

1924AnHar...99

ANNALS

OF

THE ASTRONOMICAL OBSERVATORY OF HARVARD COLLEGE

VOLUME 99

THE HENRY DRAPER CATALOGUE

21^h, 22^h, AND 23^h

BY

ANNIE J. CANNON

CURATOR OF ASTRONOMICAL PHOTOGRAPHS

AND

EDWARD C. PICKERING

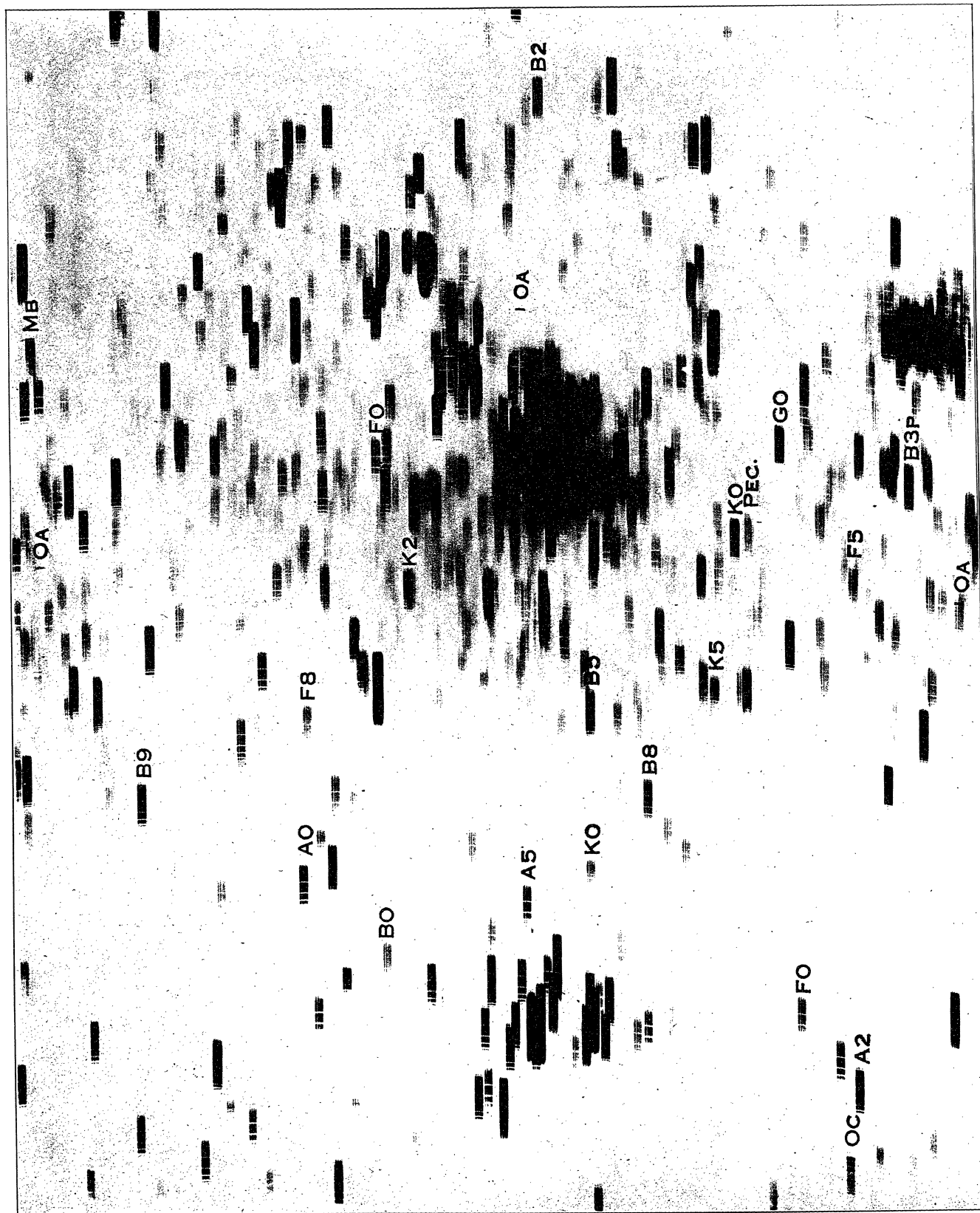
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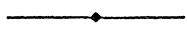
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P R E F A C E

The present volume completes the Henry Draper Catalogue, bringing the total number of stars to 225,300. It should be noted that the last partial page of each of the first eight volumes is repeated at the beginning of the succeeding volume. Attention is also called to the list of errata on the page following the preface in this and the preceding volume. Various discussions of the material included in the nine volumes have appeared during the last two years in Harvard Circulars and elsewhere.

