	+29 6	3.58	4.00	F5	..	3,R	1621c	93	69	47.8	-76 56	9.9	10.2	Fo	3	..	23772b
44	288	47.4	+ 9 5	8.9	9.9	Ko	2	5,2	38034i	94	436	47.9	+55 30	10.2	10.2	A	1	..	38164i
45	642	47.4	-27 37	8.9	9.4	Go	3	0,2-	45162b	95	433	47.9	+52 9	8.4	8.5	A3	2	..	37356i
46	516	47.4	-50 29	9.3	9.1	Go	5	..	39676b	96	388	47.9	+50 55	8.6	8.6	B9	4	..	3860oi
47	354	47.4	-55 43	8.4	9.4	F2	4	..	45176b	97	313	47.9	+34 0	8.6	9.0	F5	3	..	37474i
48	157	47.4	-58 48	9.2	10.3	K2	2	..	17627b	98	302	47.9	+21 7	9.1	10.1	Ko	1	..	38883i
49	146	47.4	-62 34	9.2	10.3	K2	2	..	23773b	99	211	47.9	+16 35	8.5	9.0	F8	3	3,2	38883i
50	79	47.4	-70 57	10.4	10.7	F2	4	..	38146b	100	332	47.9	- 8 20	8.9	9.5	Go	2	..	10360b

THE HENRY DRAPER CATALOGUE.

11500

1^h 47^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	347	47.9	-56 11	9.9	10.5	Go	2	..	39676b	51	497	48.3	-48 1	8.3	8.2	A2	4	2,3	12227b
2	243	48.0	+18 49	4.75	4.75	Aop	..	R	7029c	52	127	48.3	-75 45	8.8	9.6	G5	4	..	23772b
3	48.0	+18 48	4.83	4.83						53	62	48.4	+79 14	8.4	9.2	G5	2	..	37227i
4	259	48.0	+5 35	9.4	10.0	Go	2	..	10441b	54	425	48.4	+57 24	9.2	9.0	B	2	..	38164i
5	311	48.0	-1 49	7.43	7.99	Go	7	..	10630b	55	419	48.4	+53 41	7.50	8.28	G5	3	..	37356i
6	358	48.0	-20 0	7.73	8.9	Go	6	..	12240b	56	341	48.4	+36 39	9.9	11.3	Mc	..	..	M
7	693	48.0	-22 56	8.9	10.7	K5	2	..	45170b	57	244	48.4	+18 48	9.6	10.6	K	..	..	56,231
8	641	48.0	-30 47	8.2	9.2	F5	5	..	15113b	58	296	48.4	+7 8	7.9	9.0	K2	4	..	38034i
9	709	48.0	-36 17	9.6	10.2	F8	2	..	45154b	59	290	48.4	+2 42	4.84	5.84	Ko	..	R	56,73
10	635	48.0	-38 34	9.7	11.7	K2	1	..	39654b	60	337	48.4	-15 41	9.6	9.7	A5	2	..	12240b
11	468	48.0	-40 10	8.7	8.2	F5	4	..	12229b	61	340	48.4	-17 14	8.5	9.3	G5	2	..	12240b
12	567	48.0	-47 9	8.1	8.3	G5	3	..	12227b	62	322	48.4	-17 54	8.7	9.3	Go	3	0,2	40765b
13	568	48.0	-47 17	9.9	10.7	F5	3	..	39684b	63	590	48.4	-28 34	9.9	10.0	Go	2	..	15113b
14	569	48.0	-47 37	9.9	11.5	Go	1	..	39684b	64	721	48.4	-33 56	10.7	10.0	F2	3	..	15113b
15	522	48.0	-50 29	8.1	8.9	K2	3	2,2	12227b	65	650	48.4	-35 21	7.9	9.0	G5	6	..	15113b
16	147	48.0	-62 49	9.5	10.6	K2	1	..	23773b	66	637	48.4	-38 32	8.7	9.5	G5	4	0,3	45154b
17	354	48.1	+59 28	7.8	7.8	Ao	5	2,2	38164i	67	520	48.4	-49 7	8.5	10.0	Ko	3	..	39676b
18	424	48.1	+57 47	8.5	9.1	Go	3	..	38164i	68	521	48.4	-49 10	9.4	10.1	Ko	1	..	39676b
19	416	48.1	+53 24	8.2	9.0	G5	3	..	38600i	69	120	48.4	-72 27	9.1	9.5	F5	8	..	38146b
20	248	48.1	+12 11	7.10	7.52	F5	6	..	37468i	70	123	48.5	+69 43	8.0	9.2	K5	3	..	37308i
21	312	48.1	-2 1	8.9	9.4	F8	3	..	10630b	71	491	48.5	+49 48	7.17	8.24	K2	1	..	2089b
22	336	48.1	-17 26	5.72	5.80	A3	10	..	12240b	72	400	48.5	+40 24	8.9	9.9	Ko	2	..	38055i
23	648	48.1	-27 45	8.3	9.2	Go	4	0,3	12241b	73	651	48.5	-33 16	8.3	7.8	A2	7	..	15113b
24	627	48.1	-29 10	9.4	10.0	F5	3	..	15113b	74	348	48.5	-56 16	7.3	8.4	F5	6	5,5	45176b
25	568	48.1	-39 4	9.3	9.5	G5	4	..	45154b	75	80	48.6	+75 52	7.92	8.70	G5	3	..	37615i
26	470	48.1	-39 54	7.98	8.8	G5	3	..	12229b	76	330	48.6	+59 7	8.6	8.6	Ao	4	..	38164i
27	545	48.1	-44 13	9.5	10.4	F8	2	..	45156b	77	386	48.6	+56 36	7.64	7.64	Ao	7	..	38164i
28	134	48.1	-63 44	9.4	9.9	F8	3	..	23773b	78	385	48.6	+56 32	7.6	8.2	Go	3	..	38164i
29	169	48.2	+68 12	5.03	4.98	B8	..	R	56,73	79	431	48.6	+40 9	7.27	8.34	K2	3	..	37474i
30	390	48.2	+50 37	9.2	9.3	A2	2	..	38600i	80	254	48.6	+23 39	8.7	8.8	A3	2	..	38883i
31	327	48.2	+5 3	9.20	9.76	Go	2	5,1	10441b	81	652	48.6	-33 49	8.1	8.5	F8	7	..	15113b
32	288	48.2	-0 7	9.4	10.2	G5	2	..	10630b	82	722	48.6	-34 46	9.68	10.2	Go	2	..	15113b
33	336	48.2	-14 57	8.9	9.7	G5	3	..	12240b	83	651	48.6	-35 9	10.3	10.2	F8	2	..	15113b
34	338	48.2	-16 59	8.3	9.3	Ko	2	..	12240b	84	526	48.6	-50 1	9.3	9.4	G	3	R	39676b
35	720	48.2	-34 42	8.3	8.1	Fo	7	..	15113b	85	154	48.6	-59 24	8.2	9.4	Ko	2	..	12034b
36	649	48.2	-35 34	9.7	8.7	F5	3	..	15113b	86	124	48.6	-67 41	10.9	10.9	Ao	4	..	38146b
37	569	48.2	-39 15	8.3	8.5	A5	6	3,5	45156b	87	21	48.6	-86 12	9.6	10.6	Ko	1	..	15145b
38	523	48.2	-50 11	10.5	10.6	Go	1	..	39676b	88	87	48.7	+74 50	6.70	7.48	G5	6	..	37615i
39	367	48.2	-57 52	8.6	9.6	Fo	2	..	45176b	89	435	48.7	+51 44	8.8	8.8	Ao	4	..	38600i
40	135	48.2	-63 47	9.1	9.6	F8	4	..	23773b	90	432	48.7	+39 47	8.1	8.4	Fo	3	..	37474i
41	170	48.3	+67 52	9.2	9.3	A2	2	..	37308i	91	405	48.7	+37 32	8.6	8.9	Fo	4	..	37474i
42	322	48.3	+63 10	8.2	8.3	A2	3	..	38974i	92	235	48.7	+10 8	7.00	7.42	F5	7	..	37468i
43	325	48.3	+59 1	8.1	8.2	A5	5	2,3	38164i	93	314	48.7	-1 51	9.3	9.7	F5	2	..	10630b
44	437	48.3	+56 5	6.99	7.77	G5	5	..	38164i	94	364	48.7	-10 55	7.79	8.79	Ko	6	E	24576b
45	490	48.3	+49 21	9.9	10.0	A3	..	..	M	95	346	48.7	-12 57	8.9	9.9	Ko	4	..	24576b
46	523	48.3	+47 17	8.1	8.1	Ao	1	..	38600i	96	800	48.7	-24 41	8.25	9.7	K5	3	..	12366b
47	319	48.3	+25 17	7.81	8.09	Fo	4	..	19385i	97	653	48.7	-33 18	8.4	8.1	F5	6	..	15113b
48	331	48.3	-21 28	9.0	9.8	Go	3	..	45170b	98	577	48.7	-43 37	10.1	11.5	Ko	1	..	45156b
49	675	48.3	-26 20	8.7	9.5	K2	4	0,3	45170b	99	547	48.7	-46 17	9.9	10.4	F8	2	..	45156b
50	650	48.3	-33 45	9.6	9.2	Go	4	..	15113b	100	498	48.7	-48 11	9.5	9.4	Fo	4	0,2	39684b

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1^h 48^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	349	48.7	-56 37	10.3	11.4	K2	1	..	39676b	51	305	49.2	+ 1 5	9.59	10.15	Go	1	..	10441b
2	125	48.7	-67 9	9.3	10.1	G5	3	..	38146b	52	327	49.2	+16 29	9.1	9.7	Go	4	0,2	40765b
3	80	48.7	-71 43	10.3	11.3	Ko	4	..	38146b	53	369	49.2	-53 11	8.2	8.7	K2	3	..	12034b
4	35	48.7	-80 41	6.06	6.3	Fo	6	R	42714b	54	95	49.2	-68 38	9.1	9.2	A2	6	E	20429b
5	352	48.8	+61 53	7.8	7.8	Ao	4	..	38164i	55	144	49.2	-76 50	10.2	10.5	F2	3	..	23772b
6	331	48.8	+58 47	7.04	6.87	B3	4	2,8	38974i	56	36	49.2	-80 12	9.1	10.3	K5	1	..	23772b
7	433	48.8	+39 27	7.44	8.22	G5	4	..	37474i	57	428	49.3	+57 28	9.0	9.6	Go	2	..	38164i
8	333	48.8	-21 45	9.3	10.7	Ko	2	..	45170b	58	394	49.3	+51 11	7.25	8.25	Ko	6	..	38600i
9	111	48.9	+71 13	7.14	7.20	A2	6	..	37308i	59	480	49.3	+45 38	8.5	8.5	Ao	2	..	38055i
10	427	48.9	+57 52	9.4	9.5	A2	1	..	38164i	60	216	49.3	+17 4	8.7	9.0	Fo	4	..	38883i
11	477	48.9	+45 41	8.8	8.8	Ao	3	..	38055i	61	298	49.3	+ 6 33	9.4	10.4	Ko	1	..	38034i
12	..	48.9	+41 37	..	..	Ma	..	..	M	62	306	49.3	+ 1 9	9.49	10.05	Go	2	..	10441b
13	434	48.9	+49 12	6.50	7.57	K2	5	..	37474i	63	349	49.3	-12 8	8.1	9.1	Ko	3	..	10360b
14	334	48.9	+31 21	8.9	9.3	F5	2	..	37371i	64	655	49.3	-30 48	8.3	9.7	Go	3	..	15113b
15	319	48.9	+26 58	8.7	9.7	K	1	..	19385i	65	582	49.3	-43 52	9.9	11.3	Ko	1	..	45156b
16	236	48.9	+ 9 26	8.1	8.9	G5	2	E	37468i	66	499	49.3	-48 38	9.9	10.0	Go	3	..	39684b
17	290	48.9	+ 9 6	9.2	10.3	K2	3	..	12024b	67	452	49.3	-51 27	9.7	10.0	Fo	3	..	39676b
18	336	48.9	- 5 46	9.0	9.3	F2	3	..	10360b	68	352	49.3	-56 52	8.2	9.1	Ko	3	0,3	12034b
19	339	48.9	-15 29	8.8	9.0	K2	2	..	45693b	69	383	49.4	+60 47	7.34	7.34	Ao	5	..	38974i
20	135	48.9	-74 16	8.6	8.7	A3	4	..	23772b	70	372	49.4	+35 30	8.3	8.7	F5	4	..	37474i
21	45	48.9	-78 59	8.8	8.8	Ao	4	..	14358b	71	319	49.4	+28 18	7.27	7.61	F2	6	0,4	37371i
22	380	49.0	+61 11	8.9	9.0	A3	1	..	38164i	72	322	49.4	+27 4	7.9	7.9	Ao	4	..	37371i
23	439	49.0	+55 27	8.8	10.0	K5	2	..	38164i	73	296	49.4	+13 16	8.0	8.8	G5	6	..	37468i
24	346	49.0	+36 37	6.39	7.39	Ko	6	0,4	37474i	74	260	49.4	- 1 42	8.82	8.88	A2	3	..	10630b
25	316	49.0	+28 39	9.3	9.4	A2	2	..	19385i	75	339	49.4	- 7 52	8.5	9.1	Go	2	..	10360b
26	260	49.0	+ 4 5	8.9	9.5	Go	3	..	10441b	76	350	49.4	-12 21	8.3	9.3	Ko	2	..	12240b
27	353	49.0	- 9 9	8.7	9.1	F5	2	..	10360b	77	531	49.4	-50 24	10.8	10.9	Ko	1	..	39676b
28	653	49.0	-29 55	10.2	10.6	F5	2	..	15113b	78	371	49.4	-57 9	9.1	9.6	F8	3	E	39676b
29	724	49.0	-34 4	7.17	8.4	Ko	7	..	15113b	79	436	49.5	+39 58	8.7	8.8	A2	2	..	37474i
30	658	49.0	-42 2	9.3	10.9	F8	2	..	45156b	80	323	49.5	+26 47	8.1	8.9	G5	2	..	19385i
31	154	49.0	-60 49	9.0	10.3	K2	1	..	23773b	81	297	49.5	+13 39	8.9	9.7	G5	2	..	37468i
32	356	49.1	+60 5	8.61	9.17	Go	2	..	38164i	82	367	49.5	-11 31	8.9	9.9	Ko	3	E	24576b
33	416	49.1	+54 59	8.7	8.7	Ao	4	..	38164i	83	328	49.5	-16 13	9.6	10.4	G5	3	0,2 R	40765b
34	525	49.1	+47 26	9.5	10.5	Ko	1	..	38600i	84	235	49.5	-52 24	10.2	10.8	Go	1	..	39676b
35	318	49.1	+33 15	8.7	9.5	G5	3	..	37474i	85	334	49.6	+58 42	9.5	9.6	A5	2	..	38164i
36	306	49.1	+20 19	2.72	2.86	A5	..	R	6046c	86	444	49.6	+55 30	9.9	9.9	Ao	2	..	38164i
37	257	49.1	+10 54	7.40	8.40	Ko	5	..	37468i	87	417	49.6	+55 10	8.46	8.54	A3	4	0,3	38164i
38	237	49.1	+ 9 51	8.3	8.8	F8	2	..	37468i	88	438	49.6	+51 28	9.4	9.4	Ao	2	..	38600i
39	291	49.1	+ 9 3	8.9	8.9	Ao	4	..	38034i	89	397	49.6	+42 20	7.48	7.82	F2	5	..	38055i
40	292	49.1	+ 8 17	7.05	8.40	Ma	4	..	38034i	90	294	49.6	+ 2 53	8.1	8.4	F2	3	..	37433i
41	332	49.1	-19 30	9.3	9.9	Go	3	5,2	40765b	91	360	49.6	- 6 46	7.93	8.71	G5	3	..	10360b
42	697	49.1	-23 37	9.4	10.4	F5	2	..	45170b	92	657	49.6	-33 16	10.3	10.3	F8	3	..	15113b
43	573	49.1	-39 6	6.10	7.3	Ko	8	..	12229b	93	728	49.6	-34 17	9.3	10.0	G5	2	..	15113b
44	574	49.1	-39 42	9.1	10.9	K2	1	..	45154b	94	643	49.6	-38 17	9.1	10.0	G5	2	..	45154b
45	393	49.1	-54 31	8.5	9.6	K2	2	..	12034b	95	552	49.6	-46 48	4.41	6.4	Mb	..	0,8 R	28,195
46	143	49.1	-76 36	8.8	9.6	G5	5	..	23772b	96	15	49.7	+88 0	7.84	7.92	A3	4	..	37281i
47	440	49.2	+55 20	8.6	8.6	Ao	3	..	38164i	97	466	49.7	+53 7	8.6	9.0	F5	1	..	37356i
48	415	49.2	+55 5	8.16	8.94	G5	5	..	38164i	98	296	49.7	+ 8 17	8.9	9.5	Go	2	..	38034i
49	420	49.2	+53 50	8.49	8.77	Fo	2	..	37356i	99	319	49.7	- 7 6	8.2	8.6	F5	5	..	10360b
50	300	49.2	+27 20	7.50	8.28	G5	6	..	19385i	100	318	49.7	- 7 31	8.7	9.5	G5	2	..	10360b

THE HENRY DRAPER CATALOGUE.

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1^h 49^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	236	49.7	52 23	9.3	10.6	Ko	2	..	39676b	51	260	50.2	+11 9	9.2	10.2	Ko	1	..	38034i
2	156	49.7	59 55	8.72	9.7	G5	3	..	45176b	52	282	50.2	- 3 10	9.6	10.2	Go	2	..	10630b
3	121	49.7	72 25	9.7	10.1	F5	7	..	38146b	53	583	50.2	-43 0	5.00	4.98	B9	..	R	28,195
4	146	49.8	+70 21	8.74	8.74	Ao	2	..	37308i	54	365	50.2	-55 15	8.2	9.1	Go	4	..	12034b
5	527	49.8	+48 0	8.2	8.6	F5	3	..	2089b	55	112	50.3	+72 40	7.10	7.88	G5	4	..	37615i
6	374	49.8	+35 51	8.7	9.3	Go	2	..	37474i	56	137	50.3	+68 57	9.2	9.5	Fo	2	..	37308i
7	302	49.8	+14 52	8.1	9.1	Ko	4	..	37468i	57	216	50.3	+65 57	8.7	9.1	F5	2	..	37308i
8	292	49.8	- 0 17	9.1	9.6	F8	2	..	10630b	58	..	50.3	+62 49	..	..	Pd	..	..	76,21
9	316	49.8	- 1 59	9.1	9.6	F8	1	..	10630b	59	477	50.3	+46 47	8.5	9.6	K2	2	E	38055i
10	361	49.8	- 6 9	9.9	9.9	A	2	..	10360b	60	484	50.3	+45 29	8.0	8.5	F8	4	0,3	38055i
11	356	49.8	-14 25	8.7	9.1	F5	5	..	12240b	61	377	50.3	+35 34	8.7	8.8	A5	2	..	37474i
12	747	49.8	-25 2	9.2	10.0	F5	2	..	45170b	62	326	50.3	+29 13	8.5	8.6	A2	4	0,2	37371i
13	736	49.8	-31 53	9.1	9.4	Go	3	..	15113b	63	284	50.3	+23 5	5.95	6.95	Ko	8	0,8R	19385i
14	370	49.8	-53 45	8.4	9.1	Ko	4	..	12034b	64	251	50.3	+12 5	7.66	8.44	G5	5	..	37468i
15	32	49.8	-83 11	8.25	8.4	Fo	5	..	20538b	65	252	50.3	+11 19	9.1	9.7	Go	2	E	38034i
16	386	49.9	+60 45	8.0	9.0	Ko	1	..	38164i	66	399	50.3	-10 19	8.1	8.9	G5	3	..	10360b
17	389	49.9	+44 18	8.8	9.1	F2	2	..	38055i	67	707	50.3	-23 17	10.2	10.5	Go	1	..	45170b
18	394	49.9	+43 37	8.9	9.0	A5	1	..	38055i	68	562	50.3	-46 28	8.2	9.2	Ko	2	..	12227b
19	399	49.9	+42 34	7.51	8.58	K2	4	..	38055i	69	395	50.3	-54 19	9.3	9.9	A2	2	..	39676b
20	415	49.9	+37 22	8.2	9.0	G5	3	..	37474i	70	67	50.4	+82 4	8.5	9.9	Ma	..	..	M
21	323	49.9	+25 37	8.1	8.9	G5	2	..	19385i	71	173	50.4	+68 3	8.6	9.7	K2	3	..	37308i
22	317	49.9	- 2 25	9.6	10.1	F8	2	..	10630b	72	390	50.4	+60 46	9.5	9.5	A	1	..	38164i
23	688	49.9	-26 51	8.2	9.8	Ko	3	..	41071b	73	444	50.4	+51 59	7.7	8.9	K5	4	..	38600i
24	664	49.9	-42 11	9.3	10.4	Go	2	..	45156b	74	400	50.4	+50 55	9.4	10.6	K5	1	..	38600i
25	457	49.9	-51 22	9.4	10.1	F8	4	..	39676b	75	297	50.4	+ 3 5	8.6	8.7	A5	2	..	10441b
26	88	50.0	+74 59	9.2	9.5	F2	1	..	38972i	76	331	50.4	-15 50	8.7	9.7	Ko	3	..	12240b
27	354	50.0	+36 47	6.06	7.13	K2	6	0,4	37474i	77	332	50.4	-16 2	9.3	9.8	F8	2	..	40765b
28	303	50.0	+27 33	9.1	9.1	Ao	4	..	19385i	78	809	50.4	-24 39	10.4	10.3	G5	1	..	45170b
29	217	50.0	+16 43	8.3	9.7	Mb	3	..	37468i	79	734	50.4	-34 2	10.7	10.2	F8	2	..	15113b
30	262	50.0	+ 5 55	8.1	8.1	B9	6	..	37433i	80	374	50.5	+41 24	6.75	6.73	B9	7	..	38055i
31	352	50.0	-12 0	8.7	9.5	G5	6	E	24576b	81	326	50.5	+26 59	8.8	9.4	Go	4	..	19385i
32	150	50.0	-62 11	9.0	10.1	K2	3	..	23773b	82	285	50.5	+22 47	9.1	9.9	G5	2	..	38883i
33	96	50.0	-68 27	6.8	6.8	Ao	8	..	42851b	83	285	50.5	+17 58	8.5	8.9	F5	4	..	38883i
34	360	50.1	+59 30	8.6	8.6	Ao	3	..	38164i	84	358	50.5	-14 36	8.9	9.4	F8	5	..	40765b
35	468	50.1	+52 48	6.99	6.99	Ao	5	..	37356i	85	756	50.5	-25 23	7.12	8.2	Ko	8	..	12366b
36	324	50.1	+29 52	6.82	6.96	A5	6	5,6	37326i	86	791	50.5	-31 43	8.9	9.4	Go	3	..	15113b
37	284	50.1	+17 44	8.7	9.7	Ko	2	..	38883i	87	792	50.5	-31 49	9.7	9.4	F8	3	..	15113b
38	250	50.1	+11 45	8.9	9.9	Ko	1	E	38034i	88	97	50.5	-68 41	9.9	10.9	Ko	3	..	20429b
39	300	50.1	+ 6 47	9.1	9.9	G5	2	..	38034i	89	174	50.6	+67 47	9.5	9.9	F5	1	..	37308i
40	281	50.1	- 3 32	9.6	10.1	F8	2	..	10630b	90	285	50.6	+17 58	8.5	8.8	F2	2	..	37318i
41	502	50.1	-48 17	9.7	10.9	G5	2	..	39684b	91	356	50.6	- 9 6	8.5	9.1	Go	2	..	10360b
42	525	50.1	-49 21	10.1	10.3	G5	2	..	39676b	92	350	50.6	-13 9	8.5	9.1	Go	3	..	12240b
43	155	50.1	-65 23	9.4	9.8	F5	5	..	38146b	93	810	50.6	-24 39	8.5	8.5	F2	6	..	12366b
44	268	50.2	+64 55	7.95	7.78	B3	3	..	37308i	94	581	50.6	-47 11	10.8	11.0	Go	2	..	39684b
45	361	50.2	+59 59	9.9	9.9	A	1	..	38164i	95	354	50.6	-56 32	9.5	10.3	G5	2	..	39676b
46	441	50.2	+51 50	8.7	8.7	Ao	4	..	38600i	96	117	50.6	-66 43	9.4	9.8	F5	5	..	38146b
47	503	50.2	+50 8	9.37	9.37	Ao	3	..	38600i	97	126	50.6	-67 22	10.1	10.1	A	3	..	38146b
48	401	50.2	+42 22	8.9	9.0	A5	2	..	38055i	98	123	50.6	-72 9	10.5	10.9	F5	6	..	38146b
49	355	50.2	+36 46	5.82	6.82	Ko	6	5,7	10316i	99	33	50.6	-82 54	9.3	10.1	G5	2	..	20538b
50	344	50.2	+33 6	8.8	8.9	A2	4	..	37474i	100	363	50.7	+59 43	8.16	9.34	K5	2	..	38164i

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1^h 50^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	396	50.7	+43 42	8.6	9.2	Go	4	..	2089b	51	222	51.3	+17 1	8.6	9.1	F8	3	..	38883i
2	255	50.7	+11 47	8.7	9.3	Go	3	..	37468i	52	303	51.3	-4 41	8.40	8.68	Fo	4	..	10630b
3	347	50.7	+1 21	6.18	6.74	Go	7	..	37433i	53	351	51.3	-17 27	8.9	9.7	G5	2	..	40765b
4	302	50.7	-4 38	9.25	10.03	G5	1	..	10630b	54	646	51.3	-29 37	7.44	8.2	Ko	7	..	15113b
5	338	50.7	-21 18	8.7	10.0	K5	2	..	45170b	55	372	51.3	-53 19	9.9	10.3	F5	2	..	39676b
6	318	50.7	-22 33	9.0	9.6	F5	2	..	45170b	56	22	51.3	-86 18	8.9	9.9	Ko	4	..	15145b
7	759	50.7	-25 3	9.5	9.2	F2	4	..	12366b	57	398	51.4	+61 12	6.05	6.00	B8	9	..	38974i
8	758	50.7	-25 52	8.5	8.8	Ao	6	1,8	45170b	58	365	51.4	+59 43	9.2	9.2	A	1	..	38164i
9	166	50.7	-58 25	7.4	8.9	K2	5	3,4	12034b	59	366	51.4	+59 33	8.8	8.8	Ao	4	..	38164i
10	104	50.8	+73 29	8.4	8.7	Fo	3	..	38972i	60	341	51.4	+59 8	6.58	6.58	Ao	4	2,10	37342i
11	422	50.8	+37 33	9.2	9.8	G	3	R	37474i	61	254	51.4	+13 7	8.5	9.3	G5	3	..	37468i
12	421	50.8	+37 32	9.3	9.9	G	3	R	37474i	62	337	51.4	-16 16	9.6	10.8	K5	1	..	40765b
13	330	50.8	+29 57	8.3	8.6	Fo	4	5,4	37371i	63	341	51.4	-19 7	8.7	8.8	F2	4	..	12240b
14	305	50.8	+19 14	8.5	9.0	F8	3	..	38883i	64	36	51.4	-81 51	7.52	8.9	Ko	7	..	20538b
15	348	50.8	+1 40	9.4	9.4	Ao	1	..	10441b	65	400	51.5	+61 3	7.41	8.48	K2	2	2,1	38974i
16	338	50.8	-19 23	9.6	10.3	Ko	2	..	40765b	66	435	51.5	+57 22	8.1	8.2	A2	6	..	38164i
17	730	50.8	-35 57	8.7	9.9	Ko	3	E	15113b	67	396	51.5	+56 25	8.9	8.9	Ao	2	..	38164i
18	523	50.8	-41 28	8.7	8.8	F2	5	..	45156b	68	427	51.5	+53 51	8.89	8.89	Ao	3	E	38164i
19	665	50.8	-42 10	9.3	10.8	G5	2	..	45156b	69	401	51.5	+44 4	8.0	8.0	Ao	3	..	38055i
20	462	50.8	-51 7	9.2	10.1	K2	3	..	39676b	70	302	51.5	+8 58	8.9	10.0	K2	2	..	38034i
21	392	50.9	+60 42	8.26	9.44	K5	1	..	38164i	71	303	51.5	+6 59	9.4	10.4	K	1	R	38034i
22	539	50.9	-50 18	10.8	11.4	Ko	1	..	39676b	72	313	51.5	+1 10	9.09	9.65	Go	3	..	10441b
23	147	50.9	-76 29	8.3	8.8	F8	7	..	23772b	73	795	51.5	-31 26	8.9	10.0	Go	2	..	23790b
24	171	51.0	+67 5	8.4	8.4	Ao	5	..	37308i	74	175	51.6	+66 33	7.35	7.43	A3	6	..	37308i
25	339	51.0	+58 38	9.7	9.7	A	1	..	38164i	75	437	51.6	+57 37	8.4	8.8	F5	4	..	38164i
26	531	51.0	+47 43	8.9	8.9	A	2	..	38600i	76	817	51.6	-23 54	8.5	9.1	F8	5	..	12366b
27	248	51.0	+18 49	9.4	10.2	G5	2	..	38883i	77	671	51.6	-30 19	9.1	10.3	Go	2	..	15113b
28	665	51.0	-26 59	9.2	9.8	G5	3	..	41071b	78	737	51.6	-36 44	7.51	7.6	A2	7	E	41068b
29	599	51.0	-28 12	8.7	9.1	G5	4	5,4	15113b	79	666	51.6	-42 5	9.3	10.0	Go	3	..	45156b
30	37	51.0	-80 52	8.8	9.1	Fo	4	..	23772b	80	565	51.6	-44 21	8.9	10.4	G5	1	..	45156b
31	364	51.1	+59 54	8.0	8.1	A3	3	..	38164i	81	543	51.6	-50 52	10.1	10.1	Go	3	..	39676b
32	407	51.1	+50 38	9.2	9.6	F5	2	..	38600i	82	85	51.6	-69 51	9.7	10.5	G5	4	..	38146b
33	300	51.1	+8 0	8.3	8.9	Go	4	..	38034i	83	574	51.7	+49 9	7.03	8.10	K2	4	..	38600i
34	349	51.1	-17 43	8.9	9.3	F5	2	..	45693b	84	485	51.7	+46 36	6.53	7.53	Ko	5	..	2089b
35	339	51.1	-21 3	7.94	8.2	F2	4	3,6-	12240b	85	370	51.7	+37 11	8.2	9.2	Ko	6	..	37474i
36	649	51.1	-37 56	10.7	10.8	Go	1	..	39654b	86	369	51.7	+36 17	8.2	8.5	Fo	3	..	37474i
37	434	51.2	+57 28	8.6	8.6	Ao	3	..	38164i	87	818	51.7	-24 38	9.1	9.1	Go	3	..	12366b
38	491	51.2	+45 50	8.9	8.9	Ao	2	E	38055i	88	819	51.7	-24 44	7.95	9.4	K2	4	..	12366b
39	377	51.2	+41 17	8.0	8.0	Ao	5	..	38055i	89	763	51.7	-25 46	8.7	8.8	F8	8	..	12366b
40	321	51.2	-22 19	8.7	8.6	F5	5	3,4	12366b	90	592	51.7	-43 33	9.3	9.5	F8	3	..	12229b
41	650	51.2	-38 39	9.6	10.6	Go	2	..	39654b	91	127	51.7	-67 24	9.1	10.1	Ko	4	..	38146b
42	582	51.2	-39 47	9.7	9.7	F5	3	3,3	39654b	92	176	51.8	+67 44	9.5	9.8	Fo	2	..	37308i
43	46	51.2	-79 2	9.0	10.0	Ko	3	..	23772b	93	494	51.8	+45 59	8.7	9.9	K5	1	E	38055i
44	83	51.3	+75 28	7.42	8.42	K	2	..	37615i	94	392	51.8	+45 6	8.17	8.31	A5	3	..	38055i
45	140	51.3	+69 9	9.2	9.3	A2	3	..	37308i	95	381	51.8	+38 44	9.1	9.2	A2	3	..	37474i
46	173	51.3	+66 44	8.7	8.8	A2	3	..	37308i	96	327	51.8	+33 39	8.3	9.3	Ko	3	..	37474i
47	474	51.3	+52 41	8.4	9.4	Ko	1	..	38600i	97	251	51.8	+18 47	9.4	10.2	G5	2	..	38883i
48	406	51.3	+40 16	8.72	8.72	Ao	4	..	38055i	98	298	51.8	-0 44	8.9	9.9	Ko	2	..	10630b
49	303	51.3	+30 32	7.71	8.13	F5	4	0,4	37326i	99	653	51.8	-38 19	8.1	9.5	K5	3	3,3	45154b
50	287	51.3	+22 33	8.1	8.9	G5	4	..	38883i	100	567	51.8	-44 47	9.95	11.3	Ko	1	..	45156b

THE HENRY DRAPER CATALOGUE.

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1^h 51^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	239	51.8	-52 43	9.7	10.3	Go	2	E	39676b	51	409	52.2	+43 7	8.0	8.0	Ao	4	..	2089b
2	376	51.8	-56 55	10.0	11.1	K2	1	..	39676b	52	346	52.2	- 8 19	7.65	8.43	G5	4	5,4	37402i
3	172	51.8	-58 51	8.3	8.8	F8	5	..	45176b	53	823	52.2	-24 5	9.2	9.7	F8	3	..	45170b
4	393	51.9	+45 0	8.4	10.2	G5	1	..	38055i	54	669	52.2	-33 28	8.4	9.7	Ko	3	..	15113b
5	407	51.9	+41 12	6.58	6.56	B9	8	..	38055i	55	511	52.2	-48 44	9.5	10.1	Ko	2	..	39684b
6	409	51.9	+40 28	8.14	8.14	Ao	4	..	38055i	56	367	52.2	-55 34	6.86	7.4	A2	9	..	45176b
7	408	51.9	+40 16	6.84	7.26	F5	6	..	37474i	57	128	52.2	-67 29	9.0	10.1	K2	4	..	38146b
8	437	51.9	+37 57	8.1	8.9	G5	3	..	37474i	58	114	52.3	+72 55	8.2	9.0	G5	2	..	37615i
9	289	51.9	+17 20	5.16	5.94	G5	8	0,8R	16948i	59	334	52.3	+62 50	8.9	8.9	Ao	1	..	38974i
10	244	51.9	+ 9 55	9.4	10.2	G5	1	..	10442b	60	371	52.3	+59 58	9.0	9.1	A2	3	..	38164i
11	666	51.9	-32 59	9.4	10.6	Ko	2	..	15113b	61	310	52.3	+30 39	7.21	8.56	Mb	4	0,4	37371i
12	240	51.9	-52 38	8.9	9.7	G5	4	..	39676b	62	311	52.3	+28 2	7.8	7.8	Ao	6	0,6	37326i
13	163	51.9	-59 46	9.38	10.0	A2	2	..	23773b	63	306	52.3	+13 53	8.2	8.6	F5	6	..	37468i
14	118	51.9	-66 29	9.7	10.1	F5	4	..	38146b	64	403	52.3	-10 44	6.53	7.31	G5	6	5,8	37402i
15	100	51.9	-70 1	8.5	9.5	Ko	6	0,7	20429b	65	545	52.3	-50 20	6.54	6.9	B8	..	0,6	56,119
16	125	51.9	-72 45	8.9	9.7	G5	8	..	38146b	66	126	52.3	-72 31	8.8	9.6	G5	9	..	38146b
17	61	52.0	+80 31	8.7	8.7	A	1	..	37227i	67	32	52.3	-81 54	9.7	10.0	Fo	2	..	20538b
18	403	52.0	+61 3	8.2	8.2	Ao	4	2,2	38164i	68	416	52.4	+50 23	8.7	8.8	A2	2	..	38600i
19	439	52.0	+57 17	8.8	10.0	K5	1	..	38164i	69	397	52.4	+44 36	8.0	9.2	K5	2	..	38055i
20	397	52.0	+56 47	9.2	9.2	Ao	2	..	38164i	70	412	52.4	+40 25	8.3	9.1	G5	2	..	38055i
21	455	52.0	+55 35	9.2	9.2	Ao	2	..	38164i	71	447	52.4	+40 3	8.82	9.32	F8	2	..	37474i
22	476	52.0	+52 35	7.8	8.6	G5	3	E	38164i	72	383	52.4	+39 13	8.8	9.6	G5	2	..	37474i
23	453	52.0	+52 8	9.4	9.5	A2	2	..	38600i	73	288	52.4	+23 7	4.83	4.97	A5	..	5,R	56,73
24	452	52.0	+51 24	8.0	8.0	Ao	2	..	37356i	74	314	52.4	+20 53	8.3	8.4	F2	4	2,4-	38883i
25	510	52.0	+49 25	8.6	8.7	A2	3	..	38600i	75	704	52.4	-26 7	7.44	8.8	Ko	9	..	12366b
26	411	52.0	+40 54	7.44	8.22	G5	6	..	38055i	76	677	52.4	-29 55	9.7	10.3	G	1	..	15113b
27	328	52.0	+33 20	7.97	7.95	B9	5	0,4-	37474i	77	101	52.4	-68 9	4.72	6.3	Ko	..	0,R	28,195
28	310	52.0	+27 18	6.02	7.37	Mb	6	0,8-	37371i	78	176	52.5	+66 53	8.0	9.0	Ko	1	..	37308i
29	333	52.0	-18 30	8.9	9.5	G	3	..	40765b	79	398	52.5	+44 55	7.80	9.15	Mb	5	E	37578i
30	721	52.0	-23 1	5.18	6.6	K5	..	3,8-	28,195	80	225	52.5	+17 3	8.7	9.2	F8	4	..	38883i
31	609	52.0	-28 3	8.1	9.8	Ko	2	0,2	12241b	81	246	52.5	+ 9 49	9.1	9.6	F8	3	..	38034i
32	650	52.0	-29 21	8.2	9.4	Ko	3	..	15113b	82	330	52.5	- 7 19	7.9	8.0	A2	8	0,5	10360b
33	798	52.0	-31 37	9.1	9.7	F8	3	..	15113b	83	349	52.5	- 8 1	8.5	9.5	Ko	2	..	10360b
34	744	52.0	-34 14	8.3	9.3	Ko	5	..	15113b	84	357	52.5	-16 55	8.30	9.48	K5	4	..	40765b
35	675	52.0	-35 19	10.3	10.8	Go	1	..	45154b	85	336	52.5	-18 10	7.70	8.88	K5	4	..	12240b
36	510	52.0	-48 19	9.1	10.0	Ko	3	0,3	39684b	86	673	52.5	-27 18	9.9	9.5	Go	2	..	41071b
37	241	52.0	-52 7	3.73	4.51	G5	..	R	28,195	87	747	52.5	-34 11	10.7	10.8	Go	2	..	15113b
38	374	52.0	-53 20	9.8	10.8	K	1	..	39676b	88	632	52.5	-45 19	8.5	9.2	F5	5	0,2	45156b
39	134	52.0	-75 7	9.7	10.5	G5	2	..	23772b	89	369	52.5	-54 54	9.20	10.0	K5	3	..	39676b
40	66	52.1	+78 24	8.1	8.4	Fo	3	..	37309i	90	137	52.5	-63 34	8.5	8.6	A2	7	..	23773b
41	252	52.1	+18 30	9.1	9.4	F2	2	..	38883i	91	381	52.6	+35 45	7.9	8.7	G5	3	..	37474i
42	767	52.1	-24 58	8.60	8.8	Fo	6	..	12366b	92	675	52.6	-27 8	7.9	8.8	Ko	5	..	41071b
43	750	52.1	-32 38	6.52	7.5	G5	9	..	15113b	93	800	52.6	-31 35	7.31	8.1	Ko	7	..	15113b
44	162	52.1	-60 48	6.55	7.1	Fo	10	2,8	12034b	94	655	52.6	-38 26	10.1	10.4	F2	2	3,2	45154b
45	90	52.2	+74 43	8.9	8.9	Ao	1	..	38972i	95	157	52.6	-61 22	6.22	6.3	Fo	8	0,R	45176b
46	265	52.2	+64 8	5.18	5.18	Ao	..	0,9	56,73	96	373	52.7	+59 31	7.7	8.9	K5	4	..	38164i
47	404	52.2	+60 39	9.2	9.2	Ao	2	..	38164i	97	353	52.7	- 5 43	9.3	10.1	G5	2	..	10360b
48	429	52.2	+55 5	8.12	8.26	A5	6	0,3	38164i	98	827	52.7	-24 29	8.3	9.1	Ko	5	..	12366b
49	576	52.2	+48 43	5.78	6.56	G5	7	..	2089b	99	705	52.7	-26 43	8.9	9.8	Ko	3	..	41071b
50	534	52.2	+47 55	8.7	8.7	B9	3	..	38600i	100	613	52.7	-28 14	9.2	9.7	F5	2	E	15113b

12000

1^h 52^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	749	52.7	-34 10	9.7	9.6	Go	3	..	15113b	51	360	53.2	+32 44	7.10	7.88	G5	4	5,6-	37326i
2	748	52.7	-34 26	7.9	7.9	Fo	8	..	15113b	52	335	53.2	+28 23	8.7	9.5	G5	1	E	38973i
3	599	52.7	-43 40	7.7	7.8	A2	6	..	12229b	53	286	53.2	+15 27	8.1	8.7	Go	5	5,3	37468i
4	119	52.7	-66 11	8.3	8.9	Go	7	5,4	38146b	54	264	53.2	+10 19	8.67	8.81	A5	2	E	37468i
5	73	52.8	+77 26	6.35	7.35	Ko	4	..	37227i	55	597	53.2	-47 53	4.74	6.0	G5	..	5,10	28,195
6	577	52.8	+48 43	9.4	9.4	Ao	2	..	38600i	56	397	53.2	-54 39	9.4	9.9	F8	4	..	39676b
7	382	52.8	+36 7	7.14	7.20	A2	6	0,4	37474i	57	168	53.2	-58 58	7.4	8.1	F5	8	3,8	45176b
8	357	52.8	+33 5	8.2	8.3	A2	4	3,2-	37474i	58	167	53.2	-60 43	9.1	10.0	K2	1	..	45176b
9	351	52.8	-15 31	9.9	10.9	Ko	2	..	40765b	59	120	53.2	-72 59	8.8	9.9	K2	7	..	38146b
10	338	52.8	-18 13	8.9	9.3	F5	3	..	40765b	60	375	53.3	+59 25	8.5	8.9	F5	5	..	38164i
11	547	52.8	-49 54	8.47	8.9	F8	3	0,2	12227b	61	347	53.3	+58 13	8.7	9.1	F5	3	..	38164i
12	102	52.8	-68 24	10.3	11.4	K2	3	..	38146b	62	419	53.3	+43 12	9.0	9.0	Ao	2	E	38055i
13	91	52.9	+75 0	6.64	6.64	Ao	7	1,7	38972i	63	227	53.3	+16 33	8.3	8.7	F5	5	3,5	37468i
14	345	52.9	+58 40	8.2	9.4	K5	2	..	38164i	64	288	53.3	- 2 58	9.3	9.9	Go	2	..	10630b
15	465	52.9	+55 53	9.0	9.3	Fo	3	..	38164i	65	352	53.3	-15 16	8.3	8.9	Go	4	..	12240b
16	464	52.9	+55 18	8.46	8.46	Ao	6	2,2	38164i	66	682	53.3	-26 58	9.7	11.7	Mb	2	..	41071b
17	578	52.9	+48 33	8.8	10.0	K5	1	..	38600i	67	681	53.3	-27 33	9.2	10.0	Ko	2	..	41071b
18	538	52.9	+47 50	8.9	9.0	A2	2	..	38600i	68	664	53.3	-29 20	7.9	8.8	Go	4	..	15113b
19	291	52.9	+17 47	8.9	9.0	A3	4	1,2-	38883i	69	537	53.3	-41 8	8.3	8.8	A5	6	..	45154b
20	330	52.9	- 2 33	6.57	6.57	Ao	8	..	10630b	70	551	53.3	-50 44	9.9	10.3	K2	2	..	39676b
21	329	52.9	- 2 36	9.6	9.6	Ao	4	..	10630b	71	376	53.3	-53 8	9.5	10.5	Ko	1	..	39676b
22	307	52.9	- 4 12	8.7	9.2	F8	3	..	10630b	72	484	53.4	+52 47	8.7	9.5	G5	2	..	38600i
23	681	52.9	-29 57	9.7	10.0	F5	2	..	15113b	73	580	53.4	+48 59	8.0	8.3	Fo	6	2,3	38600i
24	396	52.9	-54 45	8.7	9.6	Ko	2	..	12034b	74	414	53.4	+40 45	8.6	9.4	G5	2	..	38055i
25	431	53.0	+54 20	var.	var.	Md	..	R	56,198	75	331	53.4	- 2 36	8.8	9.8	Ko	3	..	10630b
26	481	53.0	+52 21	9.9	10.0	A2	1	..	38600i	76	334	53.4	- 7 34	7.04	8.39	Ma	5	0,5	37402i
27	378	53.0	+37 12	8.1	8.2	A2	4	0,2	37474i	77	683	53.4	-27 26	8.7	9.1	F2	6	..	41071b
28	380	53.0	+36 40	8.7	9.3	Go	3	..	37474i	78	750	53.4	-37 28	9.0	8.4	F5	7	0,5	45154b
29	333	53.0	+28 54	8.3	9.4	K2	2	2,4	37326i	79	244	53.4	-52 22	10.0	10.8	G5	2	..	39676b
30	364	53.0	-12 27	9.0	9.4	F5	2	..	37402i	80	278	53.5	+64 14	8.8	8.8	Ao	3	..	37308i
31	340	53.0	-16 37	8.1	9.3	K5	5	..	40765b	81	516	53.5	+50 7	9.27	9.27	Ao	2	..	38600i
32	706	53.0	-25 59	9.9	10.0	G5	3	..	45170b	82	292	53.5	+17 52	7.8	8.6	G5	4	0,3-	37318i
33	660	53.0	-38 0	8.3	8.5	Ko	5	0,5	45154b	83	354	53.5	- 8 7	8.5	9.3	G5	3	5,2	10360b
34	571	53.0	-43 57	9.5	9.9	Go	3	..	45156b	84	665	53.5	-29 19	8.2	8.8	F8	3	..	15113b
35	473	53.0	-50 58	10.3	10.0	F8	4	..	39676b	85	752	53.5	-33 54	9.7	10.2	Go	3	..	15113b
36	399	53.1	+44 14	8.2	8.3	A2	2	..	2089b	86	543	53.5	-49 7	9.4	9.7	Go	4	..	39684b
37	357	53.1	- 4 47	8.49	8.49	Ao	3	..	10630b	87	87	53.5	-68 53	7.1	8.1	Ko	3	5,9	42851b
38	373	53.1	- 6 32	9.3	9.7	F5	2	..	10360b	88	350	53.6	+59 10	8.9	9.7	G5	2	..	38164i
39	325	53.1	-22 24	8.3	8.4	G5	6	5,5	12366b	89	486	53.6	+52 46	8.5	8.5	Ao	4	..	38600i
40	745	53.1	-36 33	7.03	7.1	A5	9	0,10	45154b	90	309	53.6	+ 7 9	9.4	10.2	G5	1	..	38034i
41	539	53.1	-49 44	8.37	9.1	Ko	3	0,2	12227b	91	365	53.6	-12 32	8.5	9.5	Ko	3	5,2	12240b
42	242	53.1	-52 16	6.07	6.7	F8	..	0,8-	28,195	92	677	53.6	-33 0	9.4	9.7	Go	3	..	15113b
43	164	53.1	-60 17	8.6	9.1	A2	5	..	45176b	93	753	53.6	-34 36	9.0	9.3	Ko	6	..	15113b
44	165	53.1	-60 41	9.3	9.7	G5	2	..	45176b	94	683	53.6	-35 37	9.0	9.4	F8	4	..	45154b
45	103	53.1	-68 21	9.6	9.9	F2	5	..	20429b	95	372	53.6	-55 38	8.6	9.6	F8	2	..	45176b
46	468	53.2	+55 33	9.2	9.3	A2	4	..	38164i	96	138	53.6	-63 10	9.5	10.1	Go	1	..	23773b
47	458	53.2	+52 8	9.9	10.0	A2	1	..	38600i	97	146	53.6	-73 54	9.1	10.2	K2	2	..	46019b
48	514	53.2	+50 7	9.12	9.18	A2	2	..	38600i	98	447	53.7	+58 3	8.0	8.3	Fo	5	..	38164i
49	504	53.2	+45 39	8.8	10.2	Ma	1	E	38055i	99	446	53.7	+57 23	9.5	9.6	A2	1	..	38164i
50	330	53.2	+33 51	7.65	8.43	G5	3	..	37474i	100	415	53.7	+40 52	7.48	8.26	G5	6	..	38055i

THE HENRY DRAPER CATALOGUE.

12100

1^h 53^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	288	m. 53.7	+24 21	7.8	7.9	A3	6	0,4-	19385i	51	272	54.2	+ 5 59	9.1	9.7	Go	2	..	38034i
2	269	53.7	+ 6 11	8.3	8.6	F2	4	..	10441b	52	373	54.2	- 8 52	8.9	9.0	A3	5	0,4	10360b
3	341	53.7	-15 55	9.0	9.8	G5	2	..	40765b	53	412	54.2	-10 40	8.9	9.5	Go	2	..	37402i
4	685	53.7	-30 42	9.7	10.3	F2	2	..	15113b	54	345	54.2	-18 33	8.3	9.3	Ko	3	..	40765b
5	678	53.7	-32 54	10.3	10.3	Go	2	..	15113b	55	352	54.2	-21 37	7.16	7.9	F5	7	0,8	45170b
6	680	53.7	-33 13	8.8	10.3	Ma	2	..	15113b	56	686	54.2	-33 43	10.3	10.0	G5	2	..	15113b
7	594	53.7	-39 14	9.9	11.5	G5	1	..	39654b	57	546	54.2	-41 39	7.5	7.8	Fo	6	..	12229b
8	246	53.7	-52 41	7.8	7.9	F5	5	..	12034b	58	604	54.2	-43 25	10.5	11.3	Ao	2	..	45156b
9	380	53.7	-57 26	8.7	9.7	K2	3	..	39676b	59	101	54.2	-70 29	9.8	9.9	A5	7	..	38146b
10	37	53.7	-81 31	8.8	9.8	Ko	3	..	20538b	60	155	54.3	+70 49	7.74	9.09	Ma	2	..	37308i
11	153	53.8	+70 25	4.61	4.69	A3	..	I, R	2397c	61	380	54.3	+60 1	8.0	8.3	Fo	4	0,3-	38164i
12	376	53.8	+59 28	6.74	6.74	Ao	3	2,10	37342i	62	488	54.3	+52 29	9.4	10.4	Ko	1	..	38600i
13	448	53.8	+58 1	9.2	9.2	A	1	..	38164i	63	384	54.3	+37 9	8.1	8.2	A5	3	..	37474i
14	541	53.8	+47 58	8.9	9.0	A2	1	..	38600i	64	290	54.3	+15 29	8.1	8.7	Go	4	5,2	37468i
15	310	53.8	+ 7 3	9.1	9.7	G	1	R	38034i	65	302	54.3	- 0 44	8.7	9.3	Go	4	0,2	10630b
16	367	53.8	-11 47	6.63	7.41	G5	6	..	37402i	66	308	54.3	- 4 37	9.6	10.0	F5	1	..	10630b
17	757	53.8	-32 29	9.7	9.4	Go	4	..	15113b	67	711	54.3	-26 21	9.7	10.0	G5	3	5,2	41071b
18	752	53.8	-37 24	9.3	9.6	F5	3	5,2	45154b	68	684	54.3	-27 0	8.9	9.5	G5	4	..	41071b
19	129	53.8	-71 59	11.2	11.8	Go	3	..	38146b	69	763	54.3	-32 43	9.3	10.3	G5	3	..	23790b
20	137	53.8	-75 37	8.6	9.6	Ko	4	..	23772b	70	762	54.3	-32 46	9.0	8.8	A5	6	..	15113b
21	40	53.8	-77 59	6.7	7.0	Fo	10	..	23772b	71	678	54.3	-41 54	9.5	10.8	Ko	2	..	45156b
22	378	53.9	+59 56	8.8	8.8	B8	3	R	38164i	72	130	54.3	-72 7	8.6	8.7	A5	8	..	38146b
23	264	53.9	+21 22	8.2	9.4	K5	1	..	38883i	73	108	54.4	+73 21	6.24	6.32	A3	7	..	37615i
24	314	53.9	+14 8	8.2	8.8	Go	3	..	37468i	74	389	54.4	+39 3	8.3	8.4	A3	3	..	37474i
25	270	53.9	+ 5 56	8.7	9.2	F8	2	..	37433i	75	452	54.4	+38 7	7.22	7.22	Ao	6	2,4	37474i
26	290	53.9	- 2 54	9.3	10.3	Ko	1	..	10630b	76	413	54.4	-10 4	8.4	9.2	G5	2	..	37402i
27	686	53.9	-35 1	10.3	10.5	Go	2	..	45154b	77	368	54.4	-12 23	8.4	8.5	A2	5	0,4	12240b
28	685	53.9	-35 36	9.7	10.2	F5	2	..	45154b	78	354	54.4	-15 37	7.44	8.22	G5	7	..	12240b
29	597	53.9	-39 50	8.68	9.4	Ko	4	..	45154b	79	330	54.4	-22 46	8.9	9.9	Ko	2	..	45170b
30	405	54.0	+43 57	9.4	9.4	Ao	1	..	38055i	80	737	54.4	-23 25	6.82	6.6	F2	10	..	12366b
31	406	54.0	+43 56	7.06	7.84	G5	6	0,4	38055i	81	740	54.4	-23 52	9.9	10.3	Go	1	..	45170b
32	383	54.0	+36 15	8.2	8.5	F2	3	..	37474i	82	686	54.4	-27 45	8.9	10.3	G5	3	..	41071b
33	294	54.0	+17 47	9.2	9.7	F8	3	..	38883i	83	281	54.5	+64 19	8.7	8.8	A2	1	..	37308i
34	301	54.0	+ 0 2	8.5	8.8	Fo	5	R	10630b	84	381	54.5	+59 19	8.5	8.5	Ao	4	..	38164i
35	682	54.0	-33 34	6.34	7.2	G5	9	..	15113b	85	489	54.5	+53 2	8.0	9.0	K	1	..	37356i
36	450	54.1	+57 16	9.4	9.7	Fo	2	..	38164i	86	450	54.5	+39 29	8.0	8.8	G5	3	..	37474i
37	407	54.1	+43 36	7.62	8.40	G5	4	..	38055i	87	295	54.5	+17 57	9.6	10.4	G5	1	..	38883i
38	290	54.1	+25 0	9.3	9.3	Ao	2	..	19385i	88	337	54.5	- 6 52	8.7	9.2	F8	3	..	10360b
39	322	54.1	+20 34	6.06	7.06	Ko	6	5,7	37318i	89	525	54.5	-48 15	10.1	10.8	Go	2	..	39684b
40	261	54.1	+11 49	6.14	6.20	A2	10	..	37468i	90	482	54.5	-51 25	9.4	10.1	F2	2	..	39676b
41	267	54.1	- 1 30	9.1	9.9	G5	3	..	10630b	91	172	54.5	-59 50	8.83	10.3	K2	1	..	45176b
42	333	54.1	- 2 0	9.3	9.7	F5	4	..	10630b	92	365	54.6	+61 16	8.7	8.7	B9	2	..	38974i
43	361	54.1	- 5 11	8.9	9.3	F5	3	..	10360b	93	382	54.6	+59 29	7.9	8.0	A2	7	2,3	38164i
44	372	54.1	- 9 29	8.9	9.9	Ko	3	..	10360b	94	455	54.6	+57 39	9.2	9.3	A3	1	..	38164i
45	328	54.1	-22 41	9.6	9.6	F5	2	..	45170b	95	272	54.6	+ 4 6	8.5	9.3	G5	2	..	37433i
46	756	54.1	-33 54	10.5	9.9	Go	3	..	15113b	96	309	54.6	- 4 0	9.3	9.7	F5	2	..	10630b
47	161	54.1	-61 13	8.7	9.7	A5	3	..	45176b	97	838	54.6	-24 14	9.4	10.3	K2	1	..	45170b
48	121	54.1	-73 51	9.4	10.5	K2	1	..	46019b	98	760	54.6	-37 31	8.7	8.8	F5	7	0,5	45154b
49	75	54.1	-77 44	8.4	9.4	Ko	4	..	23772b	99	457	54.7	+57 57	8.7	9.5	G5	2	..	38164i
50	451	54.2	+57 43	8.4	8.4	B8	3	..	38164i	100	423	54.7	+51 11	9.5	9.5	Ao	1	..	38600i

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1^h 54^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	421	54.7	+40 53	7.7	8.5	G5	2	..	37474i	51	315	55.1	+ 7 7	9.2	10.0	G5	1	..	38034i
2	292	54.7	+24 35	8.8	9.6	G5	3	0,2	38973i	52	273	55.1	+ 3 55	7.12	7.90	G5	4	..	37433i
3	274	54.7	+ 5 34	7.11	7.89	G5	5	..	37433i	53	271	55.1	- 1 39	9.32	9.88	Go	2	..	10630b
4	371	54.7	-14 21	7.06	8.41	Ma	7	0,3	12240b	54	311	55.1	- 4 47	8.05	9.05	Ko	4	..	10630b
5	839	54.7	-24 28	8.2	9.4	K5	3	..	12366b	55	356	55.1	-21 19	5.67	7.7	Ma	..	0,8-	28,195
6	688	54.7	-26 55	6.73	6.4	Ao	8	..	12241b	56	692	55.1	-27 26	9.4	10.3	G5	3	..	41071b
7	178	54.8	+66 38	9.7	9.7	A	1	..	37308i	57	599	55.1	-39 22	10.3	10.9	Go	1	..	39654b
8	366	54.8	+61 24	7.74	9.09	Ma	3	..	38164i	58	527	55.2	+49 45	8.9	8.9	Ao	1	..	38600i
9	523	54.8	+50 9	9.47	9.47	Ao	2	..	38600i	59	424	55.2	+43 10	8.6	8.7	A2	4	E	38055i
10	392	54.8	+39 8	7.9	8.4	F8	4	..	37474i	60	337	55.2	+29 4	8.3	9.3	Ko	1	E	38973i
11	318	54.8	+27 24	8.8	8.9	A2	2	..	19385i	61	338	55.2	- 2 7	9.6	10.1	F8	4	..	10630b
12	317	54.8	+27 16	8.5	8.8	Fo	2	..	19385i	62	312	55.2	- 3 51	6.89	6.89	Ao	7	..	10630b
13	338	54.8	- 7 36	9.9	10.5	Go	2	5,2	12388b	63	365	55.2	- 5 11	9.4	10.4	Ko	2	..	10360b
14	840	54.8	-23 56	8.14	8.5	F5	5	..	12366b	64	373	55.2	-14 2	8.1	8.7	Go	4	..	12240b
15	606	54.8	-43 26	7.4	8.3	K2	3	..	12229b	65	693	55.2	-27 32	9.7	10.3	G	3	..	41071b
16	117	54.9	+71 56	4.06	4.12	A2	..	..	2511c	66	626	55.2	-27 58	9.1	10.0	G5	4	..	41071b
17	273	54.9	+64 9	8.6	8.9	Fo	2	..	37308i	67	600	55.2	-33 35	9.7	9.7	G5	5	..	15113b
18	384	54.9	+59 58	9.7	10.5	G5	1	..	38164i	68	552	55.2	-41 13	7.3	8.2	Go	6	..	12229b
19	544	54.9	+47 28	8.5	9.7	K5	1	..	38600i	69	248	55.2	-52 27	10.0	10.6	Go	2	..	39676b
20	262	54.9	+11 54	8.8	9.4	Go	3	..	37468i	70	123	55.2	-65 55	6.43	7.5	G5	10	..	20429b
21	339	54.9	- 7 30	8.7	9.7	Ko	2	0,2	10360b	71	87	55.2	-71 34	11.1	11.9	G5	3	..	38146b
22	378	54.9	- 9 38	9.21	9.71	F8	2	..	37402i	72	123	55.2	-73 45	9.0	9.3	Fo	4	..	46019b
23	372	54.9	-13 49	8.7	9.7	Ko	4	5,2	12393b	73	338	55.3	+28 45	7.8	8.2	F5	6	0,4	37371i
24	624	54.9	-28 1	8.3	10.3	Ko	3	..	41071b	74	358	55.3	-21 34	4.18	5.53	Ma	..	0,R	28,195
25	623	54.9	-28 26	8.2	9.4	Ko	5	..	41071b	75	693	55.3	-34 56	8.73	8.7	Ao	8	..	15113b
26	580	54.9	-44 25	9.3	9.5	F8	1	..	12229b	76	694	55.3	-35 15	9.0	11.1	K2	2	..	41068b
27	603	54.9	-47 5	9.2	11.5	G5	2	..	39684b	77	649	55.3	-45 14	8.2	8.9	F5	3	..	12229b
28	360	54.9	-55 55	8.7	9.6	K2	2	..	45176b	78	249	55.3	-52 44	7.6	8.2	Ko	3	..	12034b
29	121	54.9	-66 30	8.3	9.3	Ko	3	..	20429b	79	282	55.4	+64 25	5.92	5.98	A2	..	2,8	56,73
30	63	55.0	+76 48	5.36	5.64	Fo	9	..	37615i	80	468	55.4	+52 10	8.4	8.8	F5	2	..	37356i
31	455	55.0	+38 11	8.0	9.0	Ko	2	..	37474i	81	264	55.4	+12 53	8.7	9.1	F5	3	..	37468i
32	346	55.0	+29 27	8.5	9.1	Go	4	..	37371i	82	627	55.4	-28 40	9.5	9.7	Fo	3	..	15113b
33	314	55.0	+ 6 27	7.8	9.0	K5	2	..	10442b	83	771	55.4	-32 31	9.9	9.7	Go	3	..	23790b
34	275	55.0	+ 6 12	9.1	9.5	F5	2	..	10442b	84	760	55.4	-35 55	7.49	8.1	Fo	8	0,9	15113b
35	311	55.0	+ 2 38	5.84	6.40	Go	7	..	37433i	85	672	55.4	-38 26	9.6	10.4	Go	2	0,2	45154b
36	378	55.0	-20 42	9.1	10.2	Ko	1	..	45170b	86	506	55.4	-40 9	9.9	10.6	F8	2	..	45154b
37	759	55.0	-33 59	10.5	10.5	Ko	1	..	23790b	87	383	55.4	-57 22	8.3	9.3	G5	4	0,3	12034b
38	756	55.0	-36 14	9.3	9.9	Ko	3	..	41068b	88	144	55.5	+69 6	8.0	8.0	Aop	5	R	37308i
39	607	55.0	-43 11	9.9	10.1	F5	2	..	45156b	89	548	55.5	+47 15	8.8	9.3	F8	2	..	38600i
40	527	55.0	-47 58	9.5	11.2	Ko	1	..	39684b	90	308	55.5	+ 8 43	8.7	9.7	Ko	2	..	38034i
41	401	55.0	-54 1	9.2	10.5	Go	2	..	39676b	91	309	55.5	+ 7 44	8.8	9.8	Ko	2	..	38034i
42	104	55.0	-70 40	11.0	11.4	F5	3	..	38146b	92	380	55.5	- 9 1	5.72	7.07	Mb	8	0,9	37402i
43	385	55.1	+59 49	8.7	8.7	B9	6	1,2	38164i	93	366	55.5	-16 50	9.1	9.1	A	3	..	40765b
44	..	55.1	+56 15	Nov.	Nov.	Pec.	..	R	M	94	676	55.5	-29 33	8.7	9.4	Fo	3	..	15113b
45	423	55.1	+40 44	6.92	7.92	Ko	5	..	37474i	95	772	55.5	-32 14	8.7	8.8	Go	5	..	15113b
46	354	55.1	+34 49	8.12	8.56	F5	4	..	37474i	96	684	55.5	-42 31	5.42	7.0	Ko	..	5,10	28,195
47	337	55.1	+33 48	8.0	8.8	G5	2	..	37474i	97	559	55.5	-50 38	8.8	9.2	G5	4	5,4	39676b
48	258	55.1	+18 43	9.1	9.6	F8	2	..	38883i	98	131	55.5	-67 46	9.8	10.2	F5	5	..	20429b
49	253	55.1	+10 7	7.97	8.75	G5	4	E	37468i	99	88	55.5	-71 37	9.0	10.0	Ko	4	..	38146b
50	307	55.1	+ 8 54	9.4	10.5	K2	1	..	10442b	100	129	55.6	+69 43	8.9	9.5	G	1	R	37308i

THE HENRY DRAPER CATALOGUE.

12300

1^h 55^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	274	55.6	+63 54	5.62	5.50	B5p	..	2,8R	56,73	51	496	56.0	+52 36	8.5	8.5	Ao	2	..	37356i
2	356	55.6	+59 12	8.2	8.0	B3	5	..	38164i	52	498	56.0	+46 22	7.10	7.05	B8	6	0,7	2089b
3	439	55.6	+54 1	4.99	4.94	B8	..	0,8R	56,73	53	354	56.0	+31 38	8.1	9.1	Ko	2	..	37371i
4	470	55.6	+51 31	9.2	9.3	A2	2	..	38600i	54	296	56.0	+22 54	6.55	6.83	Fo	6	..	38883i
5	294	55.6	+24 43	9.1	9.2	A2	2	..	19385i	55	267	56.0	+22 8	8.5	8.9	F5	3	..	16948i
6	270	55.6	+23 57	7.42	8.20	G5	4	5,3	19385i	56	300	56.0	- 2 59	7.9	8.5	Go	6	..	10630b
7	304	55.6	- 0 7	8.7	8.7	Ao	4	..	10630b	57	750	56.0	-23 44	9.5	9.3	Go	2	..	45170b
8	314	55.6	- 4 26	8.9	9.5	Go	2	..	10630b	58	698	56.0	-27 3	9.4	10.0	F8	2	..	41071b
9	767	55.6	-37 51	9.0	8.7	A2	6	2,7	20247b	59	774	56.0	-32 20	9.0	9.1	F5	4	..	15113b
10	404	55.6	-54 20	9.2	10.3	K2	1	..	39676b	60	652	56.0	-45 2	8.9	9.2	F2	2	..	12229b
11	162	55.6	-62 3	3.02	3.30	Fo	..	0,6R	28,195	61	488	56.0	-51 3	8.9	9.5	G5	3	0,3	39684b
12	61	55.7	+80 11	7.50	7.56	A2	4	..	37227i	62	140	56.0	-75 52	8.0	9.0	Ko	6	..	23770b
13	145	55.7	+68 28	8.1	8.2	A5	5	..	37308i	63	42	56.0	-78 51	6.22	6.4	F2	5	R	42714b
14	492	55.7	+53 9	7.8	7.8	Ao	3	..	37356i	64	16	56.1	+88 12	8.64	9.20	Go	2	..	37793i
15	292	55.7	+16 5	7.74	8.08	F2	5	..	37468i	65	423	56.1	+60 13	7.41	7.41	Ao	4	1,9	37988i
16	266	55.7	+12 19	8.5	8.5	Ao	4	..	37468i	66	410	56.1	+57 11	9.4	9.5	A2	1	..	38164i
17	360	55.7	- 7 52	9.3	9.8	F8	2	0,2	10360b	67	302	56.1	+17 28	8.1	9.5	Ma	4	0,2	37468i
18	693	55.7	-30 21	8.2	8.5	A2	6	..	15113b	68	316	56.1	- 4 45	8.77	9.55	G5	1	..	10630b
19	695	55.7	-33 48	10.1	10.3	Go	3	..	15113b	69	789	56.1	-24 55	7.11	8.5	K2	7	..	12366b
20	673	55.7	-38 37	9.3	10.8	K2	1	..	45154b	70	788	56.1	-25 48	9.5	10.3	Ko	3	0,2	41071b
21	588	55.7	-46 45	8.3	9.5	K2	4	..	45176b	71	818	56.1	-30 55	8.1	9.2	F5	4	..	15113b
22	608	55.7	-47 51	9.9	11.5	Go	1	..	39684b	72	250	56.1	-52 5	8.8	9.4	Ko	4	..	39676b
23	441	55.8	+55 8	8.96	8.94	B9	3	..	38164i	73	406	56.1	-54 13	9.1	10.2	F5	2	..	39676b
24	531	55.8	+49 53	8.2	9.3	K2	1	..	38600i	74	141	56.1	-75 49	9.2	10.2	Ko	2	..	23772b
25	406	55.8	+44 47	8.5	9.3	G5	2	..	37578i	75	430	56.2	+42 22	7.7	8.7	Ko	2	..	37577i
26	454	55.8	+40 11	8.57	8.99	F5	4	..	38055i	76	391	56.2	+36 15	8.0	8.8	G5	2	..	37474i
27	270	55.8	+10 21	8.97	9.97	Ko	2	..	38034i	77	268	56.2	+21 25	9.1	9.2	A2	2	..	38883i
28	382	55.8	- 8 58	7.14	7.92	G5	6	0,5	10360b	78	276	56.2	- 1 22	8.5	9.5	Ko	3	..	10630b
29	334	55.8	-22 34	8.5	8.4	A2	6	..	12366b	79	386	56.2	-11 32	7.68	8.18	F8	4	..	37402i
30	720	55.8	-26 43	8.78	9.4	F5	5	..	41071b	80	466	56.3	+57 44	8.6	9.4	G5	2	..	38164i
31	697	55.8	-30 0	9.13	10.0	Go	3	..	41071b	81	464	56.3	+38 8	8.8	8.8	Ao	3	..	37474i
32	589	55.8	-46 4	8.8	10.4	K2	2	..	45156b	82	305	56.3	- 0 1	8.5	9.0	F8	6	..	10630b
33	555	55.8	-49 6	8.0	8.5	G5	5	0,3	12227b	83	350	56.3	-18 37	8.9	9.5	Go	2	..	40765b
34	556	55.8	-49 20	10.5	11.2	Ko	1	..	39684b	84	700	56.3	-26 54	9.7	9.8	Ao	3	..	41071b
35	106	55.8	-68 5	9.2	10.0	G5	6	..	20429b	85	603	56.3	-38 56	9.7	10.3	Go	2	0,2	45154b
36	133	55.8	-72 10	9.7	10.5	F5	4	..	38146b	86	514	56.3	-40 46	8.2	9.4	G5	6	..	45176b
37	41	55.8	-78 4	8.6	9.7	K2	4	..	23772b	87	556	56.3	-41 13	7.3	8.0	Go	4	..	12229b
38	48	55.8	-79 21	9.9	10.0	A5	3	..	23772b	88	688	56.3	-42 16	7.3	8.5	K2	3	..	12229b
39	86	55.9	+75 38	5.30	6.08	G5	6	0,7-	37227i	89	365	56.4	+32 55	8.1	8.1	Ao	4	2,4	37474i
40	420	55.9	+60 34	9.7	9.7	A	2	..	38164i	90	326	56.4	+14 35	6.80	7.80	Ko	6	..	37468i
41	461	55.9	+57 32	8.5	8.6	A2	4	..	38164i	91	313	56.4	+ 3 11	8.7	9.2	F8	2	..	37433i
42	409	55.9	+56 49	8.7	8.7	B9	4	..	38164i	92	372	56.4	- 5 17	8.9	10.1	K5	2	R	10630b
43	340	55.9	+ 4 50	8.1	8.9	G5	3	..	37433i	93	343	56.4	- 7 2	8.7	9.3	Go	2	..	12388b
44	340	55.9	- 2 9	9.6	9.9	F2	3	..	10630b	94	791	56.4	-25 0	9.15	9.4	Ao	5	1,4	45170b
45	364	55.9	-13 22	8.9	9.7	G5	3	..	12393b	95	702	56.4	-34 55	9.18	10.2	Ko	4	5,3	41068b
46	363	55.9	-13 28	9.6	9.7	A3	2	..	12393b	96	529	56.4	-48 23	9.7	10.9	Ko	1	..	39684b
47	699	55.9	-30 16	10.2	10.0	F8	2	..	15113b	97	106	56.4	-69 55	9.50	10.2	G5	3	..	20429b
48	773	55.9	-32 35	8.2	8.5	Go	7	..	15113b	98	107	56.4	-70 3	8.76	9.0	F5	7	..	20429b
49	685	55.9	-42 2	8.5	9.7	G5	5	..	45176b	99	277	56.5	+63 46	7.8	9.0	K5	2	3,2	38974i
50	157	56.0	+70 43	7.64	7.92	Fo	4	..	37308i	100	359	56.5	+58 21	8.9	9.0	A2	3	..	38164i

12400

1^h 56^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	444	56.5	+54 45	var.	var.	Ma	3	R	38164i	51	352	56.9	-16 43	10.1	10.7	Go	1	..	40765b
2	320	56.5	+27 56	6.73	7.73	Ko	6	0,4	37371i	52	124	56.9	-65 57	7.2	7.5	F2	4	2,9	42851b
3	260	56.5	+18 42	9.2	9.6	F5	2	..	38883i	53	430	57.0	+51 10	7.6	7.6	Ao	3	..	37356i
4	335	56.5	+0 51	8.9	9.3	F5	4	..	37433i	54	319	57.0	+19 37	9.4	9.7	F	1	..	38883i
5	792	56.5	-25 35	9.5	10.3	G	1	..	45170b	55	328	57.0	+15 2	8.5	9.5	Ko	3	..	37468i
6	793	56.5	-25 38	9.4	10.0	F5	2	..	45170b	56	265	57.0	+12 13	7.13	8.13	Ko	6	..	37468i
7	634	56.5	-28 5	8.3	9.7	G5	5	..	41071b	57	314	57.0	+9 8	8.7	9.7	Ko	2	..	38034i
8	516	56.5	-40 3	11.2	10.9	G5	1	..	45154b	58	319	57.0	+2 57	10.1	10.9	G5	1	..	10441b
9	515	56.5	-40 10	8.8	9.4	G5	3	..	45154b	59	301	57.0	-3 4	8.9	9.4	F8	3	..	10630b
10	558	56.5	-41 13	10.5	11.2	Go	1	..	45156b	60	373	57.0	-12 18	8.1	8.5	F5	5	3,3	12240b
11	91	56.5	-70 56	11.1	12.1	Ko	2	..	38146b	61	367	57.0	-13 30	9.6	9.7	A3	2	..	12393b
12	394	56.6	+37 1	8.1	8.4	Fo	3	..	37474i	62	723	57.0	-26 7	8.5	9.4	F8	5	0,4	41071b
13	270	56.6	+21 38	7.27	7.69	F5	6	0,4	16948i	63	777	57.0	-37 34	10.3	10.8	Go	2	..	39654b
14	313	56.6	+7 23	7.16	7.50	F2	6	3,7	37433i	64	657	57.0	-45 41	9.9	11.0	G5	1	..	45156b
15	315	56.6	+2 24	8.9	9.5	Go	3	2,2	10441b	65	567	57.0	-50 47	10.8	11.2	Ko	2	..	39676b
16	362	56.6	-21 23	8.8	9.3	F5	4	5,3	45170b	66	158	57.0	-65 17	8.5	9.6	K2	3	..	20429b
17	762	56.6	-36 9	9.0	9.6	Go	5	..	41068b	67	64	57.1	+80 49	5.99	6.99	Ao	7	..	37227i
18	690	56.6	-42 45	9.1	11.2	K2	2	..	45156b	68	285	57.1	+64 37	6.48	6.48	Ao	..	0,7	56,73
19	559	56.6	-49 33	10.8	10.9	F5	2	..	39684b	69	484	57.1	+55 17	8.81	9.81	Ko	1	..	38164i
20	380	56.6	-53 32	9.6	10.2	Go	2	..	39676b	70	468	57.1	+38 10	8.9	9.0	A5	2	..	37474i
21	377	56.6	-54 55	9.00	9.1	F8	2	..	12034b	71	369	57.1	+32 49	5.44	5.50	A2	..	0,R	56,73
22	40	56.6	-80 51	9.7	10.5	G5	3	..	20538b	72	341	57.1	+28 18	8.3	8.7	F5	4	..	37371i
23	394	56.7	+59 17	8.8	9.1	F2	4	..	38164i	73	705	57.1	-26 59	9.5	10.3	Ko	2	..	41071b
24	552	56.7	+48 8	7.9	8.5	Go	5	..	37578i	74	702	57.1	-33 23	10.3	10.3	Go	3	..	15113b
25	465	56.7	+38 3	8.2	9.0	G5	2	..	37474i	75	701	57.1	-33 30	10.7	10.9	G	2	..	15113b
26	349	56.7	+29 17	8.2	9.0	G5	2	..	37371i	76	144	57.1	-64 27	8.9	10.1	K5	1	..	23773b
27	264	56.7	+11 42	8.53	8.95	F5	4	..	37468i	77	125	57.1	-66 33	6.14	7.5	K2	5	0,8	42851b
28	318	56.7	+6 19	9.4	10.0	G	1	..	38034i	78	396	57.2	+35 38	8.1	9.1	Ko	3	..	37474i
29	316	56.7	+2 38	9.1	9.7	Go	1	..	10441b	79	271	57.2	+13 0	6.28	7.63	Mb	8	..	37468i
30	701	56.7	-30 39	8.3	9.4	Ko	2	..	15113b	80	371	57.2	-17 3	7.80	8.87	K2	4	..	12240b
31	378	56.7	-55 30	6.60	7.5	G5	7	0,8	12034b	81	861	57.2	-24 22	9.2	10.0	Ko	2	..	12366b
32	124	56.7	-73 7	8.8	9.6	G5	6	..	38146b	82	397	57.3	+59 45	7.41	7.83	F5	7	5,3	38164i
33	440	56.8	+54 13	7.66	8.16	F8	6	0,2	38164i	83	316	57.3	+8 37	7.8	8.6	G5	5	..	38034i
34	521	56.8	+45 52	7.8	8.8	Ko	3	..	37578i	84	320	57.3	+2 21	8.32	8.82	F8	2	..	37433i
35	348	56.8	+34 10	8.6	9.1	F8	2	..	37474i	85	363	57.3	-19 12	9.9	11.0	Go	1	..	40765b
36	347	56.8	+33 17	8.2	8.7	F8	4	3,4	37474i	86	339	57.3	-22 13	8.8	10.2	Ko	2	..	45170b
37	704	56.8	-30 0	8.48	9.4	G5	3	..	15113b	87	765	57.3	-36 14	9.3	10.2	Go	3	..	41068b
38	703	56.8	-30 28	5.39	6.7	G5	..	5,R	28,195	88	533	57.3	-48 7	9.7	10.9	G5	2	..	39684b
39	587	56.8	-44 19	8.2	8.3	F8	5	..	12229b	89	379	57.3	-55 44	9.2	10.3	K5	1	..	39676b
40	150	56.8	-74 36	8.4	9.4	Ko	4	..	23772b	90	141	57.3	-62 55	9.1	10.1	Ko	1	..	23773b
41	112	56.9	+74 6	7.50	7.50	Ao	5	2,3	38972i	91	110	57.3	-70 33	9.5	9.9	F5	6	..	38146b
42	360	56.9	+59 5	9.2	9.2	Ao	4	..	38164i	92	181	57.4	+68 7	8.5	8.6	A2	5	..	37308i
43	523	56.9	+45 18	8.12	8.20	A3	3	..	37578i	93	373	57.4	+61 16	9.0	9.0	A	1	..	38164i
44	326	56.9	+20 52	8.3	9.3	Ko	2	..	38883i	94	471	57.4	+57 32	8.2	9.2	Ko	3	..	38164i
45	261	56.9	+18 55	8.7	8.7	Ao	5	..	38883i	95	539	57.4	+50 1	8.42	8.92	F8	3	..	38600i
46	317	56.9	+2 17	5.23	4.00	A2p	..	R	2317C	96	367	57.4	-7 57	8.7	9.7	Ko	1	..	12388b
47	56.9	+2 17	4.33	..	..	..	..	..	..	97	373	57.4	-17 4	9.9	10.5	Go	1	..	40765b
48	386	56.9	-6 36	9.6	10.0	F5	2	..	12388b	98	726	57.4	-25 56	9.2	10.0	F8	2	6,2	41071b
49	421	56.9	-10 14	9.3	10.1	G5	2	..	37402i	99	824	57.4	-31 29	9.5	10.0	Fo	3	..	23790b
50	372	56.9	-12 30	8.9	9.3	F5	3	..	12393b	100	707	57.4	-35 42	9.3	10.5	Ko	2	..	41068b

THE HENRY DRAPER CATALOGUE.

12500

1^h 57^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	254	57.4	m. 57.4 -52 47	10.0	11.2	K5	1	..	39676b	51	827	57.9	-31 52	9.4	11.3	Ma	2	..	15113b
2	357	57.5	+31 56	8.8	9.6	G5	2	..	37371i	52	794	57.9	-33 49	10.1	11.2	G5	1	..	15113b
3	263	57.5	+18 35	9.1	10.1	Ko	1	..	38035i	53	389	57.9	-57 14	9.8	10.8	Ko	1	..	39676b
4	274	57.5	+10 54	8.7	8.7	Ao	3	..	37468i	54	27	57.9	-87 41	9.2	10.0	G5	2	..	15145b
5	315	57.5	+7 18	8.7	9.9	K5	2	..	38034i	55	69	58.0	+78 51	7.10	7.38	Fo	4	..	37227i
6	343	57.5	+4 51	8.7	9.1	F5	3	0,2	10441b	56	418	58.0	+56 17	9.2	9.2	Ao	2	..	38164i
7	364	57.5	-19 23	9.6	10.5	Go	2	..	40765b	57	452	58.0	+54 17	7.96	7.96	Ao	7	2,3	38164i
8	143	57.5	-63 15	7.7	8.0	F2	9	..	23773b	58	341	58.0	+25 28	5.68	6.10	F5	8	..	37371i
9	281	57.6	+63 54	8.0	7.8	B3	5	0,5	37308i	59	306	58.0	+17 51	9.2	9.3	A2	5	0,3	37468i
10	362	57.6	+58 58	10.2	10.2	Ao	2	..	7195m	60	325	58.0	+3 10	8.7	9.7	Ko	1	..	10441b
11	500	57.6	+52 29	9.0	9.0	Ao	2	..	38600i	61	341	58.0	-22 27	6.80	6.4	B9	9	1,10	45170b
12	275	57.6	+10 33	6.83	7.83	Ko	6	..	37468i	62	713	58.0	-27 14	7.6	9.1	Ko	8	0,6	41071b
13	362	57.6	+1 27	8.5	9.3	G5	4	..	37433i	63	714	58.0	-30 9	6.44	6.8	A3	..	3,10	28,195
14	345	57.6	-2 7	8.7	9.2	F8	4	..	10630b	64	777	58.0	-34 7	9.0	9.3	Go	5	..	15113b
15	867	57.6	-24 32	8.9	8.2	F8	6	..	12366b	65	713	58.0	-35 30	9.3	10.2	F8	4	..	41068b
16	382	57.6	-53 6	9.8	10.2	F5	3	..	39676b	66	114	58.1	+73 32	9.5	9.6	A2	2	..	38972i
17	409	57.6	-54 30	8.3	9.1	A5	3	..	12034b	67	287	58.1	+63 49	8.8	8.6	B	3	..	38974i
18	483	57.7	+51 29	6.54	6.49	B8	5	..	37356i	68	344	58.1	+62 28	8.0	8.5	F8	2	..	38974i
19	340	57.7	+26 2	8.1	8.2	A5	3	..	19385i	69	401	58.1	+59 52	7.61	8.11	F8	7	2,2	38164i
20	347	57.7	-7 9	8.9	9.7	G5	3	..	12388b	70	397	58.1	+42 5	9.2	9.3	A3	1	..	38055i
21	369	57.7	-13 37	9.0	10.1	K2	2	..	12393b	71	324	58.1	+30 54	8.8	9.1	F2	2	..	37371i
22	608	57.7	-39 17	9.0	9.2	F2	4	..	45154b	72	328	58.1	+20 47	8.5	9.3	G5	1	..	38883i
23	609	57.7	-39 48	8.53	8.8	F5	3	..	12229b	73	307	58.1	-0 21	5.56	5.70	A5	..	3,10	56,73
24	659	57.7	-45 12	4.96	6.5	Ko	..	0,8R	28,195	74	369	58.1	-7 53	9.6	10.2	Go	2	..	12388b
25	380	57.7	-55 38	8.1	8.4	A3	6	..	45176b	75	388	58.1	-20 7	9.6	11.0	Go	1	..	40765b
26	111	57.7	-70 18	10.6	11.4	G5	3	5,2	38146b	76	871	58.1	-24 44	9.35	10.0	Go	2	0,2	41071b
27	95	57.8	+74 23	7.64	7.70	A2	3	..	37615i	77	778	58.1	-33 57	9.7	11.5	K2	1	..	15113b
28	160	57.8	+70 22	8.9	8.9	Ao	2	..	37308i	78	572	58.1	-50 37	8.1	8.5	G5	3	..	10623b
29	400	57.8	+60 1	8.06	8.62	Go	4	..	38164i	79	161	58.2	+70 42	9.0	9.3	F2	1	..	38972i
30	416	57.8	+56 36	8.8	8.8	Ao	4	..	38164i	80	366	58.2	+58 37	9.9	9.9	Ao	3	..	7195m
31	438	57.8	+51 13	8.5	9.5	Ko	1	..	38600i	81	476	58.2	+57 54	9.2	9.2	Ao	3	..	38164i
32	541	57.8	+50 1	8.9	8.9	Ao	1	..	38600i	82	355	58.2	+29 25	8.0	8.3	Fo	4	..	37371i
33	395	57.8	+41 51	2.28	3.28	Ko	..	R	6261c	83	356	58.2	-15 48	5.91	6.69	G5	10	..	12240b
34	346	57.8	+41 51	5.08	5.08	Ao	..	..	..	84	342	58.2	-22 35	9.6	10.8	Ko	1	..	45170b
35	346	57.8	+27 0	7.40	8.40	Ko	4	..	37371i	85	715	58.2	-30 19	9.4	9.7	Go	2	..	15113b
36	321	57.8	+2 52	7.09	7.65	Go	5	..	37433i	86	597	58.2	-46 19	7.7	7.8	F5	5	..	12229b
37	322	57.8	+2 17	8.49	9.49	Ko	2	..	10441b	87	383	58.2	-53 14	10.1	10.2	A5	3	..	39676b
38	304	57.8	-2 52	6.95	7.03	A3	6	1,9	39008i	88	112	58.2	-70 43	10.2	10.5	F2	4	..	38146b
39	355	57.8	-16 6	8.9	9.7	G5	2	..	40765b	89	49	58.2	-79 0	9.8	11.2	Ma	1	..	23772b
40	643	57.8	-28 50	8.1	9.7	K2	5	2,4	23790b	90	377	58.3	+61 18	8.5	8.5	Ao	3	..	38164i
41	712	57.8	-30 22	9.9	10.3	Ko	1	..	41071b	91	453	58.3	+55 9	6.62	6.90	Fo	8	0,5	38164i
42	146	57.8	-63 54	8.9	10.1	K5	1	..	23773b	92	401	58.3	+38 55	8.7	9.0	F2	2	..	37474i
43	65	57.9	+81 0	6.77	6.85	A3	5	..	37227i	93	265	58.3	+18 49	8.9	9.7	G5	1	..	38883i
44	417	57.9	+56 32	8.9	8.9	B9	2	..	38164i	94	307	58.3	+17 46	6.42	7.60	K5	5	5,7	16948i
45	363	57.9	+35 7	7.62	8.40	G5	4	0,3	37474i	95	307	58.3	-3 26	9.9	10.5	Go	1	..	10630b
46	371	57.9	+33 13	7.8	8.1	F2	4	0,3	37371i	96	872	58.3	-24 22	6.51	7.8	Ko	8	..	12366b
47	347	57.9	+26 36	8.3	8.7	F5	2	..	38973i	97	647	58.3	-27 55	9.7	10.6	A5	2	..	41071b
48	296	57.9	+24 43	8.9	9.9	Ko	1	..	38973i	98	646	58.3	-28 32	9.9	10.0	F5	3	..	41071b
49	363	57.9	+1 22	8.79	9.29	F8	2	..	37433i	99	716	58.3	-30 48	8.2	9.4	G5	3	..	15113b
50	339	57.9	+0 52	9.1	9.9	G5	2	0,2	10441b	100	567	58.3	-41 1	7.9	8.2	F5	5	..	12229b

12600

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	160	<i>m.</i> 58.3	<i>o</i> -65 36	7.9	9.0	K2	6	..	20429b	51	300	<i>m.</i> 58.8	<i>o</i> +22 14	8.8	8.9	A2	2	..	38883i
2	93	58.3	-71 27	10.3	11.1	G5	3	..	38146b	52	318	58.8	+ 8 10	8.9	9.7	G5	2	..	38034i
3	50	58.3	-79 15	7.7	8.1	F5	7	..	14358b	53	382	58.8	- 5 4	8.4	8.7	F2	3	0,3	10630b
4	492	58.4	+56 6	8.8	8.8	Ao	2	..	38164i	54	358	58.8	-15 58	9.1	9.9	G5	3	..	40765b
5	441	58.4	+50 51	9.2	9.2	Ao	2	..	38600i	55	369	58.8	-19 6	8.3	8.8	Ao	5	..	12366b
6	595	58.4	+49 5	9.2	9.2	B9	2	..	38600i	56	805	58.8	-25 37	8.3	10.3	K5	2	0,2	41071b
7	341	58.4	+ 1 8	8.49	9.27	G5	3	..	10441b	57	774	58.8	-36 26	9.7	10.8	Go	2	..	39654b
8	381	58.4	- 4 49	7.70	8.48	G5	4	5,3	10630b	58	81	58.8	-77 33	9.1	10.3	K5	2	..	23772b
9	343	58.4	-22 24	8.0	8.6	Ko	4	..	12366b	59	290	58.9	+64 6	8.6	8.6	Ao	4	..	37308i
10	109	58.4	-68 10	10.4	11.0	Go	3	..	20429b	60	404	58.9	+59 55	9.9	9.9	A	1	..	38164i
11	442	58.5	+50 28	9.0	10.0	Ko	1	..	38600i	61	298	58.9	+24 57	8.1	9.1	Ko	4	5,4	37371i
12	325	58.5	+13 42	8.7	9.5	G5	2	..	38035i	62	332	58.9	+20 33	8.3	8.8	F8	2	..	38883i
13	342	58.5	+ 0 26	10.1	10.7	Go	1	..	10630b	63	326	58.9	+14 6	9.1	9.9	G5	1	..	38035i
14	355	58.5	-18 15	9.4	10.4	Ko	2	..	40765b	64	320	58.9	+ 8 40	9.4	10.2	G5	1	..	38034i
15	707	58.5	-32 58	9.1	10.3	G5	1	..	15113b	65	344	58.9	+ 1 6	9.04	9.82	G5	2	..	10441b
16	525	58.5	-39 54	8.78	9.1	F5	3	..	12229b	66	351	58.9	- 2 32	9.1	9.5	F5	3	..	10630b
17	568	58.5	-41 26	9.3	10.3	Ko	3	..	45156b	67	308	58.9	- 3 11	8.1	8.7	Go	5	0,2	10630b
18	567	58.5	-49 23	8.3	8.5	F5	3	..	10623b	68	718	58.9	-35 45	9.4	10.5	F5	3	..	41068b
19	574	58.5	-49 54	7.42	8.8	K2	3	..	10623b	69	526	58.9	-40 36	10.3	11.2	Ko	1	..	45156b
20	500	58.5	-50 59	8.2	8.8	F8	3	..	10623b	70	571	58.9	-40 53	11.0	10.9	F8	2	..	45156b
21	182	58.5	-58 10	8.5	9.1	F8	3	..	45176b	71	387	58.9	-53 1	7.9	8.8	A3	4	..	12034b
22	132	58.6	+70 6	8.94	8.94	Ao	2	..	38972i	72	365	58.9	-56 44	8.3	9.1	Ko	3	5,2	45176b
23	345	58.6	+62 42	8.4	9.4	Ko	4	..	38974i	73	172	58.9	-61 12	8.9	10.0	F5	3	..	23773b
24	477	58.6	+57 17	9.7	9.7	Ao	1	..	38164i	74	162	58.9	-65 25	9.4	9.5	A3	3	..	20429b
25	322	58.6	+19 25	9.1	9.7	A	1	..	38883i	75	544	59.0	+50 9	7.12	7.54	F5	6	0,3	37578i
26	309	58.6	- 0 30	8.7	8.8	A2	2	..	37433i	76	326	59.0	+30 14	8.31	8.73	F5	4	..	37371i
27	424	58.6	- 9 57	7.42	8.20	G5	5	..	37402i	77	391	59.0	-20 22	9.4	10.2	Go	2	0,1	40765b
28	381	58.6	-17 31	7.9	8.0	A5	6	..	12240b	78	833	59.0	-31 25	8.3	9.4	G5	5	..	15113b
29	803	58.6	-25 17	9.2	9.1	A3	6	3,4	45170b	79	388	59.0	-53 27	9.5	9.9	F5	2	..	39676b
30	781	58.6	-37 24	9.7	10.7	G5	1	0,1	45154b	80	148	59.0	-64 7	6.84	7.5	F8	3	0,R	42851b
31	699	58.6	-42 7	8.1	10.3	Ko	4	..	45176b	81	34	59.0	-81 59	7.02	7.3	Fo	4	0,10	42714b
32	501	58.6	-51 13	10.1	10.9	Ko	1	..	39676b	82	457	59.1	+54 27	9.0	9.0	Ao	5	2,3	38164i
33	171	58.6	-61 22	8.7	10.1	K5	1	..	45176b	83	420	59.1	+43 45	8.7	9.0	Fo	3	E	38055i
34	126	58.6	-66 50	7.6	9.0	Ma	6	0,1	20429b	84	363	59.1	-14 57	9.55	10.11	Go	3	..	40765b
35	136	58.6	-67 41	10.0	11.0	Ko	3	..	20429b	85	356	59.1	-18 0	7.30	8.48	K5	5	..	12240b
36	532	58.7	+46 5	8.5	9.1	Go	3	..	37578i	86	345	59.1	-21 50	8.8	9.3	K5	3	5,3	12366b
37	402	58.7	+38 58	8.1	8.5	F5	4	..	37474i	87	529	59.1	-40 37	9.7	10.0	F8	4	..	45156b
38	343	58.7	+25 27	7.17	7.95	G5	4	5,4	19385i	88	596	59.1	-44 6	9.2	9.6	F5	2	..	12229b
39	262	58.7	+ 9 37	9.4	10.4	Ko	2	..	38034i	89	183	59.2	+67 9	9.0	9.1	A5	3	..	37308i
40	317	58.7	+ 7 37	7.35	7.77	F5	6	0,7	37433i	90	423	59.2	+56 38	9.5	9.8	Fo	1	..	38164i
41	285	58.7	- 0 49	6.01	6.79	G5	..	0,6	56,73	91	397	59.2	- 6 11	7.81	8.81	Ko	3	0,3	10630b
42	324	58.7	- 4 35	5.92	6.92	Ko	7	0,7	12388b	92	347	59.2	-22 23	8.8	9.6	Ko	2	..	12366b
43	717	58.7	-27 17	9.4	10.0	G5	2	..	41071b	93	346	59.2	-22 29	9.9	10.3	F2	1	..	45170b
44	783	58.7	-37 17	10.3	11.5	Ko	1	..	39654b	94	665	59.2	-45 28	9.5	11.0	G5	2	..	39684b
45	161	58.7	-65 41	9.0	9.5	F8	2	..	20429b	95	144	59.2	-63 5	7.9	8.4	F8	7	..	23773b
46	91	58.7	-69 48	9.06	10.5	G5	3	..	20429b	96	163	59.2	-65 53	8.9	9.5	Go	4	..	20429b
47	94	58.7	-71 12	10.5	11.1	Go	4	..	38146b	97	11	59.2	-89 42	9.2	10.0	G5	3	..	13459b
48	41	58.8	+85 16	7.24	8.02	G5	6	..	37282i	98	134	59.3	+70 11	8.79	8.79	Ao	2	..	37308i
49	133	58.8	+69 28	8.6	9.2	Go	1	..	38972i	99	496	59.3	+55 15	9.5	9.6	A3	2	..	38164i
50	403	58.8	+59 48	8.7	9.7	Ko	1	..	38164i	100	302	59.3	+23 3	9.7	10.5	G5	1	..	38973i

THE HENRY DRAPER CATALOGUE.

12700

1^h 59^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	274a	59.3	+12 3	var.	var.	Md	..	R	56,198	51	434	59.9	+41 3	6.74	6.88	A5	7	..	37577i
2	382	59.3	-12 21	6.70	7.70	Ko	5	0,7	37402i	52	337	59.9	+15 3	9.14	9.64	F8	3	..	37468i
3	381	59.3	-12 47	8.9	9.2	Fo	2	..	12240b	53	387	59.9	-14 34	9.6	10.2	Go	2	..	40765b
4	788	59.3	-37 41	7.89	8.4	Fo	7	..	20247b	54	364	59.9	-16 46	8.9	9.5	Go	5	..	40765b
5	578	59.3	-49 59	8.22	8.5	G5	2	..	10623b	55	383	59.9	-16 52	9.3	10.3	Ko	3	..	40765b
6	366	59.3	-56 7	10.0	11.0	Ko	1	..	39676b	56	837	59.9	-30 54	9.2	10.3	F5	1	..	23790b
7	184	59.3	-58 5	8.7	8.6	B9	5	..	45176b	57	716	59.9	-32 58	9.9	10.0	Go	2	..	15113b
8	430	59.4	+60 34	8.6	8.6	Ao	3	..	38164i	58	717	59.9	-33 39	10.7	10.0	G5	1	..	23790b
9	424	59.4	+56 50	8.0	8.0	B8	5	3,4 R	38164i	59	604	59.9	-45 54	7.2	7.8	Go	5	..	12229b
10	400	59.4	+56 14	8.5	8.8	Fo	4	5,3	37474i	60	154	59.9	-74 14	8.9	9.9	Ko	2	..	46019b
11	569	59.4	-49 17	9.1	9.1	A2	6	..	39684b	61	136	0.0	+69 24	9.2	10.0	G5	2	..	37308i
12	389	59.4	-53 31	7.5	7.5	A2	7	..	12034b	62	291	0.0	+65 0	8.2	8.2	A	1	R	38984i
13	176	59.4	-60 19	9.0	10.3	Ko	1	..	45176b	63	482	0.0	+57 17	9.2	10.0	G5	1	..	38164i
14	142	59.4	-75 6	8.67	9.9	K2	3	..	23772b	64	314	0.0	-0 29	8.6	9.4	G5	1	..	10630b
15	119	59.5	+71 21	8.0	9.0	Ko	4	..	38972i	65	357	0.0	-2 31	8.7	9.7	Ko	4	2,2	10630b
16	432	59.5	+60 19	9.01	9.43	F5	2	..	38164i	66	722	0.0	-27 6	9.1	10.0	F8	3	..	41071b
17	406	59.5	+59 32	10.2	10.6	F5	1	..	38164i	67	706	0.0	-29 47	4.74	4.74	Aop	..	R	28,195
18	598	59.5	+48 43	8.9	9.0	A2	2	..	37578i	68	778	0.0	-36 35	9.6	10.8	Ko	3	5,2	39654b
19	401	59.5	+36 33	8.7	9.3	Go	2	..	37474i	69	779	0.0	-36 45	9.2	10.7	F5	2	5,1	39654b
20	336	59.5	+14 49	8.7	8.7	Ao	3	..	37468i	70	600	0.0	-44 29	8.6	9.3	Go	5	..	45176b
21	284	59.5	+10 54	8.7	9.5	G5	2	E	38034i	71	451	0.1	+53 49	8.0	8.3	Fo	5	0,3	38164i
22	320	59.5	+7 23	8.9	9.5	Go	1	..	38034i	72	300	0.1	+24 39	8.0	8.8	G5	3	0,2	16948i
23	348	59.5	-22 30	8.9	9.6	Ko	3	..	45170b	73	266	0.1	+9 35	7.22	8.40	K5	3	0,3	37468i
24	574	59.5	-40 57	9.0	9.5	Go	2	..	12229b	74	288	0.1	-1 27	8.4	8.5	A5	6	2,3	10630b
25	164	59.5	-65 29	9.3	10.1	G5	3	..	38146b	75	400	0.1	-11 20	8.3	9.1	G5	2	..	37402i
26	156	59.5	-76 15	9.7	10.5	G5	3	..	23772b	76	384	0.1	-17 46	7.60	8.95	Ma	3	5,4	41991b
27	425	59.6	+56 34	8.8	8.8	B8	3	..	38164i	77	374	0.1	-19 37	9.4	9.6	A5	3	..	12240b
28	351	59.6	+28 39	7.9	8.7	G5	4	..	37371i	78	127	0.1	-66 22	7.8	8.9	K2	4	..	20429b
29	268	59.6	+18 42	9.2	9.7	F8	2	..	38883i	79	117	0.2	+74 9	9.2	9.2	Ao	1	..	38972i
30	321	59.6	+7 15	6.55	7.55	Ko	6	0,7	37433i	80	501	0.2	+55 54	8.9	10.1	K5	1	..	7195m
31	393	59.6	-19 51	8.38	8.8	Go	4	..	12240b	81	502	0.2	+55 45	9.2	10.2	Ko	1	..	7195m
32	787	59.6	-32 3	9.7	10.6	Go	2	..	15113b	82	448	0.2	+50 51	8.5	9.3	G5	2	..	38600i
33	714	59.6	-33 0	8.1	8.8	G5	5	..	15113b	83	315	0.2	-0 10	8.0	8.6	Go	4	..	10630b
34	157	59.6	-76 3	10.1	11.1	Ko	2	..	23772b	84	330	0.2	-3 59	9.6	10.4	G5	1	..	10630b
35	185	59.7	+66 30	8.9	9.0	A2	2	..	37308i	85	386	0.2	-4 53	8.20	9.27	K2	2	2,2	12388b
36	264	59.7	+9 38	7.16	8.16	Ko	5	E	37468i	86	365	0.2	-16 9	8.1	8.7	Go	5	..	12240b
37	386	59.7	-14 17	8.3	8.8	F8	4	..	12240b	87	790	0.2	-37 1	9.2	11.1	G5	2	0,1	39654b
38	369	59.7	-56 13	10.0	10.5	F8	2	..	39676b	88	670	0.2	-45 3	10.5	11.3	A2	2	..	39684b
39	139	59.7	-72 51	9.8	10.8	Ko	3	..	38146b	89	607	0.2	-46 52	9.3	9.3	Go	5	..	39684b
40	600	59.8	+48 41	8.0	7.8	B2	5	..	38897i	90	393	0.2	-57 37	10.0	10.3	F2	2	..	39676b
41	511	59.8	+46 23	7.48	7.98	F8	5	..	37578i	91	450	0.3	+51 8	9.2	9.2	Ao	1	..	38600i
42	432	59.8	+41 1	9.3	10.1	G5	1	..	37577i	92	402	0.3	+41 17	9.2	10.3	K2	1	..	37577i
43	464	59.8	+39 17	7.9	8.2	Fo	6	..	37474i	93	237	0.3	+17 10	8.6	9.1	F8	3	3,2 R	38035i
44	478	59.8	+37 31	9.1	9.1	Ao	3	2,2	37474i	94	329	0.3	+14 5	8.7	9.5	G5	1	..	38035i
45	362	59.8	-16 42	7.47	7.89	F5	7	..	12240b	95	280	0.3	+12 35	9.0	10.0	Ko	1	E	38035i
46	357	59.8	-18 30	8.8	8.8	Ao	3	..	12366b	96	718	0.3	-33 34	9.0	9.4	G5	4	..	15113b
47	715	59.8	-33 2	10.5	10.0	Go	3	..	23790b	97	707	0.3	-42 33	9.5	10.3	F8	4	..	45176b
48	119	59.8	-70 10	9.9	9.9	Ao	5	..	38146b	98	150	0.3	-64 24	9.6	9.9	F2	2	..	23773b
49	408	59.9	+59 39	9.2	9.2	Ao	2	..	38164i	99	35	0.3	-82 34	10.3	10.4	A2	1	..	20538b
50	479	59.9	+57 39	8.9	9.7	G5	2	..	38164i	100	163	0.4	+71 5	6.74	7.24	F8	5	..	37308i

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	485	m. 0.4	° 57 26	9.9	10.5	Go	1	..	7195m	51	98	m. 0.8	° -70 54	6.88	8.1	G5	10	..	38146b
2	503	0.4	+55 33	8.8	8.8	Ao	3	0,2	7195m	52	140	0.8	-72 51	10.1	11.1	Ko	3	..	38146b
3	442	0.4	+42 13	8.9	8.9	Ao	2	..	37577i	53	144	0.8	-74 56	7.04	9.0	Mb	8	..	23772b
4	408	0.4	+38 25	8.3	8.3	Ao	5	..	37474i	54	377	0.9	+59 1	9.2	9.2	Ao	3	I,2	7195m
5	281	0.4	+12 51	7.8	8.2	F5	5	..	37468i	55	490	0.9	+57 47	8.6	9.6	Ko	2	..	38164i
6	653	0.4	-28 51	7.7	8.5	Ko	7	..	23790b	56	429	0.9	+56 38	8.4	8.2	B2	5	..	7195m
7	724	0.4	-35 45	7.61	9.0	Ko	7	..	41068b	57	428	0.9	+56 33	8.0	9.0	Ko	2	..	38164i
8	603	0.4	-43 59	7.80	8.3	Go	5	..	12229b	58	500	0.9	+51 39	8.7	8.8	A2	4	0,2-	38600i
9	151	0.4	-64 43	8.3	9.3	Ko	4	..	20429b	59	410	0.9	+37 9	9.1	10.1	K	1	R	37474i
10	375	0.5	+58 19	8.7	9.5	G5	2	..	38164i	60	362	0.9	+33 45	9.2	9.2	Ao	1	..	37386i
11	444	0.5	+42 36	8.7	8.7	Ao	3	..	37577i	61	330	0.9	+27 21	9.1	10.1	Ko	1	..	38973i
12	468	0.5	+40 7	8.62	8.96	F2	3	..	37577i	62	356	0.9	-7 39	9.3	9.8	F8	2	..	12388b
13	333	0.5	+30 31	8.6	9.4	G5	1	..	37371i	63	391	0.9	-14 36	8.8	10.0	K5	2	..	40765b
14	324	0.5	+6 33	6.88	7.16	Fo	7	..	37433i	64	415	0.9	-54 8	8.6	10.2	Ko	3	..	39676b
15	399	0.5	-9 17	9.1	9.9	G5	2	..	37402i	65	99	0.9	-71 21	9.7	10.5	G5	5	..	38146b
16	371	0.5	-56 9	8.2	8.4	B9	6	..	45176b	66	491	1.0	+57 52	9.7	9.7	Ao	1	..	7195m
17	180	0.5	-59 52	8.66	8.9	F5	4	..	45176b	67	492	1.0	+57 14	9.2	9.0	B3	4	..	7195m
18	138	0.6	+70 3	9.04	9.04	A	2	R	38972i	68	348	1.0	+25 22	7.36	7.44	A3	4	I,2	37371i
19	349	0.6	+62 41	8.0	8.0	Ao	4	..	38974i	69	279	1.0	+22 11	5.08	5.08	Ao	..	0, R	3041C
20	376	0.6	+59 9	9.2	10.0	G5	1	..	38164i	70	312	1.0	+17 59	9.4	9.4	Ao	3	..	38883i
21	505	0.6	+55 42	8.1	9.1	Ko	2	..	38164i	71	331	1.0	+13 37	9.6	10.2	G	1	..	38035i
22	603	0.6	+49 9	8.5	9.6	K2	1	..	38600i	72	324	1.0	+7 46	6.66	8.01	Mb	5	5,4	37403i
23	515	0.6	+46 45	8.2	8.2	Ao	4	..	37578i	73	889	1.0	-24 52	9.5	9.5	G5	2	5,2 R	12366b
24	302	0.6	+24 38	8.1	8.1	Ao	4	0,4	16948i	74	843	1.0	-31 5	9.1	10.3	G5	2	..	23790b
25	280	0.6	+6 12	7.8	8.1	F2	3	3,3	37433i	75	783	1.0	-36 18	9.5	10.8	K5	3	5,2	39654b
26	348	0.6	+4 50	8.6	9.0	F5	2	..	37433i	76	622	1.0	-39 9	9.6	10.4	Go	2	0,2	45154b
27	350	0.6	+0 20	9.38	10.38	Ko	2	..	10630b	77	575	1.0	-49 21	8.9	9.7	G5	4	..	39684b
28	789	0.6	-32 17	9.6	10.0	Ko	2	..	15113b	78	510	1.0	-50 57	9.1	10.0	Ko	4	0,3	39676b
29	507	0.6	-51 38	9.4	10.0	Ko	3	0,2	39676b	79	511	1.0	-51 18	10.3	10.8	G5	2	..	39676b
30	507	0.7	+55 30	10.2	10.2	Ao	2	..	7195m	80	22	1.0	-85 31	8.06	8.2	Ao	5	..	15173b
31	324	0.7	+20 7	7.66	8.16	F8	5	..	16948i	81	71	1.1	+79 13	7.10	7.16	A2	3	R	37227i
32	387	0.7	-12 7	10.1	10.2	A3	2	..	12393b	82	295	1.1	+64 33	7.54	7.37	B3	5	0,3	37308i
33	361	0.7	-17 55	9.9	10.5	Go	2	..	40765b	83	455	1.1	+50 37	8.12	8.12	Ao	2	..	38873i
34	656	0.7	-28 52	7.24	8.1	G5	9	..	23790b	84	359	1.1	+28 48	6.53	6.59	A2	6	1,6	37371i
35	713	0.7	-29 2	7.64	8.5	K5	8	..	23790b	85	349	1.1	+25 13	6.00	5.95	B8	..	1,5-	56,73
36	697	0.7	-38 16	10.2	10.9	Go	2	0,1	39654b	86	282	1.1	+13 0	7.20	8.20	Ko	5	0,5	37468i
37	609	0.7	-46 34	9.7	10.4	F8	2	..	39684b	87	362	1.1	-17 48	9.1	10.2	K2	2	..	40765b
38	574	0.7	-49 9	9.9	10.9	G5	1	..	39684b	88	396	1.1	-19 53	9.63	9.9	F8	3	..	40765b
39	128	0.7	-66 0	9.4	9.5	A2	3	..	20429b	89	891	1.1	-24 51	9.2	9.5	G5	3	0,2 R	12366b
40	..	0.7	-67 5	..	..	Ko	2	..	20429b	90	659	1.1	-28 35	8.2	9.7	Mb	3	..	23790b
41	156	0.7	-73 59	..	10.2	K5	2	..	46019b	91	728	1.1	-30 47	8.9	9.7	F2	3	..	23790b
42	487	0.8	+58 11	8.5	8.8	F2	3	..	38164i	92	634	1.1	-43 28	9.9	10.7	Go	2	..	45156b
43	427	0.8	+56 21	9.0	9.1	A5	2	..	38164i	93	623	1.1	-47 5	9.4	10.1	F5	3	..	39684b
44	565	0.8	+47 35	8.6	8.6	B9	4	..	37578i	94	385	1.1	-55 22	6.54	7.2	F2	10	..	45176b
45	354	0.8	+26 23	8.7	8.7	Ao	3	..	38973i	95	445	1.2	+43 9	8.1	8.1	B8	3	..	37578i
46	285	0.8	+23 52	7.02	7.58	Go	5	..	16948i	96	412	1.2	+36 33	8.7	9.3	Go	2	..	37474i
47	325	0.8	+19 47	9.4	10.2	G5	1	..	38883i	97	350	1.2	+25 51	7.38	8.16	G5	4	5,2	38973i
48	239	0.8	+16 23	8.4	8.8	F5	3	..	38883i	98	241	1.2	+16 37	9.1	9.4	F2	3	..	38883i
49	777	0.8	-23 44	9.9	11.4	G5	1	..	45969b	99	333	1.2	+14 6	7.9	8.2	Fo	5	..	37468i
50	413	0.8	-54 50	8.26	8.1	A2	6	..	45176b	100	429	1.2	-10 41	9.3	10.7	Ma	1	..	37402i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	430	1.2	10 45	6.66	6.94	Fo	8	..	37402i	51	51	1.6	-79 21	6.85	8.4	F8	3	3,10	42714b
2	537	1.2	-40 47	8.9	9.7	G5	2	..	12229b	52	380	1.7	+58 37	10.2	10.3	A2	2	..	7195m
3	712	1.2	-42 12	9.9	10.9	F2	2	..	45156b	53	494	1.7	+57 57	5.90	5.96	A2p	5	0,R	37356i
4	635	1.2	-43 12	8.2	8.9	A3	3	..	12229b	54	357	1.7	+26 46	6.82	6.88	A2	6	..	37371i
5	191	1.2	-58 50	7.4	7.7	A2	8	4,7	45176b	55	371	1.7	+ 2 3	9.4	10.2	G5	2	..	10441b
6	378	1.3	+59 7	9.2	9.2	Ao	2	0,2	38164i	56	361	1.7	- 2 24	9.3	9.9	Go	2	..	10630b
7	271	1.3	+10 1	7.67	8.17	F8	4	2,5	37403i	57	394	1.7	-14 23	8.8	9.1	F2	3	..	12240b
8	324	1.3	+ 8 13	10.1	11.1	K	1	..	38034i	58	364	1.7	-18 1	9.1	9.2	A5	2	..	12240b
9	388	1.3	- 4 50	7.30	7.64	F2	7	0,4	12388b	59	718	1.7	-29 43	9.1	9.7	Fo	4	..	23790b
10	401	1.3	- 9 41	8.86	9.64	G5	1	..	37402i	60	724	1.7	-33 13	9.5	10.3	G5	3	..	15113b
11	351	1.3	-22 14	8.5	9.3	Ko	4	..	12366b	61	716	1.7	-42 25	9.4	10.6	A2	3	..	45156b
12	352	1.3	-22 38	8.3	8.8	F5	7	..	12366b	62	577	1.7	-48 58	7.9	9.1	K2	1	..	10623b
13	792	1.3	-34 26	10.6	11.1	Go	2	..	41068b	63	391	1.7	-53 22	9.2	10.2	Ko	2	..	39676b
14	713	1.3	-42 26	9.7	10.8	Go	1	..	45156b	64	495	1.8	+58 3	9.2	9.2	Ao	2	..	7195m
15	592	1.3	-50 10	7.82	8.2	A5	5	..	10623b	65	448	1.8	+42 41	7.8	7.8	B9	5	..	37577i
16	152	1.3	-64 26	9.1	10.3	K5	1	..	23773b	66	367	1.8	-14 56	8.45	9.01	Go	6	..	12240b
17	36	1.3	-82 24	9.7	10.7	Ko	1	..	20538b	67	821	1.8	-25 9	9.1	8.8	F5	4	..	12366b
18	51	1.4	+83 5	6.86	7.86	Ko	7	5,8	37281i	68	796	1.8	-34 22	9.0	9.6	F8	6	3,4	41068b
19	185	1.4	+67 48	9.2	9.2	Ao	3	..	37308i	69	159	1.8	-76 24	9.9	9.9	Ao	2	..	46019b
20	413	1.4	+59 29	9.5	9.5	Ao	2	..	38164i	70	37	1.8	-82 47	8.42	9.3	G5	4	..	20538b
21	514	1.4	+55 56	9.9	9.9	Ao	2	..	7195m	71	415	1.9	+59 43	7.86	7.92	A2	6	..	38164i
22	512	1.4	+55 37	9.5	10.3	G5	2	..	7195m	72	361	1.9	+29 17	7.9	8.0	A3	5	0,4	38973i
23	318	1.4	- 0 27	6.33	7.33	Ko	..	5,5	56,73	73	327	1.9	+ 6 50	8.6	9.0	F5	3	3,3	38034i
24	360	1.4	- 2 43	8.8	9.8	Ko	2	..	10630b	74	362	1.9	- 2 18	8.2	9.0	G5	5	5,2	10630b
25	661	1.4	-28 50	8.9	10.0	G5	2	..	23790b	75	895	1.9	-24 3	7.7	9.2	Ko	5	0,4	12366b
26	512	1.4	-51 22	10.1	10.8	Go	2	..	39676b	76	797	1.9	-32 12	10.2	10.6	F5	1	..	15113b
27	63	1.5	+79 13	6.53	6.61	A3	5	R	37227i	77	726	1.9	-32 59	8.9	9.7	F8	3	..	15113b
28	379	1.5	+58 23	8.6	8.6	B8	6	..	38164i	78	629	1.9	-47 46	9.2	9.5	Fo	4	..	39684b
29	306	1.5	+22 59	2.23	3.30	K2	..	R	28,195	79	263	1.9	-52 28	7.3	7.7	F2	6	3,9	12034b
30	431	1.5	-10 28	8.9	10.0	K2	2	..	37402i	80	146	1.9	-63 18	9.6	10.1	F8	1	..	23773b
31	388	1.5	-12 32	9.9	10.0	A5	2	..	12393b	81	519	2.0	+55 36	9.5	9.3	B3	3	..	7195m
32	384	1.5	-19 36	10.3	10.8	A5	2	..	40765b	82	520	2.0	+55 13	9.9	9.8	B5	2	..	7195m
33	784	1.5	-23 52	8.7	10.0	F8	2	..	45170b	83	376	2.0	+35 4	7.47	7.75	Fo	5	0,3	37474i
34	662	1.5	-28 43	9.7	11.7	G	1	..	41071b	84	338	2.0	- 4 41	7.55	7.83	Fo	7	5,3	12388b
35	676	1.5	-44 58	9.65	11.3	Ko	1	..	39684b	85	701	2.0	-38 18	8.6	9.4	F5	4	..	20247b
36	375	1.5	-56 39	9.1	9.7	Go	2	..	39676b	86	544	2.0	-40 1	7.28	8.5	Ma	5	..	12229b
37	170	1.5	-62 0	9.6	10.0	F5	4	..	23773b	87	611	2.0	-46 51	9.5	10.7	F8	2	..	39684b
38	437	1.6	+60 29	8.8	8.9	A3	2	..	38164i	88	416	2.0	-54 44	9.40	10.2	K2	2	..	39676b
39	515	1.6	+56 0	8.6	8.7	A5	6	0,3	7195m	89	386	2.0	-55 31	9.6	9.9	Fo	2	..	39676b
40	453	1.6	+54 7	8.9	9.9	Ko	2	..	38164i	90	179	2.0	-59 59	9.12	9.7	F8	2	..	45176b
41	429	1.6	+43 53	8.0	8.8	G5	3	..	37578i	91	178	2.0	-61 17	9.7	10.3	Go	2	..	23773b
42	352	1.6	+ 0 58	8.0	9.0	Ko	4	..	37433i	92	165	2.0	-65 37	7.2	7.5	Fo	10	..	20429b
43	407	1.6	- 6 15	8.5	9.6	K2	2	..	12388b	93	498	2.1	+57 27	8.6	8.4	B3	2	..	38164i
44	370	1.6	-15 55	7.10	8.10	Ko	7	..	12240b	94	431	2.1	+56 34	8.2	8.2	B9	5	..	38164i
45	371	1.6	-16 43	9.9	10.7	G5	1	..	40765b	95	518	2.1	+52 23	8.6	8.7	A3	2	R	38897i
46	664	1.6	-28 44	9.9	10.0	Go	2	..	41071b	96	472	2.1	+39 17	8.5	9.5	Ko	1	..	37577i
47	795	1.6	-34 5	10.6	11.2	Go	2	..	41068b	97	342	2.1	+15 7	8.49	8.49	Ao	3	..	38883i
48	581	1.6	-41 40	8.6	8.9	F5	3	..	12229b	98	403	2.1	- 9 5	6.79	7.57	G5	6	..	37402i
49	626	1.6	-47 28	9.3	11.0	Ko	2	..	39684b	99	729	2.1	-27 19	9.7	10.3	Ko	3	..	41071b
50	397	1.6	-57 51	8.8	9.0	A2	3	..	45176b	100	417	2.1	-54 36	9.1	9.9	G5	2	..	39676b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	519	2.2	+53 9	9.2	9.2	Ao	2	..	38164i	51	432	2.6	+56 31	8.0	7.8	Bo	4	R	38164i
2	361	2.2	- 7 42	9.0	9.3	Fo	3	..	37402i	52	456	2.6	+53 51	9.0	9.0	Ao	4	2,2	38164i
3	374	2.2	-16 11	8.1	9.2	K2	2	..	12240b	53	459	2.6	+50 36	8.1	8.1	B9	1	..	38873i
4	386	2.2	-19 37	6.60	7.9	Ko	8	..	12240b	54	476	2.6	+40 1	9.2	10.0	G5	2	..	37577i
5	799	2.2	-34 41	10.2	10.8	G5	2	..	41068b	55	305	2.6	+24 20	7.7	9.1	Ma	2	..	16948i
6	732	2.2	-35 19	9.6	10.2	Go	3	..	41068b	56	287	2.6	+23 28	8.3	9.1	G5	3	..	16948i
7	680	2.2	-45 39	10.1	11.0	G5	2	..	39684b	57	305	2.6	+15 20	7.49	8.49	Ko	4	E	37468i
8	679	2.2	-45 43	9.1	10.7	G5	2	..	39684b	58	737	2.6	-30 1	9.4	9.7	G5	2	..	23790b
9	400	2.2	-57 37	var.	var.	Md	..	R	M	59	737	2.6	-35 37	10.2	11.1	F5	2	..	41068b
10	192	2.2	-58 37	8.7	9.1	A2	2	..	45176b	60	39	2.6	-81 1	8.5	9.5	Ko	3	..	20538b
11	186	2.2	-59 39	8.4	8.8	A2	6	..	45176b	61	433	2.7	+56 14	9.0	9.0	Ao	4	1,4	38164i
12	455	2.3	+53 33	9.9	9.9	A	1	..	38164i	62	526	2.7	+56 6	9.4	9.4	Ao	3	0,2	7195m
13	431	2.3	+43 58	6.50	7.28	G5	6	..	37578i	63	441	2.7	+40 55	9.1	10.2	K2	1	..	37577i
14	449	2.3	+42 44	7.60	8.02	F5	6	..	37577i	64	670	2.7	-28 17	8.7	9.2	G5	4	..	23790b
15	407	2.3	+42 3	8.5	9.5	Ko	1	..	37577i	65	739	2.7	-35 14	7.8	9.1	Ko	6	..	41068b
16	406	2.3	+41 38	8.5	8.5	Ao	2	..	37577i	66	582	2.7	-49 38	9.5	10.0	Go	3	..	39684b
17	364	2.3	+29 5	8.2	9.2	Ko	1	..	38973i	67	503	2.8	+57 34	9.2	9.2	Ao	1	..	38164i
18	315	2.3	+17 33	6.51	6.59	A3	6	3,7	16948i	68	434	2.8	+56 13	9.9	10.0	A3	1	..	7195m
19	393	2.3	-12 10	8.5	9.3	G5	3	..	37402i	69	457	2.8	+54 9	9.0	9.0	Ao	2	..	38164i
20	368	2.3	-14 53	9.55	10.11	Go	3	..	40765b	70	523	2.8	+52 46	7.9	8.9	Ko	4	E	38164i
21	102	2.3	-71 44	9.3	9.9	Go	5	..	38146b	71	416	2.8	+38 53	7.70	7.76	A2	..	2,5-	56,73
22	383	2.4	+58 18	8.8	8.8	B8	3	R	38164i	72	292	2.8	+10 42	8.33	9.51	K5	3	..	37403i
23	521	2.4	+47 4	8.9	9.0	A5	2	..	37578i	73	397	2.8	-14 21	10.3	10.9	Go	3	..	40765b
24	408	2.4	+41 42	8.0	8.3	Fo	5	5,3	37577i	74	633	2.8	-47 5	9.2	9.9	Go	3	..	39684b
25	413	2.4	+38 55	8.3	9.3	Ko	1	..	37577i	75	264	2.8	-52 39	9.2	10.1	Go	1	..	39676b
26	328	2.4	+ 8 22	8.1	8.5	F5	4	..	37403i	76	554	2.9	+45 22	7.67	8.09	F5	5	..	37578i
27	354	2.4	+ 5 9	8.01	8.01	Ao	5	..	37433i	77	411	2.9	+41 29	6.94	6.92	B9	7	1,5	37577i
28	404	2.4	-11 1	9.6	10.4	G5	3	..	37402i	78	442	2.9	+40 20	9.02	9.58	Go	3	..	37577i
29	387	2.4	-19 29	9.9	9.9	Go	2	..	40765b	79	418	2.9	+39 5	8.6	8.9	Fo	2	..	37577i
30	848	2.4	-31 33	8.5	9.7	G5	4	..	23790b	80	391	2.9	-16 47	9.3	10.3	Ko	2	..	40765b
31	798	2.4	-32 24	9.6	10.6	G	2	..	15113b	81	361	2.9	-22 32	9.3	10.8	Ko	1	..	45170b
32	802	2.4	-37 36	7.48	8.8	Ko	7	..	20247b	82	762	2.9	-26 46	10.6	11.0	G	2	..	41071b
33	614	2.4	-46 11	9.3	9.8	Go	3	..	39684b	83	728	2.9	-29 23	7.7	8.8	Ko	7	..	23790b
34	95	2.4	-69 3	10.0	11.0	Ko	2	..	20429b	84	706	2.9	-38 35	8.9	9.7	A2	4	..	20247b
35	300	2.5	+64 52	8.2	9.0	G5	1	..	37308i	85	556	2.9	-48 17	9.3	9.7	F2	3	..	39684b
36	384	2.5	+59 9	8.6	8.4	B3	3	..	38164i	86	147	2.9	-63 10	9.3	10.1	G5	1	..	23773b
37	499	2.5	+57 30	8.5	8.6	A3	3	..	38164i	87	113	2.9	-68 47	8.7	9.7	Ko	7	..	20429b
38	501	2.5	+57 29	8.5	8.6	A3	4	..	38164i	88	388	3.0	+58 41	8.0	8.0	Ao	7	..	38164i
39	525	2.5	+55 52	10.2	10.2	Ao	2	..	7195m	89	528	3.0	+55 31	9.2	9.2	Ao	3	0,2	7195m
40	451	2.5	+42 34	8.0	8.1	A2	3	..	37577i	90	524	3.0	+46 42	8.9	8.9	B9	2	..	37578i
41	486	2.5	+37 23	4.77	4.83	A2	..	1,9-	56,73	91	330	3.0	+ 8 23	7.8	7.8	Ao	5	..	37403i
42	285	2.5	+ 5 31	7.51	8.69	K5	4	5,3	37433i	92	435	3.0	-10 20	9.3	10.1	G5	2	..	37402i
43	293	2.5	- 1 5	6.89	7.67	G5	6	5,4	39008i	93	376	3.0	-15 49	8.9	9.0	A5	3	R	12240b
44	369	2.5	-18 7	9.1	9.6	F8	2	..	40765b	94	370	3.0	-18 41	9.6	10.4	G5	1	..	40765b
45	759	2.5	-26 33	8.5	10.3	G5	4	..	41071b	95	379	3.0	-21 18	9.1	9.9	Go	3	5,3	40765b
46	736	2.5	-35 44	9.3	10.8	Go	2	..	41068b	96	800	3.0	-32 48	9.3	10.3	Ko	3	2,2	15113b
47	791	2.5	-36 8	10.2	10.7	Go	3	..	41068b	97	618	3.0	-46 4	10.8	11.5	Go	1	..	39684b
48	385	2.6	+58 38	9.7	9.6	B5	2	..	7195m	98	76	3.1	+77 26	8.8	8.9	A2	4	..	37309i
49	386	2.6	+58 26	9.7	9.7	Ao	1	..	7195m	99	442	3.1	+60 20	9.06	9.84	G5	1	..	38164i
50	502	2.6	+57 38	8.6	8.9	Fo	4	..	38164i	100	..	3.1	+59 4	Ao	2	..	7195m

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	469	3.1	+55 1	8.6	8.6	B9	4	..	38164i	51	456	3.5	+42 23	7.25	7.67	F5	5	0,4	37577i
2	379	3.1	+35 13	8.22	8.64	F5	2	..	37386i	52	354	3.5	+25 28	8.7	9.0	F2	3	..	38973i
3	272	3.1	+10 8	9.37	9.79	F5	1	..	37403i	53	312	3.5	+24 51	9.1	10.1	Ko	1	..	38973i
4	334	3.1	+ 8 0	8.6	9.6	Ko	2	5,1	38034i	54	375	3.5	+ 1 27	9.0	9.8	G5	2	..	37433i
5	393	3.1	-17 27	9.9	10.0	A2	3	..	40765b	55	366	3.5	- 7 9	6.57	7.35	G5	7	..	37402i
6	730	3.1	-29 49	9.13	9.7	Fo	4	..	23790b	56	906	3.5	-24 41	9.9	10.9	G5	1	..	45969i
7	557	3.1	-48 31	9.3	9.5	Ao	4	..	39684b	57	856	3.5	-30 59	9.1	9.7	Ao	4	..	23790b
8	390	3.1	-55 24	9.1	9.7	Ko	3	2,2	39676b	58	137	3.5	-67 24	11.0	11.8	G5	2	..	20429b
9	388	3.1	-55 34	6.9	7.9	G5	5	5,7	12034b	59	571	3.6	+48 8	8.2	9.2	Ko	1	0,1	38600i
10	129	3.1	-66 37	8.8	9.3	F8	3	..	20429b	60	420	3.6	+36 39	7.8	7.8	Ao	4	1,3	37386i
11	357	3.2	+63 7	8.6	8.6	Ao	3	0,3	37341i	61	381	3.6	+34 31	3.08	3.22	A5	..	5,R	6531c
12	..	3.2	+58 47	..	..	B9	2	..	7195m	62	337	3.6	+27 56	8.1	8.1	Ao	4	..	37371i
13	308	3.2	+24 21	9.2	9.7	F8	1	..	38973i	63	329	3.6	+ 6 15	8.8	9.4	Go	3	..	10381b
14	398	3.2	-14 43	8.63	9.63	Ko	3	..	12240b	64	356	3.6	+ 0 29	8.4	8.5	A2	3	..	37433i
15	394	3.2	-17 19	8.9	9.5	Go	6	..	40765b	65	393	3.6	-18 56	9.6	9.9	Ao	4	..	40765b
16	389	3.2	-18 50	9.1	9.7	Go	2	..	40765b	66	392	3.6	-19 6	9.9	10.5	Go	1	..	40765b
17	390	3.2	-19 23	8.7	8.8	Fo	4	..	12240b	67	830	3.6	-25 10	8.9	8.5	Go	5	5,5	45170b
18	828	3.2	-25 2	8.90	9.2	F8	3	..	12366b	68	675	3.6	-28 3	7.22	7.8	A5	9	..	23790b
19	741	3.2	-35 45	9.2	10.2	G5	4	..	41068b	69	802	3.6	-36 4	10.6	11.1	F8	2	..	39654b
20	605	3.2	-50 27	9.5	10.6	K5	1	3,1	39676b	70	800	3.6	-36 5	10.2	10.8	Go	2	..	39654b
21	24	3.2	-85 14	7.17	8.6	K2	4	..	15173b	71	648	3.6	-43 11	9.3	9.9	F5	3	..	45156b
22	422	3.3	+59 31	6.68	6.96	Fo	9	..	38164i	72	151	3.7	+69 1	8.91	9.69	G5	2	..	37308i
23	..	3.3	+58 24	..	..	A2	2	..	38164i	73	527	3.7	+52 26	8.9	10.1	K5	..	..	M
24	435	3.3	+56 54	9.9	10.0	A2	2	..	7195m	74	355	3.7	+25 28	5.07	5.35	Fo	..	0,6-	56,73
25	459	3.3	+53 52	8.6	9.8	K5	1	..	38164i	75	313	3.7	+24 21	8.1	8.9	G5	2	E	38883i
26	525	3.3	+52 19	9.2	9.2	Ao	2	0,2	38164i	76	336	3.7	+ 7 57	9.0	9.6	Go	2	5,2	10381b
27	434	3.3	+44 12	8.1	8.7	Go	3	..	37577i	77	330	3.7	+ 6 49	8.6	9.6	Ko	1	..	10381b
28	453	3.3	+42 30	8.9	9.0	A2	2	..	37577i	78	331	3.7	+ 6 32	8.6	9.0	F5	2	0,2	10381b
29	412	3.3	- 6 13	9.3	10.1	G5	1	..	12388b	79	297	3.7	- 0 54	7.8	8.1	Fo	6	0,4	37433i
30	395	3.3	-12 21	8.7	9.5	G5	2	..	37402i	80	371	3.7	-17 58	9.3	9.9	Go	5	..	40765b
31	303	3.3	-21 49	8.2	8.4	F5	8	..	12366b	81	739	3.7	-27 30	9.7	10.3	F8	3	..	41071b
32	805	3.3	-33 55	8.7	9.4	F5	6	3,7	15113b	82	738	3.7	-29 13	8.5	9.7	Ko	4	..	23790b
33	520	3.3	-51 7	8.2	8.8	F5	5	3,8	39684b	83	394	3.7	-53 41	8.3	9.0	G5	3	..	12034b
34	424	3.4	+59 37	9.2	10.2	Ko	1	..	38164i	84	391	3.7	-55 38	9.3	10.2	Ko	2	..	39676b
35	505	3.4	+57 14	10.2	10.2	Ao	1	..	7195m	85	301	3.8	+63 41	9.2	9.2	Ao	2	..	38984i
36	529	3.4	+56 5	7.7	8.9	K5	2	..	38164i	86	506	3.8	+57 59	9.4	10.4	Ko	2	..	7195m
37	460	3.4	+53 22	6.40	7.18	G5	5	..	37356i	87	531	3.8	+55 56	8.8	9.1	F2	3	..	38164i
38	412	3.4	+41 32	8.0	8.0	B9	5	..	37577i	88	484	3.8	+40 3	8.52	8.58	A	3	..	37577i
39	296	3.4	- 0 54	7.70	8.77	K2	3	..	10630b	89	370	3.8	+31 52	7.8	8.9	K2	2	..	37386i
40	365	3.4	- 6 56	8.9	10.3	Ma	2	..	37402i	90	320	3.8	- 3 41	8.9	10.1	K5	2	3,1	12388b
41	437	3.4	-10 31	6.87	6.95	A3	6	..	37402i	91	438	3.8	-10 34	9.9	10.7	G5	2	..	12388b
42	386	3.4	-12 49	9.0	10.0	K	1	..	12393b	92	805	3.8	-32 31	9.6	9.7	Go	3	..	23790b
43	396	3.4	-16 56	9.3	10.1	G5	2	..	40765b	93	809	3.8	-36 55	9.2	10.5	G5	2	..	20247b
44	903	3.4	-24 35	9.7	10.6	Ko	1	..	45969b	94	174	3.8	-62 15	9.6	10.6	Ko	1	..	23773b
45	855	3.4	-31 39	9.7	10.3	Go	3	..	41068b	95	234	3.9	+66 3	8.2	9.0	G5	1	..	37308i
46	628	3.4	-39 52	9.13	10.3	K5	2	..	20247b	96	387	3.9	+61 53	7.7	8.0	Fo	3	5,3	37341i
47	559	3.4	-48 16	9.2	9.7	G5	2	..	39684b	97	462	3.9	+53 39	8.8	8.9	A2	2	..	38164i
48	443	3.5	+60 29	8.4	9.2	G5	3	..	38164i	98	457	3.9	+42 43	8.8	9.1	Fo	2	..	37577i
49	530	3.5	+55 49	7.50	8.50	Ko	5	0,3	38164i	99	490	3.9	+38 11	9.1	9.2	A2	2	..	37577i
50	461	3.5	+54 1	10.2	10.2	Ao	3	..	38164i	100	362	3.9	+26 54	9.4	10.4	Ko	1	..	38973i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	247	3.9	+16 46	6.43	6.85	F5	6	..	16948i	51	917	4.4	-24 50	8.65	9.2	Ko	3	..	12366b
2	812	3.9	-34 28	9.6	10.2	A5	4	..	41068b	52	681	4.4	-27 53	9.7	9.6	G5	3	..	41071b
3	268	3.9	-51 55	9.2	10.1	G5	2	..	39676b	53	687	4.4	-45 48	10.8	11.3	Go	1	..	39684b
4	419	3.9	-54 20	8.8	10.5	Ko	1	..	39676b	54	403	4.4	-57 40	8.2	9.0	Ko	3	..	12034b
5	106	3.9	-71 7	9.4	10.0	Go	5	..	38146b	55	35	4.4	-82 59	7.89	7.9	A5	7	..	20538b
6	444	4.0	+60 53	8.0	8.5	F8	2	..	38164i	56	447	4.5	+60 14	8.76	9.54	G5	1	..	38164i
7	429	4.0	+59 30	8.6	9.6	Ko	3	..	38164i	57	528	4.5	+46 52	8.0	8.0	Ao	4	..	38897i
8	391	4.0	+58 46	9.0	9.0	Ao	2	..	38164i	58	348	4.5	+14 23	9.4	9.7	Fo	2	..	38035i
9	528	4.0	+52 45	8.6	8.6	Ao	2	..	37356i	59	377	4.5	+1 14	8.99	9.13	A5	2	..	37433i
10	527	4.0	+47 0	8.4	8.4	Ao	3	..	38897i	60	799	4.5	-23 28	7.62	9.0	K2	7	..	12366b
11	371	4.0	+32 5	8.5	9.3	G5	2	..	37371i	61	713	4.5	-37 56	9.8	11.2	Go	3	..	39654b
12	309	4.0	+22 45	8.5	9.3	G5	2	..	16948i	62	624	4.5	-46 51	9.3	9.9	G5	4	..	39684b
13	372	4.0	-17 52	8.5	9.7	K5	3	..	12240b	63	130	4.5	-66 25	6.76	7.3	Ko	4	0,4R	42851b
14	373	4.0	-18 1	9.6	10.2	Go	2	..	40765b	64	125	4.5	-70 30	9.6	9.9	F2	5	..	20429b
15	374	4.0	-18 15	6.26	7.61	Ma	6	5,9	41991b	65	52	4.5	-79 11	8.7	9.0	F2	6	..	14358b
16	834	4.0	-24 54	9.7	10.7	G5	1	..	45969b	66	509	4.6	+57 49	9.9	10.2	F2	2	..	7195m
17	766	4.0	-26 47	9.7	10.3	Go	3	..	41071b	67	438	4.6	+57 11	6.36	6.19	B3p	9	0,6R	38164i
18	727	4.0	-42 21	6.80	6.7	A2	8	..	12229b	68	534	4.6	+55 41	8.2	8.0	Bo	7	..	38164i
19	124	4.0	-70 12	9.7	10.5	G5	3	..	20429b	69	474	4.6	+54 28	9.2	10.2	Ko	1	..	38164i
20	143	4.0	-72 5	7.2	8.0	G5	10	..	38146b	70	515	4.6	+51 40	9.2	9.2	Ao	3	0,1	38600i
21	43	4.0	-78 29	9.2	10.0	G5	3	..	23772b	71	469	4.6	+51 8	8.8	9.8	Ko	1	..	38897i
22	121	4.1	+73 34	6.19	6.97	G5	7	..	37615i	72	426	4.6	+37 13	9.1	9.1	Ao	2	..	37386i
23	466	4.1	+50 35	7.47	7.47	Ao	3	..	37356i	73	309	4.6	+15 33	9.4	10.2	G5	1	..	38035i
24	573	4.1	+47 49	8.4	8.8	F5	1	..	38600i	74	349	4.6	+15 1	8.6	9.2	Go	3	..	38035i
25	357	4.1	+26 2	8.9	9.4	F8	2	..	38973i	75	440	4.6	-10 21	8.9	9.7	G5	2	..	37402i
26	358	4.1	+25 44	9.1	9.2	A2	1	..	38973i	76	404	4.6	-20 2	7.30	8.4	Ko	6	..	12240b
27	289	4.1	+5 31	7.06	7.34	Fo	6	0,6	37403i	77	918	4.6	-24 14	9.2	8.9	A2	4	..	45170b
28	324	4.1	-2 49	7.07	7.57	F8	4	3,8	39008i	78	808	4.6	-32 13	7.02	8.2	Ko	8	..	23790b
29	375	4.1	-18 19	9.1	9.6	F8	2	..	12240b	79	807	4.6	-36 18	7.78	8.7	Ko	6	..	41068b
30	382	4.1	-21 35	9.3	9.9	Go	3	0,2	45170b	80	651	4.6	-43 45	8.9	9.8	G5	1	..	12229b
31	913	4.1	-24 31	9.1	8.9	F8	3	..	12366b	81	182	4.6	-61 23	10.1	10.1	Ao	2	..	23773b
32	767	4.1	-26 13	8.9	9.2	Ao	6	..	41071b	82	97	4.6	-69 20	10.8	11.1	Fo	2	..	20429b
33	743	4.1	-29 2	9.2	10.6	K5	3	5,1	41071b	83	73	4.7	+78 42	7.04	7.10	A2	5	..	37227i
34	619	4.1	-44 50	9.70	10.4	Go	2	..	39684b	84	424	4.7	+38 58	9.1	9.1	B9	3	..	37577i
35	269	4.1	-52 38	9.5	10.3	G5	2	..	39676b	85	289	4.7	+3 18	6.91	6.97	A2	7	..	37433i
36	445	4.2	+60 44	8.0	9.0	Ko	1	..	38164i	86	402	4.7	-17 26	8.1	8.2	A3	6	..	12240b
37	329	4.2	+19 52	8.00	8.08	A3	6	0,4	38883i	87	383	4.7	-21 13	9.6	11.7	K5	1	..	40765b
38	338	4.2	+8 8	9.4	10.0	Go	1	..	10381b	88	683	4.7	-28 3	9.4	10.4	G5	2	..	41071b
39	379	4.2	-16 29	7.80	8.08	Fo	7	..	12240b	89	808	4.7	-36 16	8.2	8.7	F8	7	..	41068b
40	399	4.2	-17 7	8.7	9.0	Fo	4	..	12240b	90	689	4.7	-44 58	8.50	9.8	Ko	2	..	12229b
41	590	4.2	-49 35	9.3	10.0	Ko	2	..	39684b	91	592	4.7	-49 45	10.1	10.3	F5	1	..	39684b
42	181	4.2	-61 28	7.0	8.2	F5	6	3,8	12034b	92	441	4.8	+56 48	9.5	10.7	K5	1	..	7195m
43	557	4.3	+45 27	8.2	9.0	G5	2	..	37578i	93	561	4.8	+45 44	9.5	9.5	A	2	..	37578i
44	391	4.3	-8 20	9.6	9.6	A	1	..	12388b	94	425	4.8	+38 34	6.05	6.05	Ao	..	R	56,73
45	861	4.3	-31 43	8.9	10.0	F5	2	..	23790b	95	425	4.8	+38 34	6.71	6.77	A2	..	R	56,73
46	182	4.3	-60 9	7.56	8.0	F5	6	..	12034b	96	350	4.8	+14 33	8.4	9.5	K2	2	..	38035i
47	390	4.4	+32 53	7.70	7.70	Ao	4	..	37386i	97	288	4.8	+11 39	8.4	9.0	Go	2	5,2	37403i
48	292	4.4	+12 42	7.62	7.60	B9	6	1,4	37403i	98	416	4.8	-10 53	8.8	9.8	Ko	2	..	12388b
49	288	4.4	+3 46	7.46	8.24	G5	4	..	37433i	99	773	4.8	-26 45	9.1	8.9	Fo	5	..	41071b
50	915	4.4	-24 17	9.4	9.5	F5	3	..	12366b	100	809	4.8	-32 17	7.75	9.2	K5	7	..	23790b

THE HENRY DRAPER CATALOGUE.

13300

2^h 4^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	422	4.8	53 58	8.4	8.8	A5	4	..	12034b	51	813	5.3	-32 4	9.6	10.3	Go	1	..	41068b
2	574	4.9	+50 8	9.22	9.22	Ao	2	..	3860oi	52	738	5.3	-33 5	9.6	10.6	Go	1	..	41068b
3	333	4.9	+8 32	9.1	9.7	Go	1	..	10381b	53	716	5.3	-38 6	9.6	11.5	Ko	2	..	39654b
4	382	4.9	-16 36	7.71	8.49	G5	6	..	12240b	54	618	5.4	+49 8	7.8	8.2	F5	3	..	37578i
5	921	4.9	-24 49	6.51	7.3	Fo	10	..	12366b	55	427	5.4	+36 54	7.9	7.9	B8	5	2,4	37386i
6	751	4.9	-29 23	10.4	10.0	G5	2	..	41068b	56	311	5.4	+15 55	10.1	10.5	F5	2	..	38035i
7	381	4.9	-56 0	7.4	8.7	Ko	5	5,3	45176b	57	343	5.4	+13 14	7.9	8.7	G5	5	..	37403i
8	165	4.9	-76 1	9.5	10.7	K5	1	..	46019b	58	404	5.4	-17 40	8.9	9.2	Fo	3	..	12240b
9	536	5.0	+55 56	9.2	9.2	B9	3	..	38164i	59	384	5.4	-21 14	9.3	10.2	Go	1	..	40765b
10	478	5.0	+54 30	9.2	9.2	B9	2	..	38164i	60	717	5.4	-38 16	9.2	10.0	Go	4	..	20247b
11	470	5.0	+54 5	8.37	8.65	Fo	3	..	38164i	61	596	5.4	-41 52	8.3	9.1	Go	2	..	12229b
12	416	5.0	+35 33	8.5	9.5	Ko	1	..	37386i	62	394	5.4	-54 57	10.00	10.2	F5	2	..	39676b
13	368	5.0	+29 37	8.5	8.9	F5	2	E	38973i	63	362	5.5	+25 27	6.18	7.25	K2	6	2,3	37371i
14	352	5.0	+14 41	8.5	9.5	Ko	2	..	38035i	64	312	5.5	+22 45	8.2	8.5	F2	4	..	38883i
15	377	5.0	-15 21	7.73	8.73	Ko	4	..	12240b	65	405	5.5	-17 11	9.6	10.6	Ko	2	..	40765b
16	406	5.0	-20 5	9.1	10.0	G5	3	..	40765b	66	745	5.5	-27 10	9.2	9.6	Go	3	..	41071b
17	685	5.0	-28 15	8.9	9.8	K2	2	..	23790b	67	271	5.5	-52 43	9.3	10.1	F5	2	..	39676b
18	865	5.0	-30 58	8.1	9.4	F2	7	..	23790b	68	167	5.5	-65 28	8.6	9.8	K5	4	..	20429b
19	393	5.0	-55 20	9.3	9.7	F5	2	..	39676b	69	75	5.6	+76 28	9.2	9.7	F8	2	..	37615i
20	153	5.1	+68 54	7.95	7.95	Ao	5	..	37308i	70	445	5.6	+56 50	9.4	9.4	Ao	2	..	38164i
21	392	5.1	+58 34	8.9	10.0	K2	2	..	7195m	71	456	5.6	+40 15	9.07	10.07	Ko	2	..	37577i
22	511	5.1	+57 52	9.7	9.7	Ao	3	0,1	7195m	72	347	5.6	+31 3	6.20	6.20	Ao	8	..	37371i
23	532	5.1	+46 46	8.0	8.0	B8	4	..	37578i	73	366	5.6	+26 37	9.4	9.5	A5	1	..	38973i
24	318	5.1	+24 35	8.38	9.45	K2	1	..	38973i	74	345	5.6	+7 52	8.6	9.4	G5	1	..	37403i
25	277	5.1	+19 2	5.92	7.27	Ma	7	..	16948i	75	350	5.6	-3 53	8.5	9.6	K2	4	0,1	12388b
26	326	5.1	+0 1	8.4	9.2	G5	2	..	37433i	76	755	5.6	-30 28	8.9	9.4	F5	7	..	23790b
27	407	5.1	-20 45	9.3	10.5	F8	2	..	40765b	77	658	5.6	-43 26	9.9	10.8	G5	1	..	45156b
28	867	5.1	-31 26	9.2	10.3	G5	2	..	23790b	78	631	5.6	-46 9	9.5	10.1	Go	3	..	39684b
29	812	5.1	-32 11	9.6	10.3	K5	2	..	23790b	79	395	5.7	+58 57	8.7	8.7	Ao	3	..	38164i
30	155	5.1	-64 51	9.6	10.1	F8	2	..	20429b	80	363	5.7	+25 38	8.5	8.9	F5	3	..	38973i
31	443	5.2	+56 51	9.0	9.0	Ao	3	..	38164i	81	295	5.7	+24 4	8.7	9.5	G5	2	..	38883i
32	444	5.2	+56 27	9.2	10.4	K5	2	R	7195m	82	341	5.7	+20 55	7.22	7.78	Go	6	..	16948i
33	379	5.2	+1 32	9.4	9.8	F5	2	..	37433i	83	345	5.7	+14 6	9.8	10.2	F5	2	..	38035i
34	744	5.2	-27 34	9.7	10.1	Go	3	..	41071b	84	290	5.7	+11 52	8.7	9.5	G5	2	..	37403i
35	752	5.2	-29 29	7.6	9.2	K2	6	..	23790b	85	746	5.7	-27 11	10.4	9.6	Ao	3	..	41071b
36	632	5.2	-43 59	5.78	6.5	Ko	..	5,8	56,119	86	869	5.7	-31 32	8.2	9.4	Ko	4	..	23790b
37	628	5.2	-46 51	8.9	9.2	Fo	6	..	39684b	87	598	5.7	-41 20	6.72	6.7	F2	..	2,6	56,119
38	512	5.3	+57 28	9.2	9.2	B9	1	..	38164i	88	632	5.7	-45 56	7.22	7.0	Fo	6	..	12229b
39	418	5.3	+42 11	8.4	8.5	A3	3	3,2	37577i	89	633	5.7	-46 12	9.2	9.9	G5	3	..	39684b
40	419	5.3	+41 51	8.9	9.9	Ko	1	..	37577i	90	635	5.7	-46 29	8.8	9.8	F2	3	..	39684b
41	427	5.3	+39 0	8.7	9.7	Ko	1	..	37577i	91	446	5.8	+56 45	8.9	9.5	Go	2	..	38164i
42	370	5.3	+29 40	8.2	8.5	Fo	4	..	37371i	92	540	5.8	+55 59	9.5	9.5	Ao	1	..	38164i
43	369	5.3	+29 27	8.2	8.2	Ao	4	..	37371i	93	580	5.8	+49 47	8.8	8.8	Ao	1	..	3860oi
44	293	5.3	+23 20	7.23	7.51	Fo	5	0,2	16948i	94	343	5.8	+20 17	8.80	9.87	K2	1	..	38883i
45	293	5.3	+5 37	7.41	7.97	Go	4	..	37433i	95	313	5.8	+15 29	8.7	8.8	A2	3	..	38035i
46	327	5.3	-0 33	9.0	10.0	Ko	3	..	10630b	96	637	5.8	-39 44	9.58	10.6	G5	1	..	20247b
47	414	5.3	-9 13	8.18	9.18	Ko	3	..	37402i	97	598	5.8	-49 4	7.7	8.5	G5	7	..	39684b
48	841	5.3	-25 28	9.2	9.5	A5	4	2,3	45969b	98	397	5.8	-53 17	9.2	10.2	Ko	2	..	39676b
49	753	5.3	-29 4	9.2	9.4	G5	5	..	23790b	99	398	5.8	-53 39	9.5	10.5	Ko	1	..	39676b
50	868	5.3	-31 14	8.3	9.4	G5	4	..	23790b	100	177	5.8	-61 55	9.3	10.3	Ko	2	..	23773b

13400

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	38	<i>m.</i> 5.8	<i>o</i> -82 31	<i>'</i> 10.1	10.6	F8	2	..	20538b	51	518	<i>m.</i> 6.4	<i>o</i> +57 26	10.2	10.8	Go	1	..	7195m
2	396	5.9	+59 4	8.2	8.0	B	6	R	7195m	52	474	6.4	+53 44	8.1	8.1	Ao	2	..	37356i
3	449	5.9	+56 45	7.05	7.61	Go	7	0,4 R	38164i	53	583	6.4	+48 6	7.6	8.8	K5	1	0,1	38897i
4	428	5.9	+36 30	8.7	8.8	A2	3	..	37386i	54	339	6.4	+9 6	9.0	9.3	Fo	2	..	37403i
5	373	5.9	-2 23	9.4	9.9	F8	1	..	45970b	55	418	6.4	-9 41	9.9	10.7	G5	1	..	12388b
6	400	5.9	-13 24	7.30	7.30	Ao	5	R	37402i	56	447	6.4	-10 31	6.09	6.43	F2	8	..	37402i
7	408	5.9	-20 40	8.9	9.6	Go	3	..	45969b	57	381	6.4	-15 9	7.70	8.20	F8	5	0,4	12240b
8	601	5.9	-28 17	9.1	8.7	A2	5	..	23790b	58	407	6.4	-17 22	9.1	9.9	G5	2	..	40765b
9	817	5.9	-37 28	10.9	10.8	F5	3	..	39654b	59	402	6.4	-19 47	7.48	8.8	Ko	3	..	12240b
10	819	5.9	-37 52	8.2	8.5	F2	7	..	20247b	60	782	6.4	-25 56	8.5	8.7	Go	6	..	41071b
11	383	5.9	-56 5	8.6	10.5	Go	2	..	39676b	61	813	6.4	-35 59	7.64	9.0	Ko	7	..	41068b
12	397	6.0	+58 20	8.2	8.3	A2	5	R	38164i	62	725	6.4	-38 50	7.70	9.4	K2	6	..	20247b
13	482	6.0	+54 53	9.4	9.4	B8	4	..	7195m	63	641	6.4	-46 6	8.9	9.6	Ko	3	..	39684b
14	580	6.0	+47 47	8.2	8.3	A2	4	..	38897i	64	401	6.5	+59 9	9.5	9.5	Ao	3	..	7195m
15	422	6.0	+41 40	8.0	9.0	Ko	2	..	37577i	65	495	6.5	+39 47	8.1	9.1	Ko	2	..	37386i
16	815	6.0	-32 13	9.6	10.0	Go	2	..	23790b	66	319	6.5	+24 58	9.4	10.4	Ko	1	..	38973i
17	399	6.0	-53 13	9.9	10.2	Fo	3	..	39676b	67	346	6.5	+2 59	6.71	6.85	A5	7	..	37433i
18	425	6.0	-53 56	8.8	9.1	A2	3	..	12034b	68	375	6.5	-2 18	6.04	7.04	Ko	5	0,8	37433i
19	52	6.1	+84 6	9.4	9.5	A2	2	..	37281i	69	752	6.5	-27 42	8.3	8.9	G5	6	5,4	41071b
20	517	6.1	+58 5	10.2	10.3	A3	2	..	7195m	70	761	6.5	-30 46	9.9	10.3	Go	2	..	41068b
21	347	6.1	+8 6	5.74	6.30	Go	..	5,8	56,73	71	817	6.5	-32 32	8.2	8.5	G5	7	..	23790b
22	871	6.1	-31 16	8.0	9.4	Ko	5	..	23790b	72	656	6.5	-46 55	8.5	9.0	Fo	5	..	39684b
23	638	6.1	-44 17	6.49	7.0	Ko	..	5,7 R	56,119	73	99	6.5	-69 27	10.0	10.5	F8	3	..	20429b
24	273	6.1	-52 12	7.2	7.5	Ko	6	5,4	12034b	74	239	6.6	+66 3	6.15	6.57	F5	7	R	38984i
25	272	6.1	-52 27	9.1	10.1	Go	3	..	39676b	75	519	6.6	+66 3	6.50	6.50	A2	9	R	38164i
26	400	6.1	-53 45	7.6	8.8	G5	3	..	12034b	76	621	6.6	+58 6	6.50	6.50	Aop	9	R	38164i
27	307	6.2	+64 23	7.40	7.46	A2	6	..	37308i	77	621	6.6	+48 55	7.85	8.85	Ko	3	..	37578i
28	398	6.2	+58 51	10.2	10.2	Ao	2	..	7195m	78	433	6.6	+39 10	9.2	10.2	Ko	1	..	37577i
29	483	6.2	+54 39	9.0	8.9	B5	4	..	38164i	79	382	6.6	+31 42	8.10	9.17	K2	2	..	37371i
30	583	6.2	+49 19	8.1	8.5	F5	3	..	37578i	80	371	6.6	+29 50	5.20	5.76	Go	10	..	37371i
31	362	6.2	+1 13	8.34	9.34	Ko	2	..	37433i	81	369	6.6	+28 44	8.1	9.2	K2	1	..	38973i
32	402	6.2	-12 55	9.3	9.6	F	2	..	12393b	82	296	6.6	+23 30	7.61	8.39	G5	4	..	16948i
33	389	6.2	-15 47	8.5	8.5	Ao	6	..	12240b	83	298	6.6	+21 32	8.45	9.23	G5	3	..	38883i
34	846	6.2	-24 59	9.80	10.4	Go	1	..	45969b	84	341	6.6	+8 14	9.0	9.1	A5	3	..	10381b
35	694	6.2	-28 42	7.19	7.8	Ko	8	..	23790b	85	329	6.6	-0 14	8.6	9.6	Ko	3	..	10630b
36	434	6.3	+59 29	8.6	8.9	Fo	4	..	38164i	86	377	6.6	-2 29	9.0	9.4	F5	3	E	10630b
37	399	6.3	+58 44	8.1	9.1	Ko	4	..	38164i	87	640	6.6	-39 37	9.0	10.6	K2	1	..	20247b
38	581	6.3	+47 25	8.9	8.9	Ao	2	..	38897i	88	664	6.6	-42 56	8.2	10.5	F8	3	..	45156b
39	458	6.3	+41 0	8.1	8.2	A3	4	..	37577i	89	696	6.6	-45 16	9.3	10.1	F5	3	5,3	39684b
40	433	6.3	+36 55	8.3	8.3	Ao	3	..	37386i	90	643	6.6	-45 55	7.2	8.1	G5	4	..	12229b
41	420	6.3	-6 6	8.7	9.2	F8	3	..	12388b	91	178	6.6	-62 13	9.8	10.3	F8	3	..	23773b
42	380	6.3	-15 33	6.74	6.74	Ao	10	..	12240b	92	140	6.6	-67 42	10.5	11.1	Go	3	..	20429b
43	401	6.3	-19 0	9.4	10.0	Fo	2	..	40765b	93	451	6.7	+57 3	9.7	9.7	Ao	1	..	7195m
44	559	6.3	-40 49	10.0	10.6	Go	3	0,2	39654b	94	543	6.7	+56 6	9.2	9.2	B8	3	..	7195m
45	532	6.3	-51 19	6.28	7.3	G5	6	R	10623b	95	446	6.7	+43 23	8.4	8.8	F5	3	..	37578i
46	131	6.3	-66 52	9.5	10.1	Go	3	..	38146b	96	435	6.7	+36 54	8.6	8.7	A2	3	..	37386i
47	166	6.3	-73 53	9.1	10.2	K2	3	..	46019b	97	421	6.7	-6 36	8.1	8.4	Fo	3	..	37402i
48	189	6.4	+67 39	8.0	8.3	Fo	4	..	37308i	98	382	6.7	-14 53	9.20	9.28	A3	2	..	12393b
49	191	6.4	+66 16	7.7	8.7	Ko	3	..	37308i	99	847	6.7	-25 2	9.35	9.5	F8	2	0,2	41071b
50	435	6.4	+59 39	9.5	9.5	A	2	..	38164i	100	766	6.7	-30 42	9.7	10.0	F8	4	..	23790b

THE HENRY DRAPER CATALOGUE.