The frontispiece of the present volume is a reproduction of a photograph, B 9431, made on May 13, 1893, with an exposure of 140 minutes, with the Bache telescope at Arequipa. The region photographed is centered near η Carinae, which cannot be distinguished here because of over-exposure. Most of the common spectral classes appear on the photograph, appropriately labelled.

The publication of this last volume of the Henry Draper Catalogue is made possible through the generous gift of Mrs. James R. Jewett, who is a member of the Visiting Committee of the Harvard Observatory.

HARLOW SHAPLEY

Director of the Observatory of Harvard College

CAMBRIDGE, MASSACHUSETTS

April, 1924

ERRATA

H.D.	Column	For	Read
826	Dec.	+71 32	+71 58
38489	DM.	478	479
44402	Ptm.	3.70	3.10
"	Ptg.	3.53	2.93
69027	Dec.	+43 15	+43 35
203682	Dec.	-1 15	+1 15

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 243,000, relating to 225,300 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 attached to the 13-inch Boyden Telescope, and the interval between $H\beta$ and $H\epsilon$ 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 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' ; and 3783.4, H ι' . 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. $-27^\circ 50'$, the continuous spectrum is of Class G₅, but the hydrogen lines are as strong as in Class F₅. In some spectra of Class K₅, or M_a, 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. $-39^\circ 15'$, the lines of low temperature are abnormally intense.

A third peculiarity in stellar spectra is the presence of bright, or emission, lines. About 1000 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. At the International Astronomical Union held in Rome in May, 1922, the letter "e" placed after the class of spectrum, was adopted to represent the presence of emission lines. It seemed best, however, to continue to use the designation Md, for spectra of Class M, having bright lines, and to continue to use the letter "p" after the class, when bright lines occur in spectra of Class B. 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

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 number of the gaseous nebulae belong to this and the following class.

Class Pe. Typical nebulae, N.G.C. 7662, R. A. $23^h 21^m.1$, Dec. $+41^\circ 59'$, 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 4650, 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, 4471.6, 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 4649.3 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 4649.3 is slightly more intense than the helium lines 4026.3 and 4471.6, which are equally strong. The triplet, 4070.0, 4072.5, and 4076.1, is well marked. Lines 4649.3, 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 4471.6 exceeds 4649.3, while 4121.0 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 4649.3 are faint.

Class B3. Typical stars, π^4 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 4070.0, 4072.5, 4076.1, 4089.0, 4116.3 and 4649.3. Helium lines having the greatest intensities are 3819.8, 4009.4, 4026.3, 4143.9, 4388.1, 4471.6, and 4922.1.

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 4121.0, and fainter than 4143.9. Line 4481.3 is 0.7 as intense as 4471.6.

Class B8. Typical stars, β Persei and γ Gruis. The helium lines 4026.3 and 4471.6 are present, together with several lines prominent in the spectra of Class A0. Lines 4471.6 and 4481.3 are approximately equal. Line K is less intense than 4026.3.

Class B9. Typical stars, λ Aquilae and λ Centauri. The spectrum is nearly like that of Class A0, except that 4026.3 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 ϵ , 3970.3, and is nearly as intense as line K. Line 4481.3 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 4481.3, 4226.9, and 4233.8. 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 ϵ , 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 ϵ , and more intense than H δ . Line 4481.3 is no longer the most conspicuous among the solar lines. Lines 4299.4, 4300.7, and 4302.7 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 ϵ , and about 3.0 as intense as H δ . The lines 4305.6, 4308.0, and 4309.5 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 4305.6 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 γ . On plates with small dispersion, the Fraunhofer band G appears to be nearly continuous from 4299.4 to 4315.2. The compound line 4308.0 and 4309.5 is more intense than 4315.2. Line 4226.9 is well marked among the numerous lines, but is not 0.5 as strong as H γ .