2^h 6^m.7

13500

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	665	6.7	-42 53	8.6	11.1	G5	1	..	45156b	51	187	7.1	-61 14	8.9	10.0	Go	3	..	23773b
2	399	6.7	-55 37	9.2	9.7	F8	3	E	39676b	52	168	7.1	-64 54	9.3	10.1	G5	3	..	20429b
3	120	6.8	+73 8	8.6	8.7	A5	2	..	37615i	53	190	7.2	+67 26	9.2	9.5	Fo	2	..	37308i
4	392	6.8	+61 13	7.6	8.0	F5	4	0,3	38164i	54	443	7.2	+59 37	9.0	9.0	A	2	..	38164i
5	402	6.8	+58 17	9.0	9.1	A5	3	..	38164i	55	348	7.2	+20 44	5.35	5.77	F5	..	0,8R	56,73
6	452	6.8	+57 3	9.5	9.5	Ao	5	0,2	7195m	56	280	7.2	+9 51	8.5	8.8	Fo	3	..	37403i
7	496	6.8	+40 12	7.32	7.88	Go	6	..	37577i	57	946	7.2	-24 49	8.55	8.9	A2	4	..	10434b
8	502	6.8	+37 50	9.2	10.2	Ko	1	..	37577i	58	876	7.2	-31 49	9.1	10.3	Ko	3	..	41068b
9	296	6.8	+6 10	8.6	9.1	F8	2	..	10381b	59	824	7.2	-34 25	8.2	9.9	Ko	5	..	41068b
10	419	6.8	-9 24	9.1	9.9	G5	2	..	37402i	60	309	7.3	+64 33	8.14	8.64	F8	2	..	37308i
11	381	6.8	-18 13	6.73	7.91	K5	8	..	12240b	61	547	7.3	+56 2	9.0	9.0	B8	3	..	38164i
12	761	6.8	-29 39	9.2	10.6	K2	2	..	23790b	62	570	7.3	+45 15	8.42	8.42	Ao	3	..	37578i
13	816	6.8	-36 8	9.8	10.8	Ko	1	..	36954b	63	424	7.3	+41 51	9.5	9.6	A5	2	..	37577i
14	641	6.8	-39 48	9.2	10.3	Go	2	..	39654b	64	462	7.3	+40 19	7.52	7.60	A3	7	..	37577i
15	575	6.8	-48 34	7.8	8.8	G5	2	..	10623b	65	374	7.3	+30 6	7.76	8.54	G5	4	..	37371i
16	602	6.8	-49 22	8.6	9.5	G5	3	..	39684b	66	332	7.3	+19 20	8.0	9.0	Ko	3	5,1	38883i
17	385	6.8	-56 39	9.5	9.9	F5	2	..	39676b	67	351	7.3	+13 27	7.36	8.36	Ko	5	..	37403i
18	403	6.9	+58 56	8.6	8.6	B9	4	..	38164i	68	382	7.3	-18 12	7.46	8.46	Ko	4	..	12240b
19	541	6.9	+52 35	6.84	8.02	K5	3	..	37356i	69	877	7.3	-31 52	8.9	10.3	Ko	4	0,3	41068b
20	447	6.9	+43 45	5.08	6.08	Ko	8	R	37578i	70	188	7.3	-61 34	7.6	9.4	K2	4	..	23773b
21	391	6.9	+34 52	9.5	10.7	K5	..	..	M	71	521	7.4	+51 47	8.9	8.9	Ao	1	..	38600i
22	297	6.9	+23 43	6.19	7.19	Ko	6	5,7-	16948i	72	301	7.4	+21 50	9.4	9.7	F2	1	..	38883i
23	406	6.9	-19 27	6.79	7.9	G5	8	..	12240b	73	413	7.4	-16 51	9.6	10.4	G5	1	..	40765b
24	411	6.9	-20 2	9.3	9.6	Ko	2	5,1	45969b	74	389	7.4	-21 19	8.5	9.0	Ko	2	..	10434b
25	642	6.9	-39 2	10.4	11.7	Go	1	..	39654b	75	376	7.4	-22 2	8.9	10.2	Ko	3	..	45969b
26	659	6.9	-47 30	9.3	10.5	Ko	2	..	39684b	76	791	7.4	-26 47	8.9	9.5	Go	4	..	41071b
27	400	6.9	-55 8	9.1	9.7	Go	3	0,1	39676b	77	647	7.4	-46 32	9.9	10.5	F5	2	..	39684b
28	386	6.9	-56 22	9.0	9.6	Go	3	..	39676b	78	156	7.4	-64 50	7.61	8.0	Go	9	..	20429b
29	149	6.9	-75 2	8.57	9.6	Ko	3	0,3	14358b	79	191	7.5	+67 13	7.8	8.8	Ko	5	..	37308i
30	481	7.0	+50 36	5.40	6.40	Ko	6	..	37356i	80	407	7.5	+58 34	10.2	10.2	Ao	1	..	7195m
31	498	7.0	+40 3	7.47	8.03	A3	5	..	37577i	81	481	7.5	+53 23	8.5	9.5	Ko	1	..	38164i
32	405	7.0	-13 22	8.7	8.8	G5	2	..	37402i	82	627	7.5	+48 55	8.5	8.8	Fo	2	5,2	38897i
33	375	7.0	-21 53	9.1	11.1	Go	2	..	45170b	83	401	7.5	+33 9	8.6	8.9	Fo	3	..	37386i
34	787	7.0	-26 52	9.5	11.5	K5	1	..	41071b	84	295	7.5	+11 23	8.4	9.2	G5	2	..	37403i
35	823	7.0	-34 46	9.78	10.8	K2	2	..	39654b	85	390	7.5	-21 32	8.5	9.6	G5	2	..	10434b
36	732	7.0	-38 33	10.2	10.9	G5	2	..	39654b	86	820	7.5	-35 55	9.5	10.7	Go	2	..	41068b
37	642	7.0	-44 17	9.1	9.9	G5	2	..	12229b	87	604	7.5	-41 37	10.2	11.5	F8	1	..	45156b
38	179	7.0	-62 44	7.9	8.5	Go	5	..	23773b	88	663	7.5	-47 3	8.2	7.9	Ao	6	0,7	12358b
39	241	7.1	+66 2	8.8	10.0	K5	..	..	M	89	78	7.6	+77 17	7.9	8.9	Ko	2	5,3	37615i
40	242	7.1	+65 51	7.35	7.77	F5	5	..	37308i	90	310	7.6	+63 34	8.0	7.9	B5p	3	R	37308i
41	441	7.1	+60 1	9.2	9.2	Ao	2	..	38164i	91	408	7.6	+58 55	9.2	9.2	B9	3	..	38164i
42	..	7.1	+58 39	..	..	Ao	1	..	7195m	92	492	7.6	+55 7	10.2	10.2	Ao	3	..	7195m
43	521	7.1	+57 27	8.9	9.9	Ko	5	0,2	7195m	93	491	7.6	+54 26	8.6	8.7	A3	2	..	38164i
44	480	7.1	+53 27	9.0	8.8	B	2	..	38164i	94	536	7.6	+47 2	6.03	6.31	Fo	..	2,8	56,73
45	252	7.1	+16 14	8.4	9.0	Go	3	..	38035i	95	317	7.6	+15 37	9.6	10.6	Ko	1	..	38035i
46	347	7.1	+2 18	6.69	7.47	G5	6	..	37433i	96	357	7.6	+14 48	5.99	6.17	K5	6	0,6	38035i
47	412	7.1	-19 53	9.73	10.5	G5	2	..	40765b	97	352	7.6	+13 46	8.7	9.7	Ko	2	..	38035i
48	666	7.1	-43 13	9.7	11.1	Ko	1	..	45156b	98	379	7.6	-2 41	8.2	9.2	Ko	4	2,2	10630b
49	661	7.1	-47 18	10.1	10.8	Go	2	..	39684b	99	767	7.6	-29 25	8.7	9.4	Ko	4	..	23790b
50	662	7.1	-47 47	9.7	10.2	F5	3	..	39684b	100	821	7.6	-36 47	9.6	10.2	F8	3	..	39654b

13600

2^h 7^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	746	7.6	-42 20	9.5	10.0	F8	4	..	45156b	51	366	8.0	+ 4 17	8.6	9.4	G5	2	..	37433i
2	701	7.6	-45 49	8.2	8.7	F8	5	..	39684b	52	795	8.0	-26 48	7.6	8.6	G5	8	..	41071b
3	581	7.6	-48 4	8.8	9.1	F5	5	..	39684b	53	822	8.0	-35 53	9.2	10.5	Go	2	..	41068b
4	409	7.6	-57 19	8.9	9.6	G5	1	..	45176b	54	..	8.1	+58 53	..	..	Ao	1	..	7195m
5	149	7.6	-72 7	10.4	11.4	Ko	3	..	38146b	55	414	8.1	+58 52	9.7	10.8	K2	2	..	7195m
6	409	7.7	+59 11	9.2	9.3	A2	2	..	38164i	56	413	8.1	+58 39	9.4	9.5	A2	4	0,2	7195m
7	628	7.7	+48 37	8.0	9.0	Ko	3	..	37578i	57	523	8.1	+57 52	9.4	9.9	F8	2	..	38164i
8	402	7.7	+32 31	8.1	8.9	G5	2	..	37386i	58	524	8.1	+57 42	9.4	10.5	K2	1	..	7195m
9	386	7.7	+31 27	8.1	8.5	F5	4	..	37371i	59	462	8.1	+56 28	8.9	8.9	B9	3	R	38164i
10	322	7.7	+24 55	8.63	9.19	Go	2	..	38973i	60	551	8.1	+55 17	8.66	9.08	F5	5	..	7195m
11	345	7.7	+ 8 23	4.54	5.32	G5	..	5,R	56,73	61	486	8.1	+54 4	8.6	8.6	B8	5	0,3	38164i
12	336	7.7	- 2 52	5.72	6.28	Go	6	2,9	10342i	62	506	8.1	+38 11	8.7	9.7	Ko	4	..	37577i
13	415	7.7	-16 51	8.9	9.9	Ko	2	..	40765b	63	384	8.1	+34 10	8.7	9.3	G	1	..	37386i
14	698	7.7	-27 59	7.6	8.7	Ko	6	..	23790b	64	383	8.1	+34 3	8.7	8.7	A	1	..	37386i
15	823	7.7	-32 45	8.2	8.5	Go	5	..	23790b	65	393	8.1	-21 29	9.1	10.0	Ko	3	0,3	40765b
16	822	7.7	-32 48	8.9	8.8	Fo	5	..	23790b	66	664	8.1	-47 38	7.4	7.7	Ko	4	0,8-	10623b
17	647	7.7	-44 3	9.2	10.2	G5	2	..	12229b	67	199	8.1	-58 29	9.0	10.0	K5	1	..	45176b
18	604	7.7	-49 48	8.07	7.9	Fo	3	..	10623b	68	196	8.1	-59 37	7.46	8.8	Ko	6	0,4	45176b
19	191	7.7	-61 37	8.9	10.3	Go	2	..	23773b	69	552	8.2	+55 20	8.51	8.34	B3	5	..	7195m
20	456	7.8	+56 44	10.2	10.3	A2	2	..	7195m	70	255	8.2	+16 27	9.1	9.6	F8	1	..	38035i
21	494	7.8	+54 51	8.06	7.94	B5	4	..	7195m	71	427	8.2	- 6 28	9.6	10.4	G5	1	..	12388b
22	523	7.8	+51 51	8.7	8.8	A2	2	..	38600i	72	394	8.2	-21 40	9.1	9.6	Go	4	..	45969b
23	334	7.8	+20 7	8.80	9.36	Go	4	..	38883i	73	608	8.2	-49 41	9.7	10.9	Ko	1	..	39684b
24	305	7.8	+ 3 49	8.4	8.7	Fo	4	..	37433i	74	157	8.2	-64 10	10.0	10.1	A3	3	..	23773b
25	384	7.8	-18 4	9.6	10.7	K2	1	..	40765b	75	101	8.2	-69 15	9.7	10.2	F8	3	..	20429b
26	760	7.8	-27 7	8.7	8.7	Go	5	..	41071b	76	447	8.3	+59 28	9.7	9.7	Ao	2	..	38164i
27	770	7.8	-29 29	9.5	9.7	Go	4	..	23790b	77	415	8.3	+58 42	9.9	9.9	Ao	2	..	7195m
28	605	7.8	-49 37	9.9	10.0	Go	1	..	39684b	78	497	8.3	+54 38	7.16	8.16	Ko	7	0,3	38164i
29	186	7.8	-59 57	9.06	10.3	K5	1	..	45176b	79	539	8.3	+46 14	6.73	6.68	B8	7	..	37578i
30	139	7.9	+70 2	8.64	8.62	B9	3	..	38972i	80	501	8.3	+39 18	8.9	9.9	Ko	1	..	37577i
31	445	7.9	+59 35	9.7	9.7	A	1	..	38164i	81	300	8.3	+23 14	9.5	10.3	G5	2	..	38973i
32	410	7.9	+59 8	9.5	9.5	Ao	3	..	7195m	82	283	8.3	+19 9	7.10	8.10	Ko	5	5,5	38883i
33	522	7.9	+58 1	7.65	7.63	B9	5	..	38164i	83	367	8.3	+ 4 33	6.56	6.84	Fo	7	..	37433i
34	458	7.9	+57 13	9.2	10.0	G5	2	..	7195m	84	796	8.3	-26 16	9.5	9.6	F8	3	0,2-	41071b
35	457	7.9	+56 23	10.2	10.2	B8	2	..	7195m	85	121	8.4	+72 52	8.0	8.0	Ao	3	1,3	38972i
36	483	7.9	+54 0	9.5	9.5	A	1	..	38164i	86	369	8.4	+62 46	7.24	8.31	K2	2	..	37341i
37	505	7.9	+37 57	8.7	9.8	K2	2	..	37577i	87	418	8.4	+59 5	9.0	9.0	Ao	3	..	7195m
38	440	7.9	+37 9	8.8	9.6	G5	2	7,2 R	37577i	88	416	8.4	+58 55	8.9	8.9	Ao	4	..	7195m
39	746	7.9	-33 19	9.5	10.3	Ko	2	R	41068b	89	417	8.4	+58 47	8.6	8.7	A3	6	2,3	7195m
40	649	7.9	-43 57	9.1	10.3	Ko	3	..	45176b	90	633	8.4	+48 20	6.92	7.70	G5	5	..	37578i
41	45	7.9	-78 24	9.3	10.3	Ko	2	..	23772b	91	368	8.4	+26 10	7.30	8.08	G5	4	..	37371i
42	37	7.9	-83 13	8.6	9.6	Ko	4	..	20538b	92	396	8.4	-21 28	6.02	6.8	Go	10	..	10434b
43	412	8.0	+59 3	9.2	9.2	Ao	5	..	7195m	93	956	8.4	-24 5	9.2	9.6	F8	1	..	45170b
44	411	8.0	+58 35	9.5	10.3	G5	2	..	7195m	94	646	8.4	-39 9	10.2	12.0	G5	1	..	39654b
45	461	8.0	+57 7	9.2	9.8	Go	2	R	7195m	95	674	8.4	-43 26	9.5	10.2	F8	3	..	45156b
46	485	8.0	+53 35	9.5	9.5	Ao	2	..	38164i	96	429	8.4	-54 31	7.65	8.3	A5	8	2,7	12034b
47	632	8.0	+49 0	8.4	9.2	G5	2	5,1	38600i	97	117	8.4	-68 45	11.0	11.8	G5	2	..	20429b
48	631	8.0	+48 37	8.0	9.1	K2	1	..	38897i	98	153	8.4	-72 18	10.0	10.0	Ao	5	..	38146b
49	325	8.0	+25 8	7.08	7.50	F5	4	0,3	37371i	99	420	8.5	+58 38	10.2	10.2	Ao	1	..	7195m
50	354	8.0	+14 4	9.1	9.7	Go	2	..	38035i	100	549	8.5	+53 7	8.7	9.7	Ko	1	..	38164i

THE HENRY DRAPER CATALOGUE.

13700

2^h 8^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	503	8.5 ^m +39 17	9.1	9.9	G5	1	..	..	37577i	51	411	8.9 ^o -13 45	9.3	9.3	A	2	..	..	12393b
2	396	8.5+34 26	8.7	9.5	G5	2	..	..	37386i	52	784	8.9-29 27	9.7	9.2	Ao	7	..	..	23790b
3	385	8.5+33 59	8.3	8.4	A3	3	..	..	37386i	53	568	8.9-40 28	8.2	9.7	G5	5	..	..	24090b
4	354	8.5+30 16	7.31	7.59	Fo	6	..	..	37371i	54	751	8.9-41 55	9.8	9.5	Go	5	..	..	24090b
5	307	8.5+4 5	8.6	9.0	F5	2	..	..	37433i	55	711	8.9-44 58	7.75	8.4	A5	7	..	..	12229b
6	339	8.5-3 6	9.6	10.6	Ko	1	..	..	45970b	56	713	8.9-45 41	9.3	10.5	K2	2	..	..	39684b
7	415	8.5-20 33	9.4	10.0	Go	3	5,2	..	40765b	57	456	9.0+60 16	8.41	8.41	Ao	5	0,3	..	38164i
8	957	8.5-23 56	10.6	10.4	A	1	..	..	45170b	58	527	9.0+57 17	8.9	8.9	B8	3	..	..	7195m
9	882	8.5-31 12	5.24	5.24	Ao	..	R	..	56,119	59	635	9.0+48 45	8.1	8.7	Go	3	5,2	..	38600i
10	652	8.5-44 50	8.30	9.6	Ko	2	..	..	12229b	60	454	9.0+43 15	9.2	9.2	Ao	2	..	..	37577i
11	709	8.5-45 36	9.4	10.2	Ko	2	..	..	39684b	61	510	9.0+37 48	9.2	9.3	A2	2	..	..	37577i
12	148	8.5-63 30	8.9	9.9	Ko	2	..	..	23773b	62	302	9.0+5 33	9.0	9.8	G5	1	..	..	10381b
13	39	8.5-82 47	7.89	8.0	B8	9	..	..	20538b	63	429	9.0-9 31	6.70	7.70	Ko	5	..	..	37402i
14	70	8.6+80 16	7.47	7.47	Ao	5	..	..	37227i	64	378	9.0-22 29	9.6	11.7	K2	1	..	..	45969b
15	448	8.6+59 34	9.2	9.2	Ao	3	..	..	38164i	65	856	9.0-25 16	7.7	8.3	F5	6	E	..	10434b
16	525	8.6+57 18	8.5	8.3	B1	4	..	..	38164i	66	855	9.0-25 48	9.1	9.2	G5	4	..	..	45148b
17	500	8.6+55 8	8.01	7.99	B9	7	..	..	38164i	67	802	9.0-26 15	12.0	10.4	Go	1	..	..	41071b
18	426	8.6+41 27	8.8	9.8	Ko	1	..	..	37577i	68	785	9.0-29 10	9.4	10.0	Ko	3	..	..	23790b
19	404	8.6+32 18	8.5	9.1	G	1	..	..	37386i	69	743	9.0-38 14	10.2	10.6	F5	2	..	..	20247b
20	427	8.6-9 17	8.8	9.6	G5	3	..	..	12388b	70	127	9.1+71 53	8.5	9.3	G5	2	..	..	38972i
21	453	8.6-10 13	8.7	8.8	A2	4	..	..	37402i	71	452	9.1+59 36	9.4	9.4	Ao	2	..	..	38164i
22	387	8.6-15 23	7.9	8.2	Fo	6	0,4	..	12240b	72	528	9.1+57 58	8.6	8.6	B9	4	..	..	38164i
23	767	8.6-35 0	7.10	8.4	Ko	9	..	..	41068b	73	303	9.1+22 8	8.6	9.4	G5	2	..	..	38883i
24	667	8.6-47 17	8.2	8.5	Go	7	5,4	..	39684b	74	385	9.1-18 25	8.3	9.3	Ko	3	..	..	40765b
25	198	8.7+66 49	7.20	8.38	K5	4	..	..	37308i	75	418	9.1-20 0	9.0	9.6	F8	3	..	..	40765b
26	508	8.7+37 51	9.8	9.8	A	1	..	..	37577i	76	964	9.1-24 27	9.4	9.5	Ao	3	2,2	..	41071b
27	405	8.7+32 51	8.1	8.5	F5	2	..	..	37386i	77	857	9.1-25 46	10.2	10.4	Ko	2	..	..	41071b
28	340	8.7-3 30	7.34	7.40	A2	4	R	..	39008i	78	832	9.1-36 32	7.50	8.7	Ko	6	..	..	41068b
29	340	8.7-3 30	7.34	7.40	Go	4	R	..	39008i	79	831	9.1-36 53	8.4	9.9	Ko	4	..	..	41068b
30	822	8.7-23 20	7.34	8.6	G5	6	..	..	10434b	80	613	9.1-49 31	9.9	10.0	A2	4	..	..	39684b
31	705	8.7-28 22	10.2	9.8	F5	2	..	..	41071b	81	409	9.1-52 57	8.6	9.3	Go	3	E	..	20262b
32	145	8.7-72 58	8.8	9.6	G5	6	..	..	38146b	82	132	9.1-66 49	9.1	10.1	Ko	2	..	..	20429b
33	53	8.7-79 28	9.4	10.2	G5	2	..	..	20538b	83	312	9.2+64 30	8.40	8.96	Go	3	..	..	37308i
34	450	8.8+60 10	8.56	8.90	F2	5	..	..	38164i	84	466	9.2+57 9	9.5	9.8	Fo	3	..	..	7195m
35	421	8.8+58 56	9.0	9.0	Ao	2	..	..	38164i	85	605	9.2+49 14	8.0	8.8	G5	1	..	..	38897i
36	553	8.8+55 40	9.4	9.4	B9	4	..	..	7195m	86	639	9.2+49 5	8.6	8.6	Ao	2	..	..	38897i
37	502	8.8+54 23	8.4	9.4	Ko	3	..	..	38164i	87	442	9.2+38 41	8.1	9.1	Ko	4	0,4	..	37577i
38	527	8.8+52 3	7.26	8.33	K2	2	..	..	37356i	88	284	9.2+18 37	8.6	8.6	A	2	R	..	38035i
39	300	8.8+11 49	7.6	7.6	Ao	5	..	..	37403i	89	361	9.2-4 5	8.9	10.0	K2	2	..	..	12388b
40	455	8.8-10 32	8.9	9.5	Go	3	..	..	12388b	90	398	9.2-16 27	8.9	9.2	F2	2	..	..	12240b
41	828	8.8-36 4	9.2	9.9	Ao	3	..	..	41068b	91	419	9.2-17 1	8.7	9.5	G5	4	..	..	40765b
42	613	8.8-41 44	9.2	10.0	G5	5	0,2	..	24090b	92	858	9.2-25 28	9.7	10.7	K2	1	..	..	41071b
43	390	8.8-55 57	8.5	8.8	A3	4	0,3	..	45176b	93	884	9.2-31 28	9.7	10.6	G5	2	..	..	41068b
44	526	8.9+57 50	7.8	7.8	Aop	5	R	..	38164i	94	756	9.2-33 48	6.99	8.2	Ko	8	..	..	23790b
45	554	8.9+55 32	7.96	7.77	B2	6	1,7	..	38164i	95	648	9.2-39 6	10.6	11.7	Go	1	..	..	39654b
46	376	8.9+29 57	7.21	7.16	B8	8	..	..	37371i	96	585	9.2-48 6	10.8	10.9	F5	1	..	..	39684b
47	374	8.9+28 14	6.57	7.35	G5	6	..	..	37371i	97	141	9.2-66 56	9.7	10.3	Go	2	..	..	38146b
48	381	8.9-6 50	8.9	9.4	F8	2	..	..	12388b	98	372	9.3+62 55	8.4	8.4	Ao	2	..	..	37341i
49	406	8.9-8 25	8.9	9.7	G5	2	..	..	37402i	99	371	9.3+62 29	8.6	8.6	Ao	3	..	..	38974i
50	428	8.9-9 0	9.9	10.4	F8	2	..	..	12388b	100	503	9.3+55 3	9.7	10.2	F8	3	..	..	7195m

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	304	9.3	+22 9	7.84	8.12	Fo	4	..	16948i	51	617	9.8	-48 53	9.3	10.3	F8	2	..	39684b
2	358	9.3	+20 32	8.9	10.0	K2	1	..	38883i	52	199	9.8	-59 45	8.62	9.0	F5	4	0,3	45176b
3	303	9.3	+6 11	8.0	9.0	Ko	4	0,4	37403i	53	176	9.8	-74 32	9.3	9.6	Fo	4	..	46019b
4	411	9.3	-5 44	7.9	8.2	F2	6	..	37402i	54	471	9.9	+56 36	6.42	6.20	B1p	..	1,8R	18193c
5	422	9.3	-17 21	8.3	9.1	G5	3	..	12240b	55	551	9.9	+52 16	7.9	8.2	F2	3	..	37356i
6	766	9.3	-26 54	10.6	10.7	Go	1	..	41071b	56	592	9.9	+47 46	8.9	9.0	A3	3	..	37578i
7	787	9.3	-30 21	9.7	10.0	Ao	3	..	41068b	57	446	9.9	+36 19	7.9	8.0	A5	4	..	37386i
8	432	9.3	-54 13	8.4	9.1	Ko	3	..	12034b	58	332	9.9	+17 27	9.0	9.5	F8	2	..	38035i
9	142	9.3	-67 16	9.4	9.8	F5	4	..	20429b	59	310	9.9	+3 24	8.4	8.9	F8	3	..	37433i
10	192	9.4	+67 22	8.9	9.2	Fo	3	..	37308i	60	387	9.9	-7 7	8.5	8.8	F2	2	..	37402i
11	508	9.4	+39 17	8.8	8.8	Ao	2	..	37577i	61	652	9.9	-38 55	10.2	11.2	Go	2	..	39654b
12	512	9.4	+37 56	8.9	9.7	G5	4	..	37386i	62	589	9.9	-48 15	8.5	9.1	G5	7	..	39684b
13	408	9.4	+32 29	9.1	9.6	F8	1	..	37386i	63	169	9.9	-65 29	9.3	10.1	G5	3	..	20429b
14	400	9.4	-20 59	8.9	10.0	Ko	3	2,3	40765b	64	457	10.0	+60 53	8.08	8.64	Go	4	..	38164i
15	672	9.4	-47 16	9.9	10.8	Go	1	..	39684b	65	531	10.0	+58 11	7.90	8.18	Fo	5	..	38164i
16	373	9.5	+62 51	8.5	8.5	A	2	..	38974i	66	475	10.0	+56 15	7.7	7.5	B2p	5	R	38164i
17	530	9.5	+51 24	8.2	8.5	Fo	3	..	37356i	67	614	10.0	+49 22	7.53	7.51	B9	4	..	37578i
18	590	9.5	+47 21	6.44	7.44	Ko	..	5,6	56,73	68	642	10.0	+48 25	7.6	8.4	G5	2	..	37578i
19	369	9.5	+1 12	7.49	8.49	Ko	4	..	37433i	69	409	10.0	+32 54	5.26	5.26	Ao	..	0,8R	2490c
20	426	9.5	-11 8	8.9	9.3	F5	2	..	12388b	70	372	10.0	+26 11	8.6	9.0	F5	2	..	37371i
21	423	9.5	-17 8	10.8	10.9	A2	1	..	40765b	71	373	10.0	+25 17	5.84	6.18	F2	5	3,8	37335i
22	433	9.5	-54 43	9.1	9.9	Ko	2	..	39676b	72	329	10.0	+24 35	5.64	6.06	F5	6	0,8-	37335i
23	184	9.5	-62 7	7.9	8.3	F5	6	..	23773b	73	307	10.0	+11 56	8.4	9.0	Go	2	..	37403i
24	529	9.6	+57 45	8.60	8.94	F2	4	R	38164i	74	411	10.0	-8 2	8.7	9.5	G5	2	..	37402i
25	303	9.6	+23 50	6.86	7.64	G5	5	..	16948i	75	891	10.0	-31 47	9.7	10.6	Ko	2	5,2	41068b
26	305	9.6	+11 47	var.	var.	Nb	1	R	37403i	76	831	10.0	-32 39	9.6	10.6	Go	2	..	23790b
27	133	9.6	-66 15	8.0	9.0	Ko	5	..	20429b	77	662	10.0	-44 44	10.5	10.2	F8	2	..	45156b
28	54	9.7	+83 13	9.0	9.0	Ao	6	2,3	37309i	78	158	10.0	-64 46	9.3	10.1	G5	3	..	20429b
29	313	9.7	+64 48	7.65	8.15	F8	4	..	37308i	79	129	10.0	-70 28	10.7	11.0	Fo	4	..	38146b
30	374	9.7	+62 43	8.0	8.5	F8	4	..	38974i	80	78	10.1	+79 12	9.2	9.2	Ao	2	..	37309i
31	469	9.7	+56 17	8.6	8.4	Bo	4	..	38164i	81	532	10.1	+57 40	9.9	11.0	K2	1	..	7195m
32	505	9.7	+54 58	10.2	10.2	B9	2	R	7195m	82	500	10.1	+51 4	7.35	8.13	G5	2	0,4	37356i
33	533	9.7	+52 6	8.6	9.2	Go	2	2,1	38600i	83	443	10.1	+38 46	8.7	9.8	K2	2	..	37577i
34	578	9.7	+46 13	8.2	8.6	F5	3	..	37578i	84	321	10.1	+15 44	8.0	9.2	K5	2	..	38035i
35	376	9.7	+28 22	8.7	9.7	Ko	1	..	38973i	85	370	10.1	+0 15	6.82	6.88	A2	6	..	37433i
36	373	9.7	+26 54	8.2	9.0	G5	2	..	37371i	86	835	10.1	-34 47	9.28	9.9	F8	6	..	41068b
37	388	9.7	-18 15	9.1	9.9	G5	3	..	40765b	87	844	10.1	-37 34	9.2	9.6	G5	4	..	20247b
38	758	9.7	-42 15	9.5	10.0	Ao	4	..	45156b	88	572	10.1	-39 59	10.9	12.0	F2	2	..	39654b
39	615	9.7	-49 43	10.1	10.6	F8	1	..	39684b	89	761	10.1	-42 11	9.7	10.3	F8	3	2,2	24090b
40	635	9.7	-50 5	10.1	10.9	G5	1	..	39684b	90	478	10.2	+56 19	8.9	8.9	B8	4	R	7195m
41	470	9.8	+56 34	7.21	6.99	B1	..	4,6R	18193c	91	508	10.2	+54 25	8.4	8.4	Ao	4	2,2	38164i
42	559	9.8	+55 35	9.7	10.7	Ko	2	5,1	38164i	92	553	10.2	+53 1	8.9	8.9	Ao	3	..	38164i
43	480	9.8	+42 15	7.61	7.59	B9	5	..	37578i	93	482	10.2	+42 36	8.4	8.5	A2	2	..	37577i
44	469	9.8	+40 18	9.02	9.80	G5	2	..	37577i	94	779	10.2	-35 38	8.9	9.4	F2	5	..	41068b
45	287	9.8	+18 23	9.0	9.8	G5	1	..	38883i	95	847	10.2	-37 33	10.9	10.3	Go	2	..	39654b
46	434	9.8	-6 34	8.9	9.5	Go	4	..	12388b	96	678	10.2	-47 18	9.5	11.4	G5	1	..	39684b
47	712	9.8	-28 22	7.62	7.8	F2	8	..	23790b	97	190	10.2	-60 2	9.26	9.6	G5	2	..	45176b
48	830	9.8	-32 1	10.2	10.6	G5	2	..	41068b	98	397	10.3	+62 13	8.0	8.1	A2	2	..	38974i
49	752	9.8	-38 38	10.9	12.0	G5	1	..	39654b	99	428	10.3	+58 54	9.2	9.2	Ao	3	..	38164i
50	760	9.8	-42 13	9.5	10.9	G5	2	..	45156b	100	479	10.3	+56 26	9.0	8.9	B5	3	..	7195m

THE HENRY DRAPER CATALOGUE.

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2^h 10^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	560	10.3	+55 27	8.5	9.0	F8	5	7,3 R	7195m	51	170	10.6	-76 26	6.87	8.1	G5	10	..	23772b
2	304	10.3	+23 39	9.1	10.1	Ko	1	..	38883i	52	29	10.6	-87 43	9.2	9.7	F8	3	..	15145b
3	310	10.3	+22 1	8.7	9.0	Fo	3	..	16948i	53	563	10.7	+55 18	8.86	9.14	Fo	3	..	38164i
4	303	10.3	+11 18	9.1	9.7	Go	2	..	10368b	54	535	10.7	+52 2	9.4	9.5	A2	2	..	38897i
5	415	10.3	-57 41	9.1	9.9	Go	1	..	42096b	55	583	10.7	+45 23	7.52	7.52	Ao	6	..	37578i
6	416	10.3	-57 49	8.4	9.0	F8	4	..	24229b	56	513	10.7	+37 47	10.0	10.0	A	1	..	37577i
7	110	10.3	-71 25	7.2	8.0	G5	10	..	38146b	57	440	10.7	+35 15	9.32	9.32	Ao	2	..	37386i
8	314	10.4	+65 8	7.60	8.10	F8	4	..	37308i	58	305	10.7	+23 24	9.1	10.1	Ko	1	..	38883i
9	431	10.4	+59 5	8.6	8.6	Ao	5	..	7195m	59	307	10.7	+ 6 9	9.0	10.1	K2	1	..	10368b
10	480	10.4	+56 54	8.2	8.2	Ao	7	..	38164i	60	407	10.7	-16 26	8.3	8.4	A2	7	..	12240b
11	561	10.4	+55 32	9.2	9.3	A2	2	..	7195m	61	415	10.7	-19 5	9.9	10.6	F8	1	..	40765b
12	555	10.4	+52 55	9.5	9.5	A	1	..	38164i	62	717	10.7	-27 55	9.2	10.4	Go	3	..	45148b
13	330	10.4	+24 35	var.	var.	Md	..	R	56,198	63	793	10.7	-30 46	9.4	10.6	Go	2	..	41068b
14	322	10.4	+15 22	8.09	8.59	F8	3	..	38035i	64	721	10.7	-45 2	8.75	9.9	F2	5	..	39684b
15	386	10.4	- 2 23	8.9	10.1	K5	1	..	45970b	65	79	10.8	+77 48	7.9	9.0	K2	3	0,3	37615i
16	389	10.4	- 7 35	8.9	9.3	F5	2	..	37402i	66	433	10.8	+58 55	9.9	9.9	Ao	3	..	38164i
17	418	10.4	-12 31	7.70	7.70	Ao	6	..	37402i	67	434	10.8	+58 26	9.9	9.9	Ao	3	..	7195m
18	414	10.4	-12 49	9.6	10.2	G	4	R	40988b	68	534	10.8	+57 55	9.2	9.2	Ao	3	..	7195m
19	429	10.4	-16 50	9.0	9.6	Go	3	..	40765b	69	485	10.8	+56 38	8.8	8.6	B2	4	0,3	7195m
20	980	10.4	-24 0	7.16	7.8	F8	8	..	10434b	70	564	10.8	+56 11	8.6	8.4	B3	5	..	38164i
21	763	10.4	-33 17	10.2	11.8	Ko	1	..	41068b	71	565	10.8	+55 23	9.11	9.09	B9	2	..	38164i
22	836	10.4	-33 53	10.4	10.6	G5	2	..	23790b	72	450	10.8	+38 26	8.9	10.0	K2	1	..	37577i
23	844	10.4	-35 59	9.5	9.9	F8	3	..	41068b	73	441	10.8	+35 47	8.7	9.7	Ko	1	..	37386i
24	657	10.4	-39 49	10.4	12.0	Ko	3	..	39654b	74	395	10.8	+33 46	5.07	5.63	Go	8	R	37386i
25	679	10.4	-47 51	8.5	9.4	Ko	6	..	39684b	75	306	10.8	+24 9	8.80	9.58	G5	1	..	38973i
26	134	10.4	-66 37	7.1	8.1	Ko	7	..	20429b	76	417	10.8	- 5 32	8.4	9.2	G5	2	..	12388b
27	155	10.4	-71 57	var.	var.	Mc	4	R	38146b	77	431	10.8	- 9 29	9.3	10.1	G5	2	..	12388b
28	95	10.4	-77 6	6.66	7.2	Fo	7	5,10	14358b	78	421	10.8	-12 10	9.4	10.0	G	3	R	40988b
29	533	10.5	+57 34	8.0	8.1	A3	7	1,3 R	38164i	79	814	10.8	-26 22	8.9	9.5	Go	4	..	41071b
30	509	10.5	+54 51	9.4	9.5	A2	3	2,3	38164i	80	659	10.8	-39 32	9.8	10.3	Go	2	..	20247b
31	459	10.5	+43 19	7.7	8.3	Go	4	..	37578i	81	623	10.8	-41 52	10.2	11.5	Go	2	..	45156b
32	447	10.5	+38 17	9.4	10.4	Ko	1	..	37577i	82	535	10.9	+57 26	6.09	7.09	Ko	6	2,9 R	37356i
33	360	10.5	+30 35	7.86	8.14	Fo	4	0,4	37371i	83	512	10.9	+39 13	9.1	9.2	A5	2	..	37577i
34	375	10.5	+26 34	8.8	8.9	A2	3	0,2	38061i	84	514	10.9	+37 41	8.8	9.8	Ko	1	..	37577i
35	306	10.5	+10 54	8.2	8.2	Ao	4	..	37403i	85	355	10.9	+ 7 44	9.8	10.8	Ko	1	..	10368b
36	460	10.5	- 9 56	6.66	6.6	Ao	8	..	37402i	86	408	10.9	-16 28	9.9	10.7	G5	1	..	40765b
37	393	10.5	-15 47	9.3	9.4	A3	4	3,2	40765b	87	393	10.9	-18 27	9.4	10.0	Go	2	..	40765b
38	803	10.5	-29 39	9.2	9.7	G5	3	..	23790b	88	424	10.9	-20 28	10.1	10.6	Go	2	..	40765b
39	791	10.5	-30 8	8.9	10.3	K2	2	..	45148b	89	794	10.9	-30 32	9.9	11.4	G	1	..	41068b
40	621	10.5	-41 38	5.86	7.1	Ko	..	5,8	56,119	90	834	10.9	-32 34	9.5	11.2	K5	1	..	23790b
41	399	10.5	-56 9	9.3	9.6	A3	2	..	45176b	91	765	10.9	-32 56	8.6	9.5	G5	7	..	23790b
42	404	10.6	+35 0	8.3	8.9	Go	3	..	37386i	92	782	10.9	-35 35	7.8	8.7	F5	8	..	41068b
43	382	10.6	+29 20	8.7	9.5	G5	2	..	38061i	93	757	10.9	-38 30	10.9	12.0	Go	1	..	39654b
44	406	10.6	-16 31	9.4	10.0	Go	4	..	40765b	94	486	11.0	+57 4	6.15	7.15	Ko	9	5,5	38164i
45	840	10.6	-23 45	8.2	8.5	F8	5	..	10434b	95	566	11.0	+55 24	8.2	9.2	Ko	4	..	38164i
46	755	10.6	-38 0	7.52	9.1	Ko	8	..	20247b	96	493	11.0	+54 7	8.56	9.56	Ko	2	..	38164i
47	622	10.6	-41 10	9.2	10.6	G5	3	0,3	45156b	97	309	11.0	+11 56	8.0	8.8	G5	4	..	37403i
48	684	10.6	-43 26	10.8	10.8	Go	2	..	45156b	98	342	11.0	+ 6 30	8.6	9.1	F8	4	..	10368b
49	638	10.6	-50 20	10.1	11.2	K2	1	..	39684b	99	366	11.0	- 4 33	8.8	9.4	Go	4	..	12388b
50	156	10.6	-74 58	7.28	8.28	Ko	7	..	14358b	100	409	11.0	-16.21	8.9	9.5	Go	2	..	12240b

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2^h 11^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	394	II.0	m. 18 41	7.92	8.92	Ko	5	..	40765b	51	499	II.4	+57 6	9.7	9.7	Ao	1	..	7195m
2	845	II.0	o 23 51	8.2	9.4	Ma	4	0,4	10434b	52	500	II.4	+56 45	8.6	8.5	B5	4	..	38164i
3	902	II.0	o 31 21	9.9	10.6	Ao	2	..	41068b	53	498	II.4	+56 33	8.7	8.5	B2	4	..	38164i
4	847	II.0	o 36 47	7.89	9.1	Ko	7	..	41068b	54	560	II.4	+52 59	9.2	9.2	A	3	..	38164i
5	574	II.0	o 40 16	8.6	9.7	F2	5	..	24090b	55	397	II.4	+33 23	4.07	4.07	Ao	..	R	2490c
6	765	II.0	o 42 6	9.9	11.5	G5	1	..	45156b	56	363	II.4	+21 6	9.1	9.9	G5	1	..	38883i
7	666	II.0	o 44 1	8.8	9.9	Ko	4	..	24090b	57	626	II.4	-41 32	6.96	8.5	K5	..	0,7-	56,119
8	417	II.0	o 57 3	9.3	9.9	Go	2	0,1	39676b	58	98	II.4	-77 10	9.1	9.6	F8	5	..	23772b
9	180	II.0	o 74 33	8.3	8.4	A5	5	..	14358b	59	201	II.5	+66 57	9.2	9.2	Ao	1	..	38084i
10	315	II.1	+63 58	7.05	6.93	B5p	4	R	37308i	60	247	II.5	+65 49	8.2	9.2	Ko	2	5,1	38084i
11	436	II.1	+58 59	9.4	9.4	Ao	3	..	7195m	61	461	II.5	+60 41	9.0	9.0	Ao	2	..	38164i
12	487	II.1	+57 2	9.5	9.5	Ao	2	..	7195m	62	497	II.5	+53 50	7.64	8.64	Ko	5	..	38164i
13	568	II.1	+56 1	8.2	9.0	G5	6	..	38164i	63	561	II.5	+53 2	8.7	8.7	A	3	..	38164i
14	567	II.1	+55 46	9.0	9.0	B9	4	..	38164i	64	435	II.5	+42 8	7.9	8.2	Fo	4	..	37578i
15	494	II.1	+54 1	8.5	8.5	Ao	4	..	38164i	65	473	II.5	+40 21	8.67	9.09	F5	3	..	37577i
16	453	II.1	+37 2	8.3	8.8	F8	2	..	37386i	66	308	II.5	+23 26	7.9	8.2	Fo	4	..	16948i
17	443	II.1	+35 28	8.22	9.00	G5	3	..	37386i	67	307	II.5	+23 19	6.50	7.28	G5	5	..	16948i
18	367	II.1	- 4 19	8.7	9.8	K2	1	..	12388b	68	296	II.5	+ 9 20	8.7	9.3	Go	2	..	37403i
19	403	II.1	-21 47	8.2	8.8	G5	5	..	10434b	69	357	II.5	+ 7 13	9.0	9.0	Ao	2	..	37403i
20	847	II.1	-23 3	9.1	8.7	F8	4	..	10434b	70	309	II.5	+ 6 4	9.0	10.0	Ko	1	..	10368b
21	780	II.1	-26 59	7.6	8.3	G5	8	..	41071b	71	404	II.5	-21 28	8.8	9.1	F8	2	..	10434b
22	804	II.1	-29 53	9.38	10.6	G5	2	..	45148b	72	816	II.5	-25 59	9.1	9.5	Ko	4	..	41071b
23	149	II.1	-63 41	9.8	10.3	F8	2	..	23773b	73	837	II.5	-32 25	9.6	11.3	Go	1	..	41068b
24	173	II.1	-76 46	8.0	8.4	F5	7	..	23772b	74	842	II.5	-34 13	8.2	9.3	G5	6	5,5	41068b
25	437	II.2	+58 55	8.8	8.8	Ao	4	0,5-	38164i	75	768	II.5	-42 6	9.9	11.2	G5	1	..	45156b
26	536	II.2	+57 21	8.8	9.3	F8	4	..	38164i	76	683	II.5	-47 53	8.9	9.9	Ko	3	..	39684b
27	558	II.2	+52 29	9.4	9.4	Ao	1	..	38897i	77	642	II.5	-50 48	10.1	10.9	G5	2	..	39684b
28	461a	II.2	+43 50	var.	var.	Md	..	R	56,198	78	404	II.5	-54 55	9.40	9.9	K5	2	..	39676b
29	433	II.2	+41 56	8.5	8.5	Ao	2	..	37578i	79	192	II.5	-60 38	9.1	9.9	Ko	3	0,1	23773b
30	516	II.2	+37 23	9.1	9.1	Ao	1	..	37577i	80	80	II.6	+78 50	8.8	9.1	F	2	..	37309i
31	313	II.2	+ 4 10	8.0	8.3	Fo	4	..	37433i	81	511	II.6	+55 5	8.71	9.13	F5	5	..	38164i
32	433	II.2	- 9 22	9.3	9.9	Go	2	..	12388b	82	382	II.6	+28 18	6.61	7.03	F5	6	..	37371i
33	433	II.2	-17 4	8.7	9.7	Ko	3	..	40765b	83	266	II.6	+16 51	8.6	9.2	Go	3	5,2	38035i
34	416	II.2	-19 36	9.0	9.1	Go	4	..	40765b	84	406	II.6	+ 2 7	8.2	8.7	F8	5	..	37433i
35	873	II.2	-25 15	8.7	8.9	F8	4	..	10434b	85	852	II.6	-23 30	8.7	8.5	Go	6	0,5	45969b
36	840	II.2	-34 14	8.6	9.6	K5	5	5,5	23790b	86	797	II.6	-30 52	9.7	11.3	Go	2	..	41068b
37	316	II.3	+63 29	7.60	7.68	A3	4	..	37308i	87	770	II.6	-33 21	11.1	11.3	G5	1	..	41068b
38	459	II.3	+60 28	9.2	10.2	Ko	1	..	38164i	88	669	II.6	-44 8	8.9	9.4	F5	7	5,3	24090b
39	570	II.3	+56 7	8.6	9.6	Ko	4	R	38164i	89	279	II.6	-51 57	9.3	10.1	G5	3	..	39676b
40	538	II.3	+51 20	8.2	8.2	B8	3	..	37356i	90	159	II.6	-64 16	7.5	8.3	G5	8	..	20429b
41	294	II.3	+ 9 18	8.8	8.8	Ao	3	..	10368b	91	143	II.6	-66 54	9.1	10.1	Ko	3	..	20429b
42	403	II.3	+ 1 48	8.0	8.8	G5	4	..	37433i	92	507	II.7	+56 18	9.5	9.5	B8	3	..	7195m
43	404	II.3	+ 1 37	8.2	8.3	A3	4	..	37433i	93	571	II.7	+55 55	8.9	8.9	Ao	5	..	38164i
44	462	II.3	-10 17	7.24	7.80	Go	5	..	37402i	94	604	II.7	+47 42	7.12	7.20	A3	7	..	37578i
45	396	II.3	-15 10	8.8	9.8	Ko	3	..	40765b	95	489	II.7	+42 27	7.08	7.86	G5	5	..	37578i
46	425	II.3	-20 34	10.1	10.7	Go	1	..	40765b	96	447	II.7	+35 57	8.3	9.1	G5	1	..	37386i
47	850	II.3	-23 24	9.5	9.7	Go	3	..	45170b	97	423	II.7	-12 20	9.9	10.9	Ko	1	..	40988b
48	805	II.3	-29 7	9.4	10.7	Ko	1	..	41068b	98	412	II.7	-16 2	10.5	10.6	A5	2	..	40765b
49	174	II.3	-76 35	9.4	10.2	G5	1	..	46019b	99	807	II.7	-29 3	7.9	9.0	Ko	7	..	23790b
50	537	II.4	+58 8	9.04	9.04	Ao	4	..	7195m	100	420	II.7	-57 23	8.7	9.9	K2	3	0,2-	39676b

THE HENRY DRAPER CATALOGUE.

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2^h 11^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	144	11.7	-67 15	8.8	9.6	G5	4	..	20429b	51	283	12.2	-52 40	7.1	7.3	F8	6	..	12034b
2	103	11.7	-69 10	11.0	12.1	K2	1	..	38146b	52	68	12.3	+79 19	7.82	8.10	Fo	6	5,3	37309i
3	438	11.8	+58 44	9.2	9.7	F8	2	..	38164i	53	319	12.3	+64 37	8.6	9.4	G5	1	..	38984i
4	456	11.8	+44 45	8.4	9.5	K2	..	..	M	54	464	12.3	+59 40	8.8	9.6	G5	2	..	38164i
5	514	11.8	+40 5	7.77	8.77	Ko	3	..	37577i	55	387	12.3	+29 24	7.35	7.43	A3	6	..	37371i
6	518	11.8	+37 38	8.7	9.3	Go	2	..	37577i	56	419	12.3	-14 40	9.51	10.07	Go	2	..	40765b
7	337	11.8	+17 20	9.0	9.0	A	2	..	38035i	57	883	12.3	-25 6	8.50	8.9	G5	3	..	10434b
8	364	11.8	+14 1	8.2	8.2	Ao	3	..	37403i	58	841	12.3	-31 54	9.6	11.3	Go	2	..	41068b
9	345	11.8	- 3 22	8.76	9.76	Ko	2	..	45970b	59	104	12.3	-68 59	10.8	11.4	Go	3	..	38146b
10	426	11.8	-20 31	9.9	11.2	G5	1	..	40765b	60	24	12.3	-86 40	9.5	9.9	F5	3	..	15145b
11	662	11.8	-38 55	10.0	10.6	Ao	2	..	20247b	61	440	12.4	+58 51	8.6	8.6	Ao	5	..	38164i
12	552	11.8	-51 21	7.6	8.9	G5	3	..	10623b	62	535	12.4	+56 41	9.4	9.2	B	2	R	38164i
13	150	11.8	-63 26	8.9	10.1	K5	2	..	23773b	63	647	12.4	+48 27	8.4	8.5	A3	3	..	37578i
14	316	11.9	+21 46	8.6	9.0	F5	2	..	38883i	64	458	12.4	+45 11	8.92	8.92	Ao	2	R	37578i
15	392	11.9	- 7 3	7.04	7.04	Ao	8	..	12388b	65	299	12.4	+ 9 59	8.9	9.5	Go	2	..	37403i
16	417	11.9	- 8 7	9.6	10.2	Go	2	..	12388b	66	687	12.4	-47 21	9.5	10.8	Ko	2	..	39684b
17	414	11.9	-16 44	8.7	9.9	K5	2	..	40765b	67	554	12.4	-50 57	10.1	10.1	F5	2	..	39684b
18	406	11.9	-21 35	8.3	9.1	Ko	3	..	10434b	68	555	12.4	-51 14	9.1	9.4	Go	6	..	39684b
19	862	11.9	-36 56	7.46	8.3	F5	9	..	41068b	69	177	12.4	-76 33	9.3	9.9	Go	3	..	46019b
20	759	11.9	-38 19	9.2	10.3	Go	1	..	20247b	70	81	12.5	+78 11	9.5	9.5	A	1	..	37309i
21	281	11.9	-52 44	9.3	10.9	K2	2	..	39676b	71	320	12.5	+63 52	6.49	6.49	Ao	7	..	37308i
22	193	11.9	-60 19	9.3	10.5	K5	2	0,1	23773b	72	467	12.5	+59 35	6.86	6.92	A2	6	0,8	37320i
23	113	11.9	-71 15	9.4	10.2	G5	4	..	38146b	73	466	12.5	+59 33	7.36	8.14	G5	4	..	38164i
24	460	12.0	+60 2	8.0	8.3	Fo	5	0,4	38164i	74	564	12.5	+53 11	8.8	8.8	Ao	2	..	38164i
25	513	12.0	+50 26	8.8	8.8	Ao	2	0,1	38600i	75	432	12.5	-20 27	8.3	8.4	F2	6	..	10434b
26	317	12.0	+22 12	8.54	8.60	A2	3	2,2 R	38883i	76	384	12.5	-22 18	8.7	9.4	Go	4	..	45969b
27	378	12.0	+ 4 54	8.6	9.2	Go	4	5,3	10381b	77	999	12.5	-24 31	8.5	8.4	Fo	4	..	10434b
28	407	12.0	+ 1 25	7.7	8.0	Fo	5	..	37433i	78	997	12.5	-24 49	8.65	9.6	K5	3	3,2	41071b
29	393	12.0	- 6 53	5.70	6.48	G5	8	..	37402i	79	795	12.5	-35 26	8.9	9.6	F8	6	..	41068b
30	419	12.0	-12 54	8.3	9.3	Ko	3	..	37402i	80	696	12.5	-43 44	7.5	8.7	G5	4	5,9	12229b
31	854	12.0	-23 5	9.1	10.0	Go	2	..	45170b	81	407	12.5	-55 45	7.6	8.1	Fo	6	0,5	45176b
32	769	12.0	-42 16	10.3	10.6	F5	2	5,3	45156b	82	132	12.5	-69 57	9.2	10.0	G5	3	..	20429b
33	726	12.0	-45 12	9.2	9.6	Go	4	..	39684b	83	442	12.6	+59 4	8.0	8.0	Ao	5	..	38164i
34	522	12.1	+56 40	6.66	6.42	Bo	6	..	38164i	84	541	12.6	+57 13	9.4	9.5	A3	4	0,2	7195m
35	501	12.1	+53 38	9.2	10.2	Ko	2	..	38164i	85	539	12.6	+57 9	9.2	10.3	K2	1	..	7195m
36	436	12.1	+41 28	9.4	10.2	G5	1	..	37577i	86	536	12.6	+57 3	9.7	9.8	A3	2	..	7195m
37	476	12.1	+40 52	8.1	8.2	A2	4	..	37577i	87	575	12.6	+55 25	9.7	10.9	K5	2	..	7195m
38	416	12.1	-16 24	9.0	9.8	G5	3	..	40765b	88	628	12.6	+49 41	7.28	8.46	K5	2	3,1	37578i
39	415	12.1	-16 47	9.3	9.9	Go	3	..	40765b	89	517	12.6	+39 49	7.12	7.46	F2	7	..	37577i
40	880	12.1	-24 54	9.15	10.1	K2	2	2,1	41071b	90	458	12.6	+36 37	8.01	9.08	K2	2	..	37386i
41	126	12.1	-68 19	5.44	7.1	Ma	..	5,4 R	56,119	91	340	12.6	+19 26	5.69	5.69	Ao	..	0,R	56,73
42	439	12.2	+58 30	8.34	9.52	K5	1	R	7195m	92	366	12.6	+14 1	8.0	8.3	Fo	4	..	37403i
43	530	12.2	+56 43	6.66	6.42	Bo	7	..	38164i	93	343	12.6	- 0 37	8.2	9.3	K2	5	..	14901b
44	455	12.2	+38 38	8.7	9.8	K2	1	..	37577i	94	773	12.6	-33 27	8.9	9.2	Go	5	..	23790b
45	407	12.2	+34 52	8.7	9.5	G5	2	..	37386i	95	697	12.6	-43 25	9.3	9.6	F5	4	..	24090b
46	385	12.2	+28 34	6.85	8.20	Ma	4	..	37371i	96	417	12.6	-53 21	7.3	7.6	Fo	7	..	12034b
47	339	12.2	+18 0	7.40	7.68	Fo	5	..	16948i	97	145	12.6	-67 44	9.6	10.0	F5	4	..	20429b
48	379	12.2	+ 5 4	9.25	9.81	Go	1	5,1	10381b	98	146	12.6	-67 51	10.6	11.0	F5	2	..	20429b
49	432	12.2	-11 42	9.9	10.7	G5	2	..	40988b	99	160	12.6	-72 0	9.2	10.0	G5	8	..	38146b
50	417	12.2	-15 56	9.6	10.6	Ko	1	..	40765b	100	503	12.7	+53 55	10.2	10.3	A5	2	..	38164i

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2^h 12^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	629	12.7	+50 4	8.52	8.66	A5	2	..	37578i	51	440	13.2	+41 38	9.4	9.4	A0	2	..	37577i
2	405	12.7	+34 3	7.9	8.4	F8	4	..	37386i	52	360	13.2	+28 11	5.28	5.34	A2	..	2,10	56,73
3	315	12.7	+13 0	7.76	7.90	A5	4	..	37403i	53	383	13.2	+26 56	8.7	9.2	F8	3	..	38061i
4	389	12.7	- 2 30	8.1	9.1	K0	5	..	14901b	54	301	13.2	+ 9 23	8.6	9.4	G5	3	..	10368b
5	420	12.7	-13 9	8.9	10.0	K2	2	..	40988b	55	421	13.2	-16 22	8.9	10.0	K2	3	..	40765b
6	865	12.7	-36 55	10.0	9.9	F5	4	..	39654b	56	442	13.2	-17 15	8.9	9.4	F8	3	..	40765b
7	698	12.7	-43 23	7.8	9.3	K0	6	5,3	2409ob	57	667	13.2	-39 7	9.6	11.5	K2	2	..	39654b
8	418	12.7	-53 51	8.5	9.3	K0	2	E	20262b	58	598	13.2	-48 0	9.7	10.3	G0	2	..	39684b
9	443	12.8	+58 37	10.2	10.3	A2	3	..	7195m	59	116	13.2	-71 1	9.9	10.5	G0	3	..	38146b
10	543	12.8	+56 52	8.0	8.0	A0	5	..	38164i	60	542	13.3	+57 33	9.2	9.8	G0	1	..	38164i
11	577	12.8	+55 55	10.2	10.3	A2	2	..	7195m	61	583	13.3	+55 28	9.0	9.3	F0	3	..	7195m
12	552	12.8	+46 55	5.12	5.12	A0	..	O, R	56,73	62	..	13.3	+22 43	..	..	A5	..	..	..
13	589	12.8	+46 1	6.12	6.20	A3	..	I,9	56,73	63	329	13.3	+22 43	6.42	6.56	G	5	R	38973i
14	410	12.8	+ 1 17	5.82	6.32	F8	8	..	37433i	64	374	13.3	- 4 33	8.7	9.3	G0	3	..	12388b
15	914	12.8	-30 54	8.9	10.7	G5	2	..	41068b	65	422	13.3	-15 59	9.9	10.5	G	2	..	40765b
16	772	12.8	-42 13	10.3	11.2	G0	1	..	45156b	66	1006	13.3	-24 11	9.1	9.8	K2	2	..	45170b
17	322	12.9	+63 25	7.8	8.8	K0	3	..	37308i	67	819	13.3	-28 59	10.2	11.8	K0	1	..	45148b
18	379	12.9	+62 54	9.2	9.5	F0	2	..	38974i	68	699	13.3	-42 57	9.3	10.8	G5	1	..	45156b
19	..	12.9	+54 5	..	..	A0	3	..	38164i	69	196	13.4	+68 7	8.9	8.9	A	2	..	37308i
20	548	12.9	+52 5	7.04	6.92	B5	5	..	37356i	70	547	13.4	+56 32	8.2	9.4	K5	2	5,2	38164i
21	648	12.9	+48 29	6.40	6.68	F0	9	..	37578i	71	650	13.4	+48 48	9.2	9.3	A2	3	..	38897i
22	321	12.9	+21 26	7.68	7.96	F0	4	5,4	16948i	72	521	13.4	+39 23	6.51	6.46	B8	10	..	37577i
23	347	12.9	- 3 14	9.6	10.2	G0	2	..	14901b	73	457	13.4	+39 2	8.6	9.4	G5	2	..	37577i
24	425	12.9	- 4 49	8.85	9.27	F5	2	..	12388b	74	406	13.4	+33 35	8.1	8.9	G5	3	..	37386i
25	433	12.9	-20 2	9.0	9.4	F5	2	0,2	10434b	75	417	13.4	+33 9	8.2	8.3	A5	3	..	37386i
26	689	12.9	-47 31	9.5	10.2	G0	2	..	39684b	76	388	13.4	+29 36	8.7	8.8	A3	4	..	37371i
27	651	12.9	-50 2	9.1	9.7	G0	3	..	39684b	77	322	13.4	+21 26	8.7	9.5	G5	1	..	38883i
28	285	12.9	-51 59	3.78	3.73	B8	..	R	28,195	78	317	13.4	+12 33	7.12	7.90	G5	5	..	37403i
29	408	12.9	-55 57	9.0	9.6	G0	3	..	39676b	79	362	13.4	+ 7 44	7.06	8.06	K0	5	..	37403i
30	422	12.9	-57 7	9.2	10.2	G5	1	..	39676b	80	323	13.4	+ 3 44	8.0	8.8	G5	4	E	37433i
31	581	13.0	+56 8	9.4	10.2	G5	3	5,2 R	7195m	81	447	13.4	- 6 29	9.3	10.5	K5	..	..	M
32	382	13.0	+27 8	9.5	9.6	A5	1	..	38061i	82	397	13.4	- 7 4	8.9	9.5	G0	3	..	45970b
33	421	13.0	-13 11	9.6	10.4	G5	1	..	40988b	83	422	13.4	-13 5	9.0	10.0	K0	2	..	40988b
34	440	13.0	-16 47	9.1	10.1	K0	2	..	40765b	84	423	13.4	-14 35	8.08	9.43	Mb	2	..	37402i
35	441	13.0	-17 19	9.6	10.1	F8	2	..	40765b	85	1008	13.4	-24 5	7.34	8.0	F0	8	..	10434b
36	386	13.0	-22 37	8.9	10.0	K0	3	..	45170b	86	779	13.4	-33 51	9.5	11.3	K2	1	..	41068b
37	859	13.0	-23 24	9.4	10.9	K2	1	..	45170b	87	128	13.4	-68 13	5.52	7.4	K5	..	3,5 R	56,119
38	774	13.0	-42 26	9.3	10.0	G0	4	0,2	2409ob	88	81	13.5	+78 15	8.6	8.6	A0	2	..	37309i
39	558	13.0	-50 53	9.7	10.0	G0	4	5,2	39684b	89	545	13.5	+57 20	9.0	9.1	A2	3	..	38164i
40	286	13.0	-52 29	9.8	10.6	G5	2	..	39676b	90	363	13.5	+ 7 15	8.00	8.34	F2	4	..	37403i
41	248	13.1	+65 20	8.25	8.31	A2	4	3,4	38984i	91	429	13.5	- 4 47	8.85	9.41	G0	2	..	12388b
42	445	13.1	+59 13	8.9	10.1	K5	..	..	M	92	430	13.5	- 5 19	8.5	9.1	G0	4	..	12388b
43	368	13.1	+13 30	8.4	9.4	K0	1	..	37403i	93	440	13.5	- 8 49	7.61	8.39	G5	3	..	37402i
44	344	13.1	+ 6 15	8.4	9.8	Ma	1	R	10368b	94	729	13.5	-28 50	7.7	8.3	F5	7	..	23790b
45	372	13.1	- 4 18	9.6	10.2	G0	1	..	45970b	95	820	13.5	-29 14	10.4	11.8	K2	1	..	45148b
46	920	13.1	-31 11	7.64	7.8	F5	9	..	23790b	96	922	13.5	-30 56	8.1	9.8	K2	4	..	23790b
47	859	13.1	-36 27	6.74	7.9	G5	10	..	41068b	97	668	13.5	-39 42	9.5	10.9	G5	2	..	39654b
48	866	13.1	-37 36	8.6	9.9	K2	2	..	20247b	98	733	13.5	-45 14	8.8	10.3	K5	3	..	39684b
49	..	13.1	-64 54	..	..	G	2	..	20429b	99	446	13.6	+59 9	8.6	8.6	B9	4	..	38164i
50	545	13.2	+56 39	8.6	8.5	B5	3	..	7195m	100	..	13.6	+58 3	..	..	A0	2	..	7195m

THE HENRY DRAPER CATALOGUE.

14300

2^h 13^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	544	13.6 ^{m.} +57 43	9.5	9.5	Ao	2	..	38164i	51	764	14.0 ^o -38 32	10.2	12.0	Go	2	..	39654b		
2	587	13.6 +55 52	8.8	8.6	B ₂	4	1,4	38164i	52	633	14.0 -49 52	8.3	9.1	F8	3	6,2	39684b		
3	586	13.6 +55 36	10.2	10.2	A	1	..	7195m	53	559	14.0 -51 9	9.9	10.3	G5	1	..	39684b		
4	522	13.6 +50 30	6.72	7.14	F5	6	0,5	37578i	54	288	14.0 -52 47	10.3	10.9	Go	1	..	39676b		
5	342	13.6 +19 14	6.84	7.62	F8	5	0,4 R	38883i	55	136	14.0 -69 54	7.55	8.4	Go	8	..	20429b		
6	315	13.6 +11 45	8.8	9.4	Go	2	..	37403i	56	546	14.1 +58 2	9.15	9.57	F5	1	..	38164i		
7	345	13.6 - 0 8	8.4	9.5	K ₂	2	..	14901b	57	555	14.1 +56 25	8.9	8.7	B ₃	4	..	38164i		
8	431	13.6 - 5 22	9.6	10.0	F5	2	R	12388b	58	526	14.1 +54 58	9.2	9.2	Ao	1	..	7195m		
9	436	13.6 -11 39	9.6	10.6	Ko	2	..	40988b	59	525	14.1 +54 57	7.61	8.61	Ko	5	0,5-	38164i		
10	811	13.6 -30 17	9.1	9.6	G5	4	..	2379ob	60	568	14.1 +52 20	9.2	9.3	A ₂	1	..	37356i		
11	..	13.7 +58 26	..	..	Ko	2	..	7195m	61	403	14.1 +31 52	8.1	9.3	K5	2	..	37386i
12	419	13.7 +32 47	9.2	9.2	Ao	2	..	37386i	62	412	14.1 + 2 13	8.2	9.2	Ko	3	..	37433i		
13	271	13.7 +17 11	9.0	9.4	F5	2	..	38035i	63	400	14.1 - 7 18	9.3	10.3	Ko	1	..	12388b		
14	364	13.7 + 8 12	10.1	10.7	Go	1	..	10368b	64	424	14.1 -14 42	10.11	10.89	G5	1	..	40765b		
15	401	13.7 -18 39	9.1	9.7	Go	3	..	40765b	65	800	14.1 -34 56	9.70	9.9	F8	3	..	41068b		
16	863	13.7 -23 3	8.3	8.7	Fo	5	0,5-	10434b	66	661	14.1 -50 42	9.2	10.0	G5	3	..	39684b		
17	924	13.7 -31 50	8.32	9.5	Ko	4	..	2379ob	67	412	14.1 -55 1	9.1	10.2	K ₂	1	..	39676b		
18	439	13.7 -54 17	8.4	9.7	K5	2	E	20262b	68	161	14.1 -75 51	8.4	9.4	Ko	3	..	14358b		
19	163	13.7 -71 59	9.4	10.2	G5	6	..	38146b	69	9	14.2 +88 42	8.01	8.29	Fo	4	0,3	37546i		
20	448	13.8 +59 11	9.2	9.8	Go	2	..	38164i	70	199	14.2 +67 58	9.2	9.2	A	2	..	37308i		
21	550	13.8 +56 28	9.5	9.4	B5	3	..	7195m	71	591	14.2 +55 43	9.7	10.1	F5	2	..	38164i		
22	588	13.8 +55 27	6.84	6.82	B9p	8	3,3 R	38164i	72	557	14.2 +46 51	6.08	5.96	B5	..	0,9	56,73		
23	401	13.8 +31 40	10.0	10.0	A	2	..	37386i	73	392	14.2 +29 45	6.60	7.60	Ko	6	0,2	3737ii		
24	345	13.8 + 7 1	8.8	9.8	Ko	2	..	10368b	74	316	14.2 - 1 13	8.0	8.6	Go	4	..	14901b		
25	421	13.8 -19 43	9.68	10.0	Go	2	..	40765b	75	443	14.2 -17 10	8.9	9.4	F8	3	..	40765b		
26	925	13.8 -31 33	9.4	10.7	Go	2	..	41068b	76	437	14.2 -19 59	7.08	8.5	K5	7	..	14876b		
27	186	13.8 -61 54	10.0	10.8	G5	2	..	23773b	77	815	14.2 -30 8	8.1	8.9	F5	6	..	2379ob		
28	401	13.9 +61 38	9.5	9.6	A ₂	1	..	38974i	78	868	14.2 -36 13	9.6	10.5	Ko	2	..	39654b		
29	..	13.9 +57 26	..	..	A ₃	2	2,1	7195m	79	151	14.2 -63 51	7.6	8.0	F5	9	..	20429b
30	551	13.9 +56 42	var.	var.	K5	2	0,2 R	7195m	80	107	14.2 -69 31	9.9	10.5	Go	2	..	20429b		
31	590	13.9 +55 22	8.81	8.79	B9	3	..	38164i	81	131	14.3 +73 21	7.9	8.0	A ₃	3	4,3	38972i		
32	524	13.9 +54 52	8.6	8.6	B9	3	1,3	38164i	82	144	14.3 +69 52	8.0	8.4	F5	5	..	37308i		
33	335	13.9 +25 5	7.86	7.86	Ao	2	..	37335i	83	547	14.3 +58 5	9.9	10.3	F5	2	..	7195m		
34	323	13.9 +21 44	9.1	9.1	Ao	2	..	38883i	84	507	14.3 +54 4	6.83	7.25	F5	5	0,8	37356i		
35	378	13.9 +14 26	8.8	9.4	G	1	..	38035i	85	360	14.3 + 2 22	7.8	8.6	G5	6	..	10382b		
36	347	13.9 - 0 23	8.6	9.0	F5	3	..	14901b	86	353	14.3 - 3 26	var.	var.	Md	..	R	56,73		
37	393	13.9 - 2 12	8.9	9.9	Ko	1	..	14901b	87	378	14.3 - 4 35	9.0	9.8	G5	1	..	12388b		
38	422	13.9 - 7 55	7.56	7.98	F5	4	..	37402i	88	439	14.3 -11 7	9.6	10.2	Go	2	..	40988b		
39	821	13.9 -29 47	9.9	10.7	Go	1	..	45148b	89	802	14.3 -26 54	8.02	9.2	Ko	5	..	41071b		
40	926	13.9 -31 15	7.7	9.2	Ko	5	..	2379ob	90	769	14.3 -38 23	8.9	10.3	K ₂	3	..	39654b		
41	670	13.9 -39 5	9.2	10.9	Ko	3	..	39654b	91	549	14.4 +52 1	8.9	10.0	K ₂	1	..	38897i		
42	83	14.0 +79 12	7.9	9.0	K ₂	2	..	37309i	92	640	14.4 +49 42	5.56	5.56	Aop	..	2,R	56,73		
43	82	14.0 +79 7	8.0	9.1	K ₂	1	..	37309i	93	652	14.4 +48 54	8.4	9.0	Go	3	..	38897i		
44	323	14.0 +63 28	9.2	10.0	G5	1	..	38974i	94	393	14.4 +29 21	8.5	8.9	F5	4	..	3737ii		
45	472	14.0 +59 13	9.0	10.1	K ₂	2	..	38164i	95	426	14.4 -14 45	9.96	10.96	Ko	1	..	40765b		
46	450	14.0 +58 48	7.62	8.62	Ko	6	5,4	38164i	96	680	14.4 -44 24	9.1	9.9	Ko	4	2,3	2409ob		
47	..	14.0 +58 34	..	..	Ao	3	..	7195m	97	561	14.4 -51 17	8.8	9.4	Go	6	..	39684b
48	372	14.0 +30 54	7.29	7.71	F5	6	3,5	3737ii	98	409	14.4 -56 43	7.9	8.5	Go	5	0,4	24229b		
49	373	14.0 +30 20	8.71	9.13	F5	2	..	38061i	99	108	14.4 -69 13	9.3	9.9	Go	5	..	20429b		
50	358	14.0 + 3 6	8.0	8.8	G5	6	..	10382b	100	180	14.4 -76 30	9.3	9.9	Go	2	..	46019b		

14400

2^h 14^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	181	14.4	^{m.} -76 49	6.54	7.6	G5	8	..	46019b	51	138	^{m.} 14.9 -69 56	8.93	9.9	Ko	4	..	20429b	
2	166	14.5	+68 19	7.40	8.18	G5	5	..	37308i	52	56	14.9 -79 29	9.2	10.0	G5	1	..	20538b	
3	452	14.5	+58 20	8.29	9.07	G5	3	..	38164i	53	596	15.0 +56 5	9.4	9.4	Ao	3	0,2	7195m	
4	550	14.5	+57 24	8.6	9.8	K5	2	0,1	7195m	54	534	15.0 +51 1	8.6	9.4	G5	1	..	38873i	
5	592	14.5	+55 44	10.2	11.3	K2	1	..	7195m	55	393	15.0 +28 17	7.30	7.58	Fo	3	..	37335i	
6	528	14.5	+55 6	10.2	10.2	Ao	3	0,2	7195m	56	363	15.0 +28 4	7.9	8.5	Go	2	..	38973i	
7	653	14.5	+48 21	8.6	8.6	B9	3	..	37578i	57	326	15.0 +21 59	8.6	9.2	Go	2	..	38883i	
8	526	14.5	+40 2	8.7	8.7	Ao	4	..	37386i	58	350	15.0 - 0 44	8.6	9.8	K5	2	..	14901b	
9	533	14.5	+37 55	7.93	8.93	Ko	3	..	37386i	59	317	15.0 - 0 55	8.2	8.8	Go	7	..	14901b	
10	327	14.5	+15 47	9.1	10.1	K	1	..	38035i	60	442	15.0 -10 50	9.3	10.3	Ko	1	..	12388b	
11	355	14.5	- 3 25	9.08	10.43	Ma	..	..	M	61	400	15.0 -14 47	9.96	10.52	Go	1	..	40765b
12	828	14.5	-26 25	6.38	7.5	Go	10	..	41071b	62	427	15.0 -19 36	7.73	8.8	Ko	5	..	14876b	
13	94	14.6	+57 41	7.57	7.57	Ao	5	1,6	38972i	63	416	15.0 -21 27	8.9	10.0	Ko	2	..	14876b	
14	321	14.6	+64 47	7.25	7.75	F8	5	..	37308i	64	899	15.0 -25 46	9.1	10.4	K5	2	..	45148b	
15	549	14.6	+58 7	8.46	9.24	G5	3	..	38164i	65	856	15.0 -34 33	9.8	10.8	Go	2	..	41068b	
16	347	14.6	+ 6 14	8.8	9.2	F5	3	5,2	10368b	66	588	15.0 -39 57	9.5	10.9	Go	2	..	39654b	
17	438	14.6	- 4 48	6.55	6.61	A2	6	..	39008i	67	152	15.0 -63 12	8.2	8.6	F5	8	..	20429b	
18	440	14.6	-11 4	8.5	9.6	K2	2	..	12388b	68	456	15.1 +58 43	7.80	8.98	K5	4	..	38164i	
19	1018	14.6	-24 19	9.5	9.5	A3	3	..	45969b	69	597	15.1 +56 9	var.	var.	Ma	3	5,2	7195m	
20	825	14.6	-29 23	8.0	9.0	Ko	6	..	23790b	70	..	15.1 +55 57	..	..	Ao	1	..	7195m
21	130	14.6	-68 51	10.0	11.1	K2	3	..	20429b	71	600	15.1 +45 58	7.8	9.0	K5	2	..	37578i	
22	565	14.7	+56 56	9.4	9.2	Bp	3	R	7195m	72	465	15.1 +36 57	8.1	8.2	A3	3	..	37386i	
23	571	14.7	+52 15	8.9	8.9	Ao	2	..	38897i	73	379	15.1 - 3 59	8.05	8.47	F5	5	0,4	14901b	
24	409	14.7	+34 3	9.2	9.8	Go	2	..	37386i	74	201	15.1 -58 17	8.6	9.1	Go	4	..	42096b	
25	423	14.7	+33 4	8.7	9.5	G5	2	..	37386i	75	131	15.1 -68 39	9.5	9.9	F5	6	..	20429b	
26	277	14.7	+17 10	9.4	10.2	G5	1	..	38035i	76	577	15.2 +56 49	9.0	8.8	Bo	3	R	7195m	
27	396	14.7	- 2 41	8.8	9.8	Ko	2	0,1	14901b	77	474	15.2 +44 9	6.96	7.02	A2	6	..	37578i	
28	437	14.7	- 5 27	9.3	10.1	G5	2	..	12388b	78	489	15.2 +40 39	9.5	9.6	A3	2	..	37577i	
29	405	14.7	-18 31	9.6	10.2	G	1	..	40765b	79	379	15.2 +30 14	8.21	8.99	G5	2	..	38061i	
30	426	14.7	-19 1	8.9	10.0	K2	3	..	40765b	80	389	15.2 +26 53	8.3	9.3	Ko	1	..	38061i	
31	188	14.7	-61 55	9.0	9.6	Go	4	..	23773b	81	316	15.2 + 5 25	9.4	9.9	F8	2	..	10368b	
32	206	14.8	+66 24	8.1	8.9	G5	3	..	37308i	82	385	15.2 + 1 8	8.84	9.62	G5	2	E	14901b	
33	568	14.8	+56 47	6.54	6.60	A2p	5	0,9	37356i	83	1021	15.2 -24 19	9.1	10.1	K2	1	..	45969b	
34	567	14.8	+56 27	8.5	8.3	B2	4	..	7195m	84	1022	15.2 -24 20	8.9	8.7	Fo	4	..	45969b	
35	..	14.8	+55 58	..	..	Ao	2	..	7195m	85	739	15.2 -28 13	9.5	10.4	G5	2	..	41071b
36	530	14.8	+50 50	8.4	8.4	Ao	2	0,2	38873i	86	784	15.2 -42 29	8.7	9.7	G5	6	5,4	24090b	
37	502	14.8	+42 30	7.08	7.06	B9	7	..	37578i	87	128	15.3 +73 3	8.04	8.04	Ao	6	..	38972i	
38	371	14.8	+13 52	8.0	9.0	Ko	2	..	37403i	88	583	15.3 +56 39	var.	var.	Ma	2	R	7195m	
39	137	14.8	-70 47	8.9	9.0	A5	7	E	20429b	89	598	15.3 +55 23	5.22	5.28	A2p	..	0, R	56,74	
40	145	14.9	+69 27	8.7	9.5	G5	3	..	37308i	90	396	15.3 +29 28	8.8	9.4	Go	2	..	38973i	
41	383	14.9	+62 31	8.0	8.1	A3	2	..	37341i	91	292	15.3 +18 25	9.4	10.2	G5	2	..	38035i	
42	455	14.9	+59 6	9.2	9.0	Bo	3	..	7195m	92	349	15.3 + 7 1	8.0	8.1	A3	4	..	37403i	
43	570	14.9	+56 42	8.6	8.4	B	4	..	7195m	93	406	15.3 -18 27	8.9	9.4	F8	4	..	40765b	
44	513	14.9	+53 48	8.7	9.0	Fo	2	..	38164i	94	429	15.3 -19 30	9.4	9.5	A5	4	..	40765b	
45	464	14.9	+36 37	7.57	7.85	Fo	4	..	37386i	95	438	15.3 -20 29	8.7	9.4	Ko	2	..	14876b	
46	346	14.9	+19 40	9.09	9.87	G5	1	..	38035i	96	1023	15.3 -24 5	8.9	8.7	F8	4	..	10434b	
47	453	14.9	- 6 46	7.84	8.62	G5	4	..	37402i	97	851	15.3 -32 49	9.5	10.7	G5	2	..	23790b	
48	427	14.9	-13 13	8.3	8.9	Go	4	..	40988b	98	679	15.3 -39 27	7.8	8.9	Ko	8	0,3	24090b	
49	735	14.9	-28 2	9.9	10.7	G5	2	..	41071b	99	415	15.3 -55 19	8.8	9.6	G5	3	5,2	39676b	
50	876	14.9	-37 21	10.4	10.7	Go	2	..	39654b	100	69	15.4 +80 10	8.25	8.25	Ao	3	..	37227i	

THE HENRY DRAPER CATALOGUE.

14500

2^h 15^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	551	15.4	+57 42	9.5	9.3	B ₃	2	..	7195m	51	202	15.9	-59 41	9.1	10.0	Ko	1	..	45176b
2	475	15.4	+43 22	7.8	8.6	G ₅	3	..	37578i	52	405	16.0	+61 20	7.8	8.3	F8	2	..	38974i
3	390	15.4	+26 58	8.6	9.2	Go	1	..	38061i	53	603	16.0	+55 38	9.2	9.2	Ao	2	..	38164i
4	455	15.4	- 6 46	9.6	10.0	F ₅	2	..	12388b	54	307	16.0	+ 9 17	8.7	9.3	Go	3	..	10368b
5	401	15.4	-14 51	8.22	8.30	A ₃	6	..	12393b	55	746	16.0	-28 10	9.7	10.4	Go	3	..	41071b
6	902	15.4	-24 56	8.80	8.9	F ₅	4	..	10434b	56	562	16.0	-51 14	8.5	9.1	K ₂	5	..	20262b
7	853	15.4	-32 36	8.9	9.6	Go	3	..	23790b	57	406	16.1	+61 58	8.5	8.5	B8	2	..	38974i
8	858	15.4	-34 4	8.1	9.9	Ma	7	..	41068b	58	471	16.1	+60 27	8.4	8.4	Ao	3	..	38164i
9	785	15.4	-42 18	6.34	7.1	G ₅	6	0,10	12229b	59	457	16.1	+58 23	8.69	8.69	Ao	4	..	38164i
10	403	15.5	+61 46	8.6	9.2	Go	2	..	38974i	60	655	16.1	+48 29	8.6	8.7	A ₂	2	..	37578i
11	465	15.5	+38 56	8.9	9.7	G ₅	1	..	37386i	61	365	16.1	+ 9 12	9.6	10.2	Go	1	..	10368b
12	331	15.5	+22 58	7.75	9.10	Ma	2	0,1	16948i	62	364	16.1	+ 8 25	7.8	8.1	Fo	5	..	37403i
13	305	15.5	+10 11	8.47	9.25	G ₅	2	..	37403i	63	406	16.1	-15 43	9.0	9.5	F8	3	2,3	40765b
14	306	15.5	+ 9 33	8.4	9.2	G ₅	1	..	37403i	64	880	16.1	-23 3	9.1	9.7	Ko	2	..	14876b
15	456	15.5	- 6 38	9.6	9.7	A ₃	1	..	45970b	65	837	16.1	-29 19	9.1	10.7	K ₂	2	..	41071b
16	407	15.5	- 6 49	8.3	8.9	Go	4	..	37402i	66	828	16.1	-30 37	8.9	10.4	G ₅	2	..	23790b
17	417	15.5	-21 16	8.3	9.4	Ko	3	..	14876b	67	796	16.1	-32 55	8.2	8.9	G ₅	7	..	23790b
18	440	15.5	-54 24	7.8	9.0	K ₂	3	..	24229b	68	787	16.1	-42 23	8.7	10.3	Ko	3	0,2	24090b
19	385	15.6	+63 9	7.94	8.72	G ₅	3	..	37308i	69	564	16.1	-51 35	10.3	10.0	Go	2	5,2	39684b
20	588	15.6	+56 38	9.2	9.2	B ₉	2	..	7195m	70	121	16.1	-71 32	9.9	10.0	A ₂	6	..	38146b
21	536	15.6	+38 4	8.00	8.08	A ₃	4	..	37386i	71	553	16.2	+57 39	8.0	9.0	Ko	4	..	38164i
22	366	15.6	+27 37	8.8	8.9	A ₂	2	..	38973i	72	615	16.2	+47 56	9.0	9.0	Ao	2	..	38897i
23	346	15.6	+18 8	9.0	10.0	Ko	1	..	38035i	73	495	16.2	+40 43	8.6	9.0	F ₅	3	..	37577i
24	402	15.6	-15 5	8.3	9.3	Ko	3	..	12393b	74	812	16.2	-27 15	10.9	10.7	Ao	1	..	41071b
25	809	15.6	-27 40	10.4	10.1	Go	1	..	45148b	75	658	16.2	-41 51	8.9	8.9	A ₂	8	..	24090b
26	874	15.6	-35 54	8.2	9.0	G ₅	7	..	41068b	76	788	16.2	-42 43	9.4	10.9	G ₅	1	..	45156b
27	120	15.6	-71 41	9.9	10.5	Go	4	..	38146b	77	132	16.2	-68 15	7.9	9.3	Ma	6	..	20429b
28	552	15.7	+58 8	var.	var.	Md	..	R	M	78	256	16.3	+65 44	9.4	9.7	F	2	..	37308i
29	599	15.7	+55 25	10.2	10.2	Ao	3	..	7195m	79	474	16.3	+59 28	8.8	8.8	Ao	3	..	38164i
30	514	15.7	+53 45	9.7	9.7	A	1	..	38164i	80	597	16.3	+56 46	var.	var.	K ₅	1	R	7195m
31	478	15.7	+43 49	8.0	8.1	A ₃	3	..	37578i	81	598	16.3	+56 24	8.5	8.5	Ao	4	..	38164i
32	743	15.7	-45 37	9.7	11.4	K ₅	..	..	M	82	554	16.3	+52 6	8.6	8.7	A ₂	2	..	37356i
33	691	15.7	-46 7	8.8	9.9	Ko	3	..	39684b	83	538	16.3	+50 35	8.7	8.7	Ao	3	..	38897i
34	607	15.7	-48 14	8.7	9.7	Ko	4	..	39684b	84	537	16.3	+38 1	9.4	9.4	Ao	1	..	37386i
35	591	15.8	+56 47	7.46	7.46	Ao	4	R	38164i	85	538	16.3	+37 15	8.0	8.8	G ₅	3	..	37386i
36	505	15.8	+43 8	8.2	8.2	Ao	3	..	37578i	86	399	16.3	+29 53	8.7	9.3	G	5	R	38061i
37	391	15.8	+26 32	8.7	9.3	G	1	..	38061i	87	371	16.3	+ 7 18	7.42	7.56	A ₅	6	..	37403i
38	367	15.8	+ 7 56	8.6	8.9	Fo	2	..	37403i	88	429	16.3	-13 23	9.3	10.5	K ₅	2	..	40988b
39	392	15.8	-22 34	8.4	9.1	Ko	4	..	14876b	89	809	16.3	-35 35	8.7	9.6	Ko	4	..	41068b
40	153	15.8	-63 42	8.5	9.0	F8	4	..	20429b	90	609	16.3	-48 6	9.7	10.9	F ₅	2	..	39684b
41	160	15.8	-64 45	9.71	10.1	G ₅	3	..	20429b	91	290	16.3	-52 46	8.9	10.1	Go	3	0,2	39676b
42	593	15.9	+56 56	6.95	6.90	B8p	7	R	38164i	92	417	16.3	-55 29	8.3	8.8	Ko	4	0,7	24229b
43	600	15.9	+56 10	8.4	9.4	Ko	2	..	38164i	93	410	16.3	-56 7	9.1	9.7	F ₅	3	3,3	42096b
44	601	15.9	+55 54	8.9	9.9	Ko	2	..	38164i	94	473	16.4	+45 3	8.62	8.62	Ao	2	..	37578i
45	350	15.9	+ 7 10	8.4	9.5	K ₂	1	..	10381b	95	334	16.4	+22 25	6.61	7.11	G5p	6	0,4 R	38973i
46	321	15.9	+ 5 15	9.76	10.54	G ₅	1	..	10368b	96	329	16.4	+15 43	8.0	9.0	Ko	2	..	38035i
47	436	15.9	-12 3	7.83	8.61	G ₅	4	..	37402i	97	383	16.4	+15 5	7.94	7.94	Ao	4	..	38035i
48	811	15.9	-27 44	8.0	9.2	Ko	4	..	41071b	98	439	16.4	-12 39	9.4	9.9	F8	3	..	40988b
49	589	15.9	-39 59	8.9	10.3	Ao	5	0,3	24090b	99	430	16.4	-13 41	10.5	11.3	G ₅	1	..	40988b
50	422	15.9	-53 39	9.2	9.7	Go	3	0,1	39676b	100	747	16.4	-28 32	11.1	10.7	Fo	2	..	41071b

14600

2^h 16^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	861	16.4	-34 23	10.2	10.5	Go	2	..	41068b	51	386	16.8	+ 4 18	8.2	8.8	Go	4	..	10382b
2	426	16.4	-57 23	9.3	10.2	G5	2	..	42096b	52	355	16.8	- 0 4	5.9	6.91	Ma	6	5,9	39008i
3	43	16.4	-81 3	9.2	9.6	F5	3	..	20538b	53	411	16.8	- 7 5	8.6	9.7	G5	3	..	12388b
4	600	16.5	+56 26	9.4	10.0	Go	3	..	7195m	54	407	16.8	-15 1	9.59	10.2	Go	3	..	40988b
5	605	16.5	+56 8	9.7	..	Oe5	3	..	7165m	55	432	16.8	-16 13	8.3	8.9	Go	5	..	40988b
6	506	16.5	+43 5	7.44	7.50	A2	4	..	37578i	56	453	16.8	-16 50	9.6	10.4	G5	3	..	40988b
7	533	16.5	+39 23	8.9	9.2	Fo	1	..	37386i	57	864	16.8	-34 21	9.2	9.9	G5	3	..	41068b
8	401	16.5	+29 53	7.76	8.76	Ko	3	..	38061i	58	646	16.8	-49 0	9.9	10.2	F	1	..	39684b
9	351	16.5	+20 2	8.9	9.9	Ko	1	..	38035i	59	208	16.9	+66 24	8.7	8.7	Ao	3	..	37308i
10	331	16.5	+15 33	8.1	8.5	F5	3	..	38035i	60	555	16.9	+57 37	9.7	9.7	Ao	1	..	7195m
11	326	16.5	+11 49	8.6	8.9	Fo	4	..	37403i	61	602	16.9	+56 55	9.0	9.0	B8	3	..	7195m
12	441	16.5	-11 48	8.4	8.8	F5	4	..	37402i	62	535	16.9	+54 55	6.46	7.02	Gop	9	R	38164i
13	452	16.5	-17 34	9.1	9.7	Go	2	..	40765b	63	605	16.9	+45 43	7.8	7.9	A2	6	..	37578i
14	691	16.5	-44 31	8.0	8.7	Ko	8	5,3	24090b	64	509	16.9	+42 34	8.1	8.1	Ao	3	..	37578i
15	291	16.5	-52 46	8.8	10.3	Go	2	..	39676b	65	395	16.9	+27 11	8.8	9.8	Ko	2	5,2	38973i
16	412	16.5	-56 34	8.3	8.7	F5	3	0,3	24229b	66	385	16.9	+20 52	8.7	9.3	Go	2	..	38883i
17	387	16.6	+63 6	7.84	9.02	K5	2	3,1	38974i	67	479	16.9	- 9 51	8.91	9.69	G5	2	..	37402i
18	477	16.6	+59 50	9.4	9.4	A	1	..	38164i	68	442	16.9	-12 22	8.9	9.3	F5	3	..	37402i
19	556	16.6	+51 38	6.58	6.66	A3	5	..	37356i	69	408	16.9	-15 5	9.6	10.2	Go	3	..	40988b
20	540	16.6	+50 50	9.2	9.2	A	2	..	38897i	70	455	16.9	-17 24	9.3	9.8	F8	3	..	40765b
21	507	16.6	+42 59	8.0	8.0	Ao	2	..	37578i	71	800	16.9	-33 33	10.9	10.7	Go	2	..	41068b
22	500	16.6	+40 57	5.87	6.15	Fo	9	..	37578i	72	686	16.9	-39 38	9.8	10.9	Go	2	..	39654b
23	384	16.6	+31 5	8.6	9.1	F8	3	..	38061i	73	193	16.9	-62 6	9.9	10.5	Go	1	..	23773b
24	388	16.6	+25 49	8.9	9.7	G5	3	..	38061i	74	558	17.0	+51 55	8.6	9.6	Ko	1	..	38873i
25	354	16.6	- 0 36	7.59	8.59	Ko	7	..	14901b	75	482	17.0	+43 55	8.2	9.0	G5	2	..	37578i
26	321	16.6	- 0 48	7.30	8.30	Ko	7	..	14901b	76	356	17.0	- 0 42	9.0	9.6	Go	2	..	14901b
27	363	16.6	- 3 25	8.82	9.32	F8	3	3,2	14901b	77	470	17.0	-14 56	9.40	9.90	F8	4	..	40988b
28	440	16.6	-20 22	6.63	7.8	G5	10	..	14876b	78	836	17.0	-30 24	10.2	11.3	G5	1	..	45148b
29	684	16.6	-39 29	7.63	10.0	Ko	7	5,1	24090b	79	942	17.0	-30 59	9.4	9.8	G5	4	..	41068b
30	704	16.6	-47 24	8.3	8.7	F5	7	0,5	36984b	80	943	17.0	-31 24	8.5	9.5	Ko	4	..	23790b
31	325	16.7	+64 18	9.0	10.1	K2	1	..	38974i	81	661	17.0	-41 17	9.6	10.6	F5	3	5,2	24090b
32	388	16.7	+62 36	7.54	7.54	Ao	4	1,5	37341i	82	415	17.0	-56 33	7.1	8.7	K2	3	0,2	24229b
33	501	16.7	+41 2	7.7	7.5	B	5	R	37577i	83	607	17.1	+56 8	9.9	9.9	Ao	2	..	38164i
34	391	16.7	+ 0 31	8.2	9.3	K2	6	..	14901b	84	541	17.1	+50 27	8.6	8.6	Ao	2	..	38897i
35	410	16.7	- 7 20	9.6	10.6	Ko	1	..	12388b	85	544	17.1	+37 49	7.08	7.08	Ao	6	..	37386i
36	428	16.7	- 7 59	7.52	8.30	G5	3	..	37402i	86	297	17.1	+18 38	9.1	9.6	F8	2	..	38883i
37	840	16.7	-29 12	9.9	11.0	F5	2	..	41071b	87	353	17.1	+17 57	8.6	9.6	Ko	2	..	38035i
38	834	16.7	-30 11	10.4	10.7	Go	2	..	45148b	88	281	17.1	+16 25	6.78	6.78	Ao	7	..	38883i
39	685	16.7	-39 23	10.4	11.2	G5	1	..	39654b	89	417	17.1	+ 2 1	8.6	9.6	Ko	2	..	10382b
40	675	16.7	-50 46	7.8	8.2	Ko	2	..	8860b	90	322	17.1	- 1 20	5.62	5.76	A5	..	..	56,74
41	413	16.7	-56 24	5.56	7.6	K5	..	3,7-	56,119	91	448	17.1	-11 14	5.57	5.85	Fo	..	0,10	56,74
42	191	16.7	-62 24	7.7	8.1	F5	8	..	23773b	92	434	17.1	-14 44	7.41	7.69	Fo	5	E	37402i
43	166	16.7	-71 56	8.0	8.8	G5	4	E	20539b	93	794	17.1	-42 5	9.9	10.6	Go	2	..	45156b
44	460	16.8	+58 43	9.9	9.9	Ao	2	..	38164i	94	136	17.2	+74 8	7.8	9.0	K5	1	..	38972i
45	..	16.8	+57 53	..	..	B	2	R	7195m	95	408	17.2	+62 2	8.2	9.2	Ko	1	..	38974i
46	554	16.8	+57 24	8.8	8.8	B8	5	2,2	38164i	96	462	17.2	+58 49	9.4	9.4	Ao	3	R	7195m
47	574	16.8	+52 14	8.0	8.4	F5	3	..	37356i	97	470	17.2	+37 7	8.6	9.1	F8	3	..	37386i
48	659	16.8	+48 44	8.0	8.8	G5	4	..	37578i	98	436	17.2	-13 50	10.5	11.5	Ko	1	..	40988b
49	417	16.8	+33 15	7.9	7.9	B9	4	..	37386i	99	412	17.2	-15 23	8.9	9.4	F8	4	..	40988b
50	330	16.8	+21 42	8.7	9.2	F8	2	..	38883i	100	839	17.2	-30 4	9.2	10.1	K2	2	..	23790b

THE HENRY DRAPER CATALOGUE.

14700

2^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	887	17.2	-37 28	8.2	9.0	F5	3	0,4 R	41068b	51	621	17.6	+48 1	8.8	8.8	Ao	3	..	38897i
2	889	17.2	-37 47	10.9	10.8	Ao	1	..	39654b	52	473	17.6	+36 41	8.7	8.7	Ao	2	..	37386i
3	427	17.2	-57 14	6.5	7.6	G5	6	..	24229b	53	432	17.6	+32 15	8.1	8.9	G5	2	..	37386i
4	203	17.2	-58 19	9.0	10.0	K2	1	..	42096b	54	375	17.6	+ 8 6	8.2	8.5	Fo	5	..	37403i
5	161	17.2	-64 0	8.1	8.6	F8	5	..	20429b	55	358	17.6	- 0 3	9.4	10.4	Ko	1	..	14901b
6	140	17.2	-70 21	8.7	9.3	Go	7	..	20429b	56	414	17.6	-15 42	8.3	8.9	Go	4	..	40988b
7	558	17.3	+57 53	9.9	9.7	B	1	..	7195m	57	752	17.6	-28 19	7.47	7.8	G5	10	..	41071b
8	518	17.3	+53 46	9.2	9.2	B8	2	..	38164i	58	845	17.6	-29 48	7.83	8.6	Go	8	..	23790b
9	339	17.3	+24 45	9.1	9.5	F5	2	..	38973i	59	424	17.6	-53 9	9.4	10.2	G5	2	0,1	39676b
10	331	17.3	+21 49	8.8	9.6	G5	1	E	38883i	60	204	17.6	-58 56	8.5	9.4	Ao	4	2,2	42096b
11	311	17.3	+10 2	9.8	10.3	F8	1	..	10368b	61	59	17.6	-79 7	9.2	10.3	K2	3	..	23772b
12	357	17.3	- 0 15	8.6	9.6	Ko	3	..	14901b	62	608	17.7	+56 36	9.5	10.7	K5	2	5,1	7195m
13	437	17.3	-14 3	10.5	11.3	G5	1	..	40988b	63	398	17.7	+26 37	8.7	9.1	F5	2	..	38061i
14	566	17.3	-51 21	9.5	9.6	Ko	2	..	39684b	64	393	17.7	+25 56	9.5	9.9	F5	1	..	38061i
15	294	17.3	-52 14	9.6	10.2	Go	2	..	39676b	65	420	17.7	+ 1 54	9.4	9.9	F8	2	..	12387b
16	186	17.3	-74 18	9.1	9.7	Go	2	..	46019b	66	440	17.7	-13 53	8.9	9.5	Go	5	..	40988b
17	57	17.3	-79 29	8.5	9.1	Go	3	..	20538b	67	397	17.7	-22 20	8.3	9.5	K5	3	..	14876b
18	11	17.4	+88 15	8.40	8.96	Go	3	..	37793i	68	916	17.7	-25 39	8.1	9.2	Ko	4	..	14876b
19	330	17.4	+64 7	8.2	8.2	Ao	3	..	37308i	69	594	17.7	-40 37	10.2	10.9	G5	3	..	24090b
20	559	17.4	+57 16	9.4	9.4	Ao	2	..	38164i	70	649	17.8	+49 33	5.49	6.27	G5	..	0,9-	56,74
21	608	17.4	+55 20	9.5	9.5	Ao	3	..	7195m	71	453	17.8	+41 39	6.79	7.79	Ko	5	0,4	37577i
22	519	17.4	+53 46	8.2	8.1	B5	4	..	38164i	72	387	17.8	+14 57	9.4	10.2	G5	1	..	38035i
23	521	17.4	+53 20	8.2	8.2	B8	4	..	38164i	73	388	17.8	+14 53	8.8	9.2	F5	1	..	38035i
24	465	17.4	+35 23	8.6	9.4	G5	2	..	37386i	74	327	17.8	+ 3 20	8.4	9.4	Ko	4	..	10382b
25	340	17.4	+24 13	9.1	9.9	G5	1	..	38973i	75	482	17.8	-10 40	9.0	10.4	Mb	2	..	40988b
26	316	17.4	+11 7	8.8	9.4	Go	2	..	37403i	76	848	17.8	-26 3	10.6	10.4	F2	2	..	45148b
27	325	17.4	- 0 58	8.4	8.8	F5	7	..	14901b	77	790	17.8	-38 23	9.6	11.5	K2	2	..	39654b
28	409	17.4	-18 7	5.99	6.99	Ko	..	0,8-	56,119	78	689	17.8	-39 9	8.2	9.4	G5	8	0,2	24090b
29	891	17.4	-37 40	9.8	10.7	A2	1	..	39654b	79	690	17.8	-39 26	9.2	9.7	A2	6	3,2	24090b
30	786	17.4	-38 16	10.2	11.3	K2	1	..	39654b	80	568	17.8	-51 9	10.3	10.0	F5	2	..	39684b
31	694	17.4	-45 56	9.4	9.6	A5	3	..	39684b	81	295	17.8	-52 34	9.6	10.2	Go	2	..	39676b
32	199	17.4	-61 8	8.1	9.0	Ko	6	..	23773b	82	611	17.9	+55 33	9.9	10.4	F8	3	..	7195m
33	58	17.4	-79 39	7.94	9.3	Ko	6	0,6	20538b	83	422	17.9	+33 25	7.62	8.62	Ko	3	..	37386i
34	605	17.5	+56 46	9.7	9.7	Ao	3	0,2	7195m	84	332	17.9	+22 0	8.5	9.1	Go	2	E	38883i
35	425	17.5	+35 0	6.85	7.63	G5	5	..	37386i	85	298	17.9	+19 10	8.5	9.3	G5	2	..	38035i
36	402	17.5	+29 44	8.7	9.1	F5	2	..	38061i	86	389	17.9	+14 57	9.0	9.8	G5	1	..	38035i
37	369	17.5	+27 42	8.5	9.5	Ko	2	..	38973i	87	318	17.9	+10 23	7.92	8.70	G5	4	..	37403i
38	397	17.5	+26 15	8.1	8.6	F8	1	..	37335i	88	416	17.9	-15 22	7.9	7.9	Ao	9	..	12393b
39	283	17.5	+17 9	7.26	7.32	A2	6	2,5	38883i	89	949	17.9	-31 30	9.2	10.4	K5	2	..	23790b
40	388	17.5	+ 4 30	8.6	9.1	F8	3	..	10382b	90	816	17.9	-34 58	10.2	11.1	Go	2	..	41068b
41	451	17.5	-11 35	9.4	10.4	Ko	2	..	40988b	91	893	17.9	-36 33	7.8	9.0	Ko	8	..	41068b
42	439	17.5	-13 58	10.3	10.9	Go	2	..	40988b	92	615	17.9	-48 46	7.8	7.8	G5	3	..	8860b
43	457	17.5	-16 58	7.36	8.36	Ko	7	..	40988b	93	134	17.9	-68 33	6.9	7.0	A3	3	1,9	8861b
44	812	17.5	-35 18	9.2	9.9	Ko	3	..	41068b	94	483	18.0	+60 3	8.11	9.11	Ko	3	..	38164i
45	423	17.5	-53 25	7.5	8.3	F5	5	..	24229b	95	484	18.0	+59 33	7.52	7.50	B9	6	1,3-	37320i
46	148	17.5	-67 2	9.5	10.1	Go	2	..	20429b	96	565	18.0	+58 4	10.2	10.2	B9	1	..	7195m
47	133	17.5	-68 9	8.1	8.7	Go	7	..	20429b	97	565	18.0	+46 55	7.57	8.57	Ko	2	..	37578i
48	122	17.5	-71 8	8.8	8.8	Ao	8	E	20429b	98	537	18.0	+39 38	8.1	9.1	Ko	2	..	37577i
49	482	17.6	+59 25	8.2	8.2	Ao	4	..	38164i	99	472	18.0	+38 53	7.72	7.70	B9	7	..	37577i
50	609	17.6	+55 59	8.9	9.0	A3	4	..	38164i	100	433	18.0	+33 3	8.1	8.1	Ao	4	..	37386i

14800

2^h 18^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	284	18.0	+16 16	8.4	9.2	G5	3	..	38035i	51	953	18.6	-31 51	7.96	9.2	Ko	7	..	2379ob
2	1038	18.0	-24 16	5.37	6.1	F5	..	R	56,119	52	867	18.6	-32 47	8.9	9.5	Ko	5	..	2379ob
3	849	18.0	-26 1	8.5	9.5	K2	3	..	45148b	53	899	18.6	-36 57	8.4	9.4	K2	3	E	41079b
4	713	18.0	-47 3	10.5	10.2	Ao	3	..	39684b	54	613	18.7	+56 52	8.8	8.8	Ao	3	..	38164i
5	156	18.0	-63 0	7.8	8.8	Ko	8	..	20429b	55	483	18.7	+45 11	7.57	8.35	G5	5	..	37578i
6	44	18.0	-81 0	9.2	9.3	A2	4	..	20538b	56	456	18.7	+41 32	9.5	9.6	A5	2	..	37577i
7	538	18.1	+39 22	7.26	7.68	F5	7	..	37577i	57	390	18.7	- 3 50	8.60	9.95	Ma	2	..	14901b
8	316	18.1	+23 52	9.4	10.4	Ko	1	..	38973i	58	414	18.7	-18 21	9.6	10.2	Go	2	..	40765b
9	434	18.1	-13 6	9.1	9.7	Go	4	..	40988b	59	683	18.7	-50 38	9.4	9.7	Ko	3	..	39684b
10	806	18.1	-33 24	8.6	8.6	F5	7	0,7	41068b	60	205	18.7	-58 33	8.5	9.6	Ko	3	..	42096b
11	793	18.1	-38 23	10.2	11.7	Ko	2	..	39654b	61	202	18.7	-60 53	8.8	9.9	K2	2	..	23773b
12	654	18.1	-49 11	9.4	9.7	F8	2	..	39684b	62	184	18.7	-75 54	9.3	9.4	A3	4	..	14358b
13	297	18.1	-52 35	8.1	9.1	K5	4	..	20262b	63	140	18.8	+71 41	7.67	7.62	B8	6	..	38972i
14	204	18.1	-58 9	8.4	9.1	G5	4	..	24229b	64	616	18.8	+57 3	8.6	8.7	A2	4	1,4	38164i
15	172	18.1	-64 58	9.16	9.3	Fo	6	..	20429b	65	624	18.8	+47 36	8.6	9.1	F8	1	..	37578i
16	98	18.2	+75 30	8.52	9.59	K2	1	..	38972i	66	313	18.8	+ 9 49	7.27	8.27	Ko	5	..	37403i
17	472	18.2	+61 4	7.11	7.06	B8	5	1,7	37341i	67	922	18.8	-25 2	9.85	10.1	A5	2	..	45148b
18	612	18.2	+56 10	6.24	6.05	B2	5	R	37356i	68	855	18.8	-29 30	8.3	8.6	Go	5	..	41071b
19	329	18.2	+ 6 8	8.8	9.3	F8	4	..	10368b	69	198	18.8	-62 21	9.1	10.2	K2	2	..	23773b
20	442	18.2	-14 13	9.3	9.9	Go	4	..	40988b	70	615	18.9	+56 12	9.2	9.2	B8	2	..	38164i
21	435	18.2	-16 0	9.6	10.2	Go	1	..	40765b	71	616	18.9	+55 38	8.0	8.0	B9	5	..	38164i
22	723	18.2	-43 26	9.3	9.9	F5	4	..	24090b	72	656	18.9	+49 50	4.86	6.04	K5	..	0,7-	56,74
23	617	18.2	-48 24	8.9	10.5	K5	2	..	39684b	73	625	18.9	+47 32	8.8	8.9	A5	1	..	37578i
24	259	18.3	+66 7	8.5	9.5	Ko	1	..	38984i	74	406	18.9	+30 12	8.16	8.94	G5	4	..	38061i
25	566	18.3	+57 44	7.76	7.82	A2	6	0,3	38164i	75	409	18.9	+28 46	7.10	8.10	Ko	2	..	37335i
26	609	18.3	+57 0	8.5	9.9	Ma	1	..	7195m	76	373	18.9	+27 13	8.1	9.1	Ko	3	..	38061i
27	539	18.3	+54 48	7.51	7.49	B9	7	1,6	38164i	77	333	18.9	+21 58	8.1	8.7	Go	2	E	38883i
28	435	18.3	- 8 16	8.7	9.3	Go	3	..	12388b	78	368	18.9	+ 2 30	9.0	9.4	F5	3	..	12387b
29	452	18.3	-11 8	9.9	9.9	Ao	2	..	40988b	79	444	18.9	-14 34	9.4	9.8	F5	3	..	40988b
30	444	18.3	-18 48	6.43	7.21	G5	8	5,8	10434b	80	827	18.9	-27 27	7.01	8.0	G5	10	..	41071b
31	668	18.3	-40 58	9.6	11.2	K2	2	2,1	24090b	81	857	18.9	-29 41	10.2	10.4	G5	2	..	41071b
32	724	18.3	-43 39	6.30	7.4	G5	6	..	12358b	82	852	18.9	-30 19	6.94	7.8	F8	3	..	42587b
33	698	18.3	-44 4	9.3	9.9	Ko	5	0,2	24090b	83	685	18.9	-50 8	9.4	9.7	Go	3	..	39684b
34	681	18.3	-49 59	7.52	7.8	G5	7	..	20262b	84	580	19.0	+52 55	9.2	9.2	Ap	2	R	37356i
35	142	18.3	-69 53	8.83	9.9	G5	5	..	20429b	85	608	19.0	+45 28	8.2	8.5	F2	5	..	37578i
36	139	18.4	+73 16	7.22	7.50	Fo	4	..	37615i	86	410	19.0	+28 21	8.7	9.0	F2	3	7,2 R	38061i
37	611	18.4	+56 44	9.2	9.2	B8	2	..	7195m	87	392	19.0	+15 4	7.79	8.07	Fo	6	..	38035i
38	566	18.4	+46 36	8.7	9.0	F2	2	..	37578i	88	321	19.0	+11 3	8.2	8.5	Fo	3	..	37403i
39	423	18.4	+ 2 7	9.0	10.0	Ko	1	..	10382b	89	455	19.0	-10 50	9.3	10.3	Ko	3	..	40988b
40	470	18.4	- 6 39	7.04	7.32	Fo	8	..	37402i	90	797	19.0	-38 2	6.56	8.2	K2	5	3, R	12285b
41	866	18.4	-32 32	9.3	10.4	G5	2	..	23790b	91	802	19.0	-42 27	9.1	8.9	A3	8	..	24090b
42	725	18.4	-43 19	9.2	9.9	Go	4	..	24090b	92	135	19.0	-68 35	9.6	10.2	Go	3	..	20429b
43	716	18.4	-47 36	8.9	9.0	F2	4	..	39684b	93	478	19.1	+36 40	7.28	7.26	B9	6	..	37386i
44	40	18.4	-83 21	9.3	10.4	K2	1	..	20538b	94	335	19.1	+15 13	8.89	9.39	F8	2	..	38035i
45	848	18.5	-30 22	8.9	9.6	Ko	2	..	23790b	95	325	19.1	+12 34	9.0	9.6	Go	2	..	38944i
46	695	18.5	-39 52	7.78	8.8	Ko	3	5,9	12285b	96	438	19.1	- 8 19	9.4	9.7	F2	2	..	12388b
47	718	18.5	-46 55	8.5	9.6	G5	5	..	39684b	97	418	19.1	-14 57	9.9	10.9	Ko	2	..	40988b
48	139	18.6	+71 21	8.8	8.9	A3	1	..	38972i	98	401	19.1	-22 16	9.4	10.0	K	1	R	14876b
49	332	18.6	+11 26	9.0	9.8	G5	2	..	37403i	99	621	19.2	+56 47	7.42	7.42	Ao	5	2,6 R	38164i
50	850	18.6	-30 5	8.5	8.2	B9	2	1,7	42857b	100	620	19.2	+56 37	8.7	8.7	B9	4	1,1	7195m

THE HENRY DRAPER CATALOGUE.

14900

2^h 19^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	425	19.2	+33 25	7.49	8.84	Mb	4	..	37386i	51	316	19.5	+10 9	5.53	5.41	B5	..	R	56,74
2	391	19.2	+30 50	9.1	10.1	Ko	1	..	38061i	52	763	19.5	-45 32	9.7	10.2	F5	3	..	39684b
3	315	19.2	+9 15	7.6	8.6	Ko	5	..	37403i	53	727	19.5	-47 36	9.3	10.2	G5	3	..	39684b
4	401	19.2	-2 22	8.7	9.3	Go	2	..	14901b	54	625	19.5	-48 44	7.9	8.2	K2	4	..	20262b
5	371	19.2	-3 42	8.78	9.12	F2	3	..	14901b	55	42	19.6	+84 37	8.6	9.4	G5	3	..	37281i
6	419	19.2	-7 15	9.1	9.5	F5	3	..	12388b	56	568	19.6	+57 14	7.32	7.10	B1	5	R	38164i
7	440	19.2	-7 52	8.2	8.6	F5	4	..	37402i	57	546	19.6	+54 55	9.9	9.9	Ao	1	..	38164i
8	437	19.2	-13 15	10.3	10.6	F	2	..	40988b	58	526	19.6	+53 51	8.2	8.6	F5	4	3,2	38164i
9	438	19.2	-13 39	9.6	10.6	Ko	2	..	40988b	59	527	19.6	+53 41	8.6	9.1	F8	2	..	37356i
10	882	19.2	-34 32	9.0	9.4	Fo	6	..	41068b	60	478	19.6	+38 49	9.4	9.4	Ao	2	..	37386i
11	806	19.2	-42 49	10.3	10.9	G5	3	5,2	42090b	61	376	19.6	+27 32	8.8	9.6	G5	1	..	38973i
12	430	19.2	-57 17	9.3	9.7	F5	2	..	42096b	62	392	19.6	+4 34	8.6	8.9	Fo	2	..	37403i
13	162	19.2	-63 55	8.3	9.3	Ko	6	..	20429b	63	405	19.6	-2 28	8.5	8.9	F5	5	..	14901b
14	486	19.3	+59 12	7.11	8.11	Ko	6	0,7	37320i	64	473	19.6	-6 21	9.4	9.8	F5	2	..	12388b
15	567	19.3	+57 30	9.2	9.2	A	1	..	38164i	65	859	19.6	-29 53	8.43	8.9	Ao	7	..	45148b
16	622	19.3	+56 27	9.7	9.7	Ao	3	..	7195m	66	447	19.6	-54 0	8.3	9.9	K5	2	..	20262b
17	470	19.3	+35 31	8.5	8.9	F5	2	..	37386i	67	574	19.7	+51 15	8.5	9.5	Ko	1	..	38897i
18	344	19.3	+25 2	8.01	8.57	Go	3	..	37335i	68	482	19.7	+36 33	7.47	8.82	Ma	3	..	37386i
19	393	19.3	+14 12	9.1	9.6	F8	2	..	38944i	69	410	19.7	+29 26	7.9	9.0	K2	2	..	37335i
20	322	19.3	+10 54	8.4	9.6	K5	2	..	10368b	70	327	19.7	+12 56	8.6	8.6	Ao	3	..	10368b
21	331	19.3	+3 37	9.0	9.4	F5	3	..	12387b	71	440	19.7	-13 45	7.65	8.07	F5	5	..	37402i
22	403	19.3	-2 45	9.4	9.5	A2	3	..	14901b	72	416	19.7	-17 54	9.6	10.6	Ko	2	..	40765b
23	455	19.3	-9 4	8.7	9.0	Fo	4	..	37402i	73	415	19.7	-18 17	10.1	11.1	Ko	1	..	40765b
24	858	19.3	-29 42	9.1	8.9	F8	4	..	41071b	74	418	19.7	-18 25	9.4	10.4	Ko	2	..	40765b
25	956	19.3	-31 13	9.4	10.7	F8	2	..	45148b	75	417	19.7	-18 37	8.4	9.0	Go	3	..	40765b
26	798	19.3	-38 23	9.2	9.7	G5	4	..	24090b	76	934	19.7	-25 33	9.2	10.4	G5	2	..	45148b
27	702	19.3	-45 59	9.4	11.4	K5	1	..	39684b	77	958	19.7	-31 32	9.2	10.4	F8	2	..	41079b
28	197	19.3	-60 13	7.53	8.0	A2	7	3,8	12034b	78	144	19.7	-70 13	9.9	10.0	A2	4	..	20429b
29	198	19.3	-60 26	9.1	10.2	K2	1	..	23773b	79	172	19.7	-72 5	10.4	11.4	Ko	3	..	38146b
30	186	19.3	-76 12	8.7	9.0	F2	6	..	14358b	80	168	19.8	+68 12	8.6	8.6	B9	2	..	37308i
31	141	19.4	+71 24	8.6	8.6	Ao	1	..	38972i	81	..	19.8	+55 31	..	..	Ao	2	..	7195m
32	670	19.4	+48 46	8.5	8.6	A5	2	..	38897i	82	609	19.8	+46 6	8.8	8.8	Ao	3	..	38897i
33	458	19.4	+41 32	9.2	9.2	Ao	2	..	37577i	83	513	19.8	+40 26	8.5	8.8	Fo	4	..	37577i
34	481	19.4	+36 20	8.7	9.0	Fo	2	..	37386i	84	346	19.8	+24 23	8.7	9.5	G5	2	..	38973i
35	432	19.4	+34 34	6.92	7.70	G5	5	..	37386i	85	388	19.8	+14 2	9.0	10.1	K2	1	..	38944i
36	395	19.4	+25 58	9.4	9.5	A5	2	..	38061i	86	406	19.8	-2 34	9.0	9.3	F2	6	..	14901b
37	404	19.4	-2 12	8.7	9.3	Go	4	..	14901b	87	448	19.8	-12 17	9.3	10.3	Ko	3	..	40988b
38	372	19.4	-3 33	7.22	7.64	F5	8	..	14901b	88	857	19.8	-26 18	6.58	8.0	Ko	9	0,10	14876b
39	423	19.4	-7 11	9.6	10.1	F8	2	..	12388b	89	885	19.8	-34 34	10.2	9.9	F8	3	..	41068b
40	438	19.4	-16 42	6.59	6.87	Fo	10	..	40988b	90	423	19.8	-54 59	8.30	9.6	K5	2	..	20262b
41	464	19.4	-17 42	9.6	10.6	Ko	2	..	40765b	91	433	19.8	-57 38	9.0	9.7	A	2	..	42096b
42	855	19.4	-29 56	9.53	10.1	Fo	3	..	45148b	92	575	19.9	+51 36	9.2	9.3	A2	2	..	38897i
43	571	19.4	-51 33	6.01	7.1	A3	..	0,7	56,119	93	514	19.9	+40 26	8.3	8.3	Ao	6	..	37577i
44	105	19.4	-77 40	9.4	9.4	Ao	2	..	14358b	94	380	19.9	+8 5	9.4	10.0	Go	1	..	10368b
45	48	19.4	-78 33	8.8	9.6	G5	5	0,3	23772b	95	456	19.9	-9 28	8.8	9.3	F8	4	..	12388b
46	468	19.5	+58 40	8.9	8.9	Ao	4	2,4	7195m	96	660	19.9	-49 52	9.42	10.2	G5	2	..	39684b
47	467	19.5	+58 25	8.04	..	Oe	4	0,4	38164i	97	161	19.9	-73 46	8.5	9.6	K2	4	..	20539b
48	418	19.5	+31 57	7.50	8.57	K2	3	0,3	38061i	98	41	19.9	-83 14	9.5	9.9	F5	2	..	20538b
49	374	19.5	+27 13	8.2	9.2	Ko	2	..	38973i	99	327	20.0	+65 1	8.6	8.6	Ao	3	..	38974i
50	288	19.5	+16 23	9.4	9.5	A2	1	..	38944i	100	471	20.0	+58 40	7.26	7.60	F2	6	0,6	38164i

15000

2^h 20^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	569	20.0	+57 32	9.9	10.4	F8	1	..	7195m	51	436	20.3	-57 16	6.67	8.1	Ao	7	..	24229b
2	389	20.0	+14 5	8.7	9.3	Go	2	..	38944i	52	137	20.3	-66 26	9.3	9.9	Go	1	..	20429b
3	360	20.0	+0 11	8.28	9.28	Ko	5	..	14901b	53	136	20.3	-66 40	9.2	9.7	F8	2	..	20429b
4	374	20.0	-3 14	6.30	6.30	Ao	10	..	14901b	54	336	20.4	+12 4	8.6	8.9	F2	2	..	37403i
5	394	20.0	-4 20	7.06	8.06	Ko	8	..	14901b	55	360	20.4	+6 47	8.6	9.4	G5	2	..	37403i
6	731	20.0	-47 25	9.2	10.5	K5	2	..	39684b	56	451	20.4	-14 29	10.3	10.9	G	2	..	40988b
7	434	20.0	-57 0	8.7	9.6	G5	3	..	42096b	57	424	20.4	-15 39	10.8	11.6	G5	2	..	40988b
8	113	20.0	-69 7	4.26	4.32	A2	..	0, R	28,195	58	865	20.4	-29 20	9.4	9.8	Fo	5	..	45148b
9	173	20.0	-72 46	8.9	9.9	Ko	5	5,4	38146b	59	862	20.4	-30 19	7.9	8.3	F5	7	..	41071b
10	55	20.1	+82 34	8.8	9.2	F5	4	..	37309i	60	426	20.4	-56 4	6.9	7.6	F5	6	..	25229b
11	627	20.1	+56 15	9.4	9.4	Ao	3	..	7195m	61	364	20.5	+17 32	9.6	10.7	K2	1	..	38944i
12	435	20.1	+34 24	8.8	9.2	F5	2	..	37386i	62	889	20.5	-33 56	9.2	9.5	Go	5	..	41068b
13	429	20.1	+34 1	7.9	8.7	G5	3	..	37386i	63	830	20.5	-35 14	8.9	8.9	Go	4	..	41068b
14	303	20.1	+19 6	8.0	9.0	Ko	3	..	38035i	64	681	20.5	-41 18	6.20	6.6	Go	8	5,10	12285b
15	487	20.1	-10 39	8.4	9.2	G5	5	..	37402i	65	448	20.5	-54 5	9.0	9.6	F5	2	..	20262b
16	423	20.1	-14 52	9.9	10.5	Go	4	..	40988b	66	176	20.5	-72 7	8.0	9.0	Ko	7	0,4	38146b
17	447	20.1	-20 30	8.4	9.1	F8	4	..	14876b	67	163	20.5	-73 50	8.9	9.7	G5	3	..	20539b
18	913	20.1	-37 21	8.9	9.4	G5	3	E	41079b	68	142	20.6	+74 11	8.4	9.0	Go	4	..	38972i
19	299	20.1	-52 35	9.0	9.7	F8	2	..	20262b	69	416	20.6	+61 46	7.9	8.7	G5	4	5,3	38164i
20	136	20.1	-68 13	10.2	11.0	G5	2	..	20429b	70	528	20.6	+53 49	9.9	10.0	A2	2	..	38164i
21	176	20.2	+70 30	8.8	8.9	A3	2	..	37308i	71	581	20.6	+53 2	8.6	8.6	B8	2	..	37356i
22	399	20.2	+62 26	8.11	9.18	K2	2	..	38974i	72	337	20.6	+11 28	9.4	9.8	F5	1	..	37403i
23	472	20.2	+58 32	8.5	8.6	A5	4	..	38164i	73	431	20.6	-21 5	9.0	9.5	F5	4	..	14876b
24	570	20.2	+57 24	9.7	10.5	G5	2	5,1	7195m	74	713	20.6	-44 47	8.45	9.6	Ko	7	0,4	24090b
25	555	20.2	+37 48	8.1	8.4	Fo	4	..	37386i	75	300	20.6	-52 13	8.9	9.6	F8	2	..	20262b
26	393	20.2	+30 27	7.81	8.81	Ko	5	..	38061i	76	207	20.6	-58 38	9.3	9.9	Go	2	..	42096b
27	347	20.2	+24 42	6.94	7.02	A3	6	..	37383i	77	42	20.6	-82 58	8.8	8.9	A2	7	..	20538b
28	355	20.2	+19 50	8.0	8.8	G5	3	..	38035i	78	328	20.7	+65 3	8.35	8.35	Ao	2	..	38974i
29	335	20.2	+11 32	7.52	7.94	F5	6	..	37403i	79	571	20.7	+57 38	10.2	10.2	Ao	1	..	7195m
30	396	20.2	+1 7	9.09	9.51	F5	3	..	14901b	80	496	20.7	+43 18	8.9	8.9	A	2	..	37578i
31	395	20.2	+0 54	9.0	10.0	Ko	2	..	14901b	81	546	20.7	+40 10	9.12	9.68	Go	2	..	37577i
32	375	20.2	-3 40	8.46	9.64	K5	3	..	14901b	82	489	20.7	+37 5	8.0	8.1	A5	4	R	37386i
33	396	20.2	-4 20	8.9	9.9	Ko	3	..	14901b	83	490	20.7	+36 30	8.2	9.4	K5	2	..	37386i
34	453	20.2	-5 12	8.9	9.3	F5	3	..	14901b	84	305	20.7	+18 27	8.0	8.6	Go	3	..	38035i
35	435	20.2	-57 0	8.8	9.3	F8	3	..	24229b	85	1072	20.7	-24 33	9.9	11.0	K2	1	..	45148b
36	56	20.3	+83 23	6.82	7.82	Ko	5	0,8	37281i	86	863	20.7	-30 48	8.9	9.8	Ko	4	5,4	41079b
37	620	20.3	+55 56	9.5	9.5	Ao	2	..	7195m	87	431	20.7	-53 16	8.2	8.7	G5	3	..	24229b
38	621	20.3	+55 22	9.21	9.27	A2	2	..	38164i	88	449	20.7	-54 49	7.96	8.7	Ko	4	..	24229b
39	412	20.3	+29 28	8.9	9.0	A5	4	..	38061i	89	213	20.8	+66 57	4.59	4.73	A5p	..	3, R	56,74
40	397	20.3	+25 18	9.5	10.1	Go	1	..	38061i	90	622	20.8	+56 8	8.5	8.5	Ao	4	..	38164i
41	290	20.3	+17 12	9.4	10.4	Ko	1	..	38944i	91	624	20.8	+55 35	9.2	9.3	A3	1	..	38164i
42	318	20.3	+10 3	7.64	7.62	B9	4	..	37403i	92	583	20.8	+53 9	9.2	9.2	A	3	E	38164i
43	372	20.3	+8 16	8.6	8.7	A3	3	..	10368b	93	437	20.8	+35 9	6.96	7.24	Fo	6	..	37386i
44	488	20.3	-10 4	8.7	9.0	F2	4	..	37402i	94	324	20.8	+10 43	9.1	9.9	G5	1	..	10368b
45	457	20.3	-10 56	9.3	9.9	Go	4	..	40988b	95	319	20.8	+10 11	7.52	8.08	Go	4	..	37403i
46	449	20.3	-14 6	9.6	10.4	G5	3	..	40988b	96	336	20.8	+5 19	8.21	8.99	G5	2	..	37403i
47	864	20.3	-29 6	7.9	8.6	F5	8	..	41071b	97	409	20.8	-22 15	7.74	8.0	F8	9	..	14876b
48	915	20.3	-37 49	6.98	7.2	F5	5	0, R	12285b	98	908	20.8	-36 20	7.8	9.2	Ko	6	..	41068b
49	630	20.3	-48 22	8.0	8.1	F8	3	..	8860b	99	769	20.8	-45 35	8.0	9.1	Ko	8	5,2	24090b
50	424	20.3	-55 0	8.60	8.7	A2	5	..	24229b	100	428	20.8	-56 34	9.3	9.9	F8	2	..	42096b

THE HENRY DRAPER CATALOGUE.

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2^h 20^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	165	20.8	-64 31	9.4	10.0	Go	2	..	20429b	51	52I	21.3	+40 36	7.92	7.92	Ao	7	..	37577i
2	402	20.9	+62 44	7.4I	7.4I	Ao	4	0,4	3734Ii	52	409	21.3	+26 33	6.18	7.36	K5	4	3,6	37335i
3	395	20.9	+30 19	8.9I	9.9I	Ko	1	..	3806Ii	53	323	21.3	+23 57	9.1	9.2	A2	2	..	37383i
4	378	20.9	+27 36	8.7	9.7	Ko	1	..	3806Ii	54	1076	21.3	-24 17	7.79	8.0	A3	8	..	14876b
5	361a	20.9	- 0 38	var.	var.	Md	..	R	56,198	55	839	21.3	-27 36	8.1	8.7	F5	6	..	41071b
6	459	20.9	- 9 41	9.16	9.16	Ao	4	..	37402i	56	878	21.3	-32 15	8.6	9.8	G5	4	..	41068b
7	458	20.9	-11 32	10.8	11.8	Ko	2	..	40988b	57	892	21.3	-34 30	8.0	7.8	A3	10	..	41068b
8	863	20.9	-26 21	8.9	10.1	K5	3	..	41071b	58	771	21.3	-45 44	9.9	10.5	Go	2	..	39684b
9	833	20.9	-35 1	8.88	9.6	Go	4	..	41068b	59	429	21.3	-56 23	9.1	9.9	Ko	2	..	42096b
10	701	20.9	-39 7	9.2	10.0	F5	4	..	2409ob	60	199	21.3	-62 13	8.9	10.0	K2	2	..	23773b
11	450	20.9	-54 31	8.5	9.0	Fo	3	..	24229b	61	43	21.3	-83 1	8.8	9.3	F8	4	..	20538b
12	625	21.0	+55 16	9.9	10.0	A3	2	..	7195m	62	146	21.4	+71 46	8.6	9.8	K5	2	R	38972i
13	631	21.0	+47 46	7.66	7.64	B9	6	..	37578i	63	464	21.4	+41 33	8.6	9.6	Ko	2	0,2	37577i
14	332	21.0	+12 27	7.8	7.8	B9	6	..	37403i	64	322	21.4	+10 8	8.32	8.60	Fo	3	..	10368b
15	338	21.0	+ 5 51	6.67	7.01	F2	7	..	37403i	65	321	21.4	+10 7	6.78	6.86	A3	..	1,6-	56,74
16	461	21.0	- 9 42	8.3I	9.09	G5	3	..	37402i	66	362	21.4	+ 0 9	9.23	9.79	Go	3	..	14901b
17	491	21.0	-10 22	8.7	9.2	F8	4	..	37402i	67	408	21.4	- 2 44	9.3	9.7	F5	2	..	14901b
18	459	21.0	-11 5	8.3	8.7	F5	4	..	37402i	68	400	21.4	- 4 20	9.6	9.9	Fo	4	..	14901b
19	453	21.0	-14 20	9.1	9.7	Go	3	..	40988b	69	460	21.4	-11 34	9.9	10.9	Ko	3	..	40988b
20	1074	21.0	-24 25	8.5	9.5	Mb	3	..	14876b	70	452	21.4	-12 19	10.1	10.7	Go	2	..	40988b
21	864	21.0	-30 0	8.98	10.1	Ko	2	..	41071b	71	873	21.4	-29 13	9.9	10.1	F5	2	..	45148b
22	813	21.0	-42 37	7.73	7.2	A2	5	3,R	12358b	72	822	21.4	-33 16	8.9	9.8	Go	5	..	41068b
23	736	21.0	-43 19	9.9	10.5	A3	3	..	2409ob	73	823	21.4	-33 38	9.0	9.5	G5	6	..	41068b
24	630	21.1	+56 49	8.2	8.1	B5	5	3,7	38164i	74	500	21.5	+44 55	8.4	8.5	A2	2	..	37578i
25	517	21.1	+41 4	8.3	8.3	B9	6	..	37577i	75	499	21.5	+44 18	8.8	9.6	G5	2	..	37578i
26	491	21.1	+36 30	7.8	9.2	Mb	3	..	37386i	76	427	21.5	+31 22	5.80	6.80	Ko	7	..	37386i
27	433	21.1	+33 28	7.8	8.4	Go	3	..	37386i	77	147	21.5	-69 55	9.03	10.0	G5	4	..	20429b
28	396	21.1	+30 50	8.1	8.5	F5	3	..	37386i	78	584	21.6	+52 37	7.50	8.57	K2	2	..	37356i
29	407	21.1	+26 40	9.4	9.7	F2	1	..	3806Ii	79	462	21.6	- 9 22	9.1	9.5	F5	2	..	12388b
30	451	21.1	-12 44	4.90	4.90	Ao	..	0,R	56,74	80	492	21.6	-10 4	9.3	10.3	Ko	1	..	12388b
31	468	21.1	-17 10	9.9	10.9	Ko	2	..	40765b	81	461	21.6	-10 59	9.6	10.6	Ko	4	..	40988b
32	451	21.1	-20 46	9.3	9.7	F8	3	..	14876b	82	922	21.6	-37 45	9.0	9.3	Ko	2	..	41079b
33	870	21.1	-29 26	9.5	10.1	G5	2	..	41071b	83	433	21.6	-53 24	9.5	9.6	A2	3	..	20262b
34	703	21.1	-39 30	9.5	10.6	A2	3	..	2409ob	84	475	21.7	+58 59	9.2	9.3	A3	2	..	38164i
35	631	21.2	+56 46	9.2	9.3	A3	4	2,2	7195m	85	553	21.7	+55 11	9.7	9.7	Ao	3	..	7195m
36	626	21.2	+55 48	9.2	9.3	A2	2	..	38164i	86	557	21.7	+50 49	var.	var.	Md	..	R	M
37	579	21.2	+52 6	8.0	7.9	B5	2	R	37356i	87	351	21.7	+25 12	8.76	9.76	Ko	1	..	3806Ii
38	666	21.2	+50 7	6.27	6.55	Fo	..	2,7-	56,74	88	429	21.7	- 7 26	8.9	9.7	G5	3	..	12388b
39	520	21.2	+40 29	8.27	9.27	Ko	3	..	38086i	89	455	21.7	-14 20	9.3	9.9	Go	3	..	40988b
40	441	21.2	+32 26	8.5	9.1	Go	3	..	37386i	90	470	21.7	-17 12	9.0	9.6	Go	3	..	40765b
41	398	21.2	+25 36	7.11	7.53	F5	6	..	38973i	91	1082	21.7	-24 20	9.1	8.7	G5	4	..	14876b
42	347	21.2	+22 25	8.08	8.86	G5	3	..	38973i	92	736	21.7	-46 55	9.7	10.8	Go	2	..	39684b
43	291	21.2	+17 9	8.4	9.0	Go	2	..	38035i	93	451	21.7	-54 41	8.6	9.0	Go	3	..	24229b
44	426	21.2	-15 47	5.84	5.90	A2	10	..	40988b	94	174	21.7	-65 47	8.0	9.4	Ma	6	..	20429b
45	452	21.2	-20 42	9.6	10.0	Go	2	..	14876b	95	136	21.8	+72 26	9.2	9.2	Ao	1	..	38972i
46	433	21.2	-21 46	8.9	9.0	F5	5	R	14876b	96	554	21.8	+54 31	8.2	9.2	Ko	2	..	38164i
47	820	21.2	-33 10	9.0	10.4	Ko	3	..	41068b	97	523	21.8	+41 8	8.7	9.7	Ko	1	..	38086i
48	177	21.2	-72 18	9.5	9.6	A2	5	1,4	38146b	98	524	21.8	+40 48	7.9	8.9	Ko	3	5,2	38086i
49	214	21.3	+66 58	8.9	8.9	Ao	3	..	38984i	99	440	21.8	+34 57	8.8	9.4	Go	3	..	37386i
50	555	21.3	+50 30	8.6	9.0	F5	2	..	38897i	100	431	21.8	- 6 53	8.9	9.9	Ko	1	..	12388b

15200

2^h 21^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	462	21.8	m. 11 45	10.5	11.1	G	2	..	40988b	51	492	22.3	+60 15	9.5	9.5	B8	2	..	34269i
2	449	21.8	o 13 18	9.6	10.0	F5	2	..	40988b	52	..	22.3	+57 18	..	..	Ao	2	..	7195m
3	455	21.8	' 19 33	9.4	10.4	G5	2	..	40765b	53	557	22.3	+55 5	6.56	6.62	A2	10	o,8	38164i
4	817	21.8	-42 37	9.9	10.9	G5	3	..	2409ob	54	671	22.3	+49 13	8.2	9.2	Ko	1	..	38897i
5	674	21.8	-48 57	7.8	9.1	Ko	4	..	39684b	55	495	22.3	+36 30	8.5	9.3	G5	1	..	37386i
6	673	21.8	-49 42	9.1	9.0	F8	5	..	39684b	56	418	22.3	+29 26	7.8	8.4	Go	5	..	38061i
7	115	21.8	-69 29	10.3	11.1	G5	2	..	20429b	57	417	22.3	+29 14	5.38	5.66	Fo	..	o,7	56,74
8	215	21.9	+66 57	9.2	9.6	F5	2	..	37308i	58	339	22.3	+15 39	9.4	10.2	G5	2	..	38944i
9	635	21.9	+47 50	7.80	8.30	F8	5	..	37578i	59	336	22.3	- 1 28	8.97	9.25	Fo	4	..	14901b
10	340	21.9	+ 5 47	8.6	9.1	F8	4	..	37403i	60	431	22.3	-15 2	9.6	10.2	Go	2	..	40988b
11	453	21.9	-12 20	9.6	10.6	Ko	2	..	40988b	61	883	22.3	-29 32	9.9	10.1	Go	3	..	45148b
12	429	21.9	-15 26	10.1	10.7	Go	2	..	40988b	62	900	22.3	-34 3	9.2	9.8	G5	4	..	41068b
13	1085	21.9	-24 37	10.2	10.7	G5	1	..	45148b	63	634	22.3	-47 57	10.1	10.5	G5	1	..	39684b
14	880	21.9	-29 35	8.5	8.9	Go	4	..	41071b	64	140	22.3	-68 36	9.4	9.7	F2	5	..	20429b
15	629	22.0	+56 10	9.2	9.2	Ao	4	..	7195m	65	573	22.4	+58 3	9.2	9.8	Go	4	..	7195m
16	523	22.0	+42 48	8.6	8.9	Fo	3	5,2	38086i	66	572	22.4	+57 40	9.2	9.2	B8	3	..	7195m
17	525	22.0	+42 20	8.7	8.8	A2	3	2,2	38086i	67	531	22.4	+53 25	8.6	9.2	Go	3	..	38897i
18	484	22.0	+38 23	6.91	7.19	Fo	5	o,8	37386i	68	499	22.4	+43 26	8.6	8.6	Ao	2	..	37577i
19	377	22.0	+ 2 42	8.6	9.4	G5	3	..	10382b	69	467	22.4	+41 29	8.6	8.6	Ao	4	..	38086i
20	455	22.0	-20 30	6.05	7.4	Ko	10	..	14876b	70	527	22.4	+40 57	8.9	10.0	K2	1	..	37577i
21	583	22.0	-51 29	10.1	9.6	F5	2	..	20262b	71	384	22.4	+27 49	8.7	9.0	F2	2	..	38061i
22	166	22.0	-64 11	8.2	9.4	K5	7	..	20429b	72	335	22.4	+12 30	8.0	8.5	F8	4	..	37403i
23	144	22.1	+74 12	8.6	9.4	G5	2	..	38972i	73	340	22.4	+12 0	8.8	9.8	Ko	1	..	10368b
24	630	22.1	+56 0	9.5	10.3	G5	2	..	7195m	74	374	22.4	+ 8 24	9.6	10.0	F5	3	R	10368b
25	..	22.1	+55 17	..	..	K2	1	..	7195m	75	338	22.4	- 1 12	7.22	8.40	K5	7	..	14901b
26	680	22.1	+48 50	8.1	8.1	Ao	3	..	38897i	76	384	22.4	- 3 10	8.4	8.8	F5	5	..	14901b
27	293	22.1	+16 12	7.26	7.54	Fo	6	..	38035i	77	432	22.4	-15 29	9.9	11.1	K5	1	..	40988b
28	323	22.1	+ 9 46	6.54	7.10	Go	..	5,6	56,74	78	915	22.4	-36 8	8.9	9.2	F5	6	..	41068b
29	402	22.1	- 3 58	9.9	10.9	Ko	1	..	14901b	79	434	22.4	-53 25	8.5	8.7	Go	3	..	24229b
30	481	22.1	- 6 33	8.5	9.5	Ko	4	..	12388b	80	..	22.4	-60 1	var.	var.	Md	..	R	56,198
31	472	22.1	-17 37	9.1	9.9	G5	2	..	40765b	81	574	22.5	+57 33	10.2	10.3	A3	1	..	7195m
32	846	22.1	-35 9	9.8	11.0	G5	3	..	41068b	82	442	22.5	+34 51	8.5	8.5	Ao	2	..	37386i
33	199	22.1	-60 45	5.47	5.81	F2	..	o,7 R	56,119	83	326	22.5	+24 11	8.58	9.36	G5	1	..	38973i
34	202	22.1	-61 55	8.1	8.4	F2	6	..	23773b	84	368	22.5	+17 37	9.1	9.7	G	1	E	38035i
35	167	22.1	-64 27	9.0	9.4	F5	3	..	20429b	85	339	22.5	+ 3 58	8.6	9.8	K5	1	..	12387b
36	175	22.1	-65 21	9.2	9.7	F8	3	..	20429b	86	412	22.5	- 2 24	8.7	9.0	F2	5	..	14901b
37	216	22.2	+67 7	9.0	9.0	A	2	..	37308i	87	884	22.5	-29 52	9.58	10.1	Ao	2	..	45148b
38	488	22.2	+60 13	8.41	8.17	B	4	R	34269i	88	883	22.5	-31 59	8.1	9.6	K2	6	..	41068b
39	487	22.2	+60 12	8.21	7.97	B	4	R	34269i	89	901	22.5	-34 11	10.6	10.1	Go	4	..	41068b
40	632	22.2	+56 38	8.5	8.5	Ao	6	1,4	7195m	90	777	22.5	-45 52	10.1	10.5	Go	2	..	39684b
41	681	22.2	+49 7	8.6	9.6	Ko	1	..	38897i	91	209	22.5	-58 38	8.7	9.6	F5	1	..	24229b
42	466	22.2	+41 17	8.8	8.8	Ao	3	..	38086i	92	84	22.6	+77 13	7.82	8.60	G5	5	o,5	37309i
43	436	22.2	+33 44	7.8	8.8	Ko	3	..	37386i	93	582	22.6	+51 58	8.6	8.7	A2	1	..	38897i
44	383	22.2	- 3 43	9.3	9.4	A5	4	..	14901b	94	498	22.6	+36 36	8.7	9.5	G5	2	..	37386i
45	430	22.2	-14 56	9.45	9.87	F5	4	..	40988b	95	326	22.6	+10 32	8.6	9.6	Ko	2	..	10368b
46	918	22.2	-23 25	8.7	9.1	F8	5	..	14876b	96	376	22.6	+ 8 40	10.8	11.3	F8	1	..	37403i
47	740	22.2	-47 53	9.2	9.9	G5	4	..	39684b	97	340	22.6	+ 3 58	9.4	9.4	Ao	4	..	10382b
48	194	22.2	-74 6	6.00	8.0	Ko	8	o,8 R	46019b	98	413	22.6	- 2 28	9.1	9.7	Go	3	..	14901b
49	49	22.2	-78 6	9.1	9.7	Go	2	..	14358b	99	432	22.6	- 7 23	7.29	8.07	G5	5	..	37402i
50	490	22.3	+60 30	8.8	8.9	A2	2	..	38984i	100	463	22.6	-11 36	9.4	9.9	F8	4	..	40988b

THE HENRY DRAPER CATALOGUE.

15300

2^h 22^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	454	22.6	-12 30	9.6	10.2	Go	3	..	40988b	51	395	23.1	+13 26	8.5	8.9	F5	3	..	37403i
2	457	22.6	-14 34	10.3	11.1	G5	1	..	40988b	52	338	23.1	+12 18	8.2	8.5	Fo	3	..	37403i
3	476	22.7	+58 38	9.5	10.1	Go	3	..	38164i	53	465	23.1	-10 56	10.5	11.5	K	2	..	40988b
4	506	22.7	+45 5	8.82	9.16	F2	2	..	37578i	54	433	23.1	-15 42	9.4	10.0	Go	2	..	40988b
5	419	22.7	+29 17	8.8	9.1	Fo	2	..	38061i	55	437	23.1	-53 46	8.4	9.6	K5	3	..	20262b
6	340	22.7	-1 14	8.75	9.17	F5	4	..	14901b	56	181	23.2	+71 10	8.5	8.5	Ao	3	..	38972i
7	852	22.7	-27 16	9.2	9.5	Go	3	..	41071b	57	638	23.2	+57 11	9.9	9.9	Ao	2	..	7195m
8	879	22.7	-29 56	10.6	10.7	Go	1	..	45148b	58	634	23.2	+55 12	9.9	9.9	Ao	1	..	7195m
9	918	22.7	-36 41	8.9	8.9	Go	4	..	39654b	59	533	23.2	+40 58	9.5	9.5	Ao	1	..	37577i
10	619	22.7	-40 2	8.52	10.0	K2	4	..	24090b	60	330	23.2	+23 25	8.8	8.9	A2	3	..	37383i
11	618	22.7	-40 35	9.2	10.9	G5	3	..	24090b	61	404	23.2	+1 2	8.59	9.37	G5	3	..	14901b
12	780	22.7	-45 53	9.2	9.6	Go	4	..	39684b	62	302	23.2	-52 9	7.6	8.1	F5	6	0,3	24229b
13	743	22.7	-46 56	9.7	10.2	F8	3	..	39684b	63	159	23.2	-63 38	8.5	9.3	G5	4	..	20429b
14	171	22.8	+69 12	8.8	9.6	G5	2	..	37308i	64	155	23.3	+69 50	8.1	8.6	F8	3	..	37308i
15	577	22.8	+58 12	8.7	8.8	A2	4	..	38164i	65	614	23.3	+45 34	6.77	7.55	G5	5	..	37578i
16	576	22.8	+57 22	7.30	7.36	A2p	6	0,7 R	37320i	66	380	23.3	+8 12	9.1	9.7	Go	2	..	37403i
17	587	22.8	+52 37	8.4	9.5	K2	1	..	38897i	67	367	23.3	-0 41	8.30	9.08	G5	4	..	14901b
18	388	22.8	+8 1	4.34	4.34	Ao	..	R	56,74	68	467	23.3	-5 44	8.9	9.0	A3	4	..	14901b
19	495	22.8	-10 15	8.7	9.1	F5	3	..	37402i	69	832	23.3	-33 28	10.2	11.3	G	2	..	41068b
20	464	22.8	-11 2	9.6	10.6	Ko	4	..	40988b	70	820	23.3	-38 47	9.6	11.2	Go	2	..	39654b
21	960	22.8	-24 58	9.7	10.7	Ko	1	..	45148b	71	637	23.3	-48 9	4.44	4.32	B5	..	3, R	28,196
22	693	22.8	-41 49	8.6	9.4	Ko	7	5,2	24090b	72	28	23.3	-85 5	10.4	10.4	Ao	2	..	20538b
23	141	22.8	-68 36	9.6	9.9	Fo	4	..	20429b	73	29	23.3	-85 9	9.4	10.6	K5	2	..	20538b
24	578	22.9	+57 21	8.8	9.9	K2	2	..	7195m	74	45	23.4	+85 22	8.73	8.73	Ao	6	..	37281i
25	635	22.9	+56 48	8.5	8.3	B3	5	0,3 R	7195m	75	335	23.4	+64 6	8.0	9.1	K2	1	..	38974i
26	421	22.9	+29 14	8.2	8.8	Go	3	..	38061i	76	504	23.4	+43 42	8.0	9.1	K2	2	E	38086i
27	294	22.9	+16 55	8.6	9.0	F5	2	E	38035i	77	399	23.4	+30 26	7.76	8.76	Ko	3	..	38061i
28	431	22.9	+1 31	6.49	7.49	Ko	8	..	14901b	78	496	23.4	-9 51	9.76	10.54	G5	3	..	40988b
29	365	22.9	-0 14	8.53	9.31	G5	3	..	14901b	79	154	23.4	-66 56	6.40	8.4	Mb	9	..	20429b
30	459	22.9	-14 8	9.0	9.5	F8	3	..	40988b	80	86	23.5	+78 3	8.7	9.5	G5	2	..	37309i
31	920	22.9	-36 37	9.2	10.1	K2	2	E	41079b	81	157	23.5	+69 41	8.0	8.4	F5	5	..	37308i
32	637	23.0	+56 13	8.1	8.1	Ao	6	0,8-	38164i	82	495	23.5	+60 16	8.16	8.58	F5	4	0,2	37320i
33	499	23.0	+36 54	6.60	6.74	A5	6	..	37386i	83	567	23.5	+50 42	8.5	9.0	F8	2	..	38897i
34	424	23.0	+29 53	9.5	9.5	Ao	2	..	38061i	84	418	23.5	+26 30	9.4	10.4	Ko	2	..	38973i
35	423	23.0	+29 29	5.90	6.46	Go	..	2,5	56,74	85	354	23.5	+23 2	6.10	6.24	A5	8	5,6	37383i
36	456	23.0	-12 26	8.8	9.4	Go	4	..	40988b	86	408	23.5	+15 9	8.79	9.57	G5	4	..	38944i
37	784	23.0	-28 5	9.1	9.5	G5	2	..	12242b	87	345	23.5	+11 33	8.0	8.4	F5	4	..	37403i
38	829	23.0	-33 45	9.6	10.4	G5	3	..	41068b	88	392	23.5	+7 16	9.0	9.4	F5	2	..	10368b
39	722	23.0	-46 27	7.6	8.5	Ko	3	..	8860b	89	383	23.5	+3 8	8.4	8.8	F5	6	..	10382b
40	168	23.0	-64 41	9.2	10.0	G5	2	..	20429b	90	404	23.5	-3 53	8.9	9.9	Ko	4	..	14901b
41	58	23.1	+83 51	9.2	9.2	A	3	..	37309i	91	457	23.5	-12 10	8.3	8.9	Go	4	..	40988b
42	80	23.1	+81 12	8.5	9.7	K5	3	..	37309i	92	889	23.5	-29 14	8.2	9.2	G5	5	..	41071b
43	137	23.1	+72 21	8.4	9.5	K2	1	..	38972i	93	885	23.5	-30 9	8.9	9.6	G5	4	..	41071b
44	478	23.1	+58 58	9.4	9.5	A2	2	..	38164i	94	903	23.5	-34 20	7.70	7.6	F8	9	..	41068b
45	559	23.1	+54 53	7.96	8.96	Ko	3	..	38164i	95	432	23.5	-54 59	9.60	9.9	Go	1	..	20262b
46	532	23.1	+53 24	8.0	8.8	G5	2	0,2	38897i	96	560	23.6	+54 15	9.9	9.9	A	1	..	38164i
47	564	23.1	+50 47	8.6	9.6	Ko	2	..	38897i	97	638	23.6	+48 4	7.86	8.42	Go	4	..	37578i
48	560	23.1	+37 47	7.32	7.40	A3	5	..	37386i	98	404	23.6	+21 9	7.92	8.34	F5	4	..	37383i
49	416	23.1	+26 48	8.8	8.9	A2	3	..	38061i	99	382	23.6	+8 19	8.6	9.4	G5	2	..	37403i
50	..	23.1	+23 59	..	..	Ko	1	..	38973i	100	456	23.6	-13 5	8.9	9.2	Fo	4	..	40988b

15400

2^h 23^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.-	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	463	23.6	-14 39	8.7	9.3	Go	4	..	40988b	51	507	24.2	+43 14	7.8	8.4	Go	6	2,5-	38086i
2	934	23.6	-37 8	8.7	8.6	F5	5	E	41079b	52	452	24.2	+32 57	8.1	8.2	A5	4	3,3	37386i
3	935	23.6	-37 28	10.2	10.1	Go	2	..	45746b	53	385	24.2	+9 7	6.30	7.30	Ko	6	..	37284i
4	751	23.6	-47 36	11.2	10.8	Go	1	..	39684b	54	408	24.2	+0 20	8.63	9.05	F5	5	..	14901b
5	143	23.6	-68 29	10.2	11.0	G5	2	..	20429b	55	448	24.2	-16 21	9.6	10.8	K5	2	..	40988b
6	635	23.7	+55 30	9.5	10.6	K2	1	..	7195m	56	461	24.2	-19 4	8.1	8.3	F5	6	..	14876b
7	561	23.7	+55 6	7.16	7.58	F5	8	0,6	38164i	57	966	24.2	-25 44	10.2	10.4	F8	1	..	45148b
8	562	23.7	+54 43	8.6	9.6	Ko	1	..	38164i	58	853	24.2	-35 13	9.6	10.7	Ko	3	..	41068b
9	405	23.7	+20 24	8.2	9.2	Ko	2	..	37383i	59	446	24.2	-57 52	9.3	9.6	F2	3	0,3-	42096b
10	497	23.7	-10 10	8.9	8.9	Ao	4	..	37402i	60	158	24.3	+69 46	8.0	8.3	Fo	4	..	37308i
11	467	23.7	-11 5	9.0	10.0	Ko	4	..	40988b	61	639	24.3	+55 32	8.9	9.0	A3	2	..	38164i
12	984	23.7	-30 53	7.82	9.2	Ma	6	0,5	41079b	62	563	24.3	+54 30	9.2	10.2	Ko	1	..	38164i
13	639	23.7	-47 55	9.4	9.9	G5	3	..	39684b	63	515	24.3	+44 36	8.0	8.8	G5	4	5,2	37578i
14	160	23.7	-63 22	7.8	8.8	Ko	6	..	20429b	64	445	24.3	+33 23	6.25	7.25	Ko	8	..	37386i
15	144	23.7	-68 13	8.0	8.1	A2	2	0,9	8861b	65	453	24.3	+33 3	8.1	9.1	Ko	2	..	37386i
16	75	23.8	+79 17	7.63	8.41	G5	4	0,2-	37309i	66	386	24.3	+8 33	8.0	8.1	A5	..	..	56,74
17	81	23.8	+76 16	6.86	8.21	Ma	5	..	37555i	67	343	24.3	+5 19	8.26	9.33	K2	4	2,3	12387b
18	640	23.8	+47 24	7.65	8.65	Ko	3	..	37478i	68	465	24.3	-20 26	8.9	10.0	K2	2	..	14876b
19	530	23.8	+42 44	8.1	8.2	A5	5	5,5-	37577i	69	969	24.3	-25 15	8.7	8.9	F8	4	..	14876b
20	491	23.8	+38 42	6.91	7.91	Ko	6	0,4	37577i	70	968	24.3	-25 26	8.9	9.2	Go	5	..	45148b
21	384	23.8	+3 10	9.0	9.6	Go	3	..	12387b	71	990	24.3	-31 33	6.14	7.3	G5	10	..	41079b
22	435	23.8	+1 51	9.4	10.2	G5	3	..	12387b	72	182	24.4	+70 30	8.0	7.8	B3	5	R	37308i
23	467	23.8	-9 12	8.9	9.7	G5	2	..	12388b	73	554	24.4	+39 43	6.92	7.99	K2	5	..	37577i
24	498	23.8	-10 3	9.3	9.8	F8	2	E	37402i	74	394	24.4	+8 3	8.4	9.2	G5	3	..	37403i
25	435	23.8	-15 0	10.5	11.5	Ko	1	..	40988b	75	405	24.4	+4 27	9.4	10.4	Ko	1	..	12387b
26	882	23.8	-26 53	7.82	8.6	Ko	5	5,7	14876b	76	440	24.4	-7 31	9.6	9.7	A2	4	..	12388b
27	905	23.8	-34 15	5.16	5.22	A2	..	R	28,196	77	462	24.4	-18 59	9.0	10.6	K2	3	..	45672b
28	697	23.8	-41 38	9.6	9.7	F5	6	..	24090b	78	992	24.4	-31 40	9.2	10.1	Go	2	..	41079b
29	172	23.8	-74 53	7.97	8.4	Ko	7	..	20539b	79	892	24.4	-31 55	9.7	10.4	Go	1	..	41079b
30	479	23.9	+58 24	8.5	8.6	A2	3	1,2	38164i	80	840	24.4	-33 22	9.2	10.1	G5	2	..	41068b
31	534	23.9	+53 25	9.7	9.7	A	1	..	38164i	81	829	24.4	-42 52	8.1	8.5	F2	3	0,9	12285b
32	468	23.9	-11 47	7.00	7.34	F2	4	E	37402i	82	729	24.4	-46 33	9.7	10.5	Go	2	..	39684b
33	784	23.9	-45 29	7.8	9.1	Ko	8	..	24090b	83	720	24.4	-50 16	9.4	9.9	Go	2	..	39684b
34	590	24.0	+52 44	8.05	8.47	F5	2	..	37356i	84	131	24.4	-71 16	9.3	9.9	Go	2	..	20539b
35	641	24.0	+47 22	7.55	8.33	G5	5	..	37578i	85	564	24.5	+54 50	8.5	8.5	Ao	4	0,4	38164i
36	512	24.0	+44 59	7.27	8.05	G5	6	..	37578i	86	565	24.5	+54 28	9.2	9.6	F5	2	..	38164i
37	486	24.0	-5 54	8.4	9.4	Ko	4	..	14901b	87	571	24.5	+50 52	8.7	8.7	Ao	1	..	38873i
38	890	24.0	-30 3	10.4	11.3	G5	1	..	45148b	88	538	24.5	+40 58	8.9	9.0	A2	2	..	38086i
39	151	24.0	-70 33	8.0	8.1	A5	6	..	46019b	89	537	24.5	+40 15	9.12	9.26	A5	2	..	38086i
40	481	24.1	+58 48	9.2	9.2	Ao	2	..	38164i	90	454	24.5	+32 51	8.5	8.6	A5	2	3,2	37386i
41	470	24.1	+41 40	8.7	9.5	G5	2	..	37577i	91	374	24.5	+6 42	9.4	10.2	G5	2	..	10368b
42	493	24.1	+38 30	7.64	7.70	A2	7	0,4	37577i	92	470	24.5	-11 33	8.4	9.2	G5	5	..	40988b
43	565	24.1	+37 42	8.7	8.8	A2	2	..	37386i	93	461	24.5	-12 31	9.6	10.2	Go	3	..	40988b
44	437	24.1	-15 45	8.7	9.2	F8	4	..	40988b	94	463	24.5	-19 44	8.08	8.4	F2	7	..	14876b
45	463	24.1	-20 15	8.12	8.3	Fo	8	..	14876b	95	422	24.5	-22 1	8.8	9.7	Ko	2	..	14876b
46	891	24.1	-30 5	9.2	11.0	Ko	1	..	45148b	96	932	24.5	-23 39	8.04	9.5	K5	4	..	14876b
47	930	24.1	-36 47	7.29	8.3	K2	7	..	41079b	97	582	24.6	+57 15	7.20	7.03	B3	6	1,7	37320i
48	718	24.1	-50 20	9.2	9.9	Ko	2	..	39684b	98	644	24.6	+57 5	7.35	8.35	Ko	6	0,6	38164i
49	580	24.2	+57 34	6.92	8.10	K5	6	3,7	37320i	99	420	24.6	+27 3	9.2	9.8	Go	1	..	38061i
50	642	24.2	+56 27	8.7	8.5	Bop	4	R	7195m	100	356	24.6	+22 50	9.5	9.9	F5	2	..	37383i

THE HENRY DRAPER CATALOGUE.

15500

2^h 24^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	328	24.6	+ 9 40	9.4	9.9	F8	3	..	10368b	51	315	25.0	+18 14	8.1	9.1	Ko	2	E	38035i
2	386	24.6	+ 2 43	9.0	9.4	F5	2	..	10382b	52	373	25.0	- 0 21	8.98	9.48	F8	3	..	14901b
3	463	24.6	-11 51	10.1	10.4	F	2	..	40988b	53	389	25.0	- 2 51	8.4	8.9	F8	5	..	14901b
4	462	24.6	-12 25	8.9	9.7	G5	4	..	40988b	54	462	25.0	-13 42	8.3	8.7	F5	5	..	40988b
5	457	24.6	-13 21	7.25	8.03	G5	7	..	40988b	55	1106	25.0	-24 33	7.52	8.3	Ko	7	..	14876b
6	477	24.6	-17 42	8.9	9.9	Ko	2	..	40765b	56	832	25.0	-42 19	9.2	10.0	F5	3	..	24090b
7	786	24.6	-45 28	8.5	9.4	G5	6	..	24090b	57	424	25.1	+61 17	7.40	7.68	Fo	4	..	37341i
8	121	24.6	-69 5	8.0	9.0	Ko	7	..	20429b	58	502	25.1	+61 1	7.82	7.58	B	3	R	38164i
9	581	24.7	+46 36	8.7	9.3	Go	3	..	37578i	59	567	25.1	+55 1	6.70	7.04	F2	8	0,6	38164i
10	619	24.7	+45 57	6.97	7.11	A5	7	..	37578i	60	592	25.1	+52 24	8.6	8.7	A2	2	..	37356i
11	567	24.7	+37 27	8.7	9.3	Go	2	..	37386i	61	474	25.1	+42 7	7.7	7.7	Ao	4	..	37578i
12	490	24.7	+35 40	7.58	7.66	A3	3	..	37386i	62	448	25.1	+34 29	8.1	8.4	F2	4	..	37386i
13	419	24.7	- 2 43	8.7	9.1	F5	4	..	14901b	63	409	25.1	+20 36	8.20	8.62	F5	4	..	37383i
14	471	24.7	-11 48	9.3	10.1	G5	3	..	40988b	64	330	25.1	+10 37	8.5	9.3	G5	3	0,2	10368b
15	439	24.7	-21 29	7.15	7.5	F5	10	..	14876b	65	374	25.1	- 0 32	8.25	8.31	A2	7	..	14901b
16	869	24.7	-27 51	8.5	8.9	Go	4	..	12242b	66	464	25.1	-12 2	9.4	10.2	G5	3	..	40988b
17	894	24.7	-30 52	9.9	11.0	Go	2	..	41079b	67	745	25.1	-44 33	8.6	10.5	K5	3	..	24090b
18	935	24.7	-36 7	9.2	9.6	Go	3	..	41079b	68	122	25.1	-69 17	9.7	10.2	F8	3	..	20429b
19	716	24.7	-39 24	9.0	9.4	F5	6	..	24090b	69	38	25.2	+86 33	9.2	9.3	A5	2	..	37281i
20	722	24.7	-50 45	7.14	8.2	Ko	3	..	8860b	70	504	25.2	+60 56	8.0	7.8	B	2	R	38164i
21	26	24.7	-86 9	9.4	10.4	Ko	2	..	15145b	71	648	25.2	+56 59	8.0	7.8	B	4	R	7195m
22	422	24.8	+61 22	8.4	8.4	Ao	2	..	37341i	72	538	25.2	+53 48	9.2	9.2	A	1	R	38164i
23	391	24.8	+27 21	8.7	9.5	G5	2	..	38061i	73	542	25.2	+40 46	8.7	9.5	G5	2	..	37577i
24	358	24.8	+24 48	5.86	6.28	F5	6	..	37383i	74	463	25.2	-13 14	10.1	10.9	G5	1	..	40988b
25	346	24.8	+ 6 5	10.1	10.6	F8	2	..	10368b	75	468	25.2	-14 25	8.5	9.5	Ko	4	..	40988b
26	460	24.8	-12 51	9.9	10.5	Go	2	..	40988b	76	937	25.2	-36 23	7.61	8.6	Ko	5	..	41079b
27	461	24.8	-13 24	9.3	9.7	F5	3	..	40988b	77	215	25.2	-58 6	8.7	9.3	F2	3	..	24229b
28	450	24.8	-16 31	9.0	10.0	Ko	3	..	40988b	78	206	25.2	-62 26	8.1	8.4	Fo	5	..	23773b
29	976	24.8	-25 28	10.4	10.7	F5	1	..	45148b	79	620	25.3	+46 9	7.06	7.40	F2	7	..	37578i
30	871	24.8	-27 42	8.2	8.9	G5	4	..	12242b	80	511	25.3	+44 3	8.8	9.6	G5	2	..	37578i
31	741	24.8	-44 40	9.4	10.2	Go	3	..	24090b	81	475	25.3	+41 25	8.4	8.5	A2	3	2,2	38086i
32	44	24.8	-83 24	7.85	8.9	Ko	6	..	20538b	82	506	25.3	+37 1	7.71	7.99	Fo	4	..	37386i
33	183	24.9	+70 52	6.73	7.73	Ko	5	..	37308i	83	342	25.3	+12 59	8.4	8.9	F8	3	..	38944i
34	646	24.9	+56 15	9.7	9.7	Ao	2	..	7195m	84	389	25.3	+ 2 22	9.4	9.9	F8	2	..	12387b
35	363	24.9	+19 52	8.6	8.7	A5	2	..	37383i	85	490	25.3	- 6 47	8.9	9.2	F2	3	..	12388b
36	387	24.9	+ 8 26	8.6	9.6	Ko	2	..	10368b	86	467	25.3	-12 42	9.6	10.2	Go	2	..	40988b
37	346	24.9	+ 4 9	8.2	8.7	F8	4	..	37541i	87	439	25.3	-15 4	9.6	10.2	Go	3	..	40988b
38	503	24.9	- 9 51	9.31	10.49	K5	3	..	40988b	88	942	25.3	-23 7	6.56	6.7	A2	9	2,10	45148b
39	472	24.9	-11 44	10.3	11.3	Ko	2	..	40988b	89	938	25.3	-36 35	9.2	9.8	Ko	2	..	41079b
40	423	24.9	-22 45	9.6	10.0	Go	1	..	14876b	90	834	25.3	-42 31	7.8	8.5	Go	3	0,9	12285b
41	897	24.9	-30 20	9.7	10.7	Ko	2	..	41079b	91	593	25.3	-51 45	9.4	9.4	F2	3	..	20262b
42	895	24.9	-32 5	9.2	9.8	F5	2	..	41079b	92	186	25.4	+71 4	8.6	8.6	A	2	R	37308i
43	938	24.9	-37 13	9.5	10.1	F8	2	..	45746b	93	683	25.4	+49 46	7.57	7.57	Ao	5	0,4	37578i
44	628	24.9	-40 52	7.6	9.1	G5	6	5,3	24090b	94	682	25.4	+49 44	7.42	8.77	Ma	3	0,1	37578i
45	308	24.9	-52 48	8.6	9.1	Go	3	..	20262b	95	621	25.4	+45 44	8.5	9.6	K2	2	..	38072i
46	214	24.9	-58 35	7.4	8.0	F8	6	..	24229b	96	380	25.4	+17 16	6.41	7.19	G5	5	..	37431i
47	210	25.0	+67 25	8.9	9.5	Go	2	..	37308i	97	402	25.4	+13 31	8.6	9.1	F8	3	..	38944i
48	647	25.0	+56 13	8.9	8.9	B8	3	..	7195m	98	471	25.4	- 5 29	7.54	7.54	Ao	8	..	14901b
49	344	25.0	+22 1	8.7	10.1	Ma	2	..	37383i	99	480	25.4	-17 26	8.3	9.1	G5	3	..	40765b
50	365	25.0	+19 25	6.14	6.42	Fo	6	..	37431i	100	441	25.4	-21 18	8.9	9.4	Ko	3	..	14876b

15600

2^h 25^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.		
1	898	<i>m.</i> 25.4	<i>o</i> -26	<i>'</i> 33	9.1	9.3	F5	3	..	45148b	51	440	<i>m.</i> 25.9	<i>o</i> -15	<i>'</i> 24	9.9	10.5	Go	2	..	40988b
2	109	25.4	-77	15	8.9	9.0	A3	3	..	14358b	52	947	25.9	-22	59	6.45	8.1	K5	8	..	14876b
3	539	25.5	+53	52	9.2	9.2	B9	2	..	38164i	53	140	25.9	-66	0	7.9	8.7	G5	8	..	20429b
4	646	25.5	+47	53	8.6	9.4	G5	1	..	38897i	54	541	26.0	+42	43	9.5	9.6	A3	2	..	38086i
5	457	25.5	+32	59	8.6	8.9	Fo	2	..	37386i	55	499	26.0	+38	40	9.2	9.2	Ao	3	0,2	38086i
6	335	25.5	+23	17	9.1	9.9	G5	2	..	37383i	56	497	26.0	+35	43	5.35	6.35	Ko	7	..	37386i
7	423	25.5	-2	7	8.1	8.2	A5	7	..	14901b	57	468	26.0	-8	26	7.80	7.80	Ao	7	..	12388b
8	464	25.5	-13	44	9.1	9.5	F5	3	..	40988b	58	469	26.0	-12	40	8.5	9.1	Go	6	..	40988b
9	481	25.5	-16	54	9.3	10.1	G5	2	..	45672b	59	454	26.0	-16	36	9.6	10.6	Ko	1	..	45672b
10	442	25.5	-21	21	9.4	10.0	G5	1	R	14876b	60	875	26.0	-27	11	8.9	10.1	K2	2	..	45148b
11	828	25.5	-38	15	9.6	11.5	Ko	1	..	45746b	61	758	26.0	-47	40	10.1	10.8	G5	2	..	39684b
12	705	25.5	-41	48	9.8	10.6	G5	3	..	24090b	62	158	26.0	-67	36	8.9	9.9	Ko	3	..	20429b
13	442	25.5	-52	55	9.1	9.7	F8	2	..	20262b	63	88	26.1	+78	11	8.4	8.8	F5	2	..	37309i
14	449	25.5	-57	14	8.4	10.2	K2	1	..	42096b	64	189	26.1	+70	12	8.19	8.47	Fo	4	..	37308i
15	178	25.5	-65	13	8.8	9.9	K2	2	..	20429b	65	509	26.1	+59	51	8.51	9.51	Ko	2	..	38164i
16	181	25.5	-71	56	9.2	9.7	F8	3	..	20539b	66	654	26.1	+56	47	8.5	8.6	A3	3	1,4	38164i
17	160	25.6	+69	24	9.4	9.4	Ao	3	..	37308i	67	570	26.1	+54	44	9.2	9.2	Ao	2	..	38164i
18	173	25.6	+68	47	8.5	8.8	Fo	3	..	37308i	68	686	26.1	+49	20	8.9	8.9	Ao	2	..	38897i
19	583	25.6	+58	10	8.4	9.4	Ko	4	5,2	38164i	69	542	26.1	+42	17	9.2	9.2	Ao	2	..	38086i
20	584	25.6	+57	31	8.2	8.2	B8	3	..	7195m	70	500	26.1	+38	56	8.5	9.1	Go	4	..	37577i
21	652	25.6	+57	5	8.6	9.0	F5	4	0,4	38164i	71	498	26.1	+35	17	8.03	8.81	G5	3	..	37386i
22	651	25.6	+56	22	9.4	9.4	B9	3	..	7195m	72	454	26.1	+34	14	7.9	8.3	F5	4	..	37386i
23	476	25.6	+41	56	8.0	9.0	Ko	2	..	38086i	73	414	26.1	+20	56	7.52	8.52	Ko	4	5,3	37383i
24	557	25.6	+39	30	7.8	8.8	Ko	5	..	37577i	74	319	26.1	+18	51	8.6	9.7	K2	3	..	38944i
25	572	25.6	+37	41	7.19	8.19	Ko	3	..	37386i	75	414	26.1	+1	4	8.29	9.29	Ko	3	..	14901b
26	410	25.6	+0	23	9.4	9.8	F5	3	..	14901b	76	441	26.1	-15	10	10.3	11.1	G5	2	..	40988b
27	452	25.6	-16	41	9.0	9.6	Go	2	..	45672b	77	905	26.1	-29	5	8.2	10.7	F8	6	..	41079b
28	436	25.6	-56	53	7.8	9.0	Fo	3	..	24229b	78	909	26.1	-30	48	7.7	8.3	F8	8	..	41079b
29	507	25.7	+61	5	8.4	8.2	B	3	R	38164i	79	849	26.1	-33	33	8.6	8.2	F5	7	..	41079b
30	404	25.7	+31	4	8.3	8.7	F5	3	..	37386i	80	759	26.1	-47	4	9.7	10.3	A5	3	..	39684b
31	424	25.7	+27	7	7.20	7.54	F2	5	..	37383i	81	42	26.1	-82	0	8.7	10.1	Ma	3	..	20538b
32	346	25.7	+21	39	8.1	8.7	Go	4	..	37383i	82	212	26.2	+67	18	7.8	8.6	G5	5	..	37308i
33	378	25.7	-0	11	6.03	6.09	A2	9	E	37541i	83	560	26.2	+39	49	6.70	6.70	Ao	8	..	37577i
34	979	25.7	-25	37	6.50	7.0	Fo	10	..	14876b	84	559	26.2	+39	37	7.58	7.56	B9	6	..	37577i
35	906	25.7	-30	11	9.4	10.7	K2	2	..	41079b	85	396	26.2	+7	54	8.6	9.6	Ko	2	..	10368b
36	755	25.7	-43	23	9.4	10.8	K2	2	..	24090b	86	437	26.2	+1	51	9.4	9.7	Fo	3	..	14901b
37	729	25.7	-49	57	9.5	10.2	Go	2	..	39684b	87	474	26.2	-11	19	9.9	10.9	Ko	2	..	40988b
38	209	25.7	-61	45	8.6	9.0	F8	4	..	23773b	88	141	26.2	-66	22	9.2	9.7	F8	3	..	20429b
39	154	25.7	-70	21	9.5	10.5	Ko	4	..	20429b	89	174	26.3	+68	32	8.2	9.0	G5	3	..	37308i
40	505	25.8	+59	33	7.46	7.46	Ao	6	0,8	37320i	90	656	26.3	+57	5	7.7	7.5	B3	5	..	7195m
41	585	25.8	+58	0	7.46	7.52	A2	7	2,6	38164i	91	644	26.3	+55	35	8.9	9.3	F5	3	..	38164i
42	569	25.8	+54	54	8.0	7.8	B2	3	..	38164i	92	546	26.3	+41	4	9.2	9.2	Ao	2	..	37577i
43	390	25.8	-3	39	8.9	9.5	Go	4	..	14901b	93	393	26.3	+3	0	8.4	9.2	G5	3	..	37541i
44	836	25.8	-42	18	9.1	10.0	G5	4	..	24090b	94	438	26.3	+1	50	5.44	6.44	Ko	8	E	37541i
45	731	25.8	-50	21	9.3	9.6	Go	4	5,2	39684b	95	415	26.3	+0	40	6.75	6.81	A2	5	..	37541i
46	174	25.8	-64	45	6.36	6.3	B9	8	..	8861b	96	470	26.3	-14	44	10.1	11.1	K	1	..	40988b
47	179	25.8	-65	46	..	9.9	G5	3	..	20429b	97	442	26.3	-15	34	7.53	8.09	Go	5	..	40988b
48	219	25.9	+66	59	8.1	8.1	Ao	5	..	37308i	98	982	26.3	-25	7	9.2	9.8	G5	4	5,2	45148b
49	541	25.9	+54	7	7.76	7.84	A3	5	1,6	38164i	99	1010	26.3	-31	43	8.1	9.6	Ma	4	0,3	41068b
50	459	25.9	+33	6	8.3	8.6	Fo	3	..	37386i	100	762	26.3	-43	41	8.8	9.6	Fo	7	..	24090b

THE HENRY DRAPER CATALOGUE.

2^h 26^m.3

15700

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	155	26.3	-69 58	7.28	8.7	Mb	8	R	20429b	51	736	26.7	-50 22	9.2	9.7	Ko	2	..	39684b
2	161	26.4	+69 14	8.7	9.3	Go	1	..	37308i	52	589	26.8	+57 58	8.8	8.6	Bo	2	..	38164i
3	588	26.4	+51 52	6.51	6.57	A2	5	..	37356i	53	546	26.8	+42 28	7.10	7.66	Go	6	..	37578i
4	444	26.4	+31 40	7.68	8.24	Go	4	..	37386i	54	480	26.8	+41 23	7.89	8.39	F8	4	3,3	37577i
5	394	26.4	+28 8	8.0	8.0	Ao	5	..	38061i	55	454	26.8	+34 6	5.90	6.68	G5	7	..	37386i
6	469	26.4	- 8 15	9.4	10.0	Go	2	..	12388b	56	364	26.8	+25 2	8.91	9.33	F5	2	..	37383i
7	475	26.4	-11 2	10.3	11.3	Ko	2	..	40988b	57	361	26.8	+22 41	8.8	10.0	K5	2	..	37383i
8	443	26.4	-15 37	9.6	10.6	Ko	2	..	40988b	58	472	26.8	-14 6	10.1	10.7	Go	2	..	40988b
9	694	26.4	-49 15	8.5	9.9	K5	3	..	39684b	59	445	26.8	-15 46	8.9	9.7	G5	4	..	40988b
10	596	26.4	-51 11	8.7	9.0	Go	5	E	39684b	60	455	26.8	-16 10	9.6	10.1	F8	3	..	40988b
11	124	26.4	-69 29	9.6	10.0	F5	4	..	20429b	61	148	26.9	+73 50	8.9	9.0	A2	1	..	38972i
12	171	26.4	-73 13	10.0	11.1	K2	1	..	20539b	62	162	26.9	+69 25	9.4	10.0	G	2	R	37308i
13	645	26.5	+55 28	9.2	9.2	Ao	2	..	38164i	63	659	26.9	+56 34	8.7	8.8	A2	3	..	38164i
14	502	26.5	+39 6	7.66	7.61	B8	6	..	37577i	64	646	26.9	+56 4	9.9	9.9	Ao	1	..	7195m
15	457	26.5	+34 50	8.6	9.4	G5	2	..	37386i	65	334	26.9	+10 39	9.0	9.8	G5	2	o,1	10368b
16	432a	26.5	+29 27	8.7	9.7	Ko	2	..	38061i	66	472	26.9	-12 37	10.5	11.1	G	1	..	40988b
17	348	26.5	+21 32	7.17	7.45	Fo	6	o,4	37383i	67	447	26.9	-15 43	9.4	10.4	Ko	4	..	40988b
18	383	26.5	+17 56	8.4	8.8	F5	2	..	37431i	68	919	26.9	-30 48	9.7	11.3	K2	1	..	41079b
19	394	26.5	+ 2 18	8.6	8.9	F2	4	..	14901b	69	272	27.0	+65 37	7.10	8.10	Ko	5	..	37308i
20	417	26.5	+ 0 18	8.98	9.76	G5	2	..	14901b	70	647	27.0	+56 10	9.2	9.2	B9	3	..	7195m
21	471	26.5	-12 25	9.6	10.0	F5	3	..	40988b	71	380	27.0	+ 6 16	7.8	8.8	Ko	4	..	37403i
22	471	26.5	-14 43	9.9	10.7	G5	2	..	40988b	72	657	27.0	-48 22	8.7	9.7	Ko	3	..	39684b
23	444	26.5	-14 55	10.8	11.4	G	1	..	40988b	73	597	27.0	-51 49	7.7	7.8	F2	5	o,4	24229b
24	837	26.5	-38 39	8.9	10.9	Ko	2	..	45746b	74	309	27.0	-52 9	9.0	9.9	K5	1	..	20262b
25	142	26.5	-66 31	8.9	9.3	F5	5	..	20429b	75	161	27.0	-67 12	8.7	8.7	Ao	6	..	20429b
26	190	26.6	+70 29	8.0	9.1	K2	1	..	38972i	76	649	27.1	+55 24	9.4	9.4	B8	2	..	38164i
27	333	26.6	+64 21	8.8	8.8	B8	3	..	38984i	77	696	27.1	+49 4	8.1	8.9	G5	3	..	37578i
28	485	26.6	+58 46	7.18	8.18	Ko	6	2,4	37320i	78	501	27.1	+35 14	9.06	9.12	A2	2	..	37386i
29	648	26.6	+47 18	8.2	9.3	K2	1	..	38072i	79	353	27.1	- 1 28	5.53	6.53	Ko	8	E	37541i
30	574	26.6	+37 22	9.5	9.9	F5	1	..	37386i	80	352	27.1	- 1 38	7.97	9.04	K2	4	..	14901b
31	458	26.6	+34 45	9.2	9.7	F8	1	..	37386i	81	448	27.1	-15 33	9.6	10.4	G5	2	..	40988b
32	431	26.6	+28 52	8.2	9.0	G5	2	..	38061i	82	878	27.1	-27 50	10.4	9.8	F5	2	..	45148b
33	349	26.6	+21 53	7.74	8.02	Fo	5	o,4	37383i	83	800	27.1	-27 57	7.46	7.8	A2	7	3,8	45148b
34	416	26.6	+20 41	7.55	8.33	G5	4	o,4	37383i	84	215	27.2	+67 55	6.77	7.11	F2	6	..	37308i
35	412	26.6	- 4 26	8.7	8.8	A5	6	..	14901b	85	513	27.2	+60 6	8.41	8.17	B	3	R	38164i
36	470	26.6	- 8 2	9.9	10.5	Go	1	..	12388b	86	487	27.2	+58 56	9.2	9.2	Ao	4	2,3	7195m
37	468	26.6	-13 36	9.3	9.7	F5	3	..	40988b	87	519	27.2	+44 6	8.6	8.6	Ao	3	..	37578i
38	983	26.6	-25 42	9.1	9.2	F2	5	..	14876b	88	434	27.2	+29 31	7.8	8.8	Ko	5	..	38061i
39	795	26.6	-28 27	9.5	10.1	Go	2	..	45148b	89	418	27.2	+14 43	9.1	9.4	F2	4	..	38944i
40	852	26.6	-33 27	7.38	7.5	Fo	8	..	41079b	90	381	27.2	- 0 45	9.0	9.3	Fo	5	..	14901b
41	841	26.6	-42 42	9.4	10.6	G5	3	..	24090b	91	713	27.2	-41 25	9.6	11.5	K2	2	..	24090b
42	210	26.6	-61 21	8.3	9.4	Ko	4	..	17048b	92	743	27.2	-46 7	7.9	9.3	Ko	4	..	36984b
43	486	26.7	+58 44	8.9	9.2	F2	4	..	38164i	93	217	27.2	-58 15	6.80	8.5	Mb	6	..	24229b
44	518	26.7	+44 1	8.4	8.5	A2	4	..	37578i	94	548	27.3	+42 33	8.5	8.8	Fo	2	..	37578i
45	512	26.7	+36 53	7.44	7.72	Fo	5	..	37386i	95	335	27.3	+10 40	9.8	9.8	A	1	..	10368b
46	418	26.7	+21 1	8.2	8.5	F2	4	..	37383i	96	333	27.3	+ 9 35	9.8	10.4	Go	1	..	10368b
47	346	26.7	+12 14	7.6	7.7	A2	2	..	37284i	97	447	27.3	- 7 36	8.7	9.0	F2	5	..	12388b
48	476	26.7	-11 28	9.4	10.2	G5	3	..	40988b	98	449	27.3	-15 41	4.82	5.24	F5	..	o,R	56,74
49	913	26.7	-28 57	9.4	10.1	F8	2	..	45148b	99	914	27.3	-32 29	8.6	9.6	Ko	4	..	41079b
50	912	26.7	-29 13	8.1	8.6	F2	5	..	41079b	100	764	27.3	-47 53	8.6	9.6	Ko	4	..	39684b

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2^h 27^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	699	27.3	-49 49	9.5	10.2	Ao	2	..	39684b	51	515	27.9	+60 40	8.1	8.9	G5	2	..	38974i
2	364	27.4	+22 46	9.5	10.1	Go	2	..	37383i	52	655	27.9	+55 32	9.2	9.7	F8	3	..	38164i
3	334	27.4	+9 24	9.6	10.0	F5	2	..	10368b	53	590	27.9	+46 16	8.0	8.0	Ao	4	..	37578i
4	353	27.4	+5 54	8.8	9.6	G5	3	5,2	12387b	54	425	27.9	+26 56	8.6	8.7	A3	2	..	37383i
5	351	27.4	+3 18	8.0	8.3	Fo	3	..	37541i	55	438	27.9	-18 29	9.6	10.1	F8	2	..	45672b
6	354	27.4	-1 11	8.8	9.8	Ko	3	..	14901b	56	962	27.9	-23 46	8.7	9.5	G5	3	..	14876b
7	957	27.4	-23 31	7.98	7.9	A3	6	4,8-	45148b	57	738	27.9	-39 23	9.6	9.4	F8	3	..	24090b
8	1123	27.4	-24 22	9.2	10.1	G5	2	..	45148b	58	162	27.9	-63 19	9.6	9.7	A2	3	..	20429b
9	639	27.4	-40 46	8.9	10.9	K2	2	..	24090b	59	45	27.9	-82 55	8.9	8.9	Ao	5	..	20538b
10	756	27.4	-44 1	9.7	10.3	A3	3	..	24090b	60	59	28.0	+83 11	9.2	9.7	F8	4	..	37309i
11	202	27.4	-60 46	9.6	9.6	Ao	3	..	17048b	61	102	28.0	+76 6	8.72	9.28	Go	2	..	38972i
12	489	27.5	+59 6	9.9	9.9	Ao	2	..	38164i	62	515	28.0	+59 22	8.5	9.1	Go	2	..	38164i
13	652	27.5	+55 56	9.7	9.8	A2	3	..	7195m	63	696	28.0	+49 38	6.86	6.84	B9	7	..	37578i
14	419	27.5	+14 36	6.07	6.49	F5	6	3,7	37284i	64	566	28.0	+39 51	8.5	8.6	A2	3	..	37577i
15	382	27.5	+6 58	8.6	9.0	F5	2	..	37403i	65	506	28.0	+38 18	6.74	7.74	Ko	6	0,4	37577i
16	476	27.5	-9 24	9.4	10.2	G5	3	..	40988b	66	410	28.0	+31 10	7.96	8.74	G5	3	..	37386i
17	927	27.5	-30 27	9.7	10.7	Ko	2	..	41079b	67	366	28.0	+24 50	9.5	10.3	G5	2	..	37383i
18	310	27.5	-52 26	8.6	8.2	A3	3	..	24229b	68	339	28.0	+24 3	8.9	8.9	Ao	3	..	37383i
19	412	27.6	+4 46	8.4	8.9	F8	5	..	12387b	69	325	28.0	+18 28	6.77	6.91	A5	4	2,5	37431i
20	422	27.6	+1 3	8.69	8.69	Ao	5	..	14901b	70	399	28.0	+7 56	8.6	9.1	F8	3	..	10368b
21	421	27.6	+0 35	7.48	8.26	G5	7	0,3	14901b	71	478	28.0	-9 9	8.5	8.9	F5	5	..	12388b
22	433	27.6	-2 12	8.7	9.0	Fo	5	..	14901b	72	478	28.0	-11 5	9.0	9.5	F8	5	..	40988b
23	432	27.6	-2 28	8.7	9.0	Fo	5	..	14901b	73	478	28.0	-11 52	7.54	8.54	Ko	6	..	40988b
24	457	27.6	-15 59	9.6	10.4	G5	2	..	40988b	74	473	28.0	-12 53	9.4	10.2	G5	2	..	40988b
25	472	27.6	-18 55	9.3	10.9	Ko	1	..	45672b	75	860	28.0	-33 3	6.62	7.8	Ko	8	..	41079b
26	1017	27.6	-31 23	8.9	9.5	A3	5	..	41079b	76	955	28.0	-37 36	9.2	9.8	Go	3	..	45746b
27	847	27.6	-42 14	9.9	10.6	F8	3	..	24090b	77	643	28.0	-40 45	9.6	10.6	F8	3	..	24090b
28	145	27.6	-66 23	9.4	10.4	Ko	1	..	20429b	78	312	28.0	-52 15	8.8	9.6	K2	3	..	20262b
29	420	27.7	+62 48	7.37	8.15	G5	3	5,5	37341i	79	203	28.0	-60 20	8.3	9.3	F8	4	..	17048b
30	550	27.7	+42 21	7.55	8.11	Go	4	..	37578i	80	423	28.1	+63 12	8.0	8.1	A5	3	..	37308i
31	458	27.7	+33 55	7.55	7.55	Ao	5	..	37386i	81	656	28.1	+55 49	9.9	9.9	Ao	2	..	7195m
32	409	27.7	+30 59	7.37	8.44	K2	4	..	38061i	82	507	28.1	+39 7	9.1	9.2	A2	2	..	37577i
33	398	27.7	+7 27	8.6	9.4	G5	1	..	37403i	83	411	28.1	+30 58	7.7	8.7	Ko	3	..	38061i
34	384	27.7	+6 30	8.0	8.0	Ao	5	0,2	37403i	84	396	28.1	-2 51	9.3	9.7	F5	3	..	14901b
35	450	27.7	-15 2	11.0	11.6	Go	2	..	40988b	85	479	28.1	-10 56	9.3	10.1	G5	4	..	40988b
36	458	27.7	-16 21	9.9	10.9	Ko	2	..	40988b	86	1130	28.1	-24 29	9.9	10.7	Ko	1	..	45148b
37	960	27.7	-23 17	9.2	10.1	A5	3	..	45148b	87	882	28.1	-27 26	7.34	7.6	A3	8	3,8	45148b
38	1127	27.7	-24 37	9.9	10.2	F8	2	..	45148b	88	1023	28.1	-30 57	10.2	10.4	Go	2	..	41079b
39	1019	27.7	-31 53	8.5	9.8	Ko	3	R	41079b	89	957	28.1	-36 52	6.29	7.6	G5	10	0,9	41079b
40	642	27.7	-40 10	9.5	10.6	F8	2	..	24090b	90	771	28.1	-47 6	9.7	10.8	Ko	1	..	39684b
41	201	27.7	-76 11	7.7	8.7	Ko	8	..	14358b	91	668	28.1	-48 47	9.2	9.6	Go	2	..	39684b
42	111	27.8	+75 6	7.77	7.85	A3	5	..	37555i	92	176	28.1	-64 20	9.1	9.4	F2	4	..	20429b
43	112	27.8	+74 57	8.24	8.80	Go	4	..	38972i	93	146	28.1	-66 13	9.2	9.3	A2	7	R	20429b
44	371	27.8	+20 0	8.5	9.3	G5	1	..	37431i	94	462	28.2	+34 42	7.31	7.37	A2	5	..	37386i
45	440	27.8	+1 14	8.99	10.06	K2	1	..	14901b	95	461	28.2	+33 20	6.92	7.92	Ko	5	..	37386i
46	477	27.8	-12 35	10.5	11.3	G5	1	..	40988b	96	452	28.2	+32 1	7.56	8.56	Ko	4	2,3	37404i
47	803	27.8	-28 14	7.63	8.6	K2	5	2,4	45148b	97	382	28.2	-0 17	8.6	9.4	G5	6	..	14901b
48	953	27.8	-37 21	9.5	10.4	K2	1	..	45746b	98	479	28.2	-12 35	9.6	10.2	Go	2	..	40988b
49	223	27.9	+67 2	7.37	7.71	F2	5	..	37308i	99	773	28.2	-43 42	9.4	10.8	K2	2	..	24090b
50	421	27.9	+63 12	7.72	8.14	F5	4	..	37308i	100	127	28.2	-69 3	8.4	9.6	K5	6	..	20429b

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2^h 28^m. 2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	173	<i>m.</i> 28.2	<i>o</i> -72 58	8.6	9.4	G5	4	..	20539b	51	368	<i>m.</i> 28.8	<i>o</i> +24 36	8.7	9.9	K5	1	..	37383i
2	627	28.3	+45 29	8.2	8.6	F5	3	..	37578i	52	369	28.8	+24 27	8.26	8.54	Fo	3	..	37383i
3	552	28.3	+42 59	9.2	9.5	Fo	2	..	37578i	53	367	28.8	+23 4	8.3	8.9	Go	3	..	37383i
4	356	28.3	+5 15	7.9I	8.9I	Ko	5	0,3	12387b	54	374	28.8	+19 33	8.4	9.4	Ko	2	..	37431i
5	419	28.3	-4 17	9.9	9.9	Ao	5	..	14901b	55	442	28.8	-18 2	9.0	10.0	Ko	2	..	12626b
6	507	28.3	-10 48	9.9	10.9	Ko	2	..	40988b	56	443	28.8	-18 47	9.6	10.7	K2	1	..	45672b
7	480	28.3	-12 28	9.6	10.2	Go	3	..	40988b	57	998	28.8	-25 29	9.7	10.2	Go	2	..	45148b
8	451	28.3	-15 10	8.9	9.7	G5	4	..	40988b	58	915	28.8	-26 44	8.04	9.0	K2	4	3,4	12242b
9	460	28.3	-16 29	8.7	9.7	Ko	4	..	40988b	59	741	28.8	-39 1	8.9	9.1	Ko	4	..	24090b
10	477	28.3	-20 46	10.3	10.0	Ao	3	R	45672b	60	215	28.8	-59 18	7.6	8.4	F8	5	..	24229b
11	313	28.3	-52 6	9.2	9.3	Ao	4	..	20262b	61	111	28.8	-77 51	8.6	9.4	G5	2	..	14358b
12	591	28.4	+58 4	7.9	8.4	F8	6	3,4	38164i	62	141	28.9	+73 9	8.7	9.8	K2	1	..	38972i
13	567	28.4	+39 26	10.0	10.0	Ao	4	..	37577i	63	594	28.9	+57 38	7.98	7.98	Aop	5	R	38164i
14	480	28.4	-10 49	10.1	10.9	G5	2	..	40988b	64	595	28.9	+57 17	8.8	8.8	Ao	3	..	38164i
15	481	28.4	-10 54	9.1	10.1	Ko	2	..	40988b	65	628	28.9	+45 31	9.5	9.5	A	2	..	37578i
16	473	28.4	-18 48	9.3	10.1	G5	1	..	45672b	66	368	28.9	+22 32	8.29	8.43	A5	4	..	37383i
17	911	28.4	-26 12	9.1	9.8	Go	3	..	45148b	67	353	28.9	+21 15	8.7	9.1	F5	3	..	37383i
18	163	28.4	-63 2	8.2	9.0	G5	6	..	20429b	68	384	28.9	-0 29	9.4	9.7	Fo	5	..	14901b
19	135	28.4	-71 3	8.3	9.3	Ko	6	0,4	20429b	69	439	28.9	-2 39	9.4	9.7	F2	3	..	14901b
20	140	28.5	+72 23	5.34	6.34	Ko	7	..	37308i	70	501	28.9	-6 27	8.5	9.9	Ma	2	..	14901b
21	547	28.5	+53 54	8.6	8.6	Ao	3	..	38164i	71	479	28.9	-13 35	var.	var.	Md	..	R	56,198
22	701	28.5	+49 25	7.8	7.8	Ao	4	..	37578i	72	494	28.9	-17 3	9.6	10.4	G5	2	..	45672b
23	485	28.5	+41 21	8.6	8.6	Ao	4	0,3	37577i	73	1139	28.9	-24 41	10.4	11.0	K5	1	..	45148b
24	462	28.5	+33 28	8.3	8.7	F5	3	..	37386i	74	916	28.9	-26 40	9.9	10.1	G5	2	..	45148b
25	354	28.5	+3 20	8.8	9.6	G5	3	..	12387b	75	877	28.9	-35 5	5.88	7.2	Ko	..	5,R	56,119
26	443	28.5	+1 50	9.4	10.0	Go	2	..	14901b	76	960	28.9	-37 37	9.0	9.2	Fo	3	..	24090b
27	482	28.5	-11 46	10.5	11.3	G5	2	..	40988b	77	650	28.9	-40 29	9.5	9.4	F5	3	..	24090b
28	453	28.5	-14 48	8.11	8.67	Go	7	..	40988b	78	138	28.9	-71 21	8.9	9.0	A5	5	2,7	20539b
29	746	28.5	-46 19	7.3	7.9	G5	4	5,6	8860b	79	491	29.0	+58 38	9.2	9.2	Ao	4	..	7195m
30	94	28.6	+79 6	8.6	8.6	A2	2	..	37309i	80	571	29.0	+40 9	7.82	7.80	B9	5	..	37577i
31	435	28.6	+28 12	8.6	9.6	Ko	1	..	38061i	81	570	29.0	+39 50	8.7	9.2	F8	1	..	37577i
32	478	28.6	-20 6	9.6	10.1	Go	3	..	45672b	82	465	29.0	+33 44	8.2	8.5	Fo	4	..	37386i
33	604	28.6	-51 28	9.9	9.4	G5	2	..	20262b	83	340	29.0	+11 10	7.00	7.00	Ao	6	..	37284i
34	454	28.6	-57 2	7.5	9.6	Ko	2	..	24229b	84	480	29.0	-8 24	9.3	9.9	Go	2	..	12388b
35	214	28.6	-59 35	8.6	9.3	F8	3	..	24229b	85	923	29.0	-29 0	10.2	10.7	Go	2	..	45148b
36	178	28.6	-64 29	7.6	7.7	A2	4	2,9	8861b	86	1029	29.0	-31 6	9.2	10.7	G5	2	..	41079b
37	426	28.7	+63 3	7.67	8.67	Ko	3	..	38984i	87	927	29.0	-32 9	8.6	9.0	Go	4	..	41079b
38	425	28.7	+62 41	8.07	9.14	K2	1	..	38984i	88	46	29.0	-83 51	10.2	11.0	G5	2	..	20538b
39	463	28.7	+33 39	7.7	8.0	Fo	5	..	37386i	89	596	29.1	+57 36	9.7	9.8	A2	3	..	7195m
40	426	28.7	+20 14	9.05	9.47	F5	2	..	37383i	90	660	29.1	+55 30	8.2	8.2	B9	4	..	38164i
41	373	28.7	+19 55	8.8	9.4	Go	2	..	37383i	91	581	29.1	+55 6	8.81	9.37	Go	4	..	38164i
42	354	28.7	+11 45	7.63	8.19	Go	4	..	37284i	92	534	29.1	+44 12	7.42	7.40	B9	6	0,5	38072i
43	387	28.7	+6 30	10.1	10.2	A2	1	..	10368b	93	508	29.1	+38 44	8.7	9.5	G5	2	..	38086i
44	454	28.7	-15 46	9.9	10.5	Go	3	..	40988b	94	502	29.1	-6 4	7.29	8.36	K2	7	E	14901b
45	887	28.7	-27 41	9.5	10.1	F8	3	..	45148b	95	481	29.1	-12 46	6.96	7.46	F8	8	..	40988b
46	30	28.7	-85 3	8.1	9.5	Mb	5	..	20538b	96	480	29.1	-20 26	6.42	8.1	Ko	10	..	14876b
47	166	28.8	+69 39	9.2	9.2	A	2	..	37308i	97	919	29.1	-26 0	9.4	9.8	G5	3	..	45148b
48	176	28.8	+68 38	7.42	8.42	Ko	4	R	37308i	98	743	29.1	-39 47	8.78	8.8	F8	6	..	24090b
49	658	28.8	+55 12	9.9	10.7	G5	1	..	38164i	99	808	29.1	-45 38	8.9	9.3	A5	6	..	24090b
50	527	28.8	+43 27	8.5	9.6	K2	1	..	37577i	100	216	29.1	-59 33	8.23	9.3	Ko	2	..	24229b

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2^h 29^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	147	29.1	^{m.} -66 34	9.4	9.9	F8	2	..	20429b	51	92	^{m.} 29.6 +77 45	9.0	9.0	Ao	2	..	37309i	
2	175	29.1	-73 42	9.3	9.3	B9	5	..	20539b	52	536	29.6 +44 43	9.0	9.0	Ao	1	..	38072i	
3	194	29.2	+70 28	8.4	8.7	Fo	3	..	37308i	53	510	29.6 +39 6	8.1	9.1	Ko	2	..	37577i	
4	573	29.2	+39 15	6.28	6.26	B9	9	..	37577i	54	462	29.6 -16 34	9.9	9.9	Ao	3	..	45672b	
5	385	29.2	-0 5	8.6	8.6	Ao	6	..	14901b	55	928	29.6 -29 52	8.13	9.0	Ko	4	..	41079b	
6	481	29.2	-13 23	9.00	9.56	Go	4	..	40988b	56	746	29.6 -39 37	9.2	8.8	F5	6	..	24090b	
7	478	29.2	-14 36	8.11	8.89	G5	6	..	40988b	57	521	29.7 +36 39	7.55	8.33	G5	4	5,3	37386i	
8	481	29.2	-20 3	8.9	9.2	Go	2	..	14876b	58	469	29.7 +34 15	5.62	6.97	Mb	6	..	37386i	
9	749	29.2	-46 35	9.4	10.2	F5	3	..	39684b	59	415	29.7 +30 57	9.2	9.3	A2	1	..	38061i	
10	179	29.2	-64 1	8.7	9.7	Ko	3	..	20429b	60	392	29.7 +7 3	6.19	7.19	Ko	4	..	37284i	
11	278	29.3	+66 5	9.4	9.7	F2	1	..	38984i	61	400	29.7 +2 14	8.4	9.2	G5	3	0,2	14901b	
12	599	29.3	+57 17	8.2	8.2	Ao	5	..	38164i	62	430	29.7 +0 48	8.0	9.0	Ko	5	5,2	14901b	
13	529	29.3	+43 46	8.2	8.2	B9	3	..	37578i	63	404	29.7 -3 14	9.1	10.5	Ma	3	..	14901b	
14	466	29.3	+33 55	8.7	9.8	Ko	1	..	37404i	64	481	29.7 -14 14	8.7	9.5	G5	5	..	40988b	
15	468	29.3	+32 25	7.9	8.5	Go	3	..	37404i	65	929	29.7 -32 38	7.93	8.6	Go	7	..	41079b	
16	390	29.3	+6 34	10.1	10.2	A3	2	..	10368b	66	217	29.8 +67 38	7.7	8.0	Fo	4	..	37308i	
17	414	29.3	+4 49	9.0	9.8	G5	3	..	12387b	67	338	29.8 +64 53	7.55	8.05	F8	3	..	37308i	
18	399	29.3	+3 9	8.2	9.0	G5	2	..	37541i	68	667	29.8 +55 28	7.76	8.83	K2	3	..	38164i	
19	455	29.3	-15 4	9.0	9.5	F8	5	..	40988b	69	553	29.8 +41 6	9.2	9.5	F2	1	..	38086i	
20	461	29.3	-16 34	8.3	9.3	Ko	4	..	40988b	70	471	29.8 +34 17	6.76	6.90	A5	7	..	37386i	
21	1003	29.3	-25 31	8.3	9.5	K2	2	..	14876b	71	437	29.8 +28 48	8.0	8.1	A3	4	..	38061i	
22	809	29.3	-45 15	8.3	9.9	K2	4	..	24090b	72	387	29.8 -0 47	8.6	9.6	Ko	3	..	14901b	
23	168	29.4	+69 29	9.4	9.4	A	2	..	37308i	73	360	29.8 -1 37	9.0	9.4	F5	3	..	14901b	
24	280	29.4	+65 19	6.07	7.07	Ko	6	..	37308i	74	484	29.8 -8 17	5.82	6.82	Ko	8	0,7	10410b	
25	600	29.4	+57 41	8.8	8.8	B9	2	..	38164i	75	483	29.8 -13 11	9.3	9.7	F5	4	..	40988b	
26	706	29.4	+49 50	8.6	8.6	Ao	2	..	38072i	76	477	29.8 -19 39	9.88	11.6	Ko	1	..	45672b	
27	555	29.4	+43 9	7.9	9.0	K2	2	..	37577i	77	317	29.8 -52 23	8.7	9.0	Ko	4	..	20262b	
28	519	29.4	+36 53	5.93	6.93	Ko	6	..	37386i	78	167	29.8 -63 26	8.3	9.1	G5	5	..	20429b	
29	467	29.4	+34 19	9.5	9.6	A2	2	..	37386i	79	60	29.9 +82 24	9.5	10.1	G	3	..	37309i	
30	361	29.4	+5 50	8.5	9.5	Ko	2	5,2	12387b	80	668	29.9 +55 28	9.4	9.4	Ao	2	..	7195m	
31	482	29.4	-12 49	9.9	10.0	A5	2	..	40988b	81	669	29.9 +55 19	8.91	8.91	Ao	3	..	38164i	
32	866	29.4	-33 16	7.8	8.6	Ko	4	..	41079b	82	599	29.9 +51 32	7.34	8.12	G5	4	R	38897i	
33	810	29.4	-45 45	9.7	10.3	G5	2	..	39684b	83	599	29.9 +51 32	7.34	8.12	A5	4	..	37284i	
34	151	29.4	-68 24	7.5	8.1	Go	8	..	20429b	84	354	29.9 +12 43	7.8	8.6	G5	2	..	37284i	
35	50	29.4	-81 23	9.0	9.3	Fo	3	..	20538b	85	393	29.9 +6 22	8.6	9.1	F8	2	3,2	12387b	
36	337	29.5	+64 54	8.2	8.2	B8	2	..	37308i	86	359	29.9 +3 41	8.0	8.6	Go	4	..	37541i	
37	343	29.5	+63 40	7.52	8.02	F8	4	..	37308i	87	934	29.9 -31 57	7.39	7.8	Fo	8	..	41079b	
38	519	29.5	+59 25	7.56	7.56	Ao	6	0,7	37320i	88	521	30.0 +59 39	7.46	7.74	Fo	4	0,2-	37320i	
39	665	29.5	+55 46	8.4	9.4	Ko	4	0,4	38164i	89	471	30.0 +32 38	8.6	9.6	Ko	2	..	37404i	
40	663	29.5	+55 29	8.7	8.7	Ao	4	..	38164i	90	417	30.0 +30 44	7.9	8.5	Go	4	..	38061i	
41	551	29.5	+40 16	8.27	8.33	A2	4	..	37577i	91	345	30.0 +10 56	9.1	9.6	F8	2	..	10368b	
42	414	29.5	+30 14	8.51	9.1	Ko	2	..	38061i	92	431	30.0 +0 41	9.4	9.7	Fo	3	..	14901b	
43	395	29.5	+17 37	8.5	9.3	G5	4	..	38944i	93	444	30.0 -22 22	7.12	8.2	Ko	8	..	14876b	
44	479	29.5	-13 58	9.51	10.07	Go	3	..	40988b	94	1038	30.0 -30 58	9.5	10.4	Go	3	..	41079b	
45	482	29.5	-20 27	9.1	9.1	Fo	5	..	14876b	95	870	30.0 -33 33	7.57	7.9	F8	6	..	41079b	
46	819	29.5	-28 40	4.95	4.93	B9	..	R	28,196	96	177	30.1 +68 52	8.02	8.08	A2	4	..	37308i	
47	941	29.5	-30 22	7.30	7.5	F5	9	..	41079b	97	577	30.1 +39 46	7.42	7.40	B9	5	..	37577i	
48	962	29.5	-37 50	7.74	9.2	K5	6	..	24090b	98	472	30.1 +34 18	9.4	9.5	A2	2	..	37386i	
49	748	29.5	-50 13	8.5	8.7	F2	4	..	39684b	99	438	30.1 +29 26	8.0	9.0	Ko	3	..	38061i	
50	181	29.5	-64 25	9.1	9.7	Go	2	..	20429b	100	485	30.1 -8 9	9.1	10.1	Ko	1	..	10410b	

THE HENRY DRAPER CATALOGUE.

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2^h 30^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	972	30.1	^{m.} -23 35	8.9	9.8	Ko	2	..	14876b	51	506	30.5	^o - 6 6	8.9	9.5	Go	2	E	14901b
2	1040	30.1	-31 7	8.9	10.7	Ko	2	..	41079b	52	484	30.5	- 9 47	7.16	7.16	Ao	3	..	44326b
3	854	30.1	-38 29	10.4	9.7	A2	1	..	45746b	53	486	30.5	-14 24	9.9	10.7	G5	2	..	40988b
4	859	30.1	-42 18	9.4	9.7	G5	3	..	24090b	54	1043	30.5	-30 58	9.5	11.3	G	1	..	41079b
5	681	30.1	-48 49	7.8	7.7	F8	6	..	20262b	55	874	30.5	-32 54	9.0	10.7	K2	2	..	41079b
6	93	30.2	+77 12	8.6	8.6	Ao	2	..	37309i	56	963	30.5	-37 50	9.5	10.1	F8	2	..	45746b
7	671	30.2	+55 31	8.5	8.6	A5	4	0,4	38164i	57	775	30.5	-44 13	8.6	9.9	K5	3	..	24090b
8	495	30.2	+41 58	6.72	6.67	B8	8	1,9	37578i	58	709	30.5	-49 14	8.7	8.4	Ao	3	..	20262b
9	554	30.2	+41 2	8.8	9.8	Ko	2	..	38086i	59	674	30.6	+55 32	8.8	8.8	Ao	4	2,4	38164i
10	513	30.2	+38 30	9.1	10.5	Ma	1	..	38086i	60	398	30.6	+ 6 25	5.92	6.92	Ko	6	2,6R	37284i
11	438	30.2	+28 58	7.10	7.05	B8	3	..	37335i	61	418	30.6	+ 5 9	5.02	5.80	G5	8	0,R	37284i
12	354	30.2	+16 10	8.1	9.2	K2	3	..	38944i	62	428	30.6	- 3 54	8.9	9.9	Ko	4	..	14901b
13	410	30.2	+13 23	8.22	9.40	K5	2	..	38944i	63	487	30.6	-13 13	9.3	9.7	F5	2	..	40988b
14	347	30.2	+10 53	9.6	10.1	F8	2	..	10368b	64	466	30.6	-16 21	9.6	10.1	F8	3	..	45672b
15	513	30.2	- 9 53	8.26	..	R3	4	R	10410b	65	483	30.6	-20 11	10.1	11.2	Go	1	..	45672b
16	512	30.2	-10 19	8.3	9.3	Ko	5	..	40988b	66	897	30.6	-27 12	9.1	9.5	Ko	3	..	45148b
17	1008	30.2	-25 48	8.2	9.3	K2	2	..	14876b	67	750	30.6	-39 15	10.2	9.1	Go	2	..	45746b
18	947	30.2	-30 23	8.1	8.6	F8	7	..	41079b	68	861	30.6	-42 45	10.1	9.7	Go	2	..	24090b
19	871	30.2	-33 8	8.9	10.1	K2	2	..	41079b	69	783	30.6	-43 24	9.7	10.2	Go	3	..	24090b
20	939	30.2	-34 17	8.6	8.9	F8	4	..	41079b	70	611	30.6	-51 31	6.29	7.1	F5	7	..	8860b
21	940	30.2	-34 25	10.2	9.8	F5	2	..	41079b	71	439	30.6	-55 22	8.6	9.7	G5	2	..	20262b
22	855	30.2	-37 56	9.0	8.9	G5	3	..	24090b	72	148	30.6	-66 49	8.8	8.8	Ao	8	..	20429b
23	443	30.2	-56 45	8.3	9.7	F5	2	..	24229b	73	197	30.7	+70 48	8.0	9.0	Ko	3	..	37308i
24	455	30.2	-57 28	8.9	9.4	A2	3	..	24229b	74	534	30.7	+43 13	8.8	8.8	Ao	3	..	38086i
25	195	30.3	+70 32	8.7	8.7	Ao	2	R	38972i	75	496	30.7	+41 38	7.20	7.76	Go	6	5,4	37577i
26	556	30.3	+40 40	9.4	9.4	Ao	2	2,2	37577i	76	515	30.7	+38 18	5.94	6.36	F5	8	..	37404i
27	474	30.3	+35 6	9.02	9.02	Ao	2	..	37404i	77	523	30.7	+36 59	9.4	10.2	G5	2	..	37386i
28	432	30.3	+26 45	7.9	8.7	G5	2	..	37383i	78	428	30.7	+14 42	8.8	9.8	Ko	3	..	38944i
29	339	30.3	+ 9 41	9.4	10.6	K5	1	..	10368b	79	394	30.7	- 0 47	8.5	8.6	A3	5	..	14901b
30	406	30.3	- 2 54	8.4	9.2	G5	4	..	14901b	80	484	30.7	-20 27	10.5	10.5	Go	2	..	45672b
31	484	30.3	-11 20	10.1	10.5	F5	3	..	40988b	81	751	30.7	-39 4	9.2	8.8	Fo	4	..	24090b
32	465	30.3	-16 2	8.9	9.7	G5	4	..	40988b	82	153	30.8	+71 52	8.5	8.5	Ao	3	..	38972i
33	942	30.3	-34 34	9.5	10.4	G5	1	..	41079b	83	527	30.8	+60 40	8.0	8.4	F5	4	0,3	37320i
34	782	30.3	-47 17	9.1	9.6	Ao	4	..	30684b	84	719	30.8	+49 48	7.32	7.27	B8	4	E	37356i
35	319	30.3	-52 7	9.2	9.6	Go	2	..	20262b	85	637	30.8	+45 54	9.2	9.2	A	1	R	38072i
36	183	30.3	-63 57	9.1	9.9	G5	3	..	20429b	86	524	30.8	+36 56	8.34	9.34	Ko	2	..	37386i
37	103	30.4	+75 35	8.37	8.35	B9	5	..	37555i	87	418	30.8	+31 10	6.16	7.16	Ko	6	0,8	37386i
38	557	30.4	+40 50	9.4	9.4	A	1	..	37577i	88	413	30.8	+13 15	8.4	8.7	Fo	4	..	38944i
39	433	30.4	+27 1	8.1	8.9	G5	3	..	37383i	89	366	30.8	+ 6 0	7.00	7.14	A5	5	0,4	37541i
40	446	30.4	+ 1 38	9.0	9.0	Ao	5	0,2	14901b	90	395	30.8	- 0 16	9.0	9.8	G5	3	..	14901b
41	426	30.4	- 3 59	6.78	7.34	Go	9	..	14901b	91	444	30.8	- 2 16	8.7	9.7	Ko	4	..	14901b
42	485	30.4	-14 15	8.9	9.9	Ko	3	..	40988b	92	445	30.8	- 2 22	9.6	9.9	Fo	3	..	14901b
43	457	30.4	-15 21	10.3	11.3	Ko	2	..	40988b	93	407	30.8	- 3 27	8.7	9.3	Go	4	..	14901b
44	456	30.4	-15 38	9.0	9.4	F5	5	..	40988b	94	486	30.8	-12 22	10.1	10.7	Go	3	..	40988b
45	498	30.4	-17 43	7.85	7.85	Ao	9	0,9-	45672b	95	935	30.8	-29 8	7.9	7.8	Ao	7	..	12242b
46	1042	30.4	-31 45	9.1	9.8	Go	3	..	41079b	96	602	30.9	+52 23	8.2	8.3	A2	1	..	38873i
47	860	30.4	-42 44	10.1	10.4	K2	2	..	24090b	97	442	30.9	+29 44	9.1	10.1	Ko	1	..	38061i
48	206	30.4	-76 13	7.7	8.1	F5	8	..	14358b	98	372	30.9	+22 37	8.11	8.39	Fo	4	..	37383i
49	710	30.5	+48 47	8.2	8.2	Ao	3	2,2	37578i	99	396	30.9	+ 8 33	7.8	8.1	F2	4	..	37284i
50	411	30.5	+13 20	7.40	7.82	F5	4	3,4	37284i	100	486	30.9	- 9 0	8.9	9.7	G5	2	..	10410b

16200

2^h 30^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	487	30.9	m. 11 49	10.8	11.4	G	2	..	40988b	51	501	m. 31.3	o. 17 6	9.6	10.0	F5	2	..	45672b
2	458	30.9	15 22	6.89	7.89	Ko	..	0,8	56,74	52	447	31.3	18 4	7.10	7.66	Go	8	0,9-	45672b
3	944	30.9	33 58	9.6	10.4	K	1	..	41079b	53	900	31.3	27 8	8.5	8.7	F5	5	3,4	45148b
4	689	30.9	48 17	10.1	10.5	Go	1	..	39684b	54	985	31.3	36 44	9.6	10.1	Go	1	..	45746b
5	163	30.9	70 2	8.78	9.0	G5	7	R	20429b	55	149	31.3	66 4	8.9	9.7	G5	3	..	20429b
6	88	31.0	+81 15	9.4	9.9	F8	2	..	37309i	56	142	31.4	+72 21	8.4	9.4	Ko	1	..	38972i
7	..	31.0	+54 49	..	..	A	2	..	38164i	57	679	31.4	+55 28	9.4	9.7	Fo	3	..	38164i
8	536	31.0	+43 31	8.5	8.9	F5	3	0,2	38086i	58	724	31.4	+50 3	7.17	8.24	K2	4	0,3	37578i
9	518	31.0	+38 24	9.2	9.7	F8	3	..	37577i	59	437	31.4	+26 41	8.9	9.9	Ko	2	..	37383i
10	470	31.0	+33 50	var.	var.	Md	4	R	37386i	60	342	31.4	+10 6	9.52	9.60	A3	2	..	10368b
11	441	31.0	+28 28	9.5	10.5	Ko	1	..	38061i	61	363	31.4	- 1 4	7.7	7.8	A3	8	2,3	14901b
12	489	31.0	- 8 16	5.71	6.89	K5	4	5,7-	44326b	62	502	31.4	-17 34	8.2	9.0	G5	3	5,3	12626b
13	488	31.0	-12 28	8.7	9.5	G5	5	..	40988b	63	445	31.4	-21 50	7.16	7.8	Go	10	..	14876b
14	826	31.0	-28 29	8.7	9.3	G5	3	..	12242b	64	676	31.5	+57 10	9.2	9.0	B	2	..	7195m
15	863	31.0	-42 22	10.3	9.7	F8	2	..	24090b	65	677	31.5	+56 58	9.0	9.1	A2	2	..	38164i
16	320	31.0	-52 14	8.9	9.6	K2	1	..	20262b	66	561	31.5	+40 20	9.20	9.98	G5	1	..	38086i
17	60	31.1	+83 27	9.2	10.2	K	2	..	37309i	67	346	31.5	+23 47	9.8	9.8	Ao	2	..	37383i
18	444	31.1	+62 9	6.80	6.78	B9	7	0,7	38984i	68	452	31.5	+ 2 2	9.4	9.4	A	2	..	37541i
19	582	31.1	+39 27	6.40	6.35	B8	8	..	37577i	69	489	31.5	-11 36	7.42	8.42	Ko	7	..	40988b
20	473	31.1	+32 27	6.29	6.71	F5	7	..	37386i	70	1154	31.5	-23 57	8.7	9.2	K2	4	..	14876b
21	433	31.1	+20 16	8.35	8.49	A5	3	2,2	37383i	71	901	31.5	-27 0	10.2	10.7	Ko	1	..	45148b
22	430	31.1	- 4 36	9.6	10.0	F5	3	..	14901b	72	693	31.5	-48 11	9.4	10.4	Go	1	..	39684b
23	431	31.1	- 4 42	8.50	9.50	Ko	4	..	14901b	73	189	31.5	-72 37	9.4	10.2	G5	2	..	20539b
24	459	31.1	-15 40	9.6	10.2	Go	3	..	40988b	74	445	31.6	+29 19	9.4	10.0	Go	1	..	38061i
25	858	31.1	-38 14	8.2	8.8	K2	5	..	24090b	75	359	31.6	+12 28	8.6	9.4	G5	2	..	38944i
26	169	31.1	-63 1	6.70	6.4	B8	..	1,6	56,119	76	350	31.6	+10 38	8.7	8.8	A5	3	..	10368b
27	64	31.1	-79 38	9.5	9.6	A3	2	..	20538b	77	492	31.6	-13 20	7.65	8.43	G5	7	..	40988b
28	179	31.2	+68 37	8.9	8.9	Ao	2	..	37308i	78	1020	31.6	-25 31	9.9	10.1	Ko	2	..	45148b
29	346	31.2	+63 18	8.6	8.7	A2	2	..	37341i	79	903	31.6	-27 8	9.7	10.1	G5	2	..	45148b
30	445	31.2	+62 8	7.48	7.48	Ao	4	2,3	38974i	80	904	31.6	-27 36	9.5	10.2	K5	2	..	45148b
31	638	31.2	+45 39	9.2	9.5	F	1	R	38072i	81	667	31.6	-40 19	8.2	9.1	Ko	5	..	24090b
32	375	31.2	+24 13	7.37	7.79	F5	3	..	37383i	82	552	31.7	+54 0	8.9	8.9	Ao	2	..	38164i
33	403	31.2	+17 30	9.1	9.2	A3	3	..	38944i	83	641	31.7	+45 39	8.2	8.6	F5	3	..	37578i
34	360	31.2	+12 1	5.68	6.10	F5	8	..	37284i	84	523	31.7	+38 31	7.9	8.0	A2	6	0,4	37577i
35	399	31.2	+ 8 42	9.0	9.3	Fo	5	..	10368b	85	476	31.7	+34 44	7.67	8.45	G5	3	..	37386i
36	483	31.2	-19 35	9.4	11.3	Ko	1	..	45672b	86	453	31.7	+ 2 2	9.4	9.4	A	2	..	37541i
37	488	31.2	-20 19	9.9	10.4	F8	1	..	14876b	87	410	31.7	- 3 36	8.7	8.7	Ko	6	..	14901b
38	899	31.2	-26 58	10.2	10.1	F8	2	..	45148b	88	503	31.7	-17 33	9.4	9.7	F2	4	3,2	45672b
39	664	31.2	-40 25	9.6	9.7	Ko	3	..	24090b	89	487	31.7	-19 24	9.9	11.3	Ko	1	..	45672b
40	865	31.2	-42 33	7.4	8.2	Mb	6	0,3-	12267b	90	459	31.7	-21 48	8.5	8.9	Ko	5	..	14876b
41	212	31.2	-61 25	6.90	7.1	F2	4	3,10	8861b	91	936	31.7	-26 4	9.7	11.0	K2	1	..	45148b
42	164	31.2	-70 33	8.9	9.9	Ko	5	0,4	20429b	92	165	31.7	-70 11	8.9	9.7	G5	5	..	20429b
43	602	31.3	+57 23	8.5	8.3	B2	4	R	38164i	93	497	31.8	+58 24	7.8	8.8	Ko	4	5,4	38164i
44	666	31.3	+47 27	8.6	9.0	F5	2	..	38072i	94	586	31.8	+54 46	9.5	10.3	G5	1	..	38164i
45	444	31.3	+29 59	7.41	7.41	Ao	6	..	38061i	95	461	31.8	-15 5	6.96	7.96	Ko	..	..	56,74
46	376	31.3	+24 13	6.57	6.99	F5	6	..	37383i	96	490	31.8	-20 15	9.4	10.7	G5	2	..	45672b
47	402	31.3	+ 7 18	6.04	7.04	Ko	6	..	37284i	97	832	31.8	-28 39	8.5	9.2	Go	5	..	12242b
48	487	31.3	- 4 55	8.80	9.14	F2	4	..	14901b	98	945	31.8	-29 21	9.5	9.5	Go	2	..	12245b
49	488	31.3	-11 21	10.3	10.9	Go	3	..	40988b	99	186	31.8	-64 55	8.43	9.4	K2	5	..	20429b
50	460	31.3	-14 53	10.8	11.8	K	1	..	40988b	100	591	31.9	+50 20	8.47	8.45	B9	4	1,3	38897i

THE HENRY DRAPER CATALOGUE.

16300

2^h 31^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	410	^{m.} 31.9	^o +27 54	8.7	<i>9.1</i>	F5	3	..	3806ii	51	52I	^{m.} 32.3	^o +35 56	8.8	<i>9.4</i>	Go	2	..	37404i
2	389	31.9	+20 9	6.93	<i>7.7I</i>	G5	4	0,4	3743ii	52	39I	32.3	+19 38	8.6	<i>8.9</i>	Fo	3	5,3	37383i
3	400	31.9	+6 51	9.8	<i>10.3</i>	F8	2	0,I	12026b	53	365	32.3	+11 51	7.72	<i>8.50</i>	G5	4	..	37284i
4	451	31.9	-2 16	9.4	<i>9.8</i>	F5	3	..	14901b	54	492	32.3	-11 15	9.6	<i>10.1</i>	F8	3	..	40988b
5	433	31.9	-4 0	8.7	<i>8.8</i>	A2	5	..	14901b	55	493	32.3	-11 38	8.4	<i>9.0</i>	Go	7	..	40988b
6	491	31.9	-20 15	9.6	<i>10.4</i>	G5	3	..	14876b	56	492	32.3	-20 33	7.08	<i>7.9</i>	Ko	10	..	14876b
7	958	31.9	-30 28	5.79	<i>6.8</i>	G5	10	R	41079b	57	462	32.3	-21 44	9.6	<i>10.4</i>	G5	1	..	45672b
8	823	31.9	-45 30	9.4	<i>10.2</i>	Go	2	..	39684b	58	1025	32.3	-25 27	7.9	<i>8.3</i>	Go	8	..	14876b
9	65	31.9	-78 55	8.7	<i>9.7</i>	Ko	3	..	20538b	59	943	32.3	-26 8	9.5	<i>9.8</i>	Go	3	..	45148b
10	498	32.0	+58 38	8.4	<i>8.2</i>	B	5	..	7195m	60	757	32.3	-39 9	8.2	<i>8.2</i>	G5	6	5,5	24090b
11	500	32.0	+41 42	9.4	<i>9.5</i>	A3	3	..	38086i	61	451	32.3	-53 18	8.9	<i>9.9</i>	G5	2	..	20262b
12	375	32.0	+22 42	8.34	<i>8.76</i>	F5	3	..	37383i	62	605	32.4	+58 4	8.0	<i>8.4</i>	F5	2	..	38164i
13	402	32.0	+9 8	9.0	<i>9.8</i>	G5	2	..	37284i	63	606	32.4	+57 15	8.1	<i>8.9</i>	G5	3	..	38164i
14	455	32.0	+2 0	8.2	<i>8.5</i>	Fo	5	..	3754ii	64	561	32.4	+42 52	8.6	<i>9.4</i>	G5	2	..	38086i
15	493	32.0	-8 47	8.7	<i>8.8</i>	A5	4	..	10410b	65	361	32.4	+21 34	9.4	<i>10.0</i>	Go	2	..	37383i
16	462	32.0	-15 38	8.9	<i>9.9</i>	Ko	5	..	40988b	66	420	32.4	+13 43	8.0	<i>8.5</i>	F8	2	..	37284i
17	1157	32.0	-24 21	7.56	<i>8.6</i>	Ko	7	..	14876b	67	492	32.4	-12 44	9.6	<i>10.8</i>	K5	2	..	40988b
18	860	32.0	-37 54	9.3	<i>10.4</i>	Go	4	..	45746b	68	1159	32.4	-24 42	8.5	<i>9.3</i>	K2	3	..	14876b
19	789	32.0	-43 14	9.1	<i>9.9</i>	F8	4	..	24090b	69	955	32.4	-32 17	8.6	<i>8.6</i>	Ao	6	..	41079b
20	187	32.0	-64 21	9.0	<i>10.0</i>	Ko	2	..	20429b	70	954	32.4	-32 38	10.9	<i>11.0</i>	A5	1	..	41079b
21	187	32.0	-65 5	9.6	<i>10.4</i>	G5	2	..	20429b	71	826	32.4	-45 11	8.10	<i>9.0</i>	G5	6	0,2	24090b
22	150	32.0	-66 2	9.1	<i>9.7</i>	Go	2	..	20429b	72	792	32.4	-47 31	9.4	<i>9.6</i>	Ao	4	..	39684b
23	43	32.0	-82 27	8.8	<i>8.9</i>	A3	5	..	20538b	73	700	32.4	-48 51	8.6	<i>9.0</i>	Ko	3	..	20262b
24	95	32.1	+78 46	8.0	<i>8.1</i>	A2	3	..	37309i	74	588	32.5	+54 32	9.2	<i>9.2</i>	Ao	2	..	38164i
25	499	32.1	+58 24	9.2	<i>9.8</i>	Go	1	..	38164i	75	563	32.5	+42 48	8.1	<i>9.3</i>	K5	2	..	38086i
26	525	32.1	+38 44	var.	var.	N	..	R	M	76	523	32.5	+35 52	8.0	<i>8.8</i>	G5	3	..	37386i
27	588	32.1	+37 19	6.29	<i>6.7I</i>	F5	6	..	37386i	77	476	32.5	+33 56	8.1	<i>8.5</i>	F5	4	..	37386i
28	411	32.1	+27 37	8.8	<i>9.1</i>	F	1	..	3806ii	78	491	32.5	-5 31	9.0	<i>9.4</i>	F5	5	..	14901b
29	452	32.1	-2 46	7.48	<i>7.82</i>	F2	8	..	14901b	79	973	32.5	-37 45	9.6	<i>10.7</i>	G5	1	..	45746b
30	493	32.1	-13 40	9.04	<i>9.82</i>	G5	3	..	40988b	80	765	32.5	-46 41	8.5	<i>9.6</i>	Go	3	..	39684b
31	489	32.1	-19 44	10.1	<i>11.0</i>	Go	1	..	45672b	81	204	32.5	-60 7	8.9	<i>9.6</i>	F5	2	..	42096b
32	460	32.1	-20 58	10.1	<i>10.1</i>	Go	2	..	45672b	82	190	32.5	-72 53	7.9	<i>8.5</i>	Go	6	..	20539b
33	960	32.1	-30 45	9.4	<i>10.7</i>	G5	2	..	41079b	83	198	32.6	+71 11	7.41	<i>8.41</i>	Ko	4	R	37308i
34	130	32.1	-69 38	9.2	<i>10.2</i>	Ko	3	..	20429b	84	730	32.6	+49 41	8.6	<i>8.7</i>	A2	3	..	38898i
35	39	32.2	+86 37	8.7	<i>9.0</i>	Fo	4	..	3728ii	85	646	32.6	+45 46	7.8	<i>7.8</i>	Ao	5	..	37578i
36	585	32.2	+40 2	9.1	<i>9.1</i>	Ao	2	..	37577i	86	527	32.6	+38 43	7.9	<i>7.9</i>	B9	6	..	37577i
37	402	32.2	+7 10	9.0	<i>9.6</i>	Go	4	0,2	12026b	87	438	32.6	+27 6	8.1	<i>9.5</i>	Mb	2	..	37383i
38	434	32.2	-4 20	8.7	<i>9.1</i>	F5	6	..	14901b	88	991	32.6	-36 15	7.58	<i>8.9</i>	Ma	7	..	41079b
39	518	32.2	-9 52	9.71	<i>10.27</i>	Go	3	..	40988b	89	215	32.6	-61 16	8.2	<i>8.8</i>	Ko	4	..	17048b
40	505	32.2	-17 6	9.0	<i>10.0</i>	Ko	3	..	45672b	90	210	32.6	-62 50	8.4	<i>8.4</i>	Ao	8	..	17048b
41	448	32.2	-17 49	9.0	<i>9.8</i>	G5	1	..	12626b	91	151	32.6	-66 13	8.7	<i>9.7</i>	Ko	4	..	20429b
42	461	32.2	-21 12	8.5	<i>8.5</i>	A3	7	..	14876b	92	165	32.6	-67 50	10.9	<i>11.5</i>	Go	1	..	20429b
43	697	32.2	-48 6	10.1	<i>10.4</i>	Go	1	..	39684b	93	171	32.7	+69 16	8.0	<i>8.0</i>	B8	5	..	37308i
44	717	32.2	-49 45	9.1	<i>9.0</i>	F2	2	..	20262b	94	502	32.7	+58 14	9.2	<i>9.2</i>	Ao	2	..	38164i
45	760	32.2	-50 0	8.58	<i>8.5</i>	F2	4	..	20262b	95	563	32.7	+40 55	9.2	<i>10.0</i>	G5	2	..	37577i
46	616	32.2	-51 17	7.09	<i>8.1</i>	G5	4	..	8860b	96	478	32.7	+32 59	7.05	<i>8.05</i>	Ko	4	..	37386i
47	214	32.2	-61 29	8.8	<i>9.9</i>	Ko	2	..	17048b	97	421	32.7	+30 25	7.21	<i>7.77</i>	Go	5	..	3806ii
48	178	32.2	-73 7	8.9	<i>9.9</i>	Ko	2	..	20539b	98	392	32.7	+19 50	8.6	<i>8.7</i>	A2	3	0,3	37383i
49	448	32.3	+62 10	7.28	<i>7.28</i>	Ao	6	0,4	38984i	99	405	32.7	+7 16	6.46	<i>6.88</i>	F5	6	..	37284i
50	591	32.3	+37 40	6.26	<i>6.26</i>	Ao	7	..	37386i	100	436	32.7	-3 49	5.84	<i>6.84</i>	Ko	10	..	10409b

16400

2^h 32^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	463	32.7	15 28	9.9	10.9	Ko	2	..	40988b	51	347	33.3	+23 38	10.0	10.8	G5	2	..	37383i
2	506	32.7	16 58	9.9	10.2	Fo	2	5,I	45672b	52	378	33.3	+23 7	9.2	9.3	A5	3	..	37383i
3	951	32.7	29 25	7.17	7.8	Go	7	..	12242b	53	456	33.3	- 1 50	8.0	8.3	F2	6	..	10409b
4	902	32.7	35 45	7.53	8.7	Ko	8	..	41079b	54	496	33.3	-11 49	8.8	9.4	Go	6	..	40988b
5	452	32.7	53 28	8.6	9.4	Ko	3	..	20262b	55	896	33.3	-33 30	8.9	9.2	F2	7	..	41079b
6	166	32.7	67 3	9.1	9.9	G5	2	..	20429b	56	798	33.3	-43 23	9.2	8.8	A2	7	2,3	2409ob
7	154	32.7	68 4	10.8	11.1	Fo	2	..	20429b	57	155	33.3	-68 34	10.4	11.0	Go	2	..	20429b
8	180	32.7	73 6	7.8	8.2	F5	6	..	20539b	58	86	33.4	+81 1	5.92	6.92	Ko	6	0,8	37227i
9	90	32.8	+81 26	8.6	9.7	K2	2	..	37309i	59	158	33.4	+71 42	9.2	9.5	Fo	1	..	38972i
10	540	32.8	+61 3	7.75	8.53	G5	1	..	37341i	60	688	33.4	+55 51	7.52	7.80	Fo	6	0,4	38164i
11	470	32.8	-16 38	9.1	10.1	Ko	3	..	45672b	61	609	33.4	+52 22	7.39	7.39	Ao	6	2,3	37320i
12	466	32.8	-21 6	9.4	10.4	K5	3	..	14876b	62	647	33.4	+45 20	8.82	9.24	F5	2	..	37578i
13	995	32.8	-23 8	9.2	9.8	Go	3	..	24597b	63	552	33.4	+44 26	8.2	9.0	G5	3	0,2	37578i
14	1162	32.8	-24 9	8.7	9.2	F8	4	..	14876b	64	566	33.4	+42 34	8.9	8.9	Ao	2	..	38086i
15	1062	32.8	-31 22	8.0	9.0	Fo	5	..	41079b	65	438	33.4	+15 0	9.4	9.9	F8	1	..	38944i
16	893	32.8	-33 7	9.2	9.2	F5	6	..	41079b	66	405	33.4	+ 6 31	8.6	9.6	Ko	4	..	12387b
17	903	32.8	-35 0	5.80	7.3	G5	..	5,R	56,119	67	406	33.4	+ 3 1	6.37	7.15	G5	6	..	37541i
18	795	32.8	-43 43	9.4	10.3	Ko	3	..	2409ob	68	497	33.4	- 8 2	8.7	8.7	Ao	5	..	10410b
19	144	32.8	-71 12	7.9	9.3	Ma	5	0,8	20539b	69	494	33.4	-14 25	9.9	10.5	Go	3	..	40988b
20	448	32.9	+30 7	8.61	9.61	Ko	1	..	38061i	70	507	33.4	-17 35	8.9	9.9	Ko	1	..	12626b
21	57	32.9	-78 48	8.7	8.8	A5	5	..	20538b	71	450	33.4	-17 58	9.6	10.1	F8	3	0,2	45672b
22	565	33.0	+42 23	8.6	9.7	K2	2	0,I	38086i	72	454	33.4	-22 34	8.9	9.5	Go	3	..	14876b
23	394	33.0	+19 18	7.46	8.46	Ko	3	2,3	37431i	73	955	33.4	-29 45	8.53	9.0	Go	3	..	12242b
24	464	33.0	-15 2	9.6	10.4	G5	3	..	40988b	74	964	33.4	-32 42	10.0	9.8	F8	2	..	41079b
25	894	33.0	-33 20	9.5	10.1	G5	2	..	41079b	75	740	33.4	-41 10	8.4	8.3	G5	5	0,3	2409ob
26	904	33.0	-35 25	9.5	11.0	K2	1	..	41079b	76	212	33.4	-62 3	9.2	9.6	F5	3	..	17048b
27	191	33.0	-72 47	6.96	7.4	F8	8	..	20539b	77	22	33.4	-88 50	7.88	7.9	Ao	4	..	22566b
28	95	33.1	+78 10	8.1	8.9	G5	2	..	37309i	78	481	33.5	+33 5	8.3	8.6	Fo	3	..	37386i
29	541	33.1	+60 51	7.8	8.1	Fo	3	..	37341i	79	349	33.5	+23 54	8.8	8.9	A2	3	..	37383i
30	550	33.1	+44 25	8.1	8.1	B9	4	..	37578i	80	439	33.5	+14 26	7.30	8.30	Ko	4	5,3	37284i
31	412	33.1	+27 28	8.7	9.5	G5	1	..	38061i	81	495	33.5	-20 37	9.4	10.4	G5	3	..	45672b
32	362	33.1	+21 32	5.36	5.42	A2	9	3,R	37431i	82	997	33.5	-36 35	8.6	9.2	G5	4	..	41079b
33	495	33.1	-12 10	9.9	10.4	F8	3	..	40988b	83	983	33.5	-37 24	8.6	9.5	F8	4	..	45746b
34	495	33.1	-13 34	7.78	8.28	F8	7	..	40988b	84	227	33.6	+66 49	8.5	8.9	F5	3	..	37308i
35	959	33.1	-31 55	9.3	9.2	A2	6	..	41079b	85	722	33.6	+49 8	6.51	6.51	Ao	..	R	1663c
36	961	33.1	-32 43	10.2	10.7	G	1	..	41079b	86	432	33.6	+25 27	8.9	9.2	Fo	3	..	37383i
37	952	33.1	-34 5	9.5	9.8	Ko	3	..	41079b	87	372	33.6	- 1 40	9.32	9.60	Fo	3	..	10409b
38	758	33.1	-39 21	8.7	8.3	F2	6	2,4	2409ob	88	498	33.6	- 7 58	8.7	9.0	Fo	4	..	10410b
39	199	33.2	+71 9	8.0	8.0	Ao	2	..	37308i	89	497	33.6	-12 5	9.9	10.5	Go	2	..	40988b
40	221	33.2	+68 3	8.0	8.0	B8	3	..	37308i	90	497	33.6	-13 27	9.3	10.3	Ko	2	..	40988b
41	686	33.2	+56 8	9.9	9.9	A	1	..	38164i	91	493	33.6	-19 9	9.6	11.3	G5	1	..	45672b
42	592	33.2	+54 53	8.6	8.6	Ao	3	..	38164i	92	909	33.6	-34 58	8.78	10.1	K2	2	..	41079b
43	591	33.2	+54 34	8.9	9.0	A2	3	..	38164i	93	211	33.6	-76 20	6.96	6.8	F2	10	..	14358b
44	593	33.2	+39 42	9.2	9.8	G	2	..	37577i	94	610	33.7	+57 23	8.5	8.5	Ao	3	..	38164i
45	372	33.2	+ 5 51	9.0	9.5	F8	2	..	12387b	95	685	33.7	+57 5	8.7	8.7	B9	2	..	38164i
46	998	33.2	-23 25	6.89	7.9	G5	9	..	14876b	96	596	33.7	+39 25	8.6	10.0	Mb	2	0,I	37577i
47	448	33.2	-55 57	8.8	9.0	Fo	4	..	24229b	97	422	33.7	+14 5	8.2	8.6	F5	2	..	37284i
48	683	33.3	+56 53	7.13	8.13	Ko	6	0,6	38164i	98	353	33.7	+10 14	9.6	10.1	F8	2	..	12026b
49	682	33.3	+56 25	8.6	8.6	Ao	4	0,4	38164i	99	352	33.7	+10 13	6.85	7.85	Ko	6	..	37284i
50	554	33.3	+53 51	9.2	9.2	Ao	2	..	38164i	100	407	33.7	+ 8 29	7.9	7.9	Ao	4	..	37284i

THE HENRY DRAPER CATALOGUE.

16500

2^h 33^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	373	<i>m.</i> 33.7	<i>o</i> + 5 18	9.16	9.30	A5	4	..	12387b	51	960	<i>m.</i> 34.1	<i>o</i> - 29 12	9.7	10.4	F8	3	..	45148b
2	498	33.7	- 13 48	8.7	9.0	Fo	5	..	40988b	52	874	34.1	- 37 57	8.9	8.8	Ko	4	..	45746b
3	956	33.7	- 34 6	7.43	8.5	Ko	6	..	41079b	53	797	34.1	- 44 19	9.5	9.4	Fo	5	..	24090b
4	156	33.7	- 68 35	8.7	8.7	B8	6	..	20429b	54	769	34.1	- 46 3	8.8	10.5	Mb	4	..	24090b
5	222	33.8	+ 67 38	7.8	8.9	K2	4	..	37308i	55	457	34.1	- 52 58	5.26	6.2	A5	..	5,8R	56,119
6	529	33.8	+ 60 8	8.46	8.52	A2	4	0,2	38164i	56	504	34.2	+ 58 33	7.18	7.60	F5	7	0,6	38164i
7	530	33.8	+ 59 18	8.2	8.2	B9	3	..	38164i	57	557	34.2	+ 54 6	8.5	9.5	Ko	2	..	38164i
8	675	33.8	+ 48 1	8.0	8.0	Ao	4	..	38072i	58	567	34.2	+ 40 54	8.9	9.5	Go	2	..	38086i
9	487	33.8	+ 35 0	8.8	8.8	Ao	3	..	37404i	59	485	34.2	+ 34 10	8.1	8.9	G5	4	..	37386i
10	482	33.8	+ 33 38	8.1	8.4	Fo	3	..	37404i	60	462	34.2	- 2 20	8.3	8.9	Go	5	..	10409b
11	481	33.8	+ 33 32	7.75	8.53	G5	4	..	37404i	61	500	34.2	- 13 26	8.37	8.87	F8	5	..	40988b
12	483	33.8	+ 33 4	7.9	8.9	Ko	4	..	37404i	62	496	34.2	- 14 3	9.1	9.4	F2	3	..	40988b
13	484	33.8	+ 32 23	8.15	9.15	Ko	3	..	37404i	63	974	34.2	- 30 44	10.4	10.4	Go	2	..	41079b
14	350	33.8	+ 24 2	9.1	9.5	F5	3	..	37383i	64	968	34.2	- 32 29	8.9	9.5	F8	4	..	41079b
15	495	33.8	- 14 44	9.76	10.32	Go	3	..	40988b	65	458	34.2	- 53 18	9.3	9.7	Go	3	..	20262b
16	871	33.8	- 38 14	10.2	8.8	Go	3	..	45746b	66	598	34.3	+ 39 41	8.9	8.9	Ao	3	..	37577i
17	743	33.8	- 41 16	9.6	8.6	F5	4	..	24090b	67	463	34.3	- 2 30	8.1	8.1	B9	8	..	10409b
18	802	33.8	- 43 40	8.1	9.0	Ko	7	0,3	24090b	68	521	34.3	- 9 58	9.46	10.24	G5	3	..	40988b
19	794	33.8	- 44 6	9.3	9.6	Go	5	..	24090b	69	522	34.3	- 10 15	6.74	7.52	G5	8	E	18191b
20	804	33.8	- 47 4	7.7	8.4	A2	4	..	8860b	70	451	34.3	- 18 37	9.6	9.9	F2	3	3,1	45672b
21	454	33.8	- 53 33	9.2	10.2	K2	1	..	20262b	71	679	34.3	- 40 27	9.2	8.8	F5	5	..	24090b
22	66	33.8	- 19 33	5.29	6.6	Ko	..	0,7R	28,196	72	678	34.3	- 40 51	10.0	9.1	Go	4	..	24090b
23	686	33.9	+ 56 18	9.98	..	Oa	2	..	38164i	73	449	34.3	- 55 55	9.3	9.7	G5	1	..	24290b
24	689	33.9	+ 55 51	7.49	7.47	B9	7	1,6	38164i	74	60	34.3	- 78 3	8.9	9.3	F5	3	R	14358b
25	460	33.9	- 2 1	9.1	9.7	Go	2	..	10409b	75	689	34.4	+ 57 2	8.0	8.8	G5	2	..	38164i
26	469	33.9	- 20 53	7.08	8.3	Ko	6	E	24597b	76	596	34.4	+ 55 4	7.56	7.62	A2	6	2,4	38164i
27	958	33.9	- 28 59	9.9	11.3	G5	1	..	45148b	77	611	34.4	+ 52 16	9.0	9.1	A2	2	..	38897i
28	873	33.9	- 42 20	11.8	9.2	Fo	3	R	24090b	78	679	34.4	+ 47 16	9.2	9.2	Ao	3	0,2	38072i
29	806	33.9	- 47 49	8.9	9.4	Go	3	..	39684b	79	531	34.4	+ 35 36	8.2	9.4	K5	1	..	37404i
30	215	33.9	- 74 27	7.2	7.3	A2	7	..	46019b	80	453	34.4	+ 29 21	7.45	7.43	B9	7	..	38061i
31	188	33.9	- 75 31	8.9	9.4	F8	4	..	46019b	81	442	34.4	+ 0 56	8.6	8.6	B9	3	..	37541i
32	604	34.0	+ 46 35	9.5	9.5	Ao	2	..	38072i	82	406	34.4	- 0 6	4.04	3.85	B2	..	R	1632c
33	650	34.0	+ 45 24	8.9	9.5	Go	2	..	38072i	83	499	34.4	- 8 41	9.0	9.3	F2	2	..	10410b
34	507	34.0	+ 42 4	9.2	9.2	Ao	3	0,2	37577i	84	499	34.4	- 11 58	9.9	10.9	Ko	2	..	40988b
35	533	34.0	+ 38 35	9.4	10.2	G5	2	..	37577i	85	466	34.4	- 15 25	9.6	10.6	Ko	3	..	40988b
36	415	34.0	- 3 1	8.9	9.7	G5	3	..	10409b	86	1044	34.4	- 25 48	8.9	8.6	Fo	6	..	14876b
37	509	34.0	- 16 56	9.9	10.4	F8	2	..	45672b	87	846	34.4	- 27 56	9.2	9.8	K2	3	..	45148b
38	973	34.0	- 30 37	5.79	6.8	F5	..	0,R	56,119	88	915	34.4	- 35 21	9.6	10.1	Go	2	..	41079b
39	1067	34.0	- 31 51	9.2	9.8	A5	2	..	41079b	89	875	34.4	- 38 25	6.47	7.1	F5	9	3,10	12267b
40	764	34.0	- 39 12	9.8	9.4	Ko	1	..	45746b	90	876	34.4	- 41 59	7.2	8.2	Ko	7	2,4	24090b
41	807	34.0	- 47 46	9.5	10.5	K2	1	..	39684b	91	875	34.4	- 42 20	7.1	7.6	G5	6	5,9	12267b
42	222	34.0	- 59 50	9.08	9.9	G5	3	..	17048b	92	44	34.4	- 82 22	9.3	10.4	K2	3	..	20538b
43	27	34.0	- 86 14	9.4	10.4	Ko	1	..	15145b	93	612	34.5	+ 52 15	8.6	9.6	Ko	1	..	38897i
44	613	34.1	+ 57 47	9.2	9.2	B9	3	..	38164i	94	463	34.5	+ 31 53	7.50	7.56	A2	5	0,7	37386i
45	551	34.1	+ 43 40	7.25	7.25	Aop	6	R	37578i	95	352	34.5	+ 23 52	9.8	9.9	A2	2	..	37383i
46	426	34.1	+ 30 53	9.4	9.5	A2	2	..	38061i	96	408	34.5	+ 7 45	8.6	9.6	Ko	2	..	10368b
47	407	34.1	+ 7 55	9.0	10.1	K2	1	..	10368b	97	498	34.5	- 9 36	9.6	10.4	G5	3	..	40988b
48	497	34.1	- 9 21	7.11	7.67	Go	8	E	18191b	98	500	34.5	- 12 10	8.5	9.0	F8	7	..	40988b
49	470	34.1	- 21 28	8.3	9.8	Ma	4	..	24597b	99	471	34.5	- 21 18	8.7	8.7	F8	6	E	24597b
50	1041	34.1	- 25 40	9.5	10.1	Go	4	..	45148b	100	953	34.5	- 26 10	7.39	8.6	K5	8	..	14876b

16600

2^h 34^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	847	34.5	−28 35	9.1	9.5	F5	2	..	12242b	51	802	35.0	−44 35	8.1	9.0	Ko	7	2,3	24090b
2	1072	34.5	−31 1	7.55	8.9	Ko	5	..	41079b	52	147	35.0	−71 14	9.8	10.8	Ko	1	..	20539b
3	745	34.5	−41 36	10.2	9.4	G5	2	..	24090b	53	615	35.1	+58 10	8.6	8.6	Ao	3	..	38164i
4	605	34.6	+47 8	7.7	7.7	Ao	5	..	37578i	54	615	35.1	+51 44	8.8	9.9	K2	1	..	38897i
5	572	34.6	+42 27	8.9	8.9	A	1	..	38086i	55	514	35.1	+42 10	8.08	8.06	B9	4	..	38086i
6	383	34.6	+22 31	9.8	10.2	F5	2	..	37383i	56	568	35.1	+40 28	8.5	9.1	Go	3	5,2	38086i
7	322	34.6	+16 18	7.8	7.9	A2	3	..	37431i	57	399	35.1	+19 34	9.0	9.3	F	2	..	37383i
8	462	34.6	+1 42	8.6	9.8	K5	2	..	12387b	58	408	35.1	− 0 42	8.7	9.5	G5	3	..	10409b
9	497	34.6	−14 42	8.06	8.62	Go	8	..	40988b	59	500	35.1	− 9 18	8.7	9.7	Ko	2	..	18191b
10	1182	34.6	−24 46	8.25	8.6	F2	5	..	14876b	60	498	35.1	−19 25	8.9	9.5	F8	3	0,3	45672b
11	1045	34.6	−24 56	9.1	9.8	G5	3	..	45148b	61	560	35.2	+53 45	8.8	8.8	Ao	2	..	38164i
12	214	34.6	−62 2	9.7	10.8	K2	1	..	17048b	62	734	35.2	+48 13	8.5	8.8	F2	4	..	38072i
13	190	34.6	−64 22	9.0	10.0	Ko	2	..	20429b	63	558	35.2	+45 4	8.42	8.92	F8	4	..	37578i
14	116	34.7	+74 35	8.6	9.2	Go	2	..	38972i	64	353	35.2	+23 56	9.4	10.0	Go	2	..	37383i
15	184	34.7	+69 9	8.9	9.0	A5	2	..	37308i	65	367	35.2	+15 15	8.49	9.56	K2	2	..	38944i
16	462	34.7	+61 56	7.24	7.24	Ao	5	0,4	38984i	66	767	35.2	−39 17	10.6	9.7	Go	1	..	45746b
17	690	34.7	+57 0	8.2	8.2	Ao	4	..	38164i	67	68	35.2	−79 29	7.8	8.8	Ko	5	..	20538b
18	576	34.7	+43 0	9.2	9.2	A	2	R	38086i	68	506	35.3	+58 44	8.6	9.1	F8	2	..	38164i
19	407	34.7	− 0 17	8.2	8.8	Go	3	..	37541i	69	560	35.3	+44 35	7.8	8.9	K5	2	3,2	38898i
20	501	34.7	−12 18	5.01	5.43	F5	..	R	56,74	70	584	35.3	+42 43	8.6	8.6	B9	2	..	38056i
21	502	34.7	−13 45	8.14	8.56	F5	6	..	40988b	71	355	35.3	+11 5	9.6	9.6	Ao	3	..	10368b
22	498	34.7	−20 36	8.5	8.9	Ko	5	E	4597b	72	464	35.3	+ 1 27	8.6	9.4	G5	3	..	37541i
23	957	34.7	−26 43	9.1	9.2	Go	5	..	45148b	73	525	35.3	− 9 53	5.93	6.35	F5	6	..	44326b
24	848	34.7	−28 16	7.26	8.3	Ko	6	..	12242b	74	483	35.3	−16 31	8.3	9.1	G5	5	..	12626b
25	460	34.7	−57 0	9.1	9.7	F8	2	..	42096b	75	484	35.3	−16 44	7.30	7.36	A2	8	..	12626b
26	548	34.8	+61 10	6.99	7.27	Fo	5	..	37341i	76	992	35.3	−37 21	9.0	9.2	G5	3	..	41079b
27	578	34.8	+42 15	8.8	8.8	Ao	2	..	38086i	77	191	35.3	−74 55	8.80	9.9	K5	1	..	46019b
28	443	34.8	+26 38	5.38	5.44	A2	..	0,8	56,74	78	616	35.4	+52 1	9.2	9.3	A3	2	..	38897i
29	443	34.8	+20 46	7.8	9.2	Ma	2	..	37383i	79	586	35.4	+42 21	8.2	8.2	Ao	2	..	38086i
30	424	34.8	+ 4 42	9.0	9.5	F8	2	..	12387b	80	539	35.4	+39 8	8.9	10.3	Ma	1	..	38086i
31	480	34.8	−16 37	9.6	10.2	Go	3	..	45672b	81	536	35.4	+35 24	9.5	9.6	A2	3	..	37404i
32	850	34.8	−28 43	8.9	8.9	F5	4	..	12242b	82	490	35.4	+34 5	var.	var.	Mb	2	R	M
33	681	34.8	−40 44	9.6	9.1	F8	4	..	24090b	83	381	35.4	+25 11	8.04	8.04	Ao	3	..	37383i
34	844	34.8	−45 9	7.95	8.7	G5	6	..	24090b	84	382	35.4	+24 18	9.5	10.1	Go	1	..	37383i
35	843	34.8	−45 10	7.35	7.4	A5	5	0,5	12358b	85	354	35.4	+24 10	9.2	9.6	F5	2	..	37383i
36	460	34.8	−53 25	9.8	9.9	A2	1	..	20262b	86	350	35.4	+ 9 55	8.91	8.91	Ao	5	..	10368b
37	427	34.9	+30 59	8.3	9.3	Ko	3	..	38061i	87	503	35.4	−12 59	10.1	10.9	G5	2	..	40988b
38	436	34.9	+26 12	8.1	8.5	F5	5	..	37383i	88	1189	35.4	−24 21	8.3	8.6	G5	4	..	14876b
39	370	34.9	+13 6	7.7	8.7	Ko	4	..	37284i	89	1051	35.4	−24 54	8.45	8.9	G5	3	..	14876b
40	410	34.9	+ 2 30	8.4	8.8	F5	4	..	12387b	90	919	35.4	−34 57	8.04	9.6	Ko	4	..	41079b
41	692	35.0	+56 8	8.0	8.1	A2	3	2,4	38164i	91	693	35.5	+56 28	8.4	..	Oe	2	..	38164i
42	609	35.0	+46 56	8.9	9.0	A5	2	..	38072i	92	737	35.5	+48 59	8.5	8.9	F5	2	0,1	38898i
43	428	35.0	+30 47	var.	var.	Mc	..	R	M	93	588	35.5	+42 22	8.0	8.0	Ao	2	..	38086i
44	444	35.0	+20 48	7.9	8.7	G5	3	..	37383i	94	337	35.5	+18 23	6.89	6.87	B9	6	..	37431i
45	398	35.0	+19 45	8.7	9.5	G5	2	..	37383i	95	498	35.5	− 5 27	8.8	9.8	Ko	3	..	10409b
46	414	35.0	+18 10	7.8	8.2	F5	3	5,2 R	38944i	96	504	35.5	− 7 51	8.9	9.3	F5	2	..	10410b
47	374	35.0	+ 5 41	6.25	6.59	F2	6	2,7	37284i	97	503	35.5	−12 36	9.9	10.5	Go	4	..	40988b
48	498	35.0	−14 42	9.46	10.46	Ko	3	..	40988b	98	805	35.5	−44 13	8.6	8.2	A3	4	2,8	12267b
49	474	35.0	−20 52	7.38	8.1	Go	7	E	24597b	99	462	35.5	−53 23	8.8	7.7	F8p	3	R	8860b
50	958	35.0	−26 1	7.79	8.6	Ko	6	..	14876b	100	223	35.5	−59 26	8.6	9.3	Go	4	..	17048b

16700

2^h 35^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	28	35.5	-86 10	7.76	7.9	Fo	8	5,7	20538b	51	501	36.0	-19 10	8.7	8.7	Ko	5	0,4-	12626b
2	616	35.6	+57 47	8.0	8.6	Go	4	0,4	38164i	52	460	36.0	-22 0	8.3	8.7	Go	7	..	24597b
3	610	35.6	+50 13	9.02	9.80	G5	1	0,1	38072i	53	1196	36.0	-24 34	7.45	7.8	F5	8	..	14876b
4	653	35.6	+45 14	8.97	8.95	B9	3	..	37578i	54	814	36.0	-43 20	4.53	4.59	A2	..	R	28,196
5	589	35.6	+42 22	8.0	8.0	Ao	1	..	38086i	55	731	36.0	-49 35	7.83	9.0	K5	4	..	20262b
6	570	35.6	+40 59	7.87	8.87	Ko	4	0,3	38086i	56	216	36.0	-61 48	8.3	9.6	Ma	4	..	17048b
7	411	35.6	+7 48	8.0	8.4	F5	2	..	37284i	57	149	36.0	-71 35	9.0	10.0	Ko	3	..	20539b
8	412	35.6	+2 28	7.8	8.6	G5	4	0,4	37541i	58	117	36.1	+74 59	7.12	7.20	A3	7	..	37555i
9	469	35.6	-2 21	8.7	9.7	Ko	4	..	10409b	59	510	36.1	+58 49	8.6	8.9	F2	3	2,4	38164i
10	446	35.6	-4 8	9.0	9.8	G5	4	..	10409b	60	604	36.1	+38 11	8.2	9.0	G5	4	5,2-	37577i
11	499	35.6	-4 50	9.65	9.65	Ao	2	..	10409b	61	433	36.1	+30 31	7.21	8.21	Ko	5	..	38061i
12	472	35.6	-14 51	9.11	9.61	F8	4	..	40988b	62	412	36.1	+8 5	7.7	8.7	Ko	4	..	37284i
13	853	35.6	-28 29	8.5	9.5	G5	2	..	12242b	63	373	36.1	+4 0	6.88	6.88	Ao	5	..	37541i
14	968	35.6	-34 19	8.6	8.9	Go	6	..	41079b	64	467	36.1	+1 49	9.4	10.5	K2	3	..	12387b
15	920	35.6	-35 28	7.34	8.9	Ko	6	..	41079b	65	377	36.1	-1 8	5.73	6.15	F5	8	..	37541i
16	995	35.6	-37 18	8.3	8.7	Ko	5	E	41079b	66	506	36.1	-8 18	9.1	10.2	K2	2	..	10410b
17	754	35.6	-41 9	8.9	8.5	G5	4	..	24090b	67	475	36.1	-14 50	9.36	10.43	K2	3	..	40988b
18	508	35.7	+58 26	7.32	7.32	Ao	7	0,6	38164i	68	849	36.1	-44 54	8.95	9.9	Ko	4	..	24090b
19	591	35.7	+42 17	8.0	8.0	B8	2	..	38056i	69	224	36.2	+67 24	5.84	5.90	A2	10	..	37308i
20	542	35.7	+38 52	8.7	9.7	Ko	1	5,1	37404i	70	696	36.2	+56 4	7.8	7.9	A3	4	0,4-	37320i
21	425	35.7	+4 26	7.8	8.1	Fo	6	..	37541i	71	521	36.2	+42 10	7.50	8.28	G5	3	..	37577i
22	527	35.7	-10 2	9.9	10.9	Ko	2	..	40988b	72	612	36.2	+39 50	8.1	8.1	B9	6	R	37577i
23	473	35.7	-14 53	6.58	6.72	A5	..	..	56,74	73	491	36.2	+33 53	7.05	7.83	G5	4	..	37386i
24	1007	35.7	-35 56	8.2	9.6	Ko	3	..	41079b	74	437	36.2	+25 26	8.7	9.1	F5	2	..	37383i
25	461	35.7	-57 27	9.1	9.6	A5	3	..	42096b	75	378	36.2	-1 40	8.97	8.97	Ao	5	..	10409b
26	189	35.8	+68 14	8.6	8.7	A3	4	..	37308i	76	501	36.2	-5 11	8.7	9.0	Fo	4	..	10409b
27	598	35.8	+54 41	5.66	5.61	B8	8	..	37320i	77	170	36.2	-67 44	6.1	7.1	Ko	..	5,8	28,196
28	598	35.8	+42 16	8.0	8.0	B9	6	..	38056i	78	535	36.3	+59 24	7.71	7.69	B9p	3	R	37330i
29	447	35.8	+26 31	8.1	8.1	Ao	4	..	37383i	79	620	36.3	+57 24	8.6	8.4	B	1	..	38164i
30	366	35.8	+21 49	8.3	9.3	Ko	3	..	37383i	80	683	36.3	+47 51	6.56	7.34	G5	7	..	37578i
31	372	35.8	+15 36	8.7	9.1	F5	3	..	38944i	81	565	36.3	+44 34	9.5	9.9	F5	1	..	38072i
32	357	35.8	+10 57	9.1	9.4	Fo	2	..	12026b	82	607	36.3	+42 24	7.9	7.9	B9	4	..	38056i
33	1081	35.8	-31 4	6.54	7.6	G5	8	..	41079b	83	461	36.3	-22 21	8.9	9.8	Ko	4	..	24597b
34	464	35.8	-53 34	8.8	9.3	Ko	4	..	20262b	84	990	36.3	-30 34	8.1	8.1	Go	5	..	41079b
35	616	35.9	+53 6	6.12	7.12	Ko	8	..	37320i	85	977	36.3	-31 54	7.51	7.6	F5	9	..	41079b
36	748	35.9	+50 2	8.77	8.83	A2	2	..	38898i	86	410	36.4	+0 8	6.83	7.61	G5	5	..	37541i
37	614	35.9	+46 37	7.6	7.9	Fo	4	..	37578i	87	530	36.4	-10 11	9.3	9.9	Go	2	..	18191b
38	517	35.9	+41 45	8.4	9.2	G5	3	5,2	38086i	88	504	36.4	-19 2	8.7	9.5	K2	3	0,2	12626b
39	610	35.9	+39 46	4.99	5.55	Go	..	2,8	56,74	89	1003	36.4	-36 55	7.8	8.9	Ko	7	..	41079b
40	377	35.9	+5 39	7.33	8.40	K2	3	..	37541i	90	493	36.5	+33 21	8.3	8.4	A2	4	..	37404i
41	487	35.9	-16 44	9.9	10.5	Go	2	..	45672b	91	419	36.5	+17 20	7.8	8.6	G5	3	..	37431i
42	687	35.9	-40 26	8.6	8.8	K2	5	3,2	24090b	92	413	36.5	+7 16	8.6	9.0	F5	5	3,3	12026b
43	465	35.9	-53 23	6.88	7.1	A5	..	5,6	56,119	93	457	36.5	-18 14	8.1	9.1	Ko	4	2,3	12626b
44	445	35.9	-55 15	8.1	7.7	F5	7	..	24229b	94	456	36.5	-18 28	9.1	10.1	Ko	3	..	45672b
45	619	36.0	+58 2	8.0	8.0	Ao	3	..	38164i	95	464	36.5	-54 50	9.00	9.6	G5	3	..	20262b
46	681	36.0	+47 56	8.0	8.1	A2	5	..	38072i	96	224	36.5	-59 49	9.03	9.3	G5	4	..	17048b
47	573	36.0	+40 50	8.8	9.9	K2	2	..	38086i	97	183	36.5	-73 7	8.3	8.9	Go	5	..	20539b
48	374	36.0	+15 13	8.99	9.05	A2	4	..	38944i	98	355	36.6	+63 36	8.5	9.5	Ko	2	..	38984i
49	505	36.0	-12 16	10.1	11.1	Ko	3	..	40988b	99	474	36.6	+61 51	8.8	8.9	A3	4	..	37341i
50	516	36.0	-17 48	9.6	10.2	Go	1	..	45672b	100	606	36.6	+38 1	9.4	10.2	G5	1	..	37404i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	438	36.6	+26 5	8.9	9.2	Fo	3	..	37383i	51	760	37.0	-41 44	7.5	8.5	K5	5	0,3	24090b
2	353	36.6	+10 8	6.67	7.67	Ko	6	..	37284i	52	205	37.0	-60 0			Ko	5	..	17048b
3	506	36.6	-12 1	10.1	10.7	G	3	..	40988b	53	206	37.0	-60 0	7.22	7.6	A5	7	0,7	17048b
4	511	36.6	-12 59	9.1	9.9	G5	3	..	40988b	54	563	37.1	+44 0	8.4	8.7	F2	2	..	38072i
5	1062	36.6	-24 56	8.70	10.1	K2	3	2,3	45148b	55	614	37.1	+43 7	6.66	6.72	A2	6	..	37578i
6	222	36.6	-74 49	8.77	9.0	A3	4	..	20539b	56	613	37.1	+42 48	8.9	8.9	Ao	2	..	38086i
7	163	36.7	+71 33	8.5	8.6	A2	2	..	37308i	57	615	37.1	+42 12	8.6	8.7	A2	2	..	38056i
8	622	36.7	+57 53	8.9	8.7	B	3	R	38164i	58	525	37.1	+41 26	8.6	9.6	Ko	2	2,2	38086i
9	541	36.7	+36 46	7.9	8.0	A3	4	1,6	37386i	59	543	37.1	+36 29	8.1	8.7	Go	3	..	37386i
10	490	36.7	+32 29	7.60	7.88	Fo	6	..	37404i	60	499	37.1	+35 1	9.2	9.2	A	2	..	37404i
11	403	36.7	+19 35	5.72	5.72	Ao	..	0,8 R	56,74	61	360	37.1	+10 19	6.27	6.27	Ao	8	..	37284i
12	507	36.7	-13 56	8.9	9.5	Go	3	..	40988b	62	505	37.1	-10 51	10.3	10.9	Go	1	..	40988b
13	489	36.7	-15 55	9.6	10.7	K2	1	..	45672b	63	1066	37.1	-25 16	9.4	9.5	F5	3	..	45148b
14	916	36.7	-33 5	9.6	9.4	F2	2	..	41079b	64	215	37.1	-61 58	7.9	7.9	B9	8	..	17048b
15	689	36.7	-40 17	4.06	5.7	Ko	..	R	28,196	65	191	37.1	-65 46	9.0	9.4	F5	5	..	20429b
16	217	36.7	-60 59	7.8	9.1	Ko	7	..	17048b	66	154	37.1	-66 8	9.2	10.0	G5	2	..	20429b
17	170	36.7	-70 33	10.0	10.8	G5	3	..	20429b	67	608	37.2	+37 45	8.2	9.0	G5	3	..	37577i
18	702	36.8	+56 41	8.2	8.3	A2	3	..	38164i	68	494	37.2	+33 45	8.2	8.2	Ao	5	2,3	37404i
19	492	36.8	+32 26	8.1	8.9	G5	2	..	37404i	69	451	37.2	+26 34	7.7	7.7	Ao	3	..	37383i
20	331	36.8	+17 11	9.0	9.1	A2	2	..	38944i	70	389	37.2	+22 27	8.7	9.0	Fo	2	..	37383i
21	330	36.8	+16 32	8.4	8.5	A2	4	..	37431i	71	354	37.2	+ 9 23	9.8	10.6	G5	1	..	12026b
22	377	36.8	+12 24	8.4	8.8	F5	2	..	37284i	72	410	37.2	+ 6 34	9.4	10.0	Go	1	..	12026b
23	409	36.8	+ 6 28	8.6	9.7	K2	2	..	12387b	73	509	37.2	- 8 48	8.8	9.8	Ko	4	E	18191b
24	421	36.8	- 3 39	6.11	7.11	Ko	..	0,9	56,74	74	491	37.2	-16 35	9.9	10.5	Go	2	5,1	45672b
25	478	36.8	-14 59	6.05	6.47	F5	..	0,R	56,74	75	478	37.2	-21 36	8.5	8.9	Go	6	..	24597b
26	477	36.8	-15 32	7.30	7.72	F5	5	..	45171b	76	863	37.2	-27 57	8.1	9.3	Go	2	..	12242b
27	490	36.8	-16 29	9.6	10.7	K2	2	..	12626b	77	692	37.2	-40 2	9.8	8.9	Go	3	..	24090b
28	519	36.8	-17 12	8.3	8.4	A2	3	..	12626b	78	328	37.2	-52 13	7.9	8.2	F5	7	..	20262b
29	1007	36.8	-37 9	9.5	10.5	Ko	2	..	45746b	79	467	37.2	-53 15	9.1	9.0	F8	4	..	20262b
30	884	36.8	-37 59	9.5	8.8	Go	3	..	45746b	80	224	37.2	-58 6	8.5	9.6	Mb	3	..	24229b
31	190	36.9	+68 12	8.8	8.9	A5	2	..	37308i	81	706	37.3	+56 18	9.5	9.5	A	1	R	38164i
32	703	36.9	+56 14	9.0	8.8	B	2	R	38164i	82	577	37.3	+41 5	7.46	7.46	Ao	7	0,6	38086i
33	617	36.9	+46 32	7.9	7.9	Ao	5	..	38898i	83	405	37.3	+19 48	8.0	8.8	G5	3	0,2	37383i
34	544	36.9	+38 57	8.1	8.1	Ao	3	..	38056i	84	411	37.3	+ 6 52	9.4	10.4	Ko	1	..	12026b
35	411	36.9	+ 0 8	7.78	8.06	Fo	5	..	37541i	85	382	37.3	- 1 44	9.02	9.58	Go	3	..	10409b
36	504	36.9	-10 57	9.9	10.5	Go	2	..	40988b	86	476	37.3	- 2 46	9.6	10.6	Ko	2	..	10409b
37	505	36.9	-19 46	10.1	10.9	F8	2	..	45672b	87	472	37.3	- 7 36	9.6	10.2	Go	2	..	10410b
38	1017	36.9	-36 20	9.5	9.8	Go	3	..	41079b	88	502	37.3	-20 37	9.3	10.4	G5	3	..	24597b
39	775	36.9	-39 5	9.8	9.4	Go	2	..	45746b	89	920	37.3	-33 32	9.2	8.7	F5	4	..	41079b
40	160	36.9	-67 59	10.1	11.1	Ko	3	..	20429b	90	894	37.3	-42 28	8.8	8.8	K2	4	..	24090b
41	175	37.0	+69 50	8.8	8.8	Ao	2	..	37308i	91	192	37.3	-64 43	6.60	6.3	B9	7	..	8861b
42	357	37.0	+63 34	9.2	9.3	A2	2	..	37341i	92	51	37.3	-80 3	8.56	9.1	F5	5	..	20538b
43	623	37.0	+57 23	8.0	9.0	Ko	3	5,4	38164i	93	226	37.4	+67 23	9.0	9.1	A2	2	..	37308i
44	698	37.0	+56 2	9.5	9.6	A5	1	..	38164i	94	561	37.4	+60 58	8.0	8.8	G5	4	0,2	37320i
45	621	37.0	+51 32	8.8	9.2	F5	3	..	38932i	95	746	37.4	+48 48	4.22	4.72	F8	..	R	1663c
46	544	37.0	+35 32	8.5	9.3	G5	2	..	37404i	96	1029	37.4	-23 2	var.	var.	Mc	7	R	24597b
47	448	37.0	+14 48	8.0	8.0	B9	3	..	37431i	97	998	37.4	-30 30	7.38	8.7	K5	4	..	41079b
48	508	37.0	-14 2	8.9	9.9	Ko	3	..	40988b	98	999	37.4	-30 45	9.2	9.9	Go	2	..	41079b
49	501	37.0	-20 1	9.6	9.8	Go	4	..	45672b	99	175	37.4	-63 8	7.7	8.7	Ko	7	..	17048b
50	1008	37.0	-37 22	9.6	10.1	Ko	2	..	45746b	100	701	37.5	+55 19	9.01	9.07	A2	3	..	38164i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	566	37.5	+43 52	5.58	6.36	G5	8	..	37578i	51	460	38.0	+62 19	8.2	8.2	Ao	3	..	37341i
2	510	37.5	-12 39	9.4	10.0	Go	3	..	18191b	52	630	38.0	+57 13	8.6	9.4	G5	2	..	38164i
3	890	37.5	-38 13	9.6	8.3	A5	2	..	12267b	53	613	38.0	+37 44	8.5	8.5	Ao	3	..	37404i
4	207	37.5	-60 39	9.1	10.8	Ko	2	..	17048b	54	472	38.0	+31 57	7.70	8.70	Ko	5	..	37404i
5	218	37.5	-61 47	9.2	10.5	K2	2	..	17048b	55	441	38.0	+25 14	6.37	6.43	A2	7	..	37383i
6	165	37.6	+71 18	8.0	8.3	Fo	3	..	37308i	56	452	38.0	+20 44	7.67	7.67	Aop	5	1,3,R	37383i
7	289	37.6	+65 19	var.	var.	B8	3	1,4,R	37308i	57	460	38.0	-18 12	9.4	10.4	Ko	2	2,I	45672b
8	424	37.6	+27 17	4.58	4.41	B3	..	0,10	56,74	58	982	38.0	-26 19	8.7	10.1	K2	3	..	24597b
9	339	37.6	+19 0	8.6	9.8	K5	3	3,2	38944i	59	986	38.0	-29 0	9.2	9.0	F5	4	..	12242b
10	506	37.6	-11 0	10.1	10.6	F8	2	..	40988b	60	1024	38.0	-36 41	9.2	9.8	F5	3	..	41079b
11	512	37.6	-14 5	9.3	9.6	F	3	..	40988b	61	893	38.0	-38 32	8.7	9.4	K5	1	..	45746b
12	492	37.6	-16 26	7.37	7.51	A5	8	..	12626b	62	784	38.0	-39 18	8.2	8.2	Go	6	0,2	24090b
13	508	37.6	-19 25	9.6	10.7	G5	2	..	45672b	63	155	38.0	-66 33	7.3	7.8	F8	8	..	20429b
14	869	37.6	-28 22	8.9	8.6	A3	5	..	12242b	64	702	38.1	+56 8	..	..	Ao	4	R	38164i
15	984	37.6	-28 58	8.5	10.0	Ko	2	..	45148b	65	..	38.1	+56 8	7.7	7.7	Ao	3	..	38164i
16	1000	37.6	-30 50	7.64	8.1	G5	6	..	41079b	66	620	38.1	+50 18	8.72	9.79	K2	1	..	38898i
17	977	37.6	-34 38	9.6	9.8	Go	3	..	41079b	67	546	38.1	+35 50	9.5	9.5	Ao	2	..	37404i
18	1022	37.6	-36 2	9.3	10.5	K2	1	..	41079b	68	504	38.1	+34 42	7.22	7.10	B5	6	..	37404i
19	778	37.6	-39 2	9.0	8.3	A5	5	5,2	24090b	69	337	38.1	+17 8	7.9	9.3	Ma	3	..	37431i
20	446	37.6	-54 59	5.26	5.9	F2	..	2,9,R	56,119	70	422	38.1	+ 2 40	3.58	3.64	A2	..	2,R	2141c
21	216	37.6	-62 35	8.3	9.3	Ko	5	..	17048b	71	474	38.1	+ 1 20	8.09	9.44	Ma	3	5,2	10409b
22	618	37.7	+39 28	9.1	9.9	G5	1	..	37577i	72	474	38.1	- 7 4	7.8	8.8	Ko	7	..	10410b
23	361	37.7	+10 17	9.6	10.7	K2	1	..	12026b	73	481	38.1	-20 58	8.9	9.8	G5	4	..	24597b
24	453	37.7	- 4 12	9.4	9.8	F5	4	..	10409b	74	1073	38.1	-25 7	10.2	10.1	A2	3	..	45163b
25	507	37.7	-11 13	9.1	10.1	Ko	2	..	18191b	75	894	38.1	-38 49	5.92	6.9	G5	..	0,9	56,119
26	511	37.7	-12 44	9.6	9.7	A3	4	..	18191b	76	785	38.1	-46 2	8.6	8.8	A3	3	..	12267b
27	509	37.7	-19 38	9.36	10.4	Go	2	..	45672b	77	829	38.1	-47 34	8.0	8.7	Ko	5	..	23791b
28	1070	37.7	-25 5	9.4	10.7	A2	3	..	24597b	78	161	38.1	-68 42	4.26	4.24	B9	..	1,R	28,196
29	1069	37.7	-25 45	8.2	9.8	Ko	2	E	23780b	79	569	38.2	+45 10	8.12	8.62	F8	3	..	37578i
30	895	37.7	-42 7	9.3	8.8	F5	4	..	24090b	80	496	38.2	+32 52	9.2	9.2	Ao	2	..	37404i
31	634	37.7	-51 53	9.3	8.7	Ko	3	..	20262b	81	381	38.2	+12 52	8.06	9.06	Ko	2	..	38944i
32	708	37.8	+56 43	8.2	8.5	Fo	4	..	38164i	82	219	38.2	-61 11	9.1	10.2	F5	2	..	17048b
33	622	37.8	+46 26	6.98	7.40	F5	6	..	37578i	83	378	38.3	+15 41	8.8	9.6	G5	3	..	38944i
34	471	37.8	+ 1 52	8.6	9.6	Ko	4	..	12387b	84	375	38.3	+11 37	8.0	9.0	Ko	5	5,2	12026b
35	454	37.8	- 4 44	9.10	9.66	Go	3	..	10409b	85	423	38.3	+ 2 51	9.6	9.6	Ao	7	..	12387b
36	504	37.8	-19 51	9.83	10.4	Go	3	..	45672b	86	523	38.3	-17 3	10.3	10.9	Go	1	..	45672b
37	946	37.8	-27 47	8.5	9.0	F5	3	..	12242b	87	505	38.3	-20 28	9.6	10.7	Go	1	..	45171b
38	217	37.8	-62 19	9.6	9.9	Fo	3	..	17048b	88	1076	38.3	-25 45	8.1	9.2	G5	4	..	23780b
39	173	37.8	-67 24	7.28	8.7	Ko	6	..	20429b	89	819	38.3	-42 58	7.4	8.5	Ko	7	2,4	24090b
40	154	37.8	-71 7	6.69	8.2	Ko	8	..	20539b	90	468	38.3	-53 45	7.9	9.0	K2	4	..	20262b
41	185	37.8	-73 18	8.2	8.5	F2	6	..	20539b	91	452	38.3	-56 24	8.3	9.0	F5	2	..	24229b
42	602	37.9	+54 32	8.0	8.0	Ao	2	..	38164i	92	758	38.4	+49 24	8.6	9.7	K2	1	7,1	38898i
43	527	37.9	+41 26	9.0	9.4	F5	1	..	38086i	93	524	38.4	-17 21	9.4	9.9	F8	4	3,1	45672b
44	362	37.9	+23 39	7.77	8.77	Ko	3	..	37383i	94	506	38.4	-20 43	7.53	8.9	Go	7	R	24597b
45	473	37.9	- 6 54	8.5	9.1	Go	4	..	10410b	95	981	38.4	-34 14	9.3	9.8	Ko	3	..	41079b
46	508	37.9	-10 49	9.1	9.7	Go	3	E	18191b	96	897	38.4	-38 3	8.9	9.2	Ko	2	..	45746b
47	522	37.9	-17 10	9.9	10.7	G5	1	..	45672b	97	623	38.5	+51 10	8.6	8.6	Ao	3	..	38932i
48	465	37.9	-21 53	8.7	9.8	Ma	5	..	24597b	98	499	38.5	+34 0	9.1	9.2	A5	3	..	37404i
49	930	37.9	-35 16	8.3	8.9	A2	8	..	41079b	99	356	38.5	+ 9 50	9.1	10.1	Ko	1	..	12026b
50	225	37.9	-58 34	7.9	8.5	F8	5	..	24229b	100	415	38.5	- 0 46	8.5	9.1	Go	4	..	10409b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	426	38.5	- 2 58	6.64	7.64	Ko	..	0,10	56,74	51	641	39.1	- 51 14	5.42	6.8	F5	..	3,7 R	56,119
2	512	38.5	-19 28	9.3	9.2	F5	6	..	24597b	52	530	39.2	+42 7	8.5	8.6	A2	3	..	38086i
3	510	38.5	-19 46	9.03	9.5	F8	7	..	24597b	53	502	39.2	+33 54	8.7	8.7	Ao	4	..	37404i
4	987	38.5	-26 32	9.1	10.7	Mb	2	0,2	45148b	54	456	39.2	+28 26	8.5	9.5	Ko	1	..	38061i
5	870	38.5	-28 35	6.83	7.9	Go	9	..	12242b	55	390	39.2	+22 58	8.1	8.6	F8	2	..	37383i
6	832	38.5	-46 57	6.19	7.2	G5	6	0,10	8860b	56	481	39.2	- 6 50	8.4	9.8	Ma	4	..	10410b
7	455	38.6	+29 3	7.06	7.34	Fo	8	..	38061i	57	495	39.2	-16 12	8.7	9.9	K5	2	..	12626b
8	428	38.6	+27 35	7.9	8.0	A2	3	..	37383i	58	484	39.2	-21 0	10.5	11.3	G5	1	..	45171b
9	454	38.6	+15 9	8.49	8.83	F2	4	..	38944i	59	1080	39.2	-25 53	9.1	10.1	K5	3	3,1	24597b
10	385	38.6	+ 5 50	9.0	9.6	Go	2	..	12387b	60	985	39.2	-34 31	7.20	8.5	Ko	8	..	41079b
11	433	38.6	+ 5 9	9.46	9.46	Ao	3	2,2	12026b	61	767	39.2	-41 41	9.0	8.2	F2	7	3,4	24090b
12	425	38.6	+ 2 24	8.4	9.2	G5	2	..	37541i	62	178	39.2	-67 48	9.6	10.0	F5	3	..	20429b
13	461	38.6	-18 47	8.9	9.0	A5	4	..	24597b	63	624	39.3	+52 45	8.0	9.2	K5	1	..	38897i
14	453	38.6	-56 44	7.4	8.4	Ko	5	..	24229b	64	570	39.3	+43 46	9.4	9.5	A2	2	..	38086i
15	175	38.6	-67 32	9.7	10.8	K2	2	..	20429b	65	386	39.3	+ 5 14	7.96	8.74	G5	3	..	37541i
16	528	38.7	+41 46	8.6	8.7	A3	2	R	38086i	66	453	39.3	+ 1 5	9.14	9.42	Fo	3	..	10409b
17	426	38.7	+17 21	6.47	7.47	Ko	6	..	37431i	67	509	39.3	- 4 56	8.70	9.88	K5	2	0,1	10409b
18	456	38.7	+14 40	8.6	9.0	F5	2	..	37431i	68	485	39.3	-21 14	10.1	11.6	K5	1	..	45171b
19	197	38.7	-75 9	9.3	10.5	K5	1	..	46019b	69	487	39.3	-21 29	9.9	10.7	Go	3	..	24597b
20	45	38.7	-81 56	9.5	9.8	F2	4	..	20538b	70	800	39.3	-50 10	7.69	7.8	F5	3	..	8860b
21	711	38.8	+56 25	9.5	9.5	Ao	1	..	38164i	71	137	39.3	-69 31	8.5	9.3	G5	5	..	20429b
22	761	38.8	+49 47	8.5	9.0	F8	3	..	38932i	72	138	39.3	-69 40	6.66	7.1	Go	9	..	20539b
23	438	38.8	+31 3	8.9	9.0	A2	2	..	37404i	73	173	39.3	-70 21	8.7	9.5	G5	5	5,3	20429b
24	409	38.8	+20 9	8.90	9.90	Ko	2	..	37383i	74	198	39.3	-75 21	10.0	10.1	A2	1	..	46019b
25	1099	38.8	-31 30	7.51	8.4	Go	8	..	41079b	75	346	39.4	+64 16	8.4	9.2	G5	2	..	37341i
26	167	38.9	+71 57	8.06	8.84	G5	3	0,3	37555i	76	589	39.4	+40 30	7.67	7.67	Ao	5	0,3	38086i
27	760	38.9	+50 11	9.42	9.98	Go	2	..	38932i	77	456	39.4	+20 58	9.4	9.7	F	1	..	37383i
28	750	38.9	+48 32	8.6	9.6	Ko	1	5,1	38072i	78	420	39.4	- 0 2	8.6	8.9	Fo	3	..	10409b
29	501	38.9	+33 55	8.7	8.7	Ao	5	..	37404i	79	387	39.4	- 1 27	9.4	9.8	F5	3	..	10409b
30	413	38.9	+ 6 58	8.2	8.7	F8	3	E	37541i	80	516	39.4	-12 54	7.66	8.66	Ko	6	..	18191b
31	479	38.9	- 7 37	8.9	9.2	F2	3	..	10410b	81	519	39.4	-14 17	4.39	4.27	B5	..	R	56,74
32	515	38.9	-12 19	8.8	9.8	Ko	3	..	18191b	82	875	39.4	-28 20	7.63	8.3	G5	5	..	12242b
33	622	39.0	+52 49	8.0	9.1	K2	1	..	38897i	83	939	39.4	-33 29	6.84	7.7	G5	8	..	41079b
34	692	39.0	+47 43	var.	var.	B9	3	R	38072i	84	899	39.4	-38 22	8.2	8.2	G5	2	..	12267b
35	366	39.0	+23 46	7.7	8.0	Fo	4	..	37383i	85	199	39.4	-75 16	9.1	10.3	K5	1	..	46019b
36	457	39.0	+14 53	5.80	5.75	B8	7	R	37431i	86	541	39.5	+60 9	6.68	6.82	A5	6	..	37341i
37	524	39.0	- 6 26	7.04	7.46	F5	8	..	10409b	87	517	39.5	+58 53	9.2	9.2	Ao	2	..	38164i
38	525	39.0	- 6 46	8.7	9.8	K2	4	..	10410b	88	632	39.5	+57 19	7.54	7.35	B2	4	..	38164i
39	515	39.0	- 8 20	6.64	7.64	Ko	7	..	18191b	89	704	39.5	+55 28	8.41	9.19	G5	4	5,3	37320i
40	462	39.0	-17 54	10.1	10.7	Go	1	..	45672b	90	567	39.5	+53 39	7.27	7.61	F2	6	..	37320i
41	957	39.0	-26 57	8.5	8.7	A3	5	..	45148b	91	627	39.5	+50 13	8.02	8.08	A2	3	..	38873i
42	208	39.0	-60 25	9.0	9.6	Go	4	..	17048b	92	767	39.5	+49 14	7.8	8.8	Ko	3	0,1	38072i
43	603	39.1	+55 1	8.6	9.6	Ko	1	..	38164i	93	377	39.5	+12 1	5.16	5.24	A3	10	R	37284i
44	619	39.1	+37 40	8.07	8.07	Ao	5	..	37404i	94	359	39.5	+ 9 42	4.36	4.64	Fo	..	0,4 R	2322c
45	498	39.1	+32 20	9.2	9.7	F8	1	..	37404i	95	387	39.5	+ 5 21	8.61	8.67	A2	3	..	37541i
46	455	39.1	+21 11	7.8	8.6	G5	4	5,2	37383i	96	1221	39.5	-24 34	9.7	10.1	Ko	3	..	24597b
47	416	39.1	+ 8 49	8.7	9.3	Go	7	..	12026b	97	1001	39.5	-29 14	8.0	9.3	Ko	4	..	12242b
48	514	39.1	- 9 36	9.0	9.8	G5	2	..	18191b	98	769	39.5	-40 58	6.34	6.6	Ao	..	R	56,119
49	486	39.1	-15 11	9.9	9.9	A	1	..	12626b	99	95	39.6	+81 59	8.7	9.2	F8	5	..	37309i
50	1040	39.1	-23 5	9.7	9.8	F5	5	..	24597b	100	752	39.6	+48 57	8.9	9.7	G5	2	0,2	38072i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	532	39.6	+41 30	8.2	9.3	K2	2	..	38086i	51	421	40.0	+ 7 20	8.6	9.4	G5	3	..	12026b
2	628	39.6	+40 10	7.52	7.50	B9	5	1,3	38086i	52	1225	40.0	-24 50	8.0	8.9	G5	8	..	24597b
3	455	39.6	+26 41	8.8	9.2	F5	2	..	37383i	53	1026	40.0	-36 55	9.6	10.7	G5	1	..	45746b
4	442	39.6	+13 50	7.8	8.2	F5	4	3,4	37284i	54	829	40.0	-43 16	9.4	9.3	F8	4	..	2409ob
5	386	39.6	+12 47	8.0	9.1	K2	1	..	38944i	55	790	40.0	-46 52	9.4	10.0	Ko	1	..	23791b
6	418	39.6	+ 6 48	9.4	10.4	Ko	1	..	12026b	56	171	40.1	+71 21	7.7	8.5	G5	2	0,4 R	37555i
7	480	39.6	- 2 23	8.7	9.0	Fo	5	..	10409b	57	180	40.1	+70 4	8.39	8.73	F2	2	..	37308i
8	489	39.6	-20 57	9.6	10.9	Ko	3	..	24597b	58	628	40.1	+51 43	8.9	8.9	Ao	3	..	38932i
9	878	39.6	-28 52	9.1	9.0	F8	4	..	12242b	59	770	40.1	+49 43	8.0	8.5	F8	3	3,3-	38932i
10	470	39.6	-53 24	8.4	9.6	K2	3	..	20262b	60	458	40.1	+20 16	7.55	7.55	Ao	5	0,4	37383i
11	464	39.6	-57 4	8.2	9.0	Ko	3	..	24229b	61	415	40.1	+19 22	9.0	9.6	Go	2	..	37383i
12	209	39.6	-60 30	9.3	9.6	Ko	5	..	17048b	62	367	40.1	+10 23	9.07	9.21	A5	4	..	12026b
13	218	39.6	-62 51	8.9	9.9	Ko	2	..	17048b	63	437	40.1	+ 4 17	6.02	6.30	Fo	8	..	37541i
14	518	39.7	+58 55	9.2	9.0	B	1	R	38164i	64	523	40.1	-14 1	9.0	9.6	Go	4	..	18191b
15	573	39.7	+45 2	8.07	8.07	Ao	4	..	37578i	65	1228	40.1	-24 24	9.7	10.7	Ma	2	..	24597b
16	630	39.7	+39 26	8.7	9.5	G5	2	5,2	38086i	66	1003	40.1	-29 39	9.4	11.2	Mb	..	..	M
17	623	39.7	+38 6	9.1	9.2	A2	3	..	37404i	67	990	40.1	-32 22	8.9	9.4	Ao	5	..	41079b
18	503	39.7	+34 1	7.9	9.0	K2	3	..	37404i	68	943	40.1	-32 57	6.14	6.6	Ao	..	..	28,196
19	461	39.7	+29 55	8.8	9.6	G5	2	..	38884i	69	1033	40.1	-36 44	7.15	7.8	Go	7	E	24621b
20	368	39.7	+24 3	9.4	10.0	G	1	..	37383i	70	709	40.1	-40 42	8.9	8.9	K2	2	..	2409ob
21	388	39.7	+ 5 55	9.0	10.1	K2	2	..	12387b	71	830	40.1	-43 13	9.2	9.4	Ko	3	..	2409ob
22	388	39.7	- 1 16	8.0	9.0	Ko	5	..	10409b	72	232	40.2	+66 57	8.9	9.3	F5	2	..	37308i
23	521	39.7	-14 6	9.1	10.1	Ko	2	..	18191b	73	519	40.2	+58 14	9.4	9.4	Ao	1	..	38164i
24	1106	39.7	-31 30	9.2	9.9	F8	2	..	41079b	74	756	40.2	+48 41	8.7	8.7	Ao	2	2,2	38898i
25	874	39.7	-45 5	7.50	8.4	Ko	5	5,8	12267b	75	627	40.2	+37 58	9.2	9.5	Fo	2	..	37404i
26	330	39.7	-52 6	8.6	9.6	K5	2	..	20262b	76	342	40.2	+16 35	7.8	8.8	Ko	2	..	37431i
27	630	39.8	+46 13	9.2	9.5	F2	1	..	38072i	77	455	40.2	+ 1 3	9.14	9.56	F5	4	..	10409b
28	590	39.8	+41 2	9.1	10.1	Ko	1	..	38086i	78	55	40.2	-79 55	9.06	9.9	Ko	2	..	20538b
29	435	39.8	+ 4 18	8.80	9.98	K5	3	..	12026b	79	145	40.3	+72 30	7.86	7.81	B8	4	..	37555i
30	422	39.8	- 0 25	8.5	9.5	Ko	2	..	10409b	80	633	40.3	+46 40	9.2	9.2	Ao	2	0,2	38072i
31	516	39.8	- 8 25	8.9	10.0	K2	2	..	18191b	81	477	40.3	+31 35	8.6	9.6	Ko	2	..	37404i
32	514	39.8	-10 49	10.1	11.1	Ko	2	..	40988b	82	389	40.3	+ 6 2	9.4	10.5	K2	1	..	12026b
33	517	39.8	-11 55	9.3	9.7	F5	4	..	18191b	83	390	40.3	+ 5 40	8.8	9.9	K2	1	..	12026b
34	996	39.8	-25 56	6.87	7.5	Go	9	..	2378ob	84	456	40.3	+ 1 9	8.84	10.02	K5	3	..	10409b
35	942	39.8	-33 36	7.79	8.8	G5	4	..	41079b	85	516	40.3	-11 37	10.1	10.9	G5	2	..	40988b
36	1032	39.8	-36 46	9.6	9.8	Go	2	..	45746b	86	465	40.3	-18 12	9.0	9.5	F8	3	..	12626b
37	54	39.8	-80 15	7.74	8.7	G5	8	..	20538b	87	1000	40.3	-26 38	9.9	9.3	A2	3	..	45148b
38	179	39.9	+69 13	var.	var.	Ao	5	2,7 R	37555i	88	140	40.3	-69 7	8.4	8.8	F5	6	..	20429b
39	755	39.9	+48 27	8.9	9.0	A2	2	..	38932i	89	593	40.4	+40 12	8.47	8.97	F8	3	..	38086i
40	631	39.9	+39 24	8.7	9.8	K2	1	..	38086i	90	449	40.4	+25 15	8.11	9.11	Ko	4	..	37383i
41	372	39.9	+21 17	9.1	9.5	F5	2	..	37383i	91	391	40.4	+ 6 8	8.6	9.8	K5	3	..	12387b
42	424	39.9	- 0 36	8.5	9.6	K2	4	..	10409b	92	523	40.4	- 9 45	9.46	10.46	K	1	..	18191b
43	497	39.9	-16 46	9.6	10.7	K2	1	..	45672b	93	519	40.4	-12 35	8.7	9.0	Fo	7	..	18191b
44	1083	39.9	-25 17	8.1	9.2	Ko	4	..	2378ob	94	466	40.4	-18 0	8.4	9.0	Go	3	R	45672b
45	634	40.0	+57 15	8.0	7.8	B	3	R	37330i	95	1230	40.4	-24 14	8.7	9.8	K5	5	..	24597b
46	574	40.0	+43 21	7.72	8.14	F5	3	3,3	38056i	96	472	40.4	-53 17	8.2	9.1	Ko	4	..	20262b
47	550	40.0	+35 51	8.0	8.4	F5	5	..	37404i	97	156	40.4	-66 31	8.9	9.7	G5	2	..	20429b
48	510	40.0	+35 2	7.77	8.77	Ko	3	..	37404i	98	568	40.5	+53 32	7.44	7.44	Ao	2	..	38873i
49	391	40.0	+24 29	9.2	9.5	Fo	3	..	37383i	99	660	40.5	+45 30	8.9	8.9	B9	2	..	38945i
50	446	40.0	+13 31	8.5	8.5	Ao	4	0,3	37284i	100	552	40.5	+38 55	8.8	9.8	Ko	2	..	37404i

17200

2^h 40^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	551	40.5	+38 42	8.7	9.7	Ko	2	..	37404i	51	514	41.0	- 5 22	7.9	8.2	F2	8	..	10409b
2	458	40.5	+26 38	8.7	9.0	Fo	2	..	37383i	52	529	41.0	-16 52	9.6	10.4	G5	2	0,1	45672b
3	361	40.5	+ 9 58	9.1	10.2	K2	2	..	12026b	53	907	41.0	-38 43	9.6	8.8	F8	3	..	45746b
4	542	40.5	+48 16	9.9	10.5	G	2	..	18191b	54	475	41.0	-53 0	6.28	6.8	A2	..	0,7	56,119
5	498	40.5	-15 50	7.54	8.32	G5	6	0,7	12626b	55	226	41.0	-74 45	8.20	9.5	Ko	6	..	20539b
6	518	40.5	-19 0	4.61	5.03	F5	..	R	56,74	56	182	41.1	+70 5	8.19	9.19	Ko	3	2,2	38943i
7	474	40.5	-22 36	7.20	7.3	F8	10	..	24597b	57	630	41.1	+51 9	7.6	7.6	Ao	2	..	37967i
8	71	40.5	-79 10	8.4	8.7	Fo	5	..	20538b	58	597	41.1	+40 35	9.1	9.4	Fo	3	..	38086i
9	605	40.6	+54 31	8.4	8.8	F5	4	..	37320i	59	444	41.1	+30 59	8.0	8.0	B8	6	..	37404i
10	569	40.6	+53 42	8.4	8.4	Ao	4	..	37320i	60	468	41.1	+29 40	9.1	9.2	A3	1	..	38061i
11	757	40.6	+48 40	7.98	8.04	A2	2	..	37967i	61	486	41.1	- 7 14	9.6	10.4	G5	2	..	10410b
12	575	40.6	+43 29	9.27	9.27	Ao	2	..	38086i	62	511	41.1	-20 29	9.4	9.9	F5	4	..	24597b
13	369	40.6	+11 0	9.8	10.4	Go	3	..	12026b	63	494	41.1	-21 34	10.5	11.3	G5	1	..	24597b
14	1002	40.6	-26 34	10.4	10.1	F8	2	..	45148b	64	773	41.1	-41 24	9.2	8.8	A5	3	..	24090b
15	156	40.6	-71 54	7.7	8.5	G5	7	..	20539b	65	914	41.1	-42 52	9.2	8.6	Ko	4	..	24090b
16	46	40.6	-82 40	7.49	7.9	Go	10	..	20538b	66	96	41.2	+81 26	8.6	9.4	G5	3	..	37309i
17	606	40.7	+55 11	6.84	6.84	Ao	6	..	37320i	67	208	41.2	+70 34	8.7	8.8	A3	3	E	38943i
18	576	40.7	+44 51	9.2	9.0	B	1	R	38072i	68	638	41.2	+57 24	8.2	8.2	Ao	3	..	38164i
19	538	40.7	+41 46	7.64	7.64	Ao	4	0,8	38056i	69	634	41.2	+37 24	7.08	8.08	Ko	5	..	37404i
20	595	40.7	+41 7	9.2	9.2	Ao	2	..	38086i	70	913	41.2	-42 18	9.3	8.5	Ko	5	0,2	24090b
21	344	40.7	+18 25	8.4	8.5	A5	3	..	37383i	71	471	41.2	-54 44	var.	var.	Mc	..	R	M
22	420	40.7	+ 6 50	8.6	8.9	F2	5	..	12387b	72	698	41.3	+47 46	7.8	8.8	Ko	2	5,1	38932i
23	524	40.7	-14 24	8.7	10.1	Ma	1	..	18191b	73	635	41.3	+38 1	8.3	8.9	Go	2	2,2	37404i
24	493	40.7	-20 50	7.06	7.1	Ao	10	..	24597b	74	495	41.3	-21 17	9.4	10.4	Ko	4	..	24597b
25	98	40.8	+78 16	8.0	8.8	G5	4	..	37309i	75	1027	41.3	-30 18	8.9	10.0	K5	2	..	41079b
26	468	40.8	+62 52	8.1	8.1	B9	4	..	38984i	76	778	41.3	-41 5	9.3	9.1	G5	2	..	45746b
27	629	40.8	+51 55	8.6	10.0	Ma	2	..	38932i	77	777	41.3	-41 44	8.0	8.5	K5	6	3,3	24090b
28	553	40.8	+35 35	6.38	7.16	G5	6	..	37404i	78	447	41.3	-53 13	8.4	8.7	A5	7	0,3	20262b
29	462	40.8	+14 36	7.8	7.8	Ao	4	0,3	37284i	79	760	41.4	+48 48	8.6	9.0	F5	1	3,1	38072i
30	383	40.8	+11 22	9.0	10.2	K5	3	..	12026b	80	577	41.4	+43 47	7.87	7.87	B9	3	..	37967i
31	520	40.8	-11 7	9.6	9.9	Fo	4	..	18191b	81	556	41.4	+37 4	9.4	9.4	B9	3	..	38086i
32	522	40.8	-11 31	9.0	10.1	K2	1	..	18191b	82	512	41.4	+33 13	8.7	8.8	A3	3	..	37404i
33	454	40.8	-55 13	8.9	9.6	G5	1	..	20262b	83	461	41.4	+26 19	8.2	9.2	Ko	2	..	37383i
34	521	40.9	+58 25	7.48	8.26	G5	4	0,4	38164i	84	374	41.4	+22 10	8.1	8.9	G5	2	..	37383i
35	636	40.9	+57 47	7.8	8.9	K2	1	..	38164i	85	385	41.4	+11 51	8.1	8.1	Ao	4	..	37284i
36	758	40.9	+48 55	8.6	8.7	A2	2	..	38932i	86	999	41.4	-34 17	8.2	8.9	G5	4	..	41079b
37	577	40.9	+44 52	9.0	9.1	A5	2	2,2	38945i	87	882	41.4	-45 48	8.1	8.1	A2	4	0,3	12267b
38	628	40.9	+42 59	7.58	8.58	Ko	3	2,2	38056i	88	210	41.4	-60 29	9.1	10.3	Go	2	..	17048b
39	632	40.9	+37 18	8.5	8.5	B9	4	..	37404i	89	179	41.4	-63 21	7.4	8.0	Go	8	2,4	17048b
40	513	40.9	+35 9	6.34	6.68	F2	7	..	37404i	90	640	41.5	+57 37	7.8	8.4	Go	3	5,4	38164i
41	521	40.9	-12 28	9.9	10.9	Ko	1	..	40988b	91	541	41.5	+41 26	9.0	9.8	G5	2	..	38086i
42	1093	40.9	-25 5	7.7	8.6	F2	6	..	23780b	92	557	41.5	+39 6	8.9	9.3	F5	2	R	38086i
43	50	41.0	+85 28	8.9	8.9	Ao	3	..	37281i	93	386	41.5	+12 2	8.8	8.8	A	2	..	12026b
44	706	41.0	+55 21	7.71	8.71	Ko	4	..	37320i	94	387	41.5	+12 1	8.7	9.3	G	2	..	12026b
45	576	41.0	+43 50	6.74	7.16	F5	5	R	37967i	95	391	41.5	- 1 47	8.22	9.22	Ko	4	..	10409b
46	576	41.0	+43 50	6.74	7.16	A	5	R	37967i	96	515	41.5	- 5 5	9.9	10.5	Go	1	..	46082b
47	596	41.0	+40 28	8.8	9.1	F2	2	..	38086i	97	1050	41.5	-23 10	9.5	10.9	F5	1	..	24597b
48	634	41.0	+39 29	8.3	8.6	F2	4	2,2	38086i	98	1234	41.5	-24 1	9.1	9.8	F2	3	..	24597b
49	554	41.0	+36 9	8.1	8.1	Ao	3	..	37404i	99	1097	41.5	-25 38	9.1	9.8	G5	3	..	23780b
50	439	41.0	+ 5 11	8.06	8.56	F8	4	..	37541i	100	1000	41.5	-34 18	8.9	8.7	Go	7	..	41079b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	845	41.5	m. 47 35	9.5	9.9	G5	2	..	23791b	51	1055	41.9	m. 23 15	10.2	11.3	F5	2	R	24597b
2	754	41.5	49 6	7.6	8.7	K5	5	5.3	23791b	52		41.9	23 15		11.3				
3	195	41.5	63 55	8.8	9.3	F8	3	..	17048b	53	1013	41.9	26 36	9.1	9.3	G5	3	..	45148b
4	157	41.5	66 51	9.5	9.9	F5	2	..	20429b	54	716	41.9	40 9	7.98	7.9	G5	3	..	12267b
5	485	41.6	+61 27	8.6	8.7	A2	2	..	38984i	55	849	41.9	46 59	8.5	9.0	Ko	5	..	23791b
6	574	41.6	+53 44	7.8	8.8	Ko	1	..	37320i	56	548	42.0	+60 12	8.58	8.86	Fo	3	..	38164i
7	636	41.6	+50 29	7.97	7.95	B9	3	..	37967i	57	643	42.0	+57 29	8.0	8.4	F5	2	3,2	37320i
8	699	41.6	+47 38	8.0	8.0	Ao	4	0,2	38932i	58	709	42.0	+56 10	8.4	8.5	A2	5	..	38164i
9	392	41.6	+22 33	7.27	8.05	G5	4	5.4	37431i	59	762	42.0	+48 46	7.40	7.38	B9	6	..	37967i
10	489	41.6	- 7 7	8.2	8.5	Fo	8	0,7	10410b	60	446	42.0	+30 35	8.6	9.0	F5	2	..	37404i
11	522	41.6	- 8 26	8.3	9.1	G5	4	..	18191b	61	462	42.0	+28 50	4.62	5.62	Ko	..	0,10	56,74
12	1008	41.6	-29 6	8.7	9.6	Ko	3	..	12242b	62	393	42.0	+24 16	9.2	10.0	G5	2	..	37383i
13	141	41.6	-69 28	9.4	10.4	Ko	2	..	20429b	63	438	42.0	+18 8	9.0	10.2	K5	1	..	37383i
14	56	41.6	-81 35	9.1	9.1	B9	5	..	20538b	64	424	42.0	+ 8 54	7.66	8.66	Ko	4	..	37284i
15	700	41.7	+48 3	7.7	7.7	B9	3	..	37967i	65	478	42.0	-53 8	9.0	9.4	Go	3	..	20262b
16	579	41.7	+43 13	7.35	7.33	B9	4	..	37967i	66	180	42.0	-63 18	9.5	10.5	Ko	1	..	17048b
17	462	41.7	+20 56	8.3	8.4	A5p	4	R	37383i	67	159	42.0	-71 38	7.7	9.1	Mb	4	0,4	20539b
18	546	41.7	-10 12	9.6	10.6	Ko	2	..	18191b	68	463	42.1	+28 38	8.7	8.7	B8	2	R	37884i
19	512	41.7	-20 42	10.1	11.7	K5	1	..	24597b	69	467	42.1	+14 48	7.64	8.42	G5	4	0,2	37284i
20	1099	41.7	-25 46	7.44	8.6	Ko	7	..	23780b	70	436	42.1	- 3 38	9.0	9.8	G5	2	..	10409b
21	1117	41.7	-30 54	7.73	8.1	Go	7	..	41079b	71	491	42.1	-15 42	8.24	9.42	K5	4	3,4	18191b
22	910	41.7	-38 35	7.8	7.6	F8	4	2,8	12267b	72	809	42.1	-50 34	8.2	8.5	Fo	4	..	20262b
23	787	41.7	-41 10	10.0	9.2	Go	2	..	45746b	73	182	42.1	-67 43	8.8	9.2	F5	6	..	20429b
24	835	41.7	-43 16	6.86	8.0	G5	7	..	12267b	74	142	42.1	-69 35	6.70	8.0	Ko	8	..	20539b
25	797	41.7	-46 43	6.80	8.0	Ko	6	0,4	12267b	75	188	42.1	-73 14	9.5	10.5	Ko	1	..	20539b
26	181	41.7	-67 8	6.30	6.6	F8	..	0,4	28,196	76	13	42.2	+88 34	8.61	8.61	A.	3	..	37793i
27	351	41.8	+64 14	7.48	7.46	B9	5	1,5	37341i	77	120	42.2	+74 20	7.59	7.65	A2	6	..	37555i
28	701	41.8	+47 48	8.6	8.6	Ao	2	..	38072i	78	718	42.2	+56 40	6.53	6.95	F5p	8	R	37320i
29	445	41.8	+30 39	8.06	8.62	Go	3	..	37404i	79	629	42.2	+52 37	8.4	9.4	Ko	3	..	38932i
30	471	41.8	+29 17	7.19	7.17	B9	6	E	37404i	80	633	42.2	+42 20	8.9	9.9	Ko	1	..	38086i
31	369	41.8	+23 14	7.32	7.74	F5	5	0,4	37383i	81	543	42.2	+41 59	8.8	8.8	Ao	2	3,2	38945i
32	347	41.8	+18 59	6.95	7.51	Go	6	5,4	37383i	82	465	42.2	+26 40	8.2	9.2	Ko	4	..	37383i
33	345	41.8	+16 53	8.34	8.42	A3	2	1,2	38944i	83	362	42.2	+ 9 49	9.0	9.4	F5	7	..	12026b
34	346	41.8	+16 48	8.31	8.31	Ao	3	..	38944i	84	430	42.2	+ 2 55	9.0	10.2	K5	2	..	12387b
35	421	41.8	+ 6 51	10.1	10.9	G5	1	..	12026b	85	542	42.2	- 6 11	8.9	9.2	Fo	5	..	10409b
36	429	41.8	+ 2 33	9.4	10.4	Ko	1	..	12387b	86	549	42.2	-10 16	9.4	9.9	F8	4	..	18191b
37	516	41.8	- 4 59	10.3	10.9	Go	1	..	46082b	87	525	42.2	-13 45	8.7	9.5	G5	4	..	18191b
38	540	41.8	- 6 14	8.3	8.9	Go	5	..	10409b	88	529	42.2	-14 22	9.6	10.2	Go	2	..	40988b
39	490	41.8	- 7 24	9.1	10.1	Ko	2	..	10410b	89	497	42.2	-21 29	9.6	10.7	Ko	3	..	24597b
40	527	41.8	-14 24	8.36	9.14	G5	5	..	18191b	90	479	42.2	-22 4	6.49	6.9	F5	8	..	45171b
41	1118	41.8	-31 50	8.9	9.4	Ao	5	..	41079b	91	1059	42.2	-23 5	9.1	10.4	Ko	4	..	24597b
42	1002	41.8	-32 19	9.6	10.5	Ao	2	..	41079b	92	1102	42.2	-25 38	11.1	10.2	A	2	..	24597b
43	788	41.8	-41 40	8.2	8.0	F5	7	0,4	24090b	93	954	42.2	-35 20	8.6	8.5	Ao	6	..	45746b
44	226	41.8	-57 55	9.3	10.0	F8	2	..	42096b	94	702	42.3	+47 14	8.0	9.0	Ko	2	..	38072i
45	86	41.9	+79 41	7.22	7.22	Ao	8	..	37309i	95	447	42.3	+30 47	8.5	9.0	F8	3	..	37404i
46	717	41.9	+56 38	7.6	8.6	Ko	6	..	37320i	96	473	42.3	+29 56	8.5	9.3	G5	2	..	37404i
47	472	41.9	-18 27	8.9	9.5	Go	4	..	45672b	97	459	42.3	+ 0 40	8.4	8.8	F5	6	3,3	10311b
48	522	41.9	-18 52	9.6	9.6	Ao	5	..	24597b	98	1005	42.3	-34 23	9.3	9.5	Go	3	..	41079b
49	521	41.9	-19 18	9.1	8.9	Fo	7	..	24597b	99	801	42.3	-46 2	8.2	8.7	F5	3	..	12267b
50	477	41.9	-22 5	7.10	7.4	Fo	10	..	24597b	100	144	42.3	-69 49	8.33	9.1	F5	6	..	20429b

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2^h 42^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	523	42.4	+58 49	8.6	9.6	Ko	2	..	38164i	51	229	42.8	-59 19	9.2	10.1	G5	3	..	17048b
2	763	42.4	+48 54	8.0	8.0	Ao	2	..	37967i	52	224	42.8	-61 31	8.9	9.8	F2	4	..	17048b
3	437	42.4	- 3 42	8.9	9.5	Go	5	..	10409b	53	223	42.8	-62 43	9.3	9.9	Go	2	..	17048b
4	493	42.4	-15 47	8.3	8.7	F5	5	R	45171b	54	489	42.9	+61 58	7.8	7.8	B8	4	..	37341i
5	525	42.4	-19 22	9.4	10.4	G5	3	..	24597b	55	723	42.9	+56 12	9.2	10.4	K5	..	..	M
6	957	42.4	-32 58	8.6	8.4	Go	8	..	41079b	56	642	42.9	+46 44	7.8	7.9	A2	4	..	37967i
7	957	42.4	-35 13	8.9	9.3	F5	4	..	41079b	57	662	42.9	+46 0	8.25	9.32	K2	1	0,1	38072i
8	1038	42.4	-37 20	8.9	8.6	F5	5	0,2	45746b	58	546	42.9	+41 32	8.0	9.0	Ko	4	0,2	38086i
9	200	42.4	-75 40	9.0	10.1	K2	1	..	46019b	59	442	42.9	+17 52	6.04	7.04	Ko	..	0,6-	56,74
10	472	42.5	+63 8	8.1	8.2	A5	2	..	37341i	60	1245	42.9	-24 6	9.4	9.5	Go	4	..	24597b
11	641	42.5	+46 50	6.72	7.72	Ko	5	..	37967i	61	792	42.9	-41 23	7.86	8.2	F8	5	0,6	12267b
12	564	42.5	+35 49	8.7	9.2	F8	2	..	37404i	62	922	42.9	-41 58	10.5	11.9	Mb	..	..	M
13	469	42.5	+15 6	6.81	7.81	Ko	3	5,4	37431i	63	200	43.0	+68 28	var.	var.	F5	6	R	37308i
14	425	42.5	+ 8 31	9.0	10.0	Ko	1	..	12026b	64	360	43.0	+63 24	8.9	8.9	Ao	2	..	38984i
15	394	42.5	+ 5 27	9.4	9.5	A2	4	..	12026b	65	711	43.0	+55 31	9.4	9.5	A2	2	..	38164i
16	487	42.5	+ 1 17	8.04	8.60	Go	3	..	37541i	66	547	43.0	+41 24	8.8	9.8	Ko	1	..	38086i
17	1039	42.5	-37 6	9.2	9.5	A5	4	..	45746b	67	642	43.0	+40 4	7.97	7.97	Ao	7	2,3	38086i
18	176	42.5	-70 0	9.2	9.2	Ao	6	2,3	20429b	68	567	43.0	+35 27	8.12	8.46	F2	3	..	37404i
19	710	42.6	+55 26	8.6	9.1	F8	2	..	38164i	69	507	43.0	+32 46	7.9	8.9	Ko	2	..	37404i
20	377	42.6	+21 48	9.1	9.4	Fo	2	..	37383i	70	508	43.0	+32 26	7.90	7.90	Ao	4	..	37404i
21	426	42.6	+ 8 28	9.0	9.1	A2	5	..	12026b	71	396	43.0	+24 47	5.87	5.87	Ao	7	..	37383i
22	529	42.6	- 9 24	8.3	9.3	Ko	5	..	18191b	72	395	43.0	+24 40	8.3	9.1	G5	3	..	37383i
23	502	42.6	-16 23	8.7	9.7	Ko	2	..	12626b	73	427	43.0	+ 6 53	8.6	8.7	A2	3	..	12026b
24	1104	42.6	-25 1	10.2	10.4	F5	2	0,2	24597b	74	476	43.0	-18 45	9.3	10.1	G5	4	..	24597b
25	231	42.6	-58 9	8.9	9.7	Go	4	..	42096b	75	1106	43.0	-25 47	9.9	9.8	F5	2	..	23780b
26	222	42.6	-60 54	9.1	10.9	K5	1	..	17048b	76	1009	43.0	-34 39	9.6	9.8	F8	3	3,2	24621b
27	181	42.6	-63 8	8.7	9.7	Ko	3	..	17048b	77	1043	43.0	-37 46	7.95	9.2	K5	4	..	45746b
28	610	42.7	+55 4	7.91	7.91	Ao	5	..	38164i	78	846	43.0	-43 26	8.6	9.1	Ko	4	5,2	24090b
29	764	42.7	+48 28	8.4	8.5	A2	2	0,2	38072i	79	765	43.1	+48 24	7.8	7.9	A2	3	R	38932i
30	580	42.7	+44 51	8.0	8.1	A3	3	2,2-	38072i	80	765	43.1	+48 24	7.8	7.9	G	3	R	38932i
31	640	42.7	+37 15	8.5	9.3	G5	2	..	37404i	81	428	43.1	+ 7 7	8.2	8.2	Ao	4	..	37284i
32	448	42.7	+30 43	7.09	8.09	Ko	7	..	37404i	82	498	43.1	-21 41	10.5	11.7	F5	2	..	24597b
33	394	42.7	+24 54	8.7	9.8	K2	2	..	37383i	83	917	43.1	-38 10	8.9	8.0	F5	7	0,3	45746b
34	424	42.7	+19 36	8.4	8.5	A3	4	..	37383i	84	566	43.2	+36 54	6.45	6.87	F5	7	..	37404i
35	432	42.7	+ 2 46	9.0	9.0	Ao	5	2,4	12387b	85	519	43.2	+34 7	8.5	8.5	B9	3	..	37404i
36	440	42.7	- 3 26	10.3	10.9	Go	2	..	10409b	86	483	43.2	+31 42	8.8	8.9	A2	2	..	37404i
37	1061	42.7	-22 55	6.66	6.8	F2	8	..	45163b	87	430	43.2	+ 8 30	8.4	8.8	F5	6	..	12026b
38	167	42.7	-68 34	8.6	9.2	Go	5	..	20429b	88	431	43.2	+ 8 8	9.0	9.5	F8	3	..	12026b
39	47	42.7	-81 54	8.6	9.6	Ko	3	..	20538b	89	429	43.2	+ 6 54	8.6	9.8	K5	2	..	12026b
40	146	42.8	+72 52	7.29	8.07	G5	5	..	37555i	90	470	43.2	- 4 3	6.71	6.71	Ao	9	..	10409b
41	211	42.8	+71 10	8.7	8.7	Ao	2	0,1	38943i	91	530	43.2	-12 53	var.	var.	Mb	8	5,8R	40988b
42	230	42.8	+67 25	8.6	8.6	Ao	3	..	38984i	92	477	43.2	-18 42	9.6	10.4	G5	3	..	24597b
43	721	42.8	+56 16	9.0	9.0	A	2	E	38164i	93	1009	43.2	-32 51	9.5	11.1	K	1	..	41079b
44	705	42.8	+47 16	7.9	8.9	Ko	2	..	38072i	94	964	43.2	-35 12	9.6	10.1	K5	2	5,2	24621b
45	351	42.8	+17 6	var.	var.	Mc	..	R	M	95	725	43.3	+56 36	9.2	10.0	G5	1	..	38164i
46	426	42.8	+ 6 26	9.0	9.4	F5	3	..	12026b	96	709	43.3	+47 44	7.6	7.9	F2	3	3,2	38072i
47	536	42.8	-17 48	9.6	10.2	Go	2	0,2	45672b	97	521	43.3	+33 31	7.15	7.21	A2	6	..	37404i
48	474	42.8	-17 59	9.6	10.2	Go	2	..	12626b	98	398	43.3	+23 4	9.4	10.4	Ko	1	..	37383i
49	458	42.8	-56 41	8.6	9.0	Ao	3	..	24229b	99	471	43.3	+14 11	8.2	8.8	Go	3	E	38944i
50										100	389	43.3	+12 37	9.0	10.1	K2	2	2,1	12026b

THE HENRY DRAPER CATALOGUE.