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 γ is 1.5 as intense as 4325.9, and 3.0 as intense as the adjacent line, 4337.7, when the dispersion is sufficient to show the two lines separately. The lines 4076.8 to 4077.9, H δ , and 4226.9 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 β to H ϵ , although there is a slight gradual decrease from H γ to H ϵ . 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 γ when combined with 4337.7 is equal to 4325.9; when separated, H γ 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 γ to H ϵ . H γ is about 0.5 as strong as 4325.9. Line 4226.9 is 3.0 as intense as in Class G₀. Bands H and K reach their greatest intensity. Line 4226.9 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 4226.9. Several portions appear brighter than adjacent parts, such as from 4077.9 to H δ , 4215.7 to 4226.9, 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 4226.9, 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 4226.9 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 4315.2 is very faint. Line 4226.9 is the most conspicuous absorption line. The spectrum is faint towards the end of shorter wave length, so that bands H and K are generally barely seen.

Class Mb. Typical stars, ρ Persei and γ Crucis. 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 4226.9 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 4299.4, 4300.7, and the compound line 4305.6, 4308.0 and 4309.5 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 \circ 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, in the Remarks.

Class S. Typical star, π^1 Gruis. The letter S has been adopted by the International Astronomical Union, to designate spectra of this peculiar class. The brightest portion, which is between $H\beta$ and $H\gamma$, is of a complicated nature consisting of bright and dark bands. The strongest dark band is at 4554. In the brighter stars, well marked absorption is present at 4227, H, and K. Several variable stars of long period, such as R Andromedae, have spectra of this class, with the addition of bright hydrogen lines, of which $H\beta$ is the strongest.

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 four classes, which are described below.

Class R₀. Typical star, S.D. $-10^\circ 5057$, ptm. magn. 7.04, R. A. $19^h 17^m.7$, Dec. $-10^\circ 53'$. 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 4226.9, 4233.8, 4236.1, 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 R₀. 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 R₀, 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 R₀, and the continuous spectrum between these bands and $H\gamma$ is not more than 0.5 as intense as in Class R₀.

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

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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. $3^h 57^m.2$, 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. $23^h 41^m.3$, 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. $4^h 40^m.8$, 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.

Class Nc. Typical star, S Cephei, var., R.A. $21^h 36^m.5$, Dec. $+78^{\circ} 10'$. The spectrum contains little, or no, light of shorter wave length than $H\beta$. The most brilliant portion is from 5900 to 6800. All the spectra known to belong to this class have been photographed on plates stained with pinacyanol or dicyanin.

Pec. All spectra which can not be assigned to any known class, considering their principal characteristics. This includes the spectra of novae, and some variable stars.

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 24,594 stars, between $21^h 00^m.0$ and $0^h 00^m.0$, whose spectra have been classified. 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. 200,801. 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 18^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, 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 ;

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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 that 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 μ 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 a manuscript copy of a Catalogue of Stellar Parallaxes which is being prepared by Professor Schlesinger. Annual proper motions of $1''$, or more, are inserted from the list given by Dr. van Maanen in A. P. J. 41, 187.

As stated on page 12, the positions of the stars in this Catalogue are only approximate. For the brighter stars they have been taken from H. A. 50. For the fainter, Durchmusterung positions were reduced by graphical methods for stars north of -52° , and by means of the precession constants of the Cape Photographic Durchmusterung for stars south of -52° .

The positions of fifty stars in this volume were compared with positions in the Preliminary General Catalogue (Boss); of fifty other stars, with the Astronomische Gesellschaft (Strassburg) positions; and of fifty stars from H. A. 93, with the positions in the Greenwich Astrographic Catalogue. The average deviations of the positions in the Henry Draper Catalogue from the positions given by these three catalogues of precision are as follows:

Preliminary General Catalogue	R. A. $\pm 0^m.02$, Dec. $\pm 0'.34$
Strassburg	0.03 0.22
Greenwich	0.04 0.58
Mean	$\pm 0^m.03$ $\pm 0'.38$