17500

2^h 43^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	519	43.3	m. 5 18	8.7	9.3	Go	4	..	10409b	51	63	43.8	o 78 14	9.0	9.0	Ao	3	..	20538b
2	232	43.3	-59 49	8.8	10.3	K5	3	..	17048b	52	89	43.9	+80 39	7.97	8.75	G5	5	..	37309i
3	225	43.3	-61 56	9.8	10.6	G5	2	..	17048b	53	711	43.9	+47 53	7.76	7.76	Ao	4	..	37967i
4	196	43.3	-64 8	5.69	6.8	Ko	..	0,6	56,119	54	610	43.9	+40 25	8.5	8.6	A2	2	..	38086i
5	552	43.4	+60 1	7.11	6.87	Bo	5	5,6 R	37330i	55	526	43.9	+33 24	8.8	8.8	Ao	3	..	37404i
6	714	43.4	+55 29	3.93	4.93	Ko	10	R	37320i	56	524	43.9	-5 36	7.9	8.2	Fo	6	..	10409b
7	633	43.4	+52 33	8.8	8.8	Ao	3	..	38932i	57	197	43.9	-64 49	9.08	9.3	F5	4	..	20429b
8	766	43.4	+48 16	9.2	9.2	Ao	2	..	38932i	58	665	44.0	+45 24	8.7	9.0	Fo	2	..	38898i
9	583	43.4	+43 24	8.8	9.8	Ko	1	..	38086i	59	476	44.0	-4 39	7.14	8.32	K5	6	..	10409b
10	567	43.4	+36 23	8.1	8.4	Fo	3	..	37404i	60	540	44.0	-17 14	8.3	9.1	G5	5	5,5	45672b
11	467	43.4	+20 50	9.2	10.0	G5	2	..	37383i	61	499	44.0	-21 15	7.9	8.1	F5	9	..	24597b
12	395	43.4	+5 26	9.4	9.5	A5	3	..	12026b	62	1069	44.0	-23 31	9.4	9.9	F2	5	..	24597b
13	491	43.4	+1 20	10.1	10.2	A2	1	..	12387b	63	1128	44.0	-31 51	7.10	8.1	G5	7	0,8	24621b
14	521	43.4	-5 20	8.7	9.3	Go	4	..	10409b	64	1055	44.0	-36 51	11.1	10.1	G5	2	..	45746b
15	548	43.4	-6 39	9.6	10.0	F5	3	..	10410b	65	801	44.0	-40 56	9.6	8.9	Go	1	..	45746b
16	539	43.4	-17 45	10.5	11.1	G	1	..	45672b	66	169	44.0	-68 3	4.90	4.96	A2	..	0,R	28,196
17	478	43.4	-18 46	9.6	9.6	Ao	4	..	24597b	67	163	44.0	-71 14	10.0	10.6	Go	1	..	20539b
18	1248	43.4	-24 40	9.1	10.1	G5	3	..	24597b	68	586	44.1	+43 56	8.9	9.0	A5	2	..	38086i
19	856	43.4	-47 26	10.3	10.2	Go	1	..	23791b	69	638	44.1	+42 53	8.0	8.0	Ao	4	..	38072i
20	553	43.5	+59 59	8.7	8.5	B	5	R	38164i	70	550	44.1	+41 31	8.6	8.7	A2	4	0,2	38086i
21	636	43.5	+51 52	7.38	7.36	B9	5	..	38873i	71	612	44.1	+40 52	9.4	9.8	F5	2	..	38086i
22	646	43.5	+39 30	8.6	9.6	Ko	2	0,3	37404i	72	481	44.1	+30 6	6.74	7.02	Fo	7	..	37404i
23	492	43.5	+1 47	9.4	10.4	Ko	1	..	12387b	73	471	44.1	+26 51	3.68	3.63	B8	..	..	6002c
24	550	43.5	-6 9	7.14	8.14	Ko	7	..	10409b	74	477	44.1	-4 31	9.9	10.9	Ko	2	..	46082b
25	549	43.5	-6 36	8.8	9.8	Ko	3	..	10410b	75	528	44.1	-10 56	9.9	10.7	G5	2	..	18191b
26	529	43.5	-19 48	9.33	11.3	K2	2	..	24597b	76	1050	44.1	-37 24	7.29	8.1	Go	8	0,5	45746b
27	1110	43.5	-25 13	7.90	8.9	Ko	4	..	23780b	77	659	44.1	-51 53	10.1	9.9	F8	1	..	20262b
28	1050	43.5	-35 58	6.51	7.6	Ko	..	5,9 R	56,119	78	215	44.1	-60 42	9.7	10.1	F5	2	..	17048b
29	784	43.6	+49 33	8.4	8.4	Ao	3	0,2	38898i	79	10	44.1	-89 18	9.8	11.0	K5	2	..	22980b
30	520	43.6	+34 45	7.97	8.25	Fo	4	..	37404i	80	109	44.2	+76 7	7.67	8.45	G5	4	..	37555i
31	355	43.6	+18 18	8.1	8.9	G5	3	0,1	37383i	81	651	44.2	+57 53	6.27	6.27	Ao	8	0,8 R	37320i
32	397	43.6	+6 9	8.4	9.5	K2	4	..	12026b	82	641	44.2	+50 23	8.7	8.7	Ao	3	..	38932i
33	530	43.6	-19 6	8.7	9.5	F2	6	..	24597b	83	667	44.2	+45 39	8.1	9.1	Ko	2	0,2	38072i
34	519	43.6	-20 0	10.5	11.2	G5	3	..	24597b	84	646	44.2	+37 55	4.27	4.55	Fo	..	0,10	56,74
35	518	43.6	-20 24	9.0	9.8	G5	6	..	24597b	85	397	44.2	+11 43	8.7	9.2	F8	1	..	38919i
36	1064	43.6	-22 57	9.9	11.0	F8	2	..	24597b	86	500	44.2	-21 22	10.5	11.3	G	3	R	24597b
37	1025	43.6	-26 31	8.1	8.6	G5	7	..	23780b	87	1027	44.2	-26 52	9.5	9.8	F5	3	..	23780b
38	183	43.6	-63 9	7.5	8.5	Ko	7	..	17048b	88	724	44.2	-40 14	8.7	8.8	G5	3	0,2	45746b
39	184	43.6	-67 26	8.7	9.1	F5	4	..	20429b	89	160	44.2	-66 45	8.9	9.9	Ko	3	..	20429b
40	300	43.7	+65 13	7.10	7.16	A2	6	..	37308i	90	147	44.2	-69 37	8.8	9.2	F5	5	..	20429b
41	613	43.7	+54 16	7.9	8.7	G5	3	..	37320i	91	479	44.3	+63 0	6.94	7.50	Go	7	2,6	37341i
42	449	43.7	+30 37	8.7	9.0	F2	2	..	37404i	92	639	44.3	+52 1	8.4	9.5	K2	1	..	38932i
43	355	43.7	+17 3	5.30	5.18	B5	..	3,9 R	56,74	93	770	44.3	+48 56	8.5	8.6	A2	3	1,2	38898i
44	387	43.7	+3 40	8.0	8.0	Ao	4	1,3	10311b	94	571	44.3	+35 53	8.7	9.9	K5	1	R	37405i
45	479	43.7	-17 59	9.9	10.4	F8	2	..	12626b	95	511	44.3	+32 25	8.3	8.3	Ao	4	..	37404i
46	723	43.7	-40 53	9.5	9.1	Go	1	..	45746b	96	467	44.3	+0 57	9.4	9.7	F2	3	..	10409b
47	468	43.8	+26 19	9.4	9.4	Ao	2	..	38884i	97	533	44.3	-19 27	8.7	10.4	Mb	5	..	24597b
48	491	43.8	-1 56	8.4	8.9	F8	6	..	10409b	98	1026	44.3	-28 57	9.9	9.9	F5	4	..	23780b
49	531	43.8	-19 25	9.6	10.9	Go	3	..	24597b	99	473	44.3	-57 52	8.6	8.8	Go	6	..	42096b
50	1012	43.8	-32 43	8.6	8.4	F5	8	..	41079b	100	217	44.3	-60 34	8.6	9.4	F5	6	..	17048b

17600

2^h 44^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	185	44.3	-67 48	9.1	9.7	Go	4	..	20429b	51	1264	44.9	-24 9	9.7	10.1	Go	2	..	24597b
2	110	44.4	+75 51	8.6	8.7	A5	2	3,2	37309i	52	1025	44.9	-32 50	4.50	5.50	Ko	..	R	28,196
3	728	44.4	+56 38	8.6	8.4	B	2	R	38164i	53	165	44.9	-71 40	6.84	7.2	F2	10	..	20539b
4	589	44.4	+44 44	8.7	8.7	Ao	3	2,3-	38072i	54	215	44.9	-76 54	9.4	9.7	F2	2	..	14358b
5	569	44.4	+36 32	6.63	7.19	Go	5	..	37404i	55	640	45.0	+51 48	8.4	9.4	Ko	2	..	38898i
6	490	44.4	+31 33	6.64	6.64	Ao	8	..	37404i	56	648	45.0	+46 25	5.97	6.75	G5	7	..	37967i
7	400	44.4	+24 55	8.2	8.5	Fo	4	..	37383i	57	553	45.0	+41 24	9.4	9.4	Ao	2	0,1	38086i
8	392	44.4	+12 15	7.6	7.9	F2	2	..	37372i	58	574	45.0	+36 42	8.8	9.1	Fo	3	..	37405i
9	497	44.4	-15 13	9.0	9.8	G5	3	..	18191b	59	359	45.0	+18 44	6.59	7.09	F8	6	0,5-	37383i
10	1016	44.4	-34 12	6.78	7.6	G5	10	..	24621b	60	395	45.0	+15 18	9.19	10.37	K5	1	..	38919i
11	757	44.4	-48 20	8.5	9.0	Ko	5	..	23791b	61	395	45.0	+13 2	8.2	9.2	Ko	1	..	38919i
12	552	44.5	+41 15	8.8	8.8	Ao	4	..	38086i	62	399	45.0	+11 27	8.6	9.4	G5	5	0,2	12026b
13	433	44.5	+ 8 31	7.9	8.4	F8	7	..	12026b	63	374	45.0	+10 13	9.27	10.05	G5	1	..	12026b
14	494	44.5	+ 1 23	8.6	9.7	K2	4	..	10409b	64	433	45.0	+ 6 16	8.6	9.2	Go	4	..	12026b
15	468	44.5	+ 0 59	8.4	8.5	A3	5	..	10409b	65	527	45.0	- 5 8	9.0	9.3	Fo	3	..	10409b
16	469	44.5	+ 0 30	7.08	7.86	G5	6	5,6	37541i	66	535	45.0	-19 46	10.3	11.6	Go	3	..	24597b
17	529	44.5	-10 58	8.3	8.9	Go	7	..	18191b	67	1056	45.0	-29 59	9.03	9.9	G5	2	..	45163b
18	498	44.5	-15 7	8.8	9.8	Ko	4	..	18191b	68	927	45.0	-38 54	9.2	8.5	F5	5	..	45746b
19	503	44.5	-21 16	10.3	11.3	K2	3	2,1	24597b	69	732	45.1	+56 50	8.0	8.1	A2	4	..	37320i
20	1114	44.5	-25 2	8.10	8.7	G5	4	..	23780b	70	717	45.1	+48 6	8.4	8.5	A5	3	3,3-	38932i
21	849	44.5	-44 0	8.8	9.4	F5	2	..	12267b	71	591	45.1	+44 38	7.8	9.0	K5	2	0,1-	38086i
22	637	44.6	+52 36	7.02	8.09	K2	4	..	37320i	72	576	45.1	+35 54	8.1	8.4	Fo	5	R	37404i
23	714	44.6	+48 5	8.9	9.9	Ko	1	..	38932i	73	485	45.1	+30 6	7.96	8.96	Ko	3	..	37404i
24	524	44.6	+34 59	6.66	7.73	K2	5	..	37404i	74	484	45.1	+29 52	7.56	8.34	G5	4	..	37404i
25	509	44.6	-16 34	9.6	10.6	Ko	2	..	12626b	75	375	45.1	+23 20	7.9	8.9	Ko	4	..	37383i
26	534	44.6	-19 3	10.1	11.3	K2	2	..	24597b	76	375	45.1	+10 58	9.4	10.2	G5	1	..	12026b
27	1053	44.6	-37 49	6.72	6.8	F2	9	0,10	45746b	77	497	45.1	+ 2 2	8.6	9.0	F5	4	3,2	10311b
28	906	44.6	-45 45	9.1	9.4	G5	2	..	23791b	78	547	45.1	-17 43	8.3	9.5	K5	2	..	12626b
29	761	44.6	-48 32	8.7	9.0	K2	5	..	23791b	79	487	45.1	-22 9	8.7	9.5	G5	8	..	24597b
30	164	44.6	-71 20	9.8	10.4	Go	2	..	20539b	80	1077	45.1	-23 47	10.9	11.8	Ao	1	..	24597b
31	354	44.7	+64 15	7.68	8.02	F2	4	3,4	37341i	81	1035	45.1	-29 29	9.1	9.6	Ao	4	..	45163b
32	372	44.7	+23 15	8.3	8.4	A5	4	..	37383i	82	1027	45.1	-32 47	8.9	9.3	Go	4	5,5	24621b
33	479	44.7	- 3 58	9.1	10.2	K2	4	..	10409b	83	852	45.1	-44 19	9.7	9.0	Ao	3	..	23791b
34	542	44.7	-17 15	9.4	9.5	A2	4	2,4	45672b	84	664	45.1	-51 28	9.2	9.3	Fo	3	..	20262b
35	543	44.7	-17 35	8.9	9.9	Ko	2	..	12626b	85	233	45.1	-59 28	var.	var.	Mb	3	R	17048b
36	1023	44.7	-31 59	9.2	9.9	F8	3	..	24621b	86	200	45.1	-72 16	9.4	10.0	Go	2	..	20539b
37	87	44.8	+80 0	9.21	10.39	K5	1	..	37309i	87	90	45.2	+80 16	8.45	9.45	Ko	4	..	37309i
38	731	44.8	+56 31	10.2	..	Oa	..	..	76,28	88	559	45.2	+60 3	7.36	7.44	A3	6	1,4	37320i
39	456	44.8	+13 18	8.0	8.4	F5	2	..	37372i	89	593	45.2	+44 28	6.72	7.72	Ko	4	..	37967i
40	558	44.8	- 9 57	8.81	9.31	F8	6	..	18191b	90	471	45.2	+ 0 33	8.0	8.4	F5	6	0,6	37541i
41	544	44.8	-16 55	9.3	9.9	Go	3	..	12626b	91	541	45.2	-14 16	8.02	9.02	Ko	6	..	18191b
42	485	44.8	-22 5	9.9	11.7	K2	2	..	24597b	92	523	45.2	-20 40	9.0	9.2	G5	5	..	24597b
43	1116	44.8	-25 42	9.7	9.8	A5	3	..	23780b	93	1133	45.2	-31 14	7.57	8.1	A2	10	..	24621b
44	339	44.8	-52 14	8.9	9.4	F8	2	..	20262b	94	48	45.3	+84 14	9.5	9.5	A	4	..	37309i
45	480	44.8	-53 31	9.2	9.9	F5	1	..	20262b	95	113	45.3	+75 15	7.77	8.11	F2	6	..	37555i
46	149	44.8	-69 19	8.7	10.1	Mb	4	..	20429b	96	149	45.3	+72 59	6.82	7.60	G5	5	..	37555i
47	669	44.9	+45 33	9.2	10.0	G5	2	..	38898i	97	580	45.3	+53 36	9.50	10.85	Mb	..	..	M
48	493	44.9	+31 57	8.1	9.3	K5	1	..	37404i	98	777	45.3	+48 27	8.6	8.6	Ao	2	..	38898i
49	380	44.9	+21 41	8.5	8.9	F5	3	..	37383i	99	528	45.3	- 5 24	7.14	7.14	Ao	9	..	10409b
50	398	44.9	+11 12	8.5	8.6	A3	2	..	38919i	100	524	45.3	-20 40	8.5	9.2	K5	5	..	24597b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1039	45.3	-29 34	9.7	10.4	G5	2	..	45163b	51	1124	45.8	-24 58	9.45	10.1	Go	4	..	24597b
2	817	45.3	-46 46	7.4	8.0	F5	5	0,3	12267b	52	1123	45.8	-25 8	10.2	10.7	Ko	2	..	24597b
3	341	45.3	-51 59	8.6	8.7	F5	3	..	20263b	53	1036	45.8	-26 27	9.7	9.5	F5	3	..	2378ob
4	201	45.3	-75 15	9.2	10.0	G5	2	..	46019b	54	343	45.8	-52 35	9.2	9.0	F2	3	E	20263b
5	123	45.4	+74 46	7.87	8.29	F5	5	..	37555i	55	185	45.8	-63 23	7.8	8.2	F5	3	..	38366b
6	364	45.4	+64 2	8.6	8.6	B8	2	..	38984i	56	556	45.9	+41 36	7.25	8.25	Ko	5	0,4	38086i
7	363	45.4	+63 14	8.0	8.8	G5	2	..	37341i	57	581	45.9	+36 53	9.4	9.9	F8	2	..	37404i
8	574	45.4	+38 27	8.8	9.2	F5	3	0,3	37404i	58	582	45.9	+36 40	7.08	8.08	Ko	4	..	37404i
9	527	45.4	+34 39	4.67	5.85	K5	..	0,9	56,74	59	517	45.9	+32 19	8.2	8.2	Ao	3	..	37404i
10	506	45.4	-7 11	8.9	9.5	G	2	..	10410b	60	475	45.9	+26 52	8.1	8.1	Ao	4	..	37383i
11	505	45.4	-7 13	7.44	8.44	Ko	4	..	10410b	61	436	45.9	+7 52	8.6	8.9	F2	8	..	12026b
12	536	45.4	-18 53	9.6	9.7	A5	5	..	24597b	62	393	45.9	+4 3	8.4	9.2	G5	4	..	12387b
13	1120	45.4	-24 59	6.27	7.8	G5	9	R	2378ob	63	1082	45.9	-23 54	9.7	10.8	K2	1	..	24597b
14	1134	45.4	-31 53	11.1	11.2	A	1	R	24621b	64	1038	45.9	-25 57	10.4	10.2	F5	1	..	45163b
15	913	45.4	-45 31	6.72	7.2	G5	6	5,3	12267b	65	1058	45.9	-37 29	8.42	9.8	K2	3	..	45746b
16	228	45.4	-61 49	10.3	11.1	G5	1	..	17048b	66	219	45.9	-60 50	9.1	10.6	K5	2	..	17048b
17	88	45.5	+79 51	8.5	9.3	G5	2	..	37309i	67	787	46.0	+48 34	9.0	9.0	Ao	2	2,2	3898i
18	780	45.5	+48 13	8.6	9.2	Go	1	R	38932i	68	365	46.0	+18 53	8.6	9.8	K5	2	..	37383i
19		45.5	+48 13			A				69	480	46.0	+14 40	5.46	5.34	B5	..	0,9 R	56,74
20	650	45.5	+39 44	8.17	8.95	G5	3	0,2	38086i	70	510	46.0	-16 32	8.9	9.9	Ko	2	..	12626b
21	236	45.5	-58 5	8.8	9.1	F2	3	..	24229b	71	528	46.0	-20 33	8.5	8.7	A2	8	..	24597b
22	188	45.5	-67 42	7.7	8.2	F8	7	..	20429b	72	506	46.0	-20 59	9.9	10.4	G5	4	..	24597b
23	304	45.6	+65 47	9.0	9.0	Ao	2	..	38984i	73	1037	46.0	-31 59	10.2	11.2	G	2	..	24621b
24	577	45.6	+37 1	8.7	9.1	F5	2	..	37404i	74	366	46.1	+63 53	8.5	9.0	F8	2	..	37341i
25	400	45.6	+6 6	8.6	9.6	Ko	3	..	12026b	75	495	46.1	+61 28	8.8	8.8	Ao	3	..	37341i
26	391	45.6	+3 24	8.6	9.2	Go	2	..	12387b	76	788	46.1	+49 57	8.6	8.9	F2	1	..	38932i
27	531	45.6	-11 57	9.0	9.6	Go	4	..	18191b	77	488	46.1	+29 47	8.5	8.8	Fo	3	..	37404i
28	489	45.6	-22 35	9.4	10.7	G5	6	..	24597b	78	397	46.1	+13 5	9.0	10.0	Ko	1	..	38919i
29	903	45.6	-28 22	5.39	6.0	Ao	..	0,R	56,74	79	438	46.1	+2 39	8.0	8.3	F2	5	3,6	37541i
30	904	45.6	-28 32	10.6	10.1	F8	2	..	2378ob	80	502	46.1	+1 17	7.94	8.02	A3	6	0,4	10311b
31	200	45.6	-64 47	9.28	9.3	Ao	4	..	20429b	81	490	46.1	-21 58	9.6	10.4	G5	3	..	24597b
32	150	45.6	-69 30	10.2	10.3	A2	4	..	20429b	82	69	46.1	-78 47	9.6	9.6	Ao	2	..	20538b
33	482	45.7	+62 27	9.2	9.3	A5	1	..	37341i	83	59	46.1	-80 26	8.6	9.6	Ko	3	..	20538b
34	525	45.7	+58 20	8.0	8.0	B9	6	0,3	38164i	84	32	46.1	-87 46	9.7	10.0	Fo	3	..	15145b
35	583	45.7	+53 18	8.8	8.9	A5	3	..	38932i	85	152	46.2	+72 29	7.66	8.22	Go	4	..	37555i
36	782	45.7	+49 5	8.6	9.7	K2	1	0,I-	38932i	86	789	46.2	+50 1	8.8	9.1	F2	2	..	38932i
37	437	45.7	+2 53	8.6	9.2	Go	4	..	12387b	87	489	46.2	+30 7	8.26	8.26	Ao	4	..	37404i
38	502	45.7	-14 55	9.85	10.63	G5	1	..	45171b	88	476	46.2	+26 41	8.7	8.8	A5	3	..	37383i
39	484	45.7	-17 59	9.9	10.5	Go	3	2,2	45672b	89	401	46.2	+22 44	8.6	8.6	Ao	3	..	37383i
40	526	45.7	-19 54	10.1	9.8	Go	4	..	24597b	90	402	46.2	+5 26	7.96	8.10	A5	6	3,4	10311b
41	871	45.7	-47 33	9.9	10.2	Go	1	..	23791b	91	503	46.2	+1 46	7.12	8.30	K5	6	3,3	10311b
42	58	45.7	-80 13	9.0	10.0	K	3	R	20538b	92	505	46.2	-15 47	8.9	9.7	G5	2	..	45171b
43	640	45.8	+52 35	6.42	6.40	B9	8	..	38873i	93	1067	46.2	-36 16	5.82	6.9	Ko	..	5,R	56,119
44	783	45.8	+48 24	7.30	7.30	Ao	7	..	37967i	94	652	46.3	+50 37	8.1	8.1	Ao	2	..	38873i
45	721	45.8	+48 0	8.0	8.0	Ao	2	..	37967i	95	397	46.3	+16 5	8.4	9.6	K5	1	..	38919i
46	616	45.8	+40 16	9.32	9.32	A	2	R	38086i	96	436	46.3	+7 8	8.1	8.9	G5	5	..	12026b
47	474	45.8	+26 12	8.5	8.5	B8	3	..	37383i	97	398	46.3	-1 5	8.0	8.3	F2	6	3,4	10311b
48	499	45.8	+1 43	9.4	10.2	G5	1	..	37541i	98	491	46.3	-22 35	9.9	10.9	G5	4	..	24597b
49	532	45.8	-11 57	9.6	10.2	Go	2	..	18191b	99	1086	46.3	-23 27	7.42	7.6	A2	10	..	24597b
50	527	45.8	-19 54	10.3	9.8	F5	3	..	24597b	100	557	46.4	+41 33	9.4	9.4	Ao	1	..	38086i

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2^h 46^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	492	46.4	+29 46	8.3	8.3	Ao	5	..	38884i	51	448	46.9	+27 40	8.6	9.6	Ko	1	..	38884i
2	471	46.4	+28 36	8.9	9.9	Ko	1	..	38884i	52	482	46.9	+14 16	8.6	9.1	F8	2	..	37372i
3	405	46.4	+24 48	9.2	9.8	Go	2	..	37383i	53	827	46.9	-39 39	8.9	8.8	F8	4	..	45746b
4	403	46.4	+5 22	9.6	10.1	F8	3	..	12026b	54	467	46.9	-55 33	8.4	9.4	Ko	2	5,2	20262b
5	504	46.4	+2 0	9.0	9.8	G5	2	..	12387b	55	189	46.9	-67 42	10.7	11.2	F8	3	..	20429b
6	443	46.4	-0 20	8.0	9.0	Ko	4	5,2	10311b	56	206	47.0	+68 35	8.6	8.7	A2	2	..	37308i
7	399	46.4	-1 35	8.6	9.6	Ko	3	..	10409b	57	367	47.0	+63 43	7.78	7.54	Bp	3	R	37341i
8	453	46.4	-3 25	7.9	7.9	Ao	8	..	10409b	58	790	47.0	+48 57	8.8	9.3	F8	2	0,2-	38932i
9	532	46.4	-4 56	9.05	10.23	K5	1	..	46082b	59	618	47.0	+40 15	9.52	9.94	F5	2	..	38086i
10	1277	46.4	-24 46	9.60	10.1	Go	4	..	24597b	60	453	47.0	+5 6	8.21	8.35	A5	4	2,3	10311b
11	1043	46.4	-32 53	9.2	10.4	Go	2	..	24621b	61	397	47.0	+3 55	9.0	9.5	F8	1	..	12387b
12	238	46.4	-58 14	8.6	10.1	Ma	..	..	M	62	398	47.0	+3 27	9.4	10.2	G5	3	..	12026b
13	235	46.4	-59 13	9.0	9.8	Fo	4	..	17048b	63	1065	47.0	-37 50	9.5	10.2	Go	3	..	45746b
14	203	46.4	-72 4	9.0	10.0	Ko	2	..	20539b	64	736	47.0	-40 21	6.25	6.8	B9	8	1,10	40947b
15	191	46.4	-73 21	8.4	8.8	F5	6	..	20539b	65	863	47.0	-44 29	8.0	8.2	Go	5	..	12267b
16	485	46.5	+62 27	9.2	9.2	Ao	2	..	37341i	66	767	47.0	-48 31	9.4	9.5	Go	5	..	23791b
17	587	46.5	+53 23	7.8	7.9	A2	4	..	37320i	67	70	47.0	-78 48	8.6	9.6	Ko	1	..	20538b
18	723	46.5	+48 9	6.51	7.51	Ko	5	..	37967i	68	473	47.1	+29 3	8.5	8.5	Ao	3	0,2	38884i
19	585	46.5	+37 2	8.6	8.7	A5	2	..	37405i	69	478	47.1	+27 8	9.4	9.8	F5	1	..	38884i
20	380	46.5	+10 58	8.5	9.3	G5	3	..	12026b	70	430	47.1	+19 42	9.0	9.8	G5	1	..	37383i
21	379	46.5	+10 53	8.5	8.8	Fo	4	..	12026b	71	384	47.1	+10 33	9.1	9.7	Go	2	..	12026b
22	561	46.5	-6 10	9.6	10.4	G5	1	..	10410b	72	506	47.1	+1 31	9.4	10.0	Go	2	..	12387b
23	541	46.5	-19 39	9.3	9.5	F2	7	..	24597b	73	401	47.1	-1 3	8.0	8.1	A2	6	0,4	10311b
24	509	46.5	-21 25	4.81	5.81	Ko	..	R	28,196	74	496	47.1	-21 55	9.9	10.9	Ko	2	..	24597b
25	596	46.6	+43 25	8.4	8.4	Ao	2	..	37967i	75	495	47.1	-22 36	9.9	10.1	Go	5	..	24597b
26	582	46.6	+36 3	8.3	8.4	A2	3	..	37404i	76	1281	47.1	-24 37	9.4	10.4	K2	3	..	24597b
27	492	46.6	-21 50	8.9	9.8	G5	4	..	24597b	77	198	47.1	-65 39	8.9	9.9	Ko	2	..	20429b
28	1003	46.6	-27 15	9.7	10.6	F5	1	..	45163b	78	641	47.2	+52 21	4.06	4.62	Go	..	R	1616c
29	1070	46.6	-36 5	5.49	6.6	Ko	..	5,9 R	56,119	79	641	47.2	+52 21	4.06	4.62	A5	..	R	1616c
30	822	46.6	-39 44	8.9	9.7	K2	1	..	45746b	80	554	47.2	-17 40	8.06	9.06	Ko	4	5,3	40971b
31	941	46.6	-42 39	8.1	8.3	Go	3	..	12267b	81	511	47.2	-21 42	8.7	8.6	Go	6	..	24597b
32	482	46.6	-53 11	8.3	9.7	Ma	3	0,3	20262b	82	914	47.2	-28 2	8.5	8.9	Fo	5	..	23780b
33	792	46.7	+49 23	8.8	8.8	Ao	3	3,3	38932i	83	915	47.2	-28 52	9.7	10.1	G5	3	..	23780b
34	366	46.7	+18 18	9.1	9.4	F	2	R	37383i	84	1072	47.2	-30 51	7.53	7.8	F5	8	..	24621b
35	440	46.7	+2 31	9.0	9.1	A3	4	..	10311b	85	1067	47.2	-37 9	8.6	9.9	Go	3	E	40947b
36	510	46.7	-7 3	9.1	9.5	F5	2	..	10410b	86	935	47.2	-38 29	var.	var.	Ao	5	R	45746b
37	493	46.7	-22 47	10.1	11.1	K	1	R	24597b	87	866	47.2	-43 34	8.8	9.4	G5	3	..	23791b
38	909	46.7	-28 33	8.7	9.2	F8	5	..	23780b	88	926	47.2	-45 39	8.9	9.0	F8	4	..	23791b
39	823	46.7	-39 9	8.6	9.1	Ko	3	..	45746b	89	101	47.3	+76 40	7.01	7.57	Go	7	..	37555i
40	645	46.8	+51 39	9.0	9.8	G5	2	..	38898i	90	729	47.3	+47 49	8.6	8.7	A2	2	..	37967i
41	583	46.8	+35 14	8.47	9.47	Ko	2	..	37404i	91	652	47.3	+46 44	6.73	6.71	B9	7	..	37967i
42	475	46.8	+0 53	9.0	9.3	Fo	1	..	10311b	92	659	47.3	+39 39	9.1	9.2	A5	2	..	38086i
43	483	46.8	-3 53	9.6	10.7	K2	2	..	10409b	93	494	47.3	+29 25	9.2	10.0	G5	1	..	38884i
44	494	46.8	-22 4	9.0	9.2	F5	5	..	24597b	94	456	47.3	+25 30	9.1	9.4	Fo	2	..	37383i
45	1088	46.8	-23 4	9.5	10.7	G5	3	..	24597b	95	536	47.3	-8 41	var.	var.	Mb	7	R	18191b
46	1134	46.8	-25 50	10.6	10.2	Fo	1	..	45163b	96	497	47.3	-22 14	10.1	10.4	F8	3	..	24597b
47	1048	46.8	-29 25	8.9	9.3	Go	6	..	23780b	97	498	47.3	-22 38	9.6	10.1	G5	5	..	24597b
48	188	46.8	-63 14	5.39	5.39	Ao	..	0,9 R	56,119	98	1091	47.3	-23 36	8.7	9.9	G5	8	..	24597b
49	305	46.9	+65 57	8.6	9.1	F8	2	..	37308i	99	937	47.3	-38 8	8.2	8.2	G5	4	0,6	12267b
50	493	46.9	+29 44	8.9	10.0	K2	1	..	38884i	100	779	47.3	-49 17	8.1	8.3	Go	5	..	23791b

THE HENRY DRAPER CATALOGUE.

17900

2^h 47^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	152	47.3	-69 15	10.2	10.3	A2	5	..	20429b	51	378	48.0	+24 8	9.5	9.8	Fo	2	..	37383i
2	654	47.4	+50 45	6.58	7.58	Ko	5	..	37967i	52	406	48.0	-1 40	9.09	10.09	Ko	1	..	10409b
3	791	47.4	+48 35	8.8	9.8	Ko	1	..	38932i	53	566	48.0	-6 1	8.9	10.0	K2	2	..	10410b
4	655	47.4	+37 56	5.32	5.60	Fo	..	2,7	56,74	54	920	48.0	-27 54	10.4	10.5	G5	1	..	45163b
5	497	47.4	+31 14	6.53	6.95	F5	7	..	37404i	55	832	48.0	-39 9	9.2	9.1	K2	2	..	45746b
6	385	47.4	+10 16	8.82	9.60	G5	2	..	12026b	56	487	48.0	-53 27	8.1	8.4	A3	3	..	8860b
7	406	47.4	+6 3	7.9	7.9	B9	6	..	37541i	57	234	48.0	-62 37	9.1	9.4	F2	3	..	17048b
8	543	47.4	-13 30	8.9	9.7	G5	2	..	18391b	58	369	48.1	+63 55	6.57	6.75	K5	5	3,5	37341i
9	486	47.4	-18 46	8.3	8.6	F2	8	..	24597b	59	722	48.1	+55 38	8.6	8.6	Ao	3	..	38959i
10	817	47.4	-41 23	7.1	8.2	K5	5	..	12267b	60	733	48.1	+47 15	9.0	9.5	F8	3	0,2-	38932i
11	567	47.5	+59 24	7.9	8.0	A3	4	..	37320i	61	647	48.1	+42 17	8.2	9.3	K2	2	..	38056i
12	441	47.5	+8 12	8.4	8.5	A5	2	..	37284i	62	500	48.1	+31 55	8.5	8.6	A3	4	..	37404i
13	563	47.5	-6 28	8.9	9.9	K	1	..	10410b	63	495	48.1	+29 42	9.4	10.0	Fo	1	..	38884i
14	1052	47.5	-32 50	10.0	10.2	F8	2	..	24621b	64	480	48.1	+26 21	7.85	8.13	Fo	4	..	37383i
15	217	47.5	-76 37	7.5	8.5	Ko	7	..	14358b	65	557	48.1	-17 1	8.00	8.28	Fo	8	..	12626b
16	306	47.6	+65 24	7.55	7.55	Ao	6	..	38984i	66	550	48.1	-18 51	9.4	10.6	K5	5	..	24597b
17	522	47.6	+32 30	8.05	8.05	Ao	4	..	37404i	67	535	48.1	-20 3	10.1	11.3	Go	2	..	24597b
18	400	47.6	+16 5	6.38	6.72	F2	6	0,5	37372i	68	499	48.1	-22 48	10.5	11.0	Go	3	..	24597b
19	1140	47.6	-25 26	9.7	10.1	G5	4	..	24597b	69	1095	48.1	-23 53	9.1	11.3	Ko	6	..	24597b
20	1147	47.6	-31 26	10.4	10.8	G5	1	..	24621b	70	992	48.1	-33 52	8.6	8.8	G5	6	..	24621b
21	732	47.7	+47 44	7.56	7.56	Ao	4	..	37967i	71	569	48.2	+59 59	7.81	8.23	F5	4	5,2	37320i
22	646	47.7	+42 11	7.01	7.43	F5	7	3,4	38056i	72	561	48.2	+41 44	8.6	8.7	A2	2	0,2-	38945i
23	408	47.7	+5 54	10.1	10.7	Go	2	..	12026b	73	484	48.2	+14 15	7.6	9.0	Ma	2	..	37372i
24	443	47.7	+3 8	8.8	10.0	K5	2	..	12387b	74	455	48.2	+4 52	9.4	10.5	K2	1	..	12387b
25	544	47.7	-13 11	6.14	6.92	G5	6	5,10	42005b	75	456	48.2	-3 10	9.4	9.9	F8	2	..	46082b
26	1148	47.7	-31 14	6.38	6.9	F5	10	..	24621b	76	536	48.2	-5 40	7.34	8.41	K2	7	..	10409b
27	869	47.7	-43 15	8.9	9.3	F8	2	..	45746b	77	514	48.2	-21 39	8.4	8.9	G5	7	..	24597b
28	831	47.7	-46 25	8.2	8.0	A3	7	0,2-	37991b	78	1051	48.2	-26 43	9.9	9.8	A2	4	..	23780b
29	208	47.8	+68 25	8.7	8.7	B8	4	1,4	23708i	79	1007	48.2	-27 8	8.5	9.3	F8	4	..	23780b
30	661	47.8	+40 10	9.17	9.17	Ko	2	..	38086i	80	921	48.2	-28 22	7.28	8.0	G5	7	..	23780b
31	487	47.8	-17 57	9.9	11.0	K2	1	..	45171b	81	181	48.2	-70 38	8.3	8.4	A3	7	2,8	20429b
32	488	47.8	-18 26	8.9	9.3	F5	7	..	24597b	82	179	48.3	+71 45	7.9	7.9	B9	5	..	37555i
33	549	47.8	-19 10	9.6	11.0	K5	3	0,3	45171b	83	794	48.3	+48 18	9.0	10.1	K2	1	..	38932i
34	533	47.8	-20 30	10.1	10.9	F2	2	..	24597b	84	734	48.3	+47 50	8.4	8.9	F8	4	0,3	38932i
35	991	47.8	-33 2	9.6	10.2	Go	1	..	24621b	85	659	48.3	+37 20	7.9	8.7	G5	3	5,2	37404i
36	772	47.8	-48 23	9.9	9.6	F5	4	..	23791b	86	443	48.3	+8 55	6.82	8.17	Mb	4	..	37284i
37	843	47.8	-50 43	9.7	8.9	F5	3	..	23791b	87	487	48.3	-4 8	9.9	10.7	G5	2	..	10409b
38	233	47.8	-62 37	9.5	9.9	F5	2	..	17048b	88	1293	48.3	-23 56	9.9	10.5	G5	5	..	24597b
39	586	47.9	+35 38	8.7	9.5	G5	2	..	37404i	89	882	48.3	-47 37	9.3	10.0	K2	1	..	23791b
40	499	47.9	+31 17	8.2	8.3	A2	4	..	37404i	90	485	48.3	-54 51	8.16	7.8	Ao	7	..	20262b
41	474	47.9	+28 31	8.9	10.0	K2	1	..	38884i	91	192	48.3	-72 55	9.4	9.4	Ao	4	..	20539b
42	454	47.9	+5 2	9.10	9.66	G	1	..	12387b	92	153	48.4	+72 16	7.92	8.70	G5	2	..	37555i
43	569	47.9	-9 51	6.26	6.32	A2	10	..	18191b	93	492	48.4	+62 12	7.48	8.83	Ma	3	..	37341i
44	534	47.9	-20 36	9.3	9.8	F5	4	..	24597b	94	795	48.4	+48 30	8.7	8.8	A3	1	..	38932i
45	939	47.9	-38 30	8.6	8.2	F5	5	3,3	40947b	95	650	48.4	+42 49	8.9	9.0	A5	2	2,2	38086i
46	33	47.9	-85 27	7.29	8.7	Ko	7	..	15145b	96	401	48.4	+15 36	8.2	9.0	G5	2	0,2	37431i
47	234	48.0	+67 47	7.7	8.3	Go	4	5,3	37341i	97	485	48.4	+15 1	8.7	8.7	Ao	3	..	37372i
48	591	48.0	+61 7	5.63	6.05	F5	8	3,8	37341i	98	407	48.4	-0 59	9.0	9.8	G5	2	..	10409b
49	528	48.0	+58 12	8.6	9.6	Ko	1	..	38959i	99	543	48.4	-9 21	9.1	9.9	G5	2	..	18191b
50	659	48.0	+50 34	8.6	9.2	Go	2	..	38898i	100	500	48.4	-22 7	10.3	11.3	G5	2	..	24597b

18000

2^h 48^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1056	48.4	-31 59	8.6	9.0	Go	6	..	24621b	51	655	48.9	+51 17	8.8	9.3	F8	1	..	38932i
2	997	48.4	-33 2	9.2	9.3	A2	5	..	24621b	52	388	48.9	+10 54	8.0	8.1	A3	2	..	37284i
3	470	48.4	-55 29	8.5	8.8	G5	4	0,3	42096b	53	405	48.9	+ 3 32	9.0	10.2	K5	1	..	12387b
4	481	48.4	-57 36	7.4	8.7	K5	3	..	24229b	54	1103	48.9	-23 46	10.9	11.7	G	2	..	24597b
5	231	48.4	-74 24	9.2	9.5	Fo	3	..	20539b	55	827	48.9	-41 48	6.72	6.8	A2	8	..	45746b
6	71	48.4	-77 56	8.7	8.8	A2	4	0,3	14358b	56	209	49.0	+68 47	7.8	8.1	F2	4	2,4	37341i
7	723	48.5	+56 5	8.5	8.6	A2	3	..	38959i	57	738	49.0	+47 39	8.7	9.5	G5	2	5,1	38072i
8	661	48.5	+50 40	8.0	8.8	G5	2	5,3	38898i	58	370	49.0	+ 9 22	8.6	9.4	G5	2	..	12026b
9	584	48.5	+39 1	8.5	9.5	Ko	2	0,3	38086i	59	443	49.0	+ 7 16	7.38	7.38	Ao	4	..	37284i
10	466	48.5	+13 48	8.0	8.8	G5	2	0,2	37372i	60	458	49.0	+ 4 39	7.8	7.9	A3	6	1,6	10311b
11	456	48.5	+ 4 42	9.4	9.7	Fo	2	..	12387b	61	516	49.0	- 1 53	9.9	10.3	F5	3	..	10409b
12	509	48.5	+ 1 35	6.69	7.47	G5	7	5,6	37541i	62	525	49.0	-16 28	9.4	9.5	A2	5	..	45171b
13	511	48.5	- 2 3	8.1	8.9	G5	8	..	10409b	63	553	49.0	-19 6	9.3	11.7	K2	3	..	24597b
14	489	48.5	- 3 54	10.5	11.6	K2	1	..	46082b	64	1086	49.0	-30 15	8.1	8.8	Fo	7	..	23780b
15	544	48.5	- 9 16	7.96	8.52	Go	6	..	18191b	65	660	49.1	+37 36	8.5	9.3	G5	3	5,2	37404i
16	922	48.5	-28 35	10.4	9.9	F5	4	..	45163b	66	433	49.1	+19 57	7.30	8.30	Ko	5	5,4	37383i
17	736	48.6	+47 56	8.7	8.8	A2	2	..	37967b	67	406	49.1	+12 31	7.8	7.9	A3	2	2,2	37284i
18	651	48.6	+42 19	8.7	9.8	K2	2	0,2	38086i	68	445	49.1	+ 2 55	8.4	9.0	Go	4	0,2	10311b
19	432	48.6	+20 9	7.05	8.05	Ko	5	5,3	37383i	69	527	49.1	-16 28	10.1	10.1	Ao	3	..	45171b
20	409	48.6	+ 5 14	9.8	10.6	G5	1	..	12026b	70	555	49.1	-19 36	10.1	11.7	G5	1	..	24597b
21	513	48.6	- 1 53	9.0	10.1	K2	2	..	10409b	71	503	49.1	-22 47	6.06	7.3	G5	8	..	45163b
22	825	48.6	-41 34	8.4	8.2	Ao	6	..	45746b	72	1105	49.1	-23 52	9.9	11.6	F5	3	..	24597b
23	848	48.6	-50 17	7.11	7.6	G5	6	0,4	20263b	73	992	49.1	-35 27	8.17	8.8	Ko	6	..	24621b
24	678	48.6	-51 54	9.4	9.8	Go	2	..	20262b	74	840	49.1	-38 58	9.2	8.8	F8	3	..	40947b
25	489	48.6	-52 58	8.5	9.0	G5	5	..	20262b	75	236	49.1	-62 39	9.1	9.7	Go	2	..	17048b
26	232	48.6	-61 19	8.8	9.7	F5	4	..	17048b	76	534	49.2	+58 41	9.0	8.8	B	2	..	34269i
27	655	48.7	+46 59	9.2	9.2	Ao	2	..	38898i	77	533	49.2	+58 40	9.0	9.0	Ao	2	..	34269i
28	408	48.7	+24 13	9.1	9.7	Go	2	..	37383i	78	726	49.2	+55 46	8.0	8.0	Aop	5	1,4 R	37330i
29	379	48.7	+23 27	9.2	9.6	F5	3	..	37383i	79	679	49.2	+45 24	8.9	9.2	Fo	2	0,2	38072i
30	491	48.7	- 4 39	7.78	8.78	Ko	5	..	10409b	80	567	49.2	+42 7	9.7	9.7	Ao	1	0,1	38945i
31	543	48.7	- 8 9	7.21	7.55	F2	8	..	18191b	81	515	49.2	-20 57	9.9	11.6	Ko	2	..	24597b
32	545	48.7	- 9 37	9.6	10.2	Go	2	..	18191b	82	1060	49.2	-32 17	10.4	10.8	Ko	1	..	24621b
33	555	48.7	-14 40	9.61	10.17	Go	2	..	18191b	83	994	49.2	-34 54	7.98	8.4	Go	7	..	24621b
34	876	48.7	-44 42	9.5	9.3	F5	1	..	12267b	84	840	49.2	-46 14	10.1	9.6	A5	3	..	23791b
35	849	48.7	-50 38	7.9	8.5	Ko	3	..	20263b	85	193	49.2	-73 11	8.3	9.4	K2	5	..	20539b
36	182	48.7	-70 14	9.8	11.2	Mb	3	0,1	20429b	86	535	49.3	+58 11	8.9	9.5	Go	2	..	38959b
37	216	48.8	+70 13	8.59	9.15	Go	3	0,2	38943i	87	597	49.3	+44 17	9.4	9.4	Ao	2	..	38945b
38	532	48.8	+58 45	8.2	8.2	Ao	4	2,2	37330i	88	588	49.3	+35 30	8.5	9.5	Ko	2	..	37404i
39	665	48.8	+57 31	8.0	9.0	Ko	3	..	38959i	89	539	49.3	+34 33	8.6	9.7	K2	2	..	37405i
40	737	48.8	+47 56	7.20	7.26	A2	6	..	37967i	90	475	49.3	+20 23	8.8	9.1	F2	3	..	37383i
41	656	48.8	+36 53	7.45	8.45	Ko	3	..	37967i	91	454	49.3	+17 20	6.93	7.01	A3	5	0,5	37372i
42	596	48.8	+36 19	8.5	8.5	Ao	4	..	37404i	92	470	49.3	+13 14	9.4	9.5	A2	2	..	38919i
43	487	48.8	+15 5	8.49	8.77	Fo	2	..	37372i	93	445	49.3	+ 8 21	8.6	8.7	A3	3	..	12026b
44	404	48.8	+12 57	8.4	9.4	Ko	2	..	38919i	94	459	49.3	+ 5 4	9.65	10.21	Go	1	..	12026b
45	515	48.8	- 2 35	9.6	10.2	Go	1	..	10409b	95	546	49.3	-10 51	6.92	7.34	F5	9	..	18191b
46	502	48.8	-22 30	6.74	7.7	G5	10	..	24597b	96	556	49.3	-19 43	10.3	10.9	F8	3	..	24597b
47	1155	48.8	-31 49	8.2	8.1	B8	8	..	24621b	97	505	49.3	-22 5	10.3	11.0	Go	2	..	24597b
48	1079	48.8	-37 16	7.88	9.1	K2	3	E	40947b	98	1107	49.3	-23 11	10.2	10.9	Ko	3	..	24597b
49	877	48.8	-43 23	8.6	9.4	G5	1	..	12267b	99	1106	49.3	-23 34	8.1	9.8	Ma	7	..	24597b
50	232	48.8	-74 15	7.6	8.8	K5	6	..	20539b	100	1057	49.3	-26 34	9.1	8.6	B5	7	..	23780b

THE HENRY DRAPER CATALOGUE.

18100

2^h 49^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	928	49.3	o -28 16	9.1	8.7	Fo	5	..	2378ob	51	496	49.8	+62 53	7.78	8.78	Ko	3	..	3734ii
2	224	49.3	-60 40	9.3	9.8	F8	2	..	17048b	52	597	49.8	+60 43	7.8	7.8	B9	6	0,3	3732oi
3	540	49.4	+34 22	8.3	8.3	Ao	5	..	37404i	53	665	49.8	+50 51	6.52	7.70	K5	4	..	37967i
4	455	49.4	+27 19	6.72	6.70	B9	6	0,8	37477i	54	667	49.8	+50 23	8.6	9.8	K5	1	..	38932i
5	482	49.4	+26 32	8.1	8.9	G5	2	..	37383i	55	658	49.8	+46 45	6.13	7.13	Ko	..	2,7	56,74
6	390	49.4	+21 11	8.7	9.2	F8	3	..	37383i	56	571	49.8	+41 49	8.9	8.9	Ao	2	0,1	38086i
7	547	49.4	-11 30	7.8	7.8	Ao	6	..	18191b	57	465	49.8	+31 11	8.0	8.4	F5	3	..	37404i
8	1012	49.4	-27 40	10.6	10.2	A3	2	..	45163b	58	1112	49.8	-23 1	10.2	11.0	F2	3	..	24597b
9	491	49.4	-53 18	8.4	8.7	F8	6	3,4	20262b	59	1111	49.8	-23 35	10.6	11.7	Fo	2	..	24597b
10	482	49.4	-57 24	8.6	8.8	Go	4	..	42096b	60	800	49.9	+48 12	9.2	9.2	Ao	2	..	38898i
11	598	49.5	+44 34	9.0	9.8	G5	1	..	38945b	61	624	49.9	+41 3	8.8	9.9	K2	2	0,1	38086i
12	570	49.5	+41 23	7.95	8.23	Fo	3	..	38056i	62	450	49.9	+3 5	6.73	7.01	Fo	7	0,8	3754ii
13	541	49.5	+35 10	8.87	9.29	F5	2	..	37404i	63	517	49.9	-2 43	8.7	9.3	Go	4	..	10409b
14	408	49.5	+13 7	8.8	9.2	F5	2	..	38919i	64	503	49.9	-17 12	9.0	9.6	Go	2	..	12626b
15	447	49.5	+3 10	8.8	9.8	Ko	3	..	12387b	65	540	49.9	-20 32	8.9	9.5	Go	5	..	24597b
16	1148	49.5	-25 53	9.9	10.0	A3	4	E	24597b	66	517	49.9	-21 20	8.1	8.2	A2	10	..	24597b
17	783	49.5	-48 34	9.2	9.2	F5	6	..	23791b	67	1113	49.9	-23 42	9.7	11.3	G5	2	..	24597b
18	492	49.5	-53 30	8.8	9.6	G5	2	..	20263b	68	1091	49.9	-36 19	8.6	9.3	K5	4	..	24621b
19	237	49.5	-62 48	8.7	9.7	Ko	3	..	17048b	69	822	49.9	-41 40	8.9	8.2	F2	4	..	45746b
20	203	49.5	-63 57	6.67	7.8	Ko	..	0,7	56,119	70	236	49.9	-60 20	8.3	9.4	F8	5	..	17048b
21	172	49.5	-67 56	6.70	7.6	Ko	..	5,10	28,196	71	625	50.0	+41 3	9.2	9.2	Ao	3	0,2	38086i
22	356	49.6	+64 40	8.8	8.9	A2	3	..	37308i	72	457	50.0	+27 51	8.1	8.2	A2	5	0,3	38884i
23	666	49.6	+57 57	8.5	9.3	G5	2	..	38959i	73	373	50.0	+10 4	7.67	7.95	Fo	4	..	37284i
24	622	49.6	+54 14	9.5	10.9	Mc	..	..	M	74	446	50.0	+7 45	9.0	9.6	Go	2	..	12026b
25	801	49.6	+49 23	7.7	7.8	A2	3	..	37967i	75	451	50.0	+0 3	7.23	8.23	Ko	6	0,4	10311b
26	622	49.6	+40 46	8.9	9.4	F8	3	2,2	38086i	76	459	50.0	-3 43	8.3	9.3	Ko	5	..	10409b
27	542	49.6	+35 7	8.92	9.34	F5	3	..	37404i	77	1007	50.0	-33 35	9.5	9.0	A2	7	..	24621b
28	500	49.6	+30 4	8.71	9.21	F8	2	..	37404i	78	1087	50.0	-37 22	8.7	9.9	K5	3	..	45746b
29	456	49.6	+27 45	8.5	8.6	A2	4	0,2	38884i	79	670	50.1	+50 27	9.0	9.1	A2	3	..	38932i
30	390	49.6	+11 5	8.8	9.3	F8	3	0,2	12026b	80	803	50.1	+48 18	7.75	8.17	F5	3	..	37967i
31	541	49.6	-5 44	7.30	8.30	Ko	7	..	10409b	81	447	50.1	+6 32	9.8	10.6	G5	2	..	12026b
32	1005	49.6	-33 17	10.2	10.0	Fo	4	..	24621b	82	496	50.1	-4 43	9.00	9.78	G5	2	..	46082b
33	947	49.6	-38 27	9.5	9.1	Ko	2	..	45746b	83	557	50.1	-14 26	7.16	7.44	Fo	9	..	18191b
34	238	49.6	-62 2	8.7	9.7	Ko	5	R	17048b	84	750	50.1	-40 36	8.2	8.2	Fo	5	..	45746b
35	233	49.6	-73 59	8.9	10.1	K5	2	R	20539b	85	197	50.1	-63 19	6.10	7.2	Ko	..	5,8	56,119
36	48	49.6	-81 54	9.1	9.7	Go	3	..	20538b	86	157	50.1	-69 36	9.0	10.0	Ko	2	..	20539b
37	370	49.7	+64 1	6.92	7.70	G5	6	5,5	37308i	87	594	50.2	+53 57	8.4	8.4	Ao	3	..	38959i
38	371	49.7	+63 35	8.9	9.0	A2	1	..	38984i	88	600	50.2	+44 43	8.9	9.0	A2	2	1,1	38898i
39	621	49.7	+55 6	7.96	8.38	F5	4	..	3732oi	89	465	50.2	+25 41	8.3	9.1	G5	3	..	37383i
40	662	49.7	+38 11	8.3	8.8	F8	3	0,2	37404i	90	376	50.2	+18 44	9.0	9.3	F	2	..	37383i
41	601	49.7	+36 33	8.8	8.9	A5	2	..	37404i	91	457	50.2	+17 55	5.94	7.29	Mb	6	0,6	37431i
42	464	49.7	+30 38	7.24	8.59	Ma	4	..	37404i	92	492	50.2	+14 18	7.70	7.70	Ao	4	0,4	37372i
43	484	49.7	+26 28	7.45	8.23	G5	4	..	37383i	93	375	50.2	+9 25	9.4	10.0	Go	4	..	12026b
44	407	49.7	+15 54	7.8	8.6	G5	3	5,3	37431i	94	547	50.2	-8 24	8.4	9.2	G5	3	..	18191b
45	450	49.7	-0 28	6.70	7.70	Ko	6	5,8	37541i	95	518	50.2	-21 36	8.4	8.2	F2	10	..	24597b
46	1110	49.7	-23 21	8.2	9.8	Ko	7	..	24597b	96	519	50.2	-21 37	9.9	9.9	F8	4	..	24597b
47	1109	49.7	-23 49	9.4	10.7	Go	5	..	24597b	97	1073	50.2	-29 16	9.9	10.5	K5	2	..	2378ob
48	1064	49.7	-32 45	9.5	10.4	Go	2	..	24621b	98	946	50.2	-45 1	7.85	8.2	Go	4	..	12267b
49	948	49.7	-38 51	5.85	6.7	F2	7	3,R	44379b	99	308	50.3	+65 44	8.7	8.8	A3	2	..	38984i
50	881	49.7	-43 4	10.3	10.2	Ko	1	..	45746b	100	657	50.3	+52 6	8.0	9.0	Ko	2	..	38898i

18200

2^h 50^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	590	50.3	+38 18	8.9	9.4	F8	3	3,2	38086i	51	935	50.7	-28 44	10.4	10.8	K2	2	..	45163b
2	477	50.3	+28 45	6.52	7.52	Ko	6	0,5	38884i	52	1048	50.7	-33 56	6.90	7.5	A3	6	1,10	44379b
3	417	50.3	+5 54	8.6	9.1	F8	4	..	12026b	53	955	50.7	-38 14	8.6	8.3	G5	3	5,3	40947b
4	481	50.3	+0 57	8.8	9.9	K2	2	..	10409b	54	205	50.7	-72 37	10.3	10.4	A5	2	..	20539b
5	542	50.3	-5 7	9.6	10.6	Ko	2	..	46082b	55	601	50.8	+44 22	9.4	9.4	A0	2	0,1	38898i
6	530	50.3	-16 19	9.6	10.2	Go	1	..	45171b	56	458	50.8	+17 37	5.57	5.99	F5	7	0,7 R	37383i
7	541	50.3	-20 47	10.9	11.7	G	2	..	24597b	57	476	50.8	+13 30	9.4	10.4	Ko	1	..	38919i
8	520	50.3	-21 23	9.3	9.3	Fo	8	..	24597b	58	420	50.8	+5 46	7.51	8.51	Ko	4	0,4	37541i
9	1070	50.3	-32 24	9.6	10.8	G5	2	..	24621b	59	554	50.8	-12 7	9.4	9.8	F5	3	..	18191b
10	950	50.3	-38 50	9.8	10.0	K2	1	..	45746b	60	999	50.8	-34 57	9.24	10.2	F8	3	..	24621b
11	948	50.3	-44 55	9.50	9.6	Go	1	..	23791b	61	488	50.8	-54 8	9.0	9.6	G5	2	..	20263b
12	237	50.4	+67 12	9.2	10.0	G5	1	..	37600i	62	450	50.9	+7 59	6.08	6.58	F8	3	..	37284i
13	545	50.4	+34 2	9.4	9.9	F8	2	..	37404i	63	555	50.9	-12 46	8.9	9.4	F8	4	..	18191b
14	448	50.4	+6 52	8.6	9.0	F5	4	..	12026b	64	849	50.9	-39 41	9.0	8.9	F8	2	..	45746b
15	464	50.4	+5 6	9.46	9.88	F5	3	..	12026b	65	683	50.9	-51 17	6.06	7.8	Ko	7	5,4	20263b
16	512	50.4	+1 37	6.55	6.55	A0	8	0,9	10311b	66	484	50.9	-57 46	9.3	9.7	F2	3	..	40953b
17	414	50.4	-0 52	8.6	9.0	F5	5	..	10409b	67	212	51.0	+69 5	7.9	8.0	A2	3	0,3	37555i
18	531	50.4	-16 27	8.34	8.40	A2	7	E	18191b	68	596	51.0	+53 24	7.7	7.7	B8	2	..	37320i
19	1063	50.4	-26 0	9.9	10.0	G5	2	..	23780b	69	603	51.0	+44 43	9.4	10.2	G5	1	..	38945i
20	1069	50.4	-30 15	7.76	9.3	Ko	7	..	23780b	70	421	51.0	+5 36	8.6	9.4	G5	4	..	12026b
21	227	50.4	-60 53	9.3	10.9	K2	1	..	17048b	71	407	51.0	+3 37	8.2	8.2	A0	5	..	37541i
22	507	50.5	+31 32	8.7	9.0	Fo	2	..	37404i	72	456	51.0	-0 37	8.6	9.6	Ko	3	..	10409b
23	466	50.5	+30 29	8.1	9.1	Ko	2	..	37404i	73	577	51.0	-9 51	8.76	9.04	Fo	5	..	18191b
24	1116	50.5	-23 45	9.4	11.7	G5	2	..	24597b	74	564	51.0	-19 17	9.0	11.4	Ko	2	..	24597b
25	1156	50.5	-25 17	9.4	9.3	A0	7	..	24597b	75	1120	51.0	-23 47	9.9	11.3	F5	3	..	24597b
26	933	50.5	-28 18	8.9	9.9	Ko	3	..	23780b	76	1071	51.0	-26 21	7.49	9.0	Ma	6	..	23780b
27	1162	50.5	-31 18	6.84	7.8	Go	9	..	24621b	77	753	51.0	-40 31	9.6	9.1	G5	1	..	45746b
28	953	50.5	-38 9	9.5	8.8	F8	2	..	40947b	78	192	51.0	-67 43	8.7	9.7	Ko	5	..	20429b
29	346	50.5	-51 55	7.6	8.3	F2	5	..	20263b	79	810	51.1	+49 28	9.2	9.2	A0	2	3,1	38932i
30	595	50.6	+54 0	8.6	8.6	A0	2	..	38959i	80	808	51.1	+48 28	8.2	8.3	A2	2	0,2	38072i
31	681	50.6	+45 37	8.0	8.0	B8	4	..	38072i	81	607	51.1	+44 7	8.6	9.1	F8	1	R	38945i
32	498	50.6	-4 22	9.9	10.9	Ko	1	..	46082b	82	51.1	+44 7	8.6	9.1	F8	1	..	38945i	
33	510	50.6	-22 13	10.9	11.1	G	2	..	24597b	83	477	51.1	+21 1	9.1	9.2	A5	2	..	37383i
34	509	50.6	-22 18	11.0	11.7	Ko	3	..	24597b	84	378	51.1	+9 44	8.6	9.6	Ko	2	..	12026b
35	508	50.6	-22 37	10.5	10.2	F8	5	..	24597b	85	422	51.1	+6 9	8.8	9.2	F5	3	..	12026b
36	1097	50.6	-30 2	9.13	9.6	F2	4	..	23780b	86	457	51.1	+0 7	8.88	9.44	Go	4	..	10409b
37	1010	50.6	-33 21	8.6	9.0	Ko	7	..	24621b	87	564	51.1	-14 6	8.2	9.0	G5	5	..	18191b
38	1090	50.6	-37 19	9.8	9.9	Go	2	..	40947b	88	565	51.1	-19 32	8.9	9.4	Fo	7	..	24597b
39	884	50.6	-42 59	7.4	8.7	G5	3	..	12267b	89	511	51.1	-21 50	9.6	9.6	Fo	6	..	24597b
40	791	50.6	-49 8	8.3	8.7	F2	4	..	20263b	90	1160	51.1	-25 43	6.77	7.9	Ko	8	..	23780b
41	790	50.6	-49 47	8.6	9.2	Go	4	..	23791b	91	1072	51.1	-26 33	8.34	9.3	Ko	4	..	23780b
42	860	50.6	-50 18	var.	var.	Md	6	0,3 R	23791b	92	201	51.1	-65 52	6.64	7.8	Ko	..	5,8-	56,119
43	730	50.7	+55 28	8.2	8.2	B9	5	..	38959i	93	204	51.1	-75 29	4.70	6.5	K2	..	R	28,196
44	682	50.7	+46 7	9.5	10.0	F8	1	..	38945i	94	576	51.2	+59 25	9.2	9.2	A0	3	R	37330i
45	671	50.7	+39 51	8.5	9.3	G5	2	..	38086i	95	663	51.2	+46 14	7.8	7.9	A5	4	..	37967i
46	594	50.7	+38 40	8.1	8.2	A2	3	2,3	37404i	96	509	51.2	+31 32	5.18	5.18	Aop	..	1, R	56,74
47	475	50.7	+13 16	8.8	9.6	G5	1	..	38919i	97	423	51.2	+5 13	9.11	9.89	G5	2	..	12026b
48	411	50.7	+12 35	8.4	9.5	K2	3	..	12026b	98	532	51.2	-16 28	8.5	9.6	K2	4	3,3	40971b
49	419	50.7	+5 12	9.31	9.37	A2	4	..	12026b	99	546	51.2	-20 10	7.85	9.0	Ko	8	..	24597b
50	542	50.7	-20 33	10.1	11.7	Ko	2	..	24597b	100	512	51.2	-22 1	10.9	11.9	K	1	..	24597b

THE HENRY DRAPER CATALOGUE.

18300

2^h 51^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1310	<i>m.</i> 51.2	<i>o</i> -24 29	9.2	9.1	F5	7	..	24597b	51	853	<i>m.</i> 51.8	<i>o</i> -46 37	8.9	9.6	Ko	4	..	23791b
2	959	51.2	-38 44	9.2	9.1	K5	2	..	45746b	52	608	51.9	+60 53	7.00	6.81	B2	6	3,8	37341i
3	628	51.3	+40 34	8.9	9.3	F5	3	..	38086i	53	599	51.9	+53 58	8.6	8.7	A3	3	..	38959i
4	520	51.3	- 2 45	9.6	10.2	Go	2	..	46082b	54	686	51.9	+45 59	9.4	9.7	Fo	1	..	38945i
5	568	51.3	-17 23	9.1	10.1	Ko	3	..	40971b	55	677	51.9	+39 28	8.7	8.7	Ao	3	2,2	38086i
6	566	51.3	-19 10	9.4	10.5	F8	3	..	24597b	56	547	51.9	+33 50	8.6	10.0	Ma	2	..	37404i
7	596	51.4	+35 21	8.1	8.9	G5	3	..	37404i	57	414	51.9	+15 53	6.88	7.88	Ko	4	0,3	38919i
8	467	51.4	+26 9	8.8	9.4	Go	2	..	38884i	58	381	51.9	+10 4	8.75	8.89	A5	4	..	12026b
9	373	51.4	+16 49	9.0	9.0	Ao	6	2,2	4419m	59	411	51.9	+ 3 16	7.8	8.2	F5	6	0,4	10311b
10	495	51.4	+14 12	9.0	10.4	Mb	3	..	4419m	60	521	51.9	- 1 59	9.4	10.0	Go	2	..	10409b
11	514	51.4	-22 1	10.1	10.8	Ko	3	..	24597b	61	1321	51.9	-24 43	8.5	9.3	Ko	8	..	24597b
12	1073	51.4	-26 7	9.7	10.0	K2	2	..	24597b	62	866	51.9	-50 4	9.4	10.2	K5	1	..	23791b
13	960	51.4	-38 24	10.2	9.1	F8	2	..	45746b	63	233	51.9	-61 33	8.8	10.0	Fo	3	..	17048b
14	757	51.4	-40 20	9.8	9.1	F5	2	..	45746b	64	234	51.9	-74 49	8.50	8.9	A5	5	..	20539b
15	119	51.5	+75 24	8.37	9.15	G5	3	..	38732i	65	23	52.0	+88 9	8.43	9.43	Ko	3	..	37793i
16	598	51.5	+53 53	8.7	8.8	A5	1	..	38959i	66	104	52.0	+77 42	8.1	8.4	F2	4	..	37555i
17	598	51.5	+38 39	8.1	8.1	Ao	3	0,2	37404i	67	469	52.0	+31 5	7.9	8.9	Ko	5	..	37404i
18	535	51.5	+32 20	8.5	8.8	Fo	2	..	37404i	68	515	52.0	+ 1 30	7.8	8.4	Go	6	0,5	10311b
19	393	51.5	+10 15	9.05	10.05	Ko	1	..	12026b	69	460	52.0	+ 0 3	6.72	6.86	A5	8	5,8	37541i
20	456	51.5	+ 3 6	8.6	9.2	Go	2	..	10311b	70	522	52.0	- 2 11	9.3	10.4	K2	2	..	10409b
21	552	51.5	- 8 4	8.7	9.1	F5	3	..	10410b	71	558	52.0	-13 39	8.7	9.3	Go	5	..	18191b
22	553	51.5	- 9 18	4.05	5.05	Ko	..	R	1623c	72	1322	52.0	-24 0	9.7	9.9	F8	5	..	24597b
23	1122	51.5	-23 38	8.2	9.7	K5	5	..	24597b	73	1323	52.0	-24 34	9.9	10.0	F8	2	..	45163b
24	1101	51.5	-35 58	8.9	9.9	K5	3	..	24621b	74	1077	52.0	-26 30	8.1	9.3	Ko	5	..	23780b
25	474	51.5	-56 17	6.72	7.3	Fo	2	..	5619b	75	1087	52.0	-28 59	9.9	9.9	F5	3	..	23780b
26	578	51.6	+60 10	7.91	7.67	B	4	R	37330i	76	1019	52.0	-33 4	10.2	9.9	F2	1	..	24621b
27	669	51.6	+57 22	9.0	9.0	Ao	3	..	38959i	77	853	52.0	-39 3	6.98	7.5	Ko	5	5,5	12267b
28	502	51.6	+29 19	8.9	9.7	G5	1	..	38884i	78	241	52.0	-62 38	9.0	10.0	Ko	2	..	17048b
29	469	51.6	+26 8	9.5	10.3	G5	1	..	38884i	79	814	52.1	+49 7	8.6	9.7	K2	1	..	38898i
30	379	51.6	+ 9 46	7.97	8.39	F5	4	..	37284i	80	600	52.1	+39 5	8.7	9.0	Fo	3	0,2	38086i
31	502	51.6	- 4 7	5.27	5.33	A2	..	..	56,74	81	480	52.1	+13 55	9.4	10.4	Ko	1	R	4419m
32	574	51.6	- 6 39	9.0	10.0	Ko	1	..	10410b	82	480	52.1	+13 55	9.4	10.4	Ko	1	R	4419m
33	548	51.6	-20 15	10.3	9.9	F5	5	..	24597b	83	471	52.1	+ 5 6	8.81	8.87	A2	4	..	10311b
34	549	51.6	-20 37	10.3	11.1	F8	3	..	24597b	84	419	52.1	- 0 59	7.08	7.86	G5	4	..	37541i
35	954	51.6	-45 28	9.4	9.9	Go	3	..	23791b	85	580	52.1	-10 47	8.5	8.8	Fo	5	..	18191b
36	205	51.6	-75 22	8.3	8.6	Fo	5	..	20539b	86	515	52.1	-22 43	8.9	9.1	G5	8	..	24597b
37	540	51.7	+59 11	7.85	7.85	Ao	6	..	37320i	87	1088	52.1	-29 21	7.7	8.4	F5	6	..	23780b
38	580	51.7	+41 43	8.2	8.2	Ao	5	..	38056i	88	1174	52.1	-31 40	9.9	10.2	Go	2	..	24621b
39	599	51.7	+38 13	6.08	7.08	Ko	5	2,7	37404i	89	798	52.1	-49 20	7.9	8.3	Ko	4	2,2	20263b
40	496	51.7	+14 43	9.1	10.2	K2	3	..	4419m	90	203	52.1	-65 18	7.0	7.4	F5	8	0,8	20429b
41	205	51.7	-64 45	9.33	9.9	Ko	3	..	38370b	91	672	52.2	+57 16	7.46	8.64	K5	4	..	37320i
42	748	51.8	+47 17	8.0	9.1	K2	2	..	38072i	92	667	52.2	+42 57	6.87	7.87	Ko	6	0,4	38056i
43	497	51.8	+14 17	9.1	9.2	A5	3	..	4419m	93	512	52.2	+32 5	6.74	7.74	Ko	5	..	37404i
44	453	51.8	+ 7 15	8.4	8.8	F5	5	..	12026b	94	489	52.2	+26 56	9.5	9.6	A2	1	..	38884i
45	410	51.8	+ 4 5	6.31	7.66	Ma	6	0,5	10311b	95	455	52.2	+ 7 22	8.6	9.0	F5	4	..	12026b
46	519	51.8	-15 25	7.68	7.74	A2	8	..	18191b	96	896	52.2	-43 39	8.9	9.9	K2	1	..	23791b
47	568	51.8	-19 7	8.7	9.7	G5	6	..	24597b	97	686	52.2	-51 40	8.6	8.7	Fo	4	..	20263b
48	550	51.8	-20 14	10.8	11.4	F8	3	..	24597b	98	208	52.2	-72 37	10.1	11.1	Ko	1	..	20539b
49	1127	51.8	-23 53	10.2	11.1	F8	2	..	24597b	99	128	52.3	+74 30	8.1	8.9	G5	4	..	37555i
50	1074	51.8	-26 36	7.34	7.4	A3	8	..	23780b	100	609	52.3	+43 33	8.0	9.0	Ko	3	0,3	38945i

18400

2^h 52^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.		
1	668	m. 52.3	o 43	1	8.7	8.7	Ao	2	2,2	38086i	51	414	m. 52.9	+ 3	26	9.8	10.6	G5	2	..	12026b
2	601	52.3	+38	23	8.6	8.6	B9	4	1,4-	37404i	52	553	52.9	- 5	7	8.9	9.3	F5	2	..	10409b
3	491	52.3	+26	56	9.2	9.8	Go	1	..	38884i	53	564	52.9	-12	9	8.9	9.9	Ko	4	..	18191b
4	480	52.3	+20	16	5.85	6.13	Fo	..	2,7-	56,74	54	1336	52.9	-24	16	5.41	5.55	A5	..	0,R	56,74
5	461	52.3	+17	25	7.16	8.10	Ko	4	0,3	37372i	55	1169	52.9	-25	22	8.3	8.4	G5	8	R	45163b
6	482	52.3	+13	39	9.0	9.5	F8	4	..	4419m	56	1107	52.9	-36	42	7.48	8.0	F5	3	0,7	44379b
7	534	52.3	-16	7	8.8	8.8	Ao	5	..	18191b	57	90	53.0	+80	2	8.53	8.53	A	4	..	37309i
8	198	52.3	-63	25	8.3	8.7	F5	4	..	38370b	58	581	53.0	+59	16	8.8	8.9	A2	4	..	38959i
9	504	52.4	+62	19	8.0	7.8	B	2	R	38984i	59	675	53.0	+58	2	9.2	9.3	A3	2	..	38959i
10	601	52.4	+53	56	8.6	8.7	A2	2	..	38959i	60	733	53.0	+55	55	8.6	8.7	A3	4	..	37320i
11	681	52.4	+39	16	4.62	4.68	A2	..	2,R	56,74	61	463	53.0	+17	16	8.8	8.8	Ao	3	..	37372i
12	1131	52.4	-23	23	8.3	9.3	G5	7	..	24597b	62	382	53.0	+ 9	49	7.97	9.04	K2	2	..	37476i
13	1031	52.4	-27	26	9.2	10.2	F8	2	..	45163b	63	526	53.0	- 2	44	8.2	8.3	A2	7	..	10409b
14	1175	52.4	-31	16	8.9	10.2	Go	4	..	24621b	64	1142	53.0	-22	56	9.1	9.6	G5	8	..	24597b
15	1025	52.4	-33	12	9.6	10.0	G5	2	..	44621b	65	953	53.0	-28	24	10.2	10.2	K2	2	..	45163b
16	1105	52.4	-36	25	9.2	10.0	G5	2	E	40947b	66	1122	53.0	-30	16	6.32	6.3	A5	10	..	23780b
17	180	52.5	+71	37	8.4	8.4	Ao	3	..	37555i	67	1180	53.0	-31	17	9.7	10.8	Go	1	..	24621b
18	671	52.5	+38	0	7.40	8.40	Ko	4	0,2-	37404i	68	1058	53.0	-34	15	9.6	10.2	F5	3	..	24621b
19	455	52.5	+ 6	37	9.0	9.5	F8	3	..	12026b	69	804	53.0	-49	44	8.6	8.6	Ao	5	..	20263b
20	571	52.5	-17	1	9.3	10.1	G5	2	..	40971b	70	868	53.0	-50	54	9.3	10.2	F5	1	..	20263b
21	517	52.5	-21	49	9.9	9.6	B8	4	..	24597b	71	208	53.0	-64	27	8.1	8.4	F2	5	..	38370b
22	1135	52.5	-23	6	9.7	10.8	G5	3	..	24597b	72	70	53.1	+83	11	9.7	11.1	Mb	..	..	M
23	206	52.5	-64	51	6.46	8.0	Ko	..	0,7-	56,119	73	582	53.1	+59	17	7.35	7.35	Ao	6	..	38959i
24	154	52.6	+72	13	7.8	7.8	Ao	2	0,2	38972i	74	669	53.1	+46	49	5.61	6.39	G5p	..	5,7R	56,75
25	538	52.6	+32	43	8.7	8.7	B9	3	..	37404i	75	396	53.1	+21	37	8.1	8.2	A5	3	0,1	37383i
26	456	52.6	+ 7	46	9.4	10.2	G5	1	..	12026b	76	465	53.1	+17	55	9.6	9.7	A2	2	E	38036i
27	560	52.6	-13	43	8.9	10.0	K2	2	..	39703b	77	499	53.1	+14	45	9.0	9.4	F5	2	0,5	38919i
28	524	52.6	-21	39	7.8	8.6	Ko	9	..	24597b	78	570	53.1	-19	43	9.28	10.8	Ko	4	..	24597b
29	1136	52.6	-23	47	9.5	11.1	G5	2	..	24597b	79	78	53.1	-79	6	8.5	9.6	K2	2	..	20538b
30	1166	52.6	-25	6	9.7	10.0	Fo	2	0,2-	24597b	80	506	53.2	+62	56	8.5	8.8	Fo	2	..	37341i
31	630	52.7	+54	15	8.6	9.6	Ko	1	..	38959i	81	759	53.2	+56	36	9.5	9.6	A5	1	..	38959i
32	415	52.7	+15	35	8.8	9.9	K2	5	2,2-	4419m	82	639	53.2	+40	38	6.07	7.14	K2	8	..	38056i
33	464	52.7	+ 0	1	8.8	9.6	G5	6	..	10409b	83	673	53.2	+37	29	8.2	8.3	A2	4	..	37404i
34	518	52.7	-22	30	10.1	11.3	K5	1	..	24597b	84	397	53.2	+21	13	6.68	6.76	A3	..	0,5-	56,75
35	519	52.7	-22	32	9.9	9.6	Go	6	..	24597b	85	383	53.2	+19	11	8.6	9.6	Ko	2	E	38036i
36	860	52.7	-39	51	7.98	8.0	Go	5	0,4	40947b	86	1144	53.2	-23	41	9.7	10.7	Ko	1	..	24597b
37	161	52.7	-66	45	9.3	9.9	Go	2	..	20429b	87	1112	53.2	-36	50	7.43	7.7	F2	7	2,3	40947b
38	103	52.8	+79	1	5.66	7.01	Ma	8	..	37309i	88	229	53.2	-60	8	8.3	8.6	A2	7	..	17048b
39	629	52.8	+54	48	7.10	7.10	Ao	6	..	37320i	89	190	53.2	-70	27	8.9	9.7	G5	2	..	20539b
40	668	52.8	+46	52	8.8	8.9	A2	3	..	37967i	90	214	53.3	+68	49	8.5	9.5	Ko	2	..	38943i
41	416	52.8	+24	32	9.5	9.9	F5	1	..	38884i	91	360	53.3	+64	55	8.6	8.6	Ao	1	..	38984i
42	392	52.8	+23	45	7.62	8.62	Ko	4	0,4	37477i	92	817	53.3	+49	35	8.6	8.7	A2	2	0,2	38898i
43	569	52.8	-19	27	9.9	10.8	Ao	3	..	24597b	93	552	53.3	+34	57	8.1	9.1	Ko	2	..	37404i
44	1167	52.8	-25	2	9.4	10.0	Ko	3	0,3	24597b	94	541	53.3	+32	30	9.1	9.1	Ao	2	..	37404i
45	1168	52.8	-25	22	8.5	8.7	G5	6	R	45163b	95	484	53.3	+13	12	7.36	8.14	G5	5	0,4-	37372i
46	1015	52.8	-35	47	6.58	7.9	G5	4	0,8	44379b	96	465	53.3	+ 0	2	8.98	10.05	K2	2	..	10409b
47	1099	52.8	-37	6	7.37	9.0	K2	4	..	40947b	97	529	53.3	- 1	59	8.9	9.2	Fo	3	..	10409b
48	207	52.8	-64	25	6.64	8.1	G5	7	..	38370b	98	538	53.3	-16	15	7.8	8.4	Go	6	..	45171b
49	550	52.9	+34	47	4.97	5.97	Ko	..	0,8	56,74	99	573	53.3	-18	50	9.6	10.2	Go	1	..	45171b
50	493	52.9	+26	22	8.5	9.5	Ko	2	..	38884i	100	520	53.3	-22	38	9.1	9.7	G5	7	..	24597b

THE HENRY DRAPER CATALOGUE.

18500

2^h 53^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
I	1059	m. 53.3	o 34 36	9.6	9.9	F2	3	..	24621b	51	642	m. 53.8	o 40 44	8.5	8.9	F5	2	3,2	38086i
2	903	53.3	-47 16	10.1	10.0	F5	2	..	23791b	52	675	53.8	+37 45	5.92	5.90	B9	7	I,10	38056i
3	131	53.4	+74 45	7.02	7.00	B9	..	0,7	56,75	53	539	53.8	-16 12	9.6	10.2	Go	1	..	45171b
4	641	53.4	+40 26	8.6	8.6	A0	3	2,3	38086i	54	474	53.9	+30 12	8.26	9.04	G5	2	..	37404i
5	553	53.4	+33 26	8.5	8.5	A0	4	..	37404i	55	495	53.9	+26 55	8.8	9.2	F5	5	E	37383i
6	494	53.4	+26 55	8.8	9.3	F8	1	..	38884i	56	383	53.9	+9 50	8.0	8.3	F0	4	5,3	37284i
7	418	53.4	+25 4	8.96	8.96	A0	2	..	38884i	57	585	53.9	-10 11	6.22	6.28	A2	5	3,10	44326b
8	440	53.4	+19 34	8.0	8.3	F0	5	0,3	37383i	58	1186	53.9	-31 22	9.5	10.8	G5	2	..	24621b
9	517	53.4	+1 43	7.58	8.58	Ko	4	..	10311b	59	30	53.9	-84 3	9.6	10.2	G	3	..	20538b
10	560	53.4	-10 50	10.3	10.7	F5	1	..	18191b	60	736	54.0	+56 0	8.6	9.4	G5	2	..	37320i
11	566	53.4	-12 24	6.70	7.48	G5	8	..	18191b	61	496	54.0	+26 30	8.6	9.7	K2	1	..	38884i
12	1088	53.4	-25 58	9.1	9.6	Ko	3	..	23780b	62	485	54.0	+21 8	8.9	9.2	F0	2	..	37383i
13	959	53.4	-28 4	8.7	9.4	G5	2	..	23780b	63	967	54.0	-28 46	8.5	9.9	G5	3	..	23780b
14	905	53.4	-47 8	8.9	8.8	F0	6	..	23791b	64	190	54.1	+69 29	8.6	9.1	F8	2	..	38943i
15	234	53.4	-61 1	9.9	10.4	F8	2	..	17048b	65	380	54.1	+63 59	8.5	8.5	A0	3	..	37341i
16	160	53.4	-69 38	10.2	10.8	Go	1	..	38366i	66	679	54.1	+42 33	8.6	8.6	A0	3	..	38086i
17	211	53.4	-72 51	9.7	10.3	Go	1	..	20539b	67	609	54.1	+39 11	8.7	9.0	F0	3	..	38086i
18	546	53.5	+58 38	8.2	8.3	A2	3	..	38959i	68	602	54.1	+35 59	8.1	8.4	F0	4	..	37404i
19	484	53.5	+20 56	5.55	5.61	A2	..	2,R	56,74	69	557	54.1	+34 46	8.5	8.9	F5	3	..	37404i
20		53.5	+20 56	5.25	5.31	A2	..			70	460	54.1	+6 15	7.38	7.66	F0	6	0,6	37476i
21	417	53.5	+15 59	9.4	9.5	A2	5	0,2	4419m	71	490	54.1	+0 51	8.6	8.6	A0	4	..	10311b
22	961	53.5	-28 51	9.1	9.9	F0	3	..	23780b	72	554	54.1	-5 10	7.94	7.94	A0	4	E	38073i
23	864	53.5	-46 43	8.2	9.3	Ko	4	..	23791b	73	564	54.1	-11 21	9.3	9.8	F8	3	..	18191b
24	491	53.5	-54 16	9.3	9.7	F5	1	..	20263b	74	1151	54.1	-23 26	11.8	11.3	A5	1	..	24597b
25	235	53.5	-61 52	8.2	9.4	Ko	5	..	38370b	75	65	54.1	-80 38	9.0	10.2	K5	1	..	20538b
26	361	53.6	+64 46	9.2	9.3	A2	1	..	38984i	76	219	54.2	+70 16	8.44	8.44	A0	3	..	37308i
27	609	53.6	+44 45	9.2	9.8	Go	1	..	38945i	77	737	54.2	+55 37	8.8	8.9	A5	1	..	38959i
28	676	53.6	+42 45	7.60	7.66	A2	4	..	38056i	78	672	54.2	+46 51	8.7	9.3	Go	2	..	38898i
29	427	53.6	+5 19	9.41	9.69	F0	2	..	12026b	79	477	54.2	+30 43	7.40	7.82	F5	6	..	37404i
30	506	53.6	-4 36	8.3	8.4	A2	8	..	10409b	80	487	54.2	+13 39	10.1	11.2	K2	1	..	4419m
31	558	53.6	-9 2	8.8	9.1	F2	4	..	18191b	81	430	54.2	+5 55	9.0	9.6	Go	2	..	12026b
32	563	53.6	-13 12	8.3	8.6	F0	5	..	18191b	82	520	54.2	+1 15	7.94	8.94	Ko	4	..	10311b
33	503	53.6	-18 3	9.6	10.2	Go	1	..	45171b	83	564	54.2	-13 45	8.7	10.1	Ma	3	..	18191b
34	502	53.6	-18 36	9.9	10.3	F5	2	0,1	45171b	84	1350	54.2	-24 11	10.4	10.2	G5	2	..	24597b
35	1343	53.6	-24 1	5.96	7.7	Ko	..	..	56,75	85	1096	54.2	-26 48	9.7	10.5	Ko	1	..	45163b
36	963	53.6	-28 6	8.7	9.7	Ko	2	..	23780b	86	970	54.2	-28 17	9.1	10.2	K2	1	..	23780b
37	665	53.7	+51 57	5.42	5.30	B5	..	4,R	1616c	87	1035	54.2	-33 15	10.9	10.0	A5	2	R	24621b
38		53.7	+51 57	6.79	6.67	B5	..			88	1036	54.2	-33 33	8.2	8.1	A2	8	..	24621b
39	750	53.7	+47 41	7.70	8.70	Ko	2	..	37967i	89	907	54.2	-43 14	8.6	9.0	A5	2	R	12267b
40	584	53.7	+41 25	9.2	9.3	A2	2	0,2	38945i	90	878	54.2	-49 57	9.5	10.7	Ko	1	..	23791b
41	606	53.7	+38 48	var.	var.	A	1	R	38086i	91	76	54.3	+82 31	7.21	7.99	G5	7	5,4	37558i
42	501	53.7	+14 47	9.4	9.5	A2	3	..	4419m	92	674	54.3	+46 26	9.4	9.5	A3	2	I,2	38072i
43	470	53.7	-3 11	5.20	5.26	A2	..	..	56,75	93	556	54.3	+33 59	9.4	10.0	Go	2	..	37404i
44	1094	53.7	-26 17	8.7	9.3	Ko	4	..	23780b	94	419	54.3	+24 51	8.9	9.0	A2	3	..	38884i
45	977	53.7	-37 56	7.7	8.8	Ko	2	..	40947b	95	419	54.3	+11 34	9.4	10.2	G5	2	..	12026b
46	976	53.7	-38 36	6.34	6.6	A0	7	I,9	44379b	96	384	54.3	+9 14	8.2	9.2	Ko	5	..	12026b
47	243	53.7	-59 13	8.8	9.8	A5	3	..	17048b	97	460	54.3	+3 7	8.4	8.4	A0	2	..	10311b
48	163	53.7	-66 44	9.9	10.7	G5	1	..	20429b	98	564	54.3	-9 31	9.3	10.1	G5	1	..	18191b
49	752	53.8	+47 30	7.64	7.70	A2	4	..	37967i	99	477	54.3	-56 36	8.6	9.6	K2	3	..	40953b
50	585	53.8	+41 44	8.2	8.3	A5	3	..	38056i	100	210	54.3	-64 14	8.6	8.7	A2	5	..	38370b

18600

2^h 54^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.		
1	51	<i>m.</i> 54.3	<i>o</i> -83	<i>'</i> 27	9.3	9.6	Fo	7	..	20538b	51	133	<i>m.</i> 54.9	<i>o</i> +75	<i>'</i> 6	8.97	8.97	Ao	1	..	38972i
2	508	54.4	+30	9	8.61	9.61	Ko	1	..	38884i	52	692	54.9	+45	27	9.2	9.2	Ao	3	0,2	38898i
3	385	54.4	+10	6	8.49	9.49	Ko	4	0,1	12026b	53	520	54.9	+32	9	9.1	9.6	F8	2	..	37404i
4	455	54.4	+8	31	4.69	4.57	B5	..	R	56,75	54	471	54.9	+17	36	6.94	6.94	Ao	6	0,7	37431i
5	565	54.4	-12	58	9.6	10.4	G5	2	..	39703b	55	..	54.9	+7	7	..	..	A5	3	..	12026b
6	525	54.4	-15	26	9.1	10.1	Ko	2	..	18191b	56	579	54.9	-17	49	9.9	10.7	G5	1	..	40971b
7	1043	54.4	-27	20	8.2	9.3	G5	4	..	23780b	57	528	54.9	-21	7	9.6	11.1	K	2	..	24597b
8	874	54.4	-46	4	8.3	9.1	Ko	5	..	23791b	58	529	54.9	-21	12	8.3	9.0	Ko	7	..	24597b
9	910	54.4	-46	58	8.7	9.1	F2	5	..	23791b	59	1356	54.9	-24	6	8.2	9.0	Ko	8	..	24597b
10	195	54.4	-73	51	8.1	8.2	A2	8	..	20539b	60	1071	54.9	-34	35	6.67	8.1	K2	8	..	24621b
11	362	54.5	+64	25	9.4	9.8	F5	2	..	38984i	61	812	54.9	-49	51	9.08	10.2	K5	2	..	23791b
12	613	54.5	+44	43	9.7	9.7	Ao	2	..	38945i	62	175	54.9	-70	57	9.1	10.1	Ko	3	..	20539b
13	612	54.5	+44	28	8.9	9.3	F5	2	..	38945i	63	682	55.0	+51	3	8.7	8.8	A5	2	..	38932i
14	687	54.5	+40	2	7.82	7.90	A3	3	..	38056i	64	681	55.0	+42	18	8.4	8.5	A2	2	E	38072i
15	611	54.5	+38	52	8.1	9.1	Ko	2	..	38086i	65	607	55.0	+35	45	7.50	8.57	K2	3	..	37404i
16	461	54.5	+7	7	8.8	9.1	Fo	5	..	12026b	66	434	55.0	+5	14	8.61	8.67	A2	4	..	10311b
17	427	54.5	-1	2	8.6	9.2	Go	5	0,3	10409b	67	471	55.0	-0	9	8.7	9.7	Ko	4	..	10409b
18	511	54.5	-4	31	7.75	8.25	F8	7	0,7-	46082b	68	429	55.0	-1	5	8.2	9.4	K5	5	5,3	10409b
19	566	54.5	-11	15	9.6	10.1	F8	4	..	18191b	69	532	55.0	-2	12	8.1	8.4	Fo	6	..	46082b
20	505	54.5	-17	57	10.3	10.4	A2	2	..	45171b	70	1098	55.0	-26	33	8.2	9.4	Ko	4	..	23780b
21	524	54.5	-21	56	10.3	11.3	Go	3	..	24597b	71	1040	55.0	-33	19	8.7	9.3	Ko	4	..	24621b
22	771	54.5	-40	42	3.42	3.48	A2	..	0,R	28,196	72	973	55.0	-45	8	9.4	10.2	F2	2	..	23791b
23	54.5	-40	42	4.42	4.48	A2	..	0,R	28,196	73	913	55.0	-47	29	9.4	9.3	Fo	4	..	23791b	
24	193	54.5	-67	7	9.5	10.5	Ko	1	..	20429b	74	247	55.0	-59	18	8.6	10.3	Ko	3	..	17048b
25	207	54.5	-75	50	8.5	8.6	A5	5	..	20539b	75	201	55.0	-63	26	7.5	8.0	F8	6	..	38370b
26	691	54.6	+45	24	8.6	9.2	Go	3	5,2	38898i	76	212	55.0	-64	25	8.8	9.4	Go	2	..	38370b
27	399	54.6	+10	16	7.35	7.77	F5	5	0,4	37372i	77	122	55.1	+75	36	8.62	8.62	Ao	3	..	37555i
28	586	54.6	-10	40	8.7	9.1	F5	6	..	18191b	78	606	55.1	+53	58	7.36	7.50	A5	6	..	37320i
29	882	54.6	-50	33	8.0	8.7	Fo	6	..	20263b	79	645	55.1	+40	29	8.5	8.6	A5	3	..	38086i
30	237	54.6	-61	0	8.4	8.8	Ko	4	..	17048b	80	558	55.1	+34	2	8.9	9.3	F5	2	..	37404i
31	419	54.7	+15	24	10.1	10.9	G5	1	..	4419m	81	400	55.1	+10	24	9.14	9.70	Go	3	..	12026b
32	459	54.7	+7	21	8.4	9.2	G5	3	..	37476i	82	495	55.1	+0	36	8.4	9.4	Ko	6	5,4	24103b
33	475	54.7	-2	52	5.48	5.46	B9	..	..	56,75	83	580	55.1	-17	7	8.3	8.6	Fo	5	..	40971b
34	533	54.7	-7	35	6.63	7.63	Ko	8	E	18191b	84	105	55.2	+78	10	8.6	8.7	A3	3	..	37309i
35	568	54.7	-11	4	8.4	9.2	G5	6	..	18191b	85	754	55.2	+48	3	9.0	10.2	K5	1	..	38898i
36	986	54.7	-38	24	7.57	8.6	G5	4	5,3	40947b	86	683	55.2	+42	54	8.9	10.1	K5	1	..	38945i
37	476	54.7	-55	25	6.82	7.3	Fo	8	..	5619b	87	693	55.2	+39	58	8.47	8.47	Ao	2	..	38056i
38	243	54.7	-62	13	9.0	10.0	Ko	4	..	38370b	88	472	55.2	-0	43	8.7	9.7	Ko	2	..	46082b
39	165	54.8	+73	33	7.49	7.49	Ao	5	..	37555i	89	512	55.2	-4	4	8.3	8.7	F5	7	..	10409b
40	239	54.8	+68	8	9.2	9.6	F5	2	..	38943i	90	576	55.2	-14	5	7.42	8.20	G5	7	..	18191b
41	644	54.8	+40	25	7.27	8.45	K5	3	..	38056i	91	1358	55.2	-24	33	10.4	10.5	K	2	..	24597b
42	605	54.8	+35	38	8.5	9.5	Ko	2	..	37405i	92	1191	55.2	-25	41	5.63	6.1	F2	10	R	23780b
43	416	54.8	+22	26	7.37	8.15	G5	3	0,4	37477i	93	1110	55.2	-37	16	9.2	10.2	G5	1	..	40947b
44	490	54.8	+14	7	9.0	9.1	A3	4	R	4419m	94	914	55.2	-47	48	9.9	10.5	Ko	2	..	23791b
45	428	54.8	-1	5	8.2	8.8	Go	7	0,4	10409b	95	213	55.2	-64	15	8.3	9.3	Ko	4	..	38370b
46	568	54.8	-9	49	8.51	8.93	F5	4	..	18191b	96	77	55.2	-78	16	7.56	9.1	K5	3	..	20538b
47	508	54.8	-18	32	9.6	10.0	F5	3	..	40971b	97	422	55.3	+15	33	10.8	11.8	Ko	1	..	4419m
48	562	54.8	-20	29	10.5	11.4	Go	2	..	24597b	98	422	55.3	+12	36	8.4	9.6	K5	2	3,1	12026b
49	1187	54.8	-25	38	10.4	9.9	Go	2	..	23780b	99	420	55.3	+11	33	9.6	10.4	G5	1	..	12026b
50	1106	54.8	-29	18	6.19	7.2	G5	9	..	23780b	100	401	55.3	+10	29	6.20	7.38	K5	5	0,4	37372i

THE HENRY DRAPER CATALOGUE.

18700

2^h 55^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	402	55.3	+10 27	8.6	9.1	F8	2	..	37476i	51	651	55.8	+40 59	8.5	8.9	F5	4	..	38056i
2	435	55.3	+ 5 35	8.2	9.0	G5	3	..	37476i	52	503	55.8	+14 36	8.0	8.3	F2	6	0,8	37372i
3	571	55.3	- 9 38	9.4	9.7	F0	3	..	18191b	53	918	55.8	-44 1	8.8	8.8	A5	4	..	23791b
4	581	55.3	-16 51	9.9	10.2	F0	2	..	40971b	54	349	55.8	-52 30	8.4	8.9	G5	3	..	20263b
5	582	55.3	-17 6	8.9	9.3	F5	3	..	40971b	55	214	55.8	-64 40	8.7	9.7	K0	3	..	38370b
6	532	55.3	-21 38	10.3	11.4	G0	3	..	24597b	56	162	55.8	-69 17	8.3	8.4	A3	7	..	20539b
7	1162	55.3	-23 47	8.7	9.1	G0	8	..	24597b	57	513	55.9	+61 21	6.67	7.23	G0	5	5,6R	37341i
8	857	55.3	-41 8	8.7	8.7	G5	3	5,3	40947b	58	610	55.9	+35 12	9.32	10.32	K0	1	..	37404i
9	915	55.3	-44 9	7.26	7.8	G0	6	..	12267b	59	482	55.9	+ 4 37	9.4	10.0	G	2	..	12026b
10	818	55.3	-49 8	9.3	10.7	G5	2	..	23791b	60	478	55.9	- 3 17	6.34	7.69	Ma	8	0,4	24103b
11	248	55.3	-57 58	8.9	9.5	F2	4	..	40953b	61	1105	55.9	-26 11	10.4	10.5	K0	1	2,1	42897b
12	231	55.3	-60 26	9.7	10.3	G0	2	..	17048b	62	978	55.9	-28 29	8.1	9.0	K0	5	..	23780b
13	181	55.3	-68 39	8.9	10.0	K2	2	..	38366i	63	494	55.9	-54 5	7.8	7.8	K0	5	0,2	20263b
14	607	55.4	+53 53	8.6	8.7	A5	2	..	38959i	64	202	55.9	-63 4	9.4	10.4	K0	3	..	38370b
15	526	55.4	+32 1	6.71	7.49	G5	7	R	37405i	65	214	55.9	-72 13	8.3	9.1	G5	7	..	20539b
16	502	55.4	+14 38	7.26	7.76	F8	5	0,9	37372i	66	588	56.0	+59 55	7.16	7.58	F5	6	0,4	37320i
17	387	55.4	+ 9 52	7.87	8.04	K2	2	..	37476i	67	587	56.0	+59 27	9.2	10.2	K0	1	..	38959i
18	572	55.4	- 9 26	8.9	9.7	G5	3	..	18191b	68	678	56.0	+46 42	6.80	7.30	F8	4	..	37967i
19	570	55.4	-13 27	8.3	9.1	G5	5	..	18191b	69	477	56.0	+26 4	5.91	5.97	A2	9	..	38884i
20	543	55.4	-16 28	8.3	9.3	K0	5	..	40971b	70	423	56.0	+12 35	9.4	9.4	A0	2	..	12026b
21	564	55.4	-19 53	9.83	11.1	F8	2	..	24597b	71	1112	56.0	-32 2	8.9	10.0	K0	4	..	24621b
22	565	55.4	-20 10	9.9	10.5	G0	3	..	24597b	72	686	56.1	+51 2	8.7	8.8	A5	2	..	38932i
23	566	55.4	-20 16	10.5	11.7	G5	2	..	24597b	73	423	56.1	+15 56	9.4	10.4	K0	4	0,2	4419m
24	1189	55.4	-31 43	9.7	10.8	G5	2	..	24621b	74	438	56.1	+ 5 51	8.6	9.4	G5	4	..	12026b
25	194	55.4	-67 39	9.5	9.5	A0	6	..	20429b	75	591	56.1	-10 26	8.5	9.1	G0	6	..	18191b
26	222	55.4	-76 14	9.3	9.4	A2	4	..	20539b	76	823	56.1	-49 11	9.7	10.2	G0	2	..	23791b
27	194	55.5	+69 50	9.4	9.5	A5	2	R	38943i	77	163	56.1	-68 56	10.1	11.2	K2	1	..	38366b
28	592	55.5	+41 14	8.6	9.0	F5	2	..	38056i	78	97	56.2	+81 5	5.95	6.01	A2	9	..	37309i
29	617	55.5	+38 31	6.62	6.70	A3	7	..	37404i	79	220	56.2	+70 38	8.2	9.0	G5	3	E	37308i
30	391	55.5	+19 1	8.0	8.4	F5	2	..	38036i	80	756	56.2	+47 30	9.4	9.5	A5	2	..	38932i
31	559	55.5	- 8 32	8.1	8.9	G5	5	..	18191b	81	623	56.2	+43 12	9.4	9.5	A3	1	..	38945i
32	581	55.5	-19 16	9.4	11.4	K0	1	..	40971b	82	594	56.2	+41 56	9.7	9.8	A2	1	..	38945i
33	1046	55.5	-27 31	10.2	10.2	G0	3	..	45163b	83	425	56.2	+16 7	8.4	8.8	F5	3	3,2-	38919i
34	1042	55.5	-32 54	6.29	6.2	A0	..	..	56,119	84	562	56.2	- 8 3	5.94	6.72	G5	5	R	44326b
35	512	55.6	+61 35	8.8	8.8	A0	2	..	38984i	85	1199	56.2	-25 28	8.9	9.7	G5	4	..	23780b
36	423	55.6	+24 45	8.3	8.6	F2	4	..	38884i	86	245	56.2	-62 12	9.2	10.0	G5	3	..	38370b
37	497	55.6	+ 0 37	8.6	9.0	F5	4	..	24103b	87	124	56.3	+75 25	7.42	8.77	Ma	2	..	37555i
38	480	55.6	- 0 31	8.7	9.7	K0	6	5,4	10409b	88	653	56.3	+40 51	8.7	9.7	K0	2	0,1	38086i
39	571	55.6	-11 41	8.9	9.7	G5	4	..	18191b	89	499	56.3	+ 0 46	8.0	8.1	A3	8	3,9	10311b
40	576	55.6	-11 51	7.40	8.18	G5	7	..	18191b	90	573	56.3	-10 52	9.9	10.7	G5	2	..	39703b
41	533	55.6	-21 13	7.86	8.7	G0	8	..	24597b	91	535	56.3	-21 5	7.52	8.7	Ma	8	..	24597b
42	1137	55.6	-30 35	7.7	8.4	F5	7	..	23780b	92	536	56.3	-21 15	9.4	10.8	G5	3	..	24597b
43	91	55.7	+79 55	8.4	8.4	B9	5	..	37309i	93	1169	56.3	-23 46	10.2	11.1	K0	3	..	24597b
44	593	55.7	+41 34	8.4	8.9	F8	2	3,2-	38056i	94	1039	56.3	-35 30	9.5	9.9	K0	3	..	24621b
45	436	55.7	+ 5 12	8.96	10.14	K5	2	..	12026b	95	480	56.3	-55 58	6.92	7.8	K0	5	..	20263b
46	480	55.7	+ 4 54	8.5	9.3	G5	4	..	10311b	96	250	56.3	-58 10	8.5	9.4	A0	7	..	40953b
47	820	55.7	-49 51	8.43	8.7	F2	4	..	20263b	97	203	56.3	-63 0	9.3	9.3	B9	4	..	38370b
48	551	55.8	+59 3	7.8	8.6	G5	3	..	38959i	98	195	56.3	-67 15	9.2	9.3	A5	4	..	38366b
49	685	55.8	+50 24	9.2	9.3	A2	1	..	38932i	99	363	56.4	+64 47	8.4	8.9	F8	2	..	37341i
50										100	387	56.4	+63 23	8.6	9.0	F5	2	..	37341i

18800

2^h 56^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
I	595	56.4	+42 5	8.5	9.5	Ko	I	..	38945i	51	922	56.8	-47 49	7.9	7.6	A3	5	1,6	886ob
2	688	56.4	+37 33	8.7	8.8	A2	2	..	37405i	52	165	56.8	-66 29	9.0	9.4	F5	3	..	20429b
3	503	56.4	+26 14	6.72	7.28	Go	6	..	38884i	53	197	56.8	-67 46	9.3	9.7	F5	6	..	20429b
4	421	56.4	+23 2	8.1	8.1	Ao	3	..	37477i	54	33	56.8	-84 42	9.2	10.2	Ko	2	..	20538b
5	491	56.4	+13 39	10.4	11.4	Ko	I	..	4419m	55	225	56.9	+71 8	8.4	8.4	Ao	4	..	38972i
6	528	56.4	+ 1 48	9.0	9.0	Ao	2	..	10311b	56	670	56.9	+52 7	9.2	9.7	F8	2	..	38932i
7	537	56.4	-21 8	9.6	11.1	G5	3	..	24597b	57	834	56.9	+49 20	8.8	8.9	A3	2	3,1	38072i
8	1200	56.4	-25 2	9.20	9.4	F5	4	..	23780b	58	759	56.9	+47 19	9.4	10.4	Ko	2	..	38932i
9	1119	56.4	-37 51	8.2	8.7	Go	3	..	40947b	59	659	56.9	+41 10	7.6	8.7	K2	2	..	38056i
10	987	56.4	-42 16	7.0	8.3	Ko	5	5,4	40947b	60	562	56.9	+33 31	8.5	9.1	Go	2	..	37404i
11	481	56.4	-56 34	8.4	9.9	Ma	3	..	40953b	61	587	56.9	-13 59	9.9	10.4	F8	2	..	18191b
12	31	56.4	-84 1	9.4	10.2	G5	4	..	20538b	62	1374	56.9	-24 26	9.1	9.7	G5	4	0,3-	24597b
13	426	56.5	+12 51	9.0	9.6	Go	2	..	38919i	63	1055	56.9	-27 16	9.7	9.7	G5	2	..	23780b
14	464	56.5	+ 3 9	8.77	8.85	A3	2	..	10311b	64	1049	56.9	-33 30	7.28	7.3	F5	7	..	24621b
15	592	56.5	-10 43	9.6	10.2	Go	2	..	18191b	65	247	56.9	-62 51	8.3	8.4	A3	7	..	3837ob
16	512	56.5	-18 16	8.1	9.1	Ko	5	..	40971b	66	215	56.9	-64 28	5.08	5.22	A5	..	3,9 R	28,196
17	538	56.5	-21 32	10.3	11.4	F8	3	..	24597b	67	108	56.9	-67 32	9.0	10.0	Ko	5	..	20429b
18	1170	56.5	-23 20	9.1	10.5	Ko	4	..	24597b	68	683	57.0	+57 11	8.8	9.1	Fo	3	..	38959i
19	982	56.5	-28 2	7.61	7.9	Go	8	..	23780b	69	841	57.0	+49 0	8.9	8.9	Ao	2	..	38072i
20	1143	56.5	-30 7	8.7	9.3	Fo	4	..	23780b	70	758	57.0	+47 58	9.7	9.7	Ao	2	..	38932i
21	1040	56.5	-35 11	8.2	9.9	K5	3	..	24621b	71	427	57.0	+13 3	9.8	10.8	Ko	2	..	4419m
22	496	56.5	-54 39	9.3	9.7	Ko	1	..	20263b	72	440	57.0	+ 5 16	9.16	9.94	G5	2	..	12026b
23	365	56.6	+65 9	8.15	8.65	F8	3	..	37341i	73	482	57.0	- 3 20	8.9	9.0	A5	3	..	46082b
24	837	56.6	+48 22	8.7	9.7	Ko	2	5,1	38898i	74	1056	57.0	-27 52	8.5	8.7	A2	5	..	23780b
25	427	56.6	+15 23	10.8	11.8	Ko	1	..	4419m	75	157	57.1	+72 36	7.7	8.5	G5	3	..	37555i
26	465	56.6	+ 2 45	8.6	8.6	Ao	6	..	10311b	76	512	57.1	+62 38	7.42	7.37	B8	6	0,5	37341i
27	540	56.6	-21 48	10.3	11.3	K	2	..	24597b	77	589	57.1	+59 38	8.2	8.2	Ao	3	2,2	38959i
28	1122	56.6	-36 58	9.8	10.2	F8	1	..	40947b	78	760	57.1	+47 28	6.62	6.90	Fo	6	..	37967i
29	497	56.6	-54 18	6.80	7.2	Ko	7	0,4	20263b	79	682	57.1	+46 42	9.4	9.5	A2	1	..	38898i
30	656	56.7	+40 57	8.1	8.1	Ao	3	..	38056i	80	598	57.1	+42 1	7.8	8.2	F5	3	..	38056i
31	403	56.7	+21 59	8.1	8.5	F5	3	..	37477i	81	692	57.1	+38 1	7.01	7.01	Ao	8	..	37405i
32	485	56.7	+ 4 57	6.38	7.38	Ko	8	..	37476i	82	550	57.1	+32 45	8.1	9.3	K5	3	..	37404i
33	434	56.7	- 1 19	8.0	8.6	Go	5	..	24103b	83	420	57.1	+ 3 58	5.63	5.51	B5	..	..	291c
34	433	56.7	- 1 34	8.8	9.6	G5	4	..	24103b	84	419	57.1	+ 3 42	2.82	4.17	Ma	..	R	28,108
35	586	56.7	-17 13	9.9	10.4	F8	2	..	40971b	85	594	57.1	-10 21	6.02	6.80	G5	9	..	18191b
36	587	56.7	-17 37	8.10	8.66	Go	6	..	40971b	86	593	57.1	-10 35	9.6	10.7	K2	1	..	39703b
37	1146	56.7	-30 45	7.46	8.1	Ko	7	..	23780b	87	541	57.1	-20 49	9.9	11.1	G5	3	..	24597b
38	1131	56.7	-36 21	8.9	9.9	F8	2	..	40947b	88	528	57.1	-21 59	10.5	11.4	G	2	..	24597b
39	826	56.7	-49 49	9.5	10.4	K5	1	..	23791b	89	1050	57.1	-33 34	8.2	8.5	Fo	5	..	24621b
40	32	56.7	-84 19	9.6	9.6	Ao	6	..	20538b	90	986	57.1	-45 26	10.1	10.2	G	1	..	23791b
41	156	56.8	+72 26	8.5	8.5	Ao	2	..	38972i	91	81	57.1	-78 29	8.5	9.0	F8	2	..	20538b
42	689	56.8	+50 34	8.8	9.3	F8	3	..	38898i	92	366	57.2	+64 46	7.27	8.27	Ko	4	..	37341i
43	839	56.8	+48 18	8.8	8.8	Ao	2	..	38932i	93	441	57.2	+ 5 12	9.8	10.3	F8	2	..	12026b
44	680	56.8	+46 57	8.9	8.9	Ao	3	0,2	38898i	94	537	57.2	- 6 53	6.26	6.76	F8	9	..	38073i
45	504	56.8	+14 34	10.4	11.2	G5	1	..	4419m	95	1211	57.2	-25 41	9.7	10.8	Ko	1	..	42897b
46	586	56.8	-14 17	9.9	10.7	G5	2	..	18191b	96	986	57.2	-28 50	7.78	8.1	Fo	7	..	23780b
47	569	56.8	-20 23	9.6	10.5	F8	3	..	24597b	97	825	57.2	-48 36	9.5	11.2	K5	1	..	23791b
48	1110	56.8	-26 51	10.4	10.5	G	1	..	45163b	98	482	57.2	-56 22	8.7	9.1	Go	4	..	40953b
49	1052	56.8	-26 57	10.6	10.5	Ko	1	..	45163b	99	662	57.3	+40 50	8.7	8.7	Ao	3	..	38086i
50	1053	56.8	-27 4	9.7	10.0	F8	2	..	45163b	100	616	57.3	+36 3	7.80	8.30	F8	5	..	37404i

THE HENRY DRAPER CATALOGUE.

18900

2^h 57^m. 3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	405	57.3	+21 35	8.3	9.4	K ₂	2	..	37477i	51	493	57.8	+13 55	10.8	11.9	K ₂	1	..	4419m
2	492	57.3	+21 10	8.3	9.3	K ₀	2	..	37477i	52	405	57.8	+10 32	8.4	9.6	K ₅	4	3,2	12026b
3	380	57.3	+17 10	9.0	9.4	F ₅	2	..	38036i	53	568	57.8	- 8 5	5.52	6.30	G ₅	..	R	56,75
4	404	57.3	+10 38	8.13	8.41	F ₀	3	..	37476i	54	578	57.8	-11 18	10.1	10.9	G ₅	2	..	39703b
5	529	57.3	-22 30	9.4	10.8	K ₀	3	..	24597b	55	532	57.8	-15 40	8.3	9.1	G ₅	4	0,4	40971b
6	1212	57.3	-25 49	9.1	9.0	F ₈	5	..	23780b	56	520	57.8	-18 32	9.6	10.6	K ₀	1	..	40971b
7	987	57.3	-28 28	5.90	6.9	G ₅	..	5, R	56,119	57	990	57.8	-28 23	9.2	9.9	G ₀	2	..	23780b
8	625	57.4	+43 44	7.8	7.8	A ₀	4	0,3	38898i	58	232	57.8	-60 13	7.83	9.1	G ₅	6	5,5	38370b
9	466	57.4	+ 8 5	8.4	9.6	K ₅	5	5,2	12026b	59	216	57.8	-64 2	7.7	8.7	K ₀	5	..	38370b
10	486	57.4	+ 4 48	8.0	8.0	A ₀	8	1,6	10311b	60	197	57.8	-72 57	8.5	8.9	F ₅	4	..	20539b
11	591	57.4	-19 44	8.43	9.3	K ₅	6	..	24597b	61	63	57.8	-80 58	9.4	9.9	F ₈	4	..	20538b
12	988	57.4	-45 41	8.6	8.4	A ₃	7	..	23791b	62	242	57.9	+67 1	7.8	8.4	G ₀	4	..	37341i
13	251	57.4	-58 38	8.6	9.2	G ₀	5	..	40953b	63	590	57.9	+59 56	9.0	9.0	A ₀	1	..	38959i
14	367	57.5	+65 3	8.05	8.19	A ₅	4	..	37341i	64	655	57.9	+52 14	7.9	9.1	K ₅	2	..	38898i
15	517	57.5	+61 16	8.6	8.6	B ₉	2	..	37341i	65	406	57.9	+11 4	9.4	10.2	G ₅	2	..	12026b
16	836	57.5	+49 38	8.2	9.0	G ₅	5	5,3	38898i	66	533	57.9	-22 19	10.3	11.1	G ₅	1	..	24597b
17	449	57.5	+19 57	8.4	9.4	K ₀	1	E	38036i	67	1184	57.9	-23 12	8.9	9.3	F ₈	6	..	24597b
18	442	57.5	+ 5 21	8.8	9.3	F ₈	3	..	12026b	68	1206	57.9	-31 45	8.9	10.4	K ₀	2	..	24621b
19	486	57.5	+ 0 2	9.38	9.66	F ₀	3	..	24103b	69	685	58.0	+57 20	8.8	8.9	A ₂	1	..	38959i
20	575	57.5	-13 1	8.3	8.8	F ₈	3	..	18191b	70	767	58.0	+56 19	5.08	6.08	K ₀	10	R	37320i
21	516	57.5	-18 36	7.40	7.68	F ₀	8	..	40971b	71	699	58.0	+39 54	7.32	8.32	K ₀	5	0,5	38082i
22	1216	57.5	-25 11	9.7	9.6	F ₅	3	..	23780b	72	494	58.0	+14 5	8.0	9.0	K ₀	3	0,7	38036i
23	1217	57.5	-25 36	8.9	10.2	K ₂	2	..	23780b	73	408	58.0	+10 18	8.27	9.45	K ₅	5	..	12026b
24	82	57.5	-78 3	8.6	9.6	K ₀	2	..	14358b	74	503	58.0	+ 0 58	8.0	9.0	K ₀	6	0,4	24103b
25	654	57.6	+53 7	3.08	3.50	F ₅	..	R	842c	75	538	58.0	- 2 29	7.48	7.90	F ₅	8	..	24103b
26	838	57.6	+53 7	8.5	9.5	A ₃	2	..	38898i	76	483	58.0	- 3 23	8.7	9.7	K ₀	6	..	24103b
27	468	57.6	+49 24	6.34	6.48	A ₅	7	..	37477i	77	544	58.0	-20 52	9.9	11.1	K ₀	3	..	24597b
28	469	57.6	+27 11	8.1	9.1	K ₀	2	..	37477i	78	1387	58.0	-24 1	4.16	4.24	A ₃	..	1,4 R	28,196
29	425	57.6	+11 18	9.8	9.9	A ₂	2	..	12026b	79	1125	58.0	-29 7	10.4	10.4	G ₀	1	..	45169b
30	577	57.6	-10 54	10.3	10.9	G ₀	3	..	39703i	80	196	58.1	+69 51	8.24	8.38	A ₅	3	5,3	37555i
31	589	57.6	-14 39	9.51	9.57	A ₂	3	..	18191b	81	841	58.1	+49 20	8.1	8.1	A ₀	4	..	38072i
32	577	57.6	-17 52	8.5	9.5	K ₀	4	..	40971b	82	700	58.1	+45 55	9.0	9.8	G ₅	1	..	38898i
33	1181	57.6	-23 19	9.2	10.8	A ₂	3	..	24597b	83	566	58.1	+33 44	8.5	8.5	A ₀	3	..	37404i
34	924	57.6	-43 46	9.5	10.2	K ₅	1	..	23791b	84	471	58.1	+28 8	8.6	8.6	B ₉	3	..	37477i
35	893	57.6	-50 9	9.7	9.2	K ₀	1	..	23791b	85	519	58.1	- 3 51	9.6	10.7	K ₂	2	..	24103b
36	252	57.6	-58 2	9.1	10.1	F	2	..	40953b	86	593	58.1	-14 48	9.36	9.92	G ₀	3	..	18191b
37	565	57.7	+34 4	7.8	7.9	A ₅	4	..	37404i	87	1221	58.1	-25 31	10.6	10.2	G ₀	1	..	23780b
38	517	57.7	+30 7	8.56	9.56	K ₀	1	..	38884i	88	1160	58.1	-30 53	9.2	9.3	A ₀	5	..	23780b
39	425	57.7	+22 40	7.12	7.68	G ₀	5	..	37477i	89	1050	58.1	-35 32	9.2	10.2	K ₀	3	..	24621b
40	581	57.7	-12 49	8.9	9.5	K ₀	2	..	18191b	90	520	58.2	+61 24	8.5	8.5	A ₀	1	..	38984i
41	591	57.7	-13 55	8.1	8.9	G ₅	5	..	18191b	91	738	58.2	+55 41	6.50	7.50	K ₀	6	..	37320i
42	570	57.7	-20 18	9.3	9.9	G ₀	4	..	24597b	92	763	58.2	+47 31	8.5	8.5	B ₉	3	3,4	38072i
43	571	57.7	-20 30	10.1	10.8	A ₂	3	..	24597b	93	683	58.2	+46 12	8.2	8.8	G ₀	3	5,3	38072i
44	530	57.7	-22 9	8.4	8.8	F ₈	7	..	24597b	94	531	58.2	+31 33	8.1	8.1	A ₀	5	..	37404i
45	1218	57.7	-25 51	9.1	9.3	G ₀	5	..	23780b	95	443	58.2	+ 5 51	6.62	6.90	F ₀	8	0,8	37476i
46	1157	57.7	-30 51	8.9	9.9	K ₀	2	..	45169b	96	549	58.2	-16 17	9.9	10.4	F ₈	1	..	40971b
47	999	57.7	-38 31	9.6	9.5	F ₅	2	..	40947b	97	593	58.2	-18 50	9.3	9.6	F ₂	3	..	40971b
48	R	57.7	-51 2	var.	var.	Md	..	R	56,198	98	1131	58.2	-37 17	8.9	9.9	F ₅	1	..	40947b
49	696	57.8	+37 43	6.91	6.89	B ₉	5	..	37404i	99	516	58.3	+62 25	8.4	8.7	F ₀	2	..	37341i
50										100	692	58.3	+42 49	9.4	9.4	A ₀	2	..	38086i

1900

2^h 58^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	488	58.3	+ 4 57	9.00	10.00	Ko	3	..	12026b	51	787	58.7	-40 39	8.3	8.2	F2	6	0,4	40947b
2	506	58.3	+ 1 8	9.04	9.46	F5	3	..	24103b	52	69	58.7	-80 43	9.0	9.1	A2	6	..	20538b
3	540	58.3	- 2 35	9.6	10.4	G5	2	..	24103b	53	34	58.7	-83 58	8.8	9.8	Ko	6	..	20538b
4	1188	58.3	-22 56	8.9	10.8	K5	2	..	24597b	54	772	58.8	+56 30	8.7	8.7	Ao	2	..	38959b
5	992	58.3	-28 15	11.1	10.2	A	2	..	45163b	55	658	58.8	+52 40	8.6	9.4	G5	2	..	38932i
6	1125	58.3	-32 0	8.9	9.9	A3	6	..	24621b	56	618	58.8	+44 42	9.2	10.0	G5	1	..	38072i
7	996	58.3	-42 14	8.0	9.6	K2	2	..	45746b	57	663	58.8	+40 44	7.18	7.18	Ao	5	..	38056i
8	108	58.4	+78 1	8.0	8.8	G5	2	..	37555i	58	630	58.8	+38 27	var.	var.	Mb	10	R	37404i
9	592	58.4	+59 11	9.2	9.3	A2	2	..	37320i	59	567	58.8	+34 24	8.3	8.9	Go	2	..	37404i
10	693	58.4	+42 47	8.7	8.7	Ao	1	..	38072i	60	484	58.8	+30 40	8.7	9.7	Ko	1	..	38884i
11	629	58.4	+39 8	8.3	8.7	F5	3	..	37405i	61	507	58.8	+14 27	10.4	11.2	G5	3	..	4419m
12	535	58.4	-22 14	7.9	8.0	A3	10	..	24597b	62	580	58.8	-11 7	10.5	11.6	K2	1	..	39703b
13	836	58.4	-49 15	8.8	9.5	G5	4	..	23791b	63	579	58.8	-11 22	7.18	7.68	F8	7	..	18191b
14	34	58.4	-85 34	8.42	9.9	K5	3	..	20538b	64	575	58.8	-20 37	8.8	10.3	Mb	4	..	24597b
15	127	58.5	+75 41	7.62	7.62	Ao	7	..	37555i	65	390	58.9	+63 41	5.82	5.80	B9	8	..	37341i
16	187	58.5	+72 10	8.0	8.1	A2	4	..	37555i	66	664	58.9	+40 12	6.18	7.18	Ko	7	..	38056i
17	482	58.5	+30 55	8.9	8.9	Ao	2	..	37404i	67	411	58.9	+10 45	8.6	9.2	Go	2	..	38919i
18	496	58.5	+21 5	7.8	8.8	Ko	4	..	37477i	68	929	58.9	-46 56	9.9	10.8	Ma	1	..	23791b
19	444	58.5	+ 5 45	8.0	8.5	F8	7	0,8	37476i	69	31	58.9	-86 16	8.13	8.4	Ao	6	..	15145b
20	584	58.5	-12 18	9.9	11.0	K2	2	..	39703b	70	627	59.0	+44 1	7.65	7.65	Ao	4	0,8	37967b
21	523	58.5	-18 37	8.9	9.7	G5	4	..	40971b	71	605	59.0	+41 49	8.6	9.6	Ko	3	..	38086i
22	594	58.5	-18 53	8.3	9.3	Ko	4	..	40971b	72	702	59.0	+39 15	8.1	9.1	Ko	2	..	38082i
23	1390	58.5	-23 56	10.4	9.7	F8	2	..	45163b	73	533	59.0	+32 9	9.4	9.5	A3	3	..	37404i
24	1225	58.5	-25 21	8.2	9.3	Ko	5	..	23780b	74	581	59.0	-11 44	10.3	10.8	F8	2	..	39703b
25	1117	58.5	-26 38	10.4	10.2	Go	1	..	45163b	75	578	59.0	-13 32	9.4	9.9	F8	2	..	18191b
26	994	58.5	-28 24	9.4	9.7	Go	2	..	45163b	76	576	59.0	-19 59	9.23	9.6	F2	5	..	24597b
27	995	58.5	-28 42	9.4	9.7	Go	2	..	23780b	77	773	59.1	+57 5	8.0	9.0	Ko	2	..	38959i
28	937	58.5	-44 47	9.10	9.4	Go	3	..	23791b	78	848	59.1	+49 43	8.5	8.6	A3	3	..	38932i
29	829	58.5	-47 57	7.7	8.3	F5	3	3,4	8860b	79	518	59.1	+29 48	9.4	10.2	G5	1	..	38884i
30	219	58.5	-63 55	9.4	10.4	Ko	3	..	38370b	80	430	59.1	+15 29	6.59	7.59	Ko	5	0,9	37372i
31	656	58.6	+52 20	8.0	8.0	Ao	3	..	38898i	81	471	59.1	+ 6 15	9.4	10.5	K2	2	..	12026b
32	765	58.6	+47 37	8.6	8.7	A2	4	1,3 R	38898i	82	568	59.1	- 5 38	7.44	8.62	K5	4	..	38073i
33	390	58.6	+ 9 17	9.0	9.3	Fo	3	..	12026b	83	582	59.1	-11 48	10.3	10.7	F5	3	..	39703b
34	594	58.6	- 6 2	8.3	9.1	G5	3	..	38073i	84	596	59.1	-14 37	9.9	11.3	Mb	1	..	39703b
35	598	58.6	-10 29	10.5	10.6	A2	2	..	39703b	85	535	59.1	-14 57	9.15	9.71	Go	3	..	18191b
36	524	58.6	-18 28	9.1	9.4	Fo	5	..	40971b	86	537	59.1	-21 59	10.5	11.4	F5	2	..	24597b
37	536	58.6	-22 48	9.3	9.3	Go	6	..	24597b	87	1131	59.1	-29 26	9.4	10.8	Ko	1	..	45169b
38	197	58.6	-70 5	9.5	10.3	G5	1	..	20539b	88	208	59.1	-65 30	8.7	9.7	Ko	3	..	38370b
39	771	58.7	+57 7	7.7	7.8	A5	2	..	37320i	89	556	59.2	+58 13	8.2	9.2	Ko	3	..	38959i
40	845	58.7	+48 29	9.2	9.3	A2	2	..	38932i	90	676	59.2	+51 11	8.6	8.6	Ao	3	..	38898i
41	684	58.7	+47 1	9.9	10.0	A2	3	..	38932i	91	628	59.2	+43 19	7.30	7.72	F5	7	0,4 R	38072i
42	470	58.7	+ 6 54	8.4	8.5	A5	4	2,4	10311b	92		59.2	+43 19			A3			
43	507	58.7	+ 0 38	8.8	10.0	K5	1	..	24103b	93	474	59.2	+27 32	8.7	9.1	F5	2	..	38884i
44	574	58.7	-19 59	8.9	9.9	Ko	4	..	24597b	94	383	59.2	+16 53	10.8	11.6	G5	2	..	4419m
45	546	58.7	-21 19	10.3	11.7	Ko	2	..	24597b	95	520	59.2	- 4 43	8.20	9.38	K5	3	..	24103b
46	1392	58.7	-24 3	10.4	10.5	G5	1	..	45163b	96	549	59.2	-21 45	7.64	8.3	Go	10	..	24597b
47	1229	58.7	-25 4	8.7	9.3	F5	4	..	23780b	97	1130	59.2	-32 47	9.0	11.2	K2	1	..	24621b
48	1062	58.7	-27 23	8.7	9.4	Go	4	..	23780b	98	238	59.2	-74 11	9.1	9.1	Ao	5	..	20539b
49	1213	58.7	-31 21	9.2	10.4	A5	3	..	24621b	99	223	59.2	-76 44	8.4	8.5	A5	5	..	14358b
50	1006	58.7	-38 38	8.9	9.6	Ko	2	..	45746b	100	391	59.3	+64 4	9.2	10.0	G5	1	..	37600i

THE HENRY DRAPER CATALOGUE.

19100

2^h 59^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	847	59.3	+48 53	7.8	8.1	F2	4	3,I	38932i	51	70	59.7	-79 59	7.96	9.0	Ko	8	..	20538b
2	628	59.3	+36 24	7.05	7.11	A2	8	..	37404i	52	574	59.8	+33 37	7.75	7.75	Ao	5	..	37405i
3	534	59.3	+31 42	8.15	8.71	Go	4	..	37405i	53	501	59.8	+20 31	7.85	7.91	A2	4	..	38036i
4	488	59.3	+29 9	8.0	8.4	F5	2	..	37477i	54	435	59.8	+13 10	10.8	11.8	Ko	1	..	4419m
5	462	59.3	+8 43	8.2	9.4	K5	2	..	37476i	55	473	59.8	+2 34	8.2	8.7	F8	4	..	1031rb
6	461	59.3	+8 37	8.2	9.2	Ko	3	..	37476i	56	440	59.8	-1 42	9.6	9.9	Fo	2	..	24103b
7	572	59.3	-7 59	5.43	5.51	A3	..	I,R	56,75	57	545	59.8	-1 51	10.1	10.5	F5	2	..	24103b
8	583	59.3	-8 51	8.4	8.5	A3	4	..	18191rb	58	586	59.8	-11 18	9.9	10.0	Ko	2	..	39703b
9	227	59.4	+71 9	8.6	9.2	Go	3	..	38943i	59	585	59.8	-11 24	9.1	10.2	K2	4	..	18191rb
10	767	59.4	+47 21	8.9	10.1	K5	1	..	38932i	60	552	59.8	-21 27	9.9	10.5	Ko	4	..	24597b
11	706	59.4	+45 23	8.0	9.0	Ko	4	..	38072i	61	1200	59.8	-23 32	9.4	10.3	Ko	5	0,2	24597b
12	496	59.4	+13 25	7.46	8.24	G5	3	5,7	37372i	62	1402	59.8	-24 35	9.1	9.6	G5	2	..	2378ob
13	583	59.4	-10 50	9.3	9.7	F5	4	..	18191rb	63	951	59.8	-44 26	8.1	8.2	Fo	4	..	12267b
14	597	59.4	-13 59	9.9	10.5	Go	4	..	39703b	64	199	59.9	+69 24	8.0	8.0	Ao	3	..	37555i
15	527	59.4	-18 7	8.1	8.4	Fo	5	..	20766b	65	478	59.9	+27 18	8.6	9.2	Go	2	..	37477i
16	550	59.4	-21 29	9.9	11.7	K5	1	..	24597b	66	431	59.9	+22 43	7.72	8.90	K5	2	..	38884i
17	538	59.4	-22 17	9.6	10.5	Ko	3	..	24597b	67	499	59.9	+13 53	9.4	10.0	Go	6	..	4419m
18	1133	59.4	-32 25	10.0	11.2	G	1	..	24621b	68	474	59.9	+6 49	9.0	10.2	K5	1	..	12026b
19	486	59.5	+30 26	8.6	9.6	Ko	1	..	38884i	69	594	59.9	-17 0	10.3	11.3	Ko	1	..	40971b
20	434	59.5	+12 16	8.6	9.6	Ko	2	2,2	38919i	70	595	59.9	-17 32	10.1	11.2	K2	2	..	40971b
21	534	59.5	+1 30	6.05	7.05	Ko	7	0,10	38062i	71	553	59.9	-20 56	9.6	10.5	Go	3	..	24597b
22	543	59.5	-2 33	9.4	10.4	Ko	2	..	24103b	72	491	59.9	-57 46	8.9	10.4	G5	2	..	40953b
23	551	59.5	-21 7	8.9	9.6	Ko	5	..	24597b	73	690	0.0	+46 54	9.4	9.4	A	2	..	38932i
24	1068	59.5	-27 7	8.9	9.9	F5	3	..	2378ob	74	710	0.0	+45 22	7.57	7.57	B9	4	..	37967i
25	1061	59.5	-33 19	9.6	9.9	Go	4	..	24621b	75	576	0.0	+33 23	8.3	8.6	Fo	3	..	37405i
26	899	59.5	-50 15	8.1	8.7	F5	4	..	20263b	76	500	0.0	+13 15	10.3	10.9	G	2	..	4419m
27	250	59.5	-62 50	9.0	10.0	Ko	3	..	38370b	77	602	0.0	-10 33	8.8	9.9	K2	3	..	18191b
28	204	59.5	-63 53	8.3	9.3	Ko	4	..	38370b	78	590	0.0	-12 33	8.2	8.6	F5	5	..	18191b
29	201	59.5	-67 30	8.7	9.7	Ko	6	..	20429b	79	538	0.0	-15 19	10.2	10.7	F8	2	..	39703b
30	697	59.6	+42 32	8.9	9.2	F	1	..	38945i	80	556	0.0	-15 50	10.0	11.1	K2	1	..	40971b
31	702	59.6	+37 24	8.2	9.4	K5	1	..	37404i	81	540	0.0	-22 47	10.4	10.8	Fo	3	..	24597b
32	536	59.6	+31 39	8.00	8.78	G5	3	..	37405i	82	1149	0.0	-36 18	8.9	9.9	F5	2	..	40947b
33	484	59.6	+25 29	8.6	8.7	A5	2	3,I	38884i	83	847	0.0	-49 5	8.7	9.8	G5	3	..	23791b
34	431	59.6	+24 52	6.11	6.06	B8	..	3,9	56,75	84	700	0.1	+42 13	8.0	8.4	F5	1	..	38056i
35	431	59.6	+24 52	6.11	6.06	B8	..	3,9	56,75	85	432	0.1	+24 52	9.5	9.6	A2	2	..	38884i
36	509	59.6	+14 12	9.4	10.4	Ko	3	0,I	4419m	86	489	0.1	+17 47	8.9	9.0	A2	2	..	37372i
37	412	59.6	+10 25	8.02	8.58	Go	3	..	38919i	87	536	0.1	+1 31	8.3	9.3	Ko	4	..	24103b
38	472	59.6	+6 29	8.6	9.8	K5	2	..	12026b	88	512	0.1	+0 54	8.9	9.7	G5	2	..	24103b
39	601	59.6	-10 14	9.6	10.1	F8	3	..	39703b	89	511	0.1	+0 28	8.3	8.7	F5	7	3,4	24103b
40	1132	59.6	-29 38	8.5	9.9	K5	4	..	2378ob	90	584	0.1	-13 13	9.5	10.3	G5	1	..	18191b
41	932	59.6	-47 22	5.66	7.4	Ko	..	0,6-	56,119	91	597	0.1	-18 59	9.8	11.1	F2	2	..	40971b
42	518	59.7	+62 15	8.0	9.0	Ko	3	..	37341i	92	555	0.1	-21 47	8.4	9.0	F8	8	..	24597b
43	703	59.7	+37 13	8.1	9.3	K5	3	0,2	37405i	93	244	0.2	+66 32	8.0	8.8	G5	2	..	37341i
44	519	59.7	+30 8	8.51	9.51	Ko	1	..	38884i	94	616	0.2	+54 6	8.6	8.6	Ao	3	E	38932i
45	477	59.7	+27 29	8.7	8.7	Ao	3	..	37477i	95	615	0.2	+53 43	8.0	8.0	B9	4	..	38959i
46	430	59.7	+11 47	9.1	9.1	A	3	E	12026b	96	699	0.2	+43 10	8.4	8.5	A3	2	3,2	38056i
47	426	59.7	+4 5	9.27	10.27	Ko	2	..	12026b	97	634	0.2	+38 14	8.7	8.7	Ao	3	..	37404i
48	584	59.7	-11 9	10.3	10.8	F8	2	..	39703b	98	433	0.2	+25 3	8.71	9.21	F8	1	..	38884i
49	1004	59.7	-45 50	9.9	10.8	F	1	..	23791b	99	1239	0.2	-24 55	9.35	9.7	Go	2	..	2378ob
50	482	59.7	-55 22	8.3	9.6	K5	2	..	20263b	100	1098	0.2	-34 48	9.03	9.9	F8	5	..	24621b

19200

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	794	0.2	−40 30	8.7	9.2	Go	3	2,2	40947b	51	600	0.7	−19 27	7.68	8.7	Ko	8	..	24597b
2	507	0.2	−53 55	10.6	10.7	A2	1	..	20263b	52	1104	0.7	−34 22	9.6	10.8	Go	1	..	24621b
3	51	0.2	−81 57	8.9	9.9	Ko	3	..	20538b	53	1102	0.7	−34 34	10.2	10.5	A2	2	..	24621b
4	560	0.3	+58 56	8.8	9.8	Ko	2	..	38959i	54	699	0.7	−51 48	7.8	8.6	F8	5	..	20263b
5	678	0.3	+51 58	8.9	8.9	Ao	2	..	38898i	55	322	0.8	+66 5	8.7	8.8	A5	3	..	37341i
6	635	0.3	+38 59	8.7	8.8	A2	3	..	37405i	56	778	0.8	+56 38	6.78	7.34	Go	6	..	37320i
7	577	0.3	+33 44	7.85	8.63	G5	3	..	37405i	57	522	0.8	+30 9	7.11	7.25	A5	5	0,5	37405i
8	501	0.3	+13 53	8.5	8.9	F5	6	0,2	4419m	58	434	0.8	+11 17	7.32	8.50	K5	3	5,2	37476i
9	539	0.3	+1 51	8.9	9.9	Ko	1	..	38062i	59	515	0.8	+0 50	8.1	9.1	Ko	6	..	24103b
10	577	0.3	−8 40	6.57	7.57	Ko	7	E	18191b	60	588	0.8	−13 33	9.8	10.4	Go	2	2,2	39703b
11	530	0.3	−17 57	9.8	10.2	F5	2	..	40971b	61	1415	0.8	−24 49	9.45	10.2	G5	1	..	23780b
12	541	0.3	−22 2	10.0	10.6	Ko	3	..	24597b	62	1143	0.8	−32 39	9.6	10.7	F8	2	..	24621b
13	1241	0.3	−25 4	9.5	10.0	Go	1	..	23780b	63	839	0.8	−48 15	7.6	8.1	Ko	..	0,5-	20263b
14	893	0.3	−39 34	8.4	9.2	G5	4	5,2	40947b	64	356	0.8	−52 38	9.1	10.4	Ko	1	..	20263b
15	956	0.3	−44 17	6.68	7.8	Ko	6	..	12267b	65	255	0.8	−57 55	9.2	10.3	Ko	2	..	40953b
16	578	0.4	+33 15	7.8	7.8	B9	4	..	37405i	66	109	0.9	+77 49	7.34	8.34	Ko	4	..	37555i
17	433	0.4	+22 54	8.5	9.3	G5	1	..	38884i	67	395	0.9	+63 55	6.90	7.68	G5	5	0,4	37427i
18	503	0.4	+13 19	8.66	9.16	F8	6	..	4419m	68	681	0.9	+51 50	6.17	6.05	B5	7	3,8	38959i
19	447	0.4	+5 44	7.7	8.8	K2	4	2,3	10311b	69	579	0.9	+34 7	8.7	9.5	G5	2	..	37405i
20	585	0.4	−9 20	8.8	9.6	G5	5	..	39703b	70	436	0.9	+12 48	5.84	6.62	G5	6	..	37372i
21	589	0.4	−11 32	10.0	10.8	G5	3	..	39703b	71	541	0.9	+1 59	8.3	9.5	K5	2	5,2	24103b
22	592	0.4	−11 52	9.2	10.2	Ko	3	..	39703b	72	597	0.9	−16 59	7.32	7.66	F2	8	..	20766b
23	598	0.4	−14 47	8.21	8.99	G5	6	..	39703b	73	557	0.9	−21 30	8.8	9.3	Go	7	..	24597b
24	531	0.4	−18 45	9.8	10.3	F8	2	..	40971b	74	544	0.9	−22 33	9.5	9.7	F5	5	..	24597b
25	1132	0.4	−26 10	7.57	8.7	G5	6	..	23780b	75	168	1.0	+74 1	4.89	4.95	A2	..	2,9	56,75
26	403	0.5	+23 53	8.5	8.8	Fo	2	..	38884i	76	229	1.0	+70 24	9.2	9.3	A2	3	..	38943i
27	504	0.5	+13 11	9.3	9.8	F8	4	..	4419m	77	246	1.0	+67 59	8.9	9.0	A2	2	..	37600i
28	448	0.5	+6 8	8.7	8.7	Ao	5	..	12026b	78	779	1.0	+56 16	8.0	9.0	Ko	2	..	38959i
29	585	0.5	−13 6	9.0	10.0	Ko	2	..	18191b	79	692	1.0	+46 55	6.36	6.36	Ao	7	..	37452i
30	1011	0.5	−45 50	9.4	10.2	G5	2	..	23791b	80	705	1.0	+37 26	8.1	9.3	K5	3	0,2	37405i
31	679	0.6	+51 49	8.8	8.8	Ao	3	..	38898i	81	563	1.0	+32 17	8.5	9.7	K5	1	..	37404i
32	578	0.6	+34 44	8.5	9.5	Ko	3	..	37405i	82	436	1.0	+11 16	8.9	9.4	F8	4	0,2	12026b
33	540	0.6	+31 38	9.2	9.3	A2	2	..	37405i	83	493	1.0	+4 26	7.9	8.9	Ko	4	0,2	12026b
34	395	0.6	+9 17	8.7	9.9	K5	1	..	12026b	84	1014	1.0	−28 20	8.5	9.3	G5	5	..	23780b
35	547	0.6	−2 46	9.8	10.6	G5	2	..	24103b	85	250	1.0	−59 19	var.	var.	Mb	7	R	40953b
36	603	0.6	−5 53	8.8	9.2	F5	2	..	38073i	86	138	1.1	+74 41	8.2	8.6	F5	3	..	37555i
37	1068	0.6	−32 56	8.9	10.7	K5	3	..	24621b	87	245	1.1	+66 42	8.9	9.0	A3	1	..	38984i
38	488	0.6	−56 28	8.5	10.1	K5	3	..	40953b	88	696	1.1	+57 58	7.35	7.63	Fo	6	..	37320i
39	235	0.6	−60 11	8.9	9.5	F8	3	..	40953b	89	631	1.1	+36 14	8.6	8.6	B9	2	..	37404i
40	234	0.6	−60 23	8.1	8.8	F5	5	..	40953b	90	389	1.1	+17 5	8.9	9.5	Go	5	5,1	4419m
41	241	0.6	−61 11	7.3	9.1	Ko	7	..	38370b	91	511	1.1	+14 23	8.6	9.0	F5	6	5,2	4419m
42	220	0.6	−64 16	7.9	8.0	A2	7	..	38370b	92	494	1.1	+4 56	8.80	9.80	Ko	2	..	12026b
43	525	0.7	+62 0	6.54	6.30	Bo	7	R	37341i	93	495	1.1	+4 54	9.3	9.9	Go	1	..	12026b
44	695	0.7	+57 45	8.6	9.1	F8	2	..	38959i	94	431	1.1	+3 25	7.83	7.89	A2	6	..	10311b
45	741	0.7	+55 15	8.06	8.04	B9	4	..	38959i	95	598	1.1	−17 14	9.8	10.6	G5	2	..	40971b
46	404	0.7	+23 50	8.7	9.7	Ko	1	..	38884i	96	1015	1.1	−38 46	9.6	9.2	A2	4	..	40947b
47	493	0.7	−3 19	9.3	9.8	F8	2	..	24103b	97	799	1.1	−40 15	9.6	9.6	Go	2	..	40947b
48	587	0.7	−13 27	9.5	10.3	G5	2	..	39703b	98	251	1.1	−59 38	9.1	10.3	Ma	2	..	40953b
49	586	0.7	−13 48	10.2	11.0	G5	1	..	39703b	99	201	1.1	−70 4	7.78	9.2	Ko	5	..	20539b
50	599	0.7	−14 44	9.56	10.74	K5	1	..	39703b	100	713	1.2	+39 42	8.3	8.4	A2	4	..	38082i

THE HENRY DRAPER CATALOGUE.