TABLE I.
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20^h 59^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	14853	59.9	-34 1	9.4	10.5	G5	I	..	41063b	51	4094	0.2	-64 20	5.80	7.4	Ko	..	0,10	56,146
2	14379	59.9	-41 47	5.56	7.8	Ko	..	R	56,146	52	391	0.2	-86 8	9.0	9.8	G5	2	..	15173b
3	13835	59.9	-46 40	9.1	9.2	Go	5	..	39657b	53	3159	0.3	+46 29	6.30	6.44	A5	..	3,7	56,100
4	13783	59.9	-48 15	9.9	11.6	Ko	I	..	39657b	54	3797	0.3	+43 12	7.83	8.90	K2	I	..	37946i
5	13325	59.9	-49 49	10.3	11.6	K5	I	..	39657b	55	4384	0.3	+35 45	8.7	8.7	Ao	I	..	37912i
6	4634	59.9	-63 21	7.2	8.2	Ko	7	..	19897b	56	..	0.3	+15 30	..	..	G	I	..	6444m
7	922	0.0	+73 54	7.99	8.99	Ko	3	0,2	38936i	57	4541	0.3	+12 20	8.5	9.5	Ko	I	..	38129i
8	1350	0.0	+66 19	8.11	8.17	A2	3	..	37277i	58	5355	0.3	-4 45	7.29	8.47	K5	6	0,3	14193b
9	3381	0.0	+45 24	9.0	9.1	A2	2	..	37946i	59	5568	0.3	-8 47	8.11	8.89	G5	6	..	40599b
10	4257	0.0	+35 5	8.37	8.45	A3	2	..	38894i	60	5522	0.3	-11 26	9.4	9.8	F5	I	..	40621b
11	4312	0.0	+24 22	8.8	9.1	Fo	2	..	34990i	61	6174	0.3	-17 38	4.19	4.19	Ao	..	R	56,100
12	..	0.0	+13 58	..	..	G5	I	..	6444m	62	5920	0.3	-21 25	9.6	10.2	Go	3	..	39402b
13	4420	0.0	+2 10	7.46	7.44	B9	4	..	38045i	63	16398	0.3	-32 44	5.26	6.5	Ko	..	..	28, 215
14	5666	0.0	-6 21	10.0	10.5	F8	2	..	40599b	64	14168	0.3	-40 29	10.8	11.1	Go	I	..	39472b
15	5883	0.0	-15 7	9.6	10.2	Go	3	0,1	39392b	65	14286	0.3	-44 45	10.4	10.6	Go	2	..	39657b
16	6123	0.0	-20 21	9.8	10.2	F8	2	..	39402b	66	13329	0.3	-49 22	8.1	9.2	Fo	6	..	39662b
17	5917	0.0	-21 21	8.6	10.2	K2	5	..	39402b	67	13328	0.3	-49 33	8.4	9.0	A5	6	..	39662b
18	18382	0.0	-30 31	5.71	7.5	Ko	..	0,R	56,146	68	13330	0.3	-49 38	10.0	11.3	F5	2	..	39657b
19	14374	0.0	-37 59	7.41	8.6	Fo	8	..	40939b	69	9990	0.3	-53 14	9.3	10.4	Ko	2	..	39662b
20	14192	0.0	-45 43	8.4	9.5	Ko	6	..	39657b	70	9591	0.3	-56 8	9.3	9.9	F8	3	0,3	39382b
21	898	0.1	+74 32	8.9	9.5	Go	2	..	37266i	71	6529	0.3	-61 3	9.6	10.0	F5	3	..	39382b
22	3685	0.1	+44 58	8.1	8.1	Ao	3	..	37878i	72	2582	0.3	-72 1	9.1	10.1	Ko	2	..	19966b
23	3987	0.1	+41 14	6.33	6.67	F2	5	0,5	37878i	73	2194	0.3	-73 15	9.0	10.1	K2	2	..	19966b
24	4822	0.1	+20 30	8.30	9.30	Ko	2	..	38812i	74	..	0.3	-83 56	..	..	Ko	2	..	21397b