19300

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	640	m. 1.2	° +38 42	' 8.2	8.5	Fo	4	R	38082i	51	1246	m. 1.6	° -25 32	' 8.7	9.9	Ko	2	..	2378ob
2	437	1.2	+13 6	9.7	10.5	G5	3	..	4419m	52	803	1.6	-40 13	9.2	9.3	Go	3	..	40947b
3	475	1.2	+ 7 50	8.9	9.7	G5	2	..	12026b	53	52	1.6	-82 38	9.8	9.9	A5	3	..	20538b
4	477	1.2	+ 2 55	7.9	8.2	Fo	4	..	10311b	54	522	1.7	+63 7	9.4	9.4	Ao	1	..	37341i
5	543	1.2	+ 1 38	8.9	10.1	K5	1	..	24103b	55	711	1.7	+45 53	8.9	8.9	Ao	2	0,2	38072i
6	592	1.2	-11 44	9.3	10.1	G5	4	..	39703b	56	673	1.7	+40 34	var.	var.	B8	..	R	674c
7	182	1.2	-71 36	9.3	9.7	F5	3	..	20539b	57	628	1.7	+35 34	8.3	8.3	Ao	3	..	37404i
8	632	1.3	+36 15	7.65	8.21	Go	5	..	37405i	58	581	1.7	+34 51	8.5	9.5	Ko	2	..	37405i
9	542	1.3	+31 24	9.4	9.4	A	1	..	37404i	59	566	1.7	+32 41	9.4	9.4	B9	2	..	37405i
10	493	1.3	+28 45	7.60	7.58	B9	4	..	37477i	60	433	1.7	+15 41	9.7	10.5	G5	2	..	4419m
11	478	1.3	+ 6 37	9.3	9.8	F8	3	..	12026b	61	513	1.7	+14 49	7.9	9.1	K5	2	3,5	38919i
12	450	1.3	+ 5 15	8.01	8.79	G5	3	5,4	37476i	62	506	1.7	+13 16	10.7	11.5	G5	2	..	4419m
13	601	1.3	-13 49	7.7	8.1	F5	8	..	18191b	63	552	1.7	- 1 58	8.8	9.8	Ko	1	..	24103b
14	600	1.3	-13 54	10.0	11.2	K5	1	..	39703b	64	553	1.7	- 2 11	10.0	10.4	F5	3	..	24103b
15	540	1.3	-15 20	10.2	10.8	Go	2	..	39703b	65	546	1.7	- 7 1	8.2	9.3	K2	2	..	38073i
16	533	1.3	-18 11	9.5	10.5	Ko	1	..	40971b	66	610	1.7	-10 38	6.79	7.57	G5	8	..	18191b
17	1421	1.3	-24 35	8.3	8.7	F2	6	..	2378ob	67	541	1.7	-15 23	9.8	10.6	G5	2	..	40971b
18	1016	1.3	-28 2	9.5	9.9	Ko	2	..	2378ob	68	560	1.7	-21 13	10.0	10.3	F8	3	..	24597b
19	236	1.3	-60 8	5.16	5.44	Fo	..	0,R	56,119	69	514	1.7	-53 13	8.2	9.2	Ko	5	..	20263b
20	206	1.3	-63 23	9.3	9.9	Go	3	..	3837ob	70	237	1.7	-60 21	7.9	8.8	F2	7	..	3837ob
21	94	1.4	+79 45	6.98	7.98	Ko	7	..	37309i	71	168	1.7	-66 48	8.5	9.5	Ko	6	E	20429b
22	706	1.4	+50 47	6.97	7.03	A2	5	2,4	38959i	72	169	1.8	+73 49	8.5	8.8	Fo	4	..	37555i
23	564	1.4	+33 2	9.1	9.6	F8	2	..	37405i	73	857	1.8	+49 14	4.17	4.73	Go	..	0,R	56,75
24	410	1.4	+18 59	8.5	9.5	Ko	2	..	38036i	74	493	1.8	+17 30	6.09	5.92	B3	8	..	37372i
25	432	1.4	+ 3 49	9.3	9.6	Fo	2	..	12389b	75	391	1.8	+16 41	9.7	9.8	A2	3	..	4419m
26	545	1.4	+ 1 43	8.5	9.5	Ko	4	..	24103b	76	579	1.8	- 5 26	8.4	9.0	Go	4	..	38073i
27	604	1.4	-19 40	9.08	9.9	K5	3	0,3	40971b	77	561	1.8	-16 35	8.0	9.0	Ko	3	..	20766b
28	579	1.4	-20 47	9.8	10.5	Go	3	..	24597b	78	1426	1.8	-24 10	9.1	9.3	F8	4	..	2378ob
29	1245	1.4	-25 47	9.5	9.9	G5	1	..	2378ob	79	515	1.8	-52 57	8.8	9.5	F8	4	..	20263b
30	704	1.4	-51 43	7.53	8.1	Go	7	0,4	20263b	80	683	1.9	+51 43	9.2	9.7	F8	1	..	38932i
31	183	1.4	-70 55	9.0	10.0	Ko	3	..	20539b	81	437	1.9	+25 10	8.11	8.61	F8	2	..	37477i
32	744	1.5	+55 41	8.0	9.0	Ko	2	..	38959i	82	443	1.9	- 1 32	9.0	10.0	Ko	2	..	24103b
33	517	1.5	+ 0 24	8.5	8.8	F2	4	..	24103b	83	592	1.9	-13 42	8.0	8.4	F5	7	..	18191b
34	591	1.5	-13 38	8.6	9.8	K5	3	..	18191b	84	1146	1.9	-29 11	8.9	9.8	Ko	3	..	2378ob
35	1143	1.5	-29 31	9.2	11.5	Ko	1	..	45169b	85	1151	1.9	-37 18	8.9	9.9	Ko	2	..	40947b
36	802	1.5	-40 6	9.0	8.9	A5	6	..	40947b	86	901	1.9	-39 41	8.22	8.9	Ko	4	0,2	40947b
37	893	1.5	-41 22	7.4	8.3	F2	6	3,7	12267b	87	245	1.9	-61 26	8.2	8.6	F2	7	..	3837ob
38	244	1.5	-61 14	8.1	10.0	Ko	6	..	3837ob	88	95	2.0	+79 43	9.0	9.3	F	2	R	37309i
39	207	1.5	-63 46	8.3	8.6	Fo	5	..	3837ob	89	497	2.0	+23 18	7.9	8.0	A5	4	..	37477i
40	140	1.6	+74 34	8.0	8.8	G5	2	..	38972i	90	514	2.0	+15 6	10.0	11.0	K	1	..	4419m
41	563	1.6	+59 0	8.1	8.1	B9	4	..	38959i	91	476	2.0	+ 8 1	8.5	8.9	F5	4	..	12026b
42	564	1.6	+58 22	8.0	8.1	A2	3	..	38959i	92	496	2.0	+ 4 38	8.7	9.8	K2	3	3,2	12026b
43	634	1.6	+43 50	7.8	8.2	F5	3	..	38072i	93	542	2.0	-15 15	10.9	11.3	F5	1	..	40971b
44	617	1.6	+41 13	7.87	7.75	B5	4	..	38056i	94	1022	2.0	-28 2	9.1	10.0	K2	1	..	45163b
45	451	1.6	+ 5 16	8.26	8.54	Fo	4	2,4	10311b	95	1152	2.0	-37 43	7.46	7.1	A2	8	..	40947b
46	478	1.6	+ 2 20	7.7	7.7	Ao	6	0,8	10311b	96	1023	2.0	-38 52	8.2	9.2	Ko	4	5,3	40947b
47	518	1.6	+ 0 55	8.9	9.3	F5	2	..	24103b	97	257	2.0	-58 47	8.4	9.7	A5	4	..	40953b
48	551	1.6	- 2 2	9.8	10.6	G5	1	..	24103b	98	210	2.0	-65 12	8.6	8.9	Fo	5	..	3837ob
49	606	1.6	- 6 28	5.56	6.91	Ma	8	..	38073i	99	169	2.0	-65 55	8.2	9.6	Mb	3	..	3837ob
50	592	1.6	- 8 58	8.3	8.9	Go	7	..	39703b	100	219	2.0	-72 18	5.52	5.47	B8	..	R	56,119

19400

3^h 2^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	515	2.1	+14 57	10.7	11.5	G5	1	..	4419m	51	521	2.5	+ 0 43	8.9	9.7	G5	1	..	24103b
2	563	2.1	-16 28	10.0	10.5	F8	2	..	40971b	52	1144	2.5	-26 20	8.9	9.0	Fo	5	..	23780b
3	562	2.1	-16 42	9.8	10.8	Ko	1	..	40971b	53	1082	2.5	-33 3	9.3	10.4	G5	2	..	24621b
4	536	2.1	-17 51	8.4	8.7	Fo	5	..	20766b	54	519	2.5	-53 14	10.4	11.0	Go	1	..	20263b
5	1239	2.1	-31 42	8.5	9.8	Go	1	..	45169b	55	216	2.5	-75 41	8.5	9.5	Ko	2	..	46167b
6	968	2.1	-44 17	9.4	9.1	Ao	5	..	23791b	56	624	2.6	+53 49	8.5	8.5	Ao	2	..	37320i
7	246	2.1	-61 53	8.9	10.3	F5	2	..	38370b	57	853	2.6	+48 15	8.1	8.5	F5	4	0,3	38898i
8	142	2.2	+74 26	8.6	9.0	F5	2	..	37555i	58	630	2.6	+45 0	8.6	8.6	Ao	2	..	37452i
9	436	2.2	+15 42	9.7	10.7	Ko	2	..	4419m	59	676	2.6	+40 27	8.8	9.1	F2	2	..	38082i
10	516	2.2	+14 17	8.7	9.2	F8	4	..	4419m	60	414	2.6	+18 26	6.48	7.66	K5	4	..	37372i
11	554	2.2	- 2 11	7.10	7.88	G5	8	..	24103b	61	507	2.6	+13 54	8.9	10.0	K2	2	..	4419m
12	597	2.2	-12 24	10.0	10.8	G5	2	..	39703b	62	483	2.6	+ 6 52	7.9	7.9	Ao	7	3,4	12389b
13	543	2.2	-15 9	10.4	11.4	Ko	1	..	40971b	63	524	2.6	+ 0 29	8.5	9.3	G5	3	..	24103b
14	564	2.2	-16 0	10.0	10.8	G5	2	..	40971b	64	495	2.6	- 0 31	9.3	10.1	G5	1	..	24103b
15	1254	2.2	-25 20	8.2	9.4	G5	3	..	23780b	65	444	2.6	- 0 55	9.0	9.5	F8	3	..	24103b
16	1024	2.2	-28 20	11.1	10.0	G5	1	..	23780b	66	555	2.6	- 2 1	8.8	9.1	F2	5	..	24103b
17	1080	2.2	-33 50	8.9	9.9	Ko	3	..	24621b	67	604	2.6	-14 8	7.16	7.72	Go	9	..	18191b
18	222	2.2	-64 36	9.2	10.2	Ko	2	..	38370b	68	602	2.6	-16 54	9.5	9.8	Fo	2	..	20766b
19	707	2.3	+50 12	8.77	8.77	Ao	2	..	38932i	69	1221	2.6	-22 58	10.2	11.1	G5	3	..	24597b
20	480	2.3	+ 6 18	8.9	9.3	F5	3	..	12026b	70	1443	2.6	-24 31	9.4	10.2	G5	2	0,1	45163b
21	581	2.3	- 5 46	8.0	9.2	K5	3	..	38073i	71	857	2.6	-49 54	9.18	9.8	F8	1	..	20263b
22	609	2.3	-19 9	8.8	9.6	Ko	6	..	24597b	72	211	2.6	-65 33	8.5	9.6	K2	4	..	38370b
23	496	2.3	-57 33	7.8	8.0	Go	7	..	40953b	73	224	2.6	-76 33	8.9	10.1	K5	1	..	46167b
24	497	2.3	-57 48	8.9	8.6	F5	4	..	40953b	74	35	2.6	-85 9	8.60	8.7	Fo	8	..	20538b
25	325	2.4	+65 30	8.6	8.6	Ao	3	..	37341i	75	230	2.7	+71 11	7.68	8.18	F8	5	..	37555i
26	636	2.4	+43 53	9.2	9.2	Ao	2	..	38945i	76	631	2.7	+44 29	4.00	5.00	Ko	..	5,9 ^R	1655c
27	638	2.4	+36 40	8.1	9.5	Ma	2	..	37405i	77	441	2.7	+12 48	7.9	8.9	Ko	3	..	38919i
28	585	2.4	+33 56	9.5	9.5	Ao	2	..	37404i	78	563	2.7	-21 1	8.2	9.3	Go	6	..	24597b
29	409	2.4	+23 57	9.1	9.1	A	1	..	38884i	79	1145	2.7	-26 25	10.2	10.0	F5	1	..	45163b
30	392	2.4	+16 33	8.3	8.3	A	5	R	4419m	80	805	2.7	-40 10	7.48	8.7	K5	5	0,3	40947b
31	397	2.4	+ 9 33	7.72	7.72	Ao	4	..	37476i	81	212	2.7	-64 55	9.5	9.8	F2	4	..	38370b
32	482	2.4	+ 6 52	8.5	8.6	A2	4	..	12026b	82	745	2.8	+55 51	8.5	8.6	A2	2	..	38959i
33	593	2.4	-12 53	9.5	10.1	Go	4	..	39703b	83	861	2.8	+50 1	8.6	9.4	G5	1	..	38898i
34	544	2.4	-15 41	10.4	11.0	Go	2	..	40971b	84	697	2.8	+46 20	8.4	8.5	A2	3	3,2	38072i
35	566	2.4	-16 43	9.2	10.2	Ko	2	..	40971b	85	497	2.8	+25 13	8.36	9.14	G5	2	7,2 ^R	38884i
36	1185	2.4	-30 22	7.26	7.9	Ko	7	..	23780b	86	610	2.8	- 6 8	8.8	9.9	K2	2	..	38073i
37	238	2.4	-60 35	7.6	9.4	Ko	6	..	38370b	87	1085	2.8	-33 6	9.3	9.8	Ko	3	..	24621b
38	170	2.5	+73 56	7.46	7.96	F8	5	..	37555i	88	1122	2.8	-33 59	8.6	9.9	K5	4	..	24621b
39	375	2.5	+64 31	6.52	6.66	A5	6	..	37341i	89	907	2.8	-39 30	9.5	9.5	Fo	4	..	40947b
40	398	2.5	+63 25	7.38	7.88	F8	5	0,4	37341i	90	908	2.8	-39 46	9.58	9.8	F5	1	..	40947b
41	567	2.5	+59 9	8.0	7.9	B5	3	..	38959i	91	859	2.8	-49 10	8.5	8.5	F8	5	..	20263b
42	700	2.5	+57 45	9.4	9.4	Ao	1	..	38959i	92	204	2.8	-70 52	8.7	9.7	Ko	4	..	20539b
43	675	2.5	+40 55	8.5	9.3	G5	2	..	38082i	93	221	2.8	-72 51	8.2	8.8	Go	5	..	20539b
44	585	2.5	+35 4	7.57	7.57	Ao	6	..	37405i	94	713	2.9	+38 5	8.9	9.0	A3	3	..	37405i
45	495	2.5	+25 59	8.0	8.3	F2	3	..	37477i	95	443	2.9	+13 11	8.9	9.9	Ko	2	5,1	4419m
46	496	2.5	+25 36	8.7	9.1	F5	2	..	38884i	96	549	2.9	-22 26	9.8	11.4	K5	3	..	24597b
47	393	2.5	+16 39	7.9	8.2	Fo	4	5,7	38919i	97	1147	2.9	-26 52	9.7	9.6	Ao	5	..	23780b
48	482	2.5	+ 3 2	8.0	8.1	A3	6	0,7	10311b	98	917	2.9	-50 15	8.7	9.5	F2	2	..	20263b
49	550	2.5	+ 1 28	8.5	8.8	Fo	5	0,4	24103b	99	213	2.9	-64 59	9.5	10.1	Go	2	..	38370b
50	522	2.5	+ 1 2	7.34	8.34	Ko	6	0,7	10311b	100	246	3.0	+66 23	8.0	9.0	Ko	1	..	38984i

THE HENRY DRAPER CATALOGUE.

19500

3^h 3^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	633	m. 3.0	° 60 35	8.2	8.3	A2	2	0,3	3734ii	51	445	m. 3.6	° 12 29	7.06	7.84	G5	3	..	3737zi
2	785	3.0	+56 15	8.5	9.3	G5	3	..	38959i	52	401	3.6	+9 19	8.0	9.2	K5	3	..	12026b
3	441	3.0	+24 59	8.7	9.0	F2	3	..	37477i	53	620	3.6	-9 55	8.21	8.99	G5	5	..	15134b
4	418	3.0	+10 25	7.42	7.84	F5	5	0,4	37476i	54	616	3.6	-19 41	7.83	9.4	Ma	7	..	24597b
5	540	3.0	-18 24	8.8	9.8	Ko	2	0,I	40971b	55	1028	3.6	-45 43	8.7	9.6	Ko	3	..	23791b
6	1149	3.0	-25 56	8.7	9.0	Fo	4	..	2378ob	56	247	3.7	+67 2	8.4	9.2	G5	2	..	38984i
7	231	3.1	+70 51	7.9	8.9	Ko	3	..	38943i	57	702	3.7	+57 31	8.06	..	R5	4	..	3732oi
8	714	3.1	+45 41	9.9	10.0	A2	1	..	38072i	58	663	3.7	+52 47	7.50	7.64	A5	6	..	3732oi
9	640	3.1	+36 55	7.10	8.10	Ko	6	..	37405i	59	494	3.7	+31 1	9.1	9.2	A5	2	..	37405i
10	398	3.1	+10 4	var.	var.	Ao	4	R	12026b	60	597	3.7	-13 20	9.8	11.0	K5	1	..	3903b
11	485	3.1	+6 21	7.8	8.6	G5	4	0,3	10311b	61	589	3.7	-20 4	9.2	9.7	Go	4	..	40971b
12	556	3.1	-2 12	9.8	9.9	A3	4	..	24103b	62	588	3.7	-20 47	8.8	10.5	K2	3	..	24597b
13	605	3.1	-14 21	10.2	10.2	A	2	..	39703b	63	1195	3.7	-30 42	7.27	7.5	A2	7	..	45169b
14	547	3.1	-15 21	10.2	11.0	F5	2	..	39703b	64	254	3.7	-62 27	9.5	10.3	G5	3	R	3837ob
15	1159	3.1	-32 45	7.8	8.9	Ko	7	..	24621b	65	186	3.7	-68 15	9.7	10.8	K2	3	..	38366b
16	1087	3.1	-33 41	9.5	10.1	G5	3	..	24621b	66	326	3.8	+65 31	8.7	8.8	A2	3	..	37341i
17	621	3.2	+41 53	8.2	8.2	Ao	3	..	38945i	67	715	3.8	+37 59	8.1	8.1	B9	5	..	37405i
18	518	3.2	+14 59	8.14	8.70	Go	3	0,8	37372i	68	418	3.8	+19 0	6.97	6.97	Ao	5	E	37372i
19	519	3.2	+14 39	10.7	11.7	K	1	..	4419m	69	529	3.8	+0 44	8.6	9.0	F5	5	3,5	24103b
20	439	3.2	+12 0	8.5	9.0	F8	2	..	38919i	70	531	3.8	-4 4	9.0	9.8	G5	5	..	24103b
21	477	3.2	+7 16	7.6	7.9	Fo	6	..	37476i	71	564	3.8	-21 33	9.0	9.7	Ko	5	..	24597b
22	600	3.2	-12 25	8.0	8.6	Go	5	..	18191b	72	787	3.9	+57 2	8.6	9.6	Ko	2	..	38959i
23	1227	3.2	-23 52	9.4	10.8	F5	3	..	42897b	73	486	3.9	+7 5	8.3	8.9	Go	7	2,4	12026b
24	215	3.2	-65 34	8.0	8.4	F5	8	..	3837ob	74	487	3.9	+7 4	8.5	9.1	Go	7	..	12026b
25	478	3.3	+8 5	6.44	7.22	G5	6	..	37476i	75	487	3.9	+2 29	8.5	9.7	K5	2	E	24103b
26	603	3.3	-17 43	10.0	10.6	Go	2	..	40971b	76	606	3.9	-14 41	10.2	10.6	F5	3	3,2	40971b
27	R	3.3	-22 50	9.4	10.3	K2	3	3,5-	40971b	77	1162	3.9	-32 2	8.4	7.9	A3	8	..	24621b
28	1151	3.3	-26 21	9.9	9.9	Go	2	..	45163b	78	1172	3.9	-36 9	9.5	9.9	Go	2	..	40947b
29	199	3.3	-73 33	9.1	10.1	Ko	2	..	20539b	79	65	3.9	-81 17	9.4	10.0	Go	2	..	20538b
30	701	3.4	+57 43	8.9	9.0	A2	2	..	38959i	80	111	4.0	+78 8	7.80	8.80	Ko	3	..	37555i
31	718	3.4	-50 56	8.7	9.6	A2	3	..	20263b	81	589	4.0	+35 7	8.57	9.57	Ko	3	..	37405i
32	522	3.4	-52 58	8.7	9.2	A2	5	..	20263b	82	504	4.0	+17 17	8.6	8.7	A3	2	..	37372i
33	253	3.4	-62 22	9.7	10.3	Go	3	..	3837ob	83	396	4.0	+16 53	7.7	8.8	K2	2	0,5	37372i
34	171	3.5	+73 51	7.20	8.55	Ma	3	..	37555i	84	395	4.0	+16 32	8.4	8.7	Fo	5	0,3-	4419m
35	376	3.5	+64 43	8.0	8.3	Fo	5	..	37341i	85	488	4.0	+2 53	8.1	8.1	Ao	6	1,7	10311b
36	636	3.5	+60 15	7.26	7.26	Ao	4	0,6-	37341i	86	599	4.0	-11 25	10.0	10.6	Go	2	..	39703b
37	747	3.5	+55 22	8.2	8.8	Go	3	..	38959i	87	548	4.0	-15 16	9.8	10.1	Fo	3	..	40971b
38	712	3.5	+51 6	8.8	9.2	F5	2	..	38932i	88	1276	4.0	-25 48	9.5	9.9	Go	3	..	45163b
39	699	3.5	+47 9	8.4	8.7	Fo	3	0,2	38898i	89	27	4.0	-88 35	8.35	10.2	G5	5	..	15145b
40	716	3.5	+45 33	7.52	8.30	G5	3	..	37452i	90	535	4.1	+62 11	8.6	8.6	Ao	3	..	37341i
41	549	3.5	+32 6	8.3	8.7	F5	3	..	37405i	91	572	4.1	+58 22	8.2	8.2	B9	3	..	38959i
42	529	3.5	-3 58	8.6	9.0	F5	6	..	24103b	92	703	4.1	+57 49	8.8	9.6	G5	2	..	38959i
43	618	3.5	-10 35	9.5	10.0	F8	3	..	39703b	93	471	4.1	+19 39	7.9	8.9	Ko	3	..	38036i
44	596	3.5	-12 59	8.7	9.5	G5	5	..	39703b	94	530	4.1	+1 4	9.19	9.61	F5	3	..	24103b
45	1028	3.5	-28 12	6.08	6.3	A2	10	..	2378ob	95	985	4.1	-44 51	9.30	10.3	Ko	2	..	23791b
46	1082	3.5	-35 2	8.78	10.2	K5	1	..	45169b	96	53	4.1	-82 9	9.1	10.1	Ko	4	..	20538b
47	399	3.6	+64 1	8.6	8.6	Ao	4	..	37341i	97	109	4.2	+78 30	6.74	7.02	Fo	6	5,6	37555i
48	499	3.6	+28 42	5.60	5.58	B9	9	1,9	38884i	98	624	4.2	+41 14	8.6	9.6	Ko	1	..	38082i
49	514	3.6	+20 23	6.68	7.75	K2	5	E	38036i	99	531	4.2	+29 17	9.1	9.2	A3	3	1,3	37405i
50	513	3.6	+13 48	8.9	8.9	Ao	4	0,2 R	4419m	100	480	4.2	+27 27	6.38	6.38	Ao	8	..	37477i

19600

3^h 4^m. 2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
I	523	4.2	+14 58	10.0	10.0	Ao	2	..	4419m	51	574	4.7	-16 23	8.8	9.2	F5	4	..	20766b
2	552	4.2	-22 5	10.0	10.2	Go	4	..	24597b	52	1036	4.7	-45 31	9.2	10.5	Ko	2	..	23791b
3	917	4.2	-39 41	8.3	8.9	Go	5	0,3	40947b	53	640	4.8	+60 26	8.9	8.9	Ao	2	..	37427i
4	926	4.2	-46 22	9.3	10.2	Go	2	..	23791b	54	665	4.8	+52 53	8.4	9.5	K2	3	..	38932i
5	966	4.2	-47 25	8.0	8.7	F8	7	..	23791b	55	776	4.8	+47 42	8.8	9.1	Fo	3	5,3-	38932i
6	210	4.2	-63 15	9.4	9.9	F8	3	..	38370b	56	724	4.8	+39 14	4.82	5.82	Ko	..	0,R	56,75
7	449	4.3	+24 56	8.9	9.5	Go	1	..	38884i	57	625	4.8	-10 35	9.8	10.6	G5	2	..	39703b
8	448	4.3	+24 17	8.9	9.9	Ko	1	..	38884i	58	1462	4.8	-24 31	7.7	9.3	K5	5	..	23780b
9	438	4.3	+15 17	9.09	10.16	K2	4	2,1	4419m	59	1092	4.8	-35 48	7.10	7.7	Go	9	..	40947b
10	514	4.3	+13 26	8.3	8.4	A2	3	2,7	37372i	60	499	4.8	-57 12	8.2	9.2	Ko	5	..	40953b
11	614	4.3	- 5 54	8.8	9.8	Ko	2	..	38073i	61	402	4.9	+63 13	8.9	8.9	B9	2	..	37600i
12	572	4.3	-16 24	9.5	10.0	F8	2	..	40971b	62	721	4.9	+45 22	8.7	9.8	K2	2	0,I	38072i
13	1159	4.3	-26 50	8.2	9.9	Ma	2	..	23780b	63	684	4.9	+40 48	8.27	9.05	G5	2	..	38082i
14	720	4.3	-51 50	8.4	9.5	Ma	3	..	20263b	64	719	4.9	+37 40	7.48	8.83	Ma	3	..	37405i
15	172	4.4	+73 30	6.80	7.80	Ko	5	..	37555i	65	416	4.9	+21 32	7.8	8.8	Ko	3	..	37477i
16	413	4.4	+21 23	7.8	8.1	Fo	5	..	37477i	66	442	4.9	+15 37	7.9	8.0	A5	4	5,6	37372i
17	505	4.4	+17 59	8.5	9.3	G5	2	..	38036i	67	407	4.9	+ 9 19	8.3	9.1	G5	2	..	37476i
18	524	4.4	+15 0	9.3	9.8	F8	4	..	4419m	68	626	4.9	- 9 58	8.51	9.07	Go	4	..	15134b
19	515	4.4	+13 19	9.0	10.2	K5	2	..	4419m	69	904	4.9	-41 43	8.6	8.4	A3	6	1,4	40947b
20	501	4.4	+ 4 49	8.6	9.2	Go	6	..	12389b	70	87	4.9	-79 9	8.5	9.3	G5	2	..	20538b
21	603	4.4	-12 6	8.7	9.3	Go	4	..	18191b	71	71	4.9	-80 11	9.3	9.9	G	1	..	20538b
22	617	4.4	-19 20	7.10	7.8	Ao	8	..	20766b	72	871	5.0	+49 53	8.4	8.9	F8	3	..	38932i
23	241	4.4	-60 29	8.6	9.7	Ko	4	..	38370b	73	424	5.0	+18 22	7.9	8.9	Ko	4	E	38919i
24	689	4.5	+51 49	6.71	6.59	B5	6	..	38959i	74	545	5.0	-18 26	8.8	9.9	K2	1	..	20766b
25	701	4.5	+46 51	9.5	9.5	A	2	..	38932i	75	619	5.0	-19 25	8.9	10.2	K2	3	..	24597b
26	720	4.5	+45 53	8.8	9.6	G5	2	0,2-	38898i	76	591	5.0	-20 24	8.1	9.6	Ma	7	..	24597b
27	634	4.5	+44 39	7.50	7.56	A2	3	..	37452i	77	1466	5.0	-24 23	9.2	9.4	F8	4	..	45163b
28	516	4.5	+20 54	7.9	8.9	Ko	2	E	37477i	78	1103	5.0	-27 6	7.46	7.9	Ao	8	..	23780b
29	447	4.5	- 1 23	9.3	10.3	Ko	1	..	24103b	79	1177	5.0	-36 26	9.5	9.9	Go	1	..	40947b
30	502	4.5	- 3 36	8.9	9.0	A5	5	..	24103b	80	992	5.0	-44 42	8.7	9.6	Ko	3	..	23791b
31	573	4.5	-16 3	10.0	11.0	Ko	1	..	40971b	81	928	5.0	-50 49	8.4	9.5	Ko	2	..	20263b
32	1278	4.5	-25 16	7.40	8.1	G5	8	..	23780b	82	66	5.0	-81 4	9.0	10.0	K	2	..	20538b
33	1160	4.5	-26 44	9.9	9.9	Go	3	..	45163b	83	749	5.1	+55 47	8.0	9.4	Ma	4	..	37320i
34	250	4.6	+68 10	7.72	8.50	G5	3	..	37341i	84	722	5.1	+45 45	6.84	7.12	Fo	5	..	37452i
35	533	4.6	+62 50	9.2	9.2	B9	2	..	37600i	85	721	5.1	+37 46	8.1	8.2	A3	4	..	37405i
36	859	4.6	+48 54	9.5	10.6	K2	1	..	38932i	86	595	5.1	+34 43	8.3	9.1	G5	3	..	37405i
37	516	4.6	+26 31	6.12	7.12	Ko	6	..	37477i	87	536	5.1	- 3 55	10.4	10.5	A3	2	..	24103b
38	488	4.6	+ 6 20	8.3	9.1	G5	2	..	37476i	88	589	5.1	- 5 43	8.9	9.2	Fo	3	..	38073i
39	618	4.6	-19 15	8.8	9.6	Go	4	..	24597b	89	616	5.1	- 6 18	9.5	10.3	G5	1	..	38073i
40	556	4.6	-22 12	9.2	9.7	Ko	6	..	24597b	90	620	5.1	-18 51	9.3	9.9	Go	3	..	40971b
41	1038	4.6	-38 14	8.2	8.9	Go	5	5,3	40947b	91	1038	5.1	-28 45	8.7	9.6	Ko	3	E	23780b
42	216	4.6	-65 27	9.2	10.2	Ko	2	..	38370b	92	815	5.1	-40 0	9.52	9.8	G5	1	..	40947b
43	96	4.7	+79 59	8.46	9.24	G5	2	..	37309i	93	994	5.1	-44 36	8.4	9.0	F5	5	0,3	23791b
44	607	4.7	+59 33	8.4	8.4	B8	3	0,3	38959i	94	1039	5.1	-45 49	9.2	9.7	G5	3	..	23791b
45	553	4.7	+31 51	7.38	8.38	Ko	5	..	37405i	95	225	5.1	-64 6	9.0	9.5	F8	4	..	38370b
46	481	4.7	+27 58	9.2	9.2	Ao	2	2,1	38884i	96	555	5.2	+32 10	8.6	9.4	G5	2	..	37405i
47	398	4.7	+16 26	7.9	7.9	Ao	5	0,7	37372i	97	519	5.2	+13 58	8.9	10.0	K2	2	..	4419m
48	491	4.7	+ 2 41	7.6	7.9	Fo	6	2,8	10311b	98	445	5.2	+11 30	5.91	5.89	B9	9	..	37372i
49	531	4.7	+ 1 6	7.69	7.97	Fo	8	0,8	24103b	99	434	5.2	+ 3 53	9.0	9.5	F8	2	..	12389b
50	599	4.7	-13 44	9.0	9.3	F2	4	..	15134b	100	558	5.2	+ 1 41	9.0	10.0	Ko	2	..	24103b

THE HENRY DRAPER CATALOGUE.

19700

3h 5m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	592	5.2	-19 51	7.86	9.0	Ko	6	..	40971b	51	419	5.6	+21 47	8.3	8.3	B9	4	..	37477i
2	188	5.2	-68 22	10.5	11.5	Ko	2	..	38366b	52	528	5.6	+15 5	10.7	11.3	Go	3	..	4419m
3	173	5.3	+73 39	9.0	9.8	G5	1	..	37555i	53	527	5.6	+14 19	10.7	11.0	F	2	..	4419m
4	162	5.3	+72 26	9.5	9.6	A3	3	..	38043i	54	592	5.6	- 5 46	8.0	9.0	Ko	4	..	38073i
5	648	5.3	+54 48	8.0	9.1	K2	2	..	38959i	55	239	5.6	-74 42	6.92	8.3	Ko	8	..	20539b
6	724	5.3	+46 1	7.10	7.52	F5	4	..	37452i	56	726	5.7	+45 44	8.9	8.9	Ao	3	..	38945i
7	720	5.3	+42 29	9.2	9.3	A2	1	..	38945i	57	400	5.7	+16 24	10.7	11.9	K5	1	..	4419m
8	722	5.3	+37 13	7.31	8.31	Ko	5	..	37405i	58	443	5.7	+15 19	9.49	10.56	K2	3	..	4419m
9	577	5.3	+32 30	8.5	9.1	Go	3	..	37405i	59	470	5.7	+ 8 20	7.9	8.0	A5	4	..	37476i
10	526	5.3	+14 59	8.7	9.2	F8	5	3,2	4419m	60	561	5.7	+ 1 56	6.85	7.85	Ko	9	5,8	24103b
11	525	5.3	+14 45	10.0	10.5	F8	2	..	4419m	61	606	5.7	-12 2	9.3	9.7	F5	3	..	15134b
12	563	5.3	- 2 5	7.8	7.8	B9	9	..	24103b	62	601	5.7	-13 46	9.5	9.8	Fo	3	..	15134b
13	537	5.3	- 4 27	8.8	9.8	Ko	3	..	24103b	63	580	5.7	-16 41	9.2	10.0	G5	2	..	20766b
14	617	5.3	- 6 27	8.9	10.0	K2	1	..	38073i	64	569	5.7	-20 57	9.2	10.5	K2	5	..	24597b
15	1139	5.3	-34 19	8.2	9.0	F5	4	..	45169b	65	1046	5.7	-38 14	8.9	9.5	Go	2	..	40947b
16	856	5.3	-48 24	8.4	8.6	G5	2	..	8860b	66	103	5.8	+80 21	8.7	8.8	A5	2	..	37309i
17	189	5.3	-68 35	9.8	10.4	Go	2	..	38366b	67	780	5.8	+47 29	9.2	9.3	A3	2	2,2-	38932i
18	224	5.3	-72 23	8.1	9.1	Ko	6	..	20539b	68	727	5.8	+45 52	8.6	9.0	F5	2	3,2	38945i
19	329	5.4	+65 52	9.2	9.3	A3	2	..	38984i	69	649	5.8	+43 29	7.7	8.3	Go	4	..	38898i
20	666	5.4	+52 30	8.4	8.4	Ao	4	..	38959i	70	687	5.8	+41 8	8.9	8.9	Ao	2	..	38082i
21	860	5.4	+48 48	8.9	9.0	A2	3	..	38932i	71	650	5.8	+36 49	7.43	7.99	Go	6	..	37405i
22	399	5.4	+16 56	8.9	9.5	Go	5	5,1	4419m	72	492	5.8	+ 6 28	8.7	9.7	Ko	2	..	37476i
23	408	5.4	+ 9 38	7.17	8.24	K2	3	..	37476i	73	557	5.8	- 6 54	8.2	8.8	Go	3	..	38073i
24	610	5.4	-14 15	9.8	10.8	Ko	1	..	39703b	74	581	5.8	-16 4	9.3	10.4	K2	2	..	40971b
25	578	5.4	-16 4	9.8	10.8	Ko	2	..	40971b	75	559	5.8	-22 5	8.8	9.1	F8	7	..	24597b
26	548	5.4	-18 12	9.0	10.2	K5	1	..	40971b	76	1246	5.8	-23 7	9.9	10.8	G	2	..	42897b
27	1285	5.4	-25 28	9.5	9.4	Go	3	..	45163b	77	817	5.8	-40 48	9.5	9.8	K	1	..	40947b
28	1167	5.4	-26 38	9.4	10.2	K2	1	..	45163b	78	1001	5.8	-44 50	8.95	9.6	Ko	4	..	23791b
29	1262	5.4	-31 38	7.93	8.9	G5	7	0,5	24621b	79	518	5.8	-54 18	8.8	9.9	F8	3	..	20263b
30	1041	5.4	-45 20	8.1	8.8	G5	6	..	23791b	80	502	5.8	-57 23	9.3	10.7	K5	2	..	40953b
31	253	5.4	-59 10	8.7	10.0	F5	3	..	40953b	81	258	5.8	-62 14	7.4	8.0	Go	8	..	38370b
32	256	5.4	-62 34	8.7	9.1	F5	5	..	38370b	82	226	5.8	-72 36	9.7	9.7	Ao	3	..	20539b
33	67	5.4	-81 29	7.65	8.1	Fo	9	..	20538b	83	201	5.8	-73 51	7.4	8.2	G5	7	..	20539b
34	233	5.5	+70 11	8.79	8.85	A2	2	..	37555i	84	651	5.9	+36 36	8.8	8.8	Ao	2	..	37405i
35	779	5.5	+47 22	6.42	7.42	Ko	4	..	37452i	85	534	5.9	+29 27	8.1	8.2	A2	4	0,2	37405i
36	631	5.5	+42 1	6.00	5.95	B8	7	0,8	38945i	86	417	5.9	+23 37	9.1	9.1	A	1	..	38884i
37	526a	5.5	+14 25	var.	var.	Md	..	R	56,198	87	477	5.9	+19 21	4.53	5.53	Ko	..	5,8R	56,75
38	450	5.5	+13 8	8.5	8.6	A2	2	0,5	37372i	88	530	5.9	+15 2	10.0	11.0	Ko	2	..	4419m
39	498	5.5	- 0 10	7.29	7.37	A3	8	..	24103b	89	452	5.9	+12 40	6.44	7.22	G5	6	..	37372i
40	603	5.5	- 9 31	9.3	9.8	F8	2	..	15134b	90	493	5.9	+ 6 47	8.3	8.6	Fo	5	..	37476i
41	602	5.5	-11 34	9.8	10.4	Go	3	..	39703b	91	558	5.9	- 6 57	8.8	9.1	F2	2	..	38073i
42	1181	5.5	-36 21	10.2	9.9	B8	2	..	40947b	92	611	5.9	-14 48	8.16	8.16	Ao	8	..	15134b
43	257	5.5	-62 6	7.6	8.4	G5	8	..	38370b	93	582	5.9	-16 22	10.4	10.4	A	1	..	40971b
44	226	5.5	-64 25	9.6	10.1	F8	2	..	38370b	94	583	5.9	-16 42	10.4	11.0	Go	2	..	40971b
45	218	5.5	-65 50	8.9	9.9	Ko	2	..	38370b	95	594	5.9	-20 36	9.3	10.3	A3	2	..	40971b
46	225	5.5	-72 6	10.0	10.0	Ao	2	..	20539b	96	1475	5.9	-24 34	9.5	9.6	F5	1	..	20248b
47	693	5.6	+52 9	9.4	9.7	Fo	2	..	38932i	97	1287	5.9	-25 49	8.3	8.5	Fo	6	..	23780b
48	694	5.6	+51 38	8.4	8.4	Ao	4	..	38932i	98	1209	5.9	-30 18	8.9	10.1	Ko	1	..	45169b
49	723	5.6	+38 10	8.7	8.7	Ao	2	..	38082i	99	1177	5.9	-32 11	8.9	9.5	F8	2	..	45169b
50	519	5.6	+26 29	8.6	9.7	K2	1	..	38884i	100	529	5.9	-53 17	8.9	11.0	G5	1	..	20263b

19800

3^h 5^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	247	5.9	-61 32	7.4	9.1	Ko	6	..	38370b	51	561	6.4	-22 23	9.8	10.5	Ko	4	0,3	24597b
2	330	6.0	+65 53	8.6	9.0	F5	2	..	37341i	52	1173	6.4	-26 6	10.2	9.9	F8	2	..	42897b
3	551	6.0	-15 49	8.6	9.6	Ko	3	..	20766b	53	1110	6.4	-33 26	8.0	9.2	Ma	5	..	24621b
4	560	6.0	-22 8	9.0	9.6	Go	6	..	24597b	54	259	6.4	-62 9	9.6	10.6	Ko	2	..	38370b
5	862	6.1	+48 38	7.8	7.8	Ao	6	..	38932i	55	107	6.5	+81 47	7.26	8.61	Ma	6	E	37558i
6	691	6.1	+36 4	8.3	8.6	Fo	4	..	38082i	56	404	6.5	+63 35	8.6	8.6	B8	3	..	37600i
7	652	6.1	+41 4	8.1	8.1	Ao	2	..	37405i	57	655	6.5	+36 54	8.2	8.2	Ao	3	..	37405i
8	596	6.1	+34 36	8.1	8.6	F8	2	..	37405i	58	599	6.5	+34 57	8.17	8.45	Fo	5	..	37405i
9	502	6.1	+31 2	9.4	9.4	A	2	..	37405i	59	614	6.5	-14 0	10.7	11.3	Go	1	..	39793b
10	603	6.1	-11 30	7.24	8.02	G5	9	..	15134b	60	1049	6.5	-45 22	8.8	9.3	Ao	5	..	23791b
11	603	6.1	-13 28	9.5	10.5	Ko	1	..	39703b	61	243	6.5	-60 51	7.6	8.5	Ao	6	..	38370b
12	612	6.1	-13 57	9.3	9.7	F5	4	..	15134b	62	191	6.5	-68 50	8.3	8.6	F2	4	..	20539b
13	552	6.1	-15 35	9.8	10.6	G5	2	..	40971b	63	652	6.6	+54 22	8.8	9.6	G5	1	..	38959i
14	596	6.1	-20 30	7.58	9.0	G5	9	..	24597b	64	696	6.6	+51 25	7.8	8.2	F5	4	..	38898i
15	1107	6.1	-33 43	9.2	9.2	F5	3	..	45169b	65	402	6.6	+16 55	8.5	8.6	A3	3	0,2-	38036i
16	934	6.1	-46 16	8.5	9.3	G5	4	..	23791b	66	451	6.6	-0 52	7.7	8.7	Ko	8	..	24103b
17	875	6.1	-49 20	8.1	8.7	Fo	6	5,4	20263b	67	452	6.6	-1 46	10.0	10.4	F5	1	..	24103b
18	254	6.1	-59 45	9.0	9.7	B9	4	..	40953b	68	621	6.6	-6 5	8.8	9.6	G5	1	..	38073i
19	242	6.1	-60 33	9.8	10.9	K2	1	..	38370b	69	615	6.6	-14 7	10.4	10.5	A2	1	..	39703b
20	609	6.2	+59 11	7.09	6.97	B5	5	E	38959i	70	586	6.6	-16 8	8.6	8.9	F2	4	..	20766b
21	753	6.2	+55 24	8.6	9.1	F8	2	..	38959i	71	612	6.6	-17 27	9.2	9.6	F5	2	..	20766b
22	653	6.2	+43 55	8.1	8.7	Go	4	..	38945i	72	613	6.6	-17 49	8.9	9.0	A3	3	..	20766b
23	535	6.2	+29 26	9.4	10.2	G5	2	..	38884i	73	571	6.6	-21 47	9.3	10.3	G5	4	..	24597b
24	445	6.2	+15 43	10.7	10.7	A	1	..	4419m	74	1172	6.6	-29 49	8.42	9.8	K2	3	..	20248b
25	604	6.2	-11 29	8.8	8.9	A3	7	..	15134b	75	1269	6.6	-30 55	8.5	10.4	K2	1	..	45169b
26	1480	6.2	-24 7	6.43	7.7	G5	8	E	23780b	76	1100	6.6	-34 56	8.49	8.1	Go	6	..	40947b
27	1266	6.2	-31 30	9.2	9.8	Go	1	..	45169b	77	172	6.6	-69 16	10.3	11.1	G5	1	..	38366b
28	1098	6.2	-35 18	8.3	9.1	K2	4	..	40947b	78	189	6.6	-71 16	9.8	10.8	Ko	2	..	17047b
29	170	6.2	-66 18	7.7	8.0	Fo	8	..	38370b	79	227	6.6	-76 4	8.1	8.5	F5	4	..	14359b
30	403	6.3	+63 31	8.9	8.9	Ao	3	..	37600i	80	131	6.6	-77 33	8.2	8.8	Go	6	0,5-	14359b
31	728	6.3	+45 46	8.6	8.6	Ao	2	..	37452i	81	783	6.7	+47 27	9.2	..	Np	..	R	M
32	523	6.3	+26 53	5.65	5.65	Aop	9	R	37477i	82	662	6.7	+38 36	8.3	8.6	Fo	3	..	37405i
33	446	6.3	+15 45	7.57	8.75	K5	2	3,5	37372i	83	601	6.7	+34 38	8.5	8.6	A5	3	..	37405i
34	472	6.3	+8 35	8.3	8.9	Go	5	..	12026b	84	521	6.7	+13 39	8.9	10.0	K2	2	3,1	4419m
35	450	6.3	-1 5	9.3	9.7	F5	2	..	24103b	85	508	6.7	+5 3	9.45	9.45	A	1	..	12389b
36	540	6.3	-4 11	6.34	7.69	Ma	4	0,7-	38073i	86	553	6.7	-15 39	9.8	10.8	Ko	1	..	40971b
37	611	6.3	-17 32	9.2	9.8	Go	2	..	40971b	87	587	6.7	-16 24	6.34	7.34	Ko	10	..	20766b
38	549	6.3	-18 42	8.9	9.5	Go	3	..	20766b	88	563	6.7	-22 16	10.2	10.5	Go	3	..	42897b
39	1172	6.3	-25 57	10.6	10.0	A2	2	..	42897b	89	1010	6.7	-44 6	8.2	8.8	F5	6	0,3	23791b
40	1148	6.3	-34 29	8.9	8.8	A2	4	..	45169b	90	228	6.7	-72 24	7.2	8.2	Ko	7	..	20539b
41	978	6.3	-47 15	9.8	10.0	F5	3	..	23791b	91	218	6.7	-75 6	9.2	10.0	G5	2	..	17047b
42	202	6.3	-73 0	9.3	10.5	K5	2	..	20539b	92	875	6.8	+49 26	8.5	8.5	Ao	3	..	38932i
43	234	6.4	+71 2	9.2	9.5	F2	2	..	38943i	93	876	6.8	+49 12	7.06	7.04	B9	8	..	38932i
44	540	6.4	+61 21	8.0	8.0	Ao	4	0,4	37341i	94	708	6.8	+46 26	8.2	9.0	G5	4	..	38945i
45	782	6.4	+47 50	5.96	6.74	G5	6	..	37452i	95	430	6.8	+18 33	8.5	9.3	G5	2	..	38036i
46	481	6.4	+7 45	8.5	8.5	B9	4	..	37476i	96	447	6.8	+16 7	7.32	7.38	A2	5	0,8	37372i
47	507	6.4	+4 20	8.4	9.4	Ko	2	..	38062i	97	617	6.8	-13 54	7.8	8.2	F5	8	..	15134b
48	509	6.4	-3 25	9.3	9.7	F5	2	..	24103b	98	1486	6.8	-24 24	9.4	9.4	Fo	3	..	20248b
49	605	6.4	-13 16	9.3	9.9	Go	2	..	15134b	99	1296	6.8	-25 13	8.02	9.0	K5	5	..	23780b
50	604	6.4	-13 38	6.51	7.07	Go	10	..	15134b	100	227	6.8	-64 29	9.2	9.6	F5	2	..	38370b

THE HENRY DRAPER CATALOGUE.

1900

3^h 6^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	784	6.9	+47 32	7.8	9.0	K5	2	0,1	38898i	51	240	7.2	-73 54	8.9	9.2	Fo	4	..	20539b
2	582	6.9	+32 31	8.0	8.8	G5	5	..	37405i	52	220	7.2	-75 29	8.8	9.8	Ko	2	5,1	17047b
3	503	6.9	- 0 16	7.21	8.21	Ko	7	..	24103b	53	164	7.3	+72 32	8.8	8.8	Ao	2	..	37555i
4	929	6.9	-39 26	7.02	7.3	A2	9	2,10	40947b	54	865	7.3	+48 12	9.0	9.1	A3	2	..	38932i
5	494	6.9	-55 24	9.1	10.1	K2	2	..	20263b	55	711	7.3	+46 25	8.6	9.6	Ko	1	..	38932i
6	203	7.0	+69 37	7.7	7.7	Ao	5	..	37555i	56	729	7.3	+45 12	8.72	8.72	Ao	2	2,2	38072i
7	229	7.0	+68 58	9.2	9.8	Go	3	..	38943i	57	403	7.3	+16 44	8.7	9.1	F5	4	3,3	4419m
8	877	7.0	+50 0	8.8	9.2	F5	2	..	38932i	58	611	7.3	-12 2	9.5	9.9	F5	4	..	39703b
9	666	7.0	+38 35	8.6	8.7	A3	3	..	38082i	59	1262	7.3	-23 29	10.4	10.8	F	2	..	42897b
10	504	7.0	- 0 27	9.3	9.3	Ao	4	..	24103b	60	940	7.3	-46 28	9.6	10.0	Go	2	..	23791b
11	571	7.0	- 2 45	9.8	10.4	Go	2	..	24103b	61	757	7.4	+55 55	8.6	9.4	G5	2	..	38959i
12	561	7.0	- 7 11	9.0	10.0	Ko	1	..	38073i	62	647	7.4	+35 46	8.0	8.8	G5	3	..	37405i
13	1216	7.0	-30 52	8.9	8.9	Go	3	E	20248b	63	425	7.4	+10 46	7.7	7.7	Ao	3	..	37372i
14	1185	7.0	-32 28	8.3	9.5	Ko	1	..	42907b	64	456	7.4	- 1 14	8.5	9.3	G5	3	..	24103b
15	1185	7.0	-37 34	8.6	9.9	Go	2	..	40947b	65	620	7.4	-14 37	9.0	10.0	Ko	3	..	15134b
16	737	7.0	-51 12	7.7	8.1	Go	6	..	20263b	66	980	7.4	-43 29	9.2	9.3	Fo	4	..	23791b
17	209	7.0	-70 16	9.6	10.0	F5	2	..	38366b	67	335	7.5	+66 0	6.65	6.65	Ao	6	..	37341i
18	54	7.0	-82 17	9.4	9.5	A5	6	..	20538b	68	651	7.5	+60 45	8.0	8.0	B8	4	0,4	37427i
19	35	7.0	-84 24	9.6	10.1	F8	1	..	20538b	69	695	7.5	+41 4	8.3	8.7	F5	3	..	38082i
20	378	7.1	+64 33	8.6	9.1	F8	3	..	37341i	70	510	7.5	+26 1	8.5	8.6	A2	2	..	37477i
21	786	7.1	+47 26	8.2	8.2	B9	5	..	38932i	71	426	7.5	+21 15	8.5	8.9	F5	2	..	37477i
22	725	7.1	+42 32	8.2	9.0	G5	2	..	37452i	72	507	7.5	- 0 44	9.7	10.1	F5	2	..	24103b
23	667	7.1	+38 46	8.2	8.5	Fo	2	..	37405i	73	512	7.5	- 3 23	8.4	8.7	F2	6	..	24103b
24	565	7.1	+31 54	8.5	9.0	F8	4	..	37405i	74	613	7.5	-12 20	10.4	11.4	Ko	1	..	39703b
25	505	7.1	+30 42	7.30	8.37	K2	5	..	37405i	75	627	7.5	-19 13	9.0	9.4	A5	3	..	20766b
26	496	7.1	+ 6 18	5.84	6.40	A5	8	R	37499i	76	573	7.5	-21 10	8.0	9.3	K5	2	..	20766b
27	496	7.1	+ 6 18	5.84	6.40	A5	8	R	37499i	77	211	7.5	-70 29	10.0	10.8	G5	1	..	38366b
28	506	7.1	- 0 36	8.5	9.5	Ko	6	..	24103b	78	115	7.6	+77 22	5.50	5.78	Fo	8	5,9	37555i
29	572	7.1	- 2 50	8.8	9.9	K2	4	..	24103b	79	699	7.6	+51 12	8.7	8.7	Ao	2	..	38898i
30	633	7.1	-10 49	9.8	10.2	F5	2	..	39703b	80	736	7.6	+39 50	8.7	8.7	B8	3	..	38082i
31	607	7.1	-11 44	10.0	10.0	Ao	4	..	39703b	81	737	7.6	+39 44	7.07	7.05	B9	8	..	38082i
32	610	7.1	-12 22	9.8	10.1	F2	3	..	39703b	82	507	7.6	+28 51	8.7	8.8	A2	2	..	37477i
33	607	7.1	-13 18	9.5	9.9	F5	3	..	15134b	83	427	7.6	+10 54	7.9	8.3	F5	3	..	38919i
34	554	7.1	-15 19	7.90	8.90	Ko	6	..	15134b	84	498	7.6	+ 2 19	8.3	8.3	Ao	8	0,7	24103b
35	614	7.1	-16 58	8.2	9.2	Ko	4	..	20766b	85	599	7.6	- 8 26	9.3	10.3	Ko	1	..	38073i
36	1179	7.1	-26 6	10.2	10.2	Go	2	..	42897b	86	590	7.6	-16 26	8.0	9.0	Ko	5	..	20766b
37	519	7.1	-54 10	8.6	9.9	Fo	3	..	20263b	87	1174	7.6	-29 32	6.92	8.0	G5	7	..	20248b
38	495	7.1	-55 52	8.4	9.2	K5	4	..	20263b	88	1050	7.6	-38 24	8.6	9.5	G5	2	..	40947b
39	219	7.1	-64 57	6.86	6.9	A5	5	5,9	8861b	89	942	7.6	-46 43	8.0	8.7	Ko	5	..	23791b
40	174	7.1	-69 39	6.05	7.2	G5	10	..	20539b	90	865	7.6	-48 42	8.8	9.6	Ko	4	..	23791b
41	119	7.2	+76 38	8.4	9.0	Go	3	..	37555i	91	738	7.6	-51 7	9.0	9.8	G5	1	..	20263b
42	657	7.2	+43 29	7.30	8.08	G5	2	..	37452i	92	868	7.7	+48 12	8.2	8.2	Ao	3	0,3	38898i
43	451	7.2	+25 9	8.61	8.67	A2	2	..	37477i	93	731	7.7	+37 17	8.5	8.6	A2	4	..	37405i
44	474	7.2	+ 8 13	7.9	8.7	G5	3	..	37476i	94	457	7.7	- 1 34	5.14	5.64	F8	8	..	38062i
45	455	7.2	- 1 20	8.3	8.4	A5	6	..	24103b	95	513	7.7	- 3 5	9.0	10.2	K5	2	..	24103b
46	1180	7.2	-25 54	8.9	9.3	Go	5	..	23780b	96	514	7.7	- 3 17	9.0	10.0	Ko	4	..	24103b
47	939	7.2	-46 43	9.4	9.7	F5	3	..	23791b	97	563	7.7	- 7 15	9.3	10.1	G5	2	..	38073i
48	884	7.2	-49 6	6.10	7.2	Ko	..	0,8	56,119	98	600	7.7	- 8 2	9.2	10.2	Ko	2	..	38073i
49	505	7.2	-57 19	8.9	10.7	K5	2	..	40953b	99	611	7.7	- 9 5	9.0	9.6	Go	3	..	15134b
50	255	7.2	-59 8	8.6	9.5	Ao	4	..	40953b	100	614	7.7	-12 0	9.0	10.2	K5	2	..	39703b

20000

3h 7m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	576	7.7	20 59	6.90	7.0	B9	9	0,9	42897b	51	498	8.2	55 24	9.6	10.4	G5	1	..	40953b
2	1223	7.7	30 39	8.1	8.9	A5	5	..	20248b	52	260	8.2	62 44	7.8	8.7	Go	7	..	38370b
3	230	7.7	72 42	8.9	9.7	G5	5	..	20539b	53	618	8.3	+59 40	7.9	7.9	Ao	4	..	38959i
4	166	7.8	+72 25	8.0	8.3	F2	3	..	37555i	54	672	8.3	+52 23	8.0	8.0	Ao	5	..	38932i
5	510	7.8	0 45	8.5	8.9	F5	6	..	24103b	55	541	8.3	+1 4	8.79	9.97	K5	4	..	24103b
6	573	7.8	2 32	9.5	10.1	Go	3	..	24103b	56	612	8.3	-10 54	9.8	10.6	G5	4	..	39703b
7	596	7.8	5 30	8.6	9.1	F8	3	..	38073i	57	1127	8.3	-27 19	8.7	9.9	Go	2	..	42897b
8	615	7.8	12 44	10.0	11.0	Ko	1	..	39703b	58	499	8.3	-55 32	9.2	9.9	Ko	1	..	40953b
9	615	7.8	17 0	10.2	11.0	G5	2	..	40971b	59	266	8.3	-58 4	8.8	9.8	Ko	3	..	40953b
10	1177	7.8	29 23	3.95	4.45	F8	..	R	28,196	60	229	8.3	-64 17	6.67	6.8	A2	6	0,10	8861b
11	1122	7.8	33 9	8.9	8.6	A2	4	..	45169b	61	723	8.4	+50 33	8.6	9.8	K5	2	..	38932i
12	940	7.8	50 24	8.1	9.5	Ko	2	..	20263b	62	664	8.4	+44 8	8.6	8.7	A2	3	0,2	38898i
13	257	7.8	-59 36	8.2	8.4	A2	7	..	40953b	63	638	8.4	+42 8	6.16	6.04	G5	5	..	37452i
14	221	7.8	-65 14	8.28	8.2	F5	5	..	38370b	64	606	8.4	+34 25	8.5	9.3	G5	2	..	37405i
15	235	7.9	+70 32	8.5	8.6	A2	3	..	38943i	65	514	8.4	+17 56	8.5	9.3	G5	2	..	38036i
16	230	7.9	+69 4	8.0	8.0	Ao	4	1,3	37555i	66	609	8.4	-13 6	9.3	10.4	K2	1	..	39703b
17	870	7.9	+48 19	7.90	7.88	B9	4	0,4	38898i	67	622	8.4	-14 34	10.0	10.4	F5	3	..	39703b
18	524	7.9	+13 57	9.3	9.8	F8	3	0,2	4419m	68	556	8.4	-18 49	8.6	9.0	F5	3	..	20766b
19	609	7.9	-11 27	10.2	10.8	Go	2	..	15134b	69	602	8.4	-20 24	6.84	7.0	Ko	8	..	20766b
20	621	7.9	-14 6	10.4	10.5	A5	1	..	39703b	70	1227	8.4	-30 32	7.7	8.4	Ko	5	..	20248b
21	204	8.0	+69 56	8.84	9.84	Ko	2	..	38943i	71	1194	8.4	-32 46	6.96	8.0	Ko	5	..	42907b
22	789	8.0	+47 54	7.9	7.9	Ao	4	0,3	38898i	72	500	8.4	-55 16	8.3	8.7	Fo	5	..	20263b
23	713	8.0	+46 45	8.6	8.6	Ao	5	..	38945i	73	241	8.4	-74 53	9.0	10.0	Ko	2	..	17047b
24	604	8.0	+34 59	8.82	9.89	K2	2	..	37405i	74	380	8.5	+64 45	8.5	9.3	G5	2	..	37341i
25	585	8.0	+33 8	8.1	9.1	Ko	3	..	37405i	75	657	8.5	+54 56	8.8	8.8	Ao	3	..	38959i
26	458	8.0	-1 11	9.3	10.4	K2	1	..	24103b	76	873	8.5	+48 47	8.0	9.0	Ko	1	2,1	38072i
27	593	8.0	-16 22	8.7	9.1	F5	4	..	20766b	77	717	8.5	+46 54	8.9	9.0	A2	3	..	38932i
28	616	8.0	-17 10	8.9	9.9	Ko	3	0,2	39703b	78	457	8.5	+22 35	6.90	7.90	Ko	5	..	37477i
29	935	8.0	-39 24	6.93	7.8	F5	6	3,7	12267b	79	415	8.5	+10 4	8.42	8.98	Go	2	..	37499i
30	82	8.1	+83 10	7.46	8.46	Ko	4	..	37558i	80	1282	8.5	-31 30	7.10	8.3	Ko	5	0,9	42907b
31	251	8.1	+66 42	8.0	8.1	A2	4	..	37341i	81	826	8.5	-40 47	7.4	7.6	A3	7	1,8	12267b
32	883	8.1	+49 15	8.8	8.8	B9	2	..	38898i	82	946	8.5	-50 38	8.8	10.1	Ko	1	..	46083b
33	555	8.1	-18 36	9.2	9.6	F5	2	..	40971b	83	174	8.5	-66 45	8.9	9.5	Go	2	..	38366b
34	1270	8.1	-23 22	9.4	10.5	Go	3	..	42897b	84	59	8.6	+84 33	5.78	6.78	Ko	10	..	37309i
35	936	8.1	-39 44	7.00	7.9	Ko	6	0,4	40947b	85	144	8.6	+74 52	7.47	7.45	B9	5	1,8	37630i
36	944	8.1	-46 0	9.6	10.5	F5	1	..	23791b	86	450	8.6	+15 12	7.34	7.34	Ao	6	0,9	37372i
37	265	8.1	-58 11	6.72	7.3	G5	9	..	40953b	87	526	8.6	+13 32	8.9	9.5	Go	3	5,2	4419m
38	258	8.1	-59 12	9.1	10.0	G5	2	..	40953b	88	597	8.6	-4 51	9.25	10.25	K	1	R	24103b
39	190	8.2	+71 55	9.0	9.5	F8	3	..	38943i	89	638	8.6	-10 22	8.3	8.4	A2	8	..	15134b
40	616	8.2	+59 44	7.76	8.76	Ko	2	..	38959i	90	560	8.6	-18 1	8.2	9.3	K2	4	..	20766b
41	798	8.2	+56 45	5.92	5.92	Aop	8	2,8R	38959i	91	630	8.6	-18 55	9.0	9.7	A5	3	..	20766b
42	738	8.2	+39 32	8.5	8.5	Ao	1	..	38082i	92	538	8.6	-53 15	8.7	9.6	Go	4	..	20263b
43	432	8.2	+18 36	6.71	7.89	K5	4	..	37372i	93	508	8.6	-57 34	10.3	10.7	F5	1	..	40953b
44	445	8.2	+3 16	8.9	9.4	F8	2	..	12389b	94	212	8.6	-63 38	8.0	8.3	Fo	7	..	38370b
45	511	8.2	0 12	8.3	8.4	A2	7	..	24103b	95	621	8.7	+59 37	8.4	8.4	Ao	3	..	38959i
46	1185	8.2	-26 15	9.7	9.9	Go	3	..	42897b	96	725	8.7	+50 35	6.68	6.68	Ao	5	..	37967i
47	1180	8.2	-29 48	8.9	8.6	Fo	5	..	20248b	97	888	8.7	+49 30	8.4	8.4	B9	2	..	38932i
48	1192	8.2	-32 5	8.9	9.5	Ko	2	..	42907b	98	651	8.7	+35 21	8.5	8.6	A2	3	..	37405i
49	1109	8.2	-35 15	8.3	9.6	K5	3	..	40947b	99	588	8.7	+32 17	8.3	9.1	G5	2	..	37405i
50	1195	8.2	-37 3	9.6	10.5	G	1	..	40947b	100	..	8.7	-1 26	..	..	Mb	..	..	M

THE HENRY DRAPER CATALOGUE.

20100

3^h 8^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	618	8.7	11 54	9.5	10.0	F8	4	..	39703b	51	566	9.2	+ 2 4	8.9	9.4	F8	3	0,I	12389b
2	1192	8.7	-26 38	7.6	8.7	G5	7	..	23780b	52	618	9.2	- 8 57	8.4	8.8	F5	7	..	15134b
3	1182	8.7	-29 9	8.1	8.4	Ko	5	..	20248b	53	619	9.2	-12 38	9.3	10.1	G5	2	..	15134b
4	338	8.8	+65 17	6.35	6.41	A2	7	..	37341i	54	1317	9.2	-25 14	8.1	8.7	F8	5	..	20248b
5	664	8.8	+36 53	7.76	7.76	Ao	5	..	37405i	55	1183	9.2	-29 20	8.5	8.0	Go	7	..	20248b
6	615	8.8	-11 19	10.2	11.3	K2	1	..	39703b	56	1163	9.2	-33 55	9.3	10.8	G5	2	5,I	42805b
7	1193	8.8	-26 24	9.7	9.9	G5	2	..	45163b	57	1202	9.2	-37 20	8.6	8.7	F8	5	..	40947b
8	1062	8.8	-38 11	8.2	9.2	G5	3	..	40947b	58	1066	9.2	-45 31	10.4	10.2	Fo	2	..	23791b
9	193	8.8	-71 5	10.0	10.8	G5	2	..	17047b	59	371	9.2	-52 20	8.7	9.8	K2	1	..	20263b
10	79	8.9	+83 41	8.2	8.8	G	4	..	37309i	60	175	9.2	-66 52	8.6	9.0	F5	3	..	38370b
11	120	8.9	+76 41	8.2	8.6	F5	5	0,2	37555i	61	547	9.3	+61 59	8.7	9.1	F5	3	..	37600i
12	703	8.9	+51 11	7.8	8.3	F8	2	..	38808i	62	648	9.3	+44 58	6.42	7.77	Ma	4	..	37452i
13	653	8.9	+36 6	7.60	7.55	B8	5	..	37405i	63	739	9.3	+38 8	7.88	7.86	B9	4	..	37405i
14	454	8.9	+24 33	8.9	9.7	G5	2	..	38884i	64	515	9.3	+26 7	8.1	8.1	Ao	4	..	37415i
15	542	8.9	+ 0 23	8.1	8.6	F8	9	..	24103b	65	482	9.3	+ 8 37	7.7	8.7	Ko	4	..	37476i
16	517	8.9	- 3 22	9.5	9.6	A5	4	..	24103b	66	515	9.3	+ 0 6	10.0	10.6	G	1	..	24103b
17	598	8.9	- 4 53	8.80	9.58	G5	3	..	24103b	67	516	9.3	- 0 42	9.3	9.6	Fo	2	..	24103b
18	625	8.9	-14 1	7.56	7.62	A2	8	..	15134b	68	519	9.3	- 3 2	9.5	10.7	K5	1	..	24103b
19	561	8.9	-18 0	9.5	10.3	G5	3	..	40971b	69	1209	9.3	-36 51	9.0	9.9	G5	2	..	40947b
20	1275	8.9	-23 42	9.2	9.5	F5	3	..	42897b	70	1046	9.3	-42 44	7.5	8.2	Fo	4	..	12267b
21	1025	8.9	-44 47	5.92	6.6	F2	..	3,10	56,119	71	211	9.3	-67 53	8.0	8.0	B9	7	1,3-	20539b
22	728	9.0	+51 3	9.0	9.4	F5	1	..	38932i	72	71	9.3	-80 54	9.2	9.6	F5	3	..	20538b
23	729	9.0	+50 35	5.29	6.29	Ko	7	..	37967i	73	502	9.4	+ 2 24	8.5	8.8	Fo	5	5,2	12389b
24	453	9.0	+12 43	8.3	8.3	Ao	3	..	38919i	74	600	9.4	- 5 31	8.6	9.0	F5	4	E	24103b
25	480	9.0	+ 8 50	8.3	9.1	G5	1	..	37476i	75	1184	9.4	-29 0	9.4	10.4	G5	1	..	20248b
26	514	9.0	+ 0 2	9.03	10.03	Ko	3	..	24103b	76	1238	9.4	-30 10	6.22	7.1	G5	9	..	20248b
27	569	9.0	- 7 2	7.80	8.14	F2	6	..	38073i	77	504	9.4	-56 46	7.4	8.6	K5	5	E	20263b
28	633	9.0	-19 5	8.4	9.4	K2	3	..	20766b	78	728	9.5	+42 53	8.8	9.3	F8	2	..	38945i
29	568	9.0	-22 21	9.0	9.9	Go	3	..	42897b	79	641	9.5	+41 28	8.4	8.5	A5	3	..	37452i
30	949	9.0	-46 52	8.1	7.9	Fo	7	..	23791b	80	607	9.5	+33 50	8.7	8.7	Ao	1	R	37488i
31	232	9.0	-72 23	9.6	10.4	G5	2	..	20539b	81	453	9.5	+15 53	8.5	9.1	Go	3	R	38919i
32	70	9.0	-81 36	9.0	9.3	F2	3	..	20538b	82	571	9.5	- 7 33	8.4	9.5	K2	1	..	38073i
33	130	9.1	+76 0	9.07	9.07	Ao	2	..	37555i	83	598	9.5	-16 14	9.8	10.3	F8	2	..	40971b
34	625	9.1	+59 41	7.51	7.34	B3	5	5,5	38959i	84	626	9.5	-17 29	10.0	10.1	A5	3	..	40971b
35	792	9.1	+47 39	7.9	8.0	A2	4	2,3	38898i	85	628	9.5	-17 48	9.8	9.8	Ao	3	..	40971b
36	509	9.1	+28 40	8.6	9.7	K2	2	..	38884i	86	563	9.5	-18 15	8.6	9.6	Ko	4	..	20766b
37	517	9.1	+17 40	8.9	9.2	F	1	..	38036i	87	1239	9.5	-30 36	8.9	8.6	A5	5	..	20248b
38	617	9.1	- 9 15	9.2	9.3	A3	3	..	15134b	88	1206	9.5	-37 7	8.2	9.9	Ko	2	..	40947b
39	623	9.1	-17 25	8.8	9.1	F2	4	..	20766b	89	501	9.5	-55 35	Cl.	Cl.	Con.	2	R	20263b
40	603	9.1	-19 51	10.0	10.6	F5	2	0,I	42897b	90	131	9.6	+75 39	8.32	8.32	Ao	5	2,2	37555i
41	1277	9.1	-23 24	9.4	10.6	G5	2	..	42897b	91	731	9.6	+50 50	7.6	7.6	B9	3	..	37967i
42	1067	9.1	-27 57	7.02	7.1	A2	10	..	20248b	92	794	9.6	+47 54	7.8	8.8	Ko	3	0,2	38808i
43	1162	9.1	-34 45	8.79	9.6	G5	3	..	40947b	93	591	9.6	+32 29	6.34	6.62	Fo	8	..	37405i
44	1208	9.1	-36 19	6.24	6.9	B9	10	..	40947b	94	530	9.6	+26 32	8.2	8.3	A5	5	E	37415i
45	510	9.1	-57 21	9.3	10.7	K	1	..	40953b	95	439	9.6	+18 11	9.0	10.1	K2	1	..	38036i
46	223	9.1	-65 20	8.0	9.0	Ko	4	..	38370b	96	581	9.6	- 2 42	7.42	8.77	Ma	6	..	24103b
47	581	9.2	+58 46	8.6	9.0	F5	2	..	38959i	97	640	9.6	-10 35	9.5	10.0	F8	2	..	39703b
48	666	9.2	+43 11	8.7	9.7	Ko	1	..	38945i	98	569	9.6	-22 32	9.0	9.6	Ko	2	..	42897b
49	512	9.2	+30 11	5.53	5.53	Ao	..	0,R	56,75	99	1513	9.6	-24 40	9.7	9.6	F5	2	..	20248b
50	527	9.2	+20 40	4.95	4.95	Ao	..	R	56,75	100	926	9.6	-41.45	7.3	8.4	K2	6	2,4	40947b

20200

3^h 9^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	990	9.6	-47 31	7.5	7.5	Go	5	..	20263b	51	958	10.2	-46 17	8.5	8.7	F5	6	..	23791b
2	729	9.7	+42 24	10.2	11.6	Ma	..	R	M	52	994	10.2	-47 34	8.6	8.7	F5	2	E	20263b
3	447	9.7	+ 3 56	8.6	8.6	Ao	2	..	38062i	53	743	10.2	-51 28	8.4	9.2	Ko	3	..	20263b
4	567	9.7	+ 1 14	8.94	10.29	Mb	3	..	24103b	54	244	10.2	-60 13	8.7	9.8	F2	3	..	40953b
5	642	9.7	-10 4	7.65	8.07	F5	9	..	15134b	55	179	10.3	+73 20	7.10	8.10	Ko	4	0,4	37555i
6	629	9.7	-17 2	8.8	9.8	Ko	2	5,2	39703b	56	708	10.3	+51 21	9.5	9.5	Ao	2	..	38932i
7	604	9.7	-20 4	9.8	10.0	F8	2	3,2	42897b	57	570	10.3	+ 1 25	8.9	9.9	Ko	1	..	24103b
8	583	9.8	+58 25	8.5	8.9	F5	3	..	38959i	58	550	10.3	+ 0 30	8.9	9.9	Ko	2	..	24103b
9	611	9.8	+34 40	7.52	7.94	F5	5	..	37405i	59	465	10.3	- 1 32	8.5	9.0	F8	6	..	24103b
10	610	9.8	+34 19	6.42	6.48	A2	8	R	37405i	60	615	10.3	-13 21	9.0	9.8	G5	3	..	15134b
11	457	9.8	+24 10	8.6	8.6	Ao	4	..	38884i	61	572	10.3	-22 7	9.0	9.4	K2	5	..	42897b
12	529	9.8	+13 56	8.3	8.8	F8	3	..	37372i	62	960	10.3	-45 58	8.5	8.1	A3	6	..	23791b
13	501	9.8	+ 6 43	8.9	9.9	Ko	3	..	12389b	63	959	10.3	-46 13	9.2	9.1	Fo	4	..	23791b
14	548	9.8	+ 0 31	8.9	9.9	Ko	3	..	24103b	64	262	10.3	-62 39	8.7	9.2	F8	5	..	38370b
15	574	9.8	- 7 5	7.20	8.20	Ko	5	..	38073i	65	510	10.4	+28 55	9.8	10.8	Ko	1	..	38884i
16	1132	9.8	-33 12	7.8	8.6	Ko	3	..	42907b	66	466	10.4	- 0 51	8.4	9.2	G5	4	..	24103b
17	873	9.8	-48 9	8.0	9.0	Ko	3	..	20263b	67	583	10.4	- 2 33	9.0	9.4	F5	5	..	24103b
18	795	9.9	+47 46	8.9	8.7	B	3	R	38932i	68	629	10.4	-14 12	7.46	8.24	G5	7	..	15134b
19	669	9.9	+36 14	8.5	9.0	F8	3	..	37405i	69	587	10.4	-20 54	8.9	10.6	Go	2	5,2	42897b
20	608	9.9	- 8 30	8.8	9.8	Ko	2	..	38073i	70	833	10.4	-40 37	7.4	8.2	Ko	6	0,4	40947b
21	621	9.9	-12 35	10.2	10.3	A2	3	..	39703b	71	234	10.4	-64 42	9.0	9.5	F8	4	..	38370b
22	562	9.9	-15 13	9.2	10.0	G5	3	..	15134b	72	179	10.4	-69 26	9.8	10.4	Go	2	..	38366b
23	997	9.9	-43 44	8.7	9.6	A5	3	..	23791b	73	205	10.5	+69 22	6.68	6.68	Ao	8	0,7	37600i
24	502	9.9	-55 33	9.4	9.8	F5	3	..	20263b	74	253	10.5	+66 51	7.8	8.3	F8	3	..	37341i
25	58	9.9	-83 43	8.6	9.6	Ko	6	..	20538b	75	639	10.5	+53 30	8.6	9.1	F8	2	..	38959i
26	383	10.0	+64 31	8.6	8.6	B9	4	..	37600i	76	709	10.5	+51 31	8.4	9.5	K2	2	..	38932i
27	875	10.0	+48 18	8.6	8.6	B9	3	..	38898i	77	576	10.5	+31 49	6.05	7.05	Ko	7	..	37405i
28	796	10.0	+47 40	8.9	9.9	Ko	1	..	38932i	78	456	10.5	+11 15	7.9	8.7	G5	3	..	37499i
29	649	10.0	+44 31	9.7	10.5	G5	1	..	38945i	79	617	10.5	-13 22	8.2	9.2	Ko	6	..	15134b
30	568	10.0	+ 1 12	9.34	10.34	Ko	2	..	24103b	80	1207	10.5	-26 49	9.5	10.2	K2	2	..	42897b
31	521	10.0	- 2 53	10.2	10.6	F5	2	..	24103b	81	12	10.5	-89 1	9.7	10.5	G5	2	..	22578b
32	950	10.0	-39 10	6.87	6.9	Ao	9	..	40947b	82	895	10.6	+49 59	7.62	7.62	Ao	5	..	38932i
33	895	10.0	-49 42	7.71	8.9	Ko	3	..	20263b	83	743	10.6	+40 7	6.44	6.44	Ao	8	R	38082i
34	513	10.0	-57 41	5.72	7.8	Na	..	0,6	56,120	84	517	10.6	+25 50	8.5	8.6	A2	3	..	37415i
35	669	10.1	+43 22	8.0	9.1	K2	2	..	38945i	85	630	10.6	-13 52	8.7	9.3	Go	4	..	15134b
36	682	10.1	+38 15	7.9	9.0	K2	4	..	37405i	86	271	10.6	-58 12	8.9	9.2	B9	4	..	40953b
37	601	10.1	- 5 9	8.8	9.2	F5	3	E	24103b	87	261	10.6	-59 47	9.3	9.8	A2	2	..	40953b
38	630	10.1	- 5 50	8.7	8.8	A2	4	..	24103b	88	248	10.6	-61 52	9.3	10.4	F8	2	..	38370b
39	627	10.1	-14 49	7.89	8.89	Ko	6	..	15134b	89	444	10.7	+18 58	7.9	8.9	Ko	3	..	38036i
40	563	10.1	-15 39	9.2	10.0	G5	3	..	40971b	90	622	10.7	- 9 8	6.76	7.76	Ko	5	..	38073i
41	197	10.1	-68 35	8.4	9.4	Ko	5	2,2	38366b	91	605	10.7	-20 23	6.86	6.8	Ao	10	..	20766b
42	223	10.1	-75 5	9.3	10.5	K5	1	..	17047b	92	1529	10.7	-24 18	9.5	10.0	Go	3	..	42897b
43	643	10.2	+42 6	8.6	9.1	F8	2	..	38945i	93	1210	10.7	-26 28	6.11	6.6	Ao	10	..	20248b
44	642	10.2	+41 51	8.9	8.9	A	1	..	38945i	94	540	10.7	-53 2	8.6	9.2	A5	6	..	20263b
45	530	10.2	+20 20	8.05	8.05	Ao	3	E	38036i	95	630	10.8	+59 16	8.5	8.5	B8	3	R	37427i
46	569	10.2	+ 1 19	8.99	9.41	F5	5	..	24103b	96	722	10.8	+46 34	7.44	7.44	Ao	4	..	37452i
47	617	10.2	-11 34	10.2	11.0	G5	1	..	39703b	97	673	10.8	+43 49	8.5	8.5	Ao	3	..	38945i
48	614	10.2	-13 5	9.8	10.4	Go	2	..	39703b	98	1141	10.8	-27 52	9.5	9.6	F5	2	..	20248b
49	1168	10.2	-33 59	9.6	10.8	G5	2	..	42805b	99	1140	10.8	-33 49	8.6	8.6	Fo	2	..	42907b
50	1131	10.2	-35 51	10.9	10.5	G5	1	..	40947b	100	1174	10.8	-34 14	8.9	8.9	F8	3	..	45169b

THE HENRY DRAPER CATALOGUE.

20300

3^h 10^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1218	10.8 m.	-35 55 ° '	6.85	7.2	Go	8	..	40947b	51	965	11.3	-45 56 ° '	10.0	10.0	A2	3	..	23791b
2	961	10.8	-50 16	8.5	9.6	Ko	2	..	20263b	52	517	11.3	-57 17	8.7	9.5	F8	4	..	40953b
3	214	10.8	-70 10	8.5	9.5	Ko	3	..	20539b	53	713	11.4	+57 31	9.7	9.7	Ao	1	..	38959i
4	544	10.9	+63 0	8.9	9.0	A2	2	..	37600i	54	763	11.4	+56 8	9.2	9.3	A2	1	..	38959i
5	530	10.9	+13 29	8.7	9.8	K2	1	..	38919i	55	558	11.4	-4 39	6.84	6.90	A2	8	..	24103b
6	553	10.9	+0 24	8.7	9.1	F5	4	..	24103b	56	638	11.4	-6 6	6.54	7.72	K5	4	..	38073i
7	619	10.9	-11 32	9.8	10.8	Ko	1	..	39703b	57	622	11.4	-11 18	9.8	9.9	A2	4	..	15134b
8	630	10.9	-16 55	8.6	8.7	A3	5	..	20766b	58	627	11.4	-12 22	7.49	8.56	K2	7	..	15134b
9	R	10.9	-22 55	9.7	9.5	F8	2	..	42897b	59	589	11.4	-21 12	9.3	10.9	Ko	2	5,I	42897b
10	1006	10.9	-43 2	7.8	9.1	K2	2	..	12267b	60	1077	11.4	-28 22	9.1	9.4	F5	3	..	20248b
11	541	10.9	-53 42	9.3	10.4	F8	2	..	20263b	61	1179	11.4	-34 0	9.6	10.7	G5	2	..	42805b
12	226	10.9	-65 29	9.5	9.8	Fo	2	..	38370b	62	1078	11.4	-45 22	9.4	10.3	G	2	R	23791b
13	91	10.9	-79 22	5.70	5.98	Fo	..	..	56,120	63	256	11.5	+68 6	7.58	8.58	Ko	5	..	37600i
14	799	11.0	+47 18	9.5	9.5	A	1	..	38898i	64	664	11.5	+55 2	8.76	8.76	Ao	2	..	38959i
15	674	11.0	+43 39	5.38	5.26	B5	..	3,8	56,75	65	899	11.5	+49 51	5.30	5.13	B3	..	..	2257c
16	736	11.0	+42 18	7.7	8.0	Fo	5	..	37452i	66	748	11.5	+39 22	9.1	9.6	F8	2	..	38082i
17	660	11.0	+36 0	7.84	7.84	Ao	5	..	37405i	67	520	11.5	+30 46	6.53	7.09	Go	..	2,6	56,75
18	488	11.0	+28 7	8.8	9.3	F8	3	..	38884i	68	525	11.5	+17 12	7.7	8.9	K5	2	..	38036i
19	636	11.0	-6 17	6.02	6.00	B9	8	I,10	38073i	69	519	11.5	+4 40	8.7	9.5	G5	2	..	12389b
20	624	11.0	-9 11	4.90	4.98	A3	..	3,R	56,75	70	510	11.5	+2 29	9.3	10.3	K	1	..	12389b
21	569	11.0	-18 33	7.30	7.58	Fo	8	..	20766b	71	556	11.5	+0 37	8.9	9.7	G5	2	..	24103b
22	1075	11.0	-28 43	7.83	9.0	Ko	6	..	20248b	72	624	11.5	-11 13	9.2	10.2	Ko	2	..	15134b
23	228	11.0	-76 1	9.1	9.7	Go	1	..	46167b	73	625	11.5	-11 35	9.5	10.3	G5	3	..	15134b
24	803	11.1	+56 16	9.4	9.4	Ao	1	..	38959i	74	572	11.5	-18 37	9.5	9.8	Fo	2	..	20766b
25	879	11.1	+48 53	8.7	8.8	A2	1	..	38898i	75	643	11.5	-19 44	8.03	8.5	Ko	5	..	20766b
26	511	11.1	+28 24	8.3	8.3	Ao	7	..	38884i	76	1332	11.5	-25 31	8.2	9.6	Ko	2	..	20248b
27	521	11.1	+25 13	8.26	8.68	F5	4	..	37415i	77	1144	11.5	-33 32	8.4	10.1	Ko	4	0,2	42805b
28	465	11.1	+22 45	7.46	8.46	Ko	2	..	38884i	78	1140	11.5	-35 12	8.0	9.0	K5	3	..	40947b
29	459	11.1	+15 16	8.84	9.62	G5	2	..	38919i	79	1218	11.5	-37 24	8.6	8.3	F5	4	..	40947b
30	517	11.1	+0 5	8.98	9.32	F2	5	..	24103b	80	1038	11.5	-44 29	7.4	8.7	G5	7	0,3	23791b
31	587	11.1	-2 26	9.3	9.9	Go	2	..	24103b	81	1080	11.5	-44 56	9.1	9.6	F8	3	..	23791b
32	636	11.1	-19 43	9.48	10.9	Ko	2	0,I	42897b	82	243	11.5	-74 26	9.1	9.5	F5	2	..	20539b
33	573	11.1	-22 34	10.0	10.6	Ko	2	..	42897b	83	489	11.6	+28 7	9.8	10.1	F2	1	..	38884i
34	506	11.1	-56 26	8.4	8.6	Ao	5	E	20263b	84	534	11.6	+26 30	8.8	9.8	Ko	1	..	38884i
35	242	11.1	-74 41	7.02	7.3	F5	10	..	20539b	85	560	11.6	-3 54	7.48	7.90	F5	8	..	24103b
36	340	11.2	+65 17	4.76	4.59	B3P	..	R	4469c	86	1215	11.6	-26 45	9.4	10.3	Ko	1	..	42897b
37	614	11.2	-8 18	7.71	8.78	K2	5	..	38073i	87	1216	11.6	-26 52	9.9	10.3	Go	1	..	20248b
38	632	11.2	-14 31	9.0	9.6	Go	3	..	15134b	88	961	11.6	-39 22	7.39	8.4	F2	6	..	40947b
39	568	11.2	-15 10	8.2	8.8	Go	8	..	15134b	89	936	11.6	-41 36	8.4	8.9	Ko	4	..	40947b
40	631	11.2	-17 12	7.82	7.65	B3	8	..	20766b	90	257	11.7	+67 24	8.0	8.4	F5	6	..	37600i
41	639	11.2	-19 43	9.43	11.2	Ko	1	..	42897b	91	900	11.7	+49 24	7.90	7.90	Ao	4	E	38072i
42	227	11.2	-65 43	9.4	9.5	A2	3	..	38370b	92	726	11.7	+46 32	7.8	8.4	Go	3	..	38945i
43	215	11.2	-70 22	10.1	11.2	K2	1	..	38366b	93	656	11.7	+44 21	7.9	7.9	Ao	5	..	37452i
44	736	11.3	+50 11	8.07	8.07	Ao	4	2,3	38087i	94	573	11.7	+1 59	9.3	10.3	Ko	2	0,2	12389b
45	655	11.3	+44 52	8.9	8.9	Ao	3	..	38945i	95	627	11.7	-9 31	6.16	6.44	Fo	..	5,9	56,75
46	690	11.3	+38 56	5.97	5.97	Ao	9	..	37405i	96	603	11.7	-16 30	9.8	10.6	G5	2	..	40971b
47	689	11.3	+38 16	7.30	7.86	Go	4	..	37405i	97	1144	11.7	-27 29	8.2	9.8	K2	2	..	20248b
48	519	11.3	-0 48	9.3	9.7	F5	1	..	24103b	98	839	11.7	-40 8	6.98	8.2	Ko	7	..	40947b
49	571	11.3	-18 44	8.2	9.2	Ko	4	..	20766b	99	262	11.7	-59 29	8.1	9.4	Ko	4	..	40953b
50	957	11.3	-39 25	8.2	8.9	Fo	5	..	40947b	100	727	11.8	+46.40	8.4	8.7	Fo	3	..	37452i

20400

3^h 11^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	513	11.8	+29 6	9.2	10.0	G5	1	..	38884i	51	33	12.3	-86 49	9.1	9.9	G5	2	..	15145b
2	508	11.8	+ 6 27	6.98	7.06	A3	6	0,6-	37476i	52	195	12.4	+71 42	9.0	9.0	Ao	3	..	38943i
3	524	11.8	- 2 57	8.9	9.4	F8	3	..	24103b	53	260	12.4	+67 14	9.0	9.0	Ao	3	..	37600i
4	525	11.8	- 3 44	8.2	8.2	B8	8	..	24103b	54	667	12.4	+60 55	8.7	9.3	Go	3	..	37427i
5	1146	11.8	-33 10	10.4	10.1	Go	3	..	42805b	55	678	12.4	+52 18	8.8	8.8	Ao	2	..	38959i
6	964	11.8	-39 39	10.2	9.8	F5	1	..	40947b	56	514	12.4	+28 21	8.9	9.0	A2	2	..	38884i
7	968	11.8	-46 2	6.84	7.9	Go	9	..	23791b	57	436	12.4	+23 44	7.37	8.37	Ko	3	..	37415i
8	749	11.8	-50 55	7.5	8.3	F5	6	..	20263b	58	535	12.4	+13 29	7.42	7.42	Ao	5	..	37372i
9	558	11.9	+ 1 3	8.84	9.34	F8	4	..	24103b	59	627	12.4	-11 32	9.5	10.5	Ko	4	..	15134b
10	629	11.9	- 9 18	9.5	9.6	Fo	2	..	39703b	60	645	12.4	-19 30	10.2	10.6	Go	2	..	40971b
11	1204	11.9	-29 0	8.5	8.6	Fo	7	..	20248b	61	577	12.4	-22 27	8.6	8.9	Ko	5	..	42807b
12	1223	11.9	-37 36	9.6	10.7	G	1	..	40947b	62	1083	12.4	-28 51	9.2	9.4	Go	3	..	20248b
13	965	11.9	-39 25	7.61	9.2	K5	4	..	40947b	63	1227	12.4	-32 1	10.0	9.8	Go	1	..	45169b
14	884	11.9	-48 53	9.8	9.8	G5	4	..	23791b	64	970	12.4	-45 54	9.8	10.8	K5	1	..	23791b
15	504	11.9	-55 36	9.0	9.5	F5	4	..	20263b	65	225	12.4	-75 2	7.68	8.8	Ko	7	..	20539b
16	198	11.9	-68 41	9.2	9.7	F8	4	..	38366b	66	74	12.4	-80 58	9.4	10.0	Go	2	..	20538b
17	714	12.0	+58 0	9.4	9.5	A2	1	..	38959i	67	738	12.5	+45 37	9.2	9.2	Ao	3	..	37452i
18	902	12.0	+49 43	5.08	4.91	B3	7	..	37452i	68	619	12.5	+33 51	4.92	5.92	Ko	..	0,8	56,75
19	522	12.0	+30 27	9.4	9.5	A2	1	..	38884i	69	451	12.5	+ 3 19	8.1	9.1	Ko	3	..	38062i
20	469	12.0	+22 28	7.52	7.60	A3	3	..	37415i	70	629	12.5	-11 33	10.7	11.5	G5	1	..	39703b
21	574	12.0	+ 1 10	7.69	7.75	A2	9	..	24103b	71	1153	12.5	-33 11	10.4	9.8	Go	4	..	42805b
22	526	12.0	- 3 38	9.8	10.8	Ko	1	..	24103b	72	505	12.5	-55 37	9.7	10.1	F5	1	..	40953b
23	1303	12.0	-31 11	6.62	6.5	B9	9	..	42907b	73	180	12.5	-69 23	9.7	10.3	Go	3	..	38366b
24	229	12.0	-76 5	9.3	10.5	K5	1	..	46167b	74	60	12.5	-83 26	9.1	9.9	G5	4	..	20538b
25	239	12.1	+70 45	7.9	8.9	Ko	3	..	38943i	75	885	12.6	+48 32	8.6	8.9	F2	2	..	38932i
26	661	12.1	+44 56	8.7	9.1	F5	3	..	38945i	76	752	12.6	+39 48	9.2	9.3	A5	1	..	38082i
27	751	12.1	+38 6	7.42	7.84	F5	3	..	37405i	77	527	12.6	+17 47	7.52	8.08	Go	5	..	38036i
28	753	12.1	+37 34	7.39	8.39	Ko	3	..	37405i	78	630	12.6	-11 25	9.3	9.9	Go	4	..	15134b
29	464	12.1	+24 31	7.61	7.89	Fo	4	..	37415i	79	606	12.6	-16 26	8.6	9.0	F5	4	3,2	39703b
30	493	12.1	+ 7 18	7.35	7.85	F8	5	2,5	37499i	80	605	12.6	-16 41	9.2	9.7	F8	4	3,2	39703b
31	561	12.1	- 4 30	7.26	7.40	A5	7	..	24103b	81	647	12.6	-19 34	10.0	10.9	Ko	1	..	40971b
32	609	12.1	-20 36	9.3	9.2	A5	2	..	20766b	82	1342	12.6	-24 59	9.08	10.3	Ko	2	..	42897b
33	1013	12.1	-43 39	7.7	9.3	Ma	4	5,2	23791b	83	1188	12.6	-34 14	9.5	11.3	G5	2	..	42805b
34	204	12.1	-73 48	9.3	9.4	A2	3	..	20539b	84	1232	12.6	-36 3	6.98	7.3	A2	8	..	40947b
35	642	12.2	+53 46	8.15	9.15	Ko	3	..	38932i	85	263	12.6	-59 53	6.96	8.2	Ko	8	..	40953b
36	643	12.2	+53 21	8.0	8.5	F8	3	..	38932i	86	245	12.6	-74 23	7.7	7.8	A5	7	..	20539b
37	524	12.2	+30 39	8.3	8.3	B9	3	..	37405i	87	886	12.7	+48 17	7.45	7.45	Ao	4	..	38932i
38	542	12.2	+29 58	9.4	10.0	Go	1	..	38884i	88	802	12.7	+47 31	8.2	8.2	Ao	3	..	38945i
39	494	12.2	+ 7 19	7.70	8.26	Go	6	..	15183b	89	738	12.7	+42 15	8.7	9.7	Ko	2	..	38945i
40	604	12.2	-16 8	10.2	11.0	G5	2	..	40971b	90	637	12.7	-14 1	10.2	10.6	F5	3	..	39703b
41	1222	12.2	-26 52	8.9	9.7	K2	3	..	20248b	91	638	12.7	-14 4	10.0	11.0	Ko	2	..	15134b
42	245	12.2	-60 51	9.5	10.0	F8	3	..	38370b	92	594	12.7	-21 3	9.3	10.6	Ko	2	5,2	42897b
43	244	12.2	-74 50	10.0	10.1	A2	2	..	20539b	93	1230	12.7	-32 22	10.0	11.3	G5	1	..	42805b
44	663	12.3	+35 11	8.67	8.67	Ao	3	..	37405i	94	1229	12.7	-32 27	10.2	9.9	Go	3	..	42805b
45	523	12.3	- 0 32	8.5	8.8	Fo	7	..	24103b	95	506	12.7	-54 59	8.70	9.8	Ko	3	..	20263b
46	621	12.3	-13 44	8.6	8.7	A5	5	..	15134b	96	249	12.7	-61 0	8.2	8.8	F2	7	..	38370b
47	644	12.3	-19 8	10.2	10.3	Go	2	..	40971b	97	730	12.8	+46 12	8.9	9.0	A2	2	..	38898i
48	576	12.3	-22 35	9.5	9.5	A5	3	..	42897b	98	681	12.8	+43 38	8.0	8.8	G5	2	..	37452i
49	180	12.3	-66 12	8.5	9.0	F8	7	..	38370b	99	693	12.8	+38 41	7.28	7.62	F2	6	..	37405i
50	224	12.3	-75 36	8.7	9.1	F5	3	..	14359b	100	460	12.8	+12 28	7.64	7.59	B8	4	..	37372i

THE HENRY DRAPER CATALOGUE.

20500

3^h 12^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	471	12.8	+ 6 7	8.7	9.5	G5	3	..	12389b	51	632	13.2	-10 56	9.0	9.4	F5	7	..	15134b
2	575	12.8	-18 46	8.8	9.6	G5	2	..	20766b	52	633	13.2	-11 41	10.0	10.6	Go	3	..	39703b
3	1306	12.8	-23 23	8.7	9.1	F8	4	..	42897b	53	634	13.2	-11 44	10.0	10.8	G5	2	..	39703b
4	1305	12.8	-31 43	6.89	7.5	Ao	6	..	42907b	54	1312	13.2	-23 19	10.6	10.6	Fo	2	..	42897b
5	264	12.8	-59 33	10.2	10.3	A2	2	..	40953b	55	1003	13.2	-47 39	8.6	9.0	G5	5	..	23791b
6	230	12.8	-76 11	7.9	8.2	Fo	6	..	14359b	56	516	13.2	-56 44	9.2	10.4	F5	1	..	40953b
7	180	12.9	+73 48	6.94	7.36	F5	6	0,7	37555i	57	235	13.2	-72 36	8.8	8.8	B9	6	..	20539b
8	634	12.9	+59 40	8.5	8.5	B8	3	..	37427i	58	733	13.3	+46 25	7.80	8.80	Ko	2	0,2	37452i
9	766	12.9	+55 10	7.31	8.31	Ko	5	..	38959i	59	469	13.3	- 1 17	5.62	6.40	G5	10	..	24103b
10	738	12.9	+50 36	7.02	7.00	B9	7	..	3073b	60	633	13.3	- 9 49	9.11	9.89	G5	2	..	15134b
11	602	12.9	+32 19	7.9	7.9	Ao	4	..	37405i	61	610	13.3	-15 52	9.2	9.6	F5	2	..	20766b
12	550	12.9	+14 49	7.69	8.47	G5	4	..	38919i	62	982	13.3	-46 30	9.2	9.1	Fo	5	..	23791b
13	522	12.9	+ 4 36	8.3	8.4	A3	3	..	37499i	63	623	13.4	+35 7	8.52	9.08	Go	2	..	37405i
14	453	12.9	+ 3 19	8.9	9.0	A2	2	..	38062i	64	1194	13.4	-34 54	9.2	10.9	G5	2	..	42805b
15	643	12.9	- 6 17	9.2	9.5	Fo	3	..	38073i	65	983	13.4	-46 7	9.2	9.6	Go	4	..	23791b
16	631	12.9	- 9 27	9.3	9.6	Fo	3	..	39703b	66	242	13.5	+71 3	7.73	7.68	B8	4	..	38943i
17	648	12.9	-10 20	9.5	10.0	F8	3	..	39703b	67	387	13.5	+64 56	8.8	8.8	Ao	2	..	37600i
18	596	12.9	-21 25	9.2	10.0	Go	3	..	45177b	68	740	13.5	+45 31	7.82	9.00	K5	2	..	38945i
19	595	12.9	-21 30	9.8	10.6	Go	2	..	45177b	69	668	13.5	+45 0	9.02	9.36	F2	1	..	38945i
20	1308	12.9	-23 53	6.75	7.8	Ko	8	..	20248b	70	669	13.5	+44 53	9.2	9.3	A2	2	..	38945i
21	1156	12.9	-33 17	8.9	9.2	G5	2	..	42907b	71	598	13.5	- 1 59	9.2	9.3	A5	3	..	24103b
22	226	12.9	-75 48	9.0	10.0	Ko	1	..	46167b	72	650	13.5	-10 6	8.2	8.2	B8	10	..	15134b
23	241	13.0	+70 55	7.53	7.81	Fo	4	..	37555i	73	641	13.5	-14 12	8.4	8.5	A3	8	..	15134b
24	715	13.0	+57 31	8.0	9.0	Ko	4	2,2-	38959i	74	581	13.5	-17 52	9.8	10.3	F8	3	..	40971b
25	640	13.0	+42 8	9.4	10.2	G5	1	..	38945i	75	R	13.5	-22 50	9.5	10.0	G5	3	..	42897b
26	676	13.0	+36 31	8.1	9.1	Ko	3	..	37405i	76	1310	13.5	-31 36	9.4	10.1	Go	3	..	42805b
27	529	13.0	+18 6	8.5	9.3	G5	2	..	38036i	77	741	13.6	+45 48	7.7	8.8	K2	1	..	38808i
28	633	13.0	-12 14	9.5	10.0	F8	3	..	39703b	78	655	13.6	+41 52	8.5	8.8	F2	2	..	38945i
29	632	13.0	-12 35	8.8	9.6	G5	3	..	15134b	79	492	13.6	+27 11	7.8	7.8	Ao	3	..	37415i
30	639	13.0	-14 29	9.5	10.3	G5	2	..	39703b	80	456	13.6	+ 3 51	8.9	9.7	G5	2	..	12389b
31	1345	13.0	-25 10	9.9	10.0	G	1	..	42897b	81	470	13.6	- 1 37	10.7	11.0	Fo	1	..	24103b
32	1234	13.0	-36 5	9.2	9.2	Go	3	..	40947b	82	582	13.6	-18 0	10.0	10.5	F8	2	..	40971b
33	215	13.0	-67 1	8.5	9.3	G5	4	5,3	38366b	83	648	13.6	-19 26	8.8	8.5	F8	4	..	20766b
34	234	13.0	-72 27	9.7	10.8	K2	2	..	20539b	84	1228	13.6	-26 43	7.32	8.0	F8	8	..	20248b
35	385	13.1	+64 45	8.6	9.6	Ko	2	..	37600i	85	1159	13.6	-33 36	10.0	10.7	Go	2	..	42805b
36	559	13.1	+61 38	6.65	6.60	B8	8	..	37427i	86	235	13.6	-64 48	6.77	6.6	F5	5	0,10	8861b
37	716	13.1	+51 15	7.6	7.6	B9	6	..	3073b	87	75	13.6	-81 23	8.9	9.3	F5	3	..	20538b
38	731	13.1	+47 9	8.4	8.4	Ao	2	..	38945i	88	549	13.7	+62 23	7.58	8.08	F8	3	0,2	37427i
39	621	13.1	+34 48	8.7	9.1	F5	2	..	37405i	89	656	13.7	+41 31	8.1	8.2	A2	4	..	37452i
40	577	13.1	-18 1	8.6	9.2	Go	3	..	20766b	90	517	13.7	+ 7 4	8.9	9.4	F8	2	..	15183b
41	1346	13.1	-25 12	10.2	10.0	Ao	1	..	42897b	91	577	13.7	+ 1 58	8.9	9.5	Go	3	5,2	12389b
42	943	13.1	-41 38	7.8	8.4	F5	7	..	40947b	92	471	13.7	- 1 39	10.0	10.6	Go	1	..	24103b
43	891	13.1	-48 10	9.8	10.2	F8	2	..	23791b	93	643	13.7	-14 14	9.5	10.5	Ko	2	..	15134b
44	274	13.1	-58 11	8.4	9.5	Ko	3	..	40953b	94	580	13.7	-22 50	10.2	10.9	G5	1	..	42897b
45	250	13.1	-61 44	9.1	10.0	Ko	3	..	38370b	95	1312	13.7	-31 20	9.7	11.1	G5	1	..	42805b
46	386	13.2	+64 39	9.2	10.2	Ko	1	..	37600i	96	855	13.7	-40 49	8.9	9.2	F8	3	..	40947b
47	588	13.2	+58 48	8.5	8.5	B8	3	..	37427i	97	894	13.7	-48 23	10.2	10.2	A3	3	..	23791b
48	732	13.2	+46 56	9.0	8.8	G5	3	..	38945i	98	206	13.7	-72 54	9.6	10.6	Ko	1	..	17047b
49	565	13.2	- 4 35	8.3	9.9	Go	2	..	24103b	99	61	13.7	-83 29	9.5	9.9	F5	3	..	20538b
50	649	13.2	-10 48	7.14	7.92	G5	10	..	15134b	100	505	13.8	+19 21	8.3	8.9	Go	2	..	38036i

20600

3^h 13^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	473	13.8	— 1 23	10.0	10.8	G5	2	..	24103b	51	1090	14.3	—38 44	8.04	9.2	G5	4	..	40947b
2	635	13.8	—11 44	10.7	11.3	Go	1	..	39703b	52	748	14.4	+43 0	9.5	9.5	B9	2	..	38945i
3	583	13.8	—17 59	10.2	10.8	Go	2	..	40971b	53	699	14.4	+38 32	7.9	7.9	Ao	3	..	38082i
4	650	13.8	—18 59	9.2	9.5	Go	2	..	20766b	54	626	14.4	+34 54	8.2	8.8	Go	3	..	37405i
5	581	13.8	—22 18	9.8	9.5	F8	3	..	42897b	55	442	14.4	+23 20	7.35	7.49	A5	4	..	37415i
6	1216	13.8	—29 9	5.95	6.0	A5	..	5,10	56,120	56	467	14.4	+13 1	7.23	7.73	F8	4	E	37372i
7	1022	13.8	—43 46	8.4	9.3	K5	3	..	23791b	57	1353	14.4	—25 47	8.5	9.1	G5	5	..	20248b
8	265	13.8	—59 22	9.8	10.4	Go	2	..	40953b	58	215	14.4	—63 38	8.6	9.0	F5	6	..	38370b
9	533	13.9	— 3 32	9.2	9.8	Go	2	..	24103b	59	217	14.4	—70 9	7.36	8.1	Ko	7	..	20539b
10	R	13.9	—22 52	5.05	6.05	Ko	..	5,R	28,196	60	669	14.5	+61 9	8.5	9.3	G5	2	..	37427i
11	971	13.9	—39 19	8.3	9.8	Ma	2	..	40947b	61	683	14.5	+53 7	8.6	9.6	Ko	2	..	38932i
12	547	13.9	—53 17	8.7	9.9	Go	3	..	20263b	62	684	14.5	+52 21	7.82	7.82	Ao	5	0,3	3073b
13	388	14.0	+64 50	8.8	8.8	Ao	3	..	37600i	63	536	14.5	+25 18	6.41	7.41	Ko	7	..	37415i
14	551	14.0	+62 22	7.8	7.8	Ao	4	..	37427i	64	471	14.5	+24 11	8.0	9.0	Ko	3	..	37415i
15	720	14.0	+51 13	8.4	8.4	Ao	3	..	38932i	65	495	14.5	+ 8 21	7.6	7.6	B9	6	0,5	37499i
16	686	14.0	+43 37	9.4	10.0	Go	1	..	38945i	66	638	14.5	—11 24	9.8	10.9	K2	2	..	39703i
17	581	14.0	+32 8	8.5	8.5	Ao	3	..	37405i	67	615	14.5	—16 46	9.5	10.1	Go	3	..	40971b
18	540	14.0	+26 43	5.94	6.72	G5	8	..	37415i	68	1220	14.5	—29 52	8.82	8.9	F5	4	..	20248b
19	534	14.0	— 3 12	7.10	7.66	Go	8	..	24103b	69	770	14.6	+55 13	8.16	8.11	B8	3	..	38959i
20	618	14.0	— 5 6	9.0	10.0	Ko	4	..	24103b	70	685	14.6	+52 16	7.90	8.68	G5	4	0,2 R	38959i
21	635	14.0	— 8 58	8.4	9.5	K2	3	..	38073i	71	517	14.6	+28 27	8.9	9.5	Go	2	E	38884i
22	646	14.0	—14 37	7.93	8.93	Ko	5	..	15134b	72	565	14.6	+ 0 50	7.40	8.40	Ko	6	..	24103b
23	857	14.0	—40 42	9.0	9.2	F5	3	..	40947b	73	628	14.6	—13 16	9.8	10.4	Go	2	..	39703b
24	757	14.0	—51 1	9.2	10.2	K2	2	..	20263b	74	119	14.7	+78 8	7.80	8.22	F5	5	0,3	37555i
25	214	14.0	—63 21	8.9	9.9	Ko	3	..	38370b	75	893	14.7	+48 43	6.17	6.59	F5	5	..	37452i
26	668	14.1	+61 6	8.6	9.6	Ko	2	..	37427i	76	677	14.7	+45 1	7.47	7.42	B8	4	..	37452i
27	888	14.1	+48 29	8.0	8.0	Ao	4	..	38932i	77	750	14.7	+42 58	4.98	5.04	A2	..	2,9 R	56,75
28	507	14.1	+19 53	8.3	8.4	A2	2	..	38036i	78	608	14.7	+32 52	7.9	8.9	Ko	3	5,3	37405i
29	459	14.1	+18 42	7.32	7.32	Ao	6	..	38036i	79	494	14.7	+28 5	9.4	9.8	F5	1	..	38884i
30	518	14.1	+ 3 0	4.96	5.74	G5	..	R	56,75	80	542	14.7	+26 34	8.0	8.8	G5	2	..	37415i
31	651	14.1	—18 55	5.83	6.7	Fo	..	..	56,120	81	510	14.7	+19 30	7.12	8.12	Ko	2	..	38036i
32	1569	14.1	—24 28	8.3	8.5	A5	6	..	20248b	82	509	14.7	+19 21	7.67	7.73	A2	4	..	38036i
33	209	14.2	+69 54	8.7	9.7	Ko	1	..	38943i	83	603	14.7	— 2 26	9.0	9.6	Go	4	..	24103b
34	625	14.2	+34 53	9.2	9.7	F8	2	..	37405i	84	1166	14.7	—33 10	11.1	11.0	Go	2	..	42805b
35	493	14.2	+27 58	9.4	9.9	F8	1	..	38884i	85	863	14.7	—40 21	8.2	9.5	Ko	2	..	40947b
36	578	14.2	—15 15	8.6	8.9	Fo	5	..	15134b	86	912	14.7	—49 39	8.51	8.6	Ao	4	..	20263b
37	614	14.2	—15 55	7.80	8.87	K2	6	..	20766b	87	670	14.8	+60 18	9.5	9.5	Ao	3	..	37427i
38	1088	14.2	—38 21	9.2	9.8	F5	2	..	40947b	88	639	14.8	+59 40	8.6	9.6	Ko	2	..	37427i
39	987	14.2	—46 34	9.0	10.2	Ma	3	..	23791b	89	592	14.8	+58 59	8.9	9.7	G5	1	..	37427i
40	900	14.2	—48 7	5.84	7.3	Go	..	0,7	56,120	90	746	14.8	+50 44	8.9	8.9	Ao	2	..	38087i
41	981	14.2	—50 20	8.6	9.6	Go	3	..	46083b	91	746	14.8	+45 22	9.2	9.2	Ao	2	..	38945i
42	744	14.3	+51 8	8.6	8.7	A2	2	..	38087i	92	701	14.8	+38 22	8.1	8.5	F5	2	..	37405i
43	673	14.3	+44 51	9.4	9.4	Ao	2	..	38945i	93	640	14.8	—11 46	8.0	8.8	G5	7	..	15134b
44	516	14.3	+28 41	4.72	5.00	K5	..	5,9	56,75	94	641	14.8	—17 47	8.2	9.0	G5	2	..	20766b
45	423	14.3	+17 8	7.8	8.1	Fo	4	..	38036i	95	1161	14.8	—35 31	8.2	9.2	K5	3	..	40947b
46	475	14.3	— 1 26	var.	var.	Mb	..	R	M	96	1093	14.8	—38 40	8.25	9.5	Ko	4	..	40947b
47	653	14.3	— 9 51	9.46	9.52	A2	3	..	15134b	97	475	14.9	+22 49	8.1	8.4	Fo	2	..	37415i
48	634	14.3	—12 46	9.5	10.6	K2	3	..	39703b	98	461	14.9	+18 50	7.9	7.9	Ao	3	..	38036i
49	640	14.3	—17 9	9.8	10.6	G5	1	..	40971b	99	567	14.9	+ 1 7	6.82	7.82	Ko	8	..	24103b
50	1244	14.3	—36 31	9.5	10.7	G	1	..	40947b	100	1073	14.9	—42 38	8.1	9.6	Ko	2	..	12637b

THE HENRY DRAPER CATALOGUE.

20700

3^h 15^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	809	15.0	+47 34	8.4	8.4	Ao	2	..	37452i	51	910	15.5	+49 16	9.2	9.2	Ao	2	..	38932i
2	479	15.0	+ 5 51	8.5	8.5	Ao	2	0,2	12389b	52	754	15.5	+42 28	8.0	8.1	A2	4	..	37452i
3	604	15.0	- 1 57	7.6	8.0	F5	8	..	24103b	53	612	15.5	+32 44	8.1	8.1	Ao	3	..	37488i
4	583	15.0	-22 44	9.8	10.0	G5	2	..	24326b	54	613	15.5	+32 35	8.1	8.1	Ao	3	..	37405i
5	1330	15.0	-23 20	9.2	9.4	A2	3	..	42897b	55	543	15.5	+26 56	9.1	9.6	F8	1	..	37415i
6	1356	15.0	-25 10	8.9	10.0	K2	2	..	20248b	56	543	15.5	+20 47	5.17	5.00	B3	..	2,8R	56,75
7	1250	15.0	-36 28	8.2	8.4	Fo	6	..	40947b	57	604	15.5	-20 50	9.2	10.6	Ko	2	5,1	45177b
8	512	15.0	-55 50	9.0	9.5	Ko	3	..	40953b	58	605	15.5	-21 12	9.8	10.3	G5	2	..	45177b
9	172	15.1	+72 50	7.30	8.30	Ko	4	..	37555i	59	1246	15.5	-36 55	7.36	8.0	F2	6	..	40947b
10	197	15.1	+71 20	7.6	7.6	B8	6	..	37555i	60	1068	15.5	-44 32	9.3	9.6	F5	3	R	23791b
11	265	15.1	+67 5	7.58	8.08	F8	6	..	37600i	61	674	15.6	+61 6	10.2	10.2	A	1	..	37427i
12	567	15.1	+62 2	8.9	9.9	K	..	..	M	62	596	15.6	+58 22	6.78	7.78	Ko	4	..	37427i
13	671	15.1	+60 56	8.0	8.5	F8	4	..	37427i	63	570	15.6	- 4 43	8.70	9.48	G5	2	..	38073i
14	723	15.1	+51 18	8.9	9.0	A2	2	..	38087i	64	632	15.6	-13 44	9.8	10.4	Go	2	..	39703b
15	752	15.1	+42 30	8.8	9.4	Go	2	..	38945i	65	764	15.6	-51 39	7.7	8.3	Fo	6	..	20263b
16	511	15.1	+20 9	6.86	7.93	K2	3	..	37415i	66	217	15.6	-62 58	5.48	6.5	Go	..	0,6R	56,120
17	462	15.1	+11 59	7.34	7.76	F5	4	0,4	37499i	67	389	15.7	+64 53	8.4	9.2	G5	3	..	37600i
18	606	15.1	- 1 54	9.5	10.5	Ko	1	..	24103b	68	585	15.7	+31 18	7.9	8.3	F5	3	..	37405i
19	538	15.1	- 3 23	9.2	9.5	Fo	3	..	24103b	69	500	15.7	+ 8 6	8.3	8.3	B9	4	..	37499i
20	584	15.1	-22 7	3.95	5.30	Mb	..	5,R	28,196	70	526	15.7	+ 2 55	8.7	9.5	G5	3	..	24325b
21	1207	15.1	-34 28	9.0	9.2	F8	2	..	42907b	71	570	15.7	+ 0 48	7.9	8.5	Go	5	..	24103b
22	954	15.1	-41 31	8.9	10.1	K2	2	..	24616b	72	530	15.7	- 0 32	8.0	8.0	Ao	7	..	24103b
23	1025	15.1	-43 0	8.2	8.7	Go	4	..	12637b	73	591	15.7	-18 22	9.2	10.2	Ko	2	..	40971b
24	236	15.1	-64 32	9.3	9.6	Fo	3	..	38370b	74	1230	15.7	-29 21	7.70	8.9	K2	5	..	20248b
25	530	15.2	+30 24	8.5	8.6	A2	2	..	38884i	75	1284	15.7	-30 35	8.13	8.6	F2	6	2,4	20248b
26	549	15.2	+29 55	8.6	9.6	Ko	1	E	38884i	76	1211	15.7	-34 33	10.2	10.4	G5	3	..	42805b
27	496	15.2	+ 8 41	8.3	8.9	Go	3	..	15183b	77	246	15.7	-59 58	8.98	10.1	G5	1	..	40953b
28	654	15.2	-19 12	6.97	7.5	Ao	10	..	20766b	78	776	15.8	+55 46	8.2	8.2	Ao	5	..	38959i
29	1578	15.2	-24 29	5.96	7.5	Ma	..	0,9-	56,120	79	432	15.8	+10 17	8.47	8.97	F8	3	..	37499i
30	1577	15.2	-24 51	9.35	9.4	Fo	4	..	20248b	80	571	15.8	+ 0 44	8.3	9.3	Ko	4	..	24103b
31	914	15.2	-49 21	9.1	10.1	K2	2	..	23791b	81	1229	15.8	-29 8	8.5	8.9	Go	3	..	20248b
32	548	15.2	-53 13	9.6	10.4	G5	2	..	20263b	82	1231	15.8	-29 12	7.34	8.0	Go	8	..	20248b
33	523	15.2	-56 54	9.4	10.4	K	1	..	40953b	83	1327	15.8	-31 30	8.9	10.1	F8	3	2,2	42805b
34	216	15.2	-63 41	8.1	8.9	G5	6	..	38370b	84	520	15.8	-56 11	8.6	8.2	Ao	7	..	40953b
35	91	15.2	-78 18	8.2	8.7	F8	3	..	20538b	85	524	15.8	-56 56	8.7	10.4	K2	2	..	40953b
36	651	15.3	+54 9	8.4	8.9	F8	3	..	38932i	86	251	15.8	-61 24	8.4	10.3	K5	3	..	38370b
37	465	15.3	+19 7	8.1	8.5	F5	3	..	38036i	87	720	15.9	+58 7	8.0	8.3	Fo	3	..	37427i
38	1240	15.3	-25 56	8.0	8.6	Fo	8	..	20248b	88	911	15.9	+49 21	9.2	9.3	A2	1	..	38932i
39	1168	15.3	-35 51	8.9	9.0	F5	3	..	40947b	89	427	15.9	+ 9 18	7.7	7.8	A2	4	..	37499i
40	133	15.3	-77 24	9.3	9.7	F5	2	..	14359b	90	462	15.9	+ 3 30	8.9	9.2	Fo	3	..	24325b
41	57	15.3	-82 12	9.1	9.6	F8	5	..	20538b	91	461	15.9	+ 3 19	5.76	6.54	G5	7	..	37499i
42	673	15.4	+60 23	9.2	9.2	Ao	2	..	37427i	92	540	15.9	- 3 28	8.3	9.1	G5	5	..	24103b
43	594	15.4	+58 22	8.2	8.3	A5	4	..	37427i	93	620	15.9	-20 5	9.5	10.6	Ko	2	0,2-	42897b
44	607	15.4	- 2 7	8.6	8.6	Ao	4	..	24103b	94	1028	15.9	-43 27	4.30	5.08	G5	..	R	28,196
45	635	15.4	-12 27	9.8	11.0	K5	1	..	39703b	95	219	15.9	-63 27	8.1	8.6	F8	7	..	38370b
46	648	15.4	-14 30	8.6	9.7	K2	3	..	40971b	96	390	16.0	+65 6	8.55	9.05	F8	3	..	37600i
47	589	15.4	-17 55	9.2	10.2	Ko	1	..	20766b	97	391	16.0	+64 14	5.55	6.62	K2	6	0,5-	37427i
48	1244	15.4	-31 55	8.6	9.2	F8	2	..	42907b	98	570	16.0	+61 11	8.4	8.3	B5	3	..	37600i
49	1169	15.4	-35 21	6.97	7.1	Fo	9	..	40947b	99	898	16.0	+48 16	8.0	8.6	Go	3	..	38932i
50	672	15.5	+54 52	7.56	7.70	A5	..	5,4	56,75	100	666	16.0	+41 19	8.8	9.1	Fo	2	..	38945i

20800

3^h 16^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	527	16.0	+ 3 6	8.1	9.1	Ko	3	..	24325b	51	652	16.5	-14 20	10.2	10.5	Fo	3	..	39703b
2	532	16.0	- 0 44	8.6	9.6	Ko	5	..	24103b	52	1246	16.5	-26 39	6.75	7.2	Fo	10	..	20248b
3	657	16.0	-10 42	9.5	10.0	F8	2	6,2	15134b	53	1183	16.5	-26 58	6.44	6.8	F8	10	..	20248b
4	1213	16.0	-34 22	7.47	8.2	G5	5	..	42907b	54	871	16.5	-40 40	9.2	9.5	F5	2	..	40947b
5	1020	16.0	-42 56	7.5	8.7	G5	4	..	12637b	55	275	16.5	-58 21	7.5	8.5	Ko	7	..	40953b
6	549	16.0	-53 6	9.9	10.4	F8	2	..	20263b	56	96	16.5	-79 46	8.84	10.5	K5	1	..	20538b
7	265	16.0	-62 53	5.16	5.72	Go	..	0,7 R	56,120	57	121	16.6	+76 48	8.0	8.3	F2	3	..	37555i
8	897	16.1	+49 3	8.7	8.7	Ao	4	..	38932i	58	770	16.6	+39 48	8.7	9.5	G5	2	..	38082i
9	899	16.1	+48 51	5.30	5.13	B3	..	2,7	56,75	59	645	16.6	-11 26	8.9	9.5	Go	3	..	15134b
10	683	16.1	+44 37	8.2	8.2	Ao	3	..	37452i	60	611	16.6	-21 28	9.5	9.5	F8	2	..	24326b
11	667	16.1	+41 35	8.0	8.3	Fo	3	..	37452i	61	1106	16.6	-45 37	9.6	10.0	G5	3	..	23791b
12	532	16.1	+31 3	7.55	8.55	Ko	3	..	37405i	62	199	16.6	-71 41	9.0	9.5	F8	2	..	20539b
13	572	16.1	+ 0 12	8.13	8.41	Fo	7	..	24103b	63	903	16.7	+48 15	7.15	7.13	B9	6	..	37452i
14	533	16.1	- 0 17	8.5	9.6	K2	3	..	24103b	64	646	16.7	-11 35	9.2	9.5	F2	5	..	15134b
15	477	16.1	- 0 54	8.6	9.1	F8	5	..	24103b	65	583	16.7	-15 41	9.5	9.6	A5	1	2,1	39703b
16	617	16.1	-16 37	8.8	9.4	Go	3	..	40971b	66	591	16.7	-21 55	9.5	10.0	F8	2	..	24326b
17	1336	16.1	-23 4	9.7	9.1	F8	3	E	24326b	67	1253	16.7	-32 4	9.5	10.4	A5	3	R	42805b
18	1586	16.1	-24 28	7.44	8.4	F5	7	..	20248b	68	1218	16.7	-34 6	10.2	11.5	Ko	1	..	42805b
19	1100	16.1	-45 28	8.6	9.1	G5	6	..	23791b	69	1251	16.7	-36 31	8.6	10.1	Ko	2	..	42805b
20	914	16.1	-47 54	10.0	10.4	F5	3	..	23791b	70	757	16.8	+45 11	8.37	9.37	Ko	1	..	38945i
21	237	16.1	-64 11	9.1	9.9	G5	2	..	38370b	71	670	16.8	+41 21	8.0	8.0	B8	2	..	38082i
22	231	16.1	-64 56	9.9	10.7	G5	2	..	38370b	72	725	16.8	+40 51	7.78	7.84	A2	4	..	37452i
23	597	16.2	+58 34	9.9	9.9	Ao	2	..	37427i	73	552	16.8	+29 27	7.8	7.9	A2	4	..	37415i
24	674	16.2	+54 14	8.6	9.4	G5	2	..	38959i	74	637	16.8	- 7 51	8.8	8.9	A5	3	..	23809b
25	500	16.2	+27 15	5.64	6.64	Ko	8	..	37415i	75	620	16.8	-16 9	8.6	9.1	F8	4	..	20766b
26	499	16.2	+ 8 36	9.0	9.5	F8	2	..	15183b	76	1248	16.8	-26 32	8.2	9.7	K2	3	..	20248b
27	593	16.2	-17 53	8.2	8.3	A2	7	..	20766b	77	1183	16.8	-35 34	9.8	11.5	Ko	1	..	42805b
28	1075	16.2	-44 36	9.2	10.0	K2	1	..	23791b	78	1254	16.8	-37 9	8.2	7.9	Ao	7	..	40947b
29	1103	16.2	-45 43	9.4	9.6	F5	5	..	23791b	79	523	16.8	-56 53	8.5	9.6	Ko	5	..	40953b
30	916	16.2	-49 12	9.0	9.6	F5	4	..	23791b	80	248	16.8	-73 54	7.80	7.7	A3	8	..	20539b
31	198	16.3	+71 51	7.18	7.46	Fo	7	..	37555i	81	574	16.9	+62 8	8.0	8.1	A2	4	..	37427i
32	242	16.3	+68 48	8.0	8.5	F8	3	..	38943i	82	572	16.9	+61 46	8.5	8.9	F5	2	..	37427i
33	652	16.3	+53 54	8.8	8.9	A2	2	..	38959i	83	619	16.9	+32 31	8.1	8.2	A2	3	..	37488i
34	726	16.3	+51 48	8.8	8.8	B9	3	..	38932i	84	464	16.9	+ 3 52	7.9	8.9	Ko	5	5,3	24325b
35	749	16.3	+45 33	9.2	10.0	G5	1	..	38945i	85	659	16.9	-10 10	9.5	10.3	G5	3	..	24339b
36	759	16.3	+38 3	8.2	9.2	Ko	1	..	38082i	86	647	16.9	-11 12	10.2	10.7	F8	2	..	39703b
37	500	16.3	+ 8 24	8.3	8.9	Go	2	..	37499i	87	1001	16.9	-46 12	8.7	9.0	F8	4	..	23791b
38	1339	16.3	-23 39	8.5	9.2	G5	3	E	24326b	88	217	16.9	-67 17	6.08	6.4	A2	7	0,R	8861b
39	1250	16.3	-32 8	9.6	11.3	Ko	1	..	42805b	89	203	16.9	-68 32	8.0	8.4	F5	6	0,5	38366b
40	998	16.3	-46 34	9.3	9.0	F5	4	..	23791b	90	561	17.0	+62 35	8.4	9.6	K5	1	..	37600i
41	768	16.3	-51 15	8.4	8.5	F5	5	..	20263b	91	621	17.0	+32 43	7.7	8.3	Go	3	..	37488i
42	728	16.4	+51 24	7.8	7.8	Ao	4	..	38959i	92	501	17.0	+27 22	8.7	8.8	A5	2	..	37415i
43	750	16.4	+45 36	9.2	9.3	A2	2	..	38945i	93	551	17.0	+20 23	5.25	6.25	Ko	..	0,6	56,75
44	588	16.4	+31 53	7.7	9.1	Ma	3	..	37405i	94	1600	17.0	-23 59	5.67	7.2	G5	7	..	37034b
45	501	16.4	+ 8 52	8.5	9.0	F8	3	..	15183b	95	1220	17.0	-33 55	8.7	8.9	F5	3	..	42907b
46	610	16.4	-20 58	9.8	10.0	Go	2	..	42897b	96	1109	17.0	-45 32	10.2	9.9	F5	2	..	23791b
47	721	16.5	+58 5	9.2	9.5	F	1	R	37427i	97	38	17.0	-84 54	9.1	10.1	Ko	3	..	20538b
48	808	16.5	+56 20	9.2	9.3	A2	2	..	38959i	98	648	17.1	+60 8	7.66	7.61	B8	3	..	37427i
49	760	16.5	+37 18	7.8	8.8	Ko	2	..	38082i	99	752	17.1	+45 10	8.37	8.35	B9	3	..	38945i
50	428	16.5	+ 9 19	8.9	10.0	K2	1	..	15183b	100	548	17.1	+26 32	7.28	7.34	A2	5	..	37415i

THE HENRY DRAPER CATALOGUE.

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3^h 17^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1242	<i>m.</i> 17.1	<i>o</i> -29 14	10.4	10.4	Go	1	..	45169b	51	650	<i>m.</i> 17.6	<i>o</i> -11 2	9.5	10.5	Ko	3	..	24339b
2	917	17.2	+49 30	1.90	2.32	F5	..	R	28,196	52	593	17.6	-22 27	8.8	10.0	K2	3	..	24326b
3	754	17.2	+45 56	9.2	9.3	A2	3	..	38945i	53	1340	17.6	-31 29	7.7	8.3	Fo	6	..	42907b
4	622	17.2	+32 59	7.60	8.10	F8	4	..	37488i	54	220	17.6	-70 51	9.1	10.3	K5	4	..	20539b
5	535	17.2	+30 38	7.46	8.46	Ko	3	..	37488i	55	433	17.7	+16 12	8.5	9.5	Ko	2	..	38036i
6	628	17.2	- 5 30	7.8	8.8	Ko	3	..	38073i	56	1257	17.7	-37 22	9.6	9.5	A5	3	..	40947b
7	639	17.2	- 8 47	9.5	9.5	Ao	2	..	24339b	57	930	17.7	-49 37	9.6	9.9	F5	3	..	23791b
8	661	17.2	-10 0	9.2	10.2	Ko	3	..	24339b	58	184	17.7	-66 15	7.8	8.2	F5	6	..	38370b
9	640	17.2	-12 41	8.2	8.6	F5	6	..	15134b	59	600	17.8	+59 5	8.2	8.1	B5	4	..	37427i
10	635	17.2	-13 14	9.2	9.7	F8	3	..	15134b	60	679	17.8	+54 19	8.5	8.6	A2	3	..	38959i
11	625	17.2	-20 40	6.58	6.7	Ao	7	..	46088b	61	817	17.8	+47 32	7.60	7.58	B9	4	..	37452i
12	1288	17.2	-30 21	8.9	9.9	Ko	2	..	45992b	62	681	17.8	+35 23	8.1	8.1	A	1	..	37488i
13	1336	17.2	-31 21	8.9	10.4	Go	2	..	42805b	63	611	17.8	- 2 24	8.8	10.0	K5	2	..	24332b
14	1255	17.2	-37 48	7.51	9.2	K5	4	..	40947b	64	641	17.8	-12 3	8.6	9.1	F8	6	..	15134b
15	923	17.2	-48 17	8.8	10.0	K2	3	..	23791b	65	616	17.8	-21 27	6.56	8.2	G5	6	..	24326b
16	388	17.2	-52 24	8.4	9.1	G5	4	..	20263b	66	185	17.8	-66 6	7.4	7.5	A2	7	..	38370b
17	137	17.3	+75 54	9.20	9.98	G5	2	..	37555i	67	345	17.9	+65 51	7.28	8.28	Ko	5	..	37600i
18	656	17.3	+53 44	8.8	8.8	Ao	1	..	38959i	68	413	17.9	+63 54	9.4	9.4	A	1	..	37600i
19	905	17.3	+48 50	8.9	9.3	F5	2	..	38932i	69	921	17.9	+49 26	9.0	9.4	F5	2	..	38087i
20	729	17.3	+40 58	8.3	8.3	B8	4	..	37452i	70	744	17.9	+46 57	8.0	8.0	Ao	3	R	38945i
21	555	17.3	+30 5	8.41	8.41	Ao	2	..	37488i	71	775	17.9	+39 42	7.62	8.80	K5	3	..	38082i
22	474	17.3	+16 0	9.3	10.1	G5	1	..	38036i	72	634	17.9	+33 39	8.0	9.0	Ko	1	..	37488i
23	663	17.3	- 6 6	8.7	9.0	Fo	3	..	38073i	73	653	17.9	-14 8	9.2	10.2	Ko	3	..	40971b
24	584	17.3	-15 49	7.34	8.34	Ko	7	..	20766b	74	625	17.9	-16 21	9.5	10.1	Go	2	..	40971b
25	621	17.3	-16 45	9.2	9.8	Go	2	..	40971b	75	1342	17.9	-31 28	9.7	10.7	Go	2	..	42805b
26	662	17.3	-19 45	9.58	10.0	Go	3	..	45177b	76	932	17.9	-48 58	9.4	10.5	Ko	2	..	23791b
27	98	17.3	-79 12	7.2	7.5	Fo	7	..	20538b	77	248	17.9	-60 52	8.3	9.5	G5	6	..	38370b
28	412	17.4	+63 35	9.0	9.4	F5	2	..	37600i	78	211	18.0	+69 22	9.4	9.5	A2	1	..	38943i
29	598	17.4	+58 54	9.4	9.4	Ao	2	..	37427i	79	922	18.0	+49 24	8.8	8.9	A5	1	..	38087i
30	599	17.4	+58 21	7.14	8.14	Ko	4	..	37427i	80	1257	18.0	-25 57	6.26	6.7	Ao	8	0,10	37034i
31	906	17.4	+48 46	8.0	8.1	A2	6	..	38932i	81	1190	18.0	-33 41	9.6	10.4	Go	1	..	42805b
32	632	17.4	+34 3	8.3	9.3	Ko	1	..	37488i	82	1110	18.0	-38 38	9.5	9.8	Go	1	..	40947b
33	623	17.4	+32 38	7.90	8.24	F2	3	..	37405i	83	885	18.0	-40 16	8.9	9.8	Ko	1	..	40947b
34	432	17.4	+16 13	8.6	9.6	Ko	1	..	38036i	84	566	18.1	+62 50	7.32	8.10	G5	5	..	37427i
35	542	17.4	- 3 18	9.3	10.1	G5	3	..	24332b	85	923	18.1	+49 44	8.6	8.7	A2	3	..	38087i
36	637	17.4	-13 38	8.6	9.6	Ko	4	0,3	15134b	86	907	18.1	+48 54	8.6	8.7	A2	5	2,2	38932i
37	1224	17.4	-34 15	9.6	11.5	Ko	1	..	42805b	87	733	18.1	+40 24	7.77	7.75	B9	5	E	37452i
38	550	17.5	+27 3	8.5	8.6	A2	2	..	37415i	88	534	18.1	+ 2 30	8.3	8.6	Fo	4	..	24325b
39	584	17.5	+ 2 7	8.9	9.7	G5	3	..	24325b	89	481	18.1	- 1 50	9.07	10.07	Ko	3	R	24332b
40	479	17.5	- 0 53	9.3	9.8	F8	2	..	24332b	90	1344	18.1	-31 41	9.2	10.7	Go	2	..	42805b
41	626	17.5	-20 24	8.8	10.0	K2	1	..	24326b	91	1193	18.1	-35 47	9.2	10.1	F8	2	..	42805b
42	1259	17.5	-32 47	8.6	9.2	G5	2	..	42907b	92	1010	18.1	-46 47	9.8	10.2	A2	2	..	23791b
43	967	17.5	-41 32	9.8	10.4	G5	2	..	24616b	93	675	18.2	+41 40	8.5	8.5	Ao	2	..	38945i
44	1113	17.5	-45 33	10.0	9.9	A2	2	..	23791b	94	635	18.2	+33 56	7.9	8.0	A2	3	..	37488i
45	123	17.6	+76 56	9.2	9.6	F5	2	..	37555i	95	636	18.2	+33 11	5.64	5.64	Ao	..	0,9	56,75
46	678	17.6	+61 6	8.5	9.5	Ko	3	..	37427i	96	436	18.2	+16 21	8.5	8.9	F5	3	..	38036i
47	554	17.6	+20 37	7.35	8.13	G5	3	..	37415i	97	653	18.2	- 9 28	9.3	10.1	G5	3	..	24339b
48	579	17.6	+ 0 49	8.3	9.3	Ko	4	0,2-	24332b	98	663	18.2	- 9 56	9.31	10.31	Ko	2	..	24339b
49	649	17.6	- 0 32	8.8	9.6	G5	2	..	38073i	99	643	18.2	-12 41	10.7	10.8	A2	1	..	39703b
50	650	17.6	- 9 41	8.96	9.74	G5	2	..	38073i	100	666	18.2	-19 27	8.8	9.2	Ko	3	..	24326b

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3^d 18^m. 2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	929	18.2	-48 7	10.0	9.9	Go	2	..	23791b	51	473	18.7	+12 17	6.22	7.00	G5	5	..	37499i
2	552	18.2	-53 25	8.8	9.9	G5	3	..	20263b	52	535	18.7	+ 2 42	7.9	7.9	B9	5	..	24325b
3	601	18.3	+58 32	9.2	9.6	F5	2	..	37427i	53	539	18.7	- 0 20	9.7	10.7	Ko	3	..	24332b
4	657	18.3	+53 35	6.39	6.67	Fo	8	..	3073b	54	583	18.7	- 3 51	9.8	10.6	G5	3	E	24332b
5	909	18.3	+48 58	8.1	8.2	A2	4	..	38087i	55	669	18.7	- 6 22	9.8	10.4	Go	2	..	23809b
6	523	18.3	+19 33	7.22	8.40	K5	4	..	38036i	56	654	18.7	-11 36	9.8	10.3	F8	2	..	15134b
7	653	18.3	-17 12	9.3	9.9	Go	2	..	40971b	57	1200	18.7	-27 40	8.0	9.1	K2	6	..	20248b
8	618	18.3	-21 26	9.2	10.3	Ko	2	..	24326b	58	975	18.7	-41 40	8.4	8.9	G5	3	..	12637b
9	1354	18.3	-23 19	9.4	10.0	G5	1	..	24326b	59	812	18.8	+57 4	8.5	9.3	G5	3	..	38959i
10	1262	18.3	-36 59	9.6	10.4	G	1	..	40947b	60	695	18.8	+45 10	7.57	7.52	B8	5	..	37452i
11	930	18.3	-48 8	6.46	7.1	Ko	..	0,5	56,120	61	765	18.8	+37 34	7.9	8.7	G5	2	..	38082i
12	221	18.3	-63 9	9.8	9.8	B8	3	..	38370b	62	526	18.8	+28 18	6.99	6.99	Ao	6	..	37415i
13	173	18.4	+72 14	8.0	8.1	A3	3	1,3	37555i	63	657	18.8	-14 34	7.84	8.62	G5	6	..	20766b
14	654	18.4	+59 56	8.0	8.8	G5	3	..	37427i	64	589	18.8	-15 14	7.48	8.04	Go	8	..	20766b
15	690	18.4	+52 24	8.0	8.0	Ao	4	..	38932i	65	590	18.8	-15 39	9.8	10.8	Ko	2	..	40971b
16	778	18.4	+39 52	7.92	8.92	Ko	4	..	38082i	66	654	18.8	-17 47	6.68	7.68	Ko	8	..	20766b
17	481	18.4	+24 22	5.66	6.66	Ko	7	..	37415i	67	1193	18.8	-33 41	10.4	10.7	Go	1	..	42805b
18	532	18.4	+ 4 31	6.47	7.03	Go	7	..	37499i	68	1032	18.8	-47 7	7.3	7.6	Ko	7	..	23791b
19	643	18.4	- 8 9	6.28	6.84	Go	8	..	38073i	69	219	18.8	-67 31	10.0	10.4	F5	4	..	38366b
20	652	18.4	-11 42	7.64	8.06	F5	9	..	15134b	70	3	18.9	+89 41	8.85	8.99	A5	3	..	37793i
21	1299	18.4	-30 34	9.2	10.7	K2	1	..	45992b	71	913	18.9	+48 45	5.91	5.79	B5	..	3,6	56,75
22	1191	18.4	-33 21	9.2	10.1	Go	2	5,1	42805b	72	615	18.9	- 2 48	8.8	9.4	Go	7	..	24332b
23	544	18.4	-54 45	9.16	10.4	Ko	2	..	46085b	73	670	18.9	- 5 57	9.5	10.3	G5	2	..	23809b
24	134	18.4	-77 45	5.53	5.87	F2	4	0,3	56,120	74	671	18.9	- 6 19	10.4	10.6	F	1	..	23809b
25	123	18.5	+77 40	7.66	8.66	Ko	..	R	37555i	75	591	18.9	- 7 33	9.5	9.7	A5	2	..	23809b
26	151	18.5	+74 54	7.92	7.92	Ao	6	3,3	37555i	76	590	18.9	- 7 36	8.8	10.0	K5	1	..	23809b
27	414	18.5	+63 28	8.9	9.0	A5	2	5,2	37427i	77	628	18.9	-16 37	8.6	9.6	Ko	2	..	20766b
28	691	18.5	+52 58	7.30	7.30	Ao	5	..	3073b	78	1262	18.9	-26 29	8.3	8.8	Ko	5	..	20248b
29	747	18.5	+47 0	8.9	9.4	F8	2	..	38932i	79	1251	18.9	-29 44	8.1	9.5	F8	3	..	20248b
30	538	18.5	+31 3	8.7	8.8	A2	2	..	37488i	80	1115	18.9	-38 50	8.6	9.5	Ko	4	..	40947b
31	545	18.5	+17 12	8.1	8.9	G5	3	..	38036i	81	545	18.9	-54 23	8.6	9.6	G5	3	..	20263b
32	581	18.5	+ 0 34	6.64	7.64	Ko	8	5,5	24103b	82	526	18.9	-56 18	9.3	10.4	G5	1	..	40953b
33	582	18.5	+ 0 23	9.3	10.3	Ko	2	..	24332b	83	207	18.9	-73 12	9.1	10.1	Ko	2	..	20539b
34	1198	18.5	-35 0	8.99	10.7	Ko	2	..	42805b	84	724	19.0	+57 56	8.6	9.1	F8	3	..	38959i
35	974	18.5	-41 53	9.6	9.6	Go	3	..	24616b	85	929	19.0	+49 24	7.20	7.26	A2	4	E	37452i
36	555	18.5	-53 13	8.5	9.2	G5	4	..	20263b	86	595	19.0	+32 1	8.3	8.8	F8	2	..	37488i
37	785	18.6	+55 48	7.8	9.0	K5	2	3,2	38959i	87	656	19.0	-11 13	9.5	10.3	G5	3	..	15134b
38	736	18.6	+40 54	6.38	6.38	Ao	6	..	37452i	88	1265	19.0	-36 56	8.2	9.2	G5	4	..	40947b
39	482	18.6	- 1 31	10.0	10.4	F5	2	..	24332b	89	249	19.0	-60 0	8.18	9.1	G5	5	0,4	40953b
40	665	18.6	-10 36	9.2	10.2	Ko	4	..	24339b	90	208	19.0	-73 26	8.5	9.5	Ko	5	..	20539b
41	653	18.6	-11 45	9.5	9.8	F2	7	..	15134b	91	821	19.1	+48 2	7.55	7.53	B9	5	..	37452i
42	1199	18.6	-27 36	8.1	9.1	G5	6	..	20248b	92	822	19.1	+47 53	8.0	8.1	A3	3	..	38932i
43	889	18.6	-40 39	8.1	8.9	G5	4	..	40947b	93	642	19.1	+34 28	8.6	8.6	Ao	3	..	37488i
44	655	18.7	+60 3	7.66	7.72	A2	5	..	37427i	94	586	19.1	+ 1 0	8.59	8.65	A2	5	2,7	24103b
45	755	18.7	+51 4	7.6	8.1	F8	4	0,4	3073b	95	540	19.1	- 0 6	8.7	9.5	G5	5	..	24332b
46	748	18.7	+46 41	8.9	9.0	A2	3	..	38933i	96	773	19.1	-51 21	9.4	9.3	A5	2	0,2	46083b
47	737	18.7	+40 37	7.27	7.27	Ao	6	..	38082i	97	209	19.1	-72 55	9.7	10.3	Go	1	..	17047b
48	717	18.7	+38 44	9.1	9.1	Ao	1	..	38082i	98	763	19.2	+45 30	9.4	10.4	Ko	1	..	38945i
49	447	18.7	+21 41	6.93	6.93	Ao	5	..	37415i	99	782	19.2	+40 7	8.77	8.77	Ao	2	..	38082i
50	556	18.7	+20 27	5.92	5.90	B9	7	E	37415i	100	559	19.2	+14 38	8.3	8.4	A2	3	..	38036i

THE HENRY DRAPER CATALOGUE.