25	4469	0.1	+11 13	8.6	9.1	F8	I	..	38129i	75	1283	0.4	+67 47	7.20	7.08	B5	4	..	37277i
26	5667	0.1	-6 32	9.4	10.4	Ko	I	..	40599b	76	3384	0.4	+45 56	8.1	8.1	B8	4	0,3 R	37946i
27	5483	0.1	-7 24	9.8	10.8	Ko	I	..	40599b	77	4389	0.4	+37 0	8.6	9.6	Ko	I	..	38894i
28	5565	0.1	-8 8	9.4	10.4	Ko	2	..	40599b	78	4610	0.4	+8 47	8.5	8.8	Fo	5	..	14667b
29	5884	0.1	-15 18	7.92	8.92	Ko	7	..	40621b	79	4741	0.4	+6 42	8.9	10.1	K5	I	..	14667b
30	6124	0.1	-19 52	9.6	11.0	K2	I	..	39402b	80	5116	0.4	-2 51	9.4	9.5	A5	3	..	14193b
31	18061	0.1	-31 26	8.1	9.7	Ko	4	..	41063b	81	5670	0.4	-6 5	8.6	9.6	Ko	3	..	40599b
32	14167	0.1	-40 35	10.5	11.0	G5	2	..	39472b	82	5484	0.4	-7 41	9.2	10.2	Ko	3	..	40599b
33	14381	0.1	-41 46	8.5	8.4	F8	6	..	39472b	83	5524	0.4	-11 0	8.2	8.6	F5	7	..	40621b
34	15243	0.1	-42 10	10.0	11.1	G5	I	..	39472b	84	14378	0.4	-37 57	8.8	10.4	Go	4	..	40944b
35	13837	0.1	-46 39	10.2	10.6	F8	I	..	39657b	85	14170	0.4	-39 57	9.63	10.4	G5	3	..	40944b
36	9516	0.1	-55 2	9.9	10.5	Go	I	..	39662b	86	12817	0.4	-51 24	9.4	11.3	K2	I	..	39662b
37	1379	0.1	-78 10	9.1	9.5	F5	3	..	19964b	87	9795	0.4	-57 2	7.9	8.7	Go	6	2,7	39698b
38	2275	0.2	+57 33	8.7	8.7	Ao	I	..	37945i	88	4695	0.5	+18 16	7.48	7.54	A2	5	0,5	38812i
39	3256	0.2	+50 25	8.02	8.02	Ao	4	..	38796i	89	4528	0.5	+14 37	9.6	9.7	A2	3	..	6444m
40	3448	0.2	+49 57	6.45	7.45	Ko	6	0,6 R	38796i	90	4697	0.5	+5 34	6.03	6.53	F8	9	..	14667b
41	4324	0.2	+31 37	8.5	9.5	Ko	I	..	37912i	91	4155	0.5	-0 26	9.2	9.6	F5	2	..	14193b
42	4325	0.2	+31 17	8.1	8.2	A5	2	..	38894i	92	5652	0.5	-9 14	8.7	9.5	G5	3	..	40599b
43	3959	0.2	+27 55	8.8	8.9	A2	2	..	21671i	93	5525	0.5	-11 39	9.4	9.4	Ao	3	..	40621b
44	4450	0.2	+17 4	9.9	10.5	Go	2	..	6444m	94	14382	0.5	-41 0	9.4	10.7	Ko	2	..	39472b
45	4470	0.2	+12 3	7.60	7.94	F2	5	..	38129i	95	13838	0.5	-46 2	10.0	10.4	Ko	3	..	39657b
46	4621	0.2	+7 33	8.1	8.9	G5	4	..	14667b	96	13242	0.5	-50 20	10.2	11.3	Ko	I	..	39657b
47	4657	0.2	+0 20	7.78	8.06	Fo	8	0,6-	14193b	97	9991	0.5	-53 36	9.4	9.9	F8	3	..	39662b
48	4153	0.2	+0 5	8.98	9.12	A5	5	..	14193b	98	9803	0.5	-54 37	6.92	6.9	A3	..	2,5-	56,147
49	16466	0.2	-24 36	9.7	10.3	Go	4	..	39402b	99	7674	0.5	-58 57	9.9	10.7	G5	I	7,1	39382b
50	14568	0.2	-35 2	6.85	7.9	Ko	8	..	40944b	100	3520	0.5	-66 12	7.7	7.8	A2	9	..	20542b