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3^h 19^m. 2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	587	19.2	+ 1 44	8.5	9.5	Ko	5	0,4	24103b	51	519	19.7	-55 3	8.26	9.6	K2	3	..	46085b
2	484	19.2	- 1 5	var.	var.	A5	4	R	24332b	52	826	19.8	+47 34	7.80	7.78	B9	3	..	37452i
3	593	19.2	- 7 3	9.0	9.3	F2	4	..	23809b	53	..	19.8	+45 27	..	..	A3	1	..	38945i
4	1370	19.2	-23 47	10.2	10.3	F	1	..	24326b	54	681	19.8	+41 57	8.5	8.5	B9	4	..	37452i
5	1098	19.2	-44 30	8.1	8.7	F5	6	..	23791b	55	784	19.8	+40 6	8.07	8.02	B8	3	..	37452i
6	249	19.3	+68 56	7.52	7.94	F5	6	0,5	37600i	56	722	19.8	+38 44	8.1	8.1	Ao	2	..	38082i
7	733	19.3	+51 23	8.0	8.4	F5	4	3,3	38087i	57	481	19.8	+15 28	7.9	9.0	K2	2	..	38036i
8	700	19.3	+44 57	8.6	8.6	B9	4	..	37452i	58	438	19.8	+ 9 19	8.7	9.5	G5	1	..	37499i
9	767	19.3	+37 25	8.5	8.5	Ao	2	..	38082i	59	527	19.8	+ 7 2	9.3	9.8	F8	2	..	15183b
10	597	19.3	+31 23	7.49	8.49	Ko	3	2,2	37488i	60	661	19.8	-14 21	6.84	6.84	Ao	10	..	20766b
11	436	19.3	+ 9 28	7.9	8.7	G5	3	..	37499i	61	630	19.8	-16 0	7.55	8.11	Go	7	..	20766b
12	658	19.3	-14 27	9.2	10.2	Ko	2	..	40971b	62	601	19.8	-18 49	8.6	9.6	Ko	3	..	24326b
13	981	19.3	-41 37	7.7	8.9	K5	5	0,3	24616b	63	1271	19.8	-26 23	8.1	8.2	F5	8	..	20248b
14	268	19.3	-62 26	8.1	9.1	Ko	6	..	38370b	64	1365	19.8	-30 55	8.1	9.8	K2	3	2,1	45992b
15	188	19.3	-66 9	7.9	8.0	A3	6	..	38370b	65	1103	19.8	-44 36	8.20	8.4	A3	7	..	23791b
16	602	19.4	+58 51	7.8	7.8	B9	6	..	38959i	66	250	19.8	-74 21	7.18	7.4	F2	6	..	46167b
17	757	19.4	+50 30	7.67	7.62	B8	5	2,4	3073b	67	346	19.9	+65 27	8.9	9.5	Go	1	..	37600i
18	768	19.4	+37 54	8.1	8.4	F2	4	..	38082i	68	545	19.9	+25 30	8.8	9.2	F5	2	..	37415i
19	626	19.4	+32 57	8.1	9.1	Ko	1	..	37488i	69	545	19.9	+13 44	7.9	9.0	A2	3	..	38036i
20	511	19.4	+ 8 41	3.80	4.58	G5	..	R	6047c	70	618	19.9	- 2 40	9.0	9.6	Go	7	..	24332b
21	232	19.4	-76 10	8.4	9.2	G5	3	..	14359b	71	639	19.9	- 5 4	9.2	10.0	G5	2	..	23809b
22	751	19.5	+46 55	8.5	8.5	Ao	5	..	38087i	72	672	19.9	-10 46	9.5	10.5	Ko	2	..	24339b
23	437	19.5	+ 9 40	8.1	8.9	G5	3	..	37499i	73	602	19.9	-18 0	9.8	10.4	Go	1	0,1	40971b
24	486	19.5	- 1 51	10.0	10.5	F8	2	..	24332b	74	1627	19.9	-24 40	7.16	8.2	Ko	5	0,8	24326b
25	585	19.5	- 3 53	8.2	8.5	Fo	5	E	23809b	75	898	19.9	-40 26	7.3	7.5	Go	8	..	40947b
26	654	19.5	- 9 15	8.9	9.4	F8	2	..	24339b	76	779	19.9	-51 40	7.7	8.1	F8	5	..	20263b
27	647	19.5	-11 51	9.8	10.4	Go	3	2,2	39703b	77	268	19.9	-59 4	7.5	9.5	K2	6	..	40953b
28	642	19.5	-13 40	9.5	10.5	Ko	1	..	39703b	78	77	19.9	-81 40	9.5	9.6	A3	4	..	20538b
29	592	19.5	-15 31	9.0	10.0	Ko	3	..	40971b	79	201	20.0	+71 31	6.83	8.18	Ma	5	0,3	37555i
30	657	19.5	-17 39	9.2	9.8	Go	2	0,2	40971b	80	656	20.0	+59 16	8.6	8.6	Ao	3	..	38959i
31	1126	19.5	-28 18	7.27	8.4	Ko	8	..	20248b	81	828	20.0	+47 52	6.87	6.85	B9	6	..	37452i
32	253	19.5	-61 51	8.2	7.8	F8	8	..	38370b	82	689	20.0	+36 39	8.1	8.4	F2	4	..	38082i
33	744	19.6	+40 39	9.1	9.2	A3	2	..	38082i	83	645	20.0	+34 59	8.1	8.6	F8	2	..	37488i
34	438	19.6	+10 38	7.9	7.9	Ao	6	..	37499i	84	594	20.0	-15 0	9.0	9.1	A3	4	..	20766b
35	660	19.6	-14 43	9.8	10.8	Ko	2	..	40971b	85	601	20.0	-22 1	8.7	9.4	Ko	4	..	24326b
36	1391	19.6	-25 36	8.7	9.1	A5	5	..	20248b	86	1205	20.0	-27 30	9.1	10.0	G5	1	..	20248b
37	1254	19.6	-29 29	8.7	8.9	F8	4	..	20248b	87	1311	20.0	-29 58	9.1	11.1	G5	1	..	42805b
38	1036	19.6	-47 1	9.6	10.3	Ko	2	..	23791b	88	528	20.0	-56 39	9.3	10.4	Ko	1	..	40953b
39	202	19.6	-71 49	8.1	9.1	Ko	6	..	20539b	89	255	20.0	-61 21	9.2	10.0	Ko	3	..	38370b
40	250	19.7	+69 7	7.68	7.68	Ao	7	..	37600i	90	64	20.0	-83 54	7.59	8.2	Fo	8	..	20538b
41	550	19.7	+17 23	8.3	9.3	Ko	2	..	38036i	91	125	20.1	+76 16	8.32	8.32	Ao	4	..	37309i
42	469	19.7	+12 9	7.6	7.6	Ao	4	..	37499i	92	720	20.1	+43 18	7.6	8.6	Ko	3	..	37452i
43	590	19.7	+ 1 38	8.5	9.7	K5	2	..	24325b	93	748	20.1	+40 15	8.67	8.73	A2	2	..	37452i
44	619	19.7	-21 17	7.44	7.8	G5	6	..	24326b	94	506	20.1	+ 8 4	9.7	10.1	F5	2	..	15183b
45	1269	19.7	-26 35	8.7	8.6	F5	9	R	20248b	95	536	20.1	+ 2 56	8.5	9.3	G5	2	..	24325b
46	1270	19.7	-26 35	8.7	8.6	F5	9	..	20248b	96	586	20.1	- 4 50	7.41	8.19	G5	8	..	23809b
47	1256	19.7	-29 23	9.5	10.7	G5	1	..	45169b	97	642	20.1	- 5 41	8.1	9.1	Ko	4	..	23809b
48	1273	19.7	-32 26	8.9	9.9	Go	3	5,2	42805b	98	661	20.1	-17 44	10.4	11.0	Go	1	..	40971b
49	1202	19.7	-33 4	6.52	8.4	Ko	7	..	42907b	99	1102	20.1	-42 7	9.1	9.5	F8	4	..	24616b
50	1120	19.7	-38 45	8.6	8.9	F8	4	..	40947b	100	393	20.1	-51 55	8.2	9.6	Ma	3	..	20263b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	394	20.1	m. - 52 15	8.6	9.1	Ao	4	..	20263b	51	597	20.6	o ' - 7 2	9.8	10.8	Ko	1	..	23809b
2	547	20.1	- 54 49	9.2	10.1	K2	2	..	46085b	52	595	20.6	- 15 23	8.0	8.8	G5	6	..	20766b
3	657	20.2	+ 59 54	6.48	6.43	B8	7	..	37427i	53	1277	20.6	- 26 6	8.5	9.1	Ko	4	..	20248b
4	619	20.2	- 2 4	8.9	9.5	Go	5	..	24332b	54	940	20.6	- 48 34	8.5	9.0	Ko	2	..	20263b
5	648	20.2	- 12 21	9.2	9.8	Go	3	..	24339b	55	533	20.6	- 57 14	9.1	10.1	Ko	2	..	40953b
6	663	20.2	- 13 55	8.8	9.8	Ko	2	..	24339b	56	269	20.6	- 59 19	8.2	9.1	Fo	6	..	40953b
7	1368	20.2	- 31 53	9.2	11.5	G5	2	..	42805b	57	239	20.6	- 63 55	8.8	9.6	G5	4	..	38370b
8	1272	20.2	- 37 31	7.7	8.6	Ko	6	..	40947b	58	211	20.6	- 73 39	9.5	10.6	K2	1	..	20539b
9	1015	20.2	- 50 22	8.6	9.4	Ko	3	..	20263b	59	589	20.7	+ 61 14	8.9	9.9	K	1	..	37427i
10	250	20.2	- 60 4	7.8	9.1	Ko	6	0,5	40953b	60	684	20.7	+ 60 32	9.5	9.5	A	1	..	37427i
11	238	20.2	- 72 21	8.5	9.5	Ko	5	..	20539b	61	474	20.7	+ 12 8	8.1	8.7	Go	4	..	15183b
12	587	20.3	+ 62 9	8.7	8.5	B2	3	..	37600i	62	490	20.7	- 1 4	9.3	10.3	Ko	2	..	24332b
13	530	20.3	+ 19 50	8.0	8.1	A5	2	E	38036i	63	1133	20.7	- 28 8	9.1	10.1	K2	1	..	45992b
14	487	20.3	- 1 30	8.7	9.1	F5	7	..	24332b	64	1025	20.7	- 45 59	9.0	9.0	B8	5	..	23791b
15	644	20.3	- 5 0	7.08	7.86	G5	10	..	23809b	65	550	20.7	- 54 31	9.0	10.1	Ko	2	..	20263b
16	596	20.3	- 7 5	8.2	8.7	F8	6	..	23809b	66	529	20.7	- 56 19	9.7	10.7	K	1	..	40953b
17	655	20.3	- 9 18	9.2	10.0	G5	2	..	38073i	67	270	20.8	+ 68 6	8.5	8.5	B8	6	..	37600i
18	665	20.3	- 14 28	7.81	8.23	F5	7	..	20766b	68	764	20.8	+ 50 36	8.1	9.2	K2	1	..	38087i
19	1314	20.3	- 30 4	10.2	10.7	A2	2	..	42805b	69	649	20.8	+ 34 4	6.74	7.30	Go	5	..	37416i
20	1370	20.3	- 31 29	7.32	7.9	G5	6	..	42907b	70	492	20.8	+ 5 12	8.91	9.91	Ko	2	..	24335b
21	1273	20.3	- 37 39	9.6	9.8	G5	2	..	40947b	71	591	20.8	- 4 25	9.0	10.0	Ko	5	..	23809b
22	987	20.3	- 41 32	10.6	9.8	Fo	2	..	24616b	72	621	20.8	- 21 25	8.0	8.0	F5	6	..	24326b
23	206	20.3	- 68 54	7.10	7.1	A3	8	1,8	38366b	73	1128	20.8	- 45 27	7.7	8.1	F5	8	..	23791b
24	658	20.4	+ 59 34	7.53	8.03	F8	3	..	37427i	74	78	20.8	- 81 15	8.37	8.8	A2	8	..	20538b
25	682	20.4	+ 54 50	8.7	8.8	A2	3	..	38959i	75	34	20.8	- 86 1	8.8	10.2	Mb	3	..	20538b
26	918	20.4	+ 48 42	8.9	8.9	Ao	3	..	38087i	76	685	20.9	+ 60 13	9.4	10.2	G5	1	..	37427i
27	750	20.4	+ 40 56	8.7	9.7	Ko	2	..	38082i	77	791	20.9	+ 55 19	9.06	9.48	F5	1	..	38959i
28	646	20.4	+ 34 24	8.7	9.8	K2	1	..	37488i	78	920	20.9	+ 48 43	4.94	4.82	B5	..	2,8	56,75
29	599	20.4	+ 31 29	7.84	7.92	A3	2	..	37416i	79	831	20.9	+ 47 24	7.9	7.9	B9	4	..	37452i
30	488	20.4	- 1 5	10.7	11.3	G	1	..	24332b	80	726	20.9	+ 43 50	var.	var.	Nb	..	R	56,198
31	649	20.4	- 12 42	9.5	10.9	Mb	1	..	24339b	81	550	20.9	+ 13 58	8.5	8.5	Ao	2	..	38036i
32	1276	20.4	- 26 30	9.4	9.4	Ko	3	..	20248b	82	475	20.9	+ 11 38	9.3	10.1	G5	1	..	15183b
33	548	20.4	- 54 23	9.3	9.9	Fo	2	..	20263b	83	492	20.9	- 1 37	9.5	10.3	G5	3	..	24332b
34	278	20.4	- 58 12	10.0	10.0	Ao	1	..	40953b	84	621	20.9	- 1 50	9.3	10.1	G5	2	..	24332b
35	223	20.4	- 63 2	9.0	10.1	K2	2	..	38370b	85	648	20.9	- 8 34	8.4	9.5	K2	3	..	23809b
36	126	20.5	+ 76 30	8.8	8.8	Ao	2	..	37555i	86	1259	20.9	- 29 0	9.4	10.7	Ko	2	5,1	42805b
37	417	20.5	+ 64 4	8.9	9.5	G	1	..	37600i	87	1279	20.9	- 37 35	9.6	9.5	F5	1	..	40947b
38	936	20.5	+ 49 16	7.7	7.7	Ao	7	..	38087i	88	202	21.0	+ 71 50	8.8	8.8	Ao	3	..	37555i
39	830	20.5	+ 47 56	8.1	8.1	Ao	3	..	37452i	89	203	21.0	+ 71 40	8.6	8.6	Ao	3	..	37630i
40	829	20.5	+ 47 30	8.8	8.9	A3	3	..	38087i	90	204	21.0	+ 71 31	8.5	8.5	Ao	5	..	38943i
41	648	20.5	+ 34 26	9.1	9.2	A2	3	..	37488i	91	660	21.0	+ 59 36	4.42	4.40	B9p	..	R	6075c
42	532	20.5	+ 28 23	6.51	7.29	G5	5	0,3	37415i	92	771	21.0	+ 37 42	7.7	8.2	F8	3	..	37416i
43	490	20.5	+ 5 36	7.9	7.9	Ao	6	0,7	37499i	93	490	21.0	+ 24 28	8.9	10.1	K5	2	..	37415i
44	592	20.5	+ 1 41	9.3	9.9	Go	1	..	24325b	94	493	21.0	- 1 0	8.9	9.3	F5	7	..	24332b
45	646	20.5	- 4 54	8.95	9.23	F	3	R	23809b	95	598	21.0	- 7 28	8.9	9.0	A2	4	..	23809b
46	988	20.5	- 41 35	7.28	7.4	Ko	7	..	12637b	96	605	21.0	- 18 2	8.6	8.7	A2	3	..	24326b
47	37	20.5	- 85 39	9.0	9.6	Go	4	E	15145b	97	1213	21.0	- 27 36	8.7	9.7	G5	3	..	20248b
48	725	20.6	+ 57 20	8.0	8.5	F8	2	..	37427i	98	1318	21.0	- 30 12	7.23	8.4	G5	4	..	10428b
49	507	20.6	+ 7 55	9.3	9.7	F5	2	..	15183b	99	1317	21.0	- 30 32	9.5	9.8	A3	2	..	10428b
50	589	20.6	- 3 55	10.2	11.2	Ko	3	..	24332b	100	272	21.0	- 59 12	8.2	9.4	Ko	5	..	40953b

THE HENRY DRAPER CATALOGUE.

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3^h 21^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	418	21.1	+63 20	9.4	9.5	A2	2	..	37427i	51	190	21.5	-65 55	8.8	9.8	Ko	2	..	3837ob
2	938	21.1	+49 37	8.4	8.4	Ao	4	..	38087i	52	204	21.5	-71 52	9.4	10.4	Ko	2	..	20539b
3	549	21.1	-3 43	9.8	10.6	G5	2	..	24332b	53	253	21.6	+68 24	9.5	10.5	Ko	1	..	3760oi
4	645	21.1	-13 25	8.8	9.8	Ko	5	..	24339b	54	572	21.6	+62 47	9.2	9.2	A	1	..	37427i
5	636	21.1	-20 41	10.2	10.0	A	2	..	24326b	55	593	21.6	+61 20	9.2	9.2	A	2	..	37427i
6	1643	21.1	-24 50	9.10	9.7	Go	3	o,1	42897b	56	683	21.6	+54 12	8.1	8.2	A2	3	..	38959i
7	1401	21.1	-24 56	8.95	9.4	K5	2	3,2	24326b	57	544	21.6	-0 16	10.0	11.0	Ko	2	..	24332b
8	1281	21.1	-26 19	8.9	9.4	Ko	4	..	20248b	58	656	21.6	-5 48	9.2	9.8	Go	3	..	23809b
9	1026	21.1	-46 13	8.2	8.7	G5	6	..	23791b	59	667	21.6	-14 1	10.4	10.8	F5	1	..	24339b
10	154	21.2	+74 12	9.0	9.0	Ao	3	..	38943i	60	790	21.6	-51 25	6.65	7.1	Ao	9	..	46083b
11	205	21.2	+71 50	8.7	8.7	Ao	4	..	38943i	61	77	21.6	-80 49	9.1	9.9	G5	3	..	20538b
12	728	21.2	+44 3	8.5	9.1	Go	3	..	37452i	62	944	21.7	+49 31	5.64	5.52	B5	..	3,7	2257c
13	653	21.2	+34 27	8.3	8.9	Go	2	..	37416i	63	757	21.7	+47 1	8.4	9.4	Ko	2	..	38087i
14	595	21.2	+1 50	8.5	9.3	G5	4	..	24325b	64	439	21.7	+9 23	3.75	3.70	B8	..	3,R	6568c
15	594	21.2	+1 19	8.84	9.84	Ko	4	2,2	24332b	65	542	21.7	+3 8	8.5	9.3	G5	2	..	24325b
16	495	21.2	-1 22	8.7	9.2	F8	7	..	24332b	66	545	21.7	-0 14	10.0	10.1	A5	3	..	24332b
17	593	21.2	-4 43	8.70	9.77	K2	4	..	23809b	67	546	21.7	-0 18	7.18	8.18	Ko	8	..	24332b
18	659	21.2	-9 47	9.36	9.78	F5	4	..	24339b	68	648	21.7	-13 19	10.2	10.8	Go	2	..	24339b
19	1027	21.2	-46 1	7.19	7.4	A2	10	..	23791b	69	669	21.7	-14 29	9.3	10.3	Ko	2	..	40971b
20	530	21.2	-56 24	9.9	10.4	F8	2	..	40953b	70	674	21.7	-19 14	8.6	8.8	F5	4	..	24326b
21	189	21.2	-66 9	8.1	8.2	A3	5	..	3837ob	71	606	21.7	-22 31	9.3	10.3	K2	2	..	24326b
22	214	21.3	+69 25	8.97	9.31	F2	3	..	38943i	72	1029	21.7	-46 50	10.0	9.9	F5	2	..	46083b
23	624	21.3	-1 55	10.4	11.0	G	2	..	24332b	73	1026	21.7	-50 22	8.4	9.7	Ko	2	..	20263b
24	623	21.3	-2 29	9.3	9.9	Go	5	..	24332b	74	215	21.8	+69 37	9.2	9.5	F2	2	..	38943i
25	1131	21.3	-45 3	8.32	8.7	F2	7	..	23791b	75	927	21.8	+48 44	8.1	8.1	Ao	4	..	38087i
26	1047	21.3	-47 12	9.6	9.3	F5	5	..	23791b	76	833	21.8	+47 29	7.7	8.3	Go	3	..	37452i
27	273	21.3	-59 21	7.6	9.1	K5	4	..	40953b	77	732	21.8	+43 25	7.25	7.25	Ao	4	..	37452i
28	207	21.3	-68 50	8.6	9.6	Ko	4	..	38366b	78	659	21.8	+34 57	8.70	8.84	A5	2	2,2	38975i
29	79	21.3	-81 11	9.27	10.3	K5	1	..	20538b	79	477	21.8	+12 23	6.20	6.20	Ao	..	1,8	56,75
30	40	21.3	-84 32	8.5	9.6	K2	5	..	20538b	80	630	21.8	-2 44	9.8	10.2	F5	3	..	24332b
31	663	21.4	+53 51	8.8	9.3	F8	2	..	38959i	81	552	21.8	-3 49	9.8	10.8	Ko	2	..	24332b
32	941	21.4	+50 6	7.67	7.95	Fo	4	..	3073b	82	663	21.8	-9 43	9.66	9.66	A	2	R	24339b
33	940	21.4	+49 17	9.2	9.3	A2	2	..	38087i	83	598	21.8	-15 42	7.55	7.55	Ao	9	..	20766b
34	686	21.4	+41 20	8.9	8.9	Ao	2	..	38082i	84	623	21.8	-21 8	9.3	10.6	Ko	2	5,1	45177b
35	484	21.4	+18 25	6.45	6.51	A2	6	2,8	37373i	85	1127	21.8	-38 40	7.55	8.1	F5	6	..	40947b
36	535	21.4	+5 9	9.26	9.32	A2	3	..	24325b	86	1137	21.8	-45 24	9.6	9.6	Go	3	..	23791b
37	540	21.4	+2 59	9.3	9.8	F8	2	..	24325b	87	946	21.8	-48 17	8.7	9.0	Ko	1	..	20263b
38	627	21.4	-2 9	9.2	9.3	A2	5	..	24332b	88	945	21.8	-48 41	9.6	9.4	A5	4	..	46083b
39	661	21.4	-9 19	9.2	10.2	Ko	2	..	24339b	89	607	21.9	+58 32	4.76	4.76	Aop	..	R	56,75
40	1216	21.4	-27 38	7.7	8.4	G5	8	..	20248b	90	697	21.9	+53 1	8.7	9.5	G5	2	..	38959i
41	1284	21.4	-37 31	7.00	6.9	A3	9	..	40947b	91	758	21.9	+47 2	8.6	9.4	G5	1	..	38087i
42	1058	21.4	-43 35	9.8	10.2	Go	2	..	24616b	92	456	21.9	+23 51	8.1	8.9	G5	3	..	37415i
43	220	21.4	-67 53	10.3	10.9	Go	1	..	38366b	93	508	21.9	+7 49	10.0	10.1	A2	1	..	15183b
44	41	21.4	-84 3	9.8	10.1	F2	2	..	20538b	94	679	21.9	-9 52	9.21	9.27	A2	4	..	24339b
45	924	21.5	+49 2	8.9	9.0	A2	3	..	38087i	95	625	21.9	-21 13	10.4	10.6	Ao	2	..	45177b
46	730	21.5	+44 2	6.91	7.91	Ko	3	..	37452i	96	1138	21.9	-45 38	8.5	9.0	Ko	6	..	23791b
47	497	21.5	-1 48	10.7	11.5	G5	2	..	24332b	97	222	21.9	-67 32	9.4	10.0	Go	1	..	38366b
48	608	21.5	-18 47	8.2	9.0	G5	4	..	24326b	98	835	22.0	+47 58	7.40	7.38	B9	4	..	37452i
49	605	21.5	-22 25	8.8	9.1	G5	6	..	24326b	99	687	22.0	+41 54	8.9	8.9	Ao	2	..	37452i
50	1380	21.5	-30 55	8.7	9.8	A3	3	R	45992b	100	789	22.0	+39 50	7.37	8.37	Ko	4	..	37452i

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	660	m. 22.0	o 34 23	8.5	8.5	Ao	2	..	37488i	51	55I	m. 22.4	o 25 56	8.1	9.1	Ko	3	..	37415i
2	656	22.0	+33 28	5.60	5.60	Ao	8	..	37416i	52	475	22.4	+ 3 48	9.3	9.7	F5	2	..	24325b
3	629	22.0	+32 28	7.66	8.66	Ko	3	..	37416i	53	554	22.4	- 3 27	8.2	9.2	Ko	7	2,4	24332b
4	443	22.0	+16 19	8.3	8.4	A2	4	..	38036i	54	176	22.5	+72 24	9.5	9.6	A5	3	..	38943i
5	597	22.0	+ 1 56	7.37	7.37	Ao	7	..	24325b	55	760	22.5	+46 37	6.20	6.08	B5	6	..	37452i
6	660	22.0	- 5 5	9.5	10.3	G5	4	..	23809b	56	535	22.5	+28 43	8.7	9.2	F8	2	..	37415i
7	635	22.0	-16 7	9.5	10.5	Ko	1	..	45177b	57	444	22.5	+16 49	8.5	8.8	F2	3	..	38036i
8	636	22.0	-16 22	9.3	9.8	F8	3	..	45177b	58	476	22.5	+ 3 47	9.3	9.4	A2	4	..	24325b
9	638	22.0	-16 34	9.5	10.1	Go	3	..	45177b	59	649	22.5	-12 57	10.2	10.8	Go	2	..	24339b
10	610	22.0	-18 34	8.8	8.9	A2	3	..	24326b	60	1268	22.5	-28 55	7.68	8.8	Ko	8	..	20248b
11	1384	22.0	-30 59	7.7	8.6	Go	4	..	10428b	61	1134	22.5	-38 35	8.9	10.0	K2	1	..	40947b
12	1118	22.0	-44 53	9.42	10.5	K2	2	..	24616b	62	399	22.5	-52 44	7.8	8.8	Ko	5	..	20263b
13	538	22.0	-57 55	7.3	7.8	G5	6	..	40953b	63	189	22.5	-69 7	8.9	9.3	F5	3	..	38366b
14	662	22.1	+59 41	9.2	9.5	F2	3	..	37427i	64	47	22.5	-87 5	9.1	9.5	F5	4	..	15145b
15	657	22.1	+34 2	8.7	9.7	Ko	2	2,1	38975i	65	685	22.6	+55 3	7.46	8.64	K5	2	..	38959i
16	572	22.1	+20 35	7.65	8.65	Ko	2	..	37415i	66	947	22.6	+49 49	8.7	9.5	G5	2	..	38087i
17	553	22.1	- 3 37	9.3	9.4	A3	5	2,4	24332b	67	495	22.6	+22 28	6.11	6.89	G5	6	..	37415i
18	662	22.1	- 5 44	9.8	10.6	G5	1	..	23809b	68	601	22.6	- 7 18	9.3	9.4	A2	4	..	23809b
19	653	22.1	- 8 20	8.0	9.0	Ko	6	..	23809b	69	657	22.6	-12 50	10.2	10.8	Go	2	..	24339b
20	675	22.1	-14 45	9.46	10.02	Go	2	..	40971b	70	680	22.6	-19 2	8.8	10.0	K5	2	..	24326b
21	666	22.1	-17 38	8.9	10.0	K2	1	..	45177b	71	1293	22.6	-32 26	8.9	9.5	F2	1	..	42907b
22	1287	22.1	-32 1	8.9	10.4	K2	2	3,1-	42907b	72	1005	22.6	-41 15	9.5	9.7	Ko	1	..	42911b
23	1290	22.1	-36 17	6.25	6.5	A2	..	2,8R	56,120	73	1115	22.6	-41 59	6.42	6.9	Ao	10	..	12637b
24	1000	22.1	-41 8	9.6	9.5	Fo	2	..	42911b	74	1127	22.6	-44 28	9.3	9.9	G5	1	..	23791b
25	998	22.1	-41 41	8.3	8.3	Fo	5	..	12637b	75	231	22.6	-74 57	8.08	7.9	A3	8	..	20539b
26	187	22.1	-69 40	10.0	11.2	K5	1	R	38366b	76	273	22.7	+67 14	7.48	7.76	Fo	5	..	37600i
27	608	22.2	+59 2	6.06	6.06	Ao	8	..	37427i	77	269	22.7	+67 5	7.88	8.88	Ko	3	..	38943i
28	945	22.2	+49 10	4.67	4.55	B5	..	2,9	56,75	78	689	22.7	+61 9	9.9	9.9	A	1	..	37427i
29	510	22.2	+ 7 44	9.3	10.1	G5	1	..	15183b	79	933	22.7	+48 53	8.2	8.2	Ao	6	..	38087i
30	1228	22.2	-27 40	6.00	7.2	G5	5	..	37034b	80	930	22.7	+48 50	8.8	8.9	A3	2	..	38087i
31	1266	22.2	-29 54	8.88	9.9	Ko	2	..	45992b	81	840	22.7	+47 38	8.2	8.2	Ao	5	..	38087i
32	1386	22.2	-31 7	9.2	11.1	Ko	3	2,1	42805b	82	761	22.7	+47 10	7.9	7.9	Ao	3	..	37452i
33	1257	22.2	-34 9	9.2	9.2	F8	2	..	42907b	83	566	22.7	+30 2	7.06	6.89	B3	6	0,4	37415i
34	1291	22.2	-36 19	7.22	7.5	A5	7	..	40947b	84	478	22.7	+ 3 34	8.7	9.7	Ko	4	..	24325b
35	768	22.3	+42 57	9.0	9.0	Ao	2	..	38933i	85	271	22.7	-62 11	9.6	10.0	F5	3	..	38370b
36	695	22.3	+36 47	8.6	9.2	Go	2	..	38082i	86	223	22.7	-67 16	9.1	9.6	F8	3	..	38366b
37	537	22.3	+20 7	6.68	6.76	A3	5	..	37415i	87	65	22.7	-83 1	9.6	10.1	F8	2	..	20538b
38	519	22.3	+ 8 26	7.9	8.0	A5	4	..	37499i	88	699	22.8	+52 34	7.42	8.42	Ko	3	..	3073b
39	511	22.3	+ 7 24	7.9	8.2	Fo	5	..	37499i	89	770	22.8	+51 1	9.0	9.1	A5	2	..	38087i
40	495	22.3	+ 5 32	7.34	8.34	Ko	6	0,4	24325b	90	771	22.8	+42 54	8.7	9.0	F2	2	..	38933i
41	548	22.3	+ 2 51	8.7	8.8	A5	3	..	24325b	91	602	22.8	- 7 25	9.8	10.8	Ko	2	..	23809b
42	664	22.3	- 5 14	9.8	10.2	F5	5	..	23809b	92	1261	22.8	-34 9	9.6	10.2	Go	2	..	42805b
43	667	22.3	-17 12	9.5	10.1	Go	2	2,2	40971b	93	1129	22.8	-44 10	8.6	9.6	K2	2	..	23791b
44	607	22.3	-22 0	9.0	9.5	Go	3	..	24326b	94	666	22.9	+53 57	8.8	9.6	G5	2	..	38959i
45	1230	22.3	-27 20	8.7	9.7	Ko	2	..	20248b	95	763	22.9	+40 16	8.22	9.22	Ko	2	..	38082i
46	1066	22.3	-43 20	9.8	9.6	A5	3	..	24616b	96	535	22.9	+ 6 57	8.1	8.7	Go	3	..	37499i
47	684	22.4	+55 7	4.98	5.04	A2	..	2,R	56,75	97	479	22.9	+ 3 50	8.7	9.2	F8	4	..	24325b
48	714	22.4	+44 42	7.37	7.20	B3	4	R	37452i	98	651	22.9	-13 27	10.0	11.1	K2	1	..	24339b
49	790	22.4	+39 51	7.49	8.27	G5	3	..	37452i	99	601	22.9	-15 33	8.8	8.8	Ao	4	..	20766b
50	697	22.4	+35 28	7.32	8.10	G5	4	..	37416i	100	668	22.9	-16 55	9.8	10.4	Go	2	..	45177b

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1328	22.9	30 49	8.9	9.4	G5	2	..	10428b	51	844	23.5	+47 46	6.04	6.02	B9	..	0,8	2464c
2	1223	22.9	33 49	9.6	11.1	F8	1	..	42805b	52	843	23.5	+47 39	4.55	5.55	Ko	..	5,8R	2464c
3	1006	22.9	40 55	8.6	9.7	Ko	2	..	42911b	53	842	23.5	+47 17	8.8	8.9	A3	2	..	38087i
4	1069	22.9	43 11	7.5	8.4	Ko	4	0,4	23791b	54	697	23.5	+37 5	8.1	8.2	A2	2	..	38082i
5	801	22.9	51 9	8.2	9.0	G5	3	..	20263b	55	481	23.5	+4 2	8.1	8.1	Ao	8	..	24325b
6	190	22.9	68 55	9.0	9.6	Go	3	..	38366b	56	1237	23.5	-27 46	9.1	9.4	Go	3	..	20248b
7	177	23.0	+72 46	9.5	9.6	A2	2	..	38943i	57	1268	23.5	-34 51	9.31	10.7	Ko	2	..	42805b
8	256	23.0	+68 22	9.0	9.0	Ao	1	..	37600i	58	226	23.5	-63 24	9.6	10.2	Go	2	..	38370b
9	347	23.0	+65 58	8.0	9.0	Ko	3	..	38943i	59	479	23.6	+11 24	9.3	9.8	F8	2	..	15183b
10	554	23.0	+25 58	8.0	8.3	Fo	3	..	37415i	60	636	23.6	-2 38	9.3	10.1	G5	3	..	24332b
11	573	23.0	+20 17	7.15	7.15	Ao	5	E	37415i	61	658	23.6	-13 21	9.8	10.6	G5	1	..	24339b
12	655	23.0	-13 16	9.5	10.6	K2	2	..	24339b	62	645	23.6	-20 5	8.8	9.4	F5	4	..	24326b
13	677	23.0	-14 42	7.16	7.16	Ao	8	0,10	45177b	63	230	23.6	-69 59	6.22	6.7	A3	10	..	20539b
14	1297	23.0	+26 53	9.9	9.7	Go	2	..	20248b	64	574	23.7	+62 12	8.5	8.5	B9	3	..	37427i
15	1235	23.0	-27 15	8.3	8.8	F5	6	..	20248b	65	772	23.7	+42 40	7.52	7.50	B9	5	..	37452i
16	224	23.0	-63 24	8.9	9.9	Ko	3	..	38370b	66	692	23.7	+41 11	8.9	8.9	Ao	2	..	38082i
17	633	23.1	-2 49	8.2	8.6	F5	9	..	24332b	67	701b	23.7	+35 20	var.	var.	Md	..	R	56,198
18	670	23.1	-8 53	9.5	10.3	G5	2	..	24339b	68	493	23.7	+15 52	7.9	8.2	Fo	2	..	38036i
19	1298	23.1	-26 37	9.4	9.1	F8	5	..	20248b	69	540	23.7	+4 48	8.9	9.3	F5	3	..	24325b
20	1130	23.1	-43 58	8.7	9.6	G5	2	..	23791b	70	560	23.7	-3 33	8.9	9.2	Fo	5	0,7	23809b
21	225	23.1	-62 55	8.3	8.4	A3	8	..	38370b	71	659	23.7	-13 33	7.26	8.26	Ko	6	..	24339b
22	793	23.2	+55 37	9.5	9.6	A2	2	..	38959i	72	660	23.7	-13 50	10.4	11.4	Ko	1	..	24339b
23	765	23.2	+40 50	8.7	9.7	Ko	1	..	38082i	73	1298	23.7	-32 36	9.0	10.3	Ko	1	..	45169b
24	444	23.2	+11 2	6.80	7.58	G5	5	..	37470i	74	1306	23.7	-36 2	5.72	7.3	Ko	..	0,7R	56,120
25	635	23.2	-2 12	9.3	9.9	Go	3	..	24332b	75	525	23.7	-55 15	8.7	9.6	K2	3	..	20263b
26	602	23.2	-3 56	10.4	11.4	Ko	2	..	24332b	76	237	23.7	-65 21	8.3	9.3	Ko	4	..	38370b
27	934	23.3	+48 10	9.2	9.3	A2	1	..	38087i	77	600	23.8	+61 56	7.22	8.22	Ko	6	..	37427i
28	841	23.3	+47 55	8.4	8.4	B9	3	..	38087i	78	717	23.8	+44 30	8.6	8.6	Ao	2	..	37452i
29	668	23.3	-4 54	8.15	8.21	A2	8	..	23809b	79	698	23.8	+36 18	7.79	8.21	F5	3	..	37416i
30	667	23.3	-11 38	5.85	6.85	Ko	8	E	38073i	80	602	23.8	+1 55	8.5	8.8	F2	5	0,4	24332b
31	643	23.3	-20 9	8.2	9.5	K5	3	..	46088b	81	552	23.8	-0 45	8.3	8.9	Go	5	..	24332b
32	630	23.3	-21 44	9.3	9.4	B9	4	..	24326b	82	1007	23.8	-41 34	9.6	9.7	Go	4	0,2	24616b
33	1149	23.3	-28 6	8.3	9.4	Ko	3	..	20248b	83	232	23.8	-75 32	9.2	10.0	G5	1	..	46167b
34	1139	23.3	-38 15	7.8	8.2	F5	6	..	40947b	84	952	23.9	+50 9	7.32	7.38	A2	6	..	38087i
35	1054	23.3	-47 12	10.4	10.2	A2	2	..	46083b	85	552	23.9	+2 54	6.54	7.32	G5	7	5,8	37499i
36	67	23.3	-83 39	9.6	10.2	Go	2	..	20538b	86	929	23.9	-40 14	7.18	8.8	Ko	6	..	40947b
37	90	23.4	+83 2	8.2	8.3	A2	5	E	37558i	87	1009	23.9	-41 33	9.5	10.0	G5	3	0,1	24616b
38	612	23.4	+58 22	9.2	10.2	K	..	..	M	88	739	24.0	+43 38	9.2	9.3	A2	2	..	38933i
39	950	23.4	+49 26	8.9	9.2	Fo	3	..	38087i	89	693	24.0	+41 52	6.88	7.22	F2	6	..	37452i
40	762	23.4	+46 42	7.00	6.95	B8	4	..	37452i	90	450	24.0	+16 25	7.02	7.02	Aop	8	R	38036i
41	565	23.4	+14 39	7.32	7.32	Ao	5	..	38036i	91	683	24.0	-10 31	8.6	9.4	G5	3	E	38073i
42	558	23.4	-3 39	9.5	10.5	Ko	3	..	24332b	92	1279	24.0	-29 47	9.12	10.6	K2	2	..	45992b
43	603	23.4	-6 52	8.4	9.0	Go	6	..	23809b	93	1334	24.0	-30 34	9.2	10.6	F8	2	..	42805b
44	604	23.4	-7 8	10.0	10.6	Go	1	..	23809b	94	930	24.0	-40 11	7.58	8.5	G5	6	..	40947b
45	656	23.4	-13 6	7.36	8.36	Ko	6	..	24339b	95	1056	24.0	-47 19	9.3	9.7	Ko	3	..	23791b
46	1399	23.4	-31 35	8.9	10.6	G5	3	..	42805b	96	275	24.0	-59 39	8.6	9.1	F8	4	..	40953b
47	1302	23.4	-36 16	9.8	9.2	Go	3	..	40947b	97	257	24.1	+68 26	8.6	9.4	G5	2	..	37600i
48	123	23.5	+78 58	9.0	9.0	A	2	..	37309i	98	693	24.1	+60 38	10.2	10.2	A	2	R	37427i
49	666	23.5	+59 16	9.5	9.5	A	1	..	37427i	99	794	24.1	+56 7	8.1	8.4	F2	4	..	37427i
50	771	23.5	+50 42	8.7	8.7	Ao	3	..	38087i	100	953	24.1	+49 22	8.2	8.3	A3	3	..	38087i

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3^h 24^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	553	24.1	+ 0 5	9.28	10.06	G5	3	..	24332b	51	737	24.6	+38 49	7.20	7.02	F5	4	..	37416i
2	681	24.1	- 6 0	9.5	10.1	Go	2	..	23809b	52	540	24.6	+28 55	9.2	9.3	A2	2	..	37488i
3	661	24.1	-13 10	9.8	10.8	Ko	2	..	24339b	53	640	24.6	- 2 5	8.9	9.4	F8	7	..	24332b
4	642	24.1	-16 32	9.3	10.1	G5	1	E	24339b	54	671	24.6	-10 54	7.7	8.1	F5	6	E	38073i
5	612	24.1	-18 43	8.3	8.4	A5	7	..	24326b	55	1158	24.6	-27 59	10.4	10.1	F8	2	..	45992b
6	683	24.1	-18 59	8.8	9.5	Ko	2	..	24326b	56	1411	24.6	-31 49	9.2	11.2	G5	2	..	42805b
7	961	24.1	-49 13	7.4	8.7	G5	4	..	20263b	57	1238	24.6	-33 8	10.4	10.6	Go	2	..	42805b
8	809	24.1	-51 0	8.6	9.0	F5	4	..	20263b	58	1014	24.6	-41 23	9.6	10.0	G5	2	..	42911b
9	527	24.1	-55 49	9.0	9.9	Go	3	..	40953b	59	1150	24.6	-45 55	7.7	8.7	Ko	6	..	23791b
10	178	24.2	+73 0	6.41	6.41	Ao	8	0,9	37555i	60	536	24.6	-56 47	9.3	10.7	K	1	..	40953b
11	568	24.2	+29 42	7.51	7.51	Ao	4	..	37416i	61	942	24.7	+49 4	6.32	6.30	B9	7	..	37452i
12	459	24.2	+23 51	8.1	8.1	Ao	4	..	37416i	62	665	24.7	+33 34	8.1	9.2	K2	2	..	37488i
13	499	24.2	+ 6 8	8.7	8.8	A5	3	..	24325b	63	547	24.7	+19 46	7.9	8.7	G5	1	E	37373i
14	604	24.2	- 4 8	8.9	9.0	A5	5	..	23809b	64	451	24.7	+11 3	9.3	9.7	F5	3	..	15183b
15	1306	24.2	-26 41	9.1	9.1	Go	4	..	20248b	65	606	24.7	- 7 9	6.16	6.94	G5	10	0,5	23809b
16	1243	24.2	-26 57	8.5	9.4	Go	4	..	20248b	66	674	24.7	-17 24	9.8	9.9	A3	1	..	46088b
17	1038	24.2	-50 49	8.7	9.1	Go	3	..	20263b	67	1428	24.7	-25 14	8.2	9.1	F5	5	3,4	20248b
18	210	24.2	-68 41	8.1	8.5	F5	6	0,4	38366b	68	1413	24.7	-31 26	9.2	10.6	G5	2	..	42805b
19	954	24.3	+49 34	8.0	8.1	A5	3	..	38087i	69	191	24.7	-69 4	8.9	9.9	Ko	1	..	38366b
20	938	24.3	+48 51	6.29	6.29	Ao	5	..	37452i	70	126	24.8	+78 6	8.6	8.7	A2	4	..	37555i
21	740	24.3	+43 52	8.9	10.0	K2	1	..	38933i	71	141	24.8	+75 23	8.17	9.17	Ko	5	0,2 R	6449m
22	677	24.3	- 9 40	9.56	10.06	F8	3	..	24339b	72	943	24.8	+48 24	6.62	6.60	B9	7	..	37452i
23	671	24.3	-17 49	9.5	10.5	Ko	3	..	45177b	73	741	24.8	+43 54	9.4	10.8	Ma	..	..	M
24	1307	24.3	-26 2	8.7	9.1	G5	4	..	20248b	74	570	24.8	+29 17	8.7	9.3	Go	1	..	37488i
25	1031	24.3	-39 9	8.9	9.1	F8	3	..	40947b	75	485	24.8	+12 34	8.5	9.3	G5	3	..	37470i
26	1139	24.3	-44 12	6.82	7.0	F5	10	..	23791b	76	597	24.8	+ 0 12	9.13	10.20	K2	3	..	24332b
27	544	24.3	-57 5	9.2	10.7	K2	1	..	40953b	77	563	24.8	- 3 33	9.8	10.8	Ko	2	..	24332b
28	694	24.4	+60 55	9.2	10.0	G5	2	..	37427i	78	618	24.8	-18 14	9.5	10.1	Go	3	..	46088b
29	..	24.4	+43 34	Nov.	Nov.	Pec.	..	R	76,35	79	636	24.8	-21 42	8.0	9.2	K2	4	..	24326b
30	801	24.4	+39 19	8.1	8.7	Go	2	..	38082i	80	1239	24.8	-33 33	9.3	9.4	Go	1	..	42907b
31	538	24.4	+ 7 3	9.3	9.4	A5	2	..	15183b	81	1015	24.8	-41 54	11.1	10.1	F8	2	..	24616b
32	683	24.4	- 5 54	9.5	10.3	G5	1	..	23809b	82	1143	24.8	-44 0	9.0	9.6	G5	4	..	24616b
33	682	24.4	- 6 26	9.5	10.6	K2	2	..	23809b	83	1045	24.8	-46 37	9.3	10.8	G5	4	..	23791b
34	661	24.4	-12 25	8.8	9.1	Fo	5	..	24339b	84	772	24.9	+40 25	6.57	6.71	A5	6	..	37452i
35	1310	24.4	-36 12	6.50	7.1	Ao	..	2,8 R	56,120	85	513	24.9	+27 23	8.1	8.1	Ao	3	..	37415i
36	1013	24.4	-41 51	8.2	8.1	A5	5	..	12637b	86	452	24.9	+11 0	5.12	5.12	Ao	..	I, R	56,75
37	907	24.4	-47 58	9.8	10.5	G5	2	..	46083b	87	447	24.9	+10 6	7.22	8.22	Ko	4	..	37470i
38	969	24.4	-48 9	10.0	9.4	Ao	4	..	46083b	88	662	24.9	-13 1	5.59	5.65	A2	9	E	38073i
39	348	24.5	+65 12	7.04	7.10	A2	8	2,6	37600i	89	648	24.9	-19 53	7.34	8.2	G5	8	..	24326b
40	955	24.5	+50 5	8.37	8.93	Go	3	..	38087i	90	1247	24.9	-27 53	10.2	10.6	K2	1	..	45992b
41	846	24.5	+47 31	6.77	6.75	B9	6	..	37452i	91	1284	24.9	-29 20	8.9	10.6	K5	2	..	45992b
42	721	24.5	+44 20	9.0	9.1	A3	1	..	37452i	92	1016	24.9	-41 34	9.8	9.5	F8	2	..	42911b
43	501	24.5	+ 5 28	8.3	8.7	F5	5	..	24325b	93	283	24.9	-58 41	8.2	8.9	G5	6	..	40953b
44	639	24.5	- 2 48	10.7	11.3	Go	2	..	24332b	94	233	24.9	-75 38	9.1	10.3	K5	2	..	17047b
45	1311	24.5	-36 22	8.2	8.2	F2	5	E	40947b	95	603	25.0	+61 54	7.9	7.9	Ao	3	..	37427i
46	404	24.5	-52 9	8.9	9.6	F2	3	..	20263b	96	697	25.0	+60 36	9.2	10.2	K	1	..	37427i
47	213	24.5	-73 42	8.2	8.5	Fo	7	..	20539b	97	689	25.0	+54 51	8.8	9.2	F5	3	..	38959i
48	157	24.6	+74 56	10.2	10.8	Go	2	..	6449m	98	959	25.0	+49 12	8.9	8.9	Ao	4	..	38087i
49	941	24.6	+48 37	7.8	7.8	B9	3	..	38087i	99	847	25.0	+47 41	5.52	5.47	B8	7	I, R	37452i
50	696	24.6	+41 25	7.15	7.03	B5	6	..	37452i	100	514	25.0	+27 23	7.14	7.12	B9	4	..	37415i

THE HENRY DRAPER CATALOGUE.

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3^h 25^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	566	25.0	+26 47	8.3	9.3	Ko	2	..	37415i	51	776	25.4	+42 25	7.8	7.8	B9	5	..	37452i
2	677	25.0	-17 20	8.2	8.6	F5	4	E	24326b	52	712	25.4	+36 39	8.7	9.9	K5	..	..	M
3	1679	25.0	-24 27	9.7	10.3	K5	2	..	24326b	53	708	25.4	+36 9	7.74	7.74	Ao	3	..	37416i
4	1284	25.0	-34 0	7.12	8.0	Ko	4	..	42907b	54	486	25.4	+12 36	4.28	5.28	Ko	..	5,R	56,75
5	1128	25.0	-41 57	9.3	9.7	G5	2	..	12637b	55	502	25.4	+ 5 51	6.12	6.90	G5	10	..	24325b
6	230	25.0	-63 11	8.3	8.4	A5	7	..	38370b	56	608	25.4	+ 1 45	8.5	8.8	F2	5	..	24332b
7	192	25.0	-66 50	8.9	9.3	F5	4	..	38366b	57	678	25.4	-17 17	8.8	10.0	K5	1	..	46088b
8	575	25.1	+63 7	8.02	8.00	B9	5	0,4	37600i	58	649	25.4	-19 54	9.33	10.3	Go	1	..	46088b
9	604	25.1	+61 50	8.50	8.50	Ao	3	..	37600i	59	650	25.4	-19 59	9.58	10.3	G5	1	..	46088b
10	605	25.1	+61 21	9.4	9.4	A	1	..	37427i	60	R	25.4	-22 51	6.87	7.7	Ko	9	..	24326b
11	744	25.1	+51 44	8.5	8.5	B8	4	..	38087i	61	1164	25.4	-28 51	9.1	10.0	G5	3	..	45992b
12	600	25.1	+ 0 45	8.9	9.5	Go	3	..	24332b	62	1287	25.4	-28 56	8.9	10.3	Ko	2	..	45992b
13	599	25.1	+ 0 23	9.3	9.6	F2	5	..	24332b	63	1288	25.4	-34 42	8.50	9.5	Ko	2	..	42911b
14	555	25.1	- 0 49	9.3	9.9	Go	4	..	24332b	64	1155	25.4	-38 22	8.9	9.1	G5	3	E	40947b
15	672	25.1	- 5 11	8.6	8.7	A3	7	..	23809b	65	261	25.4	-61 37	7.9	8.2	F2	7	..	38370b
16	685	25.1	- 6 37	9.5	9.9	F5	3	..	23809b	66	213	25.4	-67 58	9.0	9.6	Go	4	..	38366b
17	607	25.1	- 7 19	8.9	9.2	F2	3	..	23809b	67	..	25.5	+76 45	..	..	Ao	3	..	6449m
18	682	25.1	-14 47	9.06	10.13	K2	5	..	24339b	68	425	25.5	+63 57	8.6	9.2	G	2	..	37600i
19	1250	25.1	-27 0	9.9	10.0	Go	2	..	45992b	69	619	25.5	+58 26	6.27	6.33	A2	8	0,R	37427i
20	1315	25.1	-36 15	9.6	9.2	F5	3	..	42911b	70	778	25.5	+45 44	5.35	5.63	Fo	7	..	37452i
21	546	25.1	-57 29	8.6	10.4	Ko	1	..	40953b	71	..	25.5	+44 30	..	..	Ko	..	..	..
22	192	25.1	-69 41	5.96	6.2	F2	10	..	20539b	72	732	25.5	+44 30	7.32	8.32	A	3	R	38933i
23	214	25.1	-73 51	9.5	10.5	Ko	2	..	17047b	73	713	25.5	+37 9	8.3	8.6	Fo	2	..	38082i
24	179	25.2	+73 0	8.7	9.2	F8	3	..	38943i	74	578	25.5	+20 27	8.3	9.1	G5	2	..	37415i
25	424	25.2	+64 8	8.9	8.9	B9	3	..	37600i	75	549	25.5	+19 26	7.9	8.4	F8	1	E	37373i
26	675	25.2	+53 55	8.5	8.5	Ao	2	E	38087i	76	514	25.5	+ 8 2	8.7	9.9	K5	2	..	15183b
27	744	25.2	+43 20	8.7	9.5	G5	2	..	38933i	77	503	25.5	+ 5 10	7.71	7.77	A2	6	..	24325b
28	710	25.2	+36 59	8.8	8.9	A2	3	..	38082i	78	543	25.5	+ 5 2	7.15	7.93	G5	6	..	24325b
29	669	25.2	+34 21	9.1	9.7	Go	1	..	38975i	79	666	25.5	-11 59	6.89	7.67	G5	5	E	38073i
30	667	25.2	+34 2	7.79	8.79	Ko	2	..	37416i	80	1313	25.5	-32 38	9.2	9.7	F8	4	3,3	42805b
31	484	25.2	+11 32	9.3	9.8	F8	2	..	15183b	81	258	25.6	+68 27	8.5	8.6	A2	3	..	37600i
32	524	25.2	+ 8 16	9.3	9.9	Go	2	..	15183b	82	275	25.6	+66 57	9.0	9.0	Ao	3	..	38943i
33	610	25.2	- 7 2	9.3	10.3	K	1	R	23809b	83	607	25.6	+61 19	9.2	9.3	A2	2	..	37427i
34	608	25.2	- 7 45	10.2	10.3	A3	1	..	23809b	84	729	25.6	+57 55	8.0	8.0	Ao	2	..	37427i
35	673	25.2	-11 29	8.3	8.7	F5	5	..	24339b	85	781	25.6	+37 11	8.9	8.9	A	1	..	38082i
36	637	25.2	-21 45	8.6	8.5	Fo	7	..	24326b	86	565	25.6	+25 23	9.4	9.5	A2	2	..	37415i
37	1412	25.2	-23 50	6.84	7.2	F5	3	3,10	37034b	87	564	25.6	+17 37	7.22	8.29	K2	4	0,3	38036i
38	1146	25.2	-44 36	9.2	9.9	Ko	2	..	24616b	88	544	25.6	+ 4 50	7.9	8.2	Fo	6	0,5	24325b
39	142	25.3	+75 38	9.5	9.6	A2	3	..	6449m	89	609	25.6	- 4 38	7.55	7.63	A3	8	..	23809b
40	158	25.3	+74 18	8.2	8.7	F8	3	..	37555i	90	674	25.6	- 5 25	4.80	4.78	B9	..	I,R	56,75
41	188	25.3	+73 20	8.5	9.7	K5	1	..	38943i	91	687	25.6	- 6 46	10.2	10.7	F8	2	..	23809b
42	617	25.3	+59 6	8.0	9.0	Ko	3	..	37427i	92	1686	25.6	-24 5	8.5	9.4	K2	3	..	24326b
43	515	25.3	+27 14	5.93	5.93	Ao	8	..	37415i	93	670	25.7	+59 59	8.6	9.7	K2	2	..	37427i
44	593	25.3	+24 55	8.06	8.14	A3	4	..	37415i	94	730	25.7	+57 32	6.41	6.83	F5	..	3,6	56,75
45	564	25.3	- 3 19	9.0	9.4	F5	3	..	24332b	95	776	25.7	+40 36	6.75	6.73	B9	6	..	37452i
46	664	25.3	-12 48	9.8	10.8	Ko	2	..	24339b	96	565	25.7	+17 28	8.42	9.49	K2	1	..	38036i
47	1308	25.3	-32 1	8.2	9.4	Ko	2	0,2	45169b	97	540	25.7	+ 6 53	7.9	8.9	Ko	4	..	24325b
48	1310	25.3	-32 54	10.9	10.6	F8	1	..	42805b	98	644	25.7	- 2 8	9.5	10.1	Go	4	..	24332b
49	231	25.3	-63 51	8.0	9.0	Ko	6	..	38370b	99	643	25.7	- 2 21	9.3	9.4	A3	6	..	24332b
50	234	25.3	-75 20	8.7	9.8	K2	3	0,3	17047b	100	1290	25.7	-29 45	9.2	10.6	Ko	1	..	45992b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	671	25.8	+60 3	8.96	8.96	Ao	2	..	37427i	51	1253	26.2	-35 5	9.2	9.8	F2	2	..	42911b
2	797	25.8	+55 13	7.82	7.82	Ao	4	0,3	37427i	52	1322	26.2	-36 6	7.04	7.5	A2	7	E	40947b
3	734	25.8	+44 32	6.33	6.16	B3	5	..	37452i	53	1161	26.2	-38 54	8.7	9.4	G5	3	E	40947b
4	462	25.8	+23 18	8.2	8.6	F5	4	..	37415i	54	181	26.3	+72 46	9.2	10.2	Ko	1	..	38943i
5	614	25.8	- 7 4	10.2	10.8	G	2	..	23809b	55	767	26.3	+47 5	8.6	8.6	Ao	4	..	38933i
6	426	25.9	+63 34	7.68	7.51	B3	6	2,5R	3760oi	56	674	26.3	+35 6	5.80	5.63	B3	8	..	37416i
7	702	25.9	+52 37	8.8	8.9	A2	2	..	38959i	57	526	26.3	+ 8 25	8.5	9.3	G5	4	..	15183b
8	748	25.9	+43 55	9.2	9.2	Ao	2	..	38933i	58	667	26.3	-12 14	10.0	11.0	Ko	2	..	24339b
9	783	25.9	+37 44	7.38	8.16	G5	3	..	37416i	59	672	26.3	-13 13	10.0	10.8	G5	1	..	24339b
10	689	25.9	- 6 34	8.8	10.0	K5	3	..	23809b	60	650	26.3	-15 54	8.6	9.6	Ko	1	..	46088b
11	691	25.9	-10 5	7.04	8.04	Ko	6	E	38073i	61	622	26.3	-18 49	7.58	8.58	Ko	8	..	24326b
12	676	25.9	-11 48	9.8	10.6	G5	2	..	24339b	62	541	26.3	-56 46	9.2	10.1	F2	2	..	40953b
13	648	25.9	-16 12	9.0	9.8	G5	2	..	24339b	63	751	26.4	+51 58	8.4	9.0	Go	2	..	38087i
14	621	25.9	-18 13	9.8	10.4	Go	2	..	46088b	64	611	26.4	+31 18	7.92	8.92	Ko	3	..	37416i
15	1692	25.9	-24 6	8.5	9.4	Go	4	..	24326b	65	454	26.4	+16 22	8.3	8.8	F8	2	..	38036i
16	1318	25.9	-26 41	8.5	9.7	K5	3	..	45992b	66	516	26.4	+ 7 28	8.3	8.6	Fo	3	..	24325b
17	1248	25.9	-32 59	8.9	8.8	A5	3	..	10428b	67	565	26.4	- 3 15	8.8	9.1	Fo	7	5,3	24332b
18	241	25.9	-65 0	8.5	9.6	K2	3	..	38370b	68	679	26.4	- 5 24	10.4	11.0	G	1	..	23809b
19	693	26.0	+54 38	5.82	5.88	A2	8	2,9	3073b	69	679	26.4	-11 17	8.8	9.8	Ko	5	..	24339b
20	572	26.0	+29 12	8.5	9.5	Ko	2	..	37415i	70	678	26.4	-11 44	9.5	10.3	G5	3	..	24339b
21	541	26.0	+ 6 38	9.3	9.7	F5	2	..	15183b	71	1171	26.4	-28 16	7.81	8.2	F5	8	0,3R	45992b
22	560	26.0	- 0 50	6.63	6.63	Ao	6	..	37338i	72	397	26.5	+64 31	9.4	9.4	A	1	..	3760oi
23	646	26.0	- 2 49	9.2	10.2	Ko	4	..	24332b	73	701	26.5	+41 10	9.0	9.0	Ao	3	..	38082i
24	609	26.0	-15 12	9.5	10.3	G5	2	..	24339b	74	668	26.5	-12 5	10.2	11.2	Ko	1	..	24339b
25	1132	26.0	-42 49	7.34	8.1	A5	7	..	12637b	75	674	26.5	-13 51	7.56	7.56	Ao	8	..	24339b
26	285	26.0	-58 14	7.3	7.8	K5	7	..	40953b	76	688	26.5	-14 42	9.36	10.36	Ko	2	..	24339b
27	244	26.0	-64 41	8.9	9.9	Ko	2	..	38370b	77	683	26.5	-17 31	8.50	8.50	Ao	6	E	24326b
28	233	26.0	-69 57	9.40	10.2	Ko	1	..	38366b	78	623	26.5	-18 28	8.8	9.4	Go	3	..	46088b
29	160	26.1	+75 3	10.2	10.3	A2	2	..	6449m	79	619	26.5	-22 49	10.0	10.6	F5	2	..	24326b
30	579	26.1	+62 20	8.5	8.6	A2	2	..	3760oi	80	1357	26.5	-30 8	9.2	9.4	Go	3	..	45992b
31	798	26.1	+55 59	8.23	9.23	Ko	2	..	38959i	81	1356	26.5	-30 41	8.1	8.5	Fo	5	..	10428b
32	799	26.1	+55 46	8.77	8.77	Ao	2	..	38959i	82	1085	26.5	-42 59	5.71	6.6	A3	..	..	56,120
33	749	26.1	+43 26	9.2	10.6	Mb	..	..	M	83	245	26.5	-64 35	8.5	9.0	F8	6	..	38370b
34	571	26.1	+29 39	7.96	7.96	Ao	4	0,3	37415i	84	63	26.5	-82 6	9.0	10.1	K2	4	..	20538b
35	463	26.1	+23 18	7.9	8.9	Ko	3	..	37415i	85	581	26.6	+62 12	8.21	9.28	K2	2	..	37427i
36	494	26.1	+18 27	8.3	8.3	Ao	4	..	38036i	86	787	26.6	+45 23	9.2	9.8	G	2	..	38933i
37	648	26.1	- 2 36	8.9	9.9	Ko	4	..	24332b	87	613	26.6	- 3 51	7.12	7.90	G5	8	0,3	23809b
38	690	26.1	- 5 59	8.3	9.1	G5	6	..	23809b	88	614	26.6	- 4 12	9.5	10.0	F8	3	..	24332b
39	686	26.1	- 9 10	9.5	9.9	F5	2	..	24339b	89	689	26.6	-14 28	9.8	10.3	F8	2	..	24339b
40	693	26.1	-19 26	9.5	10.0	K2	1	..	46088b	90	612	26.6	-14 51	10.4	10.4	A	1	R	24339b
41	694	26.1	-19 47	7.48	8.2	Go	8	..	24326b	91	684	26.6	-16 58	9.3	9.8	F8	1	..	46088b
42	62	26.1	-82 24	10.0	10.4	F5	1	..	20538b	92	1064	26.6	-47 44	9.1	9.0	Go	4	..	46083b
43	672	26.2	+59 24	8.0	8.0	Ao	3	..	37427i	93	263	26.6	-61 29	10.1	11.2	K2	2	..	23802b
44	850	26.2	+47 36	6.69	6.97	Fo	5	..	37452i	94	623	26.7	+58 16	8.5	8.5	B8	3	..	37427i
45	784	26.2	+45 55	8.6	9.7	K2	4	..	38087i	95	517	26.7	+ 7 13	8.1	8.9	G5	4	..	24325b
46	751	26.2	+43 16	9.2	9.3	A2	3	..	38933i	96	669	26.7	-12 10	10.2	11.2	Ko	1	..	24339b
47	714	26.2	+35 19	7.32	7.82	F8	4	..	37416i	97	1322	26.7	-32 36	8.9	10.3	Ko	2	5,1	42805b
48	556	26.2	+ 2 19	8.5	8.8	Fo	3	0,5	24325b	98	1254	26.7	-33 53	9.5	9.4	Go	2	..	10428b
49	612	26.2	- 4 12	9.5	9.9	F5	4	..	24332b	99	1029	26.7	-41 43	6.10	6.7	F5	10	..	12637b
50	664	26.2	- 8 27	9.5	10.3	G5	2	..	23809b	100	253	26.7	-60 19	9.3	11.5	Ma	1	..	23802b

THE HENRY DRAPER CATALOGUE.

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3^h 26^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	264	26.7	-61 32	8.4	9.7	G5	4	..	38370b	51	690	27.2	-9 44	9.36	9.64	Fo	4	..	24339b
2	107	26.8	+79 13	8.4	9.4	Ko	1	..	37558i	52	625	27.2	-18 49	8.7	9.8	K2	2	..	24326b
3	675	26.8	+59 43	6.48	6.90	F5	6	..	37427i	53	1705	27.2	-24 12	9.1	9.4	G5	4	..	24326b
4	677	26.8	+35 4	7.47	8.25	G5	3	..	37416i	54	1303	27.2	-29 48	9.58	11.2	Ko	1	..	45992b
5	694	26.8	-6 25	8.9	10.0	K2	2	..	23809b	55	1362	27.2	-30 51	9.2	10.6	G5	2	5,1	42805b
6	1425	26.8	-23 31	9.2	10.6	Ko	1	..	24326b	56	1328	27.2	-32 41	9.5	11.2	Ko	1	..	42805b
7	1326	26.8	-25 59	9.9	9.4	F5	3	..	45992b	57	1168	27.2	-37 56	9.0	9.1	A5	4	5,3	24616b
8	1296	26.8	-29 26	9.7	10.6	Ko	1	..	45992b	58	957	27.2	-40 53	10.6	10.3	F5	1	..	24616b
9	1324	26.8	-32 52	8.9	11.2	K2	1	..	42805b	59	1142	27.2	-42 52	9.4	9.7	F8	2	..	24616b
10	161	26.9	+74 26	7.60	8.60	Ko	4	0,6-	37630i	60	677	27.3	+59 11	8.0	8.0	B8	4	..	37427i
11	737	26.9	+44 45	9.4	9.4	Ao	1	..	38933i	61	783	27.3	+40 29	9.1	9.5	F5	2	..	38082i
12	811	26.9	+39 34	5.80	5.80	Ao	7	E	37452i	62	458	27.3	+16 15	7.93	7.45	F5	5	..	38036i
13	639	26.9	+33 0	7.58	7.92	F2	4	..	37416i	63	499	27.3	+15 11	8.54	9.10	Go	1	..	37373i
14	488	26.9	+12 1	8.5	8.6	A3	3	..	37470i	64	649	27.3	-2 2	9.3	10.3	Ko	3	..	24332b
15	487	26.9	+11 12	6.68	6.68	Ao	8	..	37470i	65	695	27.3	-6 20	8.8	8.9	A2	5	..	23809b
16	454	26.9	+10 24	8.47	9.03	Go	2	..	37470i	66	698	27.3	-19 39	8.6	9.2	K2	3	..	24326b
17	670	26.9	-12 47	9.5	10.3	G5	3	..	24339b	67	1330	27.3	-26 6	10.2	10.0	Ko	2	..	45992b
18	675	26.9	-13 5	8.6	8.7	A2	8	..	24339b	68	1176	27.3	-28 1	9.5	10.3	K2	1	..	45992b
19	685	26.9	-17 8	7.56	7.98	F5	8	E	24326b	69	..	27.4	+75 34	..	..	A2	2	..	6449m
20	1256	26.9	-26 57	7.7	9.1	Ko	7	0,1	45992b	70	143	27.4	+75 24	6.38	7.16	G5	7	0,8	37630i
21	1158	26.9	-44 29	9.8	10.5	Go	1	..	24616b	71	582	27.4	+62 59	7.58	8.58	Ko	3	2,3	37600i
22	277	27.0	+67 38	7.8	8.3	F8	4	..	37600i	72	705	27.4	+60 50	8.8	8.8	B9	3	..	37427i
23	610	27.0	+61 57	8.9	8.9	Ao	1	..	37600i	73	740	27.4	+44 59	9.07	9.07	Ao	2	..	38933i
24	757	27.0	+43 30	9.2	9.2	Ao	2	..	38933i	74	743	27.4	+38 58	8.0	9.2	K5	2	5,2	38081i
25	486	27.0	+3 32	8.3	8.6	F2	5	3,4	24325b	75	503	27.4	+19 2	8.1	8.1	Ao	4	E	38036i
26	561	27.0	-0 3	8.5	9.5	Ko	4	..	24332b	76	557	27.4	+2 48	8.3	9.3	Ko	4	2,5	24325b
27	615	27.0	-4 3	10.8	11.2	F5	1	..	24332b	77	618	27.4	-4 42	8.10	8.66	Go	6	..	23809b
28	1168	27.0	-45 5	9.08	9.0	Fo	3	..	46083b	78	618	27.4	-7 26	7.35	7.85	F8	8	..	23809b
29	216	27.0	-73 46	8.8	9.1	Fo	5	..	20539b	79	659	27.4	-20 42	8.2	9.5	G5	4	..	24326b
30	430	27.1	+63 55	8.6	8.6	B8	4	1,4	37600i	80	959	27.4	-40 51	9.0	9.7	G5	2	..	12637b
31	949	27.1	+48 17	7.25	7.25	Ao	5	R	38087i	81	1071	27.4	-47 43	6.01	6.7	Ao	10	..	12647b
32	769	27.1	+46 30	8.9	9.0	A2	2	..	38087i	82	542	27.4	-56 15	9.1	9.6	Fo	3	..	40953b
33	528	27.1	+9 2	5.64	5.59	B8	9	R	37470i	83	275	27.4	-62 53	9.4	10.6	K5	1	..	23802b
34	546	27.1	+4 18	9.3	9.9	Go	1	..	24325b	84	504	27.5	+23 1	8.3	8.4	A3	6	..	37415i
35	568	27.1	-3 46	10.4	10.8	F5	4	..	24332b	85	570	27.5	-3 39	8.4	8.4	Ao	7	0,2	23809b
36	617	27.1	-7 10	9.2	10.3	K2	2	..	23809b	86	682	27.5	-11 5	9.3	10.3	Ko	4	..	24339b
37	676	27.1	-12 54	10.0	10.3	F2	2	..	24339b	87	683	27.5	-11 35	9.0	9.3	Fo	4	..	24339b
38	1326	27.1	-37 43	7.49	7.5	Go	6	..	40947b	88	1258	27.5	-33 53	7.20	7.9	G5	5	..	10428b
39	956	27.1	-40 27	8.3	9.1	Go	4	..	12637b	89	247	27.5	-64 18	8.3	9.3	Ko	5	..	38370b
40	135	27.1	-77 6	6.89	7.0	Ao	10	..	14359b	90	162	27.6	+74 57	8.32	9.50	K5	4	..	6449m
41	..	27.2	+75 3	..	..	Ao	2	..	6449m	91	190	27.6	+74 8	8.9	9.0	A2	5	2,2	6449m
42	770	27.2	+46 56	9.4	9.5	A2	2	..	38087i	92	505	27.6	+23 3	8.5	9.3	G5	1	..	37415i
43	786	27.2	+37 41	7.20	7.18	B9	6	..	37416i	93	548	27.6	+4 54	7.40	8.18	G5	6	..	24325b
44	787	27.2	+37 27	7.95	9.02	K2	1	..	37416i	94	668	27.6	-8 49	8.6	9.6	Ko	3	..	23809b
45	521	27.2	+27 56	9.4	9.4	A	1	..	37488i	95	693	27.6	-8 57	8.26	8.76	F8	6	..	23809b
46	529	27.2	+8 45	8.9	9.9	Ko	3	..	15183b	96	644	27.6	-21 35	8.8	8.5	B5	6	..	24326b
47	488	27.2	+4 3	9.3	10.4	K2	1	..	24325b	97	1333	27.6	-25 57	6.31	6.4	Ao	10	0,7-	24326b
48	666	27.2	-8 11	7.40	7.40	Ao	8	..	23809b	98	1437	27.6	-31 35	9.7	11.4	G5	1	..	42805b
49	691	27.2	-9 9	8.9	9.2	Fo	3	..	23809b	99	1332	27.6	-32 1	7.8	7.9	Ao	7	..	10428b
50	692	27.2	-9 31	10.0	10.6	Go	2	..	24339b	100	1170	27.6	-44 58	9.28	10.2	G5	2	..	24616b

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3h 27m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	234	27.6	-63 18	4.80	5.22	F5	..	R	28,196	51	614	28.2	-14 52	9.71	10.78	K2	1	..	24339b
2	218	27.6	-73 29	8.3	8.6	Fo	6	..	20539b	52	1452	28.2	-24 58	7.20	7.0	A2	5	2,4-	37034i
3	709	27.7	+41 36	9.4	9.4	A	1	..	38082i	53	1336	28.2	-26 0	8.3	9.7	Mc	2	R	24326b
4	717	27.7	+35 44	8.7	8.7	A	1	..	37488i	54	1440	28.2	-31 55	7.95	8.3	F2	4	..	10428b
5	614	27.7	+31 44	8.7	9.8	K2	1	..	38975i	55	1339	28.2	-32 39	8.1	8.1	A3	5	..	10428b
6	559	27.7	+ 2 15	9.3	9.4	A5	4	3,3	24332b	56	64	28.2	-82 37	8.07	8.3	Fo	7	..	20538b
7	562	27.7	- 0 50	8.0	8.6	Go	6	..	24332b	57	680	28.3	+59 20	8.6	8.6	B9	3	..	37427i
8	651	27.7	- 2 0	8.6	8.9	Fo	6	..	24332b	58	682	28.3	+35 0	8.7	9.5	G5	1	..	38975i
9	619	27.7	- 4 46	8.65	9.65	Ko	3	..	23809b	59	506	28.3	+24 15	9.1	9.5	F5	3	..	6447m
10	672	27.7	-12 19	8.9	9.2	F2	7	..	24339b	60	484	28.3	+21 22	9.2	9.3	A2	2	E	6447m
11	677	27.7	-13 27	9.8	10.2	F5	2	..	24339b	61	455	28.3	+ 9 53	9.0	10.2	K5	1	..	15183b
12	1335	27.7	-32 32	9.6	11.2	G5	1	..	42805b	62	453	28.3	+ 9 21	8.7	9.8	K2	2	..	15183b
13	1329	27.7	-36 58	9.6	10.1	F8	3	..	42805b	63	550	28.3	+ 6 44	9.3	9.4	A2	2	..	15183b
14	534	27.7	-55 9	7.91	8.6	G5	4	..	20263b	64	563	28.3	- 0 14	8.4	8.7	Fo	5	..	24332b
15	287	27.7	-58 9	9.1	10.0	K5	1	..	40953b	65	684	28.3	-10 52	10.0	10.5	F8	2	..	24339b
16	467	27.8	+23 29	9.5	10.0	F8	2	E	6447m	66	689	28.3	-17 9	9.0	9.1	A2	4	..	46088b
17	568	27.8	+13 27	7.33	8.11	G5	5	..	37470i	67	1715	28.3	-23 58	9.9	9.7	B9	3	..	24326b
18	549	27.8	+ 5 7	9.21	9.99	G5	1	..	24325b	68	967	28.3	-40 43	9.6	9.7	Ko	1	..	42911b
19	1075	27.8	-46 58	9.0	9.1	F5	2	..	12647b	69	280	28.3	-58 55	8.1	8.5	F2	6	..	40953b
20	731	27.9	+57 29	9.2	9.6	F5	2	..	37427i	70	745	28.4	+45 5	9.07	9.05	B9	2	..	38933i
21	953	27.9	+48 48	8.5	9.7	K5	2	..	38087i	71	506	28.4	+22 39	9.2	9.8	Go	3	..	6447m
22	742	27.9	+44 27	7.76	8.76	Ko	3	..	38933i	72	575	28.4	+17 31	6.39	7.39	Ko	6	..	37373i
23	470	27.9	+23 54	7.9	7.9	B9	3	..	37415i	73	521	28.4	+ 7 57	8.7	8.8	A5	3	E	38104i
24	469	27.9	+23 29	7.9	8.9	Ko	3	..	37415i	74	552	28.4	+ 6 35	7.9	8.7	G5	5	..	24325b
25	1306	27.9	-29 22	8.5	8.5	A2	7	3,2	45992b	75	654	28.4	- 1 51	9.5	9.8	F2	3	..	24332b
26	1335	27.9	-36 3	9.2	9.5	Go	2	..	42911b	76	621	28.4	- 4 43	8.50	9.28	G5	4	..	23809b
27	1091	27.9	-43 17	9.8	10.5	G5	1	..	24616b	77	694	28.4	-10 23	8.2	8.5	F2	8	..	24339b
28	990	27.9	-48 29	8.7	10.2	K5	2	..	46083b	78	685	28.4	-11 31	9.5	10.3	G5	3	..	24339b
29	708	28.0	+60 14	9.7	9.8	A5	2	..	37427i	79	700	28.4	-19 36	8.8	9.2	F5	4	..	24326b
30	816	28.0	+39 57	8.1	9.1	Ko	3	..	38082i	80	1309	28.4	-29 1	8.9	9.4	F8	6	..	45992b
31	575	28.0	+14 20	8.3	9.7	Ma	3	..	37470i	81	1310	28.4	-29 33	9.7	9.7	F8	5	..	45992b
32	551	28.0	+ 4 20	8.9	9.0	A3	4	2,4	15183b	82	1441	28.4	-31 25	9.7	11.2	Ko	1	..	42805b
33	490	28.0	+ 3 47	9.3	9.8	F8	2	..	24325b	83	1265	28.4	-33 51	8.9	9.7	G5	1	..	10428b
34	508	28.0	- 1 38	8.5	9.3	G5	4	..	24332b	84	1042	28.4	-40 56	9.2	9.1	F5	3	..	12637b
35	571	28.0	- 3 17	9.2	10.2	Ko	4	..	24332b	85	209	28.4	-71 48	9.6	10.0	F5	1	..	17047b
36	622	28.0	- 7 41	9.0	9.4	F5	5	..	23809b	86	279	28.5	+67 40	8.0	8.8	G5	4	..	38943i
37	1169	28.0	-44 10	8.2	9.0	K5	2	..	12637b	87	711	28.5	+60 42	9.4	9.4	A	1	..	37427i
38	193	28.0	-69 52	9.4	10.0	Go	2	..	38366b	88	766	28.5	+43 30	8.0	9.1	K2	2	..	38933i
39	744	28.1	+45 7	7.82	8.89	K2	3	..	38933i	89	786	28.5	+42 14	8.8	8.8	Ao	3	..	38933i
40	471	28.1	+23 58	9.1	9.1	Ao	3	..	6447m	90	749	28.5	+38 15	6.99	7.27	Fo	7	..	38082i
41	248	28.1	-63 56	9.1	9.9	G5	3	..	38370b	91	473	28.5	+24 7	5.92	5.98	A2	8	0,10	37415i
42	191	28.2	+73 51	9.2	10.3	K2	1	..	6449m	92	509	28.5	+22 11	8.7	9.2	F8	3	..	6447m
43	398	28.2	+65 1	8.00	8.50	F8	6	0,4	37600i	93	553	28.5	+ 7 6	9.0	9.1	A5	3	..	15183b
44	747	28.2	+38 28	7.88	8.16	Fo	5	..	38082i	94	572	28.5	- 2 53	9.0	10.0	Ko	8	..	24332b
45	573	28.2	+17 54	8.3	9.3	Ko	2	..	37373i	95	622	28.5	- 4 20	8.2	9.4	K5	3	..	23809b
46	509	28.2	+ 6 1	9.3	10.3	Ko	2	..	15183b	96	696	28.5	-10 25	8.9	9.0	A3	6	..	24339b
47	652	28.2	- 2 12	7.62	8.40	G5	4	..	37338i	97	627	28.5	-18 45	8.6	9.0	F5	4	..	24326b
48	684	28.2	- 4 57	9.8	10.4	Go	2	..	23809b	98	649	28.5	-21 8	9.2	9.7	F8	2	..	24326b
49	697	28.2	- 9 48	3.81	4.81	Ko	..	R	56,75	99	1270	28.5	-35 19	8.2	10.2	Ko	2	..	42911b
50	679	28.2	-13 34	9.2	10.3	K2	3	..	24339b	100	969	28.5	-40 20	10.0	10.0	Go	3	..	24616b

THE HENRY DRAPER CATALOGUE.

22100

3^h 28^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Fl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Fl. No.
1	1043	28.5	-41 52	9.8	9.7	F8	2	..	24616b	51	655	29.0	-2 36	9.5	10.0	F8	7	..	24332b
2	1065	28.5	-50 27	8.2	9.6	Ko	3	..	46083b	52	692	29.0	-17 17	9.2	10.4	K5	1	..	46088b
3	829	28.5	-51 53	9.4	10.2	Ko	1	..	46085b	53	1066	29.0	-50 14	8.1	8.7	F2	4	..	20263b
4	220	28.5	-73 47	8.1	8.9	G5	6	..	20539b	54	249	29.0	-64 28	8.2	9.0	G5	5	..	38370b
5	801	28.6	+55 32	6.82	6.77	B8	6	0,5	3073b	55	164	29.1	+75 3	9.5	10.5	Ko	2	..	6449m
6	474	28.6	+23 30	9.4	10.5	K2	1	..	6447m	56	774	29.1	+46 14	7.7	8.5	G5	2	..	37452i
7	510	28.6	+22 26	8.7	9.7	Ko	3	..	6447m	57	789	29.1	+42 33	8.4	9.4	Ko	3	5,2	38933i
8	605	28.6	+0 39	10.0	11.0	K	2	..	24332b	58	753	29.1	+38 58	8.9	8.9	Ao	2	..	38081i
9	565	28.6	-0 44	8.6	9.6	Ko	4	..	24332b	59	685	29.1	+35 8	8.52	9.30	G5	2	5,2	37416i
10	623	28.6	-3 55	11.1	12.1	K	1	..	24332b	60	680	29.1	+33 19	7.8	8.1	Fo	2	..	38975i
11	656	28.6	-15 53	9.22	10.40	K5	2	0,1	45177b	61	566	29.1	-0 11	9.3	9.9	Go	2	..	24332b
12	1371	28.6	-30 14	8.5	9.4	F2	4	..	45992b	62	688	29.1	-11 0	10.7	11.1	F5	1	..	24339b
13	584	28.7	+62 37	7.84	7.84	Ao	5	..	37427i	63	703	29.1	-19 24	8.8	9.6	Go	4	..	24326b
14	794	28.7	+37 41	7.58	7.58	Ao	6	..	38082i	64	1373	29.1	-30 51	9.2	10.6	F5	1	..	45992b
15	553	28.7	+20 1	8.45	9.63	K5	..	..	M	65	991	29.1	-49 30	7.5	8.8	Ko	3	..	20263b
16	554	28.7	+19 27	8.1	8.1	Ao	2	..	37373i	66	276	29.1	-62 21	6.72	7.6	Go	9	..	38370b
17	697	28.7	-10 12	9.8	10.2	F5	3	..	24339b	67	221	29.1	-73 54	8.5	8.6	A2	8	..	20539b
18	681	28.7	-13 21	8.8	9.2	F5	5	..	24339b	68	505	29.2	+15 47	8.6	9.2	G	1	..	37373i
19	696	28.7	-13 57	9.2	9.3	A2	5	..	24339b	69	618	29.2	+1 21	10.0	11.0	K	2	..	24332b
20	537	28.7	-55 35	7.3	8.2	K5	5	0,4	40953b	70	607	29.2	+1 4	8.44	9.51	K2	5	0,3	24332b
21	163	28.8	+74 58	9.2	9.6	F5	3	..	6449m	71	687	29.2	-5 24	9.2	10.2	Ko	1	..	23809b
22	778	28.8	+42 34	7.37	7.87	F8	4	..	37452i	72	683	29.2	-13 25	9.8	10.6	G5	1	..	24339b
23	818	28.8	+40 1	8.67	9.01	F2	2	..	38082i	73	617	29.2	-15 28	7.08	7.50	F5	9	..	24339b
24	616	28.8	+31 41	6.62	6.90	Fo	6	..	37416i	74	661	29.2	-20 25	8.9	10.0	G5	2	..	24326b
25	544	28.8	+28 59	9.4	9.4	Ao	2	..	37415i	75	1048	29.2	-41 17	9.6	9.5	F5	2	..	42911b
26	491	28.8	+3 39	9.7	10.0	Fo	2	..	24325b	76	833	29.2	-51 10	8.4	9.0	G5	3	..	20263b
27	512	28.8	-0 57	9.3	10.3	Ko	3	..	24332b	77	415	29.2	-52 49	7.4	8.1	G5	5	..	20263b
28	624	28.8	-7 45	7.8	7.9	A5	8	..	23809b	78	822	29.3	+39 15	8.9	10.1	K5	..	..	M
29	625	28.8	-7 46	8.4	8.7	Fo	8	..	23809b	79	553	29.3	+30 53	9.1	9.7	Go	2	..	37488i
30	698	28.8	-9 42	9.41	9.69	Fo	3	..	24339b	80	525	29.3	+27 13	8.9	9.4	F8	2	..	37415i
31	1721	28.8	-24 7	8.1	9.1	Ko	5	..	24326b	81	574	29.3	+26 31	8.5	8.9	F5	3	..	37415i
32	1096	28.8	-43 15	9.6	10.3	G5	1	..	24616b	82	532	29.3	+8 49	7.63	7.69	A2	4	0,4	38104i
33	234	28.8	-67 33	8.9	9.9	Ko	2	..	38366b	83	554	29.3	+6 52	9.3	10.1	G5	3	..	15183b
34	..	28.9	+74 4	..	..	A3	1	..	6449m	84	701	29.3	-9 27	9.5	9.8	F2	2	..	24339b
35	703	28.9	+52 35	7.69	8.87	K5	2	..	3073b	85	684	29.3	-13 24	9.5	10.5	Ko	2	..	24339b
36	773	28.9	+46 46	6.76	6.74	B9	5	..	37452i	86	1442	29.3	-23 17	8.3	8.8	F2	6	..	24326b
37	751	28.9	+38 49	8.7	8.8	A2	1	..	38081i	87	1318	29.3	-29 21	8.9	9.2	Fo	5	..	45992b
38	684	28.9	+34 47	8.7	9.1	F5	2	..	38975i	88	1346	29.3	-32 51	8.9	9.7	G5	1	..	10428b
39	476	28.9	+23 45	9.5	10.0	F8	2	..	6447m	89	254	29.3	-60 12	7.62	7.5	A2	8	0,9	38370b
40	697	28.9	-14 49	9.26	10.04	G5	3	..	24339b	90	713	29.4	+60 22	9.5	9.6	A5	2	..	37427i
41	1175	28.9	-44 45	8.08	8.4	F2	5	..	12637b	91	628	29.4	+58 20	9.2	10.3	K2	1	..	38959i
42	102	28.9	-79 1	9.1	10.5	Ma	1	..	20538b	92	857	29.4	+47 51	4.26	4.14	B5p	..	0,R	2464c
43	81	28.9	-80 46	9.2	9.3	A2	5	..	20538b	93	714	29.4	+42 0	8.4	9.2	G5	3	..	38933i
44	854	29.0	+47 27	9.2	9.2	B9	3	..	38087i	94	723	29.4	+35 9	9.07	9.13	A2	1	..	38975i
45	572	29.0	+26 16	8.3	8.4	A2	3	..	37415i	95	619	29.4	+31 21	6.83	7.11	Fo	5	..	37416i
46	477	29.0	+23 11	8.7	8.8	A5	4	..	6447m	96	526	29.4	+27 31	8.7	8.8	A3	5	1,3	37415i
47	511	29.0	+22 45	8.8	9.8	Ko	2	..	6447m	97	555	29.4	+6 30	9.3	9.9	Go	2	..	15183b
48	531	29.0	+8 21	8.9	9.3	F5	5	..	15183b	98	554	29.4	+5 1	8.10	8.10	Ao	6	..	24325b
49	562	29.0	+3 6	8.0	8.8	G5	5	5,3	24325b	99	608	29.4	+0 21	8.3	9.1	G5	4	..	24332b
50	656	29.0	-2 30	9.5	10.3	G5	4	..	24332b	100	574	29.4	-3 34	8.4	9.4	Ko	8	0,4	24332b

22200

3^h 29^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	627	29.4	m. 0 51	8.0	9.0	Ko	5	..	23809b	51	235	29.8	-63 31	9.6	10.2	Go	2	..	23802b
2	699	29.4	-14 11	9.0	10.1	K2	5	..	24339b	52	195	29.8	-66 50	5.78	5.73	B8	..	0,10	56,120
3	628	29.4	-21 58	4.32	4.27	B8	..	R	28,196	53	824	29.9	+56 23	6.79	6.55	Bo	6	2,7	37427i
4	627	29.4	-22 16	9.2	10.6	A	1	R	24326b	54	461	29.9	+11 3	8.3	8.8	F8	3	..	37470i
5	1154	29.4	-42 41	9.4	9.7	Go	4	..	24616b	55	512	29.9	+5 24	7.9	8.3	F5	6	..	24325b
6	1178	29.4	-44 17	9.6	10.3	Go	2	..	24616b	56	662	29.9	-2 46	10.9	11.5	Go	2	..	24332b
7	255	29.4	-60 51	10.2	11.2	Ko	2	..	23802b	57	676	29.9	-12 38	8.2	8.7	F8	8	..	24339b
8	246	29.4	-65 20	8.5	9.5	Ko	4	..	38370b	58	686	29.9	-12 57	10.2	11.3	K2	1	..	24339b
9	747	29.5	+44 59	8.5	9.1	Go	4	..	38933i	59	687	29.9	-13 7	9.5	10.0	F8	3	..	24339b
10	715	29.5	+41 24	8.4	9.2	G5	2	..	38933i	60	629	29.9	-22 23	9.2	11.2	K5	1	..	24326b
11	511	29.5	+6 5	6.52	7.08	Go	8	..	24325b	61	1445	29.9	-23 11	9.4	9.4	A2	5	..	24326b
12	609	29.5	+0 35	8.9	10.1	K5	1	..	24332b	62	1450	29.9	-31 25	6.18	6.8	F5	9	..	10428b
13	674	29.5	-12 24	9.2	10.0	G5	3	..	24339b	63	1082	29.9	-47 7	8.5	8.8	Go	5	..	46083b
14	657	29.5	-16 10	9.5	10.6	K2	1	..	45177b	64	216	29.9	-68 32	8.6	9.6	Ko	1	..	17047b
15	663	29.5	-20 43	8.6	8.5	A2	7	..	24326b	65	353	30.0	+65 19	7.40	7.40	Ao	6	..	37556i
16	292	29.5	-58 26	8.3	8.8	F5	5	..	40953b	66	859	30.0	+47 11	9.5	9.5	Ao	2	..	38087i
17	291	29.5	-58 44	9.1	9.5	G5	3	..	40953b	67	779	30.0	+46 53	8.7	9.9	K5	2	..	38087i
18	247	29.5	-65 30	9.1	9.2	A3	5	..	38370b	68	771	30.0	+43 44	8.9	8.9	B9	2	..	38933i
19	235	29.5	-67 53	8.8	9.4	Go	2	..	38366b	69	529	30.0	+27 16	8.1	9.1	Ko	4	5,3	37415i
20	128	29.6	+76 50	7.90	7.90	Ao	5	0,4-	37555i	70	622	30.0	+1 39	9.3	9.8	F8	3	2,4	24325b
21	683	29.6	+59 20	9.0	9.1	A3	2	..	37427i	71	621	30.0	+1 27	8.7	10.1	Ma	4	E	24332b
22	684	29.6	+53 38	8.5	8.5	Ao	3	..	3073b	72	577	30.0	-2 56	10.8	11.6	G5	1	..	24332b
23	777	29.6	+46 55	8.6	9.4	G5	2	..	38087i	73	694	30.0	-5 32	10.2	10.7	F8	1	..	23809b
24	689	29.6	+34 36	7.62	7.76	A5	3	..	37451i	74	1736	30.0	-24 54	9.60	9.8	F8	2	..	24326b
25	507	29.6	+18 35	7.87	9.05	K5	2	..	37601i	75	1192	30.0	-28 4	10.4	10.3	Go	1	..	45992b
26	460	29.6	+10 43	8.1	8.7	Go	3	..	37470i	76	1353	30.0	-32 6	9.2	9.4	F5	2	..	10428b
27	563	29.6	+3 1	8.5	9.5	Ko	3	..	24325b	77	1276	30.0	-33 47	9.2	10.3	Ko	3	..	42805b
28	..	29.6	-16 30	var.	var.	Md	1	0,1R	45177b	78	541	30.0	-55 14	9.1	9.7	Go	3	0,2-	46085b
29	1347	29.6	-37 27	9.0	9.8	Ko	3	..	42805b	79	104	30.0	-78 57	9.1	10.5	Ma	1	..	20538b
30	1185	29.6	-45 53	8.8	8.9	F5	2	..	12647b	80	579	30.1	+29 40	7.76	7.76	Ao	4	..	37488i
31	1071	29.6	-50 43	5.60	7.1	Ko	..	0,9	56,120	81	479	30.1	+23 36	9.1	9.9	G5	1	..	6447m
32	658	29.7	-2 39	9.5	10.5	Ko	3	..	24332b	82	513	30.1	-1 4	8.5	9.3	G5	7	..	24332b
33	620	29.7	-15 3	8.2	9.2	Ko	5	..	24339b	83	695	30.1	-5 14	8.8	10.0	K5	2	..	23809b
34	1324	29.7	-29 34	9.7	9.7	Ko	3	..	45992b	84	662	30.1	-16 34	8.7	9.7	Ko	3	..	24339b
35	1378	29.7	-30 42	9.7	10.9	G	1	..	45992b	85	1279	30.1	-35 8	9.0	9.8	Ko	3	..	42911b
36	248	29.7	-64 59	8.61	9.3	G5	5	..	38370b	86	1188	30.1	-38 22	8.3	9.4	G5	2	..	42911b
37	65	29.7	-82 50	8.00	8.6	F5	8	..	20538b	87	998	30.1	-49 15	8.1	9.0	Ko	2	..	20263b
38	166	29.8	+74 49	9.7	9.7	Ao	3	..	6449m	88	196	30.1	-66 38	8.4	9.6	K5	4	E	38370b
39	576	29.8	+25 30	9.5	9.9	F5	2	..	6447m	89	213	30.2	+71 19	8.5	8.8	F2	2	..	37555i
40	576	29.8	-3 45	7.67	7.73	A2	5	0,9	37338i	90	221	30.2	+69 23	9.0	9.0	Ao	3	0,2	38165i
41	702	29.8	-6 44	9.8	11.0	K5	1	..	23809b	91	792	30.2	+42 56	8.0	9.1	K2	3	..	38933i
42	629	29.8	-7 43	8.8	10.0	K5	3	..	23809b	92	547	30.2	+28 37	8.2	8.7	F8	3	0,2	37415i
43	704	29.8	-10 12	6.27	6.27	Ao	..	..	56,75	93	534	30.2	+8 21	8.9	9.2	F2	5	..	15183b
44	691	29.8	-11 8	9.2	10.2	Ko	3	..	24339b	94	514	30.2	+6 4	8.5	8.5	Ao	3	..	24325b
45	658	29.8	-15 57	10.0	10.8	G5	2	..	45177b	95	495	30.2	+3 11	9.3	9.6	F2	2	..	24325b
46	1191	29.8	-28 25	10.6	10.3	F5	2	..	45992b	96	1188	30.2	-44 55	8.48	9.4	K2	2	..	12637b
47	1379	29.8	-30 37	9.7	10.6	K5	1	..	45992b	97	734	30.3	+57 21	9.0	9.3	F	2	R	37427i
48	1449	29.8	-30 58	7.20	8.5	G5	6	..	10428b	98	698	30.3	+54 50	8.4	8.2	B	4	R	38959i
49	1081	29.8	-47 4	8.6	8.9	Go	4	..	46083b	99	621	30.3	+31 42	8.8	9.2	F5	2	3,2	37488i
50	416	29.8	-52 8	8.9	9.7	G5	2	..	46085b	100	578	30.3	-3 11	9.8	10.8	Ko	2	..	24332b

THE HENRY DRAPER CATALOGUE.

22300

3^h 30^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	675	30.3	08 12	9.2	9.3	A3	4	..	23809b	51	773	30.8	+43 13	8.2	8.2	B9	3	..	37452i
2	693	30.3	-10 53	10.7	11.7	K0	1	..	24339b	52	796	30.8	+40 12	7.87	8.87	K0	4	..	38081i
3	631	30.3	-22 29	8.8	10.5	K5	2	..	24326b	53	829	30.8	+39 45	7.17	7.15	B9	4	..	37452i
4	1738	30.3	-24 41	9.5	9.4	F5	3	..	24326b	54	537	30.8	+ 8 33	7.9	8.9	K0	3	..	37470i
5	250	30.3	-64 1	8.9	9.2	F0	5	..	38370b	55	631	30.8	- 3 55	9.8	10.2	F5	3	..	24332b
6	682	30.4	+34 1	6.98	7.98	K0	4	..	38975i	56	1745	30.8	-24 39	7.55	8.2	K0	6	..	24326b
7	556	30.4	+30 45	8.5	8.8	F0	2	..	37416i	57	1353	30.8	-37 34	9.6	9.8	F5	3	..	42805b
8	512	30.4	+25 3	9.21	9.49	F0	3	..	6447m	58	281	30.8	-58 59	8.2	8.8	A0	6	..	40953b
9	507	30.4	+16 9	7.8	8.4	G0	4	..	37373i	59	265	30.8	-60 55	7.46	8.1	F5	7	..	38370b
10	558	30.4	+ 6 15	8.9	9.3	F5	3	..	15183b	60	557	30.9	+30 48	8.0	8.8	G5	2	5,2	37416i
11	496	30.4	+ 3 35	9.7	10.0	F0	1	..	24325b	61	676	30.9	- 8 8	9.8	10.4	G0	1	..	23809b
12	706	30.4	- 9 55	9.8	10.6	G5	2	..	24339b	62	708	30.9	- 9 20	9.2	9.3	A2	4	..	23809b
13	663	30.4	-16 24	8.8	10.0	K5	2	..	24339b	63	1200	30.9	-28 3	10.9	10.1	F5	2	..	45992b
14	1158	30.4	-42 29	9.3	10.0	K2	2	..	24616b	64	1084	30.9	-39 45	9.2	9.4	A0	2	..	40943b
15	1083	30.4	-47 19	10.0	10.0	G5	2	..	46083b	65	294	30.9	-58 17	9.1	9.5	A2	3	..	40953b
16	826	30.5	+56 37	6.27	6.25	B9	8	..	37427i	66	266	30.9	-61 44	7.5	8.5	G5	4	..	38370b
17	548	30.5	+28 54	6.63	6.77	A5	6	0,6-	37415i	67	197	30.9	-65 59	8.3	9.3	K0	3	..	38370b
18	482	30.5	+23 35	8.7	9.3	G0	4	5,3	6447m	68	224	30.9	-73 24	9.0	9.8	G5	1	..	17047b
19	481	30.5	+23 27	9.1	9.7	G0	3	..	6447m	69	436	31.0	+63 58	7.30	7.80	F8	6	3,5	37556i
20	486	30.5	+21 31	9.5	10.1	G	1	E	6447m	70	720	31.0	+61 0	8.4	9.5	K2	2	..	37427i
21	707	30.5	- 9 6	9.2	10.2	K0	2	..	23809b	71	690	31.0	+53 32	8.4	8.8	F5	2	E	38087i
22	1358	30.5	-32 13	6.40	7.7	K0	5	..	10428b	72	864	31.0	+47 55	9.0	9.0	B9	4	..	38087i
23	1054	30.5	-41 41	7.8	7.4	F0	7	..	12637b	73	695	31.0	+34 50	8.1	8.6	F8	2	..	38975i
24	1104	30.5	-43 32	9.6	10.5	G0	2	..	24616b	74	518	31.0	+22 54	6.69	6.69	Aop	7	1,5R	37415i
25	81	30.5	-81 40	9.1	10.2	K2	1	..	20538b	75	496	31.0	+11 41	8.7	9.5	G5	2	..	37470i
26	862	30.6	+47 47	8.6	9.0	F5	2	..	38087i	76	459	31.0	+ 9 51	9.3	9.9	G0	3	..	15183b
27	693	30.6	+34 43	7.42	7.42	A0	3	..	37451i	77	568	31.0	+ 2 47	10.0	10.8	G5	1	..	24325b
28	562	30.6	+19 44	7.55	7.97	F5	2	0,3	37373i	78	667	31.0	- 2 42	9.5	9.5	B9	7	..	24332b
29	561	30.6	+19 13	7.9	8.0	A2	1	E	37373i	79	696	31.0	- 5 27	6.64	7.64	K0	5	5,8	37338i
30	584	30.6	+17 29	8.3	8.4	A3	2	..	37373i	80	709	31.0	- 9 23	8.7	9.5	G5	..	..	23809b
31	664	30.6	- 2 26	10.4	10.5	A5	2	..	24332b	81	1465	31.0	-25 14	8.5	9.7	K2	2	..	24326b
32	1743	30.6	-24 12	9.2	8.8	B9	6	..	24326b	82	267	31.0	-61 21	6.29	7.6	G5	8	..	38370b
33	1348	30.6	-25 55	6.58	8.0	G5	7	0,3-	12397b	83	250	31.0	-65 45	8.2	9.6	Ma	4	..	38370b
34	1383	30.6	-30 37	9.2	10.6	K0	1	..	45992b	84	198	31.0	-66 2	9.6	9.6	A	3	..	38370b
35	1279	30.6	-33 22	9.3	9.4	F8	3	..	42805b	85	237	31.0	-70 49	8.8	10.0	K5	2	..	17047b
36	32	30.6	-88 18	9.6	9.7	A2	4	..	15145b	86	225	31.0	-73 19	8.6	9.4	G5	3	..	20539b
37	685	30.7	+59 15	8.4	8.4	B9	3	..	37427i	87	99	31.0	-77 57	7.4	8.4	K0	5	..	20538b
38	751	30.7	+44 43	8.6	9.0	F5	3	..	38933i	88	590	31.1	+62 49	8.6	8.9	F0	3	..	37427i
39	487	30.7	+21 26	8.8	9.6	G5	2	E	6447m	89	962	31.1	+48 45	7.04	7.02	B9	5	..	37452i
40	630	30.7	- 4 12	9.0	9.6	G0	7	0,3	24332b	90	793	31.1	+45 57	9.2	9.2	A0	2	0,2	38933i
41	629	30.7	- 4 42	9.10	9.38	F0	3	..	23809b	91	800	31.1	+38 6	8.3	9.3	K0	2	..	38081i
42	631	30.7	- 7 0	9.0	9.1	A5	3	..	23809b	92	519	31.1	+22 19	8.7	9.3	G0	3	..	6447m
43	694	30.7	-11 24	8.8	10.0	K5	4	..	24339b	93	579	31.1	- 3 40	10.0	10.4	F5	3	..	24332b
44	1451	30.7	-23 29	8.9	9.3	F8	6	..	24326b	94	697	31.1	- 5 20	9.5	9.5	A	2	..	23809b
45	1329	30.7	-29 11	9.9	11.2	K5	1	..	45992b	95	1754	31.1	-24 17	8.7	9.7	K2	3	..	24326b
46	1384	30.7	-30 18	9.2	10.6	G0	2	..	45992b	96	1331	31.1	-29 26	8.5	9.4	K5	3	..	45992b
47	1284	30.7	-35 10	7.09	7.5	F0	6	..	42911b	97	564	31.1	-54 40	9.7	10.3	G0	1	..	46085b
48	256	30.7	-60 9	9.3	10.0	G5	3	..	23802b	98	192	31.2	+73 30	10.2	11.0	G5	1	..	6449m
49	211	30.7	-71 4	9.5	10.5	K0	1	..	17047b	99	437	31.2	+63 33	6.81	7.23	F5	6	3,7	37556i
50	129	30.8	+76 36	9.5	10.1	G0	3	..	6449m	100	631	31.2	+58 56	8.10	9.10	K0	3	..	37427i

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3h 31m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	865	31.2	+47 15	7.7	7.7	B9	5	0, R	37452i	51	706	31.6	+52 30	7.06	8.74	G5	4	..	3073b
2	795	31.2	+42 15	6.30	6.25	B8	6	..	37452i	52	500	31.6	+ 4 9	8.5	8.8	Fo	5	..	24325b
3	580	31.2	+25 40	8.1	8.7	Go	5	5,3	37415i	53	571	31.6	- 0 38	9.0	10.0	Ko	3	..	24332b
4	493	31.2	+12 58	8.7	8.7	Ao	3	2,2	3747oi	54	581	31.6	- 3 9	9.3	10.3	Ko	5	..	24332b
5	624	31.2	+ 1 33	9.3	10.1	G5	2	..	24332b	55	697	31.6	-17 25	8.6	9.2	Go	5	..	46088b
6	515	31.2	- 1 47	10.7	11.0	F	2	..	24332b	56	698	31.6	-17 39	9.2	9.3	A2	1	..	46088b
7	633	31.2	- 7 30	9.8	10.8	Ko	1	..	23809b	57	1758	31.6	-24 31	9.2	10.0	K5	2	..	24326b
8	708	31.2	-10 31	8.9	9.9	Ko	4	..	24339b	58	993	31.6	-40 16	8.6	8.8	A3	4	..	40943b
9	696	31.2	-11 32	5.69	6.25	Go	10	..	24339b	59	1088	31.6	-47 52	10.2	10.0	F8	2	..	46083b
10	695	31.2	-16 56	9.8	10.6	G5	2	..	45177b	60	849	31.6	-51 18	9.0	9.4	F5	2	..	20263b
11	1757	31.2	-24 54	8.95	10.0	K5	2	..	24326b	61	544	31.6	-54 57	8.90	10.3	K2	2	..	46085b
12	1351	31.2	-26 21	9.5	9.7	F5	2	..	45992b	62	247	31.6	-72 43	7.9	8.3	F5	6	..	20539b
13	1205	31.2	-28 41	8.7	9.1	A3	7	..	45992b	63	131	31.7	+76 35	9.4	10.6	K5	2	..	6449m
14	1352	31.2	-35 57	9.8	10.7	G5	2	..	42805b	64	688	31.7	+59 57	9.5	9.5	A	2	..	37427i
15	130	31.3	+76 46	10.2	10.7	F8	2	..	6449m	65	724	31.7	+41 15	9.7	11.1	Ma	..	..	M
16	279	31.3	+66 38	8.6	8.9	Fo	2	..	3760oi	66	766	31.7	+38 51	8.7	8.8	A2	2	..	3808ri
17	963	31.3	+48 54	6.75	6.73	B9	6	..	37452i	67	560	31.7	+ 6 33	10.0	10.6	Go	1	..	15183b
18	558	31.3	+30 48	7.01	7.43	F5	6	3,7	37416i	68	616	31.7	+ 0 16	6.12	6.68	Go	4	5,7	37338i
19	460	31.3	+ 9 29	8.5	9.3	G5	2	..	15183b	69	699	31.7	- 5 21	10.2	10.5	F	1	..	23809b
20	668	31.3	- 1 54	9.0	10.2	K5	3	..	24332b	70	699	31.7	-17 48	5.32	5.32	Aop	..	R	56,75
21	704	31.3	- 5 55	9.2	9.5	Fo	3	..	23809b	71	707	31.7	-18 53	8.2	8.8	Go	7	..	24326b
22	622	31.3	-15 7	9.3	9.7	F5	2	..	24339b	72	1460	31.7	-23 51	8.7	9.3	G5	5	..	24326b
23	676	31.3	-20 22	9.0	9.6	Go	2	..	24326b	73	1759	31.7	-24 51	9.15	10.1	K5	2	..	24326b
24	1352	31.3	-26 46	8.9	9.1	Fo	6	..	45992b	74	1295	31.7	-27 7	8.2	8.8	Fo	7	..	45992b
25	1353	31.3	-36 16	7.80	8.9	K2	3	..	42911b	75	1338	31.7	-29 52	9.5	10.6	G5	1	..	45992b
26	1009	31.3	-48 31	9.2	10.2	G5	2	..	46083b	76	1461	31.7	-31 5	8.1	9.1	Go	2	..	10428b
27	632	31.4	+59 7	7.10	8.10	Ko	4	..	37427i	77	1460	31.7	-31 29	8.5	9.2	G5	2	..	10428b
28	757	31.4	+44 28	8.0	8.0	Ao	4	R	37452i	78	419	31.7	-52 27	8.8	9.9	K5	1	..	46085b
29	519	31.4	+24 27	9.8	9.8	Ao	2	..	6447m	79	761	31.8	+44 12	8.2	9.3	K2	3	..	38933i
30	520	31.4	+24 16	8.6	8.7	A2	5	..	6447m	80	700	31.8	+34 51	8.9	8.9	Ao	2	..	38975i
31	587	31.4	+18 1	7.9	8.0	A2	2	..	37373i	81	585	31.8	+14 46	8.3	8.9	Go	2	..	37601i
32	632	31.4	- 3 58	8.8	9.6	G5	7	5,3	24332b	82	628	31.8	+ 1 46	8.9	9.3	F5	2	E	24332b
33	677	31.4	-20 29	8.4	8.7	A2	5	..	24326b	83	617	31.8	+ 0 35	8.6	9.6	Ko	3	..	24332b
34	992	31.4	-40 22	10.2	9.7	Go	2	..	24616b	84	572	31.8	+ 0 5	4.40	5.18	G5	..	5,8	56,76
35	1193	31.4	-44 59	8.12	8.5	Fo	7	..	12637b	85	637	31.8	- 6 57	9.8	10.6	G5	2	..	23809b
36	550	31.4	-56 36	9.4	10.4	Ko	1	..	40953b	86	700	31.8	-17 6	10.2	11.2	Ko	1	..	45177b
37	295	31.4	-58 19	8.5	8.8	A5	4	..	40953b	87	1356	31.8	-36 12	9.2	9.2	F5	3	..	42911b
38	82	31.4	-81 1	9.1	10.2	K2	2	..	20538b	88	236	31.8	-67 4	8.1	8.2	A3	7	..	38370b
39	633	31.5	+59 3	7.8	8.4	Go	2	..	38959i	89	803	31.9	+56 3	6.56	6.62	A2	7	..	37427i
40	964	31.5	+48 16	8.8	8.9	A2	3	..	38087i	90	521	31.9	+24 57	9.5	10.5	Ko	1	..	6447m
41	759	31.5	+44 28	8.0	8.0	Ao	3	R	37452i	91	483	31.9	+23 57	8.1	8.9	G5	2	..	37415i
42	732	31.5	+37 6	7.36	8.14	G5	3	..	37416i	92	638	31.9	- 7 27	9.8	9.8	B8	4	..	23809b
43	698	31.5	+34 38	8.3	8.8	F8	1	..	38975i	93	693	31.9	-13 39	9.2	10.0	G5	2	..	24339b
44	489	31.5	+22 1	8.9	9.5	Go	2	..	6447m	94	708	31.9	-19 42	7.18	7.4	Ao	10	..	24326b
45	626	31.5	+ 1 21	8.7	9.5	G5	2	..	24325b	95	1323	31.9	-34 4	9.8	9.3	Ao	6	0,2	42805b
46	710	31.5	- 9 54	10.0	10.6	G	1	..	24339b	96	1011	31.9	-48 46	9.1	9.6	K5	2	..	46083b
47	1337	31.5	-29 3	9.9	10.3	Ko	1	..	45992b	97	236	31.9	-62 59	7.2	7.5	Fo	7	..	38370b
48	567	31.5	-54 51	7.50	8.5	Ko	6	..	46085b	98	67	31.9	-82 45	9.3	10.4	K2	2	..	20538b
49	236	31.5	-74 56	7.74	7.8	Ao	10	..	20539b	99	66	32.0	+84 31	8.5	9.9	Ma	..	..	M
50	51	31.5	-87 41	8.3	8.8	F8	7	..	15145b	100	184	32.0	+73 5	8.2	8.7	F8	5	2,2	6449m

THE HENRY DRAPER CATALOGUE.

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3^h 32^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	501	32.0	+ 3 41	9.3	9.7	F5	2	..	24325b	51	1015	32.5	-48 19	9.3	10.0	G5	2	..	46083b
2	574	32.0	- 0 41	9.3	9.7	F5	4	..	24332b	52	84	32.5	-80 34	9.3	10.5	K5	1	..	20538b
3	703	32.0	-13 55	9.5	10.5	Ko	1	..	24339b	53	222	32.6	+69 32	7.13	7.21	A3	5	0,7	37630b
4	1210	32.0	-28 31	11.4	10.3	Go	1	..	45992b	54	985	32.6	+49 38	9.0	9.6	Go	2	..	38087i
5	1341	32.0	-29 5	8.9	8.8	F8	7	3,2	45992b	55	587	32.6	+14 50	8.9	9.5	Go	2	..	37601i
6	582	32.0	-53 51	8.6	10.3	K5	2	..	46082b	56	521	32.6	+ 5 19	7.91	8.41	F8	5	..	24325b
7	257	32.0	-60 12	10.4	10.9	F8	3	..	23802b	57	503	32.6	+ 3 50	7.02	7.16	A5	5	5,8	37471i
8	736	32.1	+57 58	9.2	9.5	F2	2	..	37427i	58	702	32.6	-11 25	10.0	10.4	F5	1	..	24339b
9	802	32.1	+42 47	8.9	8.9	B9	2	..	38933i	59	639	32.6	-18 13	8.4	9.2	G5	4	5,3	46088b
10	490	32.1	+21 22	9.1	9.7	Go	3	E	64477m	60	1298	32.6	-35 7	8.9	9.8	G5	4	5,1	42805b
11	620	32.1	+ 1 1	7.89	7.95	A2	3	0,9	37471i	61	1016	32.6	-48 45	10.0	10.5	A2	1	..	46083b
12	706	32.1	-14 26	8.16	8.94	G5	6	..	24339b	62	..	32.7	+73 25	..	..	G	1	..	6449m
13	1012	32.1	-48 52	9.4	9.7	Go	2	..	46083b	63	357	32.7	+65 48	8.0	8.1	A2	5	..	37556i
14	568	32.1	-54 4	8.1	9.4	F5	3	0,2	46085b	64	593	32.7	+62 36	8.62	9.04	F5	1	..	37427i
15	569	32.1	-54 39	6.90	7.0	F5	9	..	46085b	65	727	32.7	+60 44	8.4	8.9	F8	2	..	37427i
16	258	32.1	-60 28	8.4	9.4	G5	6	..	23802b	66	728	32.7	+41 23	8.5	9.0	F8	3	..	38081i
17	279	32.1	-62 30	8.3	9.1	G5	6	..	38370b	67	808	32.7	+40 31	9.1	9.9	G5	1	..	38933i
18	805	32.2	+55 33	8.2	8.3	A2	4	..	38959i	68	524	32.7	+25 7	9.41	9.97	Go	3	5,1	6447m
19	868	32.2	+47 45	8.9	9.2	F2	2	..	38087i	69	523	32.7	+24 16	8.5	8.8	Fo	3	..	37415i
20	763	32.2	+44 33	8.9	9.9	Ko	2	..	38933i	70	595	32.7	+17 17	8.3	8.4	A5	1	..	37373i
21	803	32.2	+42 13	6.95	7.51	Go	4	..	37452i	71	625	32.7	+ 0 39	9.3	9.6	Fo	4	..	24332b
22	586	32.2	+15 5	6.47	6.55	A3	9	..	37601i	72	577	32.7	- 0 12	7.9	8.7	G5	6	..	24325b
23	1463	32.2	-23 42	9.1	9.3	F5	5	..	24326b	73	713	32.7	-10 0	9.36	10.43	K2	3	2,2	24339b
24	1474	32.2	-25 17	8.9	9.4	G5	4	E	24326b	74	637	32.7	-22 7	9.0	9.3	F5	3	..	24326b
25	1211	32.2	-28 13	9.5	10.0	Go	3	..	45992b	75	1770	32.7	-24 9	9.2	10.3	Ko	2	..	24326b
26	1360	32.2	-36 39	9.6	10.1	G5	2	..	42805b	76	257	32.7	-74 39	9.2	9.5	F2	2	..	17047b
27	237	32.2	-67 45	7.3	7.7	F5	6	0,8	20539b	77	728	32.8	+60 20	8.7	8.8	A2	2	..	37427i
28	630	32.3	+ 1 10	8.44	8.50	A2	5	0,7	24325b	78	523	32.8	+22 20	6.57	6.57	Ao	5	..	37417i
29	584	32.3	- 2 56	10.4	10.8	F5	1	..	24332b	79	588	32.8	+14 49	7.9	8.7	G5	4	..	37601i
30	701	32.3	- 4 59	9.50	10.68	K5	1	..	23809b	80	627	32.8	+ 1 5	9.66	9.72	A2	1	..	24325b
31	1013	32.3	-48 27	9.4	9.9	G5	2	..	46083b	81	..	32.8	- 3 45	..	..	G5	1	..	24332b
32	1011	32.3	-49 45	7.96	8.7	G5	3	..	20263b	82	1214	32.8	-28 27	8.7	9.4	G5	6	..	45992b
33	144	32.4	+75 24	8.67	9.09	F5	5	3,2	6449m	83	968	32.9	+48 38	8.0	8.0	Ao	3	..	37452i
34	624	32.4	+62 5	9.4	9.4	Ao	1	..	37427i	84	587	32.9	- 2 51	10.0	11.0	Ko	3	..	24332b
35	694	32.4	+59 47	9.2	10.3	K2	..	..	M	85	683	32.9	- 8 35	9.5	10.6	K2	1	..	23809b
36	806	32.4	+41 3	8.4	9.4	Ko	1	..	38082i	86	421	32.9	-52 53	7.2	7.5	B3	6	..	46083b
37	771	32.4	+38 23	8.7	8.7	Ao	4	..	38081i	87	299	32.9	-58 9	7.6	8.0	Ko	7	..	40953b
38	517	32.4	+19 1	7.67	7.67	Ao	4	..	37601i	88	636	33.0	- 4 40	9.3	10.4	K2	2	..	23809b
39	562	32.4	+ 6 56	8.9	9.2	F2	3	..	15183b	89	642	33.0	- 7 18	9.5	10.1	Go	4	..	23809b
40	708	32.4	-14 16	9.3	9.7	F5	3	..	24339b	90	688	33.0	- 7 59	8.6	8.9	Fo	5	..	23809b
41	1198	32.4	-44 3	7.18	7.5	Ao	9	..	12637b	91	685	33.0	- 8 0	9.2	10.0	G5	2	..	23809b
42	298	32.4	-58 3	8.6	10.3	K5	3	..	40953b	92	663	33.0	-21 13	9.2	9.6	F8	3	..	24326b
43	237	32.4	-63 6	8.7	9.9	K5	2	..	23802b	93	1406	33.0	-30 10	7.28	6.9	Ao	7	..	10428b
44	807	32.5	+40 58	8.0	8.0	Ao	3	..	37452i	94	1332	33.0	-34 7	6.94	7.4	F2	6	E	42911b
45	463	32.5	+ 9 37	7.7	8.8	K2	2	2,1	37470i	95	1202	33.0	-45 47	9.2	10.3	Ko	2	..	46083b
46	572	32.5	+ 2 38	10.0	10.0	Ao	1	..	24325b	96	585	33.0	-53 32	7.8	8.5	F2	4	E	20263b
47	622	32.5	+ 0 48	8.1	9.1	Ko	5	0,8	24325b	97	280	33.0	-62 53	7.02	6.8	A2	10	..	38370b
48	576	32.5	- 0 38	10.0	10.3	Fo	3	..	24332b	98	239	33.0	-62 58	9.0	10.1	K2	1	..	23802b
49	585	32.5	- 3 42	10.4	11.4	Ko	3	..	24332b	99	240	33.0	-70 12	8.7	8.7	Ao	5	..	20539b
50	635	32.5	-22 49	8.2	8.8	Ko	6	..	24326b	100	729	33.1	+60 32	8.9	8.9	A	2	..	37427i

22600

3^h 33^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	637	33.1	+58 31	7.10	7.38	Fo	6	..	37427i	51	584	33.5	+25 49	8.95	9.51	Go	3	..	6447m
2	759	33.1	+52 1	9.4	9.5	A5	2	..	38087i	52	574	33.5	+ 2 34	8.3	9.3	Ko	3	..	24325b
3	760	33.1	+51 42	8.9	9.2	Fo	2	..	38087i	53	575	33.5	+ 2 23	7.96	8.02	A2	5	..	24325b
4	540	33.1	+27 37	8.9	8.9	Ao	2	..	37488i	54	679	33.5	- 2 25	8.0	8.1	A2	3	..	37338b
5	628	33.1	+ 1 7	9.54	10.54	Ko	3	5,2	24332b	55	712	33.5	- 6 14	8.9	10.0	K2	3	..	23809b
6	680	33.1	-11 53	8.8	9.6	G5	3	..	24339b	56	711	33.5	- 6 21	9.5	10.1	Go	2	..	23809b
7	1365	33.1	-36 25	9.6	10.1	Go	2	..	42805b	57	703	33.5	-11 32	8.0	8.8	G5	6	..	24339b
8	1098	33.1	-39 43	9.6	9.4	F5	3	5,1	24616b	58	638	33.5	-22 26	8.8	9.6	Go	2	..	24326b
9	1097	33.1	-47 32	7.9	8.8	Ko	3	..	12647b	59	1485	33.5	-25 5	9.4	9.2	A2	4	..	24326b
10	281	33.1	-62 47	9.0	10.1	K2	1	..	23802b	60	1386	33.5	-31 58	8.9	9.4	F8	2	..	10428b
11	596	33.2	+62 19	var.	var.	Nb	..	R	M	61	1303	33.5	-34 59	8.09	8.4	F2	3	..	42911b
12	988	33.2	+49 16	8.9	8.9	Ao	2	..	38087i	62	1214	33.5	-38 45	9.2	9.7	Ko	3	0,1	24616b
13	526	33.2	+24 50	8.9	9.0	A3	5	3,2	6447m	63	1008	33.5	-40 36	4.58	6.1	Ko	..	R	28,196
14	527	33.2	+24 23	7.06	7.06	Ao	5	..	37417i	64	1075	33.5	-41 13	8.6	9.1	Ko	3	0,2	42911b
15	602	33.2	+20 35	6.42	6.42	Ao	6	..	37417i	65	283	33.5	-59 36	10.5	10.9	F5	2	..	23802b
16	675	33.2	- 2 4	9.0	9.1	A2	9	..	24332b	66	70	33.5	-83 33	8.8	9.8	Ko	5	..	20538b
17	690	33.2	- 8 12	8.2	9.2	Ko	4	..	23809b	67	169	33.6	+74 51	9.0	10.2	K5	1	..	6449m
18	711	33.2	-14 18	8.4	8.8	F5	7	..	24339b	68	628	33.6	+61 58	8.7	8.7	Ao	1	..	37427i
19	627	33.2	-15 49	7.22	8.00	G5	8	..	24339b	69	542	33.6	+27 26	8.8	8.8	Ao	1	..	37488i
20	1408	33.2	-30 31	8.1	9.2	Ko	5	5,2	45992b	70	467	33.6	+ 9 19	8.9	9.5	G	1	..	38104i
21	1367	33.2	-36 37	7.22	7.3	Ao	6	..	42911b	71	526	33.6	+ 7 17	9.3	10.4	K2	2	..	15183b
22	1366	33.2	-36 42	10.0	10.4	F8	2	..	42805b	72	638	33.6	+ 1 19	9.7	10.3	Go	2	..	24332b
23	854	33.2	-51 32	8.5	8.2	G5	3	..	20263b	73	579	33.6	- 0 50	8.3	9.3	Ko	7	..	24332b
24	251	33.2	-65 2	7.91	8.2	Fo	8	..	38370b	74	680	33.6	- 2 10	10.0	10.8	G5	1	..	24332b
25	197	33.2	-69 21	8.6	9.0	F5	2	..	38366b	75	647	33.6	- 7 43	5.90	6.68	G5	5	0,10	37338i
26	783	33.3	+43 44	8.6	8.6	B9	4	..	38933i	76	101	33.6	-78 41	5.64	6.3	Ko	..	..	56,120
27	485	33.3	+24 2	10.2	10.8	Go	2	..	6447m	77	91	33.7	+83 14	7.52	7.50	B9	8	E	37558i
28	634	33.3	+ 1 16	9.7	11.1	Ma	2	E	24332b	78	737	33.7	+57 11	8.6	9.6	Ko	1	..	37427i
29	588	33.3	- 2 54	8.8	9.3	F8	7	..	24332b	79	795	33.7	+45 41	7.48	8.26	G5	3	..	37452i
30	644	33.3	- 7 49	7.8	8.6	G5	4	..	23809b	80	527	33.7	+22 57	10.0	10.6	G	1	..	6447m
31	680	33.3	-20 48	8.8	9.6	F5	2	..	24326b	81	526	33.7	+22 31	7.9	7.9	Ao	3	..	37417i
32	1469	33.3	-31 15	9.2	10.6	G5	2	5,1	42805b	82	579	33.7	+13 35	6.89	7.67	G5	6	0,7	37601i
33	1211	33.3	-38 37	9.6	10.0	G5	1	0,1R	40943b	83	578	33.7	+13 24	8.9	8.9	Ao	1	..	37373i
34	199	33.3	-66 6	6.76	7.1	A2	10	..	38370b	84	542	33.7	+ 8 50	7.72	7.80	A3	5	..	37470i
35	167	33.4	+75 2	9.07	9.49	F5	4	..	6449m	85	506	33.7	+ 3 13	9.0	10.2	K5	2	..	24325b
36	969	33.4	+48 34	9.0	9.0	B9	2	..	38087i	86	577	33.7	+ 2 26	7.06	7.06	Ao	6	0,6	24325b
37	492	33.4	+21 32	7.27	7.27	Ao	6	..	38300i	87	1338	33.7	-34 17	8.9	8.3	A2	4	E	42911b
38	504	33.4	+ 3 45	9.3	9.9	Go	2	..	24325b	88	587	33.7	-53 6	7.4	8.5	Ko	4	E	20263b
39	677	33.4	- 1 54	8.7	8.7	Ao	8	2,2	24332b	89	110	33.8	+80 0	var.	var.	Mb	7	0,7	37309i
40	676	33.4	- 2 14	9.5	10.5	Ko	3	..	24332b	90	145	33.8	+75 46	9.2	9.5	Fo	4	..	6449m
41	589	33.4	- 3 37	10.4	11.4	Ko	3	..	24332b	91	768	33.8	+44 22	7.8	8.8	Ko	2	..	37452i
42	681	33.4	-12 34	8.0	8.0	Ao	5	..	24339b	92	690	33.8	+33 48	6.85	7.27	F5	..	3,5	56,76
43	703	33.4	-13 17	9.0	9.3	F2	3	..	24339b	93	487	33.8	+23 59	10.7	11.1	F5	2	..	6447m
44	642	33.4	-17 59	9.5	10.1	Go	1	..	46088b	94	601	33.8	+18 4	8.3	9.1	G5	2	..	37601i
45	1300	33.4	-33 36	9.2	9.4	F8	3	..	42805b	95	484	33.8	+16 13	6.33	7.11	G5	7	..	37601i
46	1336	33.4	-34 12	8.1	8.9	K2	2	E	42911b	96	630	33.8	+ 0 28	8.5	9.1	Go	6	5,3	24332b
47	1337	33.4	-34 21	10.6	9.8	Ao	3	..	42805b	97	681	33.8	- 1 51	7.40	7.68	Fo	6	R	37338i
48	168	33.5	+74 13	6.82	7.60	G5	5	0,7-	37630i	98	638	33.8	- 4 2	10.0	11.1	K2	2	..	24332b
49	597	33.5	+62 54	5.32	6.67	Ma	..	0,8	56,76	99	283	33.8	-62 47	9.1	9.9	G5	2	..	38370b
50	830	33.5	+56 50	9.2	9.2	A	2	..	37427i	100	199	33.8	-69 2	8.6	9.6	Ko	2	..	17047b

THE HENRY DRAPER CATALOGUE.

22700

3h 33m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	51	^{m.} 33.9	^o +86 20	5.84	6.26	F5	9	R	37281i	51	496	^{m.} 34.4	^o +22 9	8.7	8.8	A2	4	..	6447m
2	528	33.9	+24 53	9.2	9.3	A2	4	R	6447m	52	495	34.4	+22 0	9.4	10.5	K2	1	..	6447m
3	639	33.9	-22 36	8.6	9.6	K5	2	..	24326b	53	524	34.4	+ 6 9	8.7	8.7	Ao	3	..	24325b
4	1209	33.9	-44 48	8.42	8.9	F2	4	..	12637b	54	641	34.4	+ 1 51	8.5	9.7	K5	2	..	24332b
5	1090	33.9	-50 17	7.7	8.1	Go	5	..	20263b	55	684	34.4	-20 32	7.96	8.8	Ko	6	..	24326b
6	423	33.9	-52 21	9.3	9.6	Go	2	..	46085b	56	1344	34.4	-34 39	9.5	10.9	Ko	1	..	42805b
7	259	33.9	-60 12	9.5	10.6	K2	2	..	23802b	57	1026	34.4	-48 41	9.6	9.9	Go	2	..	46083b
8	254	33.9	-64 0	9.2	9.5	Fo	4	..	38370b	58	588	34.4	-53 24	8.1	8.9	K2	4	..	46083b
9	170	34.0	+75 5	10.2	10.2	Ao	2	..	6449m	59	560	34.4	-57 53	9.1	9.7	F8	2	..	40953b
10	638	34.0	+58 25	9.0	9.0	B8	3	..	37427i	60	253	34.4	-65 24	8.8	9.9	K2	3	..	38370b
11	544	34.0	+ 8 44	8.9	9.4	F8	4	..	15183b	61	146	34.5	+75 51	9.47	10.65	K5	1	..	6449m
12	517	34.0	- 0 52	9.0	10.1	K2	5	..	24332b	62	172	34.5	+74 44	9.2	9.5	F	2	..	6449m
13	713	34.0	- 5 57	6.00	6.78	G5	6	5,10	37338b	63	700	34.5	+59 40	9.2	9.2	A	2	..	37427i
14	692	34.0	- 8 50	7.46	8.24	G5	8	..	23809b	64	699	34.5	+59 39	5.98	6.98	Ko	6	..	37427i
15	714	34.0	-19 4	9.0	9.6	Go	3	..	46088b	65	561	34.5	+29 7	9.4	9.4	A	1	..	37488i
16	1478	34.0	-31 20	9.2	9.7	Go	4	0,3	42805b	66	562	34.5	+28 27	6.86	6.86	Ao	7	..	37488i
17	1185	34.0	-42 48	8.2	8.8	F2	6	0,4	24616b	67	607	34.5	+21 5	7.18	7.32	A5	4	..	37417i
18	800	34.1	+50 30	8.27	8.83	Go	6	..	38087i	68	564	34.5	+ 6 28	8.5	9.6	K2	2	..	15183b
19	770	34.1	+44 36	8.0	8.0	Ao	3	..	37452i	69	717	34.5	- 9 19	9.0	9.4	F5	3	..	23809b
20	788	34.1	+43 22	7.9	8.2	Fo	3	..	37452i	70	677	34.5	-16 37	9.8	10.8	Ko	1	..	45177b
21	732	34.1	+41 31	7.8	8.1	F2	2	..	37452i	71	1309	34.5	-35 9	9.2	10.4	Ko	2	..	42805b
22	546	34.1	+ 8 59	9.5	10.3	G5	2	..	15183b	72	222	34.5	-68 11	8.8	9.6	G5	2	..	38366b
23	563	34.1	+ 6 25	9.7	10.7	Ko	2	..	15183b	73	83	34.5	-81 3	7.76	8.8	Ko	6	..	20538b
24	507	34.1	+ 3 14	8.6	9.8	K5	3	R	24325b	74	193	34.6	+73 56	9.9	10.0	A2	1	..	6449m
25	579	34.1	+ 2 15	8.5	8.8	Fo	4	..	24325b	75	194	34.6	+73 25	10.2	10.8	Go	2	..	6449m
26	1482	34.1	-23 25	8.9	10.5	K2	1	..	46166b	76	359	34.6	+65 39	8.1	8.4	Fo	5	..	37556i
27	1312	34.1	-27 49	9.5	10.9	K5	1	..	45992b	77	835	34.6	+56 9	8.6	8.6	Ao	2	..	38959i
28	1479	34.1	-31 38	7.39	8.5	K5	3	..	10428b	78	773	34.6	+44 17	8.2	9.0	G5	2	..	37452i
29	1309	34.1	-33 4	8.2	8.8	F2	4	..	10428b	79	808	34.6	+42 19	8.8	8.8	Ao	3	..	38933i
30	1102	34.1	-46 38	10.2	9.7	F5	3	..	46083b	80	811	34.6	+37 16	5.57	5.45	B5	7	..	37451i
31	85	34.1	-80 30	9.3	10.5	K5	1	..	20538b	81	630	34.6	+31 31	8.6	9.6	Ko	1	..	38975i
32	813	34.2	+40 51	7.08	7.42	F2	4	..	37452i	82	518	34.6	- 1 7	8.5	9.7	K5	7	..	24332b
33	782	34.2	+38 48	7.62	7.70	A3	5	..	38081i	83	590	34.6	- 3 11	10.2	10.5	Fo	3	..	24332b
34	734	34.2	+35 38	8.67	9.09	F5	2	..	38975i	84	642	34.6	- 4 7	9.8	10.2	F5	4	..	24332b
35	714	34.2	- 6 49	9.5	9.8	Fo	2	..	23809b	85	641	34.6	- 4 29	9.8	10.2	F5	3	..	23809b
36	1779	34.2	-24 20	9.1	10.0	Go	2	..	46166b	86	653	34.6	- 7 22	9.8	10.3	F8	2	..	23809b
37	1341	34.2	-34 27	9.8	10.4	G5	2	..	42805b	87	694	34.6	- 8 20	8.6	9.4	G5	5	..	23809b
38	1105	34.2	-47 18	8.7	9.7	Ko	2	..	12647b	88	1375	34.6	-25 56	7.7	9.4	K2	4	2,3	45992b
39	1025	34.2	-47 58	9.6	10.5	Go	1	..	46083b	89	1225	34.6	-28 16	6.08	6.4	Ao	7	R	5670b
40	300	34.2	-58 25	9.1	10.0	Go	1	..	40953b	90	1395	34.6	-32 42	9.2	10.0	Go	3	..	42805b
41	358	34.3	+65 38	8.8	8.9	A3	2	..	37556i	91	1378	34.6	-36 57	8.2	8.9	Fo	3	..	42911b
42	799	34.3	+45 51	8.6	9.8	K5	1	..	38933i	92	1379	34.6	-37 36	8.2	9.0	G5	3	..	40943b
43	798	34.3	+45 35	8.4	8.9	F8	4	..	38933i	93	271	34.6	-61 49	10.3	11.5	K5	2	..	23802b
44	516	34.3	+16 2	8.3	8.3	Ao	3	..	37601i	94	238	34.6	-75 28	8.8	9.2	F5	4	..	14359b
45	640	34.3	- 4 38	9.5	10.1	Go	2	..	23809b	95	470	34.7	+ 9 21	8.7	9.5	G5	2	..	38104i
46	1308	34.3	-35 18	9.8	10.1	F8	2	..	42805b	96	581	34.7	+ 2 44	5.76	6.54	G5	8	5,8	37471i
47	1109	34.3	-39 6	8.9	8.8	A5	6	..	24616b	97	683	34.7	- 1 55	8.0	8.8	G5	3	..	37338i
48	269	34.3	-61 52	7.1	7.7	Fo	7	..	38370b	98	591	34.7	- 3 43	6.44	7.22	G5	6	..	37338i
49	221	34.3	-68 10	9.0	9.6	G	2	..	38366b	99	717	34.7	-10 46	6.35	7.13	G5	8	5,10	18192b
50	..	34.4	+57 51	..	..	A	1	..	37427i	100	1787	34.7	-24 25	8.5	9.7	Ko	2	..	24326b

22800

3^h 34^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1314	34.7	-33 8	8.4	9.4	Ko	2	..	10428b	51	566	35.1	+ 6 49	10.0	11.0	Ko	1	..	15183b
2	260	34.7	-60 5	10.9	11.5	G	1	..	23802b	52	569	35.1	+ 4 36	9.7	10.3	Go	1	..	24325b
3	223	34.7	-68 43	9.5	9.6	A2	2	..	17047b	53	686	35.1	- 2 13	8.2	9.0	G5	3	..	37338i
4	702	34.8	+59 15	9.2	9.2	Ao	2	..	37427i	54	706	35.1	-11 16	7.08	7.86	G5	5	..	18192b
5	529	34.8	+25 0	6.15	6.15	Ao	6	..	37417i	55	686	35.1	-12 0	9.2	10.0	G5	2	..	24339b
6	684	34.8	- 2 14	8.6	9.7	K2	4	..	24332b	56	707	35.1	-13 35	9.0	10.0	Ko	2	..	24339b
7	696	34.8	- 8 9	8.6	9.7	K2	3	..	23809b	57	1032	35.1	-49 8	9.4	9.4	A3	2	..	46083b
8	695	34.8	- 8 13	10.4	11.0	G	1	..	23809b	58	816	35.2	+55 13	8.76	8.76	A	2	..	38959i
9	1101	34.8	-42 1	9.6	9.7	F8	2	..	24616b	59	814	35.2	+37 16	7.76	7.76	Ao	2	..	37451i
10	1026	34.8	-49 20	7.3	9.0	K2	2	..	20263b	60	564	35.2	+28 23	6.89	6.87	B9	7	..	37488i
11	187	34.9	+72 43	8.0	8.6	Go	2	..	37555i	61	1348	35.2	-34 17	9.2	8.9	Ao	5	..	42805b
12	600	34.9	+62 48	9.2	9.8	Go	2	..	37600i	62	1380	35.2	-35 58	8.2	8.9	Ko	3	..	42911b
13	976	34.9	+48 44	9.7	9.7	A	1	..	38087i	63	1122	35.2	-43 0	8.6	9.7	K2	3	..	24616b
14	736	34.9	+36 4	7.76	8.54	G5	2	..	37451i	64	1123	35.2	-43 35	9.6	10.1	F8	2	..	24616b
15	587	34.9	+26 0	9.8	10.4	G	2	E	6447m	65	1111	35.2	-46 34	7.9	8.5	F5	5	..	12647b
16	589	34.9	+25 33	9.4	10.5	K2	1	..	6447m	66	1034	35.2	-49 42	7.56	7.6	A5	7	..	46083b
17	529	34.9	+ 7 46	9.3	10.4	K2	2	..	15183b	67	426	35.2	-51 55	9.4	10.2	G5	1	..	46085b
18	530	34.9	+ 7 16	7.6	7.7	A2	7	..	24325b	68	551	35.2	-55 43	8.4	10.4	Mc	3	5,2 R	46085b
19	519	34.9	- 1 27	6.15	6.03	G5	7	..	37338i	69	285	35.2	-61 58	10.5	11.5	Ko	2	..	23802b
20	654	34.9	- 7 6	6.99	7.05	A2	5	0,9	37338i	70	253	35.3	+70 17	9.4	9.9	F8	2	..	38165i
21	679	34.9	-16 5	8.1	9.1	Ko	3	..	24339b	71	601	35.3	+62 16	9.4	9.5	A5	2	..	37427i
22	644	34.9	-22 39	8.2	8.8	G5	5	..	24326b	72	802	35.3	+50 51	7.94	8.50	Go	5	..	38087i
23	1319	34.9	-27 8	8.9	9.4	F8	4	3,2	45992b	73	801	35.3	+45 43	9.2	9.2	Ao	3	..	38933i
24	1227	34.9	-28 21	8.3	9.2	Ko	6	..	45992b	74	775	35.3	+45 7	8.42	8.42	Ao	3	..	37452i
25	1400	34.9	-32 53	9.6	10.6	A5	2	..	42805b	75	817	35.3	+40 33	8.7	9.5	G5	2	..	38081i
26	1311	34.9	-35 32	7.08	7.9	Ko	4	..	42911b	76	786	35.3	+39 6	9.1	9.2	A2	2	..	38081i
27	1107	34.9	-46 24	9.8	9.7	Go	2	..	46083b	77	532	35.3	+24 34	9.1	9.7	Go	3	..	6447m
28	133	35.0	+77 48	7.06	7.01	B8	6	0,7	37555i	78	571	35.3	+ 4 49	6.73	7.51	G5	6	5,5	24325b
29	273	35.0	+68 30	8.4	9.4	Ko	2	..	38943i	79	592	35.3	- 3 32	6.74	7.24	F8	5	0,8	37338i
30	739	35.0	+57 15	8.0	8.0	B8	4	R	37427i	80	687	35.3	-12 23	9.0	9.8	G5	3	..	24339b
31	530	35.0	+25 9	9.01	9.01	Ao	3	..	6447m	81	633	35.3	-15 45	9.2	10.0	G5	2	..	24339b
32	488	35.0	+24 8	10.0	10.6	Go	1	..	6447m	82	680	35.3	-16 41	8.6	9.7	K2	2	E	24339b
33	581	35.0	+13 15	7.9	8.7	G5	3	0,3	37601i	83	1322	35.3	-27 42	9.2	10.0	Ko	2	..	45992b
34	565	35.0	+ 6 14	8.1	8.2	A2	5	..	24325b	84	1083	35.3	-41 29	10.4	9.7	Go	2	..	24616b
35	711	35.0	- 5 26	9.3	10.1	G5	1	..	23809b	85	788	35.4	+38 31	8.1	9.1	Ko	2	..	38081i
36	707	35.0	-17 41	7.06	8.06	Ko	..	5,8	56,76	86	533	35.4	+24 41	8.3	9.4	K2	2	..	37417i
37	717	35.0	-19 19	8.2	8.7	G5	5	..	24326b	87	489	35.4	+23 11	9.4	9.8	F5	3	..	6447m
38	685	35.0	-20 26	8.8	9.6	F8	2	..	24326b	88	568	35.4	+ 6 24	8.7	9.3	Go	4	..	15183b
39	667	35.0	-20 55	8.2	8.7	Go	5	..	24326b	89	572	35.4	+ 4 23	9.7	9.8	A2	1	..	24325b
40	1228	35.0	-28 0	9.7	10.0	Go	4	..	45992b	90	687	35.4	- 1 54	11.1	11.4	F	1	..	24332b
41	1017	35.0	-40 44	10.9	10.3	Ko	1	..	24616b	91	699	35.4	- 8 24	8.2	9.0	G5	4	..	23809b
42	231	35.0	-73 11	8.1	8.6	F8	7	..	20539b	92	719	35.4	- 9 22	6.96	7.38	F5	9	0,9	23809b
43	262	35.0	-74 22	8.8	9.2	F5	3	5,2	17047b	93	1497	35.4	-25 41	8.9	10.0	K2	2	..	45992b
44	815	35.1	+56 4	8.2	10.0	G5	3	..	37427i	94	1363	35.4	-29 25	8.1	9.1	K2	2	..	10428b
45	763	35.1	+51 59	7.85	8.85	Ko	4	..	38087i	95	491	35.5	+23 28	9.8	10.6	G5	1	..	6447m
46	791	35.1	+43 12	7.9	8.7	G5	2	..	37452i	96	529	35.5	+ 5 33	9.0	9.5	F8	3	..	15183b
47	844	35.1	+39 23	8.7	8.7	Ao	2	..	38081i	97	689	35.5	- 2 32	10.2	11.3	K2	3	..	24332b
48	712	35.1	+34 40	8.6	9.6	Ko	3	..	38975i	98	709	35.5	-16 58	9.2	10.3	K2	1	..	45177b
49	592	35.1	+29 10	8.8	9.6	G5	2	..	37488i	99	1406	35.5	-32 14	10.2	10.9	Go	2	..	42805b
50	590	35.1	+25 40	9.5	9.6	A2	4	..	6447m	100	1085	35.5	-40 58	8.3	9.1	K2	3	..	40943b

THE HENRY DRAPER CATALOGUE.

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3h 35m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	764	<i>m.</i> 35.6	+51 21	8.4	8.8	F5	2	..	38087i	51	698	<i>m.</i> 36.0	+33 39	5.04	4.85	B2	..	0,8 R	56,76
2	1001	35.6	+49 53	8.7	9.0	Fo	3	..	38087i	52	503	36.0	+12 18	7.9	8.4	F8	3	..	3747oi
3	511	35.6	+ 4 1	8.5	8.5	Ao	5	..	24325b	53	646	36.0	+ 2 8	8.9	9.0	A2	3	..	24325b
4	593	35.6	- 3 20	10.7	11.5	G5	3	..	24332b	54	693	36.0	- 2 31	9.2	9.3	A5	5	..	24332b
5	634	35.6	-15 33	6.44	7.22	G5	10	..	24339b	55	722	36.0	- 9 11	9.2	10.0	G5	1	..	23809b
6	1425	35.6	-30 45	9.7	10.6	A5	1	..	45992b	56	723	36.0	-19 44	8.78	9.4	F2	3	..	24326b
7	1409	35.6	-32 19	9.6	10.3	Go	3	..	42805b	57	649	36.0	-22 50	8.9	9.6	Ko	2	..	24326b
8	241	35.6	-63 7	9.0	9.6	Go	3	..	38370b	58	1805	36.0	-24 51	8.70	8.8	F8	4	..	24326b
9	202	35.6	-69 31	8.5	9.9	Ma	2	..	17047b	59	1321	36.0	-33 46	9.8	10.6	F8	1	..	42805b
10	68	35.6	-82 38	8.7	9.8	K2	4	..	20538b	60	261	36.0	-60 6	7.8	8.8	F5	3	..	40953b
11	132	35.7	+76 59	10.2	11.2	Ko	1	..	6449m	61	738	36.1	+35 19	9.42	9.42	A	1	..	38975i
12	216	35.7	+71 18	7.08	7.86	G5	5	0,4	37555i	62	739	36.1	+35 12	9.17	10.17	K	1	..	38975i
13	703	35.7	+59 12	8.8	8.8	Ao	3	..	37427i	63	659	36.1	+32 38	6.67	7.17	F8	3	..	37451i
14	978	35.7	+48 53	8.8	8.8	Ao	3	..	38087i	64	550	36.1	+27 59	8.2	9.2	Ko	2	..	37488i
15	534	35.7	+25 3	8.06	9.13	K2	2	..	37415i	65	472	36.1	+ 9 46	7.32	8.10	G5	4	..	3747oi
16	521	35.7	+19 4	7.7	7.7	Ao	3	..	37601i	66	639	36.1	+ 0 32	10.0	10.6	Go	2	..	24332b
17	512	35.7	+ 3 15	9.3	9.9	Go	3	..	24325b	67	655	36.1	- 7 1	9.5	10.5	Ko	2	..	23809b
18	690	35.7	- 2 39	7.07	7.85	G5	4	..	37338i	68	713	36.1	-12 56	7.46	7.80	F2	8	..	24339b
19	647	35.7	- 4 28	8.6	8.9	Fo	6	5,7	24332b	69	721	36.1	-14 15	9.5	10.5	Ko	1	..	24339b
20	715	35.7	- 5 32	5.52	5.47	B8	..	0,9	56,76	70	672	36.1	-21 42	8.9	9.9	F5	2	..	24326b
21	686	35.7	-19 55	7.00	8.4	G5	8	..	24326b	71	1503	36.1	-23 14	9.5	9.4	Go	2	..	24326b
22	648	35.7	-22 30	8.6	8.1	A2	7	..	24326b	72	1025	36.1	-40 22	10.6	10.8	K2	1	..	24616b
23	1382	35.7	-26 33	9.5	9.8	G5	3	..	45992b	73	559	36.1	-56 28	7.8	8.5	G5	5	..	40953b
24	1235	35.7	-28 50	6.90	7.3	F8	6	0,3	10428b	74	304	36.1	-57 58	9.0	9.4	F2	4	..	40953b
25	1350	35.7	-34 19	9.3	10.9	G5	1	..	42805b	75	792	36.2	+38 14	9.4	10.2	G5	1	..	38081i
26	272	35.7	-61 2	11.1	11.5	F5	2	..	23802b	76	699	36.2	+33 14	7.9	9.0	K2	1	..	38975i
27	979	35.8	+48 39	9.7	9.7	A	1	..	38087i	77	531	36.2	+22 34	8.9	9.4	F8	2	..	6447m
28	876	35.8	+47 28	3.10	2.98	B5	..	R	6678c	78	570	36.2	+ 6 33	9.3	10.5	K5	1	..	15183b
29	584	35.8	+ 2 38	7.9	8.0	Ko	3	..	24325b	79	595	36.2	- 3 8	11.1	12.1	Ko	2	..	24332b
30	583	35.8	- 0 49	10.3	11.1	G5	1	..	24332b	80	718	36.2	- 5 37	8.8	9.3	F8	5	..	23809b
31	710	35.8	-11 36	8.6	9.1	F8	4	..	18192b	81	723	36.2	- 6 49	10.7	11.1	F5	1	..	23809b
32	1388	35.8	-36 16	8.6	8.6	Fo	4	..	42911b	82	636	36.2	-15 3	8.6	9.6	Ko	2	..	24339b
33	1123	35.8	-39 27	9.6	9.4	F5	4	..	24616b	83	724	36.2	-19 48	6.90	8.1	G5	8	..	24326b
34	1116	35.8	-46 6	9.8	10.3	G5	2	..	46083b	84	650	36.2	-22 16	9.5	9.6	F8	2	..	24326b
35	590	35.8	-53 24	9.7	10.3	Go	3	..	46085b	85	1355	36.2	-34 52	7.90	8.0	F5	4	..	42911b
36	564	35.8	-57 37	7.4	8.8	K5	5	..	40953b	86	1027	36.2	-40 40	6.96	6.7	A2	8	..	40943b
37	243	35.8	-63 8	9.1	10.2	K2	2	..	38370b	87	1129	36.2	-43 50	7.8	8.8	Ko	4	..	12637b
38	133	35.9	+76 10	9.9	10.4	F8	1	..	6449m	88	1102	36.2	-50 37	9.4	9.6	A5	2	..	46083b
39	514	35.9	+ 3 51	8.9	9.9	Ko	3	..	24325b	89	262	36.2	-60 6	7.10	6.7	F2	8	..	40953b
40	520	35.9	- 1 15	10.7	11.3	Go	2	..	24332b	90	286	36.2	-62 13	10.1	10.9	G5	2	..	38370b
41	691	35.9	- 1 59	9.5	10.1	Go	4	..	24332b	91	125	36.3	+81 14	8.10	8.88	G5	3	..	37558i
42	692	35.9	- 2 28	9.5	10.3	G5	2	..	24332b	92	532	36.3	+22 29	7.32	7.66	F2	3	..	37417i
43	722	35.9	- 6 32	9.2	10.2	Ko	2	..	23809b	93	584	36.3	- 0 33	8.3	8.3	Ao	6	0,3	24325b
44	1384	35.9	-25 55	9.5	10.1	Go	2	..	45992b	94	694	36.3	- 2 16	10.8	11.6	G5	3	..	24332b
45	1490	35.9	-31 16	9.7	9.7	Go	2	..	45992b	95	725	36.3	- 6 0	9.5	9.8	Fo	4	..	23809b
46	1126	35.9	-43 5	8.4	8.8	F5	5	..	12637b	96	724	36.3	- 6 9	9.8	10.3	F8	1	..	23809b
47	1115	35.9	-47 16	10.7	10.6	Go	1	..	46083b	97	1432	36.3	-30 50	8.5	10.6	K5	1	..	45992b
48	1037	35.9	-49 1	9.2	9.9	Ko	1	..	46083b	98	1130	36.3	-43 53	10.0	10.6	Ko	1	..	24616b
49	591	35.9	-52 58	9.2	10.6	G5	2	..	46085b	99	273	36.3	-61 17	8.6	9.4	F5	3	..	38370b
50	134	36.0	+76 28	9.5	10.5	Ko	2	..	6449m	100	821	36.4	+40 41	7.9	8.2	Fo	4	..	38081i

23000

3^h 36^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	712	^{m.} 36.4	^o -11 4	9.8	<i>11.2</i>	Mb	1	..	24339b	51	597	^{m.} 36.9	^o +29 53	8.7	9.5	G5	3	5,2	381111i
2	871	36.4	-51 48	9.2	9.9	Go	2	..	46085b	52	497	36.9	+16 58	7.17	7.73	Go	7	..	37601i
3	287	36.4	-62 19	<i>10.3</i>	10.6	Fo	3	..	38370b	53	587	36.9	+ 3 7	8.3	9.1	G5	6	0,2	24325b
4	224	36.4	-68 46	7.7	8.5	G5	6	5,4	38366b	54	687	36.9	-16 38	8.8	9.8	Ko	2	E	24339b
5	284	36.5	+66 53	5.84	6.18	F2	8	..	37556i	55	687	36.9	-19 54	6.48	6.9	Ao	10	..	24326b
6	709	36.5	+52 9	9.2	9.2	A	1	..	38087i	56	233	36.9	-73 31	9.4	9.5	A3	2	..	17047b
7	601	36.5	+26 16	7.8	8.8	Ko	4	2,3	6447m	57	141	36.9	-77 12	9.0	9.1	A5	3	..	14359b
8	571	36.5	+ 7 0	8.5	9.1	Go	4	..	15183b	58	878	37.0	+47 9	8.9	9.9	Ko	1	..	38933i
9	585	36.5	- 0 29	7.7	7.7	Ao	4	2,8	24325b	59	779	37.0	+44 11	8.9	9.0	A2	1	..	38933i
10	689	36.5	-12 7	6.50	6.84	F2	9	..	18192b	60	704	37.0	+33 48	7.9	7.7	B3	..	1,3	56,76
11	1090	36.5	-41 51	8.9	8.8	A5	5	..	40943b	61	536	37.0	+24 11	9.5	10.0	F8	2	..	6447m
12	200	36.5	-66 51	9.1	9.2	A5	5	E	38370b	62	536	37.0	+ 7 14	8.3	9.3	Ko	3	..	24325b
13	735	36.6	+61 9	7.52	7.58	A2	7	..	37427i	63	599	37.0	- 3 41	9.8	10.6	G5	4	..	24332b
14	1006	36.6	+49 40	9.2	9.3	A5	2	..	38087i	64	728	37.0	- 6 44	9.0	10.2	K5	2	..	23809b
15	1008	36.6	+49 14	9.0	9.0	Ao	2	..	38087i	65	716	37.0	-11 0	8.8	9.4	Go	4	..	18192b
16	578	36.6	+19 23	5.50	5.45	B8	..	1, R	56,76	66	715	37.0	-11 11	9.8	10.6	G5	3	..	24339b
17	726	36.6	- 6 23	9.0	10.1	K2	2	..	23809b	67	729	37.0	-14 37	7.41	8.41	Ko	7	..	24339b
18	656	36.6	- 6 52	10.2	10.2	Ao	2	..	23809b	68	1511	37.0	-23 13	9.9	9.9	F8	2	..	24326b
19	724	36.6	- 9 31	8.8	9.8	Ko	3	0,2	23809b	69	1415	37.0	-32 11	8.3	8.3	Fo	5	..	12259b
20	726	36.6	-14 19	9.3	9.8	F8	4	..	24339b	70	1416	37.0	-32 25	9.5	10.3	G5	2	..	42805b
21	725	36.6	-14 44	9.8	9.8	A	2	R	24339b	71	1135	37.0	-43 34	7.24	8.8	Ma	4	..	12637b
22	712	36.6	-17 41	9.5	10.6	K2	1	..	45177b	72	247	37.0	-62 58	9.4	10.4	Ko	1	..	23802b
23	650	36.6	-18 13	8.9	9.9	Ko	2	..	45177b	73	135	37.1	+76 51	9.0	10.0	Ko	4	..	6449m
24	1241	36.6	-28 17	7.18	7.8	Ko	2	..	5670b	74	708	37.1	+60 2	8.06	8.62	Go	4	..	37427i
25	263	36.6	-60 9	8.8	8.9	F5	3	..	40953b	75	593	37.1	+25 21	7.11	7.53	F5	4	..	37417i
26	810	36.7	+42 52	7.8	8.9	K2	4	..	38933i	76	1244	37.1	-28 14	10.4	9.7	Go	2	..	45992b
27	660	36.7	+33 0	8.9	8.9	A	1	..	38975i	77	1439	37.1	-30 16	9.1	9.4	F8	5	0,3-	45992b
28	579	36.7	+19 50	7.9	8.0	A2	3	..	38300i	78	432	37.1	-52 1	8.2	8.8	F5	5	..	14920b
29	521	36.7	- 1 19	10.7	11.7	Ko	2	..	24332b	79	594	37.1	-53 14	7.28	8.0	Go	7	..	14920b
30	597	36.7	- 3 10	8.2	8.8	Go	6	..	24332b	80	288	37.1	-62 3	10.0	10.3	F2	3	..	38370b
31	714	36.7	-11 12	9.3	9.9	Go	2	..	24339b	81	189	37.2	+73 8	9.5	10.5	Ko	1	..	6449m
32	716	36.7	-13 37	9.5	10.5	Ko	3	..	24339b	82	782	37.2	+44 34	7.81	8.99	K5	2	..	38933i
33	725	36.7	-19 43	9.03	9.6	Ko	3	..	46088b	83	553	37.2	+ 8 20	7.08	7.14	A2	6	..	37470i
34	726	36.7	-19 47	9.8	11.1	G5	1	..	46088b	84	658	37.2	- 7 33	8.8	10.0	K5	3	..	23809b
35	1497	36.7	-31 34	8.9	8.8	Go	3	E	12259b	85	690	37.2	-20 41	8.8	10.2	K2	2	..	24326b
36	134	36.8	+78 0	8.0	8.0	B8	4	0,3	37555i	86	1507	37.2	-25 40	8.5	9.4	Ko	3	5,2	45992b
37	147	36.8	+75 28	8.12	8.90	G5	3	5,7	37555i	87	1340	37.2	-35 20	10.4	11.3	Ko	1	..	42805b
38	767	36.8	+51 29	8.9	9.2	F2	2	..	38087i	88	149	37.3	+75 31	9.47	9.47	Ao	4	..	6449m
39	825	36.8	+40 35	8.7	9.2	F8	2	..	38081i	89	604	37.3	+63 2	4.96	5.38	F5	..	0,9 R	56,76
40	639	36.8	+31 19	9.1	10.2	K2	1	..	38975i	90	604	37.3	+63 2	4.96	5.38	A	..	0,9 R	56,76
41	616	36.8	+20 58	8.0	8.5	F8	3	..	37417i	91	819	37.3	+37 40	8.3	8.8	F8	3	..	37451i
42	522	36.8	+15 30	9.5	9.5	Ao	1	..	37601i	92	595	37.3	+25 18	10.0	10.6	G	1	..	6447m
43	721	36.8	- 5 33	8.9	9.0	A3	5	2,3	23809b	93	506	37.3	+21 39	10.7	11.0	F	2	..	6447m
44	1414	36.8	-32 40	10.4	10.9	Fo	1	..	42805b	94	694	37.3	-12 39	9.5	10.1	Go	2	..	24339b
45	1334	36.8	-35 24	9.6	10.7	Ko	4	..	42805b	95	732	37.3	-14 41	6.98	6.98	Ao	8	..	12752b
46	592	36.8	-53 49	9.0	10.0	F	2	..	14920b	96	1247	37.3	-28 17	10.9	10.6	Go	1	..	45992b
47	246	36.8	-63 18	9.6	9.9	F2	3	..	23802b	97	1401	37.3	-37 0	9.2	10.7	Ao	3	5,2	42805b
48	224	36.9	+69 46	9.2	9.8	Go	2	..	38165i	98	557	37.3	-55 43	9.1	10.0	G5	3	..	40953b
49	984	36.9	+48 13	6.28	7.28	Ko	3	..	37010i	99	564	37.3	-56 28	8.6	9.4	Ko	3	..	40953b
50	812	36.9	+42 17	7.35	7.91	Go	5	..	38933i	100	563	37.3	-56 33	6.74	8.0	K5	6	..	40953b

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3^h 37^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	254	37.4	+70 14	8.99	9.05	A2	3	..	38943i	51	196	37.8	+73 26	9.9	10.5	G0	2	..	6449m
2	225	37.4	+69 54	8.49	8.77	F0	3	..	37555i	52	740	37.8	+57 33	8.6	9.1	F8	3	..	37427i
3	820	37.4	+55 52	8.2	8.2	A0	2	..	37427i	53	742	37.8	+57 16	9.2	9.2	A	2	..	37427i
4	809	37.4	+50 14	7.52	7.52	A0	7	..	38087i	54	538	37.8	+25 6	10.0	10.6	G	1	..	6447m
5	879	37.4	+47 15	8.6	8.6	A0	3	..	38087i	55	537	37.8	+24 45	7.46	7.52	A2	3	..	37417i
6	813	37.4	+42 50	9.5	9.0	F5	1	..	38933i	56	495	37.8	+24 4	8.5	8.6	A5	2	..	37417i
7	820	37.4	+38 4	7.40	8.58	K5	1	..	38975i	57	496	37.8	+23 21	8.6	8.7	A5	3	..	37417i
8	821	37.4	+38 4	8.7	8.8	A5	3	..	38975i	58	497	37.8	+23 18	10.0	10.8	G5	1	..	6447m
9	510	37.4	+11 39	8.6	9.0	F5	2	..	37470i	59	510	37.8	+21 45	9.5	9.8	F2	2	..	6447m
10	537	37.4	+ 7 35	8.3	8.4	A2	5	3,4	24325b	60	618	37.8	+20 25	8.3	9.3	K0	3	5,2	38300i
11	534	37.4	+ 5 10	9.11	9.67	G0	2	..	24325b	61	700	37.8	- 2 41	9.5	9.8	F0	6	..	24332b
12	650	37.4	- 4 10	10.0	10.6	G0	4	..	24332b	62	718	37.8	-17 30	8.9	10.1	K5	1	..	46088b
13	724	37.4	- 10 9	9.2	9.8	G0	3	..	24339b	63	654	37.8	-22 46	9.5	9.6	G0	2	..	24326b
14	1342	37.4	-35 13	8.9	9.5	K0	2	..	42911b	64	1522	37.8	-23 34	8.2	8.1	A2	7	..	24326b
15	1138	37.4	-43 33	8.5	9.1	G5	2	..	12637b	65	1331	37.8	-33 43	8.9	10.3	K0	2	E	12259b
16	244	37.4	-70 52	9.2	10.2	K0	1	..	17047b	66	1230	37.8	-44 55	9.18	10.0	K2	3	..	24616b
17	234	37.4	-73 43	8.4	9.4	K0	3	..	20539b	67	197	37.9	+73 49	9.9	10.7	G5	1	..	6449m
18	798	37.5	+44 2	8.4	8.4	B9	3	..	38933i	68	603	37.9	+29 22	8.7	8.7	B9	4	I,3	38975i
19	699	37.5	- 2 34	9.8	10.6	G5	4	..	24332b	69	600	37.9	+25 25	8.5	9.1	G0	4	2,2	6447m
20	706	37.5	- 7 59	9.5	9.8	F0	3	..	23809b	70	539	37.9	+24 58	9.4	10.0	G	1	..	6447m
21	715	37.5	-17 28	7.70	8.12	F5	6	0,7	12752b	71	536	37.9	+22 55	10.0	10.1	A2	2	..	6447m
22	1381	37.5	-29 9	9.2	10.6	K5	1	..	45992b	72	555	37.9	+ 8 11	9.5	9.8	F2	2	..	15183b
23	1344	37.5	-35 45	9.5	9.2	F5	2	..	42911b	73	651	37.9	+ 1 40	8.9	9.0	A3	3	..	24325b
24	1035	37.5	-40 54	8.6	9.4	K5	3	3,3	40943b	74	1208	37.9	-42 4	8.0	7.9	A2	8	..	40943b
25	1100	37.5	-41 5	10.9	9.1	A3	3	..	40943b	75	597	37.9	-53 1	8.2	8.8	F0	5	..	14920b
26	596	37.5	-53 3	8.9	9.1	A5	4	..	14920b	76	406	38.0	+64 19	8.9	9.0	A3	3	..	37600i
27	264	37.5	-60 24	8.6	8.9	G5	3	..	40953b	77	1014	38.0	+49 33	8.0	8.0	A0	3	..	37452i
28	268	37.5	-74 18	7.9	8.9	K0	5	0,4	20539b	78	987	38.0	+48 10	8.1	9.2	K2	2	..	38087i
29	646	37.6	+58 32	8.5	8.9	F5	3	..	37427i	79	807	38.0	+45 36	9.4	9.5	A2	2	..	38933i
30	741	37.6	+36 34	8.6	8.6	A0	2	..	38975i	80	642	38.0	+31 58	3.94	3.72	B1	..	I,8 R	1737c
31	598	37.6	+25 49	8.6	9.6	K0	3	2,1	6447m	81	607	38.0	+27 5	8.3	9.5	K5	..	M	
32	597	37.6	+25 27	8.5	9.0	F8	4	0,2	6447m	82	601	38.0	+25 33	8.1	9.1	K0	4	0,2	6447m
33	535	37.6	+22 26	9.2	9.6	F5	4	..	6447m	83	582	38.0	+19 21	6.34	7.12	G5	8	5,4	37601i
34	674	37.6	-21 33	8.2	8.7	G5	5	..	24326b	84	727	38.0	-10 49	9.2	9.6	F5	2	..	18192b
35	1443	37.6	-30 41	9.4	9.4	F5	3	..	42805b	85	675	38.0	-21 1	9.2	10.2	K	1	..	24326b
36	1103	37.6	-41 6	7.4	8.1	A3	7	..	40943b	86	676	38.0	-21 26	9.5	9.6	F0	2	..	24326b
37	558	37.6	-55 52	7.9	8.5	A0	7	..	40953b	87	1448	38.0	-30 35	8.43	8.5	F0	4	..	12259b
38	255	37.7	+70 33	8.6	8.7	A2	2	..	37555i	88	1407	38.0	-37 14	8.7	10.1	G5	3	0,3	40943b
39	804	37.7	+45 48	6.09	6.23	A5	6	0,8	37010i	89	278	38.1	+68 21	9.2	10.2	K0	2	..	38165i
40	805	37.7	+45 43	8.4	9.5	K2	2	..	38933i	90	707	38.1	+54 45	6.80	6.94	A5	6	0,5-	37435i
41	599	37.7	+26 4	7.53	8.53	K0	7	5,3	6447m	91	880	38.1	+47 51	8.4	8.5	A2	3	..	37010i
42	524	37.7	+16 5	7.8	7.8	B9	5	..	37601i	92	828	38.1	+40 37	8.37	8.87	F8	2	..	38081i
43	517	37.7	+ 3 49	8.5	8.6	A5	5	..	24325b	93	742	38.1	+36 9	5.57	5.63	A2	..	0,6 R	56,76
44	724	37.7	- 4 55	7.70	7.68	B9	5	1,9	37338i	94	540	38.1	+24 15	8.1	8.2	A2	3	..	37417i
45	688	37.7	-16 17	7.97	9.04	K2	4	..	24339b	95	499	38.1	+23 34	10.0	10.5	F8	1	..	6447m
46	728	37.7	-19 19	9.3	9.4	K0	2	..	24326b	96	574	38.1	+ 6 59	8.7	9.7	K0	2	..	24325b
47	1820	37.7	-23 57	8.3	8.5	A0	8	..	24326b	97	587	38.1	- 0 24	8.7	9.5	G5	3	..	24332b
48	1513	37.7	-24 58	6.77	7.5	F5	5	3,4	5670b	98	653	38.1	- 3 54	10.0	11.0	K0	3	..	24332b
49	1383	37.7	-29 6	9.2	9.4	F8	4	2,2	45992b	99	708	38.1	- 8 25	9.8	10.8	K	1	R	23809b
50	306	37.7	-58 20	8.3	9.1	A2	5	..	40953b	100	733	38.1	- 9 10	8.6	8.9	F2	3	..	23809b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1428	38.1	-31 55	9.6	9.4	Go	3	..	12259b	51	1355	38.5	-35 2	9.89	10.4	Go	2	..	42805b
2	576	38.1	-54 3	7.6	8.2	G5	5	..	14920b	52	569	38.5	-56 24	9.3	9.7	F2	3	..	40953b
3	566	38.1	-56 52	8.3	9.4	Ko	4	..	40953b	53	253	38.5	-72 5	8.3	9.3	Ko	3	..	17047b
4	744	38.2	+35 33	8.32	8.32	Ao	3	..	38975i	54	608	38.6	+62 9	7.8	7.7	B5	4	..	37427i
5	525	38.2	+15 43	8.5	8.8	Fo	2	..	37601i	55	1015	38.6	+50 6	9.22	9.36	A5	1	..	38087i
6	645	38.2	+ 0 38	9.7	10.3	Go	2	..	24332b	56	790	38.6	+45 2	7.67	8.01	F2	3	..	37010i
7	732	38.2	-19 1	7.36	7.6	A2	9	..	24326b	57	558	38.6	+27 37	7.02	7.58	Go	4	2,4	37417i
8	677	38.2	-20 52	8.6	9.6	G5	3	..	24326b	58	621	38.6	+20 37	6.03	6.01	B9	7	..	37417i
9	1351	38.2	-27 9	9.7	9.8	G5	2	..	45992b	59	526	38.6	+16 7	8.9	9.4	F8	2	..	37601i
10	1255	38.2	-28 43	9.7	10.0	Go	2	..	45992b	60	556	38.6	+ 8 45	8.9	9.5	Go	4	..	15183b
11	1429	38.2	-32 49	8.9	9.4	Ko	3	..	12259b	61	595	38.6	+ 3 8	9.0	9.8	G5	2	..	24325b
12	1334	38.2	-33 31	9.6	10.0	F8	3	..	42805b	62	703	38.6	- 2 23	8.0	9.1	K2	5	3,2	23816b
13	1375	38.2	-33 55	9.2	10.4	G5	1	..	12259b	63	698	38.6	-12 1	8.8	10.0	K5	2	..	24339b
14	1376	38.2	-34 44	9.2	10.1	K5	1	..	12259b	64	1405	38.6	-36 45	10.2	10.4	F8	2	..	40943b
15	560	38.2	-55 23	8.9	9.7	F2	2	..	12036b	65	1044	38.6	-40 22	9.5	9.7	Ko	2	..	24616b
16	136	38.3	+76 19	10.2	11.4	K5	1	..	6449m	66	258	38.6	-64 21	8.8	9.8	Ko	4	..	38370b
17	173	38.3	+74 57	9.9	9.9	Ao	3	..	6449m	67	742	38.7	+41 43	6.82	6.82	Ao	5	E	37010i
18	821	38.3	+56 3	8.5	9.0	F8	2	0,2	38959i	68	607	38.7	+29 50	8.1	8.1	Ao	4	1,4	38975i
19	881	38.3	+47 20	7.8	7.8	B9	4	..	37010i	69	545	38.7	+24 31	10.2	11.0	G5	1	..	6447m
20	576	38.3	+ 6 32	9.3	9.4	A2	3	..	24325b	70	729	38.7	- 5 9	9.2	9.6	F5	3	..	23809b
21	590	38.3	+ 0 6	8.63	9.19	Go	7	..	24332b	71	734	38.7	- 6 9	9.5	10.5	Ko	1	..	23809b
22	522	38.3	- 1 8	10.0	10.8	G5	2	..	24332b	72	709	38.7	- 8 23	9.2	9.5	F2	4	..	23809b
23	702	38.3	- 2 23	7.22	8.22	Ko	7	5,4	23816b	73	1214	38.7	-42 5	9.6	10.1	G5	2	..	24616b
24	663	38.3	- 7 49	9.8	9.9	A3	4	..	23809b	74	1051	38.7	-48 6	7.10	7.2	A2	8	..	14920b
25	689	38.3	-16 24	8.8	9.4	Go	3	E	24339b	75	86	38.7	-81 33	9.0	10.3	F5	2	..	20538b
26	657	38.3	-22 17	8.6	8.7	Ko	4	..	24326b	76	101	38.8	+82 26	8.5	8.8	Fo	5	..	37558i
27	1430	38.3	-32 15	4.93	4.81	B5	..	2,8R	28,196	77	257	38.8	+70 34	5.40	5.40	Ao	..	0,8-	56,76
28	1051	38.3	-49 11	9.0	9.4	F	3	R	46085b	78	650	38.8	+58 39	9.0	10.0	Ko	1	..	37427i
29	198	38.4	+73 35	10.2	10.6	F5	2	..	6449m	79	704	38.8	- 2 40	10.2	11.0	G5	3	..	24332b
30	815	38.4	+42 16	3.93	4.35	F5	10	R	37010i	80	602	38.8	- 3 21	10.0	10.8	G5	3	..	24332b
31	852	38.4	+39 46	7.47	8.25	G5	4	..	38081i	81	729	38.8	-10 48	5.70	5.70	Ao	10	..	18192b
32	543	38.4	+24 33	9.2	10.3	K2	1	..	6447m	82	700	38.8	-12 18	10.0	10.8	G5	1	..	24339b
33	604	38.4	+14 18	8.5	9.0	F8	2	..	38110i	83	1358	38.8	-35 1	10.6	11.0	Ao	1	..	42805b
34	658	38.4	-21 53	9.5	9.6	F5	2	..	24326b	84	1046	38.8	-40 47	10.2	10.0	Go	2	..	24616b
35	1451	38.4	-30 29	8.9	9.4	Fo	3	..	12259b	85	1052	38.8	-48 33	7.2	8.1	Fo	5	..	14920b
36	1433	38.4	-32 25	8.9	9.4	Go	3	..	12259b	86	740	38.9	+60 33	8.7	8.7	Ao	2	..	37427i
37	1145	38.4	-43 36	8.5	8.5	A3	4	..	12637b	87	808	38.9	+45 17	7.47	7.47	Ao	4	..	38933i
38	1239	38.4	-44 5	8.1	8.9	Ko	3	..	12637b	88	505	38.9	+23 59	5.43	5.31	B5	..	..	1631c
39	578	38.4	-54 21	9.2	10.6	K5	1	..	46085b	89	537	38.9	+22 58	9.2	9.6	F5	3	..	6447m
40	40	38.4	-88 55	10.0	11.0	Ko	2	..	22980b	90	622	38.9	+20 26	8.1	8.5	F5	2	..	38300i
41	69	38.5	+84 22	8.9	9.0	A2	4	..	37309i	91	655	38.9	- 4 35	8.8	8.8	Ao	5	..	23809b
42	713	38.5	+59 29	9.2	9.5	F	1	..	37427i	92	658	38.9	-18 39	9.2	10.3	K2	2	..	46088b
43	711	38.5	+52 38	9.2	9.2	A	2	..	38087i	93	1399	38.9	-26 5	9.9	10.1	Go	1	..	45992b
44	606	38.5	+29 31	8.3	8.3	Ao	3	1,3	38975i	94	1398	38.9	-26 17	8.1	9.1	Ko	5	0,3	45992b
45	556	38.5	+27 35	6.71	6.99	Fo	5	0,5	37417i	95	881	38.9	-51 45	8.6	9.9	G5	1	..	14920b
46	504	38.5	+24 5	8.9	9.0	A5	2	..	37417i	96	435	38.9	-52 43	9.3	9.9	G	1	..	14920b
47	503	38.5	+23 49	9.5	9.6	A2	2	..	6447m	97	212	38.9	-71 11	9.0	10.0	Ko	1	..	17047b
48	519	38.5	+ 3 54	8.9	9.0	A5	4	..	24325b	98	37	38.9	-85 55	9.3	9.6	F2	3	..	15145b
49	728	38.5	-10 6	3.72	4.72	Ko	..	R	56,76	99	884	39.0	+47 41	8.5	9.5	Ko	2	..	38087i
50	1529	38.5	-23 14	7.9	9.3	Ko	5	..	24326b	100	811	39.0	+45 22	5.64	5.62	B9	8	..	37010i

THE HENRY DRAPER CATALOGUE.