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21^h 0^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.
I	306	0.5	-87 13	8.3	9.5	K5	5	5,3	22980b	51	16473	0.9	-24 0	9.2	10.3	Ao	3	..	39402b
2	725	0.6	+81 25	8.13	8.47	F2	2	..	37294i	52	17112	0.9	-28 4	9.1	10.9	K5	1	..	40637b
3	2540	0.6	+53 34	8.1	8.2	A2	2	..	37945i	53	14386	0.9	-38 27	8.1	9.5	Ko	4	..	40944b
4	3277	0.6	+48 51	8.1	8.1	A	2	..	37946i	54	14115	0.9	-39 40	9.5	10.1	Ko	3	..	40944b
5	3688	0.6	+44 45	8.2	8.5	F2	2	..	37946i	55	13695	0.9	-47 42	10.7	10.6	G5	1	..	39657b
6	4742	0.6	+6 40	9.2	9.5	Fo	1	..	14667b	56	13335	0.9	-49 20	6.84	7.3	Ao	5	..	41843b
7	5671	0.6	-6 33	9.8	10.8	Ko	1	..	40599b	57	2470	1.0	+54 51	7.16	6.97	B2	5	..	37945i
8	14291	0.6	-44 21	10.2	10.7	Go	2	..	39472b	58	3389	1.0	+45 39	8.1	9.1	Ko	2	..	37878i
9	13692	0.6	-47 5	10.7	10.7	Go	2	..	39657b	59	4335	1.0	+38 58	9.3	9.4	A2	3	..	38942i
10	12818	0.6	-51 11	8.7	9.5	G5	4	..	39662b	60	4070	1.0	+26 54	8.6	9.6	Ko	1	..	21671i
11	12819	0.6	-51 37	9.0	9.5	F8	5	..	39662b	61	4462	1.0	+21 29	8.0	9.1	K2	1	..	38812i
12	9520	0.6	-55 8	8.9	9.9	G5	4	5,3	39662b	62	4826	1.0	+20 20	8.10	8.10	Ao	1	..	37940i
13	9517	0.6	-55 31	9.2	9.0	Fo	6	5,5	39662b	63	4454	1.0	+16 29	8.5	9.7	K5	4	0,1	6444m
14	9518	0.6	-55 42	9.8	10.8	Ko	1	..	39662b	64	5674	1.0	-5 57	8.4	8.5	A2	5	..	40599b
15	1483	0.6	-77 20	8.8	9.8	Ko	5	..	19964b	65	5673	1.0	-6 40	9.2	10.4	K5	3	..	40599b
16	626	0.6	-84 43	7.53	7.6	Fo	7	0,9	15173b	66	5887	1.0	-15 32	9.4	10.2	G5	1	..	45421b
17	2859	0.7	+52 53	6.08	7.08	Ko	8	..	37945i	67	5791	1.0	-16 28	9.8	10.4	Go	1	..	45421b
18	4613	0.7	+14 2	10.2	10.6	F5	2	..	6444m	68	6127	1.0	-20 35	6.68	7.9	Ko	9	..	39402b
19	4658	0.7	+0 16	8.73	9.07	F2	4	..	14193b	69	17113	1.0	-28 51	9.4	10.1	G5	2	..	40637b
20	5886	0.7	-15 11	9.8	10.4	Go	3	..	39392b	70	18392	1.0	-29 59	8.53	9.1	Ko	5	2,4	40637b
21	6175	0.7	-17 14	9.2	9.8	Go	2	..	40582b	71	14384	1.0	-41 22	9.4	9.8	F5	5	..	39472b
22	5605	0.7	-22 41	10.3	11.0	F8	2	..	39402b	72	14296	1.0	-44 41	7.71	9.2	K2	5	..	39657b
23	15246	0.7	-27 19	9.5	10.0	G5	3	..	40637b	73	13842	1.0	-46 3	10.0	9.2	F2	5	..	39657b
24	9519	0.7	-55 50	8.9	9.4	A2	5	0,5	39382b	74	13843	1.0	-46 10	9.0	8.3	F5	7	..	39657b
25	4636	0.7	-63 27	9.3	10.4	K2	1	..	19897b	75	13697	1.0	-46 57	10.2	10.7	K2	2	..	39657b
26	4637	0.7	-63 30	9.3	10.4	K2	2	..	19897b	76	4235	1.1	+24 10	8.4	8.9	F8	3	..	38051i
27	3775	0.7	-67 34	9.8	10.4	Go	3	..	20542b	77	4530	1.1	+14 56	6.62	7.04	F5	9	0,10	38129i