23300

3^h 39^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	803	39.0	+38 21	6.56	7.56	Ko	5	..	3745ii	51	548	39.4	+24 37	9.2	9.6	F5	3	..	6447m
2	507	39.0	+23 48	3.81	3.69	B5p	..	R	28,196	52	549	39.4	+24 34	9.8	10.4	G	1	..	6447m
3	596	39.0	+ 2 27	9.3	9.4	A5	2	..	24325b	53	541	39.4	+22 54	8.6	9.2	Go	2	2,2	3830oi
4	730	39.0	- 9 55	7.21	8.21	Ko	6	0,8	18192b	54	591	39.4	- 0 37	9.7	10.3	Go	2	..	24332b
5	659	39.0	-22 36	8.8	9.4	G5	3	..	24326b	55	735	39.4	-10 23	10.0	10.3	F2	2	..	24339b
6	1257	39.0	-28 27	9.5	10.0	Ko	3	0,2	45992b	56	733	39.4	-19 25	7.26	8.3	Ko	8	..	24326b
7	1242	39.0	-44 53	9.36	10.6	Ko	2	..	24616b	57	1417	39.4	-37 22	8.2	7.5	A3	5	..	40943b
8	1143	39.0	-46 16	6.55	7.2	F5	8	..	12647b	58	244	39.4	-75 8	7.12	7.4	A5	8	..	14359b
9	199	39.1	+73 36	9.2	9.8	Go	4	..	6449m	59	990	39.5	+48 29	8.4	8.8	F5	3	..	38087i
10	791	39.1	+46 29	8.9	10.0	K2	1	..	38933i	60	607	39.5	+25 19	8.66	8.94	Fo	4	5,2	6447m
11	538	39.1	+22 25	9.4	10.2	G5	1	..	6447m	61	510	39.5	+23 44	8.3	8.4	A3	3	2,2	3830oi
12	514	39.1	+21 43	9.4	9.8	F5	2	..	6447m	62	656	39.5	+ 1 39	7.9	9.0	K2	3	..	24325b
13	586	39.1	+19 32	8.3	8.6	F2	2	..	3760ii	63	526	39.5	- 1 29	5.09	5.04	B8	..	0,8	56,76
14	479	39.1	+ 9 52	8.6	9.4	G5	2	..	3747oi	64	605	39.5	- 3 49	9.3	10.3	Ko	5	5,2	24332b
15	707	39.1	- 2 17	8.6	9.6	Ko	5	2,3	24332b	65	712	39.5	- 8 4	10.0	10.3	F2	2	..	23809b
16	736	39.1	- 6 22	9.5	10.0	F8	4	..	23809b	66	726	39.5	-13 13	9.8	11.0	K5	1	..	24339b
17	710	39.1	- 8 11	7.80	8.58	G5	8	..	23809b	67	725	39.5	-13 43	8.8	9.3	F8	3	..	18192b
18	1514	39.1	-31 20	7.21	8.8	Mb	5	..	12259b	68	885	39.5	-51 7	7.3	8.1	Ko	6	..	14920b
19	1415	39.1	-37 38	4.64	5.71	K2	..	R	28,196	69	438	39.5	-52 44	9.1	9.7	Go	2	..	14920b
20	1057	39.1	-49 45	8.06	8.3	F2	5	..	14920b	70	71	39.5	-83 43	9.5	9.9	F5	4	..	20538b
21	280	39.2	+68 54	8.0	8.6	Go	3	..	38943i	71	137	39.6	+76 19	8.17	9.17	Ko	6	0,3	6449m
22	644	39.2	+31 58	8.5	9.6	K2	3	..	38975i	72	991	39.6	+48 27	9.9	9.9	A	1	..	38087i
23	608	39.2	+26 35	8.7	8.8	A5	2	..	37417i	73	831	39.6	+40 11	8.97	9.39	F5	2	..	3808ii
24	546	39.2	+24 32	5.63	5.58	B8	..	0,6	1631c	74	609	39.6	+25 33	9.5	9.5	A	1	..	6447m
25	508	39.2	+23 57	9.2	9.2	Ao	4	..	6447m	75	550	39.6	+24 10	9.1	9.2	A2	4	..	6447m
26	509	39.2	+23 24	8.8	9.2	F5	4	..	6447m	76	540	39.6	+ 8 0	8.5	9.3	G5	2	..	3747oi
27	515	39.2	+22 0	9.4	9.8	F5	3	..	6447m	77	527	39.6	- 1 45	10.7	11.0	Fo	2	..	24332b
28	474	39.2	+10 49	8.5	8.9	F5	2	..	3747oi	78	701	39.6	-12 39	9.8	10.8	Ko	1	..	24339b
29	1402	39.2	-26 40	9.7	9.8	A3	3	..	45992b	79	662	39.6	-22 15	8.9	8.8	Fo	4	..	24326b
30	1360	39.2	-26 55	9.7	10.1	Go	2	..	45992b	80	1342	39.6	-33 49	8.6	8.8	Fo	5	..	12259b
31	1439	39.2	-32 51	8.2	8.8	Ko	5	..	12259b	81	204	39.6	-69 18	8.8	10.0	K5	4	E	20430b
32	570	39.2	-55 59	8.7	9.7	Ko	2	..	40953b	82	245	39.6	-70 2	9.16	10.0	K5	3	3,3	17047b
33	260	39.2	-63 58	10.2	10.6	F5	1	..	23802b	83	824	39.7	+55 37	6.04	6.02	B9	9	E	37427i
34	246	39.2	-67 33	9.6	9.6	A	4	..	38366b	84	774	39.7	+51 24	6.80	7.08	Fo	8	5,7	38087i
35	744	39.3	+41 30	8.7	9.5	G5	1	..	38933i	85	886	39.7	+47 17	7.9	8.9	Ko	3	..	38087i
36	575	39.3	+28 21	8.0	8.1	A2	6	2,4	37488i	86	551	39.7	+24 36	9.8	10.4	G	2	..	6447m
37	605	39.3	+25 40	9.5	10.0	F8	2	..	6447m	87	512	39.7	+24 2	8.2	8.2	B9	3	..	37417i
38	547	39.3	+24 10	4.37	4.25	B5	..	R	28,196	88	624	39.7	+20 56	8.1	8.2	A3	3	3,4	37417i
39	540	39.3	+22 49	10.0	10.8	G5	1	..	6447m	89	581	39.7	+ 6 19	7.9	8.0	A2	7	..	15183b
40	738	39.3	- 6 13	9.5	10.5	Ko	3	..	23809b	90	592	39.7	- 0 44	9.5	9.8	F2	6	0,4	24332b
41	692	39.3	-16 45	9.2	10.3	K2	1	..	46088b	91	528	39.7	- 1 4	9.3	9.9	Go	5	0,3	24332b
42	1260	39.3	-28 47	10.6	10.0	Ao	3	0,2	45992b	92	738	39.7	- 8 54	8.6	8.6	B9	7	..	23809b
43	1114	39.3	-41 6	10.9	10.3	Go	2	..	24616b	93	702	39.7	-12 22	8.2	8.5	Fo	5	..	18192b
44	1058	39.3	-49 28	7.5	8.4	Ko	5	..	14920b	94	1400	39.7	-29 37	9.9	10.6	Ko	1	..	45992b
45	259	39.3	-65 36	9.5	9.6	A5	4	..	23802b	95	1343	39.7	-33 29	9.2	9.4	Fo	3	..	12259b
46	142	39.3	-77 26	8.9	9.5	Go	2	..	46167b	96	1217	39.7	-42 32	9.2	10.3	Ko	2	..	24616b
47	..	39.4	+76 43	..	..	A2	2	..	6449m	97	439	39.7	-51 57	9.1	9.4	Go	2	..	14920b
48	190	39.4	+73 5	9.2	10.2	Ko	2	..	6449m	98	307	39.7	-58 19	8.3	9.1	G5	4	..	40953b
49	745	39.4	+42 8	8.6	9.2	Go	2	..	38933i	99	261	39.7	-64 12	9.1	9.9	G5	4	..	38370b
50	561	39.4	+27 53	8.0	8.0	Ao	3	..	37488i	100	143	39.7	-77 25	8.4	9.4	Ko	3	0,2	14359b

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	259	39.8	+71 1	4.67	4.67	Ao	..	2, R	56,76	51	653	40.2	+59 1	9.4	9.4	A	1	R	37427i
2	544	39.8	+22 24	8.1	8.1	Ao	4	..	37417i	52	775	40.2	+51 13	7.25	7.25	Ao	6	0,5	38087i
3	582	39.8	+ 4 47	8.7	9.0	F2	4	0,4-	1268ob	53	613	40.2	+25 56	10.0	11.2	K5	1	..	6447m
4	665	39.8	-22 21	9.0	9.3	Go	3	..	24326b	54	519	40.2	+21 42	9.4	9.8	F5	2	..	6447m
5	1401	39.8	-28 56	7.14	7.5	A2	7	3,4	12259b	55	1387	40.2	-34 22	9.6	11.5	Ko	1	..	42805b
6	408	39.9	+64 27	8.8	9.2	F5	5	3,5	37556i	56	887	40.2	-50 58	7.02	7.6	F8	8	..	1492ob
7	749	39.9	+36 51	8.5	9.5	Ko	1	..	38975i	57	711	40.3	+54 45	8.6	8.7	A2	3	0,3-	38959i
8	516	39.9	+24 4	4.02	3.90	B5	..	R	28,196	58	1024	40.3	+50 3	8.02	9.09	K2	3	..	38087i
9	517	39.9	+23 44	8.3	8.3	Ao	5	2,3	6447m	59	616	40.3	+29 21	8.5	8.5	B9	4	3,3	37488i
10	545	39.9	+22 51	8.1	8.1	Ao	6	..	37417i	60	562	40.3	+27 27	9.4	9.4	B9	2	E	38111i
11	529	39.9	+15 57	7.9	7.9	Ao	5	..	37601i	61	614	40.3	+25 9	9.5	9.6	A2	2	..	6447m
12	602	39.9	+ 2 19	6.71	7.13	F5	6	0,7-	37471i	62	559	40.3	+24 56	10.7	11.7	K	1	..	6447m
13	593	39.9	- 0 36	5.84	6.91	K2	6	2,8-	37338i	63	519	40.3	+23 53	8.1	9.2	K2	2	2,1	6447m
14	716	39.9	- 8 21	10.2	10.8	Go	2	..	23809b	64	549	40.3	+22 50	8.8	9.4	Go	3	..	6447m
15	736	39.9	-10 33	8.2	9.3	K2	3	..	18192b	65	537	40.3	+18 15	8.4	8.4	B8	2	..	37601i
16	726	39.9	-11 5	8.3	8.9	Go	6	..	18192b	66	539	40.3	+ 5 44	5.36	5.19	B3	..	5, R	56,76
17	R	39.9	-22 53	9.4	10.2	G5	2	..	24326b	67	603	40.3	+ 2 56	7.9	9.0	K2	3	0,3	24325b
18	1518	39.9	-31 45	8.5	8.5	Fo	5	..	12259b	68	711	40.3	- 2 6	10.2	11.2	Ko	3	..	24332b
19	1421	39.9	-37 12	9.8	10.1	G5	1	..	40943b	69	683	40.3	-21 49	9.8	9.6	Ao	2	..	24326b
20	1123	39.9	-50 24	8.4	9.0	A5	4	..	14920b	70	1530	40.3	-25 29	8.7	9.2	K5	2	..	45992b
21	886	39.9	-51 36	8.5	9.0	F8	4	..	14920b	71	1117	40.3	-41 41	10.0	10.0	Go	2	..	24616b
22	561	39.9	-55 46	8.6	9.4	F5	3	..	12036b	72	250	40.3	-63 5	9.2	10.4	K5	1	..	23802b
23	265	39.9	-60 30	9.7	9.7	Ao	5	..	23802b	73	246	40.3	-70 16	9.6	10.4	G5	1	..	17047b
24	231	39.9	-68 11	9.4	9.4	Ao	2	2,4	17047b	74	105	40.3	-78 39	6.08	7.9	Ko	7	..	20538b
25	214	39.9	-71 25	8.5	8.8	Fo	3	..	17047b	75	369	40.4	+65 13	4.71	6.06	Ma	7	0,9	37556i
26	795	40.0	+46 19	7.8	8.9	K2	2	..	38087i	76	747	40.4	+57 28	8.5	9.3	G5	3	0,2	38959i
27	580	40.0	+28 34	8.6	9.6	Ko	3	..	37488i	77	809	40.4	+43 46	7.07	7.05	B9	5	..	37010i
28	611	40.0	+25 46	8.6	9.8	K5	4	..	6447m	78	649	40.4	+32 0	6.51	6.34	B3	..	0,4	56,76
29	612	40.0	+25 40	8.7	9.7	Ko	4	..	6447m	79	520	40.4	+23 53	8.2	8.3	A3	5	R	6447m
30	554	40.0	+25 5	8.06	8.06	Ao	7	3,4	6447m	80	522	40.4	+23 39	4.25	4.13	B5	..	0,8 R	28,196
31	555	40.0	+24 44	10.0	10.1	A2	2	..	6447m	81	582	40.4	+ 6 54	7.18	7.24	A2	8	..	15183b
32	553	40.0	+24 15	5.85	5.80	B8	..	1,5	1631c	82	685	40.4	-21 36	9.2	9.6	G5	2	..	24326b
33	703	40.0	-12 6	9.5	10.5	Ko	1	..	24339b	83	1427	40.4	-37 12	9.2	10.1	Go	3	..	42805b
34	661	40.0	-18 36	9.5	9.6	A2	3	..	46088b	84	1264	40.4	-38 36	6.96	7.7	G5	7	..	40943b
35	682	40.0	-21 25	8.0	9.6	K5	3	..	24326b	85	1064	40.4	-49 53	8.41	9.7	K5	2	..	46083b
36	1374	40.0	-35 1	9.8	10.9	A2	1	..	42805b	86	826	40.5	+55 49	8.6	9.4	G5	2	..	37427i
37	266	40.0	-60 50	8.9	9.4	F8	6	..	23802b	87	752	40.5	+41 17	8.0	8.6	Go	2	..	38081i
38	749	40.1	+41 33	8.2	8.7	F8	3	..	38081i	88	615	40.5	+25 33	8.7	8.7	Ao	5	..	6447m
39	750	40.1	+41 10	8.2	9.0	G5	4	R	38081i	89	523	40.5	+23 57	6.96	6.96	Ao	3	..	37417i
40	558	40.1	+24 41	10.2	10.8	G	1	..	6447m	90	674	40.5	- 7 33	9.8	10.4	Go	1	..	23809b
41	556	40.1	+24 13	6.46	6.44	B9	..	0,5	1631c	91	663	40.5	-18 22	8.9	10.0	K2	1	..	46088b
42	523	40.1	+ 4 8	8.5	9.7	K5	2	5,2	1268ob	92	737	40.5	-19 27	8.8	8.8	Go	4	..	24326b
43	658	40.1	+ 1 10	8.84	9.62	G5	1	..	1268ob	93	1526	40.5	-31 15	8.5	9.4	F8	3	..	42805b
44	648	40.1	+ 0 13	9.73	10.91	K5	1	..	24332b	94	1143	40.5	-47 29	9.4	9.7	F8	3	..	46083b
45	729	40.1	-13 47	8.2	9.0	G5	4	..	18192b	95	441	40.5	-52 34	7.8	8.7	G5	5	..	14920b
46	1466	40.1	-30 20	8.9	9.4	F8	3	..	45992b	96	582	40.5	-54 0	10.3	10.4	A2	2	..	46085b
47	267	40.1	-60 19	8.2	9.4	Ko	5	..	23802b	97	583	40.5	-54 47	8.50	9.7	Ko	4	0,2	46085b
48	88	40.1	-80 20	9.5	9.8	Fo	2	..	20538b	98	993	40.6	+49 1	9.0	9.6	Go	2	..	38087i
49	293	40.2	+67 25	9.5	9.6	A2	3	..	38165i	99	806	40.6	+38 51	9.5	10.3	G5	2	..	38081i
50	290	40.2	+66 51	7.7	8.5	G5	5	..	37556i	100	560	40.6	+24 34	10.2	10.8	G	1	..	6447m

THE HENRY DRAPER CATALOGUE.

23500

3^h 40^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	53I	40.6	+16 3	7.9	8.2	Fo	4	..	3760ii	51	283	41.0	+68 48	7.21	8.21	Ko	7	..	38165i
2	479	40.6	+10 15	7.72	8.50	G5	3	..	3747oi	52	825	41.0	+50 26	5.92	5.87	B8	9	..	38087i
3	651	40.6	+0 19	8.23	8.57	F2	6	o,8-	23816b	53	616	41.0	+25 20	9.2	10.6	Ma	1	..	6447m
4	718	40.6	- 8 15	8.1	8.1	B9	8	..	23809b	54	565	41.0	+ 8 22	8.5	9.3	G5	3	..	3747oi
5	741	40.6	-14 49	9.36	9.70	F2	2	..	18192b	55	746	41.0	- 6 16	9.5	10.5	Ko	3	..	23809b
6	667	40.6	-21 54	8.6	8.7	F5	5	..	24326b	56	745	41.0	- 6 47	9.5	10.1	Go	4	..	23809b
7	1547	40.6	-23 41	7.59	8.1	Ko	8	..	24326b	57	732	41.0	-13 16	9.5	10.5	Ko	1	..	18192b
8	1119	40.6	-40 58	6.50	7.7	Ko	8	..	40943b	58	733	41.0	-13 38	8.8	8.9	A5	5	..	18192b
9	203	40.6	-56 47	8.3	8.4	A2	8	..	3837ob	59	723	41.0	-17 27	8.2	8.5	Fo	5	..	12752b
10	845	40.7	+56 43	8.6	8.6	B8	3	5,3	3898ii	60	1274	41.0	-28 5	8.9	10.0	G5	3	..	45992b
11	526	40.7	+23 48	9.5	10.0	F8	1	..	6447m	61	1532	41.0	-31 54	9.5	10.3	Ko	2	..	12259b
12	524	40.7	+23 19	8.6	8.6	Ao	4	..	6447m	62	1166	41.0	-39 32	10.9	10.0	Go	2	..	24616b
13	551	40.7	+22 49	9.5	10.0	F8	1	..	6447m	63	1257	41.0	-44 1	8.7	9.7	Ko	4	..	24616b
14	550	40.7	+22 37	10.0	10.6	Go	1	..	6447m	64	274	41.0	-61 37	10.6	10.9	F2	3	..	23802b
15	529	40.7	- 1 11	10.0	10.6	Go	2	..	24332b	65	778	41.1	+51 31	7.8	8.4	Go	4	..	3073b
16	743	40.7	- 6 38	9.5	10.6	K2	3	..	23809b	66	797	41.1	+45 3	7.67	7.81	A5	3	..	3701oi
17	696	40.7	-16 44	8.8	9.1	Fo	3	E	24339b	67	563	41.1	+24 31	8.6	8.7	A2	4	R	6447m
18	1267	40.7	-38 39	9.6	9.4	Go	2	..	40943b	68	562	41.1	+24 13	6.68	6.66	B9	4	..	37417i
19	1120	40.7	-41 36	8.9	9.1	Fo	5	o,3	24616b	69	516	41.1	+11 13	8.9	8.9	Ao	2	..	3747oi
20	563	40.7	-55 1	9.10	10.0	F8	4	..	46085b	70	584	41.1	+ 6 57	7.9	8.9	Ko	3	..	24325b
21	242	40.7	-76 5	8.1	9.1	Ko	4	..	14359b	71	701	41.1	-20 33	9.0	9.6	G5	2	..	24326b
22	201	40.8	+73 12	9.7	10.3	Go	2	..	6447m	72	689	41.1	-21 32	9.2	10.2	K2	1	..	46166b
23	612	40.8	+63 0	5.96	6.04	A3	..	o,8	56,76	73	672	41.1	-22 25	8.4	9.3	Ko	5	..	24326b
24	777	40.8	+51 44	8.4	9.0	Go	2	..	38087i	74	671	41.1	-22 39	9.5	9.9	Ko	2	..	24326b
25	582	40.8	+28 22	8.7	8.7	Ao	3	E	38111i	75	1271	41.1	-38 43	9.5	9.4	F8	3	..	40943b
26	583	40.8	+ 6 30	6.12	7.12	Ko	..	o,7	56,76	76	1167	41.1	-39 8	7.26	7.8	Go	6	..	40943b
27	594	40.8	- 0 5	7.93	9.00	K2	5	o,4-	23816b	77	268	41.1	-60 52	10.7	11.5	G5	2	..	23802b
28	739	40.8	-10 36	9.3	9.6	F2	2	..	18192b	78	233	41.1	-68 29	9.0	9.6	Go	3	E	20430b
29	687	40.8	-21 37	9.5	9.6	Go	2	..	24326b	79	746	41.2	+60 42	8.9	9.9	Ko	2	..	37427i
30	1535	40.8	-25 54	9.9	9.8	Ao	2	..	45992b	80	827	41.2	+55 34	8.6	8.6	Ao	3	..	3898ii
31	1530	40.8	-31 36	8.1	9.4	Ko	2	..	12259b	81	828	41.2	+51 5	7.52	8.52	Ko	3	..	3073b
32	1268	40.8	-37 56	9.6	10.0	Ko	1	..	40943b	82	996	41.2	+48 15	8.6	9.6	Ko	2	..	38087i
33	1123	40.8	-41 34	9.8	9.5	Go	2	..	24616b	83	565	41.2	+25 0	9.8	10.8	Ko	1	..	6447m
34	1157	40.8	-43 33	7.9	9.4	Ma	2	..	12637b	84	529	41.2	+23 59	9.8	10.3	F8	1	..	6447m
35	585	40.8	-54 36	9.3	10.0	Go	3	..	46085b	85	528	41.2	+23 42	8.7	8.8	A2	4	o,2-	6447m
36	232	40.8	-68 51	9.6	9.6	Ao	2	..	17047b	86	625	41.2	+17 59	8.9	9.2	Fo	2	..	3760ii
37	255	40.8	-72 21	9.0	9.3	Fo	4	..	17047b	87	741	41.2	- 9 19	8.2	9.0	G5	6	o,5	23809b
38	594	40.9	+13 13	6.80	6.80	Ao	7	o,8	3760ii	88	1276	41.2	-28 11	7.9	8.8	Ko	6	2,1	45992b
39	530	40.9	- 1 30	10.0	11.0	Ko	2	..	24332b	89	1354	41.2	-33 45	9.2	9.7	Ko	2	..	12259b
40	738	40.9	- 5 37	9.5	9.5	Ao	3	..	23809b	90	1258	41.2	-44 50	10.0	10.3	G5	2	..	24616b
41	649	40.9	-15 41	7.56	8.56	Ko	5	..	24339b	91	1249	41.2	-45 5	9.16	9.7	Go	4	..	24616b
42	700	40.9	-20 49	7.50	7.2	A5	9	..	24326b	92	442	41.2	-52 21	9.1	9.9	G5	1	..	46085b
43	669	40.9	-22 17	10.0	9.3	A5	3	..	24326b	93	262	41.2	-64 30	7.50	9.3	Ko	5	o,7	20430b
44	1552	40.9	-23 15	10.2	10.2	A5	1	..	24326b	94	846	41.3	+56 49	6.48	6.46	B9	6	..	37427i
45	1271	40.9	-27 55	8.1	9.4	K2	4	o,3	45992b	95	834	41.3	+40 51	8.6	8.7	A2	2	..	3808ii
46	1270	40.9	-28 8	9.7	9.4	Go	3	..	45992b	96	835	41.3	+40 13	7.12	7.62	F8	5	..	3808ii
47	1391	40.9	-34 1	9.5	11.0	G5	2	..	42805b	97	620	41.3	+29 33	8.5	8.5	B8	4	3,6	38111i
48	1226	40.9	-42 12	7.3	8.8	K5	4	E	40943b	98	617	41.3	+25 13	10.2	10.7	F8	1	..	6447m
49	109	40.9	-79 25	6.79	7.9	Ko	5	..	46167b	99	739	41.3	-19 17	8.8	10.5	K5	1	..	46088b
50	138	41.0	+76 9	9.9	10.3	F5	2	..	6449m	100	586	41.3	-54 23	8.8	10.3	Ko	3	..	46085b

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3^h 41^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	139	41.4	+76 13	10.2	10.3	A5	2	..	6449m	51	892	41.7	+47 59	8.5	9.5	Ko	2	..	38087i
2	262	41.4	+70 12	7.39	7.47	A3	4	1,4	37555i	52	800	41.7	+46 23	8.2	8.2	Ao	3	..	38933i
3	847	41.4	+56 49	7.29	7.29	Ao	4	..	37427i	53	814	41.7	+43 22	8.4	9.4	Ko	3	..	38933i
4	998	41.4	+48 30	8.6	8.6	Ao	4	0,3	38087i	54	542	41.7	+23 18	8.3	9.3	Ko	4	5,1	6447m
5	830	41.4	+38 3	7.8	8.1	F2	3	..	38087i	55	598	41.7	- 0 11	8.9	9.5	Go	2	0,2	24332b
6	732	41.4	+34 44	9.4	9.4	A	1	..	38975i	56	694	41.7	-21 24	9.8	9.6	F5	2	..	24326b
7	534	41.4	+23 50	8.1	8.1	Ao	2	..	6447m	57	1481	41.7	-30 24	8.1	9.7	Ko	3	2,2	42805b
8	531	41.4	+23 49	8.7	9.3	Go	1	..	6447m	58	1537	41.7	-31 15	8.1	9.1	Fo	4	..	12259b
9	535	41.4	+23 25	8.0	8.4	F5	7	5,3	6447m	59	444	41.7	-52 30	9.0	9.6	G5	2	..	14920b
10	556	41.4	+22 38	8.7	8.7	Ao	5	0,3	6447m	60	588	41.7	-54 47	7.20	8.2	Ko	5	..	14920b
11	517	41.4	+11 22	8.5	8.6	A3	3	..	38110i	61	253	41.7	-63 46	9.3	10.1	G5	5	..	38370b
12	481	41.4	+10 53	8.5	9.3	G5	2	..	37470i	62	286	41.8	+68 12	6.33	6.28	B8	9	..	37556i
13	714	41.4	- 2 2	9.8	9.9	A2	4	..	24322b	63	586	41.8	+28 17	9.2	9.2	B9	2	..	38111i
14	707	41.4	-12 25	4.64	5.99	Ma	..	5, R	56,76	64	568	41.8	+25 5	8.26	8.32	A2	6	0,2	6447m
15	724	41.4	-17 3	8.9	10.1	K5	1	..	46088b	65	544	41.8	+23 15	9.4	10.4	Ko	1	..	6447m
16	1423	41.4	-26 13	6.92	7.2	A3	4	0,9	5670b	66	743	41.8	- 9 45	8.4	9.4	Ko	2	..	18192b
17	1260	41.4	-43 56	9.8	10.1	F5	2	..	24616b	67	743	41.8	-10 1	8.8	9.4	Go	4	..	18192b
18	275	41.4	-61 49	7.0	7.6	A2	7	..	38370b	68	1457	41.8	-32 47	8.9	8.8	F2	5	..	12259b
19	202	41.5	+73 15	9.7	10.0	Fo	3	..	6449m	69	1276	41.8	-38 11	8.4	8.8	F8	3	..	40943b
20	192	41.5	+72 54	8.0	8.0	Ao	6	0,2	37555i	70	1069	41.8	-48 22	6.45	7.7	Ko	7	..	14920b
21	641	41.5	+61 30	7.42	8.42	Ko	6	..	37427i	71	567	41.8	-56 56	8.6	10.0	K2	1	..	12036b
22	749	41.5	+60 12	8.81	9.59	G5	2	..	37427i	72	292	41.8	-61 56	7.6	8.4	G5	6	..	38370b
23	831	41.5	+50 33	7.37	7.71	F2	5	6,4 R	38087i	73	251	41.8	-67 35	8.9	10.0	K2	3	0,3	38366b
24	824	41.5	+42 34	7.8	7.8	B8	5	1,5	38087i	74	713	41.9	+54 25	8.0	8.4	F5	3	0,2	37435i
25	717	41.5	+33 18	6.36	6.19	B3	..	0,5	56,76	75	714	41.9	+52 21	6.76	6.52	Bo	7	5,8 R	38087i
26	650	41.5	+31 54	6.23	6.79	Go	..	5,5	56,76	76	1032	41.9	+50 5	8.97	9.53	Go	2	..	38087i
27	567	41.5	+24 21	8.42	8.42	Ao	4	..	6447m	77	808	41.9	+39 5	8.5	9.3	G5	1	..	38087i
28	566	41.5	+24 17	7.29	7.29	Ao	6	..	6447m	78	733	41.9	+34 17	8.7	9.5	G5	3	..	38975i
29	536	41.5	+23 48	8.1	8.1	Ao	..	1,5	1631c	79	512	41.9	+16 25	8.4	9.4	Ko	1	..	37601i
30	541	41.5	+23 48	2.96	2.84	B5p	..	R	28,196	80	508	41.9	+12 13	8.7	9.5	G5	2	..	38110i
31	538	41.5	+23 37	6.94	6.92	B9	8	..	6447m	81	531	41.9	- 1 47	10.7	10.7	Ao	3	..	24332b
32	537	41.5	+23 30	6.82	6.82	Ao	..	0,9	1631c	82	708	41.9	-12 44	9.5	10.3	G5	1	..	18192b
33	523	41.5	+21 34	9.4	10.2	G5	2	..	6447m	83	654	41.9	-15 33	8.2	8.2	Ao	7	..	24339b
34	486	41.5	+ 9 14	7.6	7.7	A2	5	..	37470i	84	695	41.9	-21 7	9.0	9.7	G5	2	..	46088b
35	741	41.5	-10 11	6.98	7.98	Ko	7	..	18192b	85	1562	41.9	-23 23	8.9	9.4	G5	3	..	24326b
36	692	41.5	-21 17	9.0	9.3	F8	3	..	24326b	86	1861	41.9	-24 42	8.1	9.1	F8	3	R	10587b
37	1533	41.5	-31 42	9.2	10.3	Go	2	..	42805b	87	1126	41.9	-41 45	10.2	10.1	Go	2	..	24616b
38	1356	41.5	-32 56	8.9	9.4	G5	3	..	12259b	88	174	42.0	+74 23	7.92	8.70	G5	4	0,2-	37555i
39	1230	41.5	-42 4	9.0	9.5	G5	5	..	24616b	89	834	42.0	+50 38	8.0	9.0	Ko	3	..	38087i
40	287	41.5	-59 20	9.1	10.9	Go	3	..	23802b	90	802	42.0	+46 30	8.0	8.0	Ao	4	..	37010i
41	19	41.5	-89 47	10.0	11.0	Ko	2	0,2	22980b	91	742	42.0	-19 14	9.8	10.5	Ko	1	..	46088b
42	540	41.6	+24 0	6.81	6.79	B9	8	..	6447m	92	675	42.0	-22 16	9.5	9.4	A2	3	..	24326b
43	539	41.6	+23 24	8.1	8.1	Ao	6	..	6447m	93	1549	42.0	-25 51	9.5	10.1	Mb	1	..	45992b
44	567	41.6	+ 8 39	7.38	8.16	G5	5	..	37470i	94	1459	42.0	-32 18	9.6	9.4	F2	3	..	12259b
45	588	41.6	+ 4 35	8.7	8.7	Ao	5	0,3	12680b	95	1363	42.0	-33 32	9.5	10.9	Ko	2	..	42805b
46	723	41.6	- 8 28	8.6	8.9	Fo	6	..	23809b	96	1263	42.0	-44 42	9.6	10.3	Go	2	..	24616b
47	1156	41.6	-46 14	7.9	8.8	F8	4	..	12647b	97	589	42.0	-54 35	6.26	7.6	Ko	8	..	14920b
48	564	41.6	-55 13	9.5	10.0	F8	3	..	46085b	98	816	42.1	+44 3	8.6	9.4	G5	2	..	38933i
49	451	41.7	+63 25	8.0	9.4	Mb	2	..	37427i	99	652	42.1	+31 39	8.1	8.2	A3	2	..	37451i
50	657	41.7	+58 28	8.9	9.5	Go	2	..	37427i	100	567	42.1	+27 21	8.7	10.1	Ma	2	..	38111i

THE HENRY DRAPER CATALOGUE.

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3^h 42^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	599	42.1	+14 3	8.5	9.5	Ko	1	..	38110i	51	151	42.5	+75 43	8.47	9.82	Ma	4	..	6449m
2	598	42.1	+13 48	9.3	9.8	F8	2	..	3760ri	52	372	42.5	+66 1	9.5	9.5	Ao	2	..	37556i
3	533	42.1	- 1 44	9.52	10.52	Ko	2	..	24332b	53	563	42.5	+23 8	5.51	5.46	B8	..	3,7	284c
4	664	42.1	- 3 52	10.7	11.5	G5	2	..	23816b	54	1565	42.5	-23 33	4.33	4.83	F8	..	3,8R	28,196
5	745	42.1	- 9 41	9.41	9.97	Go	2	..	24339b	55	1555	42.5	-24 57	9.9	9.8	G5	1	..	46166b
6	1397	42.1	-34 40	9.2	10.1	Fo	2	..	12259b	56	1557	42.5	-25 10	7.78	8.8	K5	4	..	10587b
7	1071	42.1	-40 10	10.6	10.3	Go	1	..	24616b	57	1556	42.5	-25 40	7.34	8.5	Ko	7	..	10587b
8	605	42.1	-53 32	9.0	10.0	F5	2	..	46085b	58	1281	42.5	-28 30	9.7	10.0	G5	2	..	45992b
9	236	42.1	-73 13	9.2	9.2	Ao	2	..	46167b	59	574	42.5	-56 38	7.9	9.2	K5	3	..	12036b
10	140	42.2	+76 35	9.2	10.0	G5	3	..	6449m	60	270	42.5	-74 14	8.5	8.6	A5	4	..	14359b
11	621	42.2	+29 39	9.4	9.4	A	2	..	37488i	61	894	42.6	+47 22	8.4	9.4	Ko	3	2,3	38087i
12	571	42.2	+24 41	6.77	7.95	K5	3	..	37417i	62	619	42.6	+26 0	8.7	10.1	Ma	2	..	6447m
13	548	42.2	+23 50	9.8	10.4	Go	2	..	6447m	63	553	42.6	+24 3	6.56	6.56	Ao	4	..	37417i
14	725	42.2	- 8 40	8.7	8.7	Ao	3	..	18192b	64	529	42.6	+21 55	9.8	10.6	G5	2	..	6447m
15	1863	42.2	-24 21	9.5	9.2	Ao	4	..	46166b	65	528	42.6	+21 30	9.4	9.9	F8	2	..	6447m
16	1280	42.2	-38 53	8.08	8.8	G5	3	..	40943b	66	711	42.6	-12 45	9.8	9.9	A3	2	..	24339b
17	1072	42.2	-40 29	9.6	9.5	F5	3	3,1	24616b	67	744	42.6	-19 27	9.0	9.9	Ko	1	..	46088b
18	1236	42.2	-42 21	8.7	9.5	K5	4	0,2	24616b	68	1383	42.6	-26 55	9.2	10.0	G5	3	..	45992b
19	1147	42.2	-47 40	5.66	7.2	Ko	..	0,10	56,120	69	1171	42.6	-43 50	9.8	10.0	Go	3	..	24616b
20	898	42.2	-51 38	9.3	9.7	G5	2	..	46085b	70	1259	42.6	-44 55	9.54	10.1	Go	2	..	24616b
21	446	42.2	-52 23	7.9	10.0	K2	4	..	14920b	71	1150	42.6	-47 49	9.4	9.7	Go	3	..	46083b
22	606	42.2	-53 15	10.4	10.4	Ao	2	..	46085b	72	447	42.6	-52 25	9.3	10.5	K5	1	..	46085b
23	591	42.2	-54 28	8.2	9.4	Ko	2	5,1	14920b	73	569	42.6	-56 58	8.2	8.9	Ko	5	..	12036b
24	266	42.2	-64 31	10.4	10.4	Ao	2	..	23802b	74	289	42.6	-59 31	10.1	10.9	G5	2	..	23802b
25	642	42.3	+61 28	8.6	9.4	G5	2	..	37427i	75	255	42.6	-63 50	9.5	10.7	K5	1	..	23802b
26	720	42.3	+59 49	8.6	8.5	B5	4	..	37427i	76	40	42.6	-85 3	8.09	8.9	G5	7	..	20538b
27	835	42.3	+50 54	8.9	8.9	Ao	2	..	38087i	77	620	42.7	+25 30	8.7	8.7	B9	7	..	6447m
28	818	42.3	+43 39	5.86	6.14	Fo	7	..	37010i	78	554	42.7	+23 53	9.4	9.9	F8	2	..	6447m
29	842	42.3	+40 23	7.72	7.80	A3	7	3,3	38088i	79	587	42.7	+ 6 50	7.8	8.8	Ko	3	..	24325b
30	719	42.3	+34 0	7.12	7.62	F8	3	..	37451i	80	659	42.7	-15 4	8.8	9.8	Ko	3	..	18192b
31	617	42.3	+26 17	8.1	9.2	K2	6	E	6447m	81	657	42.7	-15 38	8.9	10.1	K5	1	..	18192b
32	..	42.3	+24 55	..	..	F8	3	2,1	6447m	82	745	42.7	-19 7	9.5	10.5	Go	1	..	46088b
33	549	42.3	+24 1	8.7	8.8	A3	6	0,2-	6447m	83	1462	42.7	-32 31	8.6	9.4	Ko	3	..	12259b
34	637	42.3	+21 3	8.3	8.4	A5	3	0,3	37417i	84	1368	42.7	-33 13	9.6	9.7	F5	2	..	12259b
35	513	42.3	+16 39	8.1	8.4	F2	5	..	3760ri	85	1285	42.7	-38 24	8.9	9.4	G5	2	..	40943b
36	612	42.3	- 3 36	9.5	10.6	K2	3	..	24332b	86	1132	42.7	-41 30	9.5	9.5	Go	4	..	24616b
37	749	42.3	-14 47	7.70	8.70	Ko	4	..	18192b	87	566	42.7	-55 18	9.2	10.0	F5	2	..	46085b
38	1413	42.3	-29 38	5.90	5.9	A2	..	0,5R	56,120	88	117	42.8	+79 24	9.0	9.1	A5	3	..	37558i
39	1433	42.3	-36 26	8.7	10.4	K2	2	..	40943b	89	804	42.8	+46 40	9.7	9.7	A	1	..	38933i
40	752	42.4	+60 58	8.9	9.9	Ko	2	..	37427i	90	569	42.8	+27 46	9.1	9.7	Go	3	..	38111i
41	893	42.4	+47 41	7.16	7.94	G5	4	..	37010i	91	565	42.8	+22 58	8.7	8.8	A3	5	..	6447m
42	572	42.4	+25 2	9.5	10.5	Ko	4	5,2-	6447m	92	530	42.8	+21 37	8.3	8.6	Fo	5	0,2	6447m
43	526	42.4	+22 5	8.2	9.2	Ko	5	5,2	6447m	93	486	42.8	+10 50	5.03	4.86	B3	..	0,R	56,76
44	717	42.4	- 2 36	9.2	9.6	F5	5	..	23816b	94	614	42.8	- 2 52	8.4	8.8	F5	6	0,3	23816b
45	746	42.4	- 4 54	9.15	9.29	A5	3	..	24332b	95	749	42.8	- 5 8	7.52	8.52	Ko	4	..	37338i
46	736	42.4	-11 48	8.4	9.0	Go	4	..	18192b	96	748	42.8	- 5 13	9.3	10.1	G5	4	..	23816b
47	1365	42.4	-33 47	10.6	10.6	F5	1	..	42805b	97	748	42.8	- 9 5	9.2	9.2	Ao	2	..	18192b
48	1075	42.4	-40 6	9.6	10.1	G5	2	..	24616b	98	1541	42.8	-31 9	8.5	9.1	G5	3	..	12259b
49	900	42.4	-51 34	7.7	8.5	G5	5	..	14920b	99	295	42.9	+67 36	9.0	9.6	Go	3	..	38165b
50	73	42.4	-83 39	10.1	10.2	A5	3	..	20538b	100	715	42.9	+52 11	6.87	6.68	B2	6	1,6-	38087i

23800

3^h 42^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	806	42.9	+46 27	9.2	9.7	F8	2	..	38933i	51	567	43.2	+22 58	9.4	10.4	K	1	..	6447m
2	655	42.9	+31 58	8.2	8.2	B9	5	1,3	37488i	52	569	43.2	+22 19	7.9	7.9	Ao	4	..	37417i
3	592	42.9	+28 10	9.1	9.1	Ao	2	..	38111i	53	638	43.2	+21 2	8.1	8.5	F5	2	0,2	37417i
4	570	42.9	+8 29	8.3	8.3	Ao	2	..	37470i	54	514	43.2	+16 10	7.5	7.9	F5	6	..	37601i
5	571	42.9	+8 16	8.4	9.2	G5	4	..	37470i	55	664	43.2	+1 18	8.74	9.02	Fo	4	5,4	24332b
6	608	42.9	+2 28	8.3	8.6	F	2	R	12680b	56	1494	43.2	-30 12	6.61	7.3	F5	3	..	42848b
7	600	42.9	+0 4	8.98	9.04	A2	3	..	23816b	57	1081	43.2	-40 10	9.6	9.4	Go	4	0,2	24616b
8	615	42.9	-3 0	9.3	9.6	F2	4	..	23816b	58	1273	43.2	-44 49	10.0	10.3	F8	2	..	24616b
9	667	42.9	-4 23	9.8	10.8	Ko	1	..	23816b	59	39	43.2	-86 28	8.2	8.7	F8	5	..	15145b
10	681	42.9	-7 19	8.2	8.2	Ao	7	E	18192b	60	789	43.3	+51 39	9.4	9.4	A	1	..	38087i
11	739	42.9	-11 23	10.0	10.8	G5	2	..	24339b	61	761	43.3	+42 3	8.6	8.6	Ao	2	..	38081i
12	660	42.9	-15 20	8.6	9.7	K2	2	..	24339b	62	558	43.3	+23 51	5.18	5.13	B8p	..	R	28,196
13	730	42.9	-17 49	7.8	8.9	K2	2	..	12752b	63	559	43.3	+23 36	8.6	8.7	A2	5	..	6447m
14	679	42.9	-22 19	9.5	9.6	F5	2	..	24326b	64	568	43.3	+23 6	9.4	9.9	F8	2	..	6447m
15	1563	42.9	-25 3	8.95	9.8	K5	2	..	46166b	65	613	43.3	+14 41	8.3	8.8	F8	2	..	37601i
16	277	42.9	-61 24	9.7	10.3	Go	3	..	23802b	66	682	43.3	-6 53	8.7	8.8	A2	6	..	23809b
17	263	42.9	-65 7	3.80	4.80	Ko	..	R	28,196	67	728	43.3	-8 20	8.6	8.9	F2	5	3,7	18192b
18	296	43.0	+67 16	8.0	8.3	Fo	5	..	37556i	68	664	43.3	-15 24	8.2	9.3	K2	4	..	24339b
19	754	43.0	+61 4	8.5	9.3	G5	3	..	37427i	69	1425	43.3	-29 46	6.98	7.7	Ko	2	..	42848b
20	714	43.0	+54 29	7.8	8.2	F5	3	3,3-	38087i	70	1074	43.3	-48 12	8.4	8.0	F5	4	..	14920b
21	1005	43.0	+48 43	9.0	9.0	Ao	2	..	38087i	71	457	43.4	+63 11	8.50	8.45	B8	2	..	37600i
22	556	43.0	+23 34	6.57	6.85	Fo	4	..	37417i	72	560	43.4	+24 6	8.1	8.1	Ao	3	..	37417i
23	566	43.0	+22 30	7.94	7.92	B9	4	..	37417i	73	561	43.4	+24 5	6.63	6.61	B9	5	..	37417i
24	534	43.0	+15 12	8.19	8.19	Ao	3	..	37601i	74	526	43.4	+11 24	8.6	8.9	Fo	3	0,3-	37470i
25	487	43.0	+10 31	7.9	8.5	Go	3	..	37470i	75	665	43.4	+2 7	8.3	8.7	F5	5	0,3	12680b
26	534	43.0	-0 51	9.3	9.7	F5	3	3,3	24332b	76	536	43.4	-1 49	8.72	9.72	Ko	4	..	23816b
27	616	43.0	-3 10	6.91	6.97	A2	6	0,10	37338i	77	721	43.4	-2 26	8.6	9.7	K2	4	..	23816b
28	749	43.0	-8 55	9.2	9.2	Ao	2	..	18192b	78	1877	43.4	-24 11	5.04	5.10	A2	..	2,8 R	28,196
29	1493	43.0	-30 22	7.23	8.5	K5	2	..	42848b	79	1394	43.4	-27 29	8.5	9.8	K2	3	..	45992b
30	1451	43.0	-37 49	10.2	10.4	Fo	2	..	40943b	80	290	43.4	-59 33	9.9	10.9	Ko	2	..	23802b
31	1134	43.0	-40 58	10.9	9.7	Ao	3	..	24616b	81	250	43.4	-70 0	9.40	9.7	F8	3	..	17047b
32	1175	43.0	-43 38	9.8	10.6	Ko	2	..	24616b	82	175	43.5	+74 29	9.4	10.2	G5	1	..	6449m
33	449	43.0	-52 39	9.3	9.4	A3	2	..	46083b	83	373	43.5	+65 14	7.35	7.91	Go	4	..	37556i
34	278	43.0	-61 5	9.0	10.3	G5	4	..	23802b	84	1008	43.5	+48 17	8.9	9.0	A2	2	..	38087i
35	279	43.0	-61 46	11.1	11.5	F5	1	..	23802b	85	833	43.5	+37 35	6.57	6.85	Fo	6	..	37451i
36	194	43.1	+72 29	9.2	9.3	A2	2	..	37555i	86	562	43.5	+23 57	7.88	7.88	Ao	6	..	6447m
37	715	43.1	+55 3	8.26	8.68	F5	3	..	37427i	87	602	43.5	-0 4	6.10	7.10	Ko	6	0,5-	37338i
38	801	43.1	+44 40	5.79	6.35	Go	7	..	37010i	88	722	43.5	-2 22	9.8	10.9	K2	2	..	23816b
39	759	43.1	+42 7	9.2	9.8	G	1	..	38933i	89	668	43.5	-4 49	8.80	9.36	Go	4	..	23816b
40	739	43.1	+34 37	8.5	8.5	Ao	4	..	38975i	90	1244	43.5	-42 33	10.0	10.6	Ko	1	..	24616b
41	494	43.1	+9 21	6.95	7.73	G5	6	..	37470i	91	253	43.5	-67 0	8.5	8.9	F5	6	..	20430b
42	601	43.1	-0 12	9.41	9.97	G	1	..	23816b	92	251	43.5	-70 12	8.4	9.0	Go	4	..	17047b
43	617	43.1	-3 31	9.8	10.6	G5	2	..	23816b	93	141	43.6	+76 25	9.2	9.2	Ao	5	2,2	6449m
44	1403	43.1	-34 0	9.2	11.3	Ko	1	..	42805b	94	724	43.6	+60 2	7.01	8.01	Ko	5	..	37427i
45	1154	43.1	-47 7	9.8	9.7	F8	3	..	46083b	95	717	43.6	+54 24	8.0	8.0	Ao	3	0,3	37435i
46	1137	43.1	-50 41	9.6	9.9	Go	2	..	46083b	96	1037	43.6	+49 11	8.9	9.3	F5	2	..	38087i
47	755	43.2	+60 17	8.8	8.9	A2	2	..	37427i	97	822	43.6	+45 57	9.2	9.3	A3	2	..	37010i
48	667	43.2	+32 48	5.10	5.16	G5	..	2,8 R	56,76	98	831	43.6	+42 18	8.0	9.4	Ma	1	..	38933i
49	593	43.2	+28 21	8.9	9.7	A2	2	..	38111i	99	619	43.6	+26 20	9.8	9.8	Ao	3	E	6447m
50	557	43.2	+23 45	3.80	3.75	B8	..	..	56,196	100	669	43.6	-4 10	10.0	10.4	F5	2	..	23816b

THE HENRY DRAPER CATALOGUE.

23900

3^h 43^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	670	43.6	- 4 43	7.70	8.26	Go	8	5,3	23816b	51	643	44.0	+20 52	8.7	9.9	K5	..	..	M
2	754	43.6	- 6 38	8.8	9.4	Go	5	E	23809b	52	489	44.0	+10 51	8.1	8.7	Go	4	5,3	3747oi
3	712	43.6	-19 58	9.53	9.6	Ao	2	..	46088b	53	537	44.0	- 1 24	9.3	10.1	G5	2	..	23816b
4	1882	43.6	-24 19	9.2	10.0	K5	1	..	46166b	54	714	44.0	-20 43	8.7	9.4	F5	3	..	46166b
5	1139	43.6	-40 55	9.8	9.5	F5	1	..	40943b	55	682	44.0	-22 29	9.0	9.6	K2	2	..	46166b
6	1276	43.6	-44 7	7.8	9.1	K5	3	..	12637b	56	684	44.0	-22 34	9.8	9.6	Ko	1	..	46166b
7	237	43.6	-73 38	8.9	9.7	G5	4	..	20539b	57	1400	44.0	-27 3	8.7	10.1	K5	1	..	45992b
8	41	43.6	-85 37	9.0	9.5	F8	4	..	20538b	58	1453	44.0	-36 24	6.25	6.20	B8	..	0,9-	28,196
9	644	43.7	+62 2	6.82	6.88	A2	7	..	37427i	59	1180	44.0	-43 3	8.4	8.9	K2	3	E	41076b
10	897	43.7	+47 46	8.8	9.2	F5	2	..	38087i	60	90	44.0	-81 20	9.4	10.4	K	1	..	20538b
11	575	43.7	+25 5	10.0	10.1	A2	2	..	6447m	61	265	44.1	+70 53	9.2	9.8	Go	4	..	38165i
12	570	43.7	+23 5	8.9	9.4	F8	3	..	6447m	62	724	44.1	+33 45	7.36	8.54	K5	3	..	38975i
13	572	43.7	+22 15	6.91	6.89	B9	6	..	37417i	63	657	44.1	+32 7	9.1	9.1	A	1	..	38975i
14	632	43.7	+17 31	8.9	9.9	Ko	1	..	37601i	64	569	44.1	+23 33	6.68	6.66	B9	4	..	37417i
15	723	43.7	- 2 44	8.0	8.8	G5	6	0,2	23816b	65	575	44.1	+22 19	7.9	8.3	F5	4	..	37417i
16	716	43.7	-12 4	8.8	9.3	F8	3	..	18192b	66	600	44.1	+19 17	8.1	9.1	Ko	1	..	37601i
17	743	43.7	-13 36	7.60	8.60	Ko	6	..	18192b	67	573	44.1	+ 8 11	8.1	8.9	G5	3	..	3747oi
18	665	43.7	-14 53	9.8	10.2	F5	1	..	18192b	68	719	44.1	-12 21	10.0	11.0	Ko	2	..	24339b
19	1576	43.7	-23 30	8.3	8.3	F5	5	..	10587b	69	1379	44.1	-33 53	9.5	10.0	G5	2	..	42805b
20	1434	43.7	-26 38	6.85	7.5	A2	5	2,8	5670b	70	1146	44.1	-50 48	9.3	9.4	G5	3	..	14920b
21	1171	43.7	-46 9	9.2	9.2	F8	2	..	12647b	71	236	44.1	-68 3	9.2	10.2	Ko	3	..	20430b
22	741	43.8	+34 32	6.67	6.95	Fo	5	..	37451i	72	89	44.1	-81 10	9.7	9.8	A5	4	..	20538b
23	563	43.8	+23 25	6.11	6.06	B8	6	..	37417i	73	120	44.2	+79 55	8.86	8.86	Ao	2	..	37309i
24	573	43.8	+23 3	8.6	8.7	A2	6	3,3	6447m	74	658	44.2	+31 15	8.5	8.5	Ao	3	1,3	38975i
25	684	43.8	- 7 7	8.2	8.8	Go	5	..	23809b	75	576	44.2	+25 5	10.2	10.8	Go	2	..	6447m
26	752	43.8	-13 57	9.8	10.8	Ko	2	..	18192b	76	612	44.2	+ 2 12	8.4	8.9	F8	3	2,2	12680b
27	680	43.8	-21 52	8.0	8.3	A5	5	E	24326b	77	538	44.2	- 1 51	8.67	9.45	G5	3	..	23816b
28	1449	43.8	-36 50	10.0	10.9	G5	1	..	42805b	78	703	44.2	-21 12	6.06	7.6	Ko	7	..	46088b
29	1457	43.8	-37 3	8.9	10.1	Ko	3	..	40943b	79	1885	44.2	-24 0	8.2	8.5	Ko	4	..	10587b
30	1144	43.8	-50 14	9.6	10.2	Ko	1	..	46083b	80	1278	44.2	-44 44	9.3	10.3	G5	2	..	24616b
31	269	43.8	-64 2	7.38	9.0	G5	4	0,8	20430b	81	217	44.2	-71 19	9.1	9.6	F8	2	..	17047b
32	88	43.8	-81 10	7.84	9.8	Ko	4	..	20538b	82	458	44.3	+63 11	8.10	7.98	B5	4	..	37600i
33	716	43.9	+52 13	8.7	8.8	A2	3	..	38087i	83	728	44.3	+59 19	9.2	9.6	F5	2	..	37427i
34	898	43.9	+47 49	9.5	9.5	A	1	..	38087i	84	1042	44.3	+49 29	8.5	8.8	F2	3	..	38087i
35	621	43.9	+25 21	9.5	10.0	F8	2	..	6447m	85	624	44.3	+25 17	5.38	5.46	A3	..	1,8	56,76
36	589	43.9	+ 7 4	8.6	8.7	A2	2	..	38104i	86	577	44.3	+24 22	9.4	9.7	Fo	3	..	6447m
37	685	43.9	- 7 19	7.77	9.12	Mb	5	0,3-	23809b	87	491	44.3	+11 9	8.3	9.1	G5	2	..	3747oi
38	745	43.9	-13 50	9.3	10.4	K2	2	..	18192b	88	492	44.3	+10 14	7.72	8.50	G5	5	..	3747oi
39	1496	43.9	-30 24	8.5	8.3	A5	4	..	12259b	89	497	44.3	+ 9 35	7.7	8.7	Ko	2	..	3747oi
40	1497	43.9	-30 28	5.61	6.9	G5	6	R	42848b	90	574	44.3	+ 9 7	6.75	6.73	B9	7	..	3747oi
41	1551	43.9	-30 58	8.9	10.6	Ko	1	..	45992b	91	540	44.3	- 1 9	9.3	9.9	Go	3	..	23816b
42	567	43.9	-54 59	9.55	10.3	F8	2	..	46085b	92	539	44.3	- 1 45	6.76	7.54	G5	5	0,4-	12680b
43	R	43.9	-61 3	..	..	G5	2	..	23802b	93	747	44.3	-13 27	8.8	9.9	K2	4	..	18192b
44	142	44.0	+77 7	8.2	9.0	G5	4	..	37309i	94	1410	44.3	-34 1	8.9	10.1	Ko	2	..	12259b
45	706	44.0	+53 49	8.2	8.3	A3	2	1,2-	37435i	95	1195	44.3	-39 35	10.6	9.7	Go	1	..	40943b
46	632	44.0	+29 20	7.9	7.9	Ao	5	0,4	38111i	96	913	44.3	-50 56	9.2	9.4	Go	3	..	46085b
47	623	44.0	+25 45	9.1	10.2	K2	2	..	6447m	97	121	44.4	+79 14	8.8	8.9	A3	4	..	37558i
48	567	44.0	+24 3	7.34	7.34	Ao	4	..	37417i	98	196	44.4	+72 20	8.0	9.0	Ko	2	..	37555i
49	565	44.0	+23 55	8.92	8.92	Ao	3	..	6447m	99	229	44.4	+69 55	7.94	9.12	K5	3	..	38943i
50	535	44.0	+21 57	5.92	5.90	B9	7	..	37417i	100	633	44.4	+29 27	8.7	8.8	A2	2	2,3	38111i

24000

3^h 44^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	576	44.4	+22 23	8.7	9.1	F5	I	..	37417i	51	764	44.8	+37 9	8.9	9.5	G	I	R	3808ri
2	659	44.4	+1 4	8.64	9.42	G5	4	0,2	23816b	52	635	44.8	+29 23	8.2	8.7	F8	4	0,4	3811ri
3	605	44.4	-0 40	8.1	8.1	B9	7	..	23816b	53	590	44.8	+6 20	7.71	8.27	Go	4	5,4	12680b
4	618	44.4	-2 53	10.2	11.2	Ko	I	..	23816b	54	615	44.8	+2 22	10.0	10.0	Ao	2	..	23816b
5	756	44.4	-6 34	9.5	10.6	K2	2	E	23809b	55	619	44.8	-3 15	9.5	9.5	Ao	3	..	23816b
6	704	44.4	-21 36	9.5	10.2	G5	I	..	46166b	56	1583	44.8	-24 59	9.7	9.8	Go	2	..	46166b
7	1500	44.4	-30 23	9.5	9.4	A5	3	..	12259b	57	1415	44.8	-34 7	8.9	10.4	G5	I	..	42805b
8	252	44.4	-70 18	8.8	9.1	Fo	3	..	17047b	58	1150	44.8	-41 37	8.2	9.1	F2	5	E	40943b
9	70	44.4	-82 38	9.2	9.8	Go	3	..	20538b	59	572	44.8	-56 59	8.7	9.4	Go	2	..	12036b
10	900	44.5	+47 15	8.0	9.0	Ko	2	..	38087i	60	269	44.8	-60 14	9.0	10.0	Go	4	..	23802b
11	809	44.5	+46 49	8.0	8.1	A2	3	..	37010i	61	270	44.8	-64 23	9.0	9.3	F2	5	..	38370b
12	746	44.5	+34 48	7.57	7.55	B9	5	I,3	38975i	62	254	44.8	-70 20	7.2	7.8	Go	7	..	17047b
13	578	44.5	+24 12	7.26	7.32	A2	4	..	37417i	63	271	44.8	-74 19	7.5	7.5	Ao	6	..	14359b
14	537	44.5	+15 42	8.5	8.9	F5	3	..	37601i	64	204	44.9	+73 47	6.99	7.99	Ko	6	2,5-	37555i
15	575	44.5	+8 59	8.6	8.7	A5	2	..	37470i	65	618	44.9	+63 6	8.0	9.2	K5	I	..	37427i
16	..	44.5	-1 22	..	..	G5	2	..	23816b	66	901	44.9	+47 59	9.2	9.6	F5	2	..	38087i
17	672	44.5	-4 50	9.05	9.19	A5	4	..	23816b	67	620	44.9	-3 36	10.4	10.9	F8	2	..	23816b
18	720	44.5	-11 54	9.8	10.6	G5	2	..	24339b	68	675	44.9	-18 15	9.2	9.5	F2	I	..	12752b
19	1502	44.5	-30 42	8.9	9.7	Ao	2	..	12259b	69	1583	44.9	-23 23	9.7	10.2	Ko	2	..	46166b
20	1093	44.5	-40 14	8.9	10.0	Ko	I	..	40943b	70	1440	44.9	-26 20	6.92	7.7	F2	7	2,4	10587b
21	1092	44.5	-40 50	9.5	10.0	F8	2	..	24616b	71	..	44.9	-37 55	5.42	5.42	Ao	..	..	..
22	1149	44.5	-50 22	7.8	8.8	Ko	4	..	14920b	72	1297	44.9	-37 55	4.86	4.81	B8	..	R	28,196
23	914	44.5	-51 3	6.60	7.7	Ko	7	..	14920b	73	291	44.9	-59 21	9.3	10.6	Go	2	..	23802b
24	412	44.6	+64 26	8.6	9.1	F8	4	3,4	37427i	74	259	44.9	-63 28	9.4	9.8	F5	4	..	38370b
25	828	44.6	+45 9	8.37	9.37	Ko	2	..	38933i	75	747	45.0	+34 18	7.9	9.0	K2	4	..	38975i
26	833	44.6	+42 19	8.0	8.1	A3	2	..	37010i	76	570	45.0	+23 40	6.76	6.76	Ao	4	..	37417i
27	579	44.6	+24 30	10.0	10.6	G	I	..	6447m	77	731	45.0	-2 17	9.8	10.9	K2	I	..	23816b
28	537	44.6	+21 57	9.4	10.4	Ko	I	..	6447m	78	730	45.0	-2 36	9.2	9.6	F5	4	..	23816b
29	546	44.6	+18 57	8.0	8.3	Fo	2	..	37601i	79	687	45.0	-7 50	9.0	9.8	G5	3	E	23809b
30	542	44.6	-1 0	10.7	11.0	F	I	..	23816b	80	733	45.0	-8 22	8.8	9.4	Go	6	..	18192b
31	726	44.6	-2 37	7.07	7.63	Go	5	2,9	37338i	81	676	45.0	-18 36	8.6	9.6	Ko	2	..	12752b
32	1289	44.6	-28 46	8.1	9.4	G5	3	..	12259b	82	707	45.0	-21 11	9.2	9.3	A3	3	..	46166b
33	1479	44.6	-32 5	7.59	7.9	A3	2	..	42848b	83	1407	45.0	-27 44	10.9	10.3	Ao	I	..	45992b
34	1163	44.6	-47 19	9.6	9.7	Go	3	..	46083b	84	1437	45.0	-29 3	9.2	10.6	K2	I	..	45992b
35	260	44.6	-72 55	8.5	9.7	K5	4	0,1	20539b	85	255	45.0	-70 19	7.5	8.1	Go	6	..	17047b
36	112	44.6	-79 47	8.40	9.2	Ao	3	..	20538b	86	626	45.1	+25 18	9.8	10.1	F2	3	3,2	6447m
37	847	44.7	+50 28	8.27	9.34	K2	2	..	38087i	87	580	45.1	+25 5	9.8	10.3	F8	2	..	6447m
38	669	44.7	+32 16	8.6	8.7	A2	I	..	38975i	88	579	45.1	+23 8	9.4	9.5	A3	2	..	6447m
39	659	44.7	+31 52	8.8	8.9	A2	I	..	38975i	89	661	45.1	+1 6	8.44	9.51	K2	3	..	23816b
40	638	44.7	+17 11	8.0	8.6	Go	5	..	37601i	90	607	45.1	-0 15	9.3	10.3	Ko	I	..	23816b
41	499	44.7	+9 37	8.3	8.6	Fo	4	..	37470i	91	757	45.1	-14 12	9.2	10.0	G5	4	..	18192b
42	606	44.7	-0 0	9.78	10.56	G5	I	..	23816b	92	1442	45.1	-26 35	9.7	9.4	F8	4	..	45992b
43	755	44.7	-5 36	9.5	10.5	Ko	I	..	23816b	93	1409	45.1	-27 52	9.4	10.3	Ko	I	..	45992b
44	730	44.7	-8 32	9.2	10.0	G5	3	..	18192b	94	708	45.2	+53 12	8.0	8.0	B8	4	E	38087i
45	673	44.7	-18 17	8.4	9.2	G5	2	..	12752b	95	832	45.2	+43 23	8.7	8.8	A2	2	..	37010i
46	1436	44.7	-29 33	9.7	10.3	Ko	2	..	45992b	96	875	45.2	+39 27	8.8	8.6	Fo	2	..	3808ri
47	1147	44.7	-41 29	10.2	9.5	F8	2	..	24616b	97	581	45.2	+24 17	9.3	10.8	Ko	I	..	6447m
48	1279	44.7	-44 30	9.2	9.7	Go	4	..	24616b	98	544	45.2	-1 49	6.53	6.87	F2	6	0,5-	12680b
49	578	44.7	-56 21	9.0	9.7	F8	2	..	46085b	99	1389	45.2	-33 23	8.9	8.8	F8	4	..	12259b
50	460	44.8	+63 37	8.9	9.4	F8	2	..	37600i	100	1097	45.2	-49 23	8.4	9.3	A5	4	..	14920b

THE HENRY DRAPER CATALOGUE.

24100

3^h 45^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	311	45.2	-58 23	9.0	10.0	B9	3	..	23802b	51	731	45.7	+60 3	8.91	10.09	K5	1	..	37427i
2	R	45.2	-59 0	..	..	K5	1	..	23802b	52	630	45.7	+25 33	9.4	10.2	G5	3	5,5-	38111i
3	152	45.3	+75 49	9.9	10.9	K	1	..	6449m	53	582	45.7	+22 56	9.4	10.2	G5	1	..	6447m
4	627	45.3	+26 3	8.6	9.1	F8	3	..	37417i	54	539	45.7	+21 44	6.82	7.60	G5	3	..	37417i
5	628	45.3	+25 21	9.8	10.6	G5	2	..	6447m	55	516	45.7	+12 45	6.16	6.14	B9	8	0,8	3747oi
6	581	45.3	+8 9	8.5	8.9	F5	5	..	3747oi	56	762	45.7	-4 55	8.20	8.76	Go	7	5,2	23816b
7	674	45.3	-4 12	7.54	8.54	Ko	7	0,3	23816b	57	751	45.7	-19 3	7.25	7.1	Ao	7	..	46166b
8	745	45.3	-11 27	8.8	9.3	F8	4	..	18192b	58	689	45.7	-22 16	9.0	9.3	Go	4	..	46166b
9	718	45.3	-20 44	8.8	9.1	G5	3	5,2	46088b	59	1593	45.7	-25 49	8.2	8.5	G5	4	E	10587b
10	1411	45.3	-27 24	8.3	9.1	G5	5	5,4	45992b	60	1467	45.7	-36 30	4.24	5.24	Ko	..	R	28,196
11	1463	45.3	-36 17	9.0	9.5	F8	3	..	40943b	61	1154	45.7	-41 12	9.8	9.4	F5	4	..	24616b
12	1096	45.3	-40 42	7.2	7.4	F8	8	..	40943b	62	1156	45.7	-50 24	9.3	9.0	F8	3	..	14920b
13	1277	45.3	-45 28	8.8	9.1	G5	3	..	12637b	63	135	45.8	+81 17	7.63	8.05	F5	5	..	37558i
14	221	45.3	-71 24	8.7	9.1	F5	3	..	17047b	64	222	45.8	+71 31	6.39	6.67	Fo	7	0,8	3763oi
15	261	45.3	-72 0	8.4	9.0	Go	4	..	17047b	65	880	45.8	+40 3	7.32	8.10	G5	2	..	3701oi
16	619	45.4	+63 2	8.2	8.2	B9	3	..	37427i	66	660	45.8	+31 43	9.1	9.9	G5	1	..	38975i
17	847	45.4	+40 30	7.52	7.58	A2	3	..	3701oi	67	582	45.8	+30 52	6.22	6.30	A3	6	1,5	37488i
18	583	45.4	+24 52	6.86	6.92	A2	..	0,4	56,76	68	585	45.8	+24 47	8.88	9.66	G5	3	..	6447m
19	582	45.4	+24 41	9.5	9.6	A2	3	..	6447m	69	541	45.8	+21 59	9.4	9.7	F2	3	..	6447m
20	758	45.4	-5 22	7.99	8.99	Ko	6	..	23816b	70	608	45.8	-0 30	8.1	9.1	Ko	6	5,2	24332b
21	R	45.4	-40 57	9.1	9.7	Go	1	..	24616b	71	676	45.8	-4 1	10.4	10.9	F8	1	..	23816b
22	1085	45.4	-47 55	9.3	9.4	Go	4	..	46083b	72	727	45.8	-12 39	9.2	9.7	F8	2	..	18192b
23	1152	45.4	-50 45	9.6	9.9	K2	1	..	46083b	73	720	45.8	-20 6	8.8	10.2	F5	2	..	10587b
24	598	45.4	-54 3	8.2	9.5	Ko	2	..	14920b	74	1901	45.8	-24 10	9.4	9.4	G5	3	..	46166b
25	209	45.4	-69 50	9.3	9.7	F5	2	..	17047b	75	1414	45.8	-27 47	9.4	10.0	Go	1	..	45992b
26	134	45.5	+81 35	7.20	8.20	Ko	5	..	37558i	76	280	45.8	-61 28	8.7	10.0	G5	3	..	23802b
27	..	45.5	+75 42	..	..	K	1	..	6449m	77	833	45.9	+45 39	8.0	8.0	B9	4	..	38933i
28	267	45.5	+71 0	9.2	10.2	Ko	2	..	38165i	78	631	45.9	+25 41	8.1	8.1	Ao	3	..	37417i
29	849	45.5	+50 46	7.46	7.44	B9	5	..	38087i	79	530	45.9	+11 45	8.9	9.5	Go	2	..	3811oi
30	905	45.5	+47 20	9.7	9.7	A	1	..	38087i	80	592	45.9	+4 51	8.7	8.8	A5	2	..	12680b
31	728	45.5	+34 3	5.73	5.56	B3	..	0,7	56,76	81	668	45.9	+1 26	7.85	8.63	G5	7	0,3-	23816b
32	584	45.5	+24 13	9.2	9.3	A5	2	2,4-	38111i	82	735	45.9	-2 42	10.0	10.3	F	2	..	23816b
33	667	45.5	+1 16	6.66	6.94	Fo	8	0,R	12680b	83	729	45.9	-12 18	8.2	8.7	F8	7	..	18192b
34	725	45.5	-12 3	9.3	9.6	Fo	4	..	18192b	84	1591	45.9	-23 6	8.5	9.9	K2	2	..	46166b
35	313	45.5	-57 56	8.3	8.8	K2	4	..	23802b	85	..	45.9	-54 36	..	..	F5	..	..	..
36	215	45.5	-66 48	7.8	7.9	A3	8	..	20430b	86	599	45.9	-54 36	7.00	7.3	A2	8	R	14920b
37	112	45.5	-78 36	9.0	9.8	G5	2	..	20538b	87	582	45.9	-56 46	8.2	9.5	K5	2	..	12036b
38	143	45.6	+76 31	9.0	9.8	G5	4	..	6449m	88	262	45.9	-71 58	6.54	6.0	Ao	4	..	5626b
39	176	45.6	+75 0	10.2	11.0	G5	1	..	6449m	89	720	46.0	+52 16	8.5	9.0	F8	3	..	38087i
40	294	45.6	+67 8	9.4	9.4	A	2	..	38165i	90	730	46.0	+33 53	7.49	7.32	B3	4	..	37451i
41	752	45.6	+57 40	5.79	5.79	Ao	6	2,10	37426i	91	661	46.0	+31 40	9.1	9.6	F8	1	..	38975i
42	793	45.6	+51 58	8.2	9.0	G5	2	..	38087i	92	636	46.0	+29 18	8.3	9.1	G5	2	0,1	38111i
43	767	45.6	+41 37	9.2	9.3	A2	2	..	38933i	93	586	46.0	+25 2	8.06	9.06	Ko	5	5,2	6447m
44	592	45.6	+6 51	8.7	9.7	Ko	1	..	38104i	94	573	46.0	+23 37	10.7	11.5	G5	1	..	6447m
45	663	45.6	+0 42	8.9	9.4	F8	3	..	23816b	95	664	46.0	+0 38	8.1	8.2	A2	8	4,2	23816b
46	757	45.6	-10 38	8.4	8.8	F5	5	..	18192b	96	609	46.0	-0 20	8.9	10.0	K2	4	3,2	23816b
47	739	45.6	-16 57	8.2	8.3	A5	5	..	12752b	97	676	46.0	-15 14	9.5	9.9	F5	1	..	12752b
48	738	45.6	-17 5	8.1	9.1	Ko	2	..	12752b	98	1301	46.0	-28 53	10.2	10.1	Go	1	..	45992b
49	1393	45.6	-33 19	9.6	9.7	Go	3	..	42805b	99	1304	46.0	-38 2	9.2	9.5	G5	2	..	42805b
50	1466	45.6	-36 23	6.71	8.3	Ko	5	..	40943b	100	1280	46.0	-45 5	9.24	9.7	F5	2	..	41076b

24200

3^h 46^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	315	46.0	-58 31	8.6	9.7	Go	4	..	23802b	51	105	46.5	+82 35	9.2	9.6	F5	3	..	37558i
2	272	46.0	-64 38	9.2	9.8	Go	3	5,2-	23802b	52	731	46.5	+33 11	8.7	9.0	F2	2	..	38975i
3	722	46.1	+52 59	7.9	8.5	Go	3	0,4-	38981i	53	618	46.5	+ 2 28	8.3	8.4	A2	6	2,5-	23816b
4	769	46.1	+41 58	8.8	9.8	Ko	1	..	38933i	54	610	46.5	+ 0 2	9.03	10.03	Ko	3	..	23816b
5	632	46.1	+25 56	8.2	8.3	A2	3	..	37417i	55	737	46.5	- 2 17	9.3	9.6	F2	4	..	23816b
6	583	46.1	+22 23	7.8	8.4	Go	3	..	37417i	56	678	46.5	-15 32	8.8	9.3	F8	1	..	12752b
7	759	46.1	- 6 22	9.2	9.5	Fo	2	..	23816b	57	1517	46.5	-30 50	10.4	10.3	Ko	2	..	45992b
8	1906	46.1	-24 19	9.1	9.2	F8	3	..	46166b	58	281	46.5	-61 54	10.3	11.5	K5	1	..	23802b
9	1425	46.1	-35 43	8.7	9.8	Ko	3	..	12259b	59	210	46.5	-69 45	8.6	9.6	Ko	5	..	20430b
10	1289	46.1	-44 39	9.1	9.1	Go	3	..	41076b	60	834	46.6	+45 28	8.4	8.4	Ao	2	..	37010i
11	255	46.1	-67 7	9.0	9.8	G5	3	E	20430b	61	585	46.6	+22 8	10.7	11.2	F8	1	..	6447m
12	114	46.1	-79 53	9.3	9.3	Ao	2	..	20538b	62	549	46.6	+18 38	7.8	7.8	Ao	5	2,3	37601i
13	587	46.2	+24 53	6.78	7.34	Go	..	2,3	37417i	63	594	46.6	+ 6 15	5.62	5.60	B9	9	..	37549i
14	574	46.2	+23 16	9.8	10.9	K2	1	..	6447m	64	669	46.6	+ 1 49	8.9	9.0	A3	2	..	23816b
15	497	46.2	+10 33	8.3	8.3	Ao	4	..	37470i	65	738	46.6	- 2 44	9.2	9.6	F5	6	..	23816b
16	763	46.2	- 5 5	10.0	10.4	F5	1	..	23816b	66	1595	46.6	-23 12	9.2	9.6	Go	2	..	46166b
17	731	46.2	-12 10	9.3	9.6	Fo	3	..	18192b	67	1563	46.6	-30 59	7.24	8.3	Ko	2	..	42848b
18	710	46.2	-15 55	8.2	9.3	K2	2	..	12752b	68	1211	46.6	-39 55	8.15	9.1	K2	3	..	40943b
19	711	46.2	-20 57	9.5	9.6	Ao	2	..	10587b	69	1197	46.6	-43 11	9.4	9.7	G5	3	..	24616b
20	1602	46.2	-25 16	var.	var.	Md	..	R	M	70	1166	46.6	-50 43	9.2	9.9	Ko	1	..	46083b
21	1427	46.2	-34 20	8.9	9.2	G5	3	..	12259b	71	316	46.6	-58 18	8.8	10.0	K5	2	..	23802b
22	1170	46.2	-47 3	8.8	9.1	Go	4	..	46083b	72	257	46.6	-67 41	9.4	10.2	G5	3	..	20430b
23	1090	46.2	-48 35	9.0	9.6	G5	3	..	46083b	73	177	46.7	+75 8	9.4	10.4	Ko	4	..	6449m
24	611	46.2	-53 29	8.3	8.9	Go	3	..	14920b	74	205	46.7	+73 33	10.2	11.0	G5	1	..	6449m
25	113	46.2	-79 4	8.8	9.6	G5	3	..	20538b	75	796	46.7	+51 15	8.1	8.2	A2	4	..	38087i
26	121	46.3	+80 56	7.87	8.87	Ko	2	..	37558i	76	816	46.7	+46 9	8.6	8.7	A2	2	..	38087i
27	851	46.3	+50 39	8.4	8.4	Ao	4	..	38087i	77	635	46.7	+25 20	9.8	9.8	Ao	3	..	6447m
28	662	46.3	+32 6	6.70	7.70	Ko	..	5,4	56,76	78	550	46.7	+18 17	7.8	7.8	Ao	5	..	37601i
29	585	46.3	+27 49	8.8	9.8	Ko	1	..	38111i	79	611	46.7	- 0 50	8.9	8.9	Ao	3	..	23816b
30	634	46.3	+25 38	9.8	10.2	F5	1	..	6447m	80	756	46.7	-19 13	8.8	8.7	Ao	5	..	46166b
31	759	46.3	-10 2	8.4	9.2	G5	3	..	18192b	81	1198	46.7	-43 50	8.6	9.7	R3	3	..	24616b
32	1399	46.3	-33 25	8.2	8.8	Ko	5	..	12259b	82	144	46.8	+76 29	9.2	9.6	F5	4	..	6449m
33	1158	46.3	-41 55	9.6	9.4	F8	4	..	24616b	83	414	46.8	+65 7	8.20	8.28	A3	4	0,3	37556i
34	1194	46.3	-43 23	9.3	10.0	Ko	3	..	24616b	84	1054	46.8	+50 7	9.07	9.63	Go	2	..	38087i
35	1291	46.3	-44 4	9.4	9.7	F8	3	..	24616b	85	908	46.8	+47 12	8.5	9.3	G5	2	..	38087i
36	1164	46.3	-50 21	9.3	9.7	F5	2	..	14920b	86	770	46.8	+36 31	8.5	9.5	Ko	1	..	38975i
37	294	46.4	+68 36	9.2	10.3	K2	2	..	38165i	87	606	46.8	+19 19	8.5	9.5	Ko	1	..	37601i
38	762	46.4	+60 52	7.8	8.8	Ko	4	..	37427i	88	532	46.8	+11 31	9.5	10.3	G5	1	..	38110i
39	732	46.4	+59 54	9.2	9.2	Ao	2	..	37427i	89	680	46.8	- 4 8	10.2	10.8	Go	2	..	23816b
40	1015	46.4	+48 21	5.92	6.92	Ko	5	..	37010i	90	1914	46.8	-24 24	8.3	8.2	A2	5	..	10587b
41	815	46.4	+46 36	8.0	8.8	G5	2	..	37010i	91	1286	46.8	-45 41	6.80	7.8	G5	7	..	41076b
42	758	46.4	+34 11	9.1	9.1	Ao	1	..	38975i	92	577	46.8	-57 16	9.0	10.0	Go	2	5,2	40953b
43	542	46.4	+21 52	10.7	11.3	G	1	..	6447m	93	272	46.8	-65 8	8.01	8.9	Go	6	0,6	20430b
44	546	46.4	- 1 41	9.3	10.7	Mc	4	0,3 R	24332b	94	145	46.9	+76 58	10.2	10.8	Go	2	..	6449m
45	677	46.4	-15 1	8.40	8.90	F8	5	..	18192b	95	178	46.9	+75 6	9.9	10.9	Ko	2	..	6449m
46	1450	46.4	-26 54	8.7	9.7	G5	3	..	45992b	96	199	46.9	+72 26	6.75	7.75	Ko	6	0,5	37555i
47	1515	46.4	-29 58	8.78	9.7	Ko	2	..	12259b	97	231	46.9	+69 14	8.0	8.8	G5	5	..	38165i
48	1487	46.4	-32 35	7.00	8.5	K5	6	..	12259b	98	855	46.9	+57 7	8.0	8.1	A3	3	..	37426i
49	1196	46.4	-43 1	7.37	7.3	A2	7	..	46199b	99	762	46.9	+36 6	8.7	9.8	K2	1	..	38975i
50	569	46.4	-55 18	7.3	8.5	Ko	6	..	14920b	100	763	46.9	+35 14	8.62	8.62	Ao	3	0,2	38975i

THE HENRY DRAPER CATALOGUE.

24300

3^h 46^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	633	<i>m.</i> 46.9	+26 22	7.98	8.54	Go	2	..	37417i	51	1058	<i>m.</i> 47.4	+50 3	8.87	8.87	Ao	3	..	38087i
2	589	46.9	+24 23	9.23	9.73	F8	2	..	6447m	52	840	47.4	+45 28	8.4	8.4	B8	3	..	3701oi
3	670	46.9	+1 31	10.0	10.1	A5	1	..	23816b	53	819	47.4	+38 15	8.1	8.2	A3	3	..	3745ii
4	1448	46.9	-29 42	7.79	9.4	K2	4	..	12259b	54	820	47.4	+38 14	8.5	8.5	A	2	..	3745ii
5	1476	46.9	-36 43	6.79	6.6	B9	..	1,8	28,196	55	638	47.4	+25 20	9.8	9.9	A2	2	..	6447m
6	456	46.9	-52 23	7.0	9.0	Mb	5	..	14920b	56	578	47.4	+23 11	10.7	11.0	F	1	..	6447m
7	614	46.9	-53 32	7.6	8.2	F2	7	..	14920b	57	523	47.4	+17 2	5.96	6.24	Fo	10	..	3760ii
8	258	46.9	-67 0	9.4	10.4	Ko	3	..	20430b	58	751	47.4	-11 11	9.8	10.1	F	1	..	18192b
9	179	47.0	+74 18	10.2	10.3	A2	2	..	6449m	59	1600	47.4	-23 13	7.9	8.3	G5	5	..	10587b
10	836	47.0	+45 12	7.92	8.92	Ko	3	..	38933i	60	1526	47.4	-30 22	8.1	9.4	Ko	3	..	12259b
11	590	47.0	+25 5	9.01	9.07	A2	3	0,2	6447m	61	1570	47.4	-31 10	7.58	9.1	Ko	4	..	12259b
12	541	47.0	+15 40	8.9	8.9	A	2	..	3760ii	62	584	47.4	-56 27	8.6	9.7	K2	2	..	12036b
13	739	47.0	-1 56	8.3	8.6	Fo	6	0,3	23816b	63	283	47.4	-61 16	8.7	9.7	Ko	4	..	23802b
14	625	47.0	-3 43	8.8	9.2	F5	5	..	23816b	64	910	47.5	+47 21	8.9	8.9	Ao	4	2,3	38087i
15	757	47.0	-13 4	9.5	10.0	F8	2	..	18192b	65	589	47.5	+27 50	7.9	8.7	G5	4	..	3811ii
16	744	47.0	-17 28	7.63	8.63	Ko	6	..	12752b	66	639	47.5	+25 38	8.5	9.3	G5	3	..	6447m
17	1287	47.0	-45 28	9.3	9.2	Fo	3	..	41076b	67	640	47.5	+25 27	8.6	8.7	A2	6	..	6447m
18	40	47.0	-86 16	8.9	9.2	F2	4	..	15145b	68	641	47.5	+25 23	7.16	7.16	Ao	..	0,6-	56,76
19	200	47.1	+73 5	8.9	9.7	G5	3	..	6449m	69	588	47.5	+22 50	8.9	10.0	K2	3	2,1	6447m
20	297	47.1	+67 13	8.8	9.6	G5	2	..	38165i	70	550	47.5	-1 43	10.0	10.4	F5	3	..	23816b
21	761	47.1	+34 45	8.7	8.7	Ao	3	0,1	38975i	71	768	47.5	-5 21	7.06	7.34	Fo	6	5,3	37338i
22	679	47.1	+32 48	8.1	8.1	Ao	2	..	3745ii	72	715	47.5	-21 32	9.5	9.6	F5	2	..	46166b
23	637	47.1	+25 14	8.61	8.61	Ao	5	0,3	6447m	73	693	47.5	-22 45	9.2	8.8	F8	3	..	46166b
24	668	47.1	+0 57	9.7	9.7	Ao	1	..	23816b	74	1435	47.5	-34 2	8.2	8.4	F8	5	..	12259b
25	548	47.1	-1 26	6.71	6.69	B9	6	0,7-	37338i	75	273	47.5	-64 25	9.9	10.7	G5	2	..	23802b
26	682	47.1	-3 54	8.0	8.4	F5	8	0,3	23816b	76	799	47.6	+52 6	9.2	9.2	Ao	1	..	38087i
27	763	47.1	-10 50	8.6	8.9	F2	6	..	18192b	77	592	47.6	+24 54	10.7	11.5	G5	1	..	6447m
28	713	47.1	-21 34	6.63	7.6	Ko	8	..	10587b	78	543	47.6	+15 16	9.44	10.00	Go	1	..	3811oi
29	1430	47.1	-35 5	9.3	10.4	G5	1	..	12259b	79	559	47.6	+7 59	9.3	9.4	A3	2	..	38104i
30	1217	47.1	-39 17	7.11	7.8	Mb	7	..	40943b	80	671	47.6	+1 26	7.9	8.9	Ko	5	0,3	23816b
31	1269	47.1	-42 53	8.4	9.1	Ko	3	..	41076b	81	670	47.6	+0 50	9.3	9.8	F8	2	..	23816b
32	570	47.1	-55 39	9.3	10.0	Go	2	..	46085b	82	551	47.6	-1 18	8.9	9.0	A2	5	..	23816b
33	282	47.1	-61 38	10.9	11.5	G	1	..	23802b	83	742	47.6	-2 38	9.2	9.7	F8	5	..	23816b
34	587	47.2	+27 43	8.7	8.8	A3	3	..	3811ii	84	765	47.6	-14 10	8.2	9.3	K2	3	..	18192b
35	612	47.2	+13 39	8.5	9.5	Ko	1	..	3811oi	85	1322	47.6	-38 30	9.3	9.6	F8	2	..	40943b
36	549	47.2	-0 57	6.94	7.00	A2	7	0,R	37549i	86	712	47.7	+53 15	8.6	9.1	F8	3	0,2	38087i
37	764	47.2	-6 32	9.3	10.1	G5	2	E	23816b	87	1018	47.7	+48 30	8.2	8.2	Ao	2	..	3701oi
38	737	47.2	-12 16	7.58	8.93	Ma	4	..	18192b	88	769	47.7	-5 39	5.49	5.44	B8	..	0,9-	56,76
39	1453	47.2	-26 14	10.4	9.7	F8	3	..	45992b	89	1601	47.7	-23 0	9.2	9.6	Go	2	..	46166b
40	1201	47.2	-43 9	10.2	10.3	G5	2	..	24616b	90	1456	47.7	-29 8	8.2	8.5	F8	4	..	12259b
41	798	47.3	+52 8	7.8	8.4	Go	4	5,2	38087i	91	1301	47.7	-44 22	8.1	8.5	Ao	7	..	41076b
42	1057	47.3	+49 27	8.1	9.1	Ko	2	..	38087i	92	1291	47.7	-44 55	9.18	10.1	G5	2	..	41076b
43	..	47.3	+24 35	..	..	G5	1	..	6447m	93	270	47.7	-60 25	8.8	10.6	K5	4	..	23802b
44	645	47.3	+17 43	9.3	9.6	F	2	..	3760ii	94	257	47.7	-70 11	7.56	7.7	A3	8	..	17047b
45	613	47.3	+14 4	8.02	8.80	G5	3	..	3760ii	95	857	47.8	+56 37	6.84	6.98	A5	7	2,4	37427i
46	507	47.3	+9 40	8.3	8.4	A3	3	R	3747oi	96	855	47.8	+41 1	8.2	9.2	Ko	1	..	38087i
47	620	47.3	+2 12	8.4	8.8	F5	4	..	23816b	97	774	47.8	+36 24	8.8	9.8	Ko	1	..	38975i
48	1425	47.3	-27 46	9.2	9.7	Go	1	..	45992b	98	666	47.8	+31 35	2.91	2.69	B1	..	R	1733c
49	1492	47.3	-31 57	7.8	8.8	Ko	5	..	12259b	99	636	47.8	+26 36	7.54	8.32	G5	3	..	37417i
50	856	47.4	+56 12	8.2	9.0	G5	3	..	3898ii	100	560	47.8	+7 29	var.	var.	F5	5	0,5R	12680b

24400

3^h 47^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	613	47.8	0 18	9.3	9.3	Ao	2	..	23816b	51	154	48.3	+75 53	8.32	9.50	K5	5	R	6449m
2	740	47.8	8 47	8.4	8.7	F2	5	..	18192b	52	207	48.3	+73 40	10.2	11.2	Ko	1	..	6449m
3	753	47.8	11 11	9.8	10.4	G	2	..	18192b	53	845	48.3	+42 36	8.6	9.1	F8	2	..	38933i
4	1618	47.8	25 15	8.7	9.2	Go	3	..	46166b	54	593	48.3	+24 17	10.0	10.6	G	1	..	6447m
5	1617	47.8	25 53	8.3	8.9	Ao	5	..	46166b	55	592	48.3	+22 35	10.7	11.1	F5	1	..	6447m
6	1303	47.8	44 40	7.98	8.2	Fo	8	..	41076b	56	673	48.3	+1 50	6.73	6.71	B9	8	I,R	37549i
7	930	47.8	51 19	8.7	9.7	G5	2	..	14920b	57	629	48.3	-3 36	8.6	8.7	A3	7	I,2	23816b
8	579	47.8	57 39	10.3	11.7	Mb	..	..	M	58	766	48.3	-14 25	9.2	9.5	F2	2	..	18192b
9	736	47.9	+59 20	6.59	7.15	Go	7	..	37427i	59	1458	48.3	-26 13	9.7	9.4	K2	2	..	45992b
10	756	47.9	+57 22	9.4	10.8	Mb	..	..	M	60	1443	48.3	-34 29	9.8	9.8	Go	1	..	12259b
11	683	47.9	+32 39	9.1	9.2	A2	2	..	38975i	61	224	48.3	-71 6	9.7	10.5	A5	2	R	17047b
12	683	47.9	4 45	9.20	10.20	Ko	1	..	23816b	62	775	48.4	+41 38	8.1	8.2	G3	2	..	38081i
13	766	47.9	6 15	9.5	9.5	Ao	3	..	23816b	63	580	48.4	+23 48	10.7	11.3	Go	2	..	6447m
14	1930	47.9	24 42	9.7	10.1	Ko	1	..	46166b	64	593	48.4	+22 54	10.7	11.3	Go	1	..	6447m
15	1312	47.9	28 22	9.9	10.0	Go	2	..	45992b	65	625	48.4	+14 51	8.9	9.4	F8	1	..	38110i
16	1109	47.9	40 23	7.8	9.0	Mb	5	..	40943b	66	671	48.4	+1 5	8.34	8.76	F5	4	..	23816b
17	458	47.9	52 8	8.7	10.2	K5	1	..	46083b	67	767	48.4	-13 58	8.6	9.4	G5	3	..	18192b
18	222	47.9	71 13	9.3	9.9	Go	2	..	17047b	68	75	48.4	-83 36	9.6	10.2	Go	2	..	20538b
19	146	48.0	+76 25	9.9	9.9	Ao	4	..	6449m	69	841	48.5	+46 1	9.4	9.4	B9	2	..	38933i
20	..	48.0	+73 57	..	..	K	1	..	6449m	70	686	48.5	-4 16	9.8	10.6	G5	1	..	23816b
21	803	48.0	+51 55	6.77	7.19	F5	6	0,5-	38087i	71	690	48.5	-18 46	7.8	8.9	K2	2	..	12752b
22	591	48.0	+22 50	9.8	11.2	Ma	1	..	6447m	72	697	48.5	-22 34	7.22	7.4	Fo	8	0,7-	10587b
23	526	48.0	+16 37	8.4	9.4	Ko	1	..	37601i	73	1610	48.5	-23 14	9.2	9.6	K5	2	..	46166b
24	684	48.0	4 40	7.56	7.98	F5	8	..	23816b	74	1445	48.5	-34 39	8.9	9.8	G5	2	..	12259b
25	717	48.0	16 3	7.68	8.68	Ko	6	..	12752b	75	1490	48.5	-37 2	9.8	10.4	Ao	1	..	40943b
26	1101	48.0	48 49	7.6	8.3	F5	6	..	14920b	76	1210	48.5	-43 50	9.6	10.3	Ko	1	..	46199b
27	93	48.0	80 20	9.0	..	F8	8	R	20538b	77	..	48.6	+75 1	..	..	Ko	2	..	6449m
28	94	48.0	80 20	7.87	10.1	F8	8	R	20538b	78	465	48.6	+63 35	9.2	9.2	Ao	2	..	37600i
29	74	48.0	83 46	9.0	10.1	K2	4	..	20538b	79	628	48.6	+62 47	4.87	4.85	B9	..	..	56,76
30	757	48.1	+57 37	8.6	9.4	G5	2	..	37427i	80	..	48.6	+60 49	..	..	Ko	8	R	37427i
31	726	48.1	+52 21	6.70	..	Oe5	5	0,5 R	3073b	81	768	48.6	+60 49	5.22	6.22	Ao	..	..	..
32	1019	48.1	+48 45	7.02	6.85	B3	6	E	38933i	82	553	48.6	+18 19	8.5	9.7	K5	1	..	37601i
33	775	48.1	+36 27	8.7	9.8	K2	1	..	38975i	83	630	48.6	-2 55	10.4	10.8	F5	1	..	23816b
34	550	48.1	+21 38	7.07	7.02	B8	5	..	37417i	84	771	48.6	-5 19	9.3	10.7	Ma	1	..	23816b
35	745	48.1	-2 8	9.5	10.0	F8	5	..	23816b	85	744	48.6	-8 19	8.8	9.8	Ko	4	..	18192b
36	727	48.1	20 25	8.8	10.2	Ma	1	..	46166b	86	771	48.6	-10 51	8.0	9.0	Ko	6	..	18192b
37	719	48.1	21 28	9.5	9.3	F8	2	..	10587b	87	1611	48.6	-23 11	9.4	9.6	G5	2	..	46166b
38	1110	48.1	40 6	10.6	10.2	G5	1	..	40943b	88	1226	48.6	-39 33	8.2	8.4	G5	5	..	40943b
39	153	48.2	+76 4	8.9	10.0	K2	3	..	6449m	89	1204	48.6	-46 9	9.6	9.7	Go	2	..	46199b
40	206	48.2	+73 15	9.2	10.2	Ko	3	0,1	6449m	90	1106	48.6	-48 24	9.1	9.9	G5	1	..	46083b
41	774	48.2	+41 43	8.6	8.7	A3	1	..	38081i	91	620	48.6	-53 55	9.3	10.9	K2	1	..	46085b
42	624	48.2	+14 53	8.3	9.1	G5	2	..	37601i	92	72	48.6	-82 7	8.8	9.6	G5	5	..	20538b
43	614	48.2	+13 13	7.9	8.3	F5	3	3,3	37601i	93	299	48.7	+68 5	8.5	8.8	Fo	4	..	37556i
44	593	48.2	+8 22	9.5	9.6	A2	2	..	38104i	94	843	48.7	+46 2	10.2	10.7	F8	2	..	7197m
45	747	48.2	-2 18	8.2	8.5	Fo	7	0,3	23816b	95	642	48.7	+25 23	8.8	9.8	Ko	3	..	6447m
46	695	48.2	-6 55	6.55	6.53	B9	5	..	10637b	96	527	48.7	+16 19	6.89	7.45	Go	7	..	37601i
47	722	48.2	-21 7	9.2	9.5	G5	3	..	46166b	97	691	48.7	-18 43	6.37	6.71	F2	8	..	12752b
48	1325	48.2	-38 1	9.5	9.6	Go	2	..	40943b	98	1492	48.7	-37 48	8.6	9.2	F5	4	..	40943b
49	1273	48.2	-42 30	9.4	10.0	Go	2	..	24616b	99	1206	48.7	-46 27	8.1	8.5	F2	8	..	41076b
50	275	48.2	-74 49	8.24	8.2	Fo	4	..	14359b	100	1178	48.7	-47 37	6.68	6.9	A3	8	2,9	41076b

THE HENRY DRAPER CATALOGUE.

24500

3^h 48^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	271	48.7	-60 43	7.8	10.0	Ma	7	..	23802b	51	678	49.2	+ 2 3	8.5	9.1	Go	3	..	23816b
2	259	48.7	-70 39	7.5	8.5	Ko	6	..	17047b	52	675	49.2	+ 0 58	7.99	8.55	Go	6	0,4-	23816b
3	728	48.8	+52 14	8.8	8.8	Ao	2	..	38087i	53	556	49.2	- 1 24	10.7	10.7	A	1	..	23816b
4	912	48.8	+47 35	5.34	5.22	B5	..	3,9	56,76	54	631	49.2	- 3 14	6.33	7.11	G5	..	R	56,76
5	597	48.8	+27 54	8.1	8.9	G5	3	0,3	38111i	55	631	49.2	- 3 14	4.95	4.95	A	..	R	56,76
6	643	48.8	+25 21	10.0	10.8	G5	1	..	6447m	56	778	49.2	- 6 49	8.6	9.6	Ko	2	..	12679b
7	595	48.8	+ 8 57	8.5	9.3	G5	1	..	3747oi	57	1312	49.2	-44 27	8.4	8.9	A3	4	..	41076b
8	554	48.8	- 1 28	10.7	11.2	F8	2	..	23816b	58	277	49.2	-64 22	9.3	10.1	G5	3	..	23802b
9	1460	48.8	-26 15	9.7	9.2	F8	2	..	45992b	59	822	49.3	+46 17	9.2	9.7	F8	5	..	6673m
10	572	48.8	-55 47	9.0	9.7	F5	2	..	46085b	60	816	49.3	+44 38	7.8	7.6	B3	7	..	6673m
11	265	48.8	-63 31	9.6	10.4	G5	2	..	23802b	61	744	49.3	-12 45	7.44	8.22	G5	6	..	18192b
12	276	48.8	-74 33	3.17	5.7	Ma	..	R	28,196	62	772	49.3	-14 18	8.2	8.3	A2	8	..	18192b
13	300	48.9	+67 44	7.38	8.16	G5	4	..	37556i	63	1449	49.3	-34 15	9.2	10.1	G	1	..	12259b
14	629	48.9	+62 29	8.0	8.3	F2	3	..	37427i	64	1208	49.3	-46 52	8.4	9.7	K5	1	R	46083b
15	814	48.9	+44 56	9.9	10.0	A5	2	..	7197m	65	621	49.3	-53 13	9.2	10.0	F5	2	..	46085b
16	842	48.9	+38 2	8.1	8.9	G5	1	..	38081i	66	587	49.3	-56 35	7.4	8.5	Ko	7	E	14920b
17	779	48.9	+36 17	8.6	9.7	K2	1	2,1	38899i	67	267	49.3	-63 27	8.6	9.6	Ko	5	..	23802b
18	594	48.9	+22 54	8.7	8.7	B9	7	0,3	6447m	68	42	49.3	-84 29	9.3	9.9	Go	3	..	20538b
19	528	48.9	+17 2	8.3	8.3	B9	5	..	37601i	69	381	49.4	+65 17	7.90	7.90	Ao	6	..	37556i
20	676	48.9	+ 1 52	8.1	8.1	B9	4	..	23816b	70	596	49.4	+23 4	8.6	9.6	Ko	4	0,2	6447m
21	672	48.9	+ 0 42	9.0	9.6	Go	2	..	23816b	71	557	49.4	+18 17	7.9	8.3	F5	5	..	37601i
22	683	48.9	-15 16	7.20	8.27	K2	7	..	18192b	72	523	49.4	+12 36	9.0	9.1	A5	2	..	38110i
23	382	49.0	+65 33	8.8	8.9	A2	2	..	37556i	73	596	49.4	+ 8 54	7.32	7.32	Ao	6	..	3747oi
24	844	49.0	+45 11	9.62	9.62	Ao	3	..	6673m	74	774	49.4	-10 44	8.8	8.8	Ao	7	..	18192b
25	640	49.0	+26 46	8.7	9.7	Ko	2	..	3747i	75	1332	49.4	-38 13	8.6	9.3	Go	3	..	40943b
26	583	49.0	+23 53	10.7	11.1	F5	1	..	6447m	76	1306	49.4	-45 15	7.68	8.8	Ko	4	..	41076b
27	616	49.0	+13 28	7.82	8.60	G5	3	0,3	37601i	77	1309	49.4	-45 52	9.0	9.7	Ko	2	..	41076b
28	769	49.0	-14 14	9.5	9.8	F2	2	..	18192b	78	320	49.4	-58 52	8.8	9.7	F5	5	..	23802b
29	732	49.0	-20 31	9.2	10.2	F8	1	..	46166b	79	150	49.4	-77 2	7.8	7.8	B8	6	..	46167b
30	1176	49.0	-50 11	9.8	10.7	Ko	2	..	14920b	80	268	49.5	+70 10	8.64	9.64	Ko	3	..	38165b
31	819	49.1	+46 56	10.2	10.2	Ao	3	..	7197m	81	296	49.5	+68 22	9.7	10.0	Fo	1	..	38165b
32	820	49.1	+46 40	9.2	9.2	B9	6	..	7197m	82	915	49.5	+47 10	8.5	8.9	F5	2	..	37010i
33	815	49.1	+44 11	9.7	10.5	G5	1	..	6673m	83	767	49.5	+34 15	9.1	9.1	Ao	2	..	38975i
34	591	49.1	+30 45	var.	var.	Bop	7	R	38111i	84	602	49.5	+ 4 39	8.5	8.5	Ao	4	1,2	12680b
35	595	49.1	+24 48	8.9	9.0	A2	2	..	3747i	85	679	49.5	+ 1 47	6.95	7.73	G5	7	0,4-	12680b
36	584	49.1	+23 38	9.5	9.5	Ao	3	2,2	6447m	86	779	49.5	- 6 9	8.4	8.7	Fo	4	5,5	12679b
37	617	49.1	- 0 0	8.73	9.23	F8	6	0,3	23816b	87	1945	49.5	-24 55	4.76	4.64	B5	..	R	28,196
38	616	49.1	- 0 27	8.5	9.0	F8	2	..	23816b	88	1464	49.5	-26 7	9.2	9.2	F5	3	..	45992b
39	765	49.1	-13 2	8.0	9.0	Ko	4	..	18192b	89	1322	49.5	-28 35	9.7	9.4	Go	3	..	45992b
40	770	49.1	-14 19	10.2	10.3	A5	2	..	18192b	90	1450	49.5	-34 33	8.7	9.8	Ko	2	..	12259b
41	727	49.1	-21 18	8.6	9.3	Go	3	..	10587b	91	1283	49.5	-42 16	8.2	8.7	Fo	4	0,3-	41076b
42	1495	49.1	-37 41	9.8	10.7	Ko	1	..	40943b	92	1214	49.5	-43 26	10.0	10.5	G	2	..	41076b
43	1113	49.1	-48 42	10.4	10.2	Go	1	..	46083b	93	586	49.5	-56 57	8.5	9.1	Ao	4	..	12036b
44	261	49.1	-70 11	9.36	10.4	Mb	..	..	M	94	292	49.5	-59 32	9.3	10.3	Go	3	..	23802b
45	138	49.2	+77 54	7.04	8.04	Ko	5	5,4	37555i	95	466	49.6	+64 2	8.6	8.6	B8	2	..	37556i
46	860	49.2	+50 24	5.47	5.89	F5p	9	3,R	38087i	96	823	49.6	+46 9	9.9	11.1	K5	2	R	6673m
47	821	49.2	+46 35	9.7	10.2	F8	3	..	7197m	97	845	49.6	+46 4	9.4	10.5	K2	2	..	6673m
48	..	49.2	+25 21	..	..	A5	1	..	6447m	98	817	49.6	+44 18	9.7	10.2	F8	2	..	6673m
49	654	49.2	+18 3	8.9	9.2	Fo	2	..	37601i	99	852	49.6	+42 43	9.0	9.1	A2	2	..	38933i
50	601	49.2	+ 4 53	7.65	7.93	Fo	6	0,4 R	12680b	100	670	49.6	+31 52	9.1	9.1	Ao	2	..	38975i

24600

3^h 49^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	669	49.6	+31 51	9.1	9.1	Ao	2	..	38975i	51	247	50.0	-76 44	8.4	9.2	G5	2	..	46167b
2	600	49.6	+27 52	8.7	8.7	Ao	2	2,2	38111i	52	124	50.1	+79 12	9.0	9.0	Ao	3	..	37558i
3	559	49.6	+5 17	8.41	8.47	A2	5	..	12680b	53	847	50.1	+45 52	10.2	10.2	Ao	3	..	6673m
4	689	49.6	-4 27	8.10	8.88	G5	5	..	23816b	54	588	50.1	+24 3	10.0	10.5	F8	2	..	6447m
5	776	49.6	-10 16	10.2	10.7	F8	1	..	18192b	55	556	50.1	+21 56	9.4	9.9	F8	3	3,2	6447m
6	1429	49.6	-33 17	8.9	9.7	K5	2	..	12259b	56	512	50.1	+9 37	8.5	8.9	F5	3	..	3747oi
7	..	49.6	-46 8	var.	var.	Md	4	R	41076b	57	746	50.1	-12 6	8.8	8.9	A2	5	..	18192b
8	202	49.7	+73 2	8.4	9.2	G5	2	5,5-	3763oi	58	686	50.1	-15 14	var.	var.	F8	2	R	18192b
9	824	49.7	+46 37	9.0	9.0	Ao	6	0,2	6673m	59	771	50.1	-19 41	8.8	10.4	K2	2	..	46166b
10	846	49.7	+45 35	9.5	9.5	B9	3	..	7197m	60	704	50.1	-22 8	9.2	9.3	A2	4	1,2	46166b
11	818	49.7	+44 33	8.9	8.9	Ao	5	..	6673m	61	1326	50.1	-27 58	6.88	7.2	A2	7	1,3	12397b
12	686	49.7	+32 45	8.7	9.2	F8	1	..	38975i	62	1339	50.1	-38 12	8.9	9.9	G5	2	..	40943b
13	642	49.7	+26 19	9.5	10.1	G	1	E	38111i	63	1231	50.1	-39 50	8.18	9.1	G5	4	..	40943b
14	598	49.7	+22 42	9.5	10.5	Ko	1	..	6447m	64	771	50.2	+35 42	8.1	8.6	F8	3	0,2	38975i
15	690	49.7	-4 39	8.8	9.2	F5	4	..	23816b	65	599	50.2	+22 50	9.5	9.9	F5	2	R	6447m
16	1619	49.7	-23 26	6.80	7.1	Go	8	..	10587b	66	775	50.2	-5 16	8.4	8.7	Fo	7	..	23816b
17	461	49.7	-52 27	9.5	10.3	G5	2	..	46085b	67	728	50.2	-16 30	8.8	9.6	G5	1	..	18192b
18	279	49.7	-64 4	9.1	10.1	Ko	3	..	23802b	68	727	50.2	-16 44	8.8	8.8	A	1	..	18192b
19	73	49.7	-82 18	9.8	10.1	F2	2	..	20538b	69	755	50.2	-17 18	8.00	8.08	A3	7	..	12752b
20	656	49.8	+17 19	7.9	8.7	G5	5	..	37601i	70	752	50.2	-17 40	8.6	8.6	A	1	..	12752b
21	502	49.8	+11 0	8.9	9.7	G5	2	..	3747oi	71	754	50.2	-17 46	8.3	9.5	K5	1	..	12752b
22	618	49.8	-0 17	8.3	8.6	Fo	6	0,3	23816b	72	735	50.2	-20 45	8.2	8.7	F5	3	..	10587b
23	773	49.8	-9 49	7.06	7.40	F2	3	2,9	10637b	73	1232	50.2	-39 38	9.2	9.6	G5	2	..	40943b
24	770	49.8	-13 1	8.2	8.2	Ao	6	..	18192b	74	279	50.2	-65 36	8.7	9.2	F8	3	..	20430b
25	702	49.8	-22 41	8.8	8.9	A5	3	..	10587b	75	215	50.2	-69 23	8.6	9.6	Ko	4	..	20430b
26	1455	49.8	-35 2	5.12	5.00	B5	..	0,9R	56,12o	76	125	50.3	+79 30	8.4	8.4	Ao	7	..	37558i
27	1230	49.8	-39 13	10.4	10.7	Ko	2	..	39655b	77	147	50.3	+76 50	10.2	11.0	G5	2	..	6449m
28	1183	49.8	-50 14	8.8	9.7	K2	3	..	46083b	78	672	50.3	+58 20	8.2	8.7	F8	3	..	37427i
29	223	49.8	-66 38	8.2	8.3	A5	7	..	20430b	79	747	50.3	+33 49	8.5	9.1	Go	2	..	38975i
30	916	49.9	+47 10	9.2	9.3	A2	3	..	38933i	80	664	50.3	+20 30	8.3	9.1	G5	2	..	37417i
31	854	49.9	+42 57	8.4	8.9	F8	6	..	6673m	81	754	50.3	-2 2	9.5	10.3	G5	4	..	23816b
32	586	49.9	+23 31	9.4	9.9	F8	3	..	6447m	82	778	50.3	-10 18	9.8	10.1	Fo	2	..	18192b
33	558	49.9	-1 34	8.9	9.7	G5	5	..	23816b	83	736	50.3	-20 7	8.8	8.7	F8	3	..	10587b
34	751	49.9	-8 12	8.4	9.2	G5	4	..	18192b	84	731	50.3	-20 59	8.8	9.5	G5	2	..	10587b
35	775	49.9	-14 7	10.0	10.3	Fo	2	..	18192b	85	1637	50.3	-25 11	8.1	8.5	Go	3	..	10587b
36	251	49.9	-75 0	7.44	7.4	F2	6	..	14359b	86	625	50.3	-53 12	9.8	10.6	G5	1	..	46085b
37	97	49.9	-80 47	9.6	9.6	B9	4	..	20538b	87	248	50.3	-76 47	8.4	9.4	Ko	2	..	46167b
38	76	49.9	-83 54	10.1	10.9	G5	1	..	20538b	88	812	50.4	+51 50	8.0	8.8	G5	3	0,1	37406i
39	651	50.0	+61 32	8.8	8.8	Ao	2	..	37427i	89	779	50.4	+41 35	6.79	6.85	A2	6	..	3701oi
40	768	50.0	+34 47	5.48	5.31	B3	..	0,7	56,76	90	645	50.4	+26 27	9.2	9.3	A5	2	E	38111i
41	688	50.0	+32 53	8.5	9.0	F8	3	2,2	38975i	91	560	50.4	+18 57	8.7	9.5	G5	1	..	37601i
42	555	50.0	+21 29	8.1	8.7	Go	5	E	6447m	92	775	50.4	-9 13	9.0	9.3	Fo	2	..	18192b
43	527	50.0	+12 52	9.3	9.4	A3	1	..	3811oi	93	687	50.4	-15 12	7.40	8.75	Ma	5	..	18192b
44	752	50.0	-2 18	10.4	10.9	F8	2	..	23816b	94	737	50.4	-20 47	8.8	8.5	Fo	4	..	10587b
45	782	50.0	-6 10	9.8	11.0	K5	1	..	23816b	95	1504	50.4	-36 19	10.2	10.4	F5	2	..	40943b
46	759	50.0	-11 0	9.3	9.9	Go	2	..	18192b	96	1221	50.4	-43 27	7.7	8.8	Ko	5	..	41076b
47	696	50.0	-18 22	8.7	9.2	F8	1	..	12752b	97	265	50.4	-70 15	8.8	10.0	K5	4	..	20430b
48	1336	50.0	-38 49	9.5	9.9	A2	2	..	40943b	98	75	50.4	-82 48	9.2	10.4	K5	1	..	20538b
49	1185	50.0	-41 30	7.4	7.6	F8	7	2,8	41076b	99	43	50.4	-84 30	9.7	9.8	A2	4	..	20538b
50	272	50.0	-60 39	7.9	8.5	F8	9	..	23802b	100	180	50.5	+75 1	9.4	10.2	G5	2	..	6449m

THE HENRY DRAPER CATALOGUE.

24700

3^h 50^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	855	50.5	+43 2	7.20	7.20	Ao	5	..	3701oi	51	785	51.0	- 6 28	9.8	10.8	Ko	2	..	23816b
2	602	50.5	+22 23	8.1	8.7	Go	6	..	6447m	52	706	51.0	- 7 34	8.6	9.0	F5	3	..	12679b
3	559	50.5	- 1 22	9.3	9.4	A5	3	..	23816b	53	736	51.0	-21 52	8.6	9.5	A3	3	..	10587b
4	738	50.5	-20 15	9.0	9.9	K2	1	..	46166b	54	1960	51.0	-24 20	var.	var.	Md	4	R	41089b
5	1477	50.5	-29 17	8.5	10.3	K5	1	..	45992b	55	1508	51.0	-36 1	7.56	8.0	F8	6	0,7	40943b
6	1187	50.5	-47 12	5.77	7.4	Ko	..	0,7	56,120	56	1223	51.0	-46 34	8.7	10.0	K2	1	..	46083b
7	603	50.5	-54 24	8.3	8.5	Ao	5	..	14920b	57	577	51.0	-55 9	8.00	7.7	B5	8	..	14920b
8	814	50.6	+51 26	8.0	8.3	Fo	4	0,4	37406i	58	761	51.1	+57 42	9.0	10.1	K2	2	0,1	37427i
9	847	50.6	+43 48	9.5	9.6	A3	2	..	6673m	59	851	51.1	+45 30	9.7	10.1	F5	4	..	6673m
10	748	50.6	+33 59	8.5	9.1	Go	1	..	38975i	60	895	51.1	+39 43	2.96	2.74	B1	..	R	7042c
11	601	50.6	+22 53	8.5	8.5	Ao	6	2,2	6447m	61	625	51.1	+19 47	8.5	8.5	A	2	..	37601i
12	752	50.6	-12 24	5.94	6.22	Fo	6	..	10637b	62	571	51.1	+ 7 17	8.5	9.3	G5	3	0,2	12680b
13	1470	50.6	-26 53	9.7	9.7	Go	2	..	45992b	63	681	51.1	+ 1 55	7.9	8.9	Ko	5	5,2	23816b
14	1479	50.6	-29 32	9.7	11.4	Ma	..	..	M	64	1477	51.1	-26 50	8.5	9.1	Ko	4	0,2	45992b
15	1187	50.6	-41 32	9.8	10.2	Ko	2	..	41076b	65	1330	51.1	-28 2	9.7	9.8	Go	3	..	45992b
16	123	50.7	+80 42	8.4	8.4	Ao	4	..	37558i	66	1345	51.1	-38 21	8.9	10.0	G5	2	..	40943b
17	760	50.7	+57 9	6.89	6.89	Ao	5	0,7	37426i	67	1240	51.1	-39 6	9.2	9.3	G5	3	..	40943b
18	1022	50.7	+48 27	8.7	9.2	F8	3	..	38087i	68	598	51.2	+25 0	7.71	8.49	G5	3	..	37417i
19	825	50.7	+46 39	10.2	10.3	A2	3	..	7197m	69	607	51.2	+22 54	5.98	5.96	B9	8	..	37417i
20	589	50.7	+23 18	8.8	9.9	K2	3	0,1	6447m	70	561	51.2	+21 45	9.1	9.6	F8	2	..	6447m
21	557	50.7	+21 45	10.2	10.2	A	1	..	6447m	71	555	51.2	+15 14	8.74	9.02	Fo	2	..	37601i
22	638	50.7	- 3 25	10.0	10.5	F8	1	..	23816b	72	562	51.2	+ 5 34	7.9	8.7	G5	3	0,2	12680b
23	717	50.8	+53 47	8.9	9.0	A2	2	..	38981i	73	701	51.2	-18 0	8.2	8.5	F2	5	..	12752b
24	826	50.8	+46 22	9.7	9.7	A2	3	..	6673m	74	1522	51.2	-32 24	9.2	9.4	A2	3	..	12259b
25	819	50.8	+44 46	9.5	9.5	Ao	5	..	6673m	75	817	51.3	+51 13	7.8	8.9	K2	2	3,1	37406i
26	639	50.8	- 3 33	10.0	10.1	A3	1	..	23816b	76	1073	51.3	+49 56	8.9	9.3	F5	1	..	38087i
27	694	50.8	- 4 49	7.08	7.50	F5	9	..	23816b	77	669	51.3	+21 2	6.95	7.95	Ko	4	..	37417i
28	783	50.8	-10 50	8.6	8.7	A2	5	..	18192b	78	562	51.3	+18 33	8.5	8.9	F5	3	..	37601i
29	709	50.8	-22 6	9.5	10.4	Go	2	..	46166b	79	605	51.3	+ 6 25	7.7	8.0	Fo	6	5,4	12680b
30	1509	50.8	-37 34	9.6	10.4	F5	1	..	40943b	80	779	51.3	- 5 26	8.8	10.0	K5	3	..	23816b
31	1343	50.8	-38 18	10.9	10.5	G	1	..	40943b	81	707	51.3	- 7 14	9.0	9.6	G	2	..	12679b
32	1291	50.8	-42 10	9.3	9.3	Go	2	..	41076b	82	757	51.3	- 7 56	7.7	8.7	Ko	5	..	18192b
33	718	50.9	+53 42	6.97	6.97	Ao	6	0,7	37406i	83	785	51.3	-10 16	9.5	9.9	F5	2	..	18192b
34	918	50.9	+48 0	9.7	9.7	Ao	2	..	38087i	84	778	51.3	-19 44	7.54	8.7	Ko	4	..	10587b
35	848	50.9	+43 42	9.9	9.9	Ao	2	..	6673m	85	712	51.3	-21 53	8.6	9.2	Fo	3	..	10587b
36	691	50.9	+32 36	8.5	8.5	Ao	3	0,2	38975i	86	711	51.3	-22 8	9.8	9.8	Ao	4	..	45166b
37	648	50.9	+26 13	8.5	8.9	F5	4	0,2	6447m	87	1470	51.3	-35 52	7.88	9.2	K2	4	2,4	12259b
38	604	50.9	+22 49	10.7	10.7	Ao	1	..	6447m	88	1513	51.3	-36 56	9.6	10.9	F5	1	..	40943b
39	606	50.9	+22 24	8.7	9.2	F8	4	..	6447m	89	1133	51.3	-49 41	9.4	9.7	F5	2	..	46083b
40	605	50.9	+22 12	5.76	6.04	Fo	7	..	37417i	90	856	51.4	+42 49	8.6	8.6	Ao	3	..	38933i
41	780	50.9	-14 23	9.5	10.5	Ko	1	..	18192b	91	540	51.4	+ 3 47	8.7	9.0	F	2	R	12680b
42	1640	50.9	-25 11	8.1	8.5	F5	4	..	10587b	92	628	51.4	+ 2 46	7.40	8.40	Ko	6	5,4	12680b
43	1483	50.9	-29 31	8.5	9.5	Ko	3	2,2	41072b	93	787	51.4	-10 7	8.8	9.1	F2	5	..	18192b
44	1128	50.9	-40 40	5.61	6.7	F5	..	R	56,120	94	762	51.4	-10 57	8.6	9.4	G5	4	..	18192b
45	155	51.0	+75 52	8.62	9.80	K5	3	..	6449m	95	713	51.4	-22 10	9.8	10.4	K5	1	..	46166b
46	792	51.0	+36 12	6.88	7.16	Fo	3	..	37451i	96	R	51.4	-22 54	9.4	9.5	G5	1	..	10587b
47	560	51.0	+21 38	9.4	9.4	Ao	3	0,2	6447m	97	1478	51.4	-26 14	7.48	8.5	K2	4	..	10587b
48	678	51.0	+ 0 24	8.7	9.0	Fo	3	..	23816b	98	1479	51.4	-26 31	8.0	8.2	Ko	4	..	10587b
49	640	51.0	- 3 25	9.0	10.2	K5	2	..	23816b	99	591	51.4	-56 43	8.1	8.8	Ko	4	..	14920b
50	640	51.0	- 3 25	9.0	10.2	K5	2	..	23816b	100	156	51.5	+75 51	8.02	9.02	Ko	5	..	6449m

24800

3^h 51^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	..	m. 51.5	° 73 36	..	..	Ao	2	..	6449m	51	654	m. 52.0	° 61 47	9.2	9.5	F	2	R	37427i
2	599	51.5	+24 12	6.38	7.38	Ko	5	..	37417i	52	743	52.0	+59 15	9.2	9.5	Fo	2	..	37427i
3	781	51.5	-14 3	8.8	8.8	B9	4	..	18192b	53	762	52.0	+57 36	8.8	9.2	F5	2	..	3898ri
4	1480	51.5	-26 14	8.9	8.5	F5	4	0,4	46166b	54	1024	52.0	+48 28	7.62	8.69	K2	3	E	38933i
5	1226	51.5	-46 43	6.88	7.5	Ao	10	..	41076b	55	796	52.0	+36 51	8.6	9.1	F8	1	..	38899i
6	299	51.6	+68 34	8.4	9.4	Ko	3	..	38165i	56	695	52.0	+32 28	8.1	8.2	A3	2	..	38975i
7	301	51.6	+66 46	9.2	9.3	A2	3	..	37506i	57	564	52.0	+21 41	10.0	10.5	F8	1	..	6447m
8	676	51.6	+58 12	8.7	9.1	F5	2	..	37427i	58	630	52.0	+14 34	8.4	8.4	Ao	2	..	38110i
9	773	51.6	+34 32	6.39	6.53	A5	5	..	37451i	59	760	52.0	- 2 50	10.0	11.1	K2	1	..	23816b
10	782	51.6	-14 13	9.5	10.5	Ko	2	..	18192b	60	1339	52.0	-28 34	9.7	10.9	K5	1	..	45992b
11	1554	51.6	-30 29	8.9	10.2	Ko	1	0,1	12259b	61	1559	52.0	-30 6	8.1	10.3	K2	3	..	41072b
12	591	51.6	-57 23	8.7	10.0	K5	2	..	12036b	62	1140	52.0	-49 23	9.2	9.9	Go	2	..	46083b
13	270	51.6	-62 56	9.4	10.2	G5	2	..	23802b	63	628	52.0	-52 59	6.42	6.8	A2	10	..	14920b
14	225	51.6	-66 14	9.6	10.1	F8	3	..	20430b	64	605	52.0	-54 50	9.10	9.7	F5	4	..	46085b
15	853	51.7	+45 34	9.2	10.2	Ko	3	..	6673m	65	41	52.0	-86 26	10.1	10.1	Ko	1	..	15145b
16	592	51.7	+23 27	10.0	10.4	F5	2	..	6447m	66	655	52.1	+61 23	9.2	9.2	Ao	2	..	37427i
17	564	51.7	+ 5 45	6.02	6.02	Ao	8	0,10	37549i	67	829	52.1	+46 54	10.2	10.5	F2	4	..	7197m
18	629	51.7	+ 2 40	8.9	9.4	F8	1	..	12680b	68	824	52.1	+44 22	9.2	9.3	A2	3	..	6673m
19	561	51.7	- 1 50	7.94	8.00	A2	6	1,7	12680b	69	855	52.1	+43 29	9.2	9.3	A5	3	..	6673m
20	789	51.7	-10 32	10.2	10.8	G	2	R	18192b	70	854	52.1	+43 21	8.9	9.5	Go	4	..	6673m
21	1640	51.7	-23 20	10.2	10.4	Go	1	..	46166b	71	609	52.1	+27 40	9.8	10.8	Ko	1	..	38111i
22	1641	51.7	-23 51	8.7	9.8	Ko	3	0,2	46166b	72	593	52.1	+23 22	10.2	10.7	F8	1	..	6447m
23	1447	51.7	-33 31	7.97	8.9	K2	4	..	12259b	73	543	52.1	+11 12	8.5	9.0	F8	2	..	38110i
24	1515	51.7	-36 37	7.47	7.8	A3	8	1,9	40943b	74	774	52.1	-13 37	9.2	9.5	Fo	3	..	18192b
25	1245	51.7	-39 4	6.80	6.8	B9	9	..	40943b	75	1564	52.1	-29 57	7.50	8.3	Ko	6	0,5	41072b
26	54	51.7	-87 33	9.4	9.4	Ao	4	..	15145b	76	300	52.1	-62 54	10.3	10.9	G	1	..	23802b
27	855	51.8	+45 59	9.9	10.0	A3	2	..	6673m	77	654	52.2	+26 28	9.4	9.7	F2	1	..	38111i
28	854	51.8	+45 13	9.7	10.7	Ko	1	..	7197m	78	1342	52.2	-28 43	10.6	10.1	Go	2	..	45992b
29	822	51.8	+44 52	9.2	9.3	A2	4	..	6673m	79	945	52.2	-51 2	8.7	9.7	Go	2	..	14920b
30	562	51.8	- 1 10	8.9	9.2	F2	6	..	23816b	80	323	52.2	-58 32	9.3	10.6	K2	2	..	23802b
31	789	51.8	- 5 55	9.0	10.0	Ko	4	..	23816b	81	273	52.2	-60 49	9.9	10.9	Ko	2	..	23802b
32	793	51.8	-10 3	6.16	6.44	Fo	7	0,10	10637b	82	216	52.2	-69 36	8.8	9.9	K2	3	..	20430b
33	764	51.8	-11 9	6.60	7.02	F5	5	0,9	10637b	83	98	52.2	-80 27	8.7	9.8	K2	4	..	20538b
34	783	51.8	-13 53	6.70	7.88	K5	8	..	18192b	84	159	52.3	+75 51	9.9	9.9	Ao	3	..	6449m
35	1349	51.8	-38 17	7.7	8.4	G5	5	..	40943b	85	595	52.3	+31 7	9.4	9.4	Ao	2	..	38111i
36	1196	51.8	-41 32	9.6	10.2	G5	2	..	41076b	86	557	52.3	+15 20	8.4	9.2	G5	2	..	38110i
37	1202	51.8	-50 20	9.8	9.7	F5	2	..	46085b	87	607	52.3	+ 6 35	8.5	8.5	Ao	4	..	12680b
38	293	51.8	-59 43	9.2	10.0	Fo	4	..	23802b	88	762	52.3	- 1 52	9.7	10.2	F8	2	R	23816b
39	157	51.9	+76 5	9.9	10.7	G5	3	..	6449m	89	645	52.3	- 3 25	9.3	10.4	K2	1	..	23816b
40	158	51.9	+75 17	9.5	10.6	K2	1	..	6449m	90	709	52.3	- 7 27	8.4	9.4	Ko	3	..	12679b
41	204	51.9	+72 32	8.0	8.8	G5	3	5,2	37555i	91	760	52.3	- 8 45	8.8	8.9	A5	5	..	18192b
42	852	51.9	+43 44	9.0	9.8	G5	2	..	6673m	92	1653	52.3	-25 28	6.93	7.9	Go	7	..	10587b
43	827	51.9	+38 33	6.41	7.41	Ko	5	..	37451i	93	1343	52.3	-28 17	9.5	10.0	G5	2	..	45992b
44	608	51.9	+22 38	9.1	10.1	Ko	2	0,1	6447m	94	126	52.4	+79 21	8.4	8.9	F8	4	..	37558i
45	708	51.9	- 7 5	9.0	9.1	A5	3	..	12679b	95	639	52.4	+62 21	8.5	9.5	Ko	2	..	37427i
46	739	51.9	-20 58	9.5	9.5	Ao	3	..	46166b	96	679	52.4	+59 0	8.9	8.9	Ao	2	..	37427i
47	738	51.9	-21 5	9.8	9.9	Go	1	..	46166b	97	856	52.4	+45 13	9.27	10.34	K2	2	..	6673m
48	1642	51.9	-23 43	8.26	8.6	F8	4	..	10587b	98	826	52.4	+44 12	7.7	7.8	A3	4	..	37010i
49	1473	51.9	-35 33	9.3	10.1	F8	2	..	40943b	99	594	52.4	+23 48	7.07	7.05	B9	5	..	37417i
50	181	52.0	+74 59	8.62	8.68	A2	4	1,3	37555i	100	567	52.4	+ 5 26	8.3	8.8	F8	4	0,2	12680b

THE HENRY DRAPER CATALOGUE.

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3^h 52^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	699	52.4	- 4 30	8.6	8.9	F2	3	..	23816b	51	1459	52.8	-27 3	8.5	9.2	F8	2	..	45992b
2	1522	52.4	-37 40	8.9	10.4	F8	1	..	40943b	52	1460	52.8	-27 49	7.7	9.1	F8	5	..	45992b
3	1202	52.4	-41 22	8.7	8.8	F8	4	3,3	41076b	53	1460	52.8	-33 30	8.6	8.5	Go	4	..	12259b
4	629	52.4	-53 28	8.4	9.5	K2	2	..	14920b	54	1204	52.8	-41 54	10.2	10.2	F	1	..	41076b
5	607	52.4	-54 45	8.7	9.4	Go	3	..	14920b	55	327	52.8	-58 30	8.8	10.0	K2	3	..	23802b
6	148	52.5	+76 37	10.2	10.7	F8	3	..	6449m	56	328	52.8	-58 41	8.7	10.0	Ko	5	..	23802b
7	182	52.5	+74 39	10.2	10.3	A3	2	..	6449m	57	229	52.8	-66 23	9.0	9.3	F2	4	..	20430b
8	469	52.5	+63 36	8.1	8.7	Go	2	..	37556i	58	301	52.9	+68 54	8.9	9.4	F8	3	..	38165i
9	920	52.5	+47 52	8.1	8.1	B9	3	..	37010i	59	858	52.9	+45 25	8.6	8.6	Ao	6	..	6673m
10	859	52.5	+43 4	8.9	9.9	Ko	5	..	6673m	60	778	52.9	+36 2	8.1	9.1	Ko	2	0,2	38899i
11	860	52.5	+43 3	8.7	8.7	Ao	4	..	6673m	61	633	52.9	+14 48	8.0	8.6	Go	3	..	37601i
12	775	52.5	+35 30	4.05	..	Oe5	..	0,9 R	6154c	62	575	52.9	+ 7 20	7.7	8.1	F5	6	3,5	12680b
13	697	52.5	+32 29	8.1	8.1	Ao	4	0,2	38975i	63	648	52.9	- 2 53	9.2	10.2	Ko	2	..	23816b
14	610	52.5	+22 50	9.1	9.6	F8	4	..	6447m	64	796	52.9	- 9 59	8.06	9.06	Ko	4	..	18192b
15	568	52.5	+ 5 12	8.71	8.77	A2	3	..	12680b	65	778	52.9	-13 40	8.6	9.6	Ko	2	..	18192b
16	565	52.5	- 1 26	8.7	9.8	K2	6	2,3	23816b	66	1253	52.9	-39 15	6.80	6.6	B9	8	..	40943b
17	786	52.5	-13 55	9.0	9.4	F5	4	..	18192b	67	1235	52.9	-43 25	7.62	8.5	Ko	5	..	41076b
18	1567	52.5	-30 18	8.9	9.5	Ko	3	0,2	41072b	68	829	53.0	+44 16	9.5	10.0	F8	3	3,2	7197m
19	1350	52.5	-38 20	10.4	10.5	G5	1	..	39655b	69	..	53.0	+43 23	..	..	Ao	4	..	6673m
20	54	52.6	+86 40	9.0	9.3	Fo	3	..	37793i	70	655	53.0	+26 55	7.38	7.38	Ao	4	..	37417i
21	470	52.6	+64 4	8.6	9.6	Ko	1	..	37600i	71	536	53.0	+12 49	8.6	9.2	Go	1	..	38110i
22	597	52.6	+23 38	9.8	10.2	F5	2	..	6447m	72	548	53.0	+11 50	8.9	9.7	G5	2	..	38110i
23	535	52.6	+12 28	8.29	8.29	Ao	3	..	37601i	73	576	53.0	+ 7 11	8.0	9.0	Ko	4	5,4	12680b
24	764	52.6	- 2 16	9.2	10.2	Ko	2	..	23816b	74	756	53.0	-12 11	9.3	9.6	Fo	4	..	18192b
25	785	52.6	- 5 51	9.5	9.6	A5	5	..	23816b	75	1981	53.0	-24 56	7.26	7.4	A2	7	0,3	10587b
26	705	52.6	-18 50	8.2	9.4	K5	2	..	12752b	76	1236	53.0	-43 55	8.1	8.8	F8	5	..	41076b
27	1646	52.6	-23 28	9.4	9.5	Go	3	..	46166b	77	465	53.0	-52 6	7.8	8.5	A5	7	..	14920b
28	1535	52.6	-31 59	8.1	7.8	A2	3	..	42848b	78	160	53.1	+76 8	7.67	8.01	F2	5	2,5-	37555i
29	1523	52.6	-36 21	9.6	10.1	Go	2	..	40943b	79	735	53.1	+52 42	9.0	9.0	A	2	..	37406i
30	325	52.6	-58 14	8.9	10.0	Ko	3	..	23802b	80	923	53.1	+47 18	8.2	8.3	A2	3	1,2	37406i
31	271	52.6	-63 29	9.2	10.4	K5	1	..	23802b	81	862	53.1	+43 15	10.2	10.2	Ao	2	..	7197m
32	859	52.7	+44 7	9.5	10.9	Ma	1	..	6673m	82	829	53.1	+38 31	6.38	6.38	Ao	6	..	37451i
33	647	52.7	- 3 10	9.2	9.7	F8	4	..	23816b	83	600	53.1	+23 20	8.1	9.1	Ko	3	..	37417i
34	762	52.7	- 8 15	9.2	10.2	Ko	3	E	18192b	84	538	53.1	+16 50	8.7	9.2	F8	3	..	37601i
35	1657	52.7	-25 18	9.5	9.7	Ao	2	..	46166b	85	577	53.1	+ 8 5	8.9	8.9	Ao	3	..	38104i
36	1203	52.7	-41 46	8.3	8.2	F8	5	3,5-	41076b	86	795	53.1	- 6 2	9.0	10.2	K5	4	..	23816b
37	1145	52.7	-49 26	9.8	9.9	F8	1	..	46083b	87	712	53.1	- 7 24	9.0	9.4	F5	3	..	12679b
38	326	52.7	-58 1	9.0	9.4	G5	3	..	23802b	88	1148	53.1	-40 13	7.74	7.6	A3	7	..	40943b
39	270	52.7	-72 20	9.1	9.6	F8	1	..	17047b	89	1307	53.1	-42 56	9.3	10.2	Go	3	..	41076b
40	251	52.7	-76 12	7.8	8.9	K2	4	..	14359b	90	1131	53.1	-48 4	7.7	8.3	F8	7	..	14920b
41	..	52.8	+76 40	..	..	F5	1	..	6449m	91	266	53.1	-69 57	9.0	9.4	F5	4	..	20430b
42	734	52.8	+52 39	8.6	9.0	F5	2	R	38087i	92	640	53.2	+62 14	7.9	7.9	B8	4	..	37427i
43	827	52.8	+44 37	8.8	8.8	Ao	5	..	6673m	93	873	53.2	+50 56	8.8	8.9	A2	3	R	38087i
44	828	52.8	+44 28	9.0	9.0	Ao	4	..	6673m	94	830	53.2	+46 31	9.2	9.7	F8	5	..	6673m
45	785	52.8	+41 33	8.6	9.4	G5	2	..	38933i	95	798	53.2	+36 32	8.7	9.1	F5	1	..	38899i
46	650	52.8	+25 33	9.4	9.5	A2	3	R	6447m	96	602	53.2	+24 56	8.47	9.54	K2	2	..	6447m
47	570	52.8	+ 5 18	8.71	9.13	F5	1	..	38104i	97	603	53.2	+24 46	9.15	9.65	F8	2	..	6447m
48	793	52.8	- 6 42	9.5	9.9	F5	1	..	12679b	98	601	53.2	+24 28	9.1	9.1	Ao	2	..	6447m
49	710	52.8	- 7 17	8.8	9.9	K2	3	..	12679b	99	540	53.2	+16 37	9.3	10.3	K	1	..	37601i
50	768	52.8	-11 45	9.2	10.2	Ko	1	..	18192b	100	513	53.2	+10 44	7.6	9.0	Ma	4	0,3-	37470i

25000

3^h 53^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	685	53.2	+ 1 10	7.89	9.07	K5	5	3,3	23816b	51	1353	53.7	-28 10	8.5	9.4	Ko	1	..	45992b
2	787	53.2	- 5 11	8.8	9.2	F5	4	..	23816b	52	1213	53.7	-41 12	10.0	9.3	A	3	R	41076b
3	799	53.2	-10 31	10.0	11.0	Ko	2	..	18192b	53	274	53.7	-60 17	8.5	9.5	A2	7	..	23802b
4	1208	53.2	-41 39	9.2	9.6	K2	2	0,2	40943b	54	284	53.7	-61 12	7.5	8.0	F5	8	..	23802b
5	1205	53.2	-47 35	8.7	8.9	F5	4	..	46083b	55	774	53.8	+60 24	8.6	8.6	Ao	2	..	37427i
6	466	53.2	-52 33	8.2	8.3	Ao	8	..	14920b	56	722	53.8	+53 35	7.35	8.13	G5p	4	R	38981i
7	125	53.3	+80 25	5.25	5.75	F8	..	R	856c	57	792	53.8	+41 59	7.90	7.90	Ao	5	..	38933i
8	832	53.3	+80 25	9.7	10.7	A2	3	..	7197m	58	622	53.8	+13 27	8.5	8.5	Ao	4	..	38110i
9	831	53.3	+46 57	10.2	10.3	Ko	2	..	7197m	59	684	53.8	+ 0 28	8.5	9.3	G5	5	..	23816b
10	611	53.3	+22 42	8.7	9.2	A2	2	..	7197m	60	1312	53.8	-42 47	9.2	9.3	Go	4	..	41076b
11	605	53.3	+ 8 45	8.9	10.1	F8	3	2,2	6447m	61	630	53.8	-53 14	9.1	10.3	Go	1	..	14920b
12	713	53.3	- 7 14	8.8	9.2	K5	1	..	38104i	62	274	53.8	-63 34	9.7	10.9	G5	1	R	23802b
13	780	53.3	-13 38	9.5	9.8	F5	5	..	12679b	63	659	53.9	+29 26	8.1	8.1	B9	5	0,4	38111i
14	749	53.3	-20 34	8.9	9.5	Fo	1	..	18192b	64	611	53.9	+27 16	8.5	9.7	K5	2	..	37417i
15	1495	53.3	-26 2	9.2	9.7	Ko	2	..	10587b	65	605	53.9	+24 24	8.7	9.3	Ko	2	..	6447m
16	582	53.3	-54 56	9.7	10.3	Go	2	..	46166b	66	680	53.9	+21 2	8.1	9.1	Go	4	..	37417i
17	302	53.3	-62 23	8.6	9.6	Go	1	..	46085b	67	624	53.9	+13 27	9.3	9.3	Ao	1	..	38110i
18	270	53.4	+70 28	9.2	9.7	Ko	5	..	23802b	68	568	53.9	- 1 14	10.0	10.6	Ko	2	..	23816b
19	302	53.4	+68 3	10.2	11.0	F8	3	..	38165i	69	789	53.9	- 5 45	5.96	6.96	Go	4	..	10637b
20	839	53.4	+55 45	7.07	7.07	G5	1	..	38165i	70	693	53.9	-15 23	8.6	9.1	F8	3	2,2-	18192b
21	904	53.4	+39 44	6.84	6.84	Ao	7	0,4	37427i	71	1365	53.9	-38 53	9.6	11.1	F8	2	..	39655b
22	779	53.4	+35 43	8.7	8.8	Ao	4	..	37010i	72	1260	53.9	-39 23	8.4	9.1	Ko	3	..	40943b
23	782	53.4	+ 9 11	9.0	9.1	A2	2	0,2	38899i	73	1341	53.9	-44 31	9.0	9.7	Go	3	..	41076b
24	781	53.4	-13 48	3.19	4.37	A2	3	..	18192b	74	1136	53.9	-48 46	7.5	8.0	G5	7	..	38413b
25	1209	53.4	-41 8	9.3	10.5	K5	..	0,2 R	762c	75	834	54.0	+44 9	8.7	9.5	Ko	4	..	10637b
26	267	53.4	-70 28	9.5	9.6	Ko	2	..	41076b	76	865	54.0	+43 37	9.5	10.6	G5	5	..	6673m
27	128	53.5	+79 42	9.2	9.7	A5	4	..	20430b	77	660	54.0	+29 18	8.9	9.3	K2	1	..	6673m
28	773	53.5	+60 28	8.6	9.1	F5	3	..	37558i	78	612	54.0	+22 56	10.0	10.6	F5	2	..	38135i
29	827	53.5	+51 53	8.6	9.7	G	2	..	37427i	79	551	54.0	+11 30	9.3	9.6	F8	3	..	6447m
30	925	53.5	+47 58	8.0	8.5	F2	1	..	38087i	80	687	54.0	+ 1 13	9.59	10.15	F2	1	..	38110i
31	831	53.5	+44 18	10.2	10.3	F8	2	..	38087i	81	569	54.0	- 1 6	10.0	10.1	Go	3	..	23816b
32	599	53.5	+31 4	8.8	9.8	A3	2	..	7197m	82	762	54.0	-11 52	9.5	9.9	A3	3	..	23816b
33	523	53.5	+ 9 31	7.9	8.5	Ko	2	0,1	38111i	83	1996	54.0	-24 14	8.95	9.8	F5	2	..	18192b
34	545	53.5	+ 3 14	8.5	9.5	Go	3	..	38110i	84	1661	54.0	-25 9	9.5	10.0	Ko	2	5,2	46166b
35	633	53.5	+ 2 13	8.5	9.3	Ko	2	E	38104i	85	1262	54.0	-39 49	9.6	9.6	K5	1	..	41089b
36	567	53.5	- 1 30	10.0	10.5	Go	2	E	38104i	86	1262	54.0	-39 49	9.6	9.6	Go	2	..	40943b
37	1152	53.5	-40 20	7.2	8.1	G5	1	..	12680b	87	1313	54.0	-41 59	9.6	9.6	Go	2	..	40943b
38	832	53.6	+44 9	9.9	9.9	F8	2	..	23816b	88	1209	54.0	-50 3	8.06	9.0	F2	3	..	41076b
39	650	53.6	- 2 56	7.14	7.92	Ko	5	..	40943b	89	285	54.0	-61 5	8.5	8.8	F2	3	..	41076b
40	706	53.6	- 3 56	7.30	8.08	Ao	3	..	6673m	90	286	54.0	-61 51	10.1	11.1	Ao	7	..	23802b
41	783	53.6	- 9 17	8.3	9.1	G5	8	..	23816b	91	643	54.1	+62 9	7.28	7.16	Ko	2	..	23802b
42	789	53.6	-19 43	9.18	9.5	G5	8	..	23816b	92	835	54.1	+46 54	10.2	10.2	B5	5	..	37427i
43	719	53.6	-22 46	9.2	10.5	G5	3	..	18192b	93	834	54.1	+46 39	9.4	9.4	A	1	..	7197m
44	1576	53.6	-30 10	8.9	9.7	F5	3	..	46166b	94	834	54.1	+46 39	9.4	9.4	Ao	5	..	6673m
45	1238	53.6	-43 14	9.2	10.0	G5	1	..	41072b	95	685	54.1	+ 0 40	8.7	8.8	Go	2	..	23816b
46	271	53.6	-67 43	9.3	9.9	Go	3	0,2	41072b	96	1502	54.1	-26 24	9.1	9.1	A2	5	..	23816b
47	303	53.7	+67 14	9.5	9.6	Go	2	..	41072b	97	1543	54.1	-32 20	9.3	9.5	Go	2	2,2-	41072b
48	621	53.7	+13 44	7.33	8.11	G	2	..	41076b	98	1472	54.1	-34 48	9.54	11.0	F5	2	..	12259b
49	785	53.7	- 9 35	9.5	10.1	G	3	..	20430b	99	1157	54.1	-49 20	9.6	10.2	K5	1	..	12259b
50						A2	2	..	38165i	100	142	54.2	+78 40	8.0	8.0	Ko	2	..	38413b
						G5	6	..	37601i		927	54.2	+47 10	7.31	8.31	B9	6	0,5	37558i
						Go	1	..	18192b		866	54.2	+43 11	8.1	9.1	Ko	5	0,8-	37406i
																			6673m

THE HENRY DRAPER CATALOGUE.

25100

3^h 54^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	552	54.2	+11 11	9.3	9.9	G	1	..	3811oi	51	836	54.7	+44 16	8.8	8.9	A3	6	1,2	6673m
2	524	54.2	+10 2	6.42	6.76	F2	6	E	37566i	52	805	54.7	+36 44	6.33	6.31	B9	5	..	3745ii
3	770	54.2	-11 43	8.2	8.6	F5	5	..	18192b	53	625	54.7	+14 2	7.7	8.1	F5	3	..	3760ii
4	784	54.2	-12 57	8.8	9.2	F5	5	..	18192b	54	627	54.7	- 0 18	8.9	9.0	A5	3	..	23816b
5	1535	54.2	-36 34	8.6	8.9	Ko	3	5,3	12259b	55	1666	54.7	-23 26	9.1	9.3	Go	2	..	10587b
6	232	54.2	-66 45	8.4	9.0	Go	5	..	20430b	56	1622	54.7	-31 53	8.9	9.7	Go	1	..	12259b
7	223	54.2	-69 42	9.2	10.4	K5	2	..	20430b	57	1540	54.7	-36 19	9.3	9.5	F5	2	..	40943b
8	271	54.3	+70 50	9.2	9.2	Ao	4	..	38165i	58	1246	54.7	-43 40	10.4	10.3	A3	2	..	46199b
9	882	54.3	+50 22	8.0	8.0	Ao	4	..	37406i	59	330	54.7	-58 47	8.4	10.2	K5	4	..	23802b
10	613	54.3	+23 7	9.8	10.4	G	3	E	6447m	60	243	54.7	-73 12	9.9	10.3	F5	2	..	17047b
11	614	54.3	+22 54	9.4	9.4	A	2	E	6447m	61	684	54.8	+20 8	8.15	8.15	Ao	4	..	37417i
12	554	54.3	+11 16	8.3	8.7	F5	3	..	3811oi	62	687	54.8	+ 1 7	8.54	9.72	K5	3	..	23816b
13	614	54.3	+ 4 20	8.1	8.2	A2	5	2,3	12680b	63	709	54.8	- 4 48	8.65	8.71	A2	7	..	23816b
14	546	54.3	+ 3 30	8.3	9.4	K2	2	2,2	12680b	64	808	54.8	-10 36	8.4	9.0	Go	5	..	18192b
15	635	54.3	+ 2 23	8.5	9.5	Ko	3	..	23816b	65	766	54.8	-12 51	5.90	6.68	G5	9	..	18192b
16	626	54.3	- 0 41	8.5	9.0	F8	5	..	23816b	66	696	54.8	-15 25	8.2	8.6	F5	5	0,4	18192b
17	2001	54.3	-24 6	8.0	7.7	Ao	6	..	46166b	67	1496	54.8	-35 30	8.6	9.2	F2	4	..	12259b
18	1492	54.3	-35 0	9.74	10.1	F2	1	..	12259b	68	1543	54.8	-37 6	8.9	10.1	G5	3	5,2	39655i
19	276	54.3	-60 53	8.3	10.0	Ko	5	..	23802b	69	1243	54.8	-46 40	7.7	7.9	F5	6	E	41076b
20	291	54.3	-65 35	9.0	9.6	Go	3	..	20430b	70	275	54.8	-63 46	6.04	6.8	Ko	..	0,8	56,120
21	209	54.4	+73 28	8.9	10.0	K2	3	..	6449m	71	294	54.8	-65 29	7.7	8.2	F8	7	..	20430b
22	474	54.4	+63 59	8.6	8.6	B8	2	..	37556i	72	42	54.8	-84 58	9.1	9.6	F8	3	..	15145b
23	645	54.4	+63 0	8.2	8.8	Go	3	..	37427i	73	184	54.9	+74 55	7.32	7.82	F8	6	0,6-	37630i
24	867	54.4	+43 12	9.2	9.3	A2	3	..	6673m	74	844	54.9	+55 58	7.78	8.12	F2	4	2,3	37427i
25	656	54.4	+25 32	9.5	10.5	K	1	E	6447m	75	544	54.9	+17 0	6.30	6.28	B9	9	..	3760ii
26	770	54.4	- 2 1	8.8	9.6	G5	3	..	23816b	76	691	54.9	+ 1 51	9.3	9.4	A2	4	3,3	23816b
27	765	54.4	- 7 55	9.3	10.3	K	1	..	12679b	77	1476	54.9	-33 46	8.7	9.8	K2	2	..	12259b
28	764	54.4	-12 39	8.8	9.1	Fo	6	..	18192b	78	276	54.9	-63 15	9.6	10.2	Go	2	..	23802b
29	1370	54.4	-38 20	10.2	10.8	G5	2	..	39655b	79	143	55.0	+78 10	8.6	8.7	A5	4	3,3-	37309i
30	1159	54.4	-49 6	10.0	10.3	F	2	..	38413b	80	161	55.0	+76 2	9.9	10.9	Ko	2	..	6449m
31	597	54.4	-56 37	8.5	9.1	A5	4	E	14920b	81	185	55.0	+74 47	9.4	10.4	Ko	2	..	6449m
32	685	54.5	+58 40	8.0	7.8	B3	6	0,6-	37427i	82	838	55.0	+44 28	9.0	10.0	Ko	3	..	6673m
33	1084	54.5	+49 39	8.1	8.4	Fo	3	..	37406i	83	837	55.0	+44 16	9.9	10.7	G5	2	..	6673m
34	835	54.5	+44 28	9.7	9.8	A2	4	..	6673m	84	832	55.0	+38 23	7.58	8.65	K2	1	..	3745ii
35	869	54.5	+43 10	9.5	9.5	Ao	3	..	7197m	85	686	55.0	+31 59	8.7	8.7	Ao	2	..	38975i
36	857	54.5	+38 6	7.61	8.79	K5	2	..	3745ii	86	627	55.0	+13 37	7.52	8.52	Ko	4	..	3760ii
37	689	54.5	+ 1 30	8.1	8.1	B9	8	1,6-	12680b	87	570	55.0	- 1 44	9.07	10.07	Ko	2	..	23816b
38	1347	54.5	-45 2	8.77	9.5	G5	3	..	41076b	88	767	55.0	- 8 26	9.2	10.2	K	1	..	12750b
39	633	54.5	-53 32	9.0	10.3	K5	2	..	46085b	89	755	55.0	-20 37	7.67	8.5	Ko	5	..	10587b
40	687	54.6	+58 38	8.8	9.8	Ko	1	..	37435i	90	1161	55.0	-49 23	10.7	11.4	G	2	..	38413b
41	741	54.6	+52 36	8.6	8.6	A	3	R	37406i	91	278	55.0	-74 14	9.0	9.4	F5	3	..	17047b
42	909	54.6	+39 50	7.22	7.56	F2	3	..	3701oi	92	130	55.1	+79 8	8.8	9.3	F8	3	..	37309i
43	703	54.6	+32 8	8.5	8.5	Ao	3	..	38975i	93	835	55.1	+51 52	9.0	9.8	G5	1	..	38087i
44	615	54.6	+22 33	9.4	10.5	K2	1	E	6447m	94	930	55.1	+48 7	8.8	9.1	F2	2	..	38087i
45	655	54.6	- 3 45	10.0	10.6	Go	1	..	23816b	95	929	55.1	+47 13	8.1	8.0	B5	6	3,4	7197m
46	807	54.6	-10 16	9.5	10.0	F8	2	..	18192b	96	859	55.1	+45 37	10.2	10.3	A3	3	R	7197m
47	1585	54.6	-30 52	9.2	9.5	G5	2	..	41072b	97	860	55.1	+45 26	8.5	8.8	F2	6	..	6673m
48	1620	54.6	-31 19	9.2	9.8	G5	1	..	41072b	98	871	55.1	+43 46	9.5	10.5	Ko	2	..	6673m
49	634	54.6	-53 2	7.6	9.1	Ko	3	..	14920b	99	876	55.1	+40 17	8.52	8.52	Ao	2	..	3808ii
50	843	54.7	+56 7	8.2	9.2	Ko	2	0,1	3898ii	100	911	55.1	+39 42	7.27	7.33	A2	3	..	3701oi

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	617	55.1	+22 57	6.54	6.52	B ₉	6	..	37417i	51	2018	55.5	-24 52	9.35	9.8	F ₅	2	..	41089b
2	666	55.1	+17 55	5.76	6.04	F ₀	9	..	3760ri	52	1484	55.5	-33 43	9.6	9.7	G	1	..	12259b
3	565	55.1	+15 12	7.74	8.52	G ₅	4	..	3760ri	53	1354	55.5	-44 35	9.1	9.7	G ₀	2	..	41076b
4	539	55.1	+12 12	var.	var.	B ₃	..	R	702c	54	44	55.5	-84 23	7.80	8.0	F ₂	8	..	20538b
5	525	55.1	+9 54	8.3	8.3	A ₀	2	..	37470i	55	211	55.6	+73 57	10.2	11.2	K ₀	2	..	6449m
6	788	55.1	-13 49	9.5	9.8	F ₀	2	..	18192b	56	885	55.6	+50 20	8.7	8.8	A ₂	2	..	37406i
7	1515	55.1	-29 51	9.19	9.7	G ₀	3	5,2	41072b	57	583	55.6	+7 34	9.3	9.9	G ₀	2	2,2	38104i
8	1168	55.1	-40 44	8.9	9.1	F ₅	4	3,3	41076b	58	714	55.6	-4 22	10.2	10.3	A ₂	2	..	23816b
9	1320	55.1	-42 8	9.2	9.3	F ₈	3	..	41076b	59	1677	55.6	-23 27	9.4	9.5	G ₅	2	..	10587b
10	611	55.1	-54 39	7.9	8.5	F ₂	6	..	14920b	60	1519	55.6	-29 38	8.5	9.1	F ₅	4	5,3	41072b
11	306	55.1	-62 0	9.9	11.1	K ₅	2	..	23802b	61	1324	55.6	-42 34	8.5	8.0	F ₀	5	..	41076b
12	..	55.2	+76 24	..	..	G ₅	1	..	6449m	62	599	55.6	-56 32	8.1	8.5	F ₀	6	..	14920b
13	186	55.2	+74 22	6.86	7.86	K ₀	6	0,9	37630i	63	863	55.7	+45 42	9.9	10.5	G ₀	3	..	6673m
14	872	55.2	+57 6	8.8	8.8	A ₀	3	..	3898ri	64	876	55.7	+44 1	10.2	10.2	A	1	..	7197m
15	745	55.2	+52 29	8.8	8.8	A ₀	3	1,1	37406i	65	525	55.7	+10 18	9.17	9.17	A	1	..	38110i
16	..	55.2	+44 44	..	..	A	1	..	6673m	66	752	55.7	-15 53	9.5	9.5	A ₀	2	..	18192b
17	605	55.2	+23 11	9.2	10.0	G ₅	2	E	6447m	67	2022	55.7	-24 18	4.69	4.69	A _{0p}	..	R	28,196
18	712	55.2	-4 20	9.8	10.2	F ₅	2	..	23816b	68	602	55.7	-57 3	8.6	8.9	F ₈	4	0,4	12036b
19	771	55.2	-17 4	8.2	9.3	K ₂	1	..	12752b	69	253	55.7	-75 36	8.5	9.7	K ₅	1	..	14359b
20	1543	55.2	-36 4	8.4	8.6	K ₂	4	2,4	12259b	70	877	55.8	+43 49	8.6	8.6	A ₀	5	..	6673m
21	1377	55.2	-38 53	10.6	10.5	G ₀	1	..	39655b	71	834	55.8	+38 49	7.62	7.70	A ₃	4	..	37451i
22	1144	55.2	-48 28	8.0	9.0	K ₀	4	..	38413b	72	797	55.8	-13 55	9.5	10.5	K ₀	1	..	18192b
23	307	55.2	-62 33	9.4	9.8	F ₅	4	..	23802b	73	1671	55.8	-25 37	9.4	9.6	G ₀	1	..	46166b
24	245	55.2	-73 53	9.3	9.4	A ₂	3	..	17047b	74	303	55.9	+68 24	6.14	7.21	K ₂	7	..	37556i
25	210	55.3	+73 42	6.72	7.72	K ₀	7	0,7	37630i	75	620	55.9	+4 16	8.9	9.5	G ₀	3	..	12680b
26	769	55.3	+57 26	8.0	8.0	A ₀	5	0,4	37427i	76	1493	55.9	-27 34	9.4	9.3	K ₀	4	..	41072b
27	795	55.3	+41 34	8.00	8.06	A ₂	2	..	37010i	77	1328	55.9	-42 11	8.1	8.2	F ₅	6	..	41076b
28	609	55.3	+28 13	6.99	6.99	A ₀	4	..	37417i	78	235	55.9	-66 6	9.4	10.2	G ₅	2	..	20430b
29	616	55.3	+27 20	8.7	9.7	K ₀	2	0,2	38135i	79	658	56.0	-3 47	9.5	10.0	F ₈	1	..	23816b
30	643	55.3	+19 55	6.77	7.55	G ₅	4	..	37417i	80	795	56.0	-5 0	9.20	9.98	G ₅	3	..	23816b
31	717	55.3	-18 11	7.70	8.88	K ₅	4	..	12752b	81	790	56.0	-13 8	8.7	9.0	F ₂	4	..	18192b
32	1510	55.3	-26 11	9.2	9.0	F ₅	3	..	41089b	82	774	56.0	-17 17	8.8	9.2	F ₅	1	..	12752b
33	1272	55.3	-39 43	10.6	10.8	G ₅	1	..	39655b	83	1684	56.0	-23 27	8.5	9.2	G ₅	3	..	10587b
34	472	55.3	-52 3	9.3	10.5	K ₂	1	..	46085b	84	1522	56.0	-29 19	9.7	10.9	K ₀	2	..	41072b
35	746	55.4	+52 21	8.9	8.9	A ₀	1	..	3898ri	85	1549	56.0	-36 54	9.2	11.8	G ₅	1	..	39655b
36	862	55.4	+46 0	9.2	9.7	F ₈	4	..	6673m	86	1276	56.0	-39 5	9.0	9.6	K ₂	2	..	40943b
37	861	55.4	+45 43	9.9	10.3	F ₅	3	..	6673m	87	1176	56.0	-39 57	10.9	10.8	G ₅	2	..	39655b
38	874	55.4	+43 19	9.2	10.2	K ₀	2	..	6673m	88	280	56.0	-63 28	10.3	10.4	A ₅	3	..	23802b
39	687	55.4	+31 56	9.1	9.1	A ₀	1	..	38975i	89	149	56.1	+76 44	8.9	9.7	G ₅	4	..	6449m
40	520	55.4	+10 32	9.3	10.3	K ₀	2	..	38110i	90	665	56.1	+62 3	7.68	8.10	F ₅	4	..	37427i
41	799	55.4	-6 40	8.7	10.1	Mb	1	E	23816b	91	690	56.1	+58 53	5.07	5.35	F ₀	9	..	37426i
42	768	55.4	-12 42	8.4	9.4	K ₀	5	..	18192b	92	750	56.1	+53 0	7.6	8.1	F ₈	4	2,3	37406i
43	1517	55.4	-29 4	8.1	9.1	F ₅	4	3,3	41072b	93	1029	56.1	+48 34	6.93	7.43	F ₈	6	3,4	37406i
44	1378	55.4	-38 35	9.3	10.5	K ₀	2	..	39655b	94	932	56.1	+47 58	9.0	9.0	A ₀	3	..	38087i
45	1165	55.4	-49 54	7.10	8.1	K ₀	9	..	38413b	95	609	56.1	+31 5	8.3	9.1	G ₅	3	5,3	38135i
46	836	55.5	+46 42	8.2	8.3	A ₂	7	0,2	6673m	96	618	56.1	+27 52	7.48	8.26	G ₅	3	..	37417i
47	839	55.5	+45 2	9.9	10.7	G ₅	2	..	6673m	97	647	56.1	+19 39	8.5	8.6	A ₂	3	..	3760ri
48	619	55.5	+4 48	8.5	8.6	A ₃	4	3,2	12680b	98	813	56.1	-10 44	9.0	9.3	F ₀	4	..	18192b
49	777	55.5	-10 57	8.9	9.0	A ₃	3	..	18192b	99	1550	56.1	-36 20	8.9	10.1	G	3	..	40943b
50	796	55.5	-19 31	7.09	7.8	F ₈	8	..	12752b	100	1178	56.1	-40 10	10.0	10.4	K ₀	3	..	39655b

THE HENRY DRAPER CATALOGUE.

25300

3^h 56^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1358	56.1	-44 12	6.70	7.5	G5	6	..	41076b	51	..	56.6	+45 34	..	..	A2	2	..	6673m
2	965	56.1	-51 28	9.3	9.7	G	3	..	14920b	52	880	56.6	+43 22	9.5	10.1	Go	2	..	6673m
3	603	56.1	-57 3	8.5	9.4	K2	2	..	46085b	53	873	56.6	+43 6	9.7	9.7	Ao	2	..	6673m
4	150	56.2	+76 11	9.27	9.77	F8	4	..	6449m	54	866	56.6	+37 47	7.87	7.87	Aop	3	R	3745ii
5	843	56.2	+51 37	8.6	8.7	A2	2	..	38087i	55	664	56.6	+25 39	8.2	8.2	Ao	3	..	37417i
6	842	56.2	+44 41	9.5	10.1	Go	2	2,2	6673m	56	760	56.6	-21 46	8.6	9.8	Ko	3	5,2	41089b
7	862	56.2	+37 40	8.5	8.5	Ao	3	2,3	38899i	57	1511	56.6	-35 8	9.6	10.4	Ko	2	..	12259b
8	794	56.2	+35 7	8.42	8.42	Ao	3	0,3-	38939i	58	1333	56.6	-42 41	7.5	8.1	Ko	6	..	41076b
9	708	56.2	+32 39	8.1	8.1	Ao	3	..	38975i	59	589	56.6	-55 8	9.3	10.0	Go	3	..	46085b
10	692	56.2	+31 13	8.2	8.2	Ao	3	..	38111i	60	287	56.6	-64 19	8.6	8.9	Fo	5	0,4	20430b
11	630	56.2	+13 34	7.7	8.2	F8	3	..	37601i	61	694	56.7	+58 23	var.	var.	K2	2	R	37427i
12	716	56.2	-4 40	9.5	10.3	G5	2	..	23816b	62	734	56.7	+54 48	6.62	7.04	F5	6	0,7-	37427i
13	775	56.2	-17 23	8.9	9.4	F8	1	..	12752b	63	1092	56.7	+49 33	9.2	9.2	Ao	2	..	38087i
14	1497	56.2	-27 8	8.2	8.6	Go	7	..	41072b	64	843	56.7	+44 28	10.2	11.4	K5	1	..	7197m
15	1174	56.2	-49 12	7.7	8.4	Ao	8	..	38413b	65	881	56.7	+43 45	9.5	9.5	Ao	3	..	6673m
16	966	56.2	-51 23	8.0	9.0	G5	4	..	14920b	66	882	56.7	+43 40	8.5	8.6	A2	5	1,2	6673m
17	605	56.2	-57 10	9.0	9.5	Fo	2	..	12036b	67	802	56.7	+41 57	7.8	7.9	A2	4	..	37010i
18	274	56.3	+70 11	8.59	8.57	B9	5	..	38165i	68	617	56.7	+6 15	8.7	9.5	G5	2	..	37566i
19	1030	56.3	+48 17	8.7	8.8	A5	2	..	37406i	69	661	56.7	-3 11	9.2	9.3	A2	4	..	23816b
20	798	56.3	+41 39	7.65	7.65	Ao	3	..	37010i	70	755	56.7	-16 8	8.6	9.4	G5	3	..	12752b
21	863	56.3	+37 40	9.1	9.7	G	1	..	38939i	71	1597	56.7	-30 46	5.85	6.0	Ao	..	0,7	56,120
22	621	56.3	+22 9	8.2	8.6	F5	3	..	37417i	72	1260	56.7	-46 31	10.2	10.3	G5	1	..	46199b
23	794	56.3	-9 52	8.71	9.49	G5	3	..	18192b	73	798	56.8	+34 33	7.67	8.67	Ko	3	0,2-	38939i
24	1366	56.3	-27 58	9.7	10.9	K2	3	..	41072b	74	621	56.8	+27 24	9.5	9.8	F2	2	..	38135i
25	1554	56.3	-35 56	9.0	10.4	Ko	2	5,2	40943b	75	801	56.8	-14 20	9.8	10.6	G5	1	..	18192b
26	1226	56.3	-47 2	9.2	9.8	G5	2	..	41076b	76	761	56.8	-21 25	9.0	9.9	F8	2	..	46166b
27	272	56.3	-72 38	9.1	9.1	Ao	4	..	17047b	77	1502	56.8	-27 38	9.9	9.6	Go	3	..	41072b
28	879	56.4	+43 32	8.9	9.4	F8	3	..	6673m	78	1559	56.8	-36 36	9.6	11.3	Ko	2	..	39655b
29	796	56.4	+35 3	8.62	9.40	G5	2	0,1R	38939i	79	289	56.8	-64 2	9.9	10.4	F8	2	..	23802b
30	528	56.4	+9 43	5.68	5.63	B8	8	0,10	9655i	80	..	56.9	+46 42	..	..	A	1	..	7197m
31	585	56.4	+7 19	8.5	8.5	Ao	2	0,3	37566i	81	883	56.9	+43 22	8.6	9.1	F8	5	..	6673m
32	692	56.4	+1 19	9.3	10.1	G5	1	..	23816b	82	610	56.9	+28 11	8.5	9.1	Go	2	..	38111i
33	1526	56.4	-29 32	8.1	8.9	Fo	4	5,3	41072b	83	719	56.9	-4 24	9.5	9.6	A2	2	..	23816b
34	1637	56.4	-31 44	8.1	10.2	Ma	1	5,2	41072b	84	762	56.9	-21 36	9.2	9.8	Go	2	..	46166b
35	1258	56.4	-43 29	9.0	10.1	Ko	2	..	41076b	85	727	56.9	-22 33	7.19	7.2	Fo	7	..	46166b
36	1256	56.4	-46 26	9.8	9.7	Go	3	..	46199b	86	1679	56.9	-25 28	8.7	9.8	G5	2	E	41089b
37	846	56.5	+55 28	8.6	9.7	K2	1	..	38981i	87	1560	56.9	-37 24	9.2	11.8	Ko	1	..	39655b
38	810	56.5	+36 51	7.45	8.23	G5	2	..	37451i	88	1284	56.9	-39 14	8.1	8.7	Go	5	..	40943b
39	571	56.5	-1 16	9.3	9.6	Fo	3	..	23816b	89	884	57.0	+43 43	7.7	7.8	A3	5	1,8	37010i
40	572	56.5	-1 50	5.25	5.13	B5	..	0,9	56,76	90	877	57.0	+43 6	8.8	8.9	A2	5	..	6673m
41	659	56.5	-2 55	9.5	10.0	F8	2	..	23816b	91	642	57.0	+14 47	8.0	8.6	Go	2	..	37601i
42	776	56.5	-17 39	8.2	9.2	Ko	3	..	12752b	92	803	57.0	-14 6	9.8	9.9	A5	2	..	18192b
43	758	56.5	-20 36	8.6	9.2	G5	2	..	10587b	93	1503	57.0	-27 42	9.5	9.3	F5	3	..	41072b
44	758	56.5	-21 0	8.04	8.9	Ko	4	..	10587b	94	1369	57.0	-28 34	8.9	8.9	Go	4	..	41072b
45	1556	56.5	-37 16	9.6	10.4	G5	2	5,2-	42054b	95	1495	57.0	-33 21	9.5	10.3	K5	1	..	12259b
46	606	56.5	-57 23	6.14	7.0	F2	6	..	5648b	96	1484	57.0	-34 4	9.2	10.4	Ko	1	..	12259b
47	875	56.6	+56 28	8.0	8.8	G5	2	..	37426i	97	309	57.0	-62 19	9.8	10.3	F8	2	..	23802b
48	752	56.6	+53 3	8.2	8.0	B	3	R	37426i	98	131	57.1	+79 35	8.9	9.5	Go	1	..	37309i
49	751	56.6	+52 29	9.2	9.2	A	1	..	38087i	99	..	57.1	+73 29	..	..	G5	1	..	6449m
50	1032	56.6	+48 23	7.9	8.9	Ko	5	0,2	37406i	100	630	57.1	-0 11	8.4	8.5	A3	6	1,4	23816b

25400

3^h 57^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1521	57.1	-26 48	7.46	7.6	F5	5	5,9 E	10587b	51	43	57.4	-85 30	9.05	10.1	K5	2	..	20538b
2	1335	57.1	-42 2	8.6	8.7	Go	4	..	41076b	52	235	57.5	+69 36	8.5	8.5	Ao	6	..	38165i
3	1178	57.1	-49 56	9.8	10.8	Ko	1	..	38413b	53	480	57.5	+63 28	7.57	8.57	Ko	5	5,4	37427i
4	1224	57.1	-50 37	9.8	10.3	G5	2	..	38413b	54	870	57.5	+37 20	8.2	8.8	Go	2	..	38939i
5	289	57.1	-61 35	8.7	9.6	Ko	5	..	23802b	55	613	57.5	+28 23	7.9	8.0	A3	4	1,4	38135i
6	146	57.2	+78 46	7.19	8.19	Ko	5	0,4	37558i	56	643	57.5	+14 12	7.9	8.4	F8	3	..	37601i
7	390	57.2	+65 41	8.9	8.9	Ao	2	..	38165i	57	632	57.5	-0 33	5.42	5.84	F5	8	3,8-	37549i
8	667	57.2	+61 32	7.92	..	R8	..	R	M	58	724	57.5	-7 17	8.9	9.5	Go	2	..	12679b
9	1094	57.2	+49 49	8.9	9.3	F5	2	..	38087i	59	762	57.5	-20 45	8.0	8.2	Go	7	..	10587b
10	878	57.2	+42 15	7.8	8.3	F8	2	..	37010i	60	1372	57.5	-28 0	9.4	9.8	F8	2	..	41072b
11	867	57.2	+37 43	7.7	7.7	Ao	3	..	37451i	61	614	57.6	+28 56	8.2	9.2	Ko	3	0,2	38111i
12	552	57.2	+3 34	6.91	6.86	B8	6	0,7-	37549i	62	614	57.6	+24 40	8.7	9.2	F8	1	..	37417i
13	631	57.2	-0 12	9.3	9.3	B8	4	..	23816b	63	623	57.6	+8 56	6.85	7.35	F8	8	..	37566i
14	777	57.2	-1 54	7.9	8.3	F5	6	0,2	23816b	64	589	57.6	+7 52	7.7	8.0	Fo	5	0,5-	37549i
15	721	57.2	-4 19	9.2	9.7	F8	3	..	23816b	65	694	57.6	+1 36	9.3	10.1	G5	1	..	23816b
16	722	57.2	-4 47	8.80	8.88	A3	5	..	23816b	66	574	57.6	-1 4	6.84	6.84	Ao	6	0,4-	37593i
17	818	57.2	-10 46	9.5	10.5	Ko	1	..	18192b	67	764	57.6	-21 18	7.52	8.5	K2	7	..	10587b
18	1644	57.2	-31 1	8.9	10.2	G5	2	..	41072b	68	1532	57.6	-29 28	9.2	9.8	Ko	2	..	41072b
19	1569	57.2	-32 53	8.9	9.1	A5	3	..	12259b	69	1230	57.6	-50 32	10.0	10.8	Ko	1	..	38413b
20	1563	57.2	-36 28	9.3	10.7	G5	3	7,1	39655b	70	975	57.6	-51 51	6.42	..	Ma	7	..	14920b
21	1365	57.2	-44 47	9.07	9.5	Go	4	..	41076b	71	91	57.6	-61 27	9.3	9.9	F8	4	..	23802b
22	290	57.2	-61 41	4.41	6.9	Ma	..	R	28,196	72	291	57.6	-64 7	9.5	10.7	K5	2	..	23802b
23	280	57.2	-74 14	8.8	8.9	A2	3	..	17047b	73	212	57.7	+73 18	6.88	7.30	F5	7	0,7-	37630i
24	..	57.3	+76 24	..	..	F5	2	..	6449m	74	779	57.7	+60 47	8.6	8.6	A	1	..	37427i
25	391	57.3	+65 14	6.07	6.13	A2	8	..	37556i	75	881	57.7	+40 50	8.1	8.5	F5	2	..	37010i
26	424	57.3	+64 45	8.5	8.6	A3	4	..	37556i	76	836	57.7	+38 31	7.53	7.61	A3	3	..	37451i
27	668	57.3	+61 20	7.72	7.72	Ao	5	..	37427i	77	625	57.7	+8 37	6.97	7.97	Ko	6	..	37566i
28	1034	57.3	+48 30	9.2	9.8	G	2	E	38087i	78	784	57.7	-11 11	9.8	10.2	F5	2	..	18192b
29	864	57.3	+45 42	10.2	10.2	Ao	2	..	6673m	79	1566	57.7	-36 15	9.8	11.0	F8	2	..	39655b
30	845	57.3	+44 48	10.2	11.4	K5	1	..	7197m	80	1567	57.7	-37 6	9.6	11.0	F5	2	..	39655b
31	879	57.3	+42 46	8.0	8.1	A2	3	2,2	38933i	81	1395	57.7	-38 50	8.9	9.3	G5	2	..	40943b
32	613	57.3	+25 4	8.69	8.75	A2	2	..	37417i	82	296	57.7	-58 58	9.8	10.8	Ko	2	..	23802b
33	723	57.3	-4 34	8.6	9.7	K2	3	..	23816b	83	..	57.8	+74 54	..	..	A	1	R	6449m
34	805	57.3	-6 15	8.2	9.4	K5	3	..	12679b	84	698	57.8	+59 1	8.5	9.5	Ko	3	..	37427i
35	727	57.3	-18 25	8.9	8.9	A	1	R	12752b	85	1037	57.8	+48 36	9.2	9.8	G	1	E	38087i
36	728	57.3	-18 38	7.78	8.12	F2	6	..	12752b	86	1036	57.8	+48 11	8.9	9.0	A2	2	E	38087i
37	1570	57.3	-32 21	9.2	9.5	F8	2	..	12259b	87	623	57.8	+27 51	var.	var.	Ao	3	1,3 R	37417i
38	1516	57.3	-35 0	10.0	10.4	F	1	R	12259b	88	624	57.8	+27 25	8.5	8.6	A5	4	3,3-	36384i
39	1393	57.3	-38 14	9.8	10.0	Go	2	..	39655b	89	669	57.8	+26 13	9.1	9.7	G	1	..	38111i
40	1227	57.3	-50 29	9.3	10.2	K5	3	..	38413b	90	581	57.8	+5 43	3.94	3.94	Ao	..	0,R	6216c
41	276	57.3	-67 8	9.5	9.6	A2	5	..	20430b	91	803	57.8	-5 27	8.9	9.4	F8	2	..	12679b
42	254	57.3	-75 27	8.9	8.9	B9	3	..	14359b	92	785	57.8	-11 41	8.8	9.3	F8	4	..	18192b
43	669	57.4	+61 48	6.75	6.56	B2	7	R	37427i	93	733	57.8	-21 55	9.2	9.9	Go	2	5,2	46166b
44	918	57.4	+39 14	7.18	7.96	G5	3	..	37451i	94	1184	57.8	-49 16	9.2	9.7	F8	4	..	38413b
45	574	57.4	+18 23	9.3	10.1	G5	2	..	37601i	95	976	57.8	-51 37	9.3	9.7	Go	2	..	14920b
46	819	57.4	-10 22	9.5	9.9	F5	1	..	18192b	96	121	57.8	-79 38	9.2	9.3	A2	4	..	20538b
47	1181	57.4	-49 11	10.0	10.8	F5	1	..	38413b	97	R	57.9	+62 4	..	..	A	..	..	M
48	614	57.4	-54 27	7.5	8.2	F2	8	..	14920b	98	670	57.9	+62 4	8.0	9.0	K	1	..	37556i
49	607	57.4	-56 46	7.00	7.2	Ao	10	..	14920b	99	759	57.9	+52 48	8.1	8.4	Fo	3	0,3-	37435i
50	246	57.4	-73 51	9.0	9.1	A5	4	..	17047b	100	1038	57.9	+48 32	9.2	9.3	A3	2	E	38087i

THE HENRY DRAPER CATALOGUE.

25500

3^h 57^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	633	57.9	0 20	8.5	8.9	F5	4	..	23816i	51	730	58.4	+53 19	8.5	8.5	Ao	3	0,3	37435i
2	1652	57.9	-31 3	9.2	10.5	K2	1	..	41072b	52	873	58.4	+37 11	8.7	9.2	F8	3	..	38939i
3	1369	57.9	-44 44	8.5	8.7	F8	5	..	41076b	53	814	58.4	+36 28	9.1	9.1	Ao	2	..	38939i
4	1233	57.9	-50 4	9.6	9.9	K2	2	..	38413b	54	614	58.4	+30 38	9.2	9.2	A	1	..	38111i
5	229	57.9	-69 49	8.65	9.0	Fo	6	..	20430b	55	609	58.4	+23 50	5.67	6.09	F5	..	0,7 R	56,76
6	699	58.0	+59 0	8.8	9.1	Fo	2	..	37427i	56	694	58.4	+23 50	9.1	9.4	A	..	0,7 R	56,76
7	837	58.0	+46 21	9.9	9.9	Ao	3	..	6673m	57	694	58.4	+20 24	9.1	9.4	F	2	R	37589i
8	796	58.0	+35 39	7.94	7.94	Ao	3	0,3	37451i	58	584	58.4	+5 9	5.33	5.16	B3	..	0,8-	6216c
9	689	58.0	+0 15	10.0	10.0	A	1	..	23816i	59	784	58.4	-2 0	10.0	11.0	Ko	2	..	23816b
10	787	58.0	-11 12	9.5	9.8	F2	4	..	18192b	60	783	58.4	-2 46	9.5	9.9	F5	2	..	23816b
11	1185	58.0	-40 13	10.2	10.2	A5	3	..	39655b	61	780	58.4	-12 6	9.8	10.6	G5	1	..	18192b
12	1248	58.0	-41 32	10.2	9.6	F5	3	..	41076b	62	765	58.4	-21 0	8.0	8.2	F8	5	..	10587b
13	1368	58.0	-45 8	9.3	10.4	G5	2	..	41076b	63	735	58.4	-22 15	9.2	10.5	G5	1	..	41089b
14	609	58.0	-56 21	8.9	9.7	Go	2	2,2	46085b	64	1528	58.4	-26 55	9.5	9.6	Go	4	..	41072b
15	896	58.1	+50 30	8.7	9.0	Fo	2	..	38087i	65	1571	58.4	-36 54	9.2	10.1	G5	3	..	39655b
16	865	58.1	+46 7	9.9	10.0	A2	2	..	6673m	66	1237	58.4	-50 42	9.6	10.5	Ko	2	..	38413b
17	886	58.1	+44 0	8.9	8.7	B2	4	..	6673m	67	616	58.4	-54 36	8.50	8.5	Fo	5	..	14920b
18	838	58.1	+38 38	8.1	8.5	F5	2	..	37451i	68	838	58.5	+46 57	8.6	9.0	F5	6	0,2	7197m
19	692	58.1	+20 48	8.1	8.2	A2	4	2,3	37589i	69	888	58.5	+44 5	8.9	10.1	K5	2	..	6673m
20	641	58.1	+2 55	7.35	8.42	K2	3	..	12680b	70	592	58.5	+7 55	5.48	5.76	Fo	8	2,10	37549i
21	640	58.1	+2 47	7.05	7.33	Fo	5	0,5-	12680b	71	785	58.5	-2 12	10.2	11.2	Ko	1	..	23816b
22	800	58.1	-19 46	7.88	8.3	F8	4	..	12752b	72	728	58.5	-7 11	8.4	9.8	Ma	2	..	12679b
23	2049	58.1	-24 44	9.5	9.5	G5	3	..	41089b	73	708	58.5	-15 25	8.9	9.4	F8	3	..	18192b
24	1609	58.1	-30 45	8.5	8.8	Go	5	0,4	41072b	74	767	58.5	-20 47	7.8	8.9	K2	3	..	10587b
25	1187	58.1	-40 31	10.6	10.5	K5	2	..	39655b	75	736	58.5	-22 52	6.89	7.8	Ko	8	..	41089b
26	485	58.1	-52 27	8.9	9.6	Ko	2	..	14920b	76	1529	58.5	-26 22	10.4	10.7	Ko	2	..	41072b
27	240	58.1	-66 10	7.6	9.0	Ma	6	..	20430b	77	1516	58.5	-27 17	8.9	9.8	K2	3	..	41072b
28	276	58.2	+71 5	7.49	7.47	B9	5	..	37630i	78	1536	58.5	-28 57	9.5	10.2	Ko	2	..	41072b
29	236	58.2	+69 58	9.09	10.09	Ko	1	..	38165i	79	1186	58.5	-49 48	9.4	9.9	Go	2	..	38413b
30	392	58.2	+65 34	8.6	8.6	Ao	2	..	38165i	80	611	58.5	-56 57	9.3	10.0	K2	1	..	20264b
31	866	58.2	+45 19	9.9	10.7	G5	2	..	6673m	81	310	58.5	-62 11	6.66	8.1	K5	7	..	23802b
32	626	58.2	+23 8	8.3	8.9	Go	2	..	37589i	82	868	58.6	+45 21	8.7	8.7	A2	3	3,2-	38933i
33	774	58.2	-8 32	8.7	9.0	F2	4	..	12750b	83	884	58.6	+43 4	9.2	9.2	Ao	4	..	7197m
34	788	58.2	-11 12	9.5	9.8	F2	5	..	18192b	84	646	58.6	+14 45	7.9	8.7	G5	2	..	37601i
35	1491	58.2	-34 46	6.67	7.3	Go	10	..	12259b	85	823	58.6	-10 50	8.4	9.5	K2	3	..	18192b
36	1569	58.2	-36 23	8.2	8.4	Ao	5	0,7-	40943b	86	2054	58.6	-24 16	9.1	10.1	Ko	2	..	41089b
37	1268	58.2	-46 25	7.2	8.0	G5	6	..	41076b	87	1517	58.6	-27 46	7.39	8.0	Go	8	..	41072b
38	813	58.3	+36 49	7.9	7.9	Ao	4	0,3	10405i	88	1254	58.6	-41 13	9.6	9.3	Fo	4	..	41076b
39	714	58.3	+32 18	6.70	6.53	B3	6	5,5	37451i	89	1167	58.6	-48 43	9.4	10.5	G5	2	..	38413b
40	652	58.3	+19 43	8.5	8.5	Ao	1	..	37601i	90	617	58.6	-54 41	7.54	7.5	A2	9	..	14920b
41	575	58.3	-1 2	10.7	11.3	Go	2	..	23816b	91	618	58.6	-54 41	8.5	8.5	A2	4	..	14920b
42	782	58.3	-2 38	8.4	9.2	G5	5	..	23816b	92	613	58.6	-56 40	8.9	9.7	G5	2	..	46085b
43	781	58.3	-2 51	9.8	9.8	Ao	3	..	23816b	93	188	58.7	+74 24	8.5	8.6	A3	6	0,4-	6449m
44	805	58.3	-4 58	9.55	10.73	K5	1	..	23816b	94	673	58.7	+62 8	8.4	8.4	Ao	6	..	37427i
45	801	58.3	-9 2	8.7	9.0	Fo	3	..	12750b	95	921	58.7	+40 2	7.87	8.87	Ko	2	0,3	38081i
46	1379	58.3	-28 49	7.55	8.0	F8	6	0,8	12259b	96	670	58.7	+25 56	8.5	9.9	Ma	1	..	38111i
47	1163	58.3	-48 7	9.2	10.2	Ko	2	..	38413b	97	1539	58.7	-29 54	9.4	10.0	F8	2	..	41072b
48	283	58.3	-59 57	9.92	10.8	K2	1	..	23802b	98	489	58.7	-52 18	8.4	9.7	Ko	3	..	14920b
49	241	58.3	-68 38	8.04	9.3	Ko	5	..	20430b	99	488	58.7	-52 36	9.5	10.3	G5	1	..	14920b
50	151	58.4	+76 28	8.8	9.8	Ko	5	..	6449m	100	297	58.7	-59 35	9.7	10.3	Go	2	..	23802b

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3^h 58^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	285	58.7	-60 38	9.9	11.1	K5	1	..	23802b	51	1275	59.1	-43 36	9.0	9.5	Go	4	..	41076b
2	732	58.8	+53 45	6.42	7.42	Ko	6	0,7	37406i	52	1376	59.1	-44 7	10.4	10.7	G	2	..	41076b
3	839	58.8	+47 0	8.6	9.0	F5	6	3,2	7197m	53	1375	59.1	-44 57	8.32	8.3	A2	7	..	41076b
4	585	58.8	+21 49	4.50	5.50	Ko	..	0,7 R	56,76	54	615	59.1	-56 36	9.0	8.9	Ao	4	5,3	46085b
5	547	58.8	+12 14	7.6	9.0	Ma	3	0,2	3811oi	55	..	59.2	+75 30	..	..	G	1	..	6449m
6	554	58.8	+3 35	8.7	8.7	B9	6	0,6	1268ob	56	901	59.2	+50 19	9.0	9.0	Ao	1	..	37406i
7	635	58.8	+0 8	9.48	9.76	F	2	..	23816b	57	776	59.2	+33 59	6.61	6.95	F2	6	3,5	10405i
8	576	58.8	-0 59	9.3	9.6	Fo	4	..	23816b	58	700	59.2	+31 14	7.43	8.61	K5	3	..	38135i
9	786	58.8	-2 16	9.5	9.9	F5	3	..	23816b	59	578	59.2	-1 31	10.7	11.0	Fo	2	..	23816b
10	768	58.8	-20 46	8.2	8.5	Ao	5	..	10587b	60	767	59.2	-16 1	8.7	9.0	Fo	3	..	18192b
11	1403	58.8	-38 15	8.6	10.4	K5	2	..	40943b	61	770	59.2	-20 26	7.39	8.5	K2	4	..	10587b
12	1242	58.8	-50 47	8.4	8.7	Ko	5	..	38413b	62	1187	59.2	-49 5	10.0	10.8	G5	1	..	38413b
13	983	58.8	-51 14	8.8	9.7	G5	1	..	14920b	63	1245	59.2	-50 47	8.0	8.1	Fo	8	..	38413b
14	298	58.8	-58 57	7.16	7.1	Ao	9	..	23802b	64	152	59.3	+76 37	9.9	10.3	F5	2	..	6449m
15	299	58.8	-59 19	9.9	10.2	Fo	3	..	23802b	65	238	59.3	+69 17	8.1	8.9	G5	7	..	38165i
16	840	58.9	+46 40	6.63	6.69	A2	7	0,9	37406i	66	880	59.3	+57 5	9.4	10.0	Go	1	..	37435i
17	869	58.9	+45 56	10.2	10.3	A3	2	..	6673m	67	870	59.3	+45 23	9.5	10.5	Ko	3	..	6673m
18	885	58.9	+43 2	8.8	9.8	Ko	4	..	7197m	68	891	59.3	+43 25	9.9	10.0	A2	1	..	6673m
19	922	58.9	+39 30	8.6	8.6	Ao	3	..	3808ii	69	613	59.3	+23 31	7.9	8.4	F8	3	0,2	37589i
20	611	58.9	+23 14	8.9	9.2	Fo	2	..	37589i	70	579	59.3	-1 46	9.12	9.68	Go	3	..	23816b
21	645	58.9	+2 33	5.39	5.81	F5	8	0,R	37549i	71	675	59.3	-3 0	10.2	11.2	Ko	1	..	23816b
22	768	58.9	-21 41	7.7	8.5	Ko	7	..	10587b	72	726	59.3	-4 29	9.2	9.3	A5	3	..	23816b
23	1658	58.9	-31 31	8.1	8.5	F2	5	2,5	41072b	73	812	59.3	-4 56	9.60	10.60	Ko	2	..	23816b
24	285	58.9	-63 11	8.4	8.7	Fo	7	..	23802b	74	784	59.3	-12 1	8.6	8.6	Ao	5	..	18192b
25	890	59.0	+43 56	8.6	8.6	Ao	4	..	6673m	75	2062	59.3	-24 44	7.70	8.6	Mb	6	5,7	41072b
26	628	59.0	+27 20	7.9	8.0	A2	3	..	37417i	76	1535	59.3	-26 8	6.83	8.6	K5	8	5,6	41072b
27	676	59.0	+17 15	6.84	7.62	G5	6	..	37601i	77	1534	59.3	-26 46	8.5	9.0	F5	4	..	41072b
28	695	59.0	+1 12	9.57	10.35	G5	1	..	23816b	78	1195	59.3	-40 17	8.6	8.8	Ko	3	..	40943b
29	788	59.0	-1 55	10.4	11.4	Ko	1	..	23816b	79	629	59.4	+27 38	7.9	8.0	A2	3	1,3	38135b
30	787	59.0	-2 19	9.8	9.8	Ao	4	..	23816b	80	587	59.4	+21 44	5.96	6.74	G5	..	0,5 R	56,76
31	769	59.0	-20 25	6.39	6.22	B3	5	2,8	42139b	81	692	59.4	+1 3	9.49	10.27	G5	1	..	23816b
32	1404	59.0	-38 39	8.6	8.7	Go	4	..	40943b	82	636	59.4	-0 0	8.33	9.11	G5	3	5,5	1268ob
33	1193	59.0	-40 35	9.8	11.1	K2	2	..	39655b	83	789	59.4	-2 0	10.7	11.7	Ko	1	..	23816b
34	336	59.0	-58 39	9.4	10.5	K2	2	..	23802b	84	771	59.4	-20 29	8.2	9.3	Ko	2	..	10587b
35	300	59.0	-59 14	10.3	10.3	A	3	..	23802b	85	1581	59.4	-37 0	9.0	9.5	F2	3	..	40943b
36	311	59.0	-62 12	9.7	10.5	G5	1	..	23802b	86	1302	59.4	-39 30	10.6	10.7	F8	1	..	39655b
37	102	59.0	-80 6	9.00	9.6	Go	3	..	20538b	87	286	59.4	-63 29	9.4	9.8	F5	2	..	23802b
38	676	59.1	+62 4	7.04	6.80	Bo	6	R	37556i	88	153	59.5	+76 48	8.9	8.9	Ao	4	..	6449m
39	59.1	+62 4	7.07	6.83						89	162	59.5	+76 0	8.97	9.75	G5	1	R	6449m
40	753	59.1	+59 52	8.7	8.8	A2	3	..	37427i	90	59.5	+76 0			G5	1			
41	879	59.1	+56 28	7.6	8.6	Ko	5	5,4	37427i	91	189	59.5	+74 36	10.2	11.0	G5	2	..	6449m
42	1101	59.1	+50 5	4.33	4.33	Ao	..	0,R	56,76	92	853	59.5	+44 43	9.2	9.2	B9	4	..	6673m
43	876	59.1	+37 30	7.75	8.03	Fo	3	5,4	37451i	93	892	59.5	+43 9	7.46	8.24	G5	3	..	3701oi
44	807	59.1	+34 54	8.7	9.7	Ko	2	..	38939i	94	630	59.5	+28 8	9.1	9.1	Ao	2	..	38111i
45	577	59.1	-1 26	8.3	8.7	F5	8	..	23816b	95	629	59.5	+22 54	8.5	9.5	Ko	2	..	37589i
46	673	59.1	-2 53	9.5	10.5	Ko	1	..	23816b	96	793	59.5	-2 19	7.4	7.8	F5	2	..	23816b
47	810	59.1	-4 52	7.57	8.75	K5	5	0,7	12750b	97	676	59.5	-3 36	8.2	8.5	Fo	6	..	23816b
48	809	59.1	-6 19	8.2	8.2	Ao	1	..	10637b	98	731	59.5	-7 48	8.7	9.9	K5	3	..	12750b
49	730	59.1	-7 38	9.8	10.2	F5	2	..	12750b	99	778	59.5	-8 31	8.7	9.9	K5	3	..	12750b
50	1533	59.1	-26 18	9.7	9.3	F5	4	..	41072b	100	770	59.5	-16 51	6.49	7.56	K2	7	..	12752b

THE HENRY DRAPER CATALOGUE.

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3^h 59^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	741	59.5	-21 56	8.6	9.8	K2	1	..	10587b	33	309	59.8	+67 33	9.9	10.5	Go	2	..	38165i
2	1702	59.5	-25 9	8.7	9.8	K5	2	..	41089b	34	780	59.8	+60 37	7.46	7.44	B9	6	..	37427i
3	1196	59.5	-40 5	7.57	7.6	A2	7	..	40943b	35	855	59.8	+44 38	9.5	9.5	A0	4	..	6673m
4	612	59.5	-57 30	7.9	8.5	F5	4	0,4	12036b	36	856	59.8	+44 24	9.0	9.0	B8	5	R	6673m
5	312	59.5	-62 27	4.46	6.7	Mb	..	R	28,196	37	696	59.8	+20 57	9.1	9.7	G	2	..	37589i
6	871	59.6	+45 30	10.2	10.2	A0	3	..	6673m	38	727	59.8	-3 53	9.5	9.6	A2	2	..	23816b
7	548	59.6	+13 2	7.6	7.7	A2	2	..	37601i	39	1666	59.8	-31 20	8.9	9.7	G5	2	..	41072b
8	629	59.6	+4 31	8.7	9.0	F0	3	5,2	12680b	40	1381	59.8	-44 40	8.22	8.6	Go	5	..	41076b
9	811	59.6	-6 26	8.7	8.7	A0	2	..	10637b	41	1192	59.8	-49 7	9.0	9.6	K0	3	..	38413b
10	831	59.6	-10 30	8.2	8.8	Go	6	..	18192b	42	314	59.8	-62 16	10.0	11.0	K0	2	..	23802b
11	786	59.6	-12 47	9.3	10.5	K5	1	..	18192b	43	294	59.8	-64 42	8.00	8.0	A5	7	..	20430b
12	810	59.6	-14 7	9.3	10.4	K2	2	..	18192b	44	104	59.8	-80 52	8.7	9.0	F2	5	..	20538b
13	1303	59.6	-39 39	7.50	8.7	K0	4	..	40943b	45	239	59.9	+69 21	9.2	9.2	A0	2	..	38165i
14	1379	59.6	-44 35	8.7	8.7	B9	5	..	41076b	46	872	59.9	+45 19	10.2	11.0	G5	1	..	6673m
15	55	59.6	-87 55	9.7	10.0	F0	3	..	15145b	47	893	59.9	+43 58	9.9	10.0	A2	1	..	6673m
16	163	59.7	+75 27	9.9	11.3	Mb	1	..	6449m	48	675	59.9	+26 16	8.6	8.6	A	1	..	38111i
17	235	59.7	+71 45	9.2	9.8	Go	2	..	38165i	49	640	59.9	+14 2	7.6	8.6	K0	3	..	37601i
18	856	59.7	+51 22	8.7	8.7	A	2	..	37406i	50	639	59.9	-0 28	8.9	9.0	A3	3	..	23816b
19	854	59.7	+44 24	9.5	9.5	A	2	..	7197m	51	797	59.9	-2 15	10.0	10.3	F0	4	..	23816b
20	658	59.7	+19 42	8.3	8.7	F5	3	0,2	37417i	52	798	59.9	-2 42	7.12	7.12	A0	10	..	23816b
21	812	59.7	-6 26	9.8	10.8	K0	1	..	12679b	53	677	59.9	-3 26	9.5	10.6	K2	1	..	23816b
22	734	59.7	-7 1	8.8	9.8	K0	3	..	12679b	54	806	59.9	-19 44	7.38	8.1	A0	8	..	12752b
23	806	59.7	-13 4	5.67	6.45	G5	10	..	18192b	55	770	59.9	-20 52	9.0	10.7	Ma	1	..	46166b
24	812	59.7	-14 32	8.2	8.3	A3	7	..	18192b	56	771	59.9	-21 37	8.9	9.8	G5	1	..	10587b
25	771	59.7	-16 0	var.	var.	Mc	3	R	18192b	57	1667	59.9	-31 37	8.9	10.3	K5	2	..	41072b
26	1304	59.7	-39 16	9.6	10.4	F8	2	..	39655b	58	1412	59.9	-38 52	8.7	9.3	K0	3	..	40943b
27	647	59.7	-53 54	8.8	10.0	K0	2	..	14920b	59	1410	59.9	-38 56	9.6	9.6	F5	2	..	40943b
28	293	59.7	-61 22	4.81	6.7	K5	..	5, R	28,196	60	1305	59.9	-39 3	8.9	9.0	F5	3	..	40943b
29	244	59.7	-66 28	8.2	9.0	G5	6	..	20430b	61	1306	59.9	-39 40	8.9	10.5	Ma	1	..	39655b
30	145	59.8	+78 7	8.5	9.5	K0	2	..	37309i	62	1384	59.9	-44 52	8.98	9.8	K0	3	..	41076b
31	213	59.8	+73 57	10.2	11.2	K0	1	..	6449m	63	R	59.9	-60 52	..	..	K5	1	..	23802b
32	214	59.8	+73 30	10.2	10.8	Go	1	..	6449m										

REMARKS.

28. The second observation was made on C 3071.
 38. Parallax, 0".100.
 73. The lines are wide and hazy.
 108. The spectrum appears to be nearly continuous. The dark lines are faint and show very slight contrast compared with the other portions. Bright spaces or lines are suspected. The class may be Oes.
 135. The observation, A0, on I 37241, residual 10, was rejected. On that plate, the definition is very poor in the region of the line K.

139. The spectrum was classified Mc on B 11110, a plate taken with long dispersion, on which the image is very faint.
 151. Seven photographs of this spectrum were examined and show that the continuous portion changes from Class K0 to Ma, and that bright hydrogen lines are present. Assuming H γ to be equal to 10, the intensity of H δ varies from 8 to 12. On one of these photographs, H β also is bright, intensity 2. An examination of chart photographs shows a slight change in the brightness of this star, and even if this is real, the spectrum, which

- resembles that of the long period variables, is remarkable for a star having such a small range of variation.
166. Parallax, $0''.152$.
280. The star, $+33^\circ 2$, ptm. magn. 9.4, precedes $1^\circ 6$, south $3'.1$. The spectrum is partly superposed and is probably also of Class G5.
330. The region between $H\beta$ and $H\gamma$ resembles that of Class G5. Perhaps the spectrum is slightly peculiar.
358. α Andromedae. The spectrum is very peculiar. It resembles Class A0 in respect to the hydrogen and calcium lines, while lines 4026.2, 4267.4 and 4471.5 are of the same intensity as in Class B8. Several strong solar lines are present. See H.A. 28, 95, 185, Remarks, 67, 141.
409. ν Sculptoris. Variable. Class II. Max. 9.0. Min. 12.0. Period, 295^d. The spectrum is of Class Ma, having $H\gamma$ and $H\delta$ bright. On two photographs taken very near maximum, the two bright lines are approximately equal, but on a photograph taken nine days after maximum, $H\delta$ is 5 times as bright as $H\gamma$.
432. β Cassiopeiae.
493. κ^1 Sculptoris.
496. ϵ Phoenicis.
499. SS Cassiopeiae. Variable. Class II. Max. 8.5. Min. 11.7. Period, 141^d. On a photograph taken November 26, 1904, the spectrum is of Class Mb, having $H\gamma$ and $H\delta$ bright and approximately equal in intensity. These lines are not much brighter than adjacent portions of the continuous spectrum.
560. Read 0,10-, for 0,R.
561. Read 0,10-, for 0,R.
570. H. D. 583 follows $0^\circ 8$, south $2'.0$. The two spectra are superposed. The lines in the spectrum of H. D. 570 are wide, while those of H. D. 583 are very narrow and faint helium lines are suspected to be present.
571. The metallic lines are narrow and of well marked intensity.
583. See H. D. 570.
594. The star, $+57^\circ 19$, ptm. magn. 9.0, follows $5^\circ 0$, south $0'.2$. The spectrum appears to be also of Class A.
636. γ^3 Octantis.
656. The observation, G0, on B 41879, residual 10, was rejected.
- 661,2. The spectrum is composite. Innes $0^A 7$. P. A. 340^o, Dist. $0''.8$, magnitudes 7.3 and 8.3. The lines of the spectrum of Class G are very faint.
669. The lines appear to be wide.
670. The lines are very wide. A fainter star is in nearly the same right ascension, north $0'.2$. The superposition of this spectrum may cause the wide lines of H. D. 670.
672. — Ceti. Variable. Class III. Max. 8.9. Min. 9.5. Period, irregular.
720. κ^2 Sculptoris.
739. θ Sculptoris. Read 0,10-, for 0,R.
794. The spectrum may be intermediate between Classes K5 and Ma.
826. N.G.C. 40. The spectrum of this nebula appears to be somewhat intermediate between other gaseous nebulae and stars of Class O. Band 4650 is the strongest bright band.
855. S. D. — $23^\circ 1$, ptm. magn. 8.7, and C.D.M. — $22^\circ 33$, ptm. magn. 9.0.
886. γ Pegasi.
913. The star, $+48^\circ 42$, ptm. magn. 8.6, follows $0^\circ 8$, south $0'.2$. The spectrum is probably also of Class A.
932. The observation, F5, on I 38069, residual 10, was rejected, owing to the extreme faintness of the spectrum.
1013. χ Pegasi. Read 0,10,R, for 0,R.
1014. Read 0,10-, for 0,R.
1038. Read 0,10-, for 0,R.
1115. S Sculptoris. Variable. Class II. Max. 6.6. Min. 12.8. Period, 366^d. The lines $H\gamma$ and $H\delta$ are bright. The spectrum appears to vary from Class Ma at maximum to Mc at minimum. At maximum, $H\delta$ was estimated to be 3 times as bright as $H\gamma$, but 26 days before maximum $H\delta$ appeared to be 8 times as bright as $H\gamma$.
1130. A star about 0.5 magn. fainter than H. D. 1130 follows 3° , north $0'.6$. The Durchmusterung number may relate to both stars. The spectrum appears to be also of Class G.
1167. X Andromedae. Variable. Class II. Max. 8.1. Min. 14.2. Period, 346^d. On a photograph taken November 8, 1904, the spectrum was estimated Mb, having $H\gamma$ and $H\delta$ bright, and equal in intensity.
1201. Indistinct faint lines are seen, and the spectrum may be of Class B8.
1243. A line near the wave length 4026 is strong.
1245. On B 24596, this spectrum was estimated G5, which is uncertain, owing to the superposition of the spectrum of H. D. 1244.
1254. The observation, G0, residual 10, on I 19643, was rejected.
1279. Read 1,10 R, for 1,R.
1280. θ Andromedae. Read 0,10 R, for 0,R.
1306. ST Cassiopeiae. Variable. Class III. Max. 7.5. Min. 9.0. Period, irregular.
1326. Parallax, $0''.283$. Proper motion, $2''.82$, $81^\circ 8$.
1337. The lines show very slight contrast to the continuous spectrum.
1370. The star, $6^\circ 38$, ptm. magn. 10.2, follows $0^\circ 8$, south $2'.5$.
1383. The line 4116.3 is very strong.
1404. σ Andromedae. Read 2,10-, for 2,R.
1486. TV Cassiopeiae. Variable. Class V. Max. 7.4. Min. 9.0. Period, 1^d.8126.
1499. The observation, F5, on B 14382, residual 15, was rejected. The spectrum is near the edge and in very poor focus.
1522. ι Ceti. Read 0,10 R, for 0,R.
1546. VX Andromedae. Variable. Max. 8.1. Min. 9.5. Class III. Period unknown, perhaps irregular. This star is one of the reddest now known, and has a color index of about 5 magnitudes. The spectrum was photographed with the 24-inch Reflector on plates stained with pinacyanol. It is very peculiar and contains little or no light of shorter wave length than $H\beta$.
1552. The observation, A3, on I 38896, residual 9, was rejected. The class is somewhat uncertain and peculiarities may be present.

1581. ζ Tucanae. Parallax, $0''.148$. Proper motion, $2''.05$, $55''.9$.
1635. δ Piscium.
1639. Perhaps of Class K5.
1648. The star, $+45^\circ 65$, ptm. magn. 9.4, follows $2''.4$, north $2''.4$. The spectrum is partly superposed and is probably of Class A.
1671. ρ Andromedae. Read $0,10$, for $0,R$.
1685. π Tucanae.
1737. ϵ Sculptoris.
1745. The spectrum is indistinct. On second examination, the class was estimated to be "perhaps F8."
1760. T Ceti. Variable. Class III. Max. 5.4. Min. 6.9. Period, irregular. On B 10109, the spectrum was classified Mc, having the line 4455 strong. Perhaps the spectrum changes. Read $0,10 R$, for $0,R$.
1778. The lines are narrow.
1795. T Andromedae. Variable. Class II. Max. 8.2. Min. 14.2. Period, $280^d.6$. On photographs taken November 30, and December 1, 1901, the spectrum is of Class Mb, having $H\gamma$, and $H\delta$ bright. $H\delta$ was estimated to be 3 times as bright as $H\gamma$.
1845. T Cassiopeiae. Variable. Class II. Max. 6.7. Min. 12.5. Period, $443^d.5$. On four plates examined, the spectrum is of Class Mc, with $H\gamma$ and $H\delta$ bright. The intensity of $H\delta$ varies from 1 to 3 times that of $H\gamma$. These emission lines are only slightly brighter than other portions of the spectrum.
1873. Suspected of variability.
1917. In H.A. 56, 71, spectrum A5. This observation is rejected, owing to indistinctness of the spectrum on C 15266.
1925. S Tucanae. Variable. Class II. Max. 8.8. Min. <12.5 . Period, $240^d.9$. On photographs taken July 6, 1894, and July 22, 1898, the spectrum is of class Mb, having $H\gamma$ and $H\delta$ bright. On both plates, $H\gamma$ is 3 times as bright as $H\delta$.
1952. In H.A. 56, 71, spectrum A5. The spectrum is probably composite. The line K is fainter than H.
1967. R Andromedae. Variable. Class II. Max. 5.6. Min. 14.0. Period, $410^d.7$. The spectrum is very peculiar, and does not appear to be of any division of Class M. In the continuous portion between $H\beta$ and $H\gamma$, it resembles the spectrum of π^1 Gruis, R. A., $22^h 16^m.6$, Dec., $-46^\circ 27'$, and should probably be placed in some division of Class R. The continuous portion of the spectrum is very faint in the region having shorter wave length than $H\gamma$. The hydrogen lines $H\beta$, $H\gamma$, $H\delta$, and $H\epsilon$ are bright. $H\beta$ is about 0.3 as bright as $H\gamma$ and $H\delta$, which are nearly equal.
1987. S Ceti. Variable. Class II. Max. 7.9. Min. 14.5. Period, $320^d.6$. On photographs taken October 10 and 24, 1895, the spectrum is of Class Ma, having $H\gamma$ and $H\delta$ bright. $H\delta$ is about 0.7 as bright as $H\gamma$.
2011. Read $0,10$, for $0,R$.
2051. ξ (47) Tucanae, N. G. C. 104.
2123. The image is poor and indistinct.
2127. The star, $+29^\circ 66$, ptm. magn. 9.5, precedes $3''.3$, north $6''.1$. The spectrum is partly superposed and appears to be of Class G.
2151. β Hydri. Parallax, $0''.143$. Proper motion, $2''.27$, $81''.9$.
2207. TU Cassiopeiae. Variable. Class IV. Max. 7.2. Min. 8.6. Period, $2^d.137$.
2261. α Phoenicis.
2262. κ Phoenicis. The lines are broad.
2342. This star is probably variable within the limits 7.77 to 8.02.
2429. η Sculptoris. Read $0,10$, for $0,R$.
2438. This star is probably variable with small range. The spectrum is of Class Mc on a photograph taken August 22, 1909, with the 24-inch Bruce Telescope.
2451. The dark lines are barely seen. The spectrum may belong to Class Oe5.
2453. The silicon lines 4128.1 and 4131.1 are strong.
2585. T Sculptoris. Variable. Class II. Max. 7.8. Min. 11.4. Period, $201^d.5$.
2610. The star, $+63^\circ 54$, ptm. magn. 8.2, follows $5''$, north $1''.5$. The spectrum is superposed and appears to be of Class A.
2725. T Phoenicis. Variable. Class II. Max. 8.5. Min. <12.0 . Period, 280^d . On a photograph taken September 14, 1896, the spectrum is of Class Mc, having $H\gamma$ and $H\delta$ bright. $H\delta$ is 4 times as bright as $H\gamma$.
2726. In H.A. 28, 195, classified F5, but the spectrum is rather faint on plates taken with the 13-inch Boyden Telescope.
2731. The observation, A5, on I 37311, residual 10, was rejected.
2745. The star, $+59^\circ 71$, ptm. magn. 9.2, precedes $2''.2$, north $6''.5$. The spectrum is partly superposed and is probably also of Class A.
2750. The observation refers to the combined light of two stars of nearly equal brightness. The star which is slightly fainter follows $1''$, north $0''.2$.
2772. λ Cassiopeiae. The lines are broad.
2834. λ^1 Phoenicis.
- 2839,40. The spectrum is composite. Only one star is given in the Durchmusterung Catalogue, although both are on the chart. It is not certain to which star the Durchmusterung magnitude, 8.3, belongs. The star which, according to the Gesellschaft positions, follows $0^d.95$, north $40^m.8$, is about 0.4 magn. fainter on a chart plate than the southern star. The northern star appears certainly to be of the solar type.
2884. β^1 Tucanae. This spectrum is superposed on that of H. D. 2885. The lines are wide.
2885. β^2 Tucanae. This spectrum is superposed on that of H. D. 2884. The lines are narrow and probably resemble in intensity those in the spectrum of α Cygni. See H.A. 28, 185, Remark 117.
2890. TU Andromedae. Variable. Class II. Max. 7.7. Min. <11 . Period, 317^d .
2905. κ Cassiopeiae.
3101. The observation, K0, on B 15112, residual 10, was rejected. On second examination, the image was found to be too poor to show the true nature of the spectrum.
3112. θ Tucanae.
3189. The image is very faint, and may be slightly peculiar. On A 5525, the spectrum appears to be of Class K5.

3191. The dark lines show very slight contrast to the other portions of the spectrum.
- 3210.11. The spectrum is composite. Bu. 317. P. A. 315°.9, Dist. 0'.16, "with about one magnitude difference in the components." The spectrum is very peculiar. Several strong lines which appear to belong to a spectrum of Class K are superposed on one of Class A2. It is uncertain which is the brighter star visually.
3240. The lines are broad.
3246. This star has magn. 11.0 in the Cape Photographic Durchmusterung.
3302. λ^2 Phoenicis.
3312. S. D. $-23^\circ 6$, ptm. magn. 9.5, and C. DM. $-22^\circ 183$, ptm. magn. 10.0.
3344. Y Cephei. Variable. Class II. Max. 8.7. Min. 14.0. Period, 332^d.9. Photographs taken November 30, 1896, and November 11, 1907, show a faint spectrum, in which H δ was estimated 2, and 5 times as bright as H γ , respectively.
3360. ζ Cassiopeiae.
3369. π Andromedae.
3388. In this spectrum, the line H δ is as strong as in Class F5, but the continuous portion resembles Class G5, especially in the distribution of the light.
3443. Parallax, 0'.360. Proper Motion, 1".41, 91°.2.
3540. S. D. $-23^\circ 7$, ptm. magn. 8.9, and C. DM. $-22^\circ 197$, ptm. magn. 9.2.
3546. ϵ Andromedae. Read 0,10 R for 0,R.
3557. The observation, K0, on B 19958, residual 10, was rejected. The spectrum is near the edge of that plate.
3627. δ Andromedae.
3651. Parallax, 0'.140.
3712. α Cassiopeiae. Suspected of variability within the limits 2.1 to 2.6.
3735. Z Sculptoris. Variable. Class and period unknown. Max. 6.3, Min. 7.6.
3755. Perhaps of Class A3. The definition is poor.
3795. The observation, G0, on B 12238, residual 10, was rejected. The spectrum is too dense on that plate.
3823. Proper motion, 1".00, 64°.5.
3883. This spectrum is probably composite, as some metallic lines are present which appear to belong to a spectrum of Class G.
3901. ξ Cassiopeiae. Read 0,10 R for 0,R.
3919. μ Phoenicis.
3940. The lines are not well defined.
3969. The Great Nebula of Andromeda. N. G. C. 221. The new star, S Andromedae, appeared in this nebula in August, 1885. See H.A. 76, 34.
3977. This star is C. DM. $-22^\circ 219$, ptm. magn. 9.3, and is not contained in the Southern Bonn Durchmusterung.
3980. ξ Phoenicis. The spectrum is very peculiar, and resembles the composite type in combining strong hydrogen lines with several intense solar lines. The strontium lines 4077.9 and 4215.7, and the double silicon line 4128.1, 4131.1 are especially well marked. For further description, see H.A. 27, 187, Remark 187.
3992. The lines 4128.1 and 4131.1 are well marked but they are fainter than the line K.
4009. The spectrum is indistinct on the second plate, which may account for the large residual.
4036. Read 0,10 R for 0,R.
4058. π Cassiopeiae. Read 3,10 R, for 3,R.
4065. λ^1 Sculptoris. Read 0,10 R, for 0,R.
- 4082,3. For convenience, these stars are given in the same right ascension, although H. D. 4082 precedes 0^m.1. The spectrum shows no peculiarities, and since chart plates show that the stars are nearly equal in magnitude photographically, it is probable that the spectra are similar.
4089. ρ Tucanae.
4098. The observation, G0, on B 23760, residual 10, was rejected.
4128. β Ceti.
4150. η Phoenicis. The lines are broad.
4153. The star, $+30^\circ 106$, ptm. magn. 9.5, precedes 0'.1, north 1'.0. The spectrum is partly superposed and appears to be also of Class G5.
4180. σ Cassiopeiae. Read 3,10 R, for 3,R.
4188. ϕ^1 Ceti. Read 5,10 R, for 5,R.
4211. λ^2 Sculptoris.
4226. Read 0,2-, for R.
4298. The spectrum may be composite. Several faint lines are seen which are suspected to belong to the spectrum of a fainter companion star.
4350. U Cassiopeiae. Variable. Class II. Max. 8.0. Min. 16. Period, 276^d.0. The spectrum resembles that of R Andromedae, H. D. 1967, and does not appear to be of Class M. H γ and H δ are bright. On a photograph taken July 10, 1894 these two lines are of equal brightness, but on photographs of October 8, 1896, and December 1, 1905, H δ is from 3 to 6 times as bright as H γ .
4391. The hydrogen lines are as strong as in Class G0. On B 12226, which has short dispersion, the spectrum was classified G0.
4397. S. D. $-23^\circ 8$, ptm. magn. 8.9, and C. DM. $-22^\circ 248$, ptm. magn. 8.8.
4441. The star, $+65^\circ 91$, ptm. magn. 8.8, precedes 1'.0, north 5'.0. The spectrum is partly superposed and appears to be of Class A or F.
4460. The lines are very hazy and indistinct. Several bright spaces or lines are seen.
4461. The class of this spectrum is uncertain. On second examination, it appears probable that it is nearer Class A than F.
4475. The star, $+50^\circ 142$, ptm. magn. 8.5, follows 4^s.8, north 0'.2. The spectrum is superposed and appears to be of Class K0 or K2.
4489. RW Andromedae. Variable. Class II. Max. 8.4. Min. 14.5. Period, 431^d.3. The spectrum is faint on three plates examined, but it appears to be of Class Mc, having H δ very bright.
4499. RX Cephei. Variable. Class unknown. Max. 7.4. Min. 7.9. Period, 130^d.
4502. ζ Andromedae. Read 0,10 R for 0,R.
4521. The observation, K0, on B 11991, residual 10, was rejected, as the focus is too poor at the end of greater wave length to show the true nature of the spectrum.

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4613. The image appears hazy, as if due to two stars. Only one star is seen on chart plates.
4614. η Cassiopeiae. Parallax, $0''.202$. Proper motion, $1''.19$, $113''.8$. Bu. 426. P. A. $215^\circ.9$, Dist. $5''.19$, ptm. magn. 3.67 and 7.41. The lines appear to be broad, which may be due to the spectrum of the fainter component, but the difference of 3.74 magn. in brightness makes this uncertain. The companion has the same proper motion as the primary star.
- 4615,6. The spectrum is composite.
4625. The hydrogen lines are as strong as in Class F8, and this probably accounts for the large residual.
4628. Parallax, $0''.175$. Proper motion, $1''.37$, $146^\circ.9$.
4636. ν Cassiopeiae.
4653. Lines of the band G of Fraunhofer appear stronger than normal for this class, and the spectrum may be slightly peculiar. It was classified F5 on I 37367, where it appears near the edge.
4656. δ Piscium.
4694. The spectrum is hazy, as if due to two stars, but chart plates show only one in this position.
4725. H γ and H δ are very narrow.
4727. ν Andromedae.
- 4757,8. i Piscium. Bu. 439. P. A. $297^\circ.2$, Dist. $4''.42$, combined photometric magn., 5.54.
- 4775,6. The spectrum is composite.
4779. V Andromedae. Variable. Class II. Max. 8.0. Min. 14.3. Period, $258^d.9$. On photographs taken January 24, and September 24, 1906, the spectrum is Class Ma, having H γ and H δ nearly equal in brightness.
4791. On B 40845, this spectrum was classified G o , and confirmed on second examination.
4796. Lines 4077.9, 4128.1, and 4131.1, are slightly stronger than normal.
4797. The star, $+57^\circ 159$, ptm. magn. 8.9, follows $1''.3$, north $0'.6$. The spectrum is partly superposed and appears to be of Class A.
4813. ϕ^2 Ceti.
4815. λ Hydrī.
4841. The lines are narrow and the line K is strong for this class.
4852. The lines H γ and H δ are narrow. The spectrum may resemble that of δ Canis Majoris in the intensities of the lines.
4862. The dark lines are barely seen, and the spectrum appears to be nearly continuous.
4895. RR Andromedae. Variable. Class II. Max. 8.8. Min. 13.5. Period, $333^d.5$. On three photographs examined, the spectrum is of Class Mb, and H δ is from 1 to 6 times as bright as H γ .
4919. ρ Phoenicis.
4976. The lines are narrow. Perhaps the Class is B5.
5005. H β is suspected to be bright.
5013. This star is C. DM. $-60^\circ 160$, and is not in the Cape Photographic Durchmusterung.
5016. RV Cassiopeiae. Variable. Class II. Max. 8.0. Min. 14.5. Period, 333^d . On photographs taken October 8, 1896, and December 14, 1903, the spectrum is Class Mb, having H δ 5 times as bright as H γ .
- 5058, 9. Innes σ^4 49. P. A. $267^\circ.6$, Dist. $2''.25$, magns. 7.4 and 8.2.
5098. Read $0,10 R$, for $0,R$.
5148. V Tucanae. Variable. Class V. Max. 8.8. Min. 10.3. Period, unknown.
5190. λ^1 Tucanae.
5195. The star, $+39^\circ 203$, ptm. magn. 9.2, precedes $1''.6$, south $2'.7$. The spectrum is partly superposed and appears to be also of Class A.
5234. ν^1 Cassiopeiae.
5235. W Cassiopeiae. Variable. Class II. Max. 8.4. Min. 12.2. Period, $403^d.5$. The spectrum is peculiar in the distribution of its light. Nearly all of the brightness is between H β and H γ .
- 5250,1. Bu. 478. P. A. $127^\circ.0$, Dist. $13''.2$, magn. 10, 10. Only one spectrum was observed and it should have been placed between the lines, except that the first star comes at the bottom of the page. Chart photographs taken with the 24-inch Bruce Telescope show the two stars to be nearly equal photographically, and since no peculiarity was observed in the spectrum it is assumed that both belong to Class F o .
5276. Read $0,10 R$, for $0,R$.
5291. This spectrum is nearly continuous and the hydrogen lines are suspected to be bright.
5333. The observation, F2, on I 37974, residual 10, was rejected.
5373. This spectrum is suspected to be composite. The line K appears to be too faint for this class. Perhaps the star is double, one component being of Class A o , and the other of Class G o .
5382. k Piscium.
5394. γ Cassiopeiae. See H.A. 28, 100, Remark 162, for a detailed description of this spectrum. The lines H α , H β , H γ , H δ , H ϵ and H ζ are bright and superposed on hazy, wide, dark bands. Other bright lines and spaces are present. The dark lines are hazy and present slight contrast to adjacent portions of the spectrum. See also H.A. 28, 261 and Plate II.
5395. ν^2 Cassiopeiae.
5402. The observation, K o , on B 19958, residual 10, was rejected. The spectrum is too near the edge of that plate.
5408. The lines are broad.
5427. The star $-68^\circ 33$, ptm. magn. 9.6, follows $0''m.1$, north $1'$. The spectrum is partly superposed and appears to be also of Class G.
5437. ϕ^3 Ceti. Read $0,10 R$, for $0,R$.
5448. μ Andromedae. The second observation was made on C 2935.
5457. λ^2 Tucanae. Read $5,10 R$, for $5,R$.
5501. The spectrum is indistinct and the class is not very well defined.
5512. H γ and H δ are narrow. Perhaps of Class F5.
5516. η Andromedae. Read $5,10 R$, for $5,R$.
5551. The lines are indistinct.
5553. The spectrum is difficult to classify. On I 38877, it was classified F p , but helium lines are present and it certainly belongs to some division of Class B. The line K is strong for Class B and the lines are probably narrow.

5575. h Piscium. Read 0,10 R, for 0,R.
5599. The observation, F2, on B 14896, residual 10, was rejected. The spectrum is on the extreme edge of that plate.
5614. The magn. 8.91 in H.A. 54, 14, applies to the light of this star combined with that of $+5^{\circ} 127$, ptm. magn. 10.4, which precedes $8^{\circ} 7$, south $0^{\circ} 9$.
5621. This spectrum is suspected to be composite. The line K is slightly fainter than H.
5635. N. G. C. 330. Dunlop 23.
5679. U Cephei. Variable. Class V. Max. 6.9. Min. 9.1. Period, $2^d.492884$, with small variations. The spectrum of the fainter component of this eclipsing binary star has been photographed recently and is of Class Ko.
5689. This spectrum appears to be nearly continuous. It may belong to Class Oe5.
5722. ϕ^4 Ceti. Read 5,10 R, for 5,R.
5737. α Sculptoris.
5774. U Tucanae. Variable. Class II. Max. 9.1. Min. 13.0. Period, $258^d.0$. The spectrum is of Class Mb having $H\gamma$ and $H\delta$ bright. The intensity of $H\delta$ varies from 1 to 3 times that of $H\gamma$ on 4 photographs examined.
- 5788.9. Bu. 520. P. A. $192^{\circ}.5$, Dist. $7^{\circ}.52$, combined magn. 5.62. The lines are wide and it is probable that both spectra are of Class B9.
5802. The observation, A2, on MC 6670, residual 10, was rejected.
- 5837.8. The spectrum is composite.
- 5846.7. H. D. 5846, precedes 3° , south $0^{\circ}.1$, and is about 0.1 magn. fainter than H. D. 5847.
5942. N. G. C. 346. Dunlop 25.
6055. ξ Sculptoris.
6058. The star $-76^{\circ} 82$, ptm. magn. 9.4, follows 6° , and is in the same declination. The spectrum is superposed and is probably also Class F5.
6107. In H.A. 56, 118, classified Ko. This observation was rejected, owing to the faintness of the spectrum on photographs taken with the 13-inch Boyden Telescope.
6110. The observation, F5, on I 37974, residual 13, was rejected.
6118. σ Piscium.
6164. The lines 4128.1 and 4131.1 are strong.
6173. Probably of Class A0.
6178. σ Sculptoris. Read 2,10 R, for 2,R.
6186. ϵ Piscium. Read 5,10 R, for 5,R.
6197. The observation, G0, on B 14372, residual 10, was rejected, owing to the faintness of the spectrum on that plate.
6226. The lines are narrow, and line K is as strong as in Class A2.
6290. In H.A. 56, 118, classified Ma. The spectrum is rather faint on photographs taken with the 13-inch Boyden Telescope.
6405. N.G.C. 362. Dunlop 62. Globular Cluster. The distribution of light in the spectrum is similar to that in a hazy spectrum of Class G5.
- 6456.7. ψ^1 Piscium.
6474. The spectrum in general resembles that of Class K2, but the lines of hydrogen are as strong as in Class G0. Classified G5 on I 38060.
6559. Read 0,10-, for 0,R.
6580. The observation, Ko, on I 38060, residual 10, was rejected. The image is very faint on that plate.
6582. μ Cassiopeiae. Parallax, $0^{\circ}.110$. Proper Motion, $3^{\circ}.73, 114^{\circ}.9$.
6592. Z Ceti. Variable. Class II. Max. 8.8. Min. 13.5. Period, $184^d.5$. On photographs taken August 3 and 8, 1899, the spectrum is Class Mb, having $H\gamma$ and $H\delta$ bright. $H\delta$ is 4 times as bright as $H\gamma$.
6595. β Phoenicis.
6640. S. D. $-23^{\circ} 14$, ptm. magn. 8.3, and C. DM. $-22^{\circ} 391$, ptm. magn. 8.1.
6660. Parallax, $0^{\circ}.101$.
6695. ψ^2 Piscium.
6717. The observation, F5, on I 37412, residual 13, was rejected. The spectrum is too near the edge of that plate.
6763. ϵ Piscium.
6767. ν Phoenicis.
6793. ι Tucanae.
6798. The lines are wide. Read 0,10 R, for 0,R.
6805. η Ceti.
6811. ϕ Andromedae.
6838. The observation, G0, on B 23762, residual 10, was rejected.
6843. When classifying this spectrum, the remark was made "Composite? Line K appears faint." This was confirmed by the examination of other plates. The brighter component is of Class F5 and the fainter, of Class A. This star is Bu. 603. P. A. $233^{\circ}.4$, Dist. $9^{\circ}.15$, magn. 8.0 and 9.8. Two lines should be given to this object.
6860. β Andromedae. Parallax, $0^{\circ}.241$.
6882. ζ Phoenicis. Read 0,10 R, for 0,R.
6884. This spectrum appears to be nearly continuous. It may belong to Class Oe5.
6903. ψ^3 Piscium.
6960. Read 0,10 R, for 0,R.
6961. θ Cassiopeiae.
6972. RU Cassiopeiae. Probably not variable, or variable with small range. See Remark in H.A. 55, 33. Read 1,10 R for 1,R.
7021. The observation, F0, on I 38103, residual 8, was rejected, as the image is defective on that plate.
7034. g Piscium. Read 5,10 R, for 5,R.
7087. χ Piscium.
7099. The lines are faint and appear to be narrow.
7103. $H\gamma$ and $H\delta$ are very narrow.
7106. τ Piscium. Read 0,10-, for 0,R.
7113. I.C. 1644. Gaseous nebula.
7137. The region of the line K is very hazy and indistinct on the second plate.
7160. X Piscium. Variable. Class II. Max. 8.5. Min. 13. Period, 350^d . On a photograph taken October 16, 1912, the spectrum is of Class Ma, having $H\gamma$ and $H\delta$ bright. $H\delta$ is 5 times as bright as $H\gamma$.
7194. The lines are broad.
7227. The image is indistinct.
7318. ϕ Piscium.
- 7344.5. ζ Piscium. The spectrum of H. D. 7345 is given G5 in H.A. 56, 72. The image is so faint on photographs

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- taken with the 11-inch Draper Telescope, that the observation on I 38054 is to be preferred.
7482. U Andromedae. Variable. Class II. Max. 8.9. Min. 14.5. Period, 348^d. On a photograph taken October 16, 1900, the spectrum is of Class Mb, having H δ 5 times as bright as H γ .
7505. The second observation was made on C 18208.
7536. The observation, G₅, on B 38135, residual 10, was rejected. The image is too near the edge of that plate.
7540. UZ Andromedae. Variable. Class II. Max. 9.5. Min. <13. Period, 307^d. On a photograph taken January 21, 1906, the spectrum shows the bright lines H γ and H δ . The latter is 5 times as bright as H γ . The continuous portion is too faint to classify.
7544. S. D. -23° 15, ptm. magn. 7.3, and C. D.M. -22° 437, ptm. magn. 7.2.
7558. This star precedes H. D. 7577, 1^s.02, north 42^m.6. It was probably included in the Durchmusterung observation.
7561. Z Piscium. Variable. Class III. Max. 7.4. Min. 8.1. Period, irregular.
7570. ν Phoenicis. Read 0,10 R, for 0,R.
7577. See H. D. 7558. The spectrum is slightly uncertain due to the superposition of that of H. D. 7558.
7583. The lines are narrow.
7592. The line 4227.0 is strong for this class.
7624. The observation, G₀, on I 37512, residual 8, was rejected. The lines are not clearly seen on that plate.
7636. H β is not distinctly seen.
7668. The star +41° 236, ptm. magn. 8.5, precedes 6^s.5, south 9^m.1. The spectrum is partly superposed and is probably of Class K₅.
7769. S Cassiopeiae. Variable. Class II. Max. 7.6. Min. 14.5. Period, 609^d.5. The spectrum is peculiar, and does not appear to be of Class M, but to resemble in characteristics that of R Andromedae, H. D. 1967. On several photographs examined, the brightness of H β varies from 2 to 10 times that of H γ .
7773. S Piscium. Variable. Class II. Max. 8.2. Min. <14.7. Period, 404^d.3. On a photograph taken November 21, 1895, the line H δ is very bright, and the faint continuous spectrum appears to be of Class M.
7788. κ Tucanae. The lines are hazy. This is probably due to the duplicity of the star, which is Innes 1^b 14. P. A. 354^s.8, Dist. 5^m.52, ptm. magn. 5.10 and 7.29. Read 3,10 R, for 3,R.
7804. f Piscium. Read 2,10 R, for 2,R.
7902. The lines are narrow. H β is suspected to be bright.
7927. ϕ Cassiopeiae. The lines are very narrow, and in their intensity the spectrum resembles that of δ Canis Majoris.
7938. The observation, F₅, on B 38135, residual 12, was rejected. The spectrum is too near the edge of that plate.
7962. The observation, A₅, on I 37380, residual 10, was rejected. The spectrum is too near the edge of that plate.
7964. ν Piscium. Read 2,10 R, for 2,R.
8043. This spectrum is probably composite. The solar lines appear to be too strong for Class A₂. On I 38879, the spectrum is very hazy, and was classified as F₂, with the remark "Line K faint." The peculiarities could be explained by supposing a faint spectrum of Class G to be superposed upon a brighter one of Class A.
8055. The observation, F₅, on MC 4415, residual 10, was rejected. The spectrum is very faint on that plate.
8065. The lines are narrow.
8126. 1 Piscium.
8159. The lines are narrow.
8166. W Phoenicis. Variable. Class II. Max. 8.5. Min. 16. Period, unknown. On a photograph taken October 20, 1909, the spectrum is of Class Ma, having the line H δ twice as bright as H γ .
- 8181.2. Two stars of nearly equal brightness are near this position. The one which is about 0.1 magn. fainter precedes 3^s, south 0^m.3. Both spectra may be of Class A₂.
8193. The class is uncertain and the spectrum may be nearer to Class F than to A.
8207. ξ Andromedae.
8313. This spectrum is probably intermediate between Classes K₅ and Ma.
8329. The observation, F₅, on I 38917, residual 13, was rejected. The spectrum is too faint on that plate.
8368. The star +23° 183, ptm. magn. 9.3, precedes 0^s.4, north 6^m.9. The spectrum is partly superposed and appears to be of Class K.
8374. The metallic lines are well marked.
8441. Lines 4077.9, 4128.1, and 4131.1 are strong.
8487. This is A. G. C. 1320. The star A. G. C. 1321, magn. 8.5, follows 0^s.25, north 0^m.3.
8491. ψ Cassiopeiae. Read 5,10 R, for 5,R.
8493. Perhaps of Class A₅.
8512. θ Ceti. Parallax, 0^m.101.
8538. δ Cassiopeiae.
8550. The classification is difficult. H. D. 8549 precedes 3^s.1, north 7^m.2 and the superposition of its spectrum makes the region of the line K indistinct. The observation G₅, on MC 4415, residual 15, was rejected.
8581. In H.A. 56, 118, Class G₅, but the spectrum is seen to better advantage on B plates.
8633. A star about 0.5 magn. fainter precedes 0^s.9, south 0^m.8 and appears also to be of Class A. On I 38905 the combined spectrum of these two stars was classified F₅.
8641. The observation, G₀, on B 23815, residual 10, was rejected. The spectrum is too near the edge of that plate.
8723. ρ Piscium.
8729. This spectrum and that of H. D. 8735 are superposed.
8735. See H. D. 8729.
8799. ω Andromedae.
8817. The observation, K₀, on B 12024, residual 10, was rejected. The spectrum is too faint on that plate.
8822. The observation, F₅, on I 38972, residual 15, was rejected. The spectrum is near the edge and very indistinct on that plate.
8878. This is C. P. D. -31° 179. C. P. D. -31° 178, magn. 9.2, precedes 0^s.2, north 0^m.6. The spectrum is not clearly

- seen. Only one star is given in the Cordoba Durchmusterung.
8879. R Sculptoris. Variable. Class II. Max. 6.2. Min. 8.8. Period, 376^d.4.
8890. α Ursae Minoris. Polaris. Variable. Class IV. Max. 2.3. Min. 2.4. Period, 3^d.9681. The lines are somewhat narrow and of well marked intensity.
8896. S. D. -23° 18, ptm. magn. 6.2, and C. DM. -22° 503, ptm. magn. 6.7.
8974. S. D. -23° 19, ptm. magn. 8.7, and C. DM. -22° 508, ptm. magn. 9.1.
9053. γ Phoenicis. Perhaps the class is intermediate between K5 and Ma. Read 3,10 R, for 3,R.
9057. A Andromedae.
9087. Perhaps of Class A5.
9105. The lines H β , H γ , and H δ are bright.
9138. μ Piscium.
9155. The observation, F8, on MC 4415, residual 15, was rejected. That plate is very poor for faint stars.
9203. R Piscium. Variable. Class II. Max. 7.0. Min. 14.0. Period, 344^d.2. On photographs taken December 28, 1896, and January 25, 1897, the spectrum is of Class Mb, having H γ and H δ of nearly equal brightness.
9205. The observation, G0, on B 23762, residual 10, was rejected. The spectrum is too near the edge of that plate.
9270. η Piscium.
9273. S. D. -23° 21, ptm. magn. 9.7, and C. DM. -22° 521, ptm. magn. 9.9.
9285. This star is double. The lines are broad, and both stars are probably of Class A. The star which is slightly the fainter of the two, on chart plates, precedes 0^s.5, south 15^s.8, according to the positions in the Catalogue of the Gesellschaft.
9311. The lines are hazy.
- 9352,3. The spectrum is composite.
9356. RR Ceti. Variable. Class IV. Max. 8.4. Min. 9.0. Period, 0^d.553022.
9362. δ Phoenicis. Line 4227.0 appears to be slightly less intense than in the typical star.
9408. χ Cassiopeiae.
9413. The star -35° 534, ptm. magn. 10.7, follows 6^s.5, north 1^s.0. The spectrum is superposed and appears to be of Class G. In H.A. 54, 19, the combined magnitude of these two stars is 8.73.
9422. This spectrum is suspected to be composite. The line K is fainter than normal for Class F8.
9470. A star of nearly equal brightness on ordinary plates precedes 2^s, north 0^s.2. On MC 11199, taken with yellow light and an exposure of 90^m, this star is about 2 magnitudes fainter than H. D. 9470. It thus proves that the following star is the one having spectrum of Class Mb.
9482. The star $+43^{\circ}$ 322, ptm. magn. 8.9, follows 2^s.9, north 0^s.5. The spectrum is superposed and appears to be of Class K.
9599. The observation, K0, on B 22155, residual 10, was rejected, since the spectrum is superposed on that of H. D. 9600.
9672. Read 2,10-, for 2,R.
9721. The observation, F2, on I 37615, residual 9, was rejected. The spectrum is very faint on that plate.
9725. The star $+45^{\circ}$ 389, ptm. magn. 10.2, follows 0^m.2, north 1^s. The spectrum is superposed, and it is not distinct enough to be classified.
9811. This spectrum appears to be composite, but the classes of the two spectra are not defined.
9826. ν Andromedae.
9875. The observation K0, on B 12229, residual 10, was rejected. The spectrum is not in good focus on that plate.
9906. τ Sculptoris. Read 0,10 R, for 0,R. Bu. 836. P. A. 97^s.0. Dist. 1^s.80, ptm. magn. 6.01 and 7.13. No peculiarity was observed in the combined spectrum, and it therefore appears probable that both spectra are similar.
9919. π Piscium.
9927. ν Persei.
10072. χ Andromedae.
10088. The lines 4128.1 and 4131.1 are stronger than normal, and other metallic lines are well marked.
10101. The observation, G0, on B 12227, residual 10, was rejected.
10112. Y Andromedae. Variable. Class II. Max. 8.4. Min. 14.1. Period, 217^d.9. On November 7, 1904, and January 1, 1908, the spectrum is of Class Mb, having the line H δ about 0.6 as bright as H γ .
10144. α Eridani. The lines are wide and H β is suspected to be bright. Read 3,10 R, for 3,R.
10157. The star $+29^{\circ}$ 280, ptm. magn. 9.3, precedes 1^s.9, south 8^s.9. The spectrum is superposed and appears to be also of Class G.
10205. τ Andromedae. Read 0,10 R, for 0,R.
10221. The lines 4128.1 and 4131.1 are strong.
10285. Estimated F2, on I 38108. The spectrum is near the edge of that plate.
10307. Parallax, 0^s.114.
10318. Read 0,5-, for R. The line H δ is strong for Class G5.
10346. N. G. C. 651. Gaseous nebula.
- 10360,1. ρ Eridani.
10364. The spectrum was re-observed on the second plate, I 37318, and was classified K0, which gives residual 2.
10380. ν Piscium. Read 0,10 R, for 0,R.
10390. Read 0,10-, for 0,R.
10456. The spectrum is indistinct.
10461. The magnitude in the Cordoba Durchmusterung is 6.0, which is probably an error for 9.0. The magnitude in the C. P. D. is 9.6.
10476. Parallax, 0^s.114.
10516. ϕ Persei. H α , H β , H γ , H δ , H ϵ and H ζ are bright. This star is a spectroscopic binary with a period of 126^d.5. The spectrum changes with phase. The helium lines are strong at the intermediate phase, only suspected to be present at time of maximum positive velocity, and are not visible at maximum negative velocity. At the latter phase, the dark hydrogen lines are wide and faint. At the intermediate and positive velocity phases, the dark hydrogen

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- lines are very narrow and sharply defined. See also H.A. 56, 258.
10537. π Sculptoris. Read 5,10 R, for 5,R.
10578. The observation, Go, on B 10441, residual 10, was rejected. The spectrum is too faint on that plate.
10599. This spectrum is intermediate between Classes K5 and Ma.
10606. The star $-7^{\circ} 283$, ptm. magn. 9.1, precedes $0^{\circ}.8$, south $0^{\circ}.9$. The spectrum appears also to be of Class A.
10644. This star is S. D. $-23^{\circ} 24$, ptm. magn. 9.9, and C. DM. $-22^{\circ} 575$, ptm. magn. 9.5.
10647. η^1 Eridani.
10693. The magnitude 7.19 in H.A. 54, 22, refers to the stars A. G. C. 1714 and 1715.
10700. τ Ceti. Parallax, $0^{\circ}.311$. Proper motion, $1^{\circ}.95$, 296.1° .
10733. Line 4026.2 is present.
10740. The observation, F5, on I 38879, residual 10, was rejected. The spectrum is near the edge of that plate.
10761. σ Piscium. Read 5,10 R, for 5,R.
10783. The lines 4128.1 and 4131.1 are strong.
10800. Read 0,10-, for 0,R.
10812. The observation, Ko, on B 45154, residual 10, was rejected.
10830. ϵ Sculptoris. Read 0,10 R, for 0,R.
10859. τ^1 Hydri.
10939. η^2 Eridani.
11092. The star $+64^{\circ} 244$, ptm. magn. 9.9, follows 4° , north $0^{\circ}.5$. The spectrum is superposed and appears to be of Class A.
11094. TT Persei. Variable. Class III. Max. 8.9. Min. 10.5. Period, irregular. The spectrum appears to change from Mb to Mc.
11143. This star is S. DM. $-23^{\circ} 25$, ptm. magn. 8.9, and C. DM. $-22^{\circ} 606$, ptm. magn. 9.2.
- 11154.5. The spectrum is composite.
11171. χ Ceti.
11187. The lines 4128.1 and 4131.1 are strong.
11208. Perhaps of Class A5.
11353. ζ Ceti.
11360. Perhaps of Class A2.
11415. ϵ Cassiopeiae. The lines 3856.2 and 3863.2 are strong.
11443. α Trianguli.
11473. This spectrum is indistinct and may be nearer to Class F than to A.
- 11502.3. γ Arietis. Bu. 993. P. A. $359^{\circ}.4$, Dist. $8^{\circ}.02$, combined magn. 4.04. The lines 4128.1 and 4131.1 are strong.
11529. ω Cassiopeiae.
11559. ξ Piscium.
11584. The star $-50^{\circ} 524$, ptm. magn. 9.3, precedes $2^{\circ}.3$, south $0^{\circ}.8$. The spectrum is superposed and is probably also of Class G.
11604. τ^2 Hydri.
11636. β Arietis.
11683. The star $-16^{\circ} 329$, ptm. magn. 10.3, follows $2^{\circ}.9$, and is in the same declination. The spectrum is superposed and is probably also of Class G5.
11695. ψ Phoenicis.
11753. ϕ Phoenicis.
11763. This star is suspected to be variable with small range.
- 11811.2. H. D. 11812 follows $0^{\circ}.3$, north $0^{\circ}.5$ and appears on chart plates to be about 0.2 magn. brighter than H. D. 11811. Both spectra may be of Class G.
11871. Perhaps of Class K5.
11909. ι Arietis.
11937. χ Eridani.
11973. λ Arietis. Read 5,10 R, for 5,R.
11977. η^2 Hydri. Read 0,10 R, for 0,R.
11995. Read 0,10 R, for 0,R.
12025. U Persei. Variable. Class II. Max. 7.0. Min. 10.9. Period, 320^d . On a photograph taken November 19, 1890, the spectrum is of Class Mc, having H δ one half as bright as H γ .
12111. A Cassiopeiae. Read 1,10 R for 1,R.
12115. Probably of Class Go.
12122. The star $+59^{\circ} 377$, ptm. magn. 9.5, precedes $1^{\circ}.5$, south $1^{\circ}.7$. The spectrum is superposed and makes the spectrum of H. D. 12122 rather uncertain.
12134. The spectrum may be composite. Faint lines are seen as in a spectrum of Class G.
12244. V Persei, Nova No. I. See H. C. 4 and H.A. 76, 35. This star appeared on a spectrum plate taken November 3, 1887, and also on 5 chart photographs at that time. The spectrum is very faint and consists of 5 or 6 bright lines, of which He is the strongest. The magnitude of this Nova on the International Scale was 9.2.
12274. ν Ceti. Read 0,10-, for 0,R.
12288. The lines 4128.1 and 4131.1, are strong.
12300. The star $+69^{\circ} 128$, ptm. magn. 9.7, precedes 7° , south $4^{\circ}.5$. The spectrum is superposed and is of Class A.
12301. The lines are very narrow, and the line K is strong for this class.
12303. g Persei.
12311. α Hydri.
12363. σ Hydri.
12392. This spectrum is probably intermediate between Classes K5 and Ma.
12401. Variable. Class III. Max. 9.6. Min. 10.4. Period, irregular.
12438. π Fornacis.
- 12446.7. α Piscium. Bu. 1061. P. A. $318^{\circ}.7$, Dist. $2^{\circ}.61$. Combined magn. 3.94. This spectrum is peculiar. Some lines appear to be double. The line K is as strong as in Class A2, but numerous solar lines are stronger than in this class. Lines 4077.9, 4128.1, and 4131.1 are well marked. The spectrum is composite but the two classes can not be detected from the combined spectrum.
12471. ϵ Trianguli. Read 0,10 R, for 0,R.
12524. χ Phoenicis.
- 12533.4. γ Andromedae. Bu. 1070. The first line refers to star A, the second, to stars B and C. See H.A. 56, 246.
12680. Read 0,10-, for 0,R.
12701. S Arietis. Variable. Class II. Max. 9.1. Min. 14.4. Period, $292^d.2$. On a photograph taken January

- 23, 1905, the spectrum which is very faint, appears to be of Class M, and has H γ and H δ nearly equally bright.
12709. The lines are somewhat narrow.
12762. Perhaps of Class B8. The spectrum is hazy and the lines are not well defined.
12767. ν Fornacis. The spectrum is peculiar in the great intensity of the lines 4128.1 and 4131.1. Line 4077.9 is also well marked. The line K is faint.
12793. In the distribution of light, this spectrum resembles Class G5.
12818. Perhaps of Class B8.
12859. The star, +36° 409, ptm. magn. 10.0, precedes 2°.1, south 3°.1. The spectrum is superposed and makes the classification of H. D. 12859 very difficult.
12869. κ Arietis. The lines are broad. Read 0,10, for 0,R.
12873. H. D. 12889 follows 3°.7, north 0°.3. The combined magnitude of these two stars in H.A. 54, 25, is 8.20.
12881. The class of this spectrum and of H. D. 12927 are incorrectly given as B8 in H.A. 56, 232.
12889. See H. D. 12873.
12927. See H. D. 12881.
12929. α Arietis. The spectrum resembles that of α Cassiopeiae except that the amount of absorption in the violet is greater.
12953. The lines are narrow. The spectrum appears to resemble that of α Cygni. Read 0,10 R, for 0,R.
12995. The star +52° 517, ptm. magn. 8.9, precedes 7°.3, north 2°.4, and appears to be of Class A.
13009. γ Eridani. Variable. Class II. Max. 7.5. Min. 10.0. Period, unknown. On a photograph taken September 9, 1904, the spectrum is of Class Mc, having the line H δ very bright. H γ is not distinctly seen.
13022. The lines are indistinct.
13051. The lines are barely seen.
13093. The intensity of the line K is uncertain.
13161. β Trianguli. Read 5,10 R, for 5,R.
13263. The observation, G0, on B 20429, residual 10, was rejected. The spectrum is too dense on that plate, which was taken with small dispersion.
13267. The lines are narrow.
- 13294.5. Bu. 1125. P. A. 35°.0, Dist. 16".55. On photographs taken with the 11-inch Draper Telescope, the separation is sufficient to show the line K of each star. The combined spectrum was classified A0 on I 37386.
13332. A star of nearly the same brightness precedes 3°, north 1°.1. Its spectrum is not well defined but may belong to Class G.
13402. Perhaps of Class B0. The lines are barely seen.
13403. Parallax, 0".135.
13406. The metallic lines are well marked for this class.
13412. The lines are probably somewhat narrow.
13423. The observation, G0, on B 12229, residual 10, was rejected. The spectrum is too dense on that plate.
13445. Proper motion, 2".28; 70°.5.
- 13474.5. The spectrum is composite.
13476. The lines are narrow. The spectrum is probably like that of η Leonis.
13520. b Andromedae.
13555. η Arietis.
13590. The lines are narrow, and line K is as strong as in Class A2.
13611. ξ Ceti. Read 5,10 R, for 5,R.
13638. The spectrum is in poor focus on the second plate, which may account for the large residual.
13639. The declination of this star is taken from the Cape Photographic Durchmusterung. The declination in the Cordoba Durchmusterung is about 1°.4 too far south.
13645. The observation, K0, on I 38164, residual 10, was rejected. The spectrum is very faint on that plate.
13659. The lines are hazy.
13709. μ Fornacis.
- 13728.9. The spectrum is composite. Line 4077.9 is strong. The brightness of the two components is probably nearly equal visually. The spectrum was classified A0 on B 45970, taken with short dispersion and which does not show the lines of the fainter component.
13744. The lines are narrow.
13788. The observation, F5, on I 38883, residual 15, was rejected. The spectrum is very indistinct on several other photographs which were examined, and the exact class is uncertain.
13824. The lines are narrow.
13826. V Arietis. Variable. Class III. Max. 8.3. Min. 9.0. Period, probably irregular. Some observers consider this variable to belong to Class IV, and the period to be 0^d.99248. The nature of the spectrum, however, indicates an irregular variation.
13832. The star +54° 506, ptm. magn. 9.9, follows 5°.9, north 5°.4. The spectrum is superposed and appears to be of Class G.
13841. The lines are probably narrow.
13854. The line K is strong for this Class and the lines are probably narrow and resemble in intensity those in the spectrum of θ Arae, which is described in H.A. 28, 177, Remark 39.
13866. The lines are narrow.
13869. The lines are broad.
13890. The lines appear to be narrow.
13901. The spectrum is faint and indistinct on the second plate.
13913. R Arietis. Variable. Class II. Max. 7.3. Min. 13.2. Period, 186^d.5. On photographs taken October 6, 1896, and February 8, 1909, the spectrum is of Class Ma, having H γ and H δ , bright and equal.
13918. The lines are very indistinct.
13927. — Hydri. Variable. Class III. Max. 9.6. Min. 10.5. Period, irregular.
13929. The lines are probably narrow.
13974. δ Trianguli. Parallax, 0".120. Proper motion, 1".15, 101°.5.
13978. The lines are very indistinct.
13982. Parallax, 0".105.
14010. The lines are narrow, and line K is as strong as in Class A2.
14028. W Andromedae. Variable. Class II. Max. 6.5. Min. 14.0. Period, 395^d.4. On photographs taken September 18, 1909, and October 12, 1910, the spectrum

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- is of Class Mc, having H δ at least 10 times as bright as H γ .
14039. Parallax, 0".125.
14055. γ Trianguli. The lines are broad.
14126. The observation, Fo, on I 16948, residual 8, was rejected. The lines appear to be double on that plate, probably owing to poor focus.
14141. π^1 Hydri.
14142. T Persei. Probably not variable. The photometric magnitude is given according to Wendell's observations in H.A. 69, 35.
14162. The class of spectrum is difficult to determine with certainty because of the partial superposition of the spectra of several adjacent stars.
14164. The star +45° 588, ptm. magn. 9.5, precedes 3^a.3, north 2'.9. The spectrum is superposed and is of Class A.
14191. θ Arietis. Read 0,10 R, for 0,R.
14212. c Andromedae. Read 0,10 R, for 0,R.
14228. ϕ Eridani. The lines are broad.
14231. Parallax, 0".185.
14244. The spectrum was classified K2 on B 10381, on which the image is very faint.
- 14262,3. The spectrum is composite. The spectrum of Class G appears to be fainter photographically than that of Class A5.
14287. π^2 Hydri.
14305. In H.A. 56, 73, spectrum G5. The spectrum is faint on the photographs taken with the 11-inch Draper Telescope.
14308. The star -5° 430, ptm. magn. 8.5, precedes 1^a.6, north 3'.1. The spectrum is superposed and makes that of H. D. 14308, very indistinct.
14322. The lines are narrow.
14330. - Persei. Variable. Class III. Max. 10.1. Min. 10.5. Period, irregular. In N. G. C. 884, χ Persei.
14386. o Ceti. Variable. Class II. Max. 2.0. Min. 9.6. Period, 331^d.6. The spectrum varies from Class Mb to Mc. At some maxima the lines H β , H γ , H δ , H ϵ , H η , H θ , and H ι are bright. H δ varies from 2 to 6 times the brightness of H γ . A few characteristics of this spectrum are discussed in H.A. 56, 104 and 255.
14392. The lines 4128.1 and 4131.1 are strong. Read 2,10 R, for 2,R.
14422. H β is bright. All the other lines are diffuse and not much darker than the adjacent portions of the spectrum.
14433. The lines are narrow.
14469. SU Persei. Variable. Class III. Max. 6.8. Min. 7.9. Period unknown, perhaps irregular.
14476. H β is suspected to be bright.
14488. RS Persei. Variable. Class III. Max. 8.1. Min. 9.4. Period, irregular.
14489. i Persei. The lines are narrow and the spectrum is like that of α Cygni. Read 0,10 R, for 0,R.
14528. S Persei. Variable. Class II. Max. 7.2. Min. 11.8. Period, irregular. On a photograph taken October 3, 1905, the line H δ is bright, and the spectrum, although very faint, appears to be of Class M.
14535. The lines may be narrow. The spectrum is partly superposed on that of H. D. 14542.
14542. The lines are narrow.
14580. - Persei. Variable. Class III. Max. 10.6. Min. 11.4. The spectrum is intermediate between Classes K5 and Ma.
14586. The star +29° 400, ptm. magn. 8.9, follows 0^a.2, south 2'.3. The spectrum is partly superposed and makes that of H. D. 14586 very indistinct.
14595. The spectrum is peculiar in the great intensity of the hydrogen lines for this class.
14633. Probably of Class B0. The spectrum of H. D. 14622 is partly superposed.
14645. The lines are barely seen.
14662. The lines are narrow and the spectrum resembles that of δ Canis Majoris in the presence and intensity of the lines. The line 4077.9 is strong.
14696. The star +58° 461, ptm. magn. 10.2, precedes 4^a.4, south 2'.5. The spectrum is partly superposed and appears to be of some division of Class B.
14701. The observation, A2, on B 12285, residual 13, was rejected. The spectrum is too near the edge of that plate.
14802. κ Fornacis.
14818. The lines are probably narrow. The line K is strong for this class.
14884. The lines 4128.1 and 4131.1 are strong.
14886. The focus is poor on the second plate.
14890. Read 3,10-, for 3,R.
14898. Perhaps of Class K5.
14899. The lines are somewhat narrow.
14951. ξ Arietis.
14956. The lines are probably narrow.
15008. δ Hydri. Read 0,10 R, for 0,R.
15048. Read 0,10-, for 0,R.
15082. The metallic lines are well marked.
15089. ι Cassiopeiae. The line 4077.9 is strong. See H.A. 56,104, Remark 12. Read 3,10 R, for 3,R.
15105. R Ceti. Variable. Class II. Max. 7.8. Min. 14.0. Period, 167^d.0. On a photograph taken October 30, 1907, the spectrum is of Class Mb, having H δ 0.8 as bright as H γ .
15122. Read 3,10-, for 3,R.
15130. ρ Ceti. Read 0,10 R, for 0,R.
15137. H β is suspected to be bright. H γ is faint and hazy.
15146. The spectrum and photographic magnitude refer to the combined light of the two stars, C. P. D. -21° 229, magn. 8.3, and -21° 230, magn. 8.6. The latter star follows 0^a.0, south 0'.3.
15162. The star +71° 145, ptm. magn. 9.4, precedes 6^a, south 2'.0. The spectrum is superposed and appears to be of Class G.
15186. RR Persei. Variable. Class II. Max. 8.0. Min. <14.2. Period, 389^d.1. On a photograph taken March 24, 1909, a faint spectrum of Class Ma is seen, having the line H δ bright.
15233. λ Horologii.
15238. Perhaps of Class B0.
15239. Perhaps of Class B3.
15248. κ Hydri.

15274. The spectrum is suspected to be composite.
15280. S Horologii. Variable. Class II. Max. 9.7. Min. <11.2. Period, 338^d. On a photograph taken November 15, 1895, the spectrum is of Class Ma having H δ 10 times as bright as H γ .
15316. The lines are narrow, and the spectrum probably resembles that of α Cygni.
15318. ξ^2 Ceti.
15325. The line H β is suspected to be bright.
15371. κ Eridani. Line 3819.2 is well defined, but lines 3918.7, 3920.6, 3926.8 and K are not seen. See also H.A. 28, 182, Remark 84. Read 3,10 R, for 3,R.
15427. ϕ Fornacis.
15450. The line H β is bright.
15472. The line H β has been found to be bright on the Mt. Wilson photograph. When classifying this spectrum, the remark was made, "H β is not seen distinctly."
15558. Perhaps of Class Bo.
15570. Perhaps of Class Bo.
15571. The lines are indistinct. The class may be B3.
15572. Bu. 1290. A triple star. For AB, P. A. 308^o.5, Dist. 8".00. For AC, P. A. 354^o.7, Dist. 8".45. The lines are broad and at least two of the spectra are probably of Class A.
15592. The star +70^o 187, ptm. magn. 9.2, follows 8^o, north 0'.2. The spectrum is partly superposed and appears to be of Class A.
15610. The star -21^o 441, ptm. magn. 8.9, precedes 4'.2, south 2'.9. The spectrum is superposed and makes that of H. D. 15610 somewhat indistinct.
15629. Perhaps of Class Bo.
15701. Perhaps variable with a small range.
15762. The star +69^o 163, ptm. magn. 10.2, follows 3^o, north 1'.1. The superposition of the spectrum makes that of H. D. 15762 very indistinct.
15785. The lines are indistinct.
15798. σ Ceti. Read 0,10 R, for 0,R.
15839. This star is probably identical with -32^o 918.
15893. The spectrum is suspected to be composite. Several solar lines are seen, which appear to be too strong for this class.
15910. The declination is taken from the Cape Photographic Durchmusterung, since the position in the Catalogue and on the charts of the Bonn Durchmusterung is 4' north of the true place.
15948. This star has been suspected of variability.
15963. The lines are somewhat narrow, and numerous peculiar lines of well marked intensity are seen, resembling those in the spectrum of α Cygni. These lines may be due to the spectrum of a fainter component. The two double lines 4172.9, 4173.6 and 4177.8, 4179.5 are strong.
15971. U Ceti. Variable. Class II. Max. 6.6. Min. 12.7. Period, 235^d.8. On a photograph taken November 21, 1908, the spectrum is of Class Mc, having H γ and H δ equal in brightness. On December 14, 1909, the spectrum is of Class Ma, having H δ 0.5 as bright as H γ .
15975. λ^1 Fornacis. Read 5,10 R, for 5,R.
16046. ω Fornacis.
- 16082.3. The spectrum is composite. On I 38873, the observation was, "G α , K line faint. Composite?"
16115. In the distribution of light, this spectrum resembles that of Class R5, but the H and K bands are seen as in Class R3.
16125. The star, +70^o 196, ptm. magn. 9.2, follows 7^o, south 0'.5. The spectrum is superposed and is probably of Class G5.
16160. Parallax, 0".150. Proper motion, 2".34, 51^o.8.
16161. ν Ceti. Read 0,10 R, for 0,R.
16185. The lines are indistinct.
16205. The line H δ is strong for this class.
16210. R Trianguli. Variable. Class II. Max. 5.3. Min. 12.0. Period, 267^d.0. On a photograph taken January 17, 1911, about 8 days after maximum, the spectrum is of Class Ma, having H δ 1.2 as bright as H γ . The continuous spectrum is very strong, and shows few dark lines except H and K. On a photograph taken October 16, 1909, the spectrum is very faint and is of Class Mc having H γ and H δ bright and of nearly equal intensity.
16231. Perhaps of Class A5.
16243. The lines are indistinct.
16307. ι^1 Fornacis.
16326. UY Andromedae. Variable. Class unknown, perhaps III. Period, probably irregular. The spectrum is faint. It may be of Class Nb.
16383. The star +71^o 157, ptm. magn. 8.6, precedes 6^o, north 4'.9. The spectrum is partly superposed and is probably of Class A.
16417. λ^2 Fornacis. Read 5,10 R, for 5,R.
16432. ν Arietis. Read 3,10 R, for 3,R.
16485. The lines are broad.
16522. μ Hydri.
16528. The magnitude 10 in C. DM. appears to be too faint. Perhaps it is wrong. The ptm. magnitude given in the Table depends upon that value.
16538. ι^2 Fornacis. Read 0,10 R, for 0,R.
16545. The lines 4128.1, and 4131.1 are very strong.
16555. η Horologii.
16574. The star -78^o 59, DM. magn. 8.6, precedes 13^o.5, and is in the same declination. The spectrum is probably of Class F5.
16582. δ Ceti.
16618. The star +42^o 574, ptm. magn. 8.9, precedes 2'.7, south 1'.0. The spectrum is of Class Ko or K5.
16620. ϵ Ceti.
16643. Y Arietis. Variable. Class and period, unknown. Max. 10.0. Min. 11.5.
16646. The spectrum is suspected to be composite.
16682. W Trianguli. Variable. Class III. Max. 8.5. Min. 9.1. Period, perhaps irregular.
16699. C. DM. -53^o 535, magn. 9.3, follows 0^o.8, south 0'.1. Only one star is given in the Cape Photographic Durchmusterung. The spectrum is peculiar. In the distribution of light, it resembles Class G5 but H δ is as strong as in Class F8. The peculiarity may be due to the superposition of the spectrum of -53^o 535. Classified G5 on B 24229.
16754. ς Eridani. The lines are broad.

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16772. The star $+39^{\circ} 611$, *ptm.* magn. 8.9, precedes $1^{\circ}.3$, north $0'.4$. The spectrum appears to be of Class B₉ or A₀.
16778. The lines are very narrow.
16808. The dark lines show very slight contrast to other portions of the spectrum.
16811. μ Arietis.
16815. ϵ Eridani.
16825. Read $0,10$ R, for $0, R$.
16832. The dark lines show very slight contrast to other portions of the spectrum.
16881. The lines are broad. Perhaps of Class A₅.
16895. θ Persei.
16896. — Ceti. Variable. Class III. Max. 7.7. Min. 8.6. Period, irregular.
16907. TW Cassiopeiae. Variable. Class V. Max. 8.3. Min. 9.0. Period $1^d.42827$.
16920. ζ Horologii.
16956. The lines 4128.1 and 4131.1 are strong.
- 16964.5. In the Gesellschaft Catalogue, magn. 8.7 and 8.2, the fainter star preceding $2^{\circ}.04$, north $1^{\circ}.4$. Chart plates show the two stars to be nearly equal in brightness.
16970. γ Ceti. Parallax, $0''.128$. The lines are broad. Read $2,10$ R, for $2, R$.
16978. ϵ Hydri. Read $1,10$ R, for $1, R$.
16994. This star is C. P. D. $-20^{\circ} 307$. The star C. P. D. $-20^{\circ} 308$, magn. 9.1, follows $0^{\circ}.5$, south $0'.4$. The spectrum is probably too faint to affect that of H. D. 16994.
17016. The observation, F₂, on I 37577, residual 9, was rejected. The spectrum is on the extreme edge of that plate.
17034. RY Persei. Variable. Class V. Max. 8.2. Min. 10.6. Period, $6^d.863614$. The lines are narrow.
17036. σ Arietis.
17051. ι Horologii.
17081. π Ceti.
17093. The lines appear to be narrow.
17094. μ Ceti.
17098. Innes $2^h 28$. P. A. $44^{\circ}.5$, Dist. $1''.41$, *ptm.* magn. 6.99 and 7.21. The hydrogen lines are broad. Both spectra may be of Class A₀.
17114. The dark lines show slight contrast to other portions of the spectrum.
17138. RZ Cassiopeiae. Variable. Class V. Max. 6.4. Min. 7.7. Period, $1^d.19525$.
17145. The hydrogen lines are very narrow, and the other lines are faint.
17156. On I 37308 the line H δ is as strong as in Class F₂.
17194. The spectrum is slightly peculiar. The distribution of light resembles that of Class G₅ or K₀, while the hydrogen lines are as strong as in Class G₀. The spectrum was estimated K₀ on B 12626.
17206. τ^1 Eridani.
17218. The lines are very faint.
- 17245.6. The spectrum is composite.
17271. W Horologii. Variable. Class III. Max. 9.1. Min. 10.4. Period, irregular.
17292. The observation, K₀, on I 37404, residual 15, was rejected. The spectrum is on the extreme edge of that plate, and appears to be defective.
17317. The lines 4077.9, 4128.1, 4131.1 and 4173 are very strong.
- 17351.2. C. P. D. $-23^{\circ} 290$ and 291. The spectrum is very hazy.
17368. The lines are indistinct.
17378. The spectrum is composite. H β , H γ , and H δ are narrow and of well marked intensity. The line K is only about 0.5 as intense as H. The solar lines are strong. Superposed on a spectrum of Class F₅, or G₀, there appears to be a spectrum of Class A₂ or A₃, having narrow lines. Two lines should have been given to this star.
- 17404.5. The spectrum is composite.
17446. T Arietis. Variable. Class II. Max. 7.9. Min. 10.1. Period, $313^d.0$.
17463. SU Cassiopeiae. Variable. Class IV. Max. 5.9. Min. 6.3. Period, $1^d.9498$.
- 17479.80. The spectrum is composite. Bu. 1437. P. A. $337^{\circ}.2$, Dist. $1''.81$, magn. 7.8 and 12.0. The visual component is probably too faint to affect the spectrum, and the bright star is doubtless a close double. Estimated A₃ on I 38072, which does not show the lines of the fainter component, and F₂ on I 38898, where the two spectra are blended.
17491. Z Eridani. Variable. Class III. Max. 6.4. Min. 7.7. Period, irregular.
17505. The line H β is barely seen, and is suspected to be partly reversed.
17506. η Persei.
17520. Perhaps of Class B₅.
17528. η^1 Fornacis.
17543. π Arietis.
17566. ζ Hydri. Read $0,10$ R, for $0, R$.
17581. A line at about 4174 is very strong. This may include lines 4172.9 and 4173.6.
17586. The class is uncertain. The star $-21^{\circ} 501$, magn. 9.4, follows $0^{\circ}.5$, north $1'.6$. The spectrum is superposed. It also appears to be of Class G.
17594. The declination of this star and $+30^{\circ} 576$, H. D. 17672, are transposed in the Bonn Durchmusterung. The preceding star is south.
17603. The lines are barely seen.
17652. β Fornacis.
17672. See H. D. 17594.
17685. X Horologii. Variable. Class III. Max. 8.1. Min. 9.4. Period, irregular.
17713. γ^1 Fornacis.
17714. Perhaps of Class A₃.
- 17718.9. The spectrum is composite.
17729. γ^2 Fornacis. Read $0,10$ R, for $0, R$.
17742. The star $-80^{\circ} 57$, magn. 9.1, precedes 8° , south $1'.3$. The spectrum is superposed but is not distinct enough to be classified.
17746. Perhaps of Class A₂.
17769. σ Arietis.
17793. η^2 Fornacis. Read $5,10$ R, for $5, R$.
17824. τ^2 Eridani. Line 4227.0 is 0.8 as intense as in the typical star, α Phoenicis.
17829. η^3 Fornacis.

17834. Perhaps of Class A₅.
 17837. Perhaps of Class K₅. The spectrum is very faint.
 17848. ν Horologii.
 17857. H β is barely seen. H γ and H δ are very narrow. The other lines are faint.
 17878.9. τ Persei. The spectrum is composite. On I 37320, classified F8. The spectrum is dense and near the edge of that plate.
 17886. — Fornacis. Variable. Class V. Max. 9.3. Min. 10.0. Period, unknown.
 17895. RR Eridani. Variable. Class III. Max. 7.2. Min. 8.1. Period, irregular.
 18078. The lines 4077.9, 4128.1, and 4131.1 are strong.
 18134. The star $-62^{\circ} 239$, magn. 9.6, follows 4^o.0, south 4^o.8. The spectrum is probably of Class G.
 18135. This spectrum may be intermediate between Classes K₅ and Ma.
 18149. ψ Fornacis. Read 3,10 R, for 3,R.
 18242. R Horologii. Variable. Class II. Max. 4.0. Min. 10.2. Period, 405^d.0. On a photograph taken Dec. 9, 1892, the spectrum is of Class Mc, having H δ very bright. The lines H γ and H η also are bright, but have not more than 0.01 of the intensity of H δ .
 18256. ρ Arietis.
 18281.2. Bu. 1492. P. A. 300^o.8, Dist. 22^o.04, magn. 8.5 and 9.0. On I 38172, the combined spectrum was classified F₅.
 18293. ν Hydri.
 18294. The lines are somewhat narrow.
 18296. Lines 4128.1, 4131.1 are strong. Read 1,10 R, for 1,R.
 18322. η Eridani.
 18326. Perhaps of Class B₀.
 18381.2. The spectrum represents the combined light of two stars of nearly equal brightness. The star which is about 0.1 magn. fainter, follows 1^o.65, north 0^o.1. Both stars may have spectra of Class K₀.
 18409. The lines are barely seen.
 18411. π Persei. Read 2,10 R, for 2,R.
 18445. In H.A. 54, 35, the magnitude 7.12 refers to the combined light of this star and H. D. 18455.
 18454. Read 0,10 R, for 0,R.
 18455. See H. D. 18445.
 18474. This spectrum is very peculiar. The lines are narrow and the band G is not continuous but is separated into several lines. See H.A. 56, 104, Remark 15.
 18519.20. ϵ Arietis. Bu. 1512. P. A. 203^o.0, Dist. 1^o.25, combined magn. 4.64. The two spectra are probably similar. Read 2,10 R, for 2,R.
 18537.8. Bu. 1510. P. A. 85^o.7, Dist. 11^o.89, combined magn. 5.15. Read 4,10 R, for 4, R.
 18541. ST Persei. Variable. Class V. Max. 9.7. Min. 11.8. Period, 2^d.648382.
 18587. The focus is poor in the region of the line K.
 18589. The spectrum is indistinct in the region of shorter wave length.
 18604. λ Ceti.
 18622.3. θ Eridani. Innes 2^h50. P. A. 84^o.5, Dist. 8^o.51, combined magn. 3.06. Both spectra are probably of Class A₂. Read 0,10 R, for 0,R.
 18644. Bu. 1525. P. A. 159^o.2, Dist. 5^o.14, magn. 9.5 and 9.9. The hydrogen lines are very wide which is probably due to similarity of the two spectra.
 18692. ζ Fornacis.
 18715.6. The spectrum is composite. Bu. 1530. P. A. 8^o.3, Dist. 8^o.48, magn. 6.5 and 8.0. On I 37404, the combined spectrum was classified F8.
 18728. A star of nearly the same brightness precedes 2^o, north 1'. The spectrum is superposed and makes the class of H. D. 18728 uncertain.
 18757. Proper motion, 1^o.01, 131^o.4.
 18784. ρ^1 Eridani.
 18866. β Horologii.
 18884. α Ceti.
 18907. ϵ Fornacis. Read 5,10 R, for 5,R.
 18925.6. γ Persei. The spectrum is composite. See also H.A. 28, 99, Remark 149.
 18949. T Horologii. Variable. Class II. Max. 7.7. Min. 12.0. Period, 218^d.2. This is C. P. D. $-51^{\circ} 354$, and is not contained in the Cordoba Durchmusterung. On a photograph taken December 1, 1899, the spectrum is of Class Mb, having H γ and H δ equally bright.
 18953. ρ^2 Eridani.
 18970. k Persei.
 18978. τ^2 Eridani.
 19032. The lines are broad.
 19058. ρ Persei. Variable. Class III. Max. 3.3. Min. 4.1. Period, irregular.
 19091.2. The spectrum is composite. Bu. 1555. P. A. 279^o.7, Dist. 0^o.21, magn. 7.3 and 8.7.
 19107. ρ^3 Eridani. Read 1,10 R, for 1,R.
 19243. The lines are poorly defined.
 19285. V Horologii. Variable. Class III. Max. 7.0. Min. 9.3. Period, irregular.
 19301. The star $+38^{\circ} 639$, ptm. magn. 8.8, precedes 2^o.0, north 8'.5. The spectrum is partly superposed and appears also to be of Class F₀.
 19319. μ Horologii. Read 0,10 R, for 0,R.
 19356. β Persei. Variable. Class V. Max. 2.3. Min. 3.5. Period, 2^d.8673102.
 19373. ι Persei. Parallax, 0^o.110, Proper motion, 1^o.25, 92^o.7. Read 0,10 R, for 0,R.
 19388. Perhaps nearer to Class A than to F.
 19400. θ Hydri.
 19430. Perhaps of Class A₃.
 19476. κ Persei.
 19485. H δ is slightly stronger than normal for Class G₅, which may account for the estimate F8 on second plate.
 19510. X Arietis. Variable. Max. 8.8. Min. 9.5. Class and period, unknown. The nature of the spectrum indicates variability of the Algol type.
 19527. S. D. $-23^{\circ} 40$, ptm. magn. 9.8, and C. D.M. $-22^{\circ} 1072$, ptm. magn. 9.4.
 19550. The observation, F₀, on I 38036, residual 10, was rejected. The spectrum is very faint and indistinct on that plate.
 19564. The star $-62^{\circ} 255$, magn. 9.1, follows 5^o.0, north 1'.2. The spectrum is superposed and is probably also of Class G₅.

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19656. ω Persei. Read 0,10 R, for 0,R.
 19737. U Arietis. Variable. Class II. Max. 7.0. Min. 13.0. Period, 370^d. On photographs taken December 18, 1905, and January 26, 1906, the spectrum is of Class Mb, having H γ and H δ equally bright.
 19787. δ Arietis.
 19832. The lines 4128.1 and 4131.1 are strong.
 19881. The spectrum is very faint on ordinary plates. On photographs taken with the 24-inch Reflector on plates stained with pinacyanol, the end of greater wave length resembles that of H. D. 1546, VX Andromedae, but there is more light having shorter wave length than H β .
 19926,7. g Tauri. The spectrum is composite. On I 37476, the spectrum was classified G0 with the remark that it resembles Class K between H β and H γ , and Class F in the region of H δ .
 20010. α Fornacis.
 20041. The lines are narrow. The spectrum resembles that of η Leonis.
 20088. Perhaps of Class K5.
 20149. Read 0,10-, for 0,R.
 20150. ζ Arietis.
 20180. The star +33° 606, ptm. magn. 9.1, precedes 0^a.4, south 5'.5. The spectrum is superposed and is probably of Class K5.
 20181. The star +15° 452, ptm. magn. 8.5, precedes 0^a.5, north 3'.5. The spectrum appears to be of Class G0 or G5.
 20189. N. G. C. 1261, Dunlop 337. A globular cluster extremely condensed.
 20202. The image is very faint.
 20210. The lines are narrow. 4077.9, 4128.1, and 4131.1 are well marked.
 20218. Perhaps of Class B3.
 20283. The line K is very faint, but 4026.2 is not seen.
 20295. The spectrum is indistinct.
 20309. S.D. -23° 42, ptm. magn. 9.5, and C. DM. -22° 1124, ptm. magn. 9.7.
 20320. ζ Eridani. Read 3,10 R, for 3,R.
 20336. Ha, H β , and H γ are bright. Changes occur in the positions of the bright H β and H γ . See H.A. 28, 105, Remark 174. See also Publ. Ast. Obs. Univ. Michigan II, 39 for a detailed description of this spectrum.
 20362. The spectrum resembles Class G in the distribution of light, but some lines, especially 4227.0, are as intense as in Class K0 or K5.
 20575. S. D. -23° 43, ptm. magn. 9.5, and C. DM. -22° 1142 ptm. magn. 9.5.
 20610. S. D. -23° 44, and C. DM. -22° 1146. This star was considered to be variable by Gould and called R Eridani, but the variability has not been confirmed. Read 5,10 R, for 5,R.
 20630. κ Ceti.
 20646. X Ceti. Variable. Class II. Max. 8.0. Min. 13.0. Period, 176^d.5.
 20670. The observation, F5, on B 3073, residual 10, was rejected. The plate is poor.
 20677. l Persei.
 20720. τ^4 Eridani. Read 5, 10 R, for 5,R.
 20756. τ Arietis.
 20760. The star -44° 1066, ptm. magn. 10.4, precedes 6^a.0, south 0'.6. The superposed spectrum of this star makes the spectrum of H. D. 20760 very indistinct.
 20766. ζ^4 Reticuli. Proper motion 1".48, 65^a.2.
 20794. e Eridani. Parallax, 0".162. Proper motion, 3".05, 75^a.5. Line 4215.7 is very faint and 4227.0 is strong. Other lines of increased intensity are present.
 20807. ζ^2 Reticuli. Proper motion, 1".44, 63^a.6.
 20847. The lines are indistinct. Perhaps of Class A5.
 20867. The observation, F5, on B 45169, residual 10, was rejected. The lines have poor definition on that plate.
 20888. Read 0,10-, for 0,R.
 20902. α Persei. The lines are somewhat narrow. Their intensities resemble those in the spectrum of δ Canis Majoris. See H.A. 28, 187, Remark 178.
 20970. The star +46° 742, ptm. magn. 8.0, precedes 3^a.5, north 2'.3. The spectrum appears to be of Class K.
 20989. Also B.D. -2° 612, ptm. magn. 8.6.
 21024. ι Hydri.
 21102. - Tauri. Variable. Max. 9.9. Min. 10.8. Class and period, unknown.
 21120. o Tauri.
 21145,6. H. D. 21145 precedes H. D. 21146 2^a.4. The spectra are superposed except on each edge.
 21245. On second examination, estimated to be "perhaps of Class A3."
 21280. Y Persei. Variable. Class II. Max. 8.3. Min. 11.0. Period, 257^d.0.
 21291. The lines are narrow. See H.A. 28, 95, Remark 35.
 21350. The spectrum is ill-defined. The observation, F8, on B 45169, residual 15, was rejected. The spectrum is too near the edge of that plate.
 21364. ξ Tauri. The lines are wide. Read 3,10 R, for 3,R.
 21382. Perhaps of Class A5.
 21389. The lines are narrow and the spectrum resembles that of η Leonis. See H.A. 56, 105, Remark 16.
 21423. χ^1 Fornacis.
 21426. The spectrum is intermediate between Classes K5 and Ma.
 21447. Read 2,10-, for 2,R.
 21448. H β is not distinctly seen and is suspected to be bright.
 21552. σ Persei.
 21567. R Persei. Variable. Class II. Max. 7.9. Min. 13.8. Period, 210^d.3. On a photograph taken October 8, 1896, the spectrum is of Class Ma, having the lines H γ and H δ equally bright.
 21574. χ^2 Fornacis.
 21590. The lines 4128.1 and 4131.1 are strong.
 21598. Probably of Class A0.
 21629. Nova Persei, No. 2. See H.A. 56, No. 3, and H.A. 76, 35, for a discussion of the remarkable changes in the spectrum of this star from February 22, 1901, to January 31, 1905. It is there shown how this spectrum, during a period of four years, changed first from one having dark lines to the typical Nova form, then to a gaseous nebula, and finally, to a spectrum resembling that of the Sun.
 21635. χ^3 Fornacis.

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21671. The observation, G₀, on I 37555, residual 10, was rejected. On second examination this was classified G₅.
21686. δ Tauri. Read 1,10 R, for 1, R.
21699. The second observation was made on C 18318.
21733. The spectrum is very faint. Perhaps of Class K₅.
21754. ϵ Tauri. Read 5,10 R, for 5, R.
21760. S. D. $-23^{\circ} 46'$, ptm. magn. 7.1, and C.D.M. $-22^{\circ} 12' 14''$, ptm. magn. 7.0.
21769. The star $+58^{\circ} 6' 18''$, ptm. magn. 8.2, precedes $2^{\circ} 0'$, south $0' 2''$. The spectrum may be of Class G₅. The second plate was C 17034.
- 21771.2. The spectrum is composite.
21790. ν Eridani. Read 1,10 R, for 1, R.
21806. H β is suspected to be bright.
21871. The observation, A₅, on B 12397, residual 10, was rejected. The definition is very poor on that plate.
21890. Perhaps of Class A₂.
21931. The star $+48^{\circ} 9' 50''$, ptm. magn. 9.0, follows $8^{\circ} 8'$, north $2' 0''$. The spectrum appears to be also of Class A.
21933. τ Tauri. The line K is rather strong for this class.
22001. κ Reticuli.
22049. ϵ Eridani. Parallax, $0''.330$. This spectrum shows some peculiarities. The intensities of several lines are greater, the continuous spectrum is more uniform, and the region of shorter wave length is stronger, than in typical spectra of Class K₀.
22053. The edges of the absorption bands resemble bright lines.
22192. ψ Persei. H α and H β are bright. The bright H β is superposed on a very wide dark band. This bright line is suspected to move, being sometimes centrally superposed and again lying nearer to one or the other edge of the dark band. See H.A. 28, 104, Remark 172. Read 0,10 R, for 0, R.
22203. γ^5 Eridani. The lines are rather wide.
22204. Perhaps of Class A₅.
22228. RT Eridani. Variable. Class II. Max. 9.6. Min. <11.0 . Period, unknown. On a photograph taken December 23, 1914, the spectrum is of Class Mc, having H δ 3 times as bright as H γ . The continuous spectrum is very faint except from 4227.0 to H, and several bright lines are seen between H γ and H δ .
22297. The spectrum is indistinct and the class is uncertain.
22298. The lines are wide.
22374. Lines 4128.1 and 4131.1 are strong.
22401. The second observation was made on C 13818.
22428. In H.A. 54, 41, the magnitude of this star combined with H. D. 22441 is 6.82. The latter follows $3^{\circ} 1'$, south $0' 2''$.
22441. See H. D. 22428.
22470. Lines 4128.1, and 4131.1 are strong.
22611. U Camelopardalis. Variable. Class III. Max. 6.9. Min. 9.0. Period, irregular.
22633. The observation, F₅, on B 24616, residual 10, was rejected.
22663. ν Eridani. Line 4227.0 is 0.8 as intense as in the spectrum of α Phoenicis.
22664. The observation, G₀, on B 24616, residual 10, was rejected.
22689. SS Cephei. Variable. Max. 7.7. Min. 9.0. Class and period, unknown. Period may be irregular.
22697. Also B.D. $-1^{\circ} 51' 6''$.
22701. In H.A. 54, 40, for right ascension $33^m 6.6$, read $33^m 9.9$.
22702. The observation, F₂, on I 38300, residual 10, was rejected. The spectrum is very faint and indistinct on that plate.
22724. The spectrum is probably intermediate between Classes K₅ and Ma.
22789. τ Fornacis.
22830. The line K is strong for this class.
22868. This star is suspected to be variable.
22928. δ Persei. The lines are wide.
22951. θ Persei.
23016. Read 1,10-, for 1, R.
23021. Perhaps of Class A₅.
- 23089,90. The spectrum is composite.
23180. θ Persei. On I 37451, H β appears to be bright on the edge of greater wave length. This is a spectroscopic binary for which the H and K lines give constant velocity.
23193. The lines are narrow, and the intensities resemble those in the spectrum of α Cygni.
23199. Perhaps of Class K₅.
23227. δ Fornacis.
23228. The spectrum is suspected to be composite.
23230. ν Persei.
23249. δ Eridani. Parallax, $0''.173$.
23302. H α is bright. Lines 4128.1, 4131.1, and 4481.2 are somewhat more intense than in the typical star of this class.
23319. h Eridani.
23338. q Tauri.
23401. Read 2,10-, for 2, R.
23408. Lines 4128.1, 4131.1, and 4481.2 are somewhat more intense than in the typical star of this class.
23417. S. D. $-23^{\circ} 47'$, ptm. magn. 9.5, and C.D.M. $-22^{\circ} 13' 02''$, ptm. magn. 9.4.
23439. Proper motion, $1''.38$, $154^{\circ} 2'$.
23451. Perhaps of Class A₂.
23466. u Tauri. Read 5,10 R, for 5, R.
23479. The observation, F₂, on I 38300, residual 9, was rejected. On that plate, the spectrum is confused by the superposition of the spectrum of H. R. 23463. The latter star precedes $1^{\circ} 8'$, north $1' 5''$.
23480. H α and H β have been found to be bright by Merrill. The Harvard photographs show H β to be a hazy dark line. Lines 4128.1, 4131.1, and 4481.2 are somewhat more intense than in the typical star of this class.
23567. The observation, F₂, on I 38300, residual 10, was rejected. A second examination shows that the spectrum is certainly between A and F.
23614. π Eridani. Read 5,10 R, for 5, R.
23623. The definition is poor on the second plate, B 3073.
23630. η Tauri, Alcyone. H α is bright.
23675. The focus is poor on the second plate.
23686. S Fornacis. This star is not variable. See H.A. 55, 35.
23738. σ Fornacis.

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23754. τ^6 Eridani. In the intensity of the hydrogen lines, this spectrum resembles Class F2 or F5.
23793. ϵ Tauri. Read $0,10R$, for $0,R$.
23806. The line K is not clearly defined. Perhaps the spectrum is of Class A5.
23817. β Reticuli.
23848. n Persei.
23862. Pleione. The lines $H\alpha$, $H\beta$, and $H\gamma$ are variable in this spectrum. They were bright in 1889 and 1895, dark in 1905 and on later dates.
23878. τ^7 Eridani.
23940. ρ Fornacis.
23943. This star is C.D.M. $-61^\circ 696$, magn. 9.4, and is not contained in the Cape Photographic Durchmusterung.
24051. Perhaps of Class F5.
- 24071.2. f Eridani. Innes 3^h44 . P. A. $206^\circ.7$, Dist. $7''.81$, combined magn. 4.35.
24102. This is C.D.M. $-59^\circ 706$, magn. 9.5, and is not contained in the Cape Photographic Durchmusterung.
24121. This is C. P. D. $-41^\circ 396$, and is not contained in the Cordoba Durchmusterung.
24133. Read $0,10$, for $0,R$.
24160. g Eridani.
- 24185.6. The spectrum is composite.
24220. U Eridani. Variable. Class II. Max. 8.4. Min. 13.5. Period, 239^d . On a photograph taken September 8, 1904, the spectrum is of Class Mb, having the line $H\delta$ 3 times as bright as $H\gamma$.
24244. This star is suspected to be variable between the photographic magnitudes 8.8 and 9.2.
24336. Read $0,10$, for $0,R$.
24346. The lines $H\beta$, $H\gamma$, and $H\delta$ appear to be faint for this class. The spectrum may be composite.
24398. ζ Persei. Line 3805.1 is strong.
24400. X Tauri. Variable. Class III. Max. 6.6. Min. 7.2. Period, irregular.
- 24427.8. H. D. 24427 precedes H. D. 24528 $2''$, north $0'.2$. The line $H\delta$ appears to be double. Both spectra may be alike.
24431. Classified B5 on I 37435 which is too dense to show the lines characteristic of Class Oe5.
24451. The observation G5, on I 37630, residual 10, was rejected. The spectrum is very indistinct on that plate.
24456. Read $1,10$, for $1,R$.
24461. The star $-71^\circ 223$, magn. 9.4, precedes $3^\circ.0$, north $0'.1$. The spectrum is superposed and makes the classification of the spectrum of H. D. 24461 uncertain. Chart plates show that $-71^\circ 223$ is about 0.4 magn. fainter than $-71^\circ 224$.
- 24480.1. The spectrum is composite. Bu. 1927. 9 Camelopardalis. P. A. $45^\circ.7$, Dist. $1''.92$, magn. 5.0 and 8.2.
24512. γ Hydri.
24534. X Persei. Variable. Max. 6.2. Min. 6.9. Class and period, unknown. $H\beta$ is bright and several other bright lines are seen. The dark lines are very faint.
24546. A Persei. The lines are narrow. Read $3,10R$, for $3,R$.
24550. The lines appear to be narrow, and strong lines are present somewhat as in the spectrum of δ Canis Majoris.
- 24554.5. w Eridani. Bu. 1939. P. A. $346^\circ.3$, Dist. $6''.93$, combined magn. 4.68. The spectrum is composite. See H. A. 56, 105, Remark 23. The spectrum of the fainter component may belong to some division of Class B.
24564. The spectrum appears to be intermediate between Classes K5 and Ma.
24587. τ^8 Eridani.
24596. This spectrum may be intermediate between Classes K5 and Ma.
24607. U Horologii. Variable. Class II. Max. 8.5. Min. <11.0 . Period, unknown. On a photograph taken November 5, 1909, the spectrum is of Class Mc, having the line $H\delta$ twice as bright as $H\gamma$.
24626. i Eridani.
24658. RU Eridani. Variable. Class V. Max. 8.9. Min. 9.5. Period, $0^d.6322$.
24665. The observation, G5, on I 38300, residual 10, was rejected. The spectrum is too faint on that plate.
- 24744.5. The spectrum is composite. Innes 3^h51 . Innes states that the Cape Refractor shows a star of magn. 10, $12'' \pm$ at $180^\circ \pm$. The bright component may also be double.
24754. T Eridani. Variable. Class II. Max. 7.4. Min. 11.8. Period, 252^d . On a photograph taken November 12, 1909, the spectrum is of Class Mb, having $H\gamma$ and $H\delta$ equally bright.
24760. ϵ Persei.
24791. Perhaps of Class A5.
24796. S. D. $-23^\circ 49$, ptm. magn. 8.9, and C.D.M. $-22^\circ 1398$, ptm. magn. 9.4.
24820. The star $-10^\circ 790$, ptm. magn. 10.7, follows $1'.5$, south $1'.5$. The spectrum is superposed and makes the spectrum of H. D. 24820 uncertain.
24851. The spectrum is very faint and the class is uncertain.
24888. This appears to be the same star as B. D. $-1^\circ 563$.
24912. ξ Persei. The line 4096.9 is very strong. The line 4649.2 appears to be bright on the edge of shorter wave length. This is a spectroscopic binary in which the oscillations of the H and K line do not follow those of the other lines.
24942. The line K appears faint, and the spectrum may be composite.
24946. This is the south following of a group of three stars. It is assumed to be $+25^\circ 650$, although the declination in the Durchmusterung is $2'.1$ north of its true position.
24993. The lines are narrow, and the spectrum may resemble that of a Cygni.
- 25007.8. The spectrum is composite.
25025. γ Eridani.
25052. Perhaps of Class A2.
25056. The hydrogen lines are as strong as in Class F8. Other strong lines are seen which are probably the same as those in the spectrum of δ Canis Majoris. Classified F8 on I 37406.
25062. The spectrum may belong to Class Ma.
25141. Perhaps of Class B8.
25196. The observation F5 on MC 6673, residual 12, was rejected. The spectrum is indistinct on that plate.
25204. λ Tauri. Variable. Class V. Max. 3.3. Min. 4.2. Period, $3^d.952941$.

25267. ϵ Eridani. Lines 4077.9, 4128.1, 4131.1 are very strong. See H.A. 28, 186, Remark 186.
25329. Proper motion, $2''.19$, $128''.0$.
25348. $H\beta$ is suspected to be bright.
25354. Lines 4128.1 and 4131.1 are strong.
25361. RX Camelopardalis. Variable. Max. 8.6. Min. 9.2. Class and period, unknown.
25408. See page 11 for a description of this spectrum.
25422. δ Reticuli.
25435. Perhaps of Class A2.
25438. Perhaps of Class A3.
25443. The lines are not well defined.
25483. Perhaps nearer to Class F than to Class A.
25487. RW Tauri. Variable. Class V. Max. 7.9. Min. 11.5. Period, $2^d.768904$. The line K is not seen, but neither are the lines of helium.
25490. ν Tauri. Read 0,10 R, for 0,R.
25497. This star precedes $+61^\circ 670$, $3^s.38$, and is south $36''.7$. The Durchmusterung number and magnitude may refer to both stars.
- 25555,6. The spectrum is composite. Bu. 2013. P.A. $257^\circ.3$, Dist. $25''.48$, magn. 6 and 12.5. The visual companion is probably too faint to affect the spectrum, and the brighter star must have a close companion.
25557. Perhaps of Class A3.
25604. A¹ Tauri.
25621. Read 0,10-, for 0,R.
- 25638,9. Bu. 2014. P.A. $333^\circ.6$, Dist. $19''.86$, combined magn. 6.30. Both spectra may be of Class B0.
25642. λ Persei. Read 0,10 R, for 0,R.
25680. A² Tauri.
- 25689,90. H. D. 25689 precedes H. D. 25690 $3^s.35$, north $19''.8$.
25705. γ Reticuli.
25725. V Eridani. Variable. Class III. Max. 8.4. Min. 9.3. Period, irregular. Line 4227.0 is very strong.
25728. ι Reticuli. Read 5,10 R, for 5,R.
25736. Line 4026.2 is very broad.
25763. C.D.M. $-60^\circ 842$, magn. 9.5.

The Frontispiece illustrates the principal types of stellar spectra and shows their most striking characteristics. It was originally published in H.A. 64, No. 4. All of the spectra, except the third, were taken with the 11-inch Draper Telescope at Cambridge. The third spectrum was taken with the 13-inch Boyden Telescope at Arequipa.

The class of spectrum, the name of the star, the date on which the photograph was taken, and the length of exposure, are given below.

B0, ϵ Orionis,	December 23, 1893,	Exposure 68 ^m .
A0, α Canis Majoris,	October 15, 1893,	Exposure 60 ^m .
F0, α Carinae,	August 4, 1896,	Exposure 34 ^m .
F5, α Canis Minoris,	December 7, 1893,	Exposure 60 ^m .
G0, α Aurigae,	December 21, 1899,	Exposure 113 ^m .
K0, α Bootis,	February 5, 1894,	Exposure 49 ^m .
Ma, α Orionis,	January 1, 1894,	Exposure 60 ^m .

The original negatives show a large number of lines of which only the principal ones appear in the reproductions.

The hydrogen lines, $H\beta$ to $H\nu$, are shown in the second spectrum, the line of greatest wave length, $H\beta$, being on the right. The intensity of the calcium line K, which is faint in Class A0, increases to Class K0, where it is stronger than the line H.

END OF VOLUME 91.