28	2542	0.8	+53 57	7.64	7.98	F2	4	..	37945i	78	5675	1.1	-6 35	10.7	11.5	G5	1	..	40599b
29	2541	0.8	+53 34	8.5	8.5	Ao	2	..	37945i	79	5997	1.1	-12 21	8.4	9.4	Ko	6	..	40621b
30	3387	0.8	+46 8	8.7	8.7	Ao	1	..	37946i	80	6178	1.1	-16 56	9.4	9.5	A2	3	..	40582b
31	4233	0.8	+23 12	7.59	8.77	K5	1	..	37940i	81	16698	1.1	-23 37	7.44	8.1	G5	9	..	39402b
32	17553	0.8	-29 34	9.5	10.3	F5	1	..	40637b	82	16474	1.1	-23 59	10.4	10.9	G5	1	..	39402b
33	14865	0.8	-34 35	10.1	10.8	K5	1	..	41063b	83	15231	1.1	-25 3	8.40	8.9	Fo	8	..	39402b
34	14575	0.8	-35 27	8.8	10.0	K2	2	..	40944b	84	15426	1.1	-25 58	7.6	8.3	Ao	8	..	40637b
35	14605	0.8	-36 16	8.5	8.5	Ao	8	..	40944b	85	14116	1.1	-39 5	7.37	8.0	Fo	..	0,7	56,147
36	14114	0.8	-39 18	9.1	9.2	F8	6	..	40944b	86	14385	1.1	-40 55	10.8	10.7	Ao	2	..	39472b
37	12821	0.8	-51 9	9.8	11.0	Ko	1	..	39662b	87	14200	1.1	-45 47	6.68	7.3	A3	10	..	39657b
38	7675	0.8	-59 25	9.4	10.0	Go	3	0,2	39698b	88	9805	1.1	-54 40	10.1	10.2	A3	3	..	39662b
39	3276	0.9	+47 42	8.5	9.6	K2	2	..	38796i	89	6530	1.1	-61 28	8.5	9.4	K2	4	..	19897b
40	3991	0.9	+42 3	8.3	9.7	Ma	1	..	38942i	90	4427	1.2	+39 57	8.7	8.7	Ao	2	..	38942i
41	4401	0.9	+40 37	8.2	8.2	A	4	E	37946i	91	4390	1.2	+35 22	8.6	9.7	K2	1	..	38894i
42	4267	0.9	+35 2	7.42	7.70	Fo	6	..	37948i	92	4046	1.2	+33 6	8.0	8.0	Ao	4	..	37948i
43	4066	0.9	+26 22	8.0	8.1	A2	3	..	37940i	93	3984	1.2	+28 43	8.0	9.1	K2	1	..	21671b
44	4319	0.9	+24 43	8.2	9.3	K2	1	..	37940i	94	4325	1.2	+15 25	8.7	8.8	A2	6	1,4	6444m
45	5672	0.9	-6 33	9.2	9.8	Go	4	..	40599b	95	4159	1.2	-0 37	9.2	9.6	F5	3	..	14193b
46	5486	0.9	-7 5	9.2	10.2	Ko	4	..	40599b	96	5676	1.2	-6 9	9.1	9.4	Fo	4	..	40599b
47	5653	0.9	-9 43	9.8	10.4	Go	2	..	40599b	97	5573	1.2	-8 17	9.8	10.6	G5	1	..	40599b
48	5596	0.9	-10 47	9.2	9.2	Ao	3	..	40599b	98	5932	1.2	-13 54	8.0	9.0	Ko	6	..	40621b
49	5848	0.9	-13 24	8.8	9.8	Ko	3	..	40621b	99	5792	1.2	-15 58	8.2	8.6	F5	6	..	40621b
50	5606	0.9	-22 24	9.4	10.2	F8	5	..	39402b	100	6180	1.2	-17 48	10.3	10.3	Ao	2	..	45421b

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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	6128	<i>m.</i>	<i>o</i>							51	6022	<i>m.</i>	<i>o</i>						
2	15253	I.2	-20 6	9.2	9.4	F5	5	..	39402b	52	15255	I.5	-19 6	8.2	9.0	G5	4	..	40582b
3	14380	I.2	-42 39	8.4	9.8	Ko	4	..	39472b	53	17562	I.5	-27 41	7.09	6.8	A3	..	0,9	56,147
4	13336	I.2	-43 29	10.7	11.5	K5	1	..	39472b	54	14121	I.5	-29 30	9.4	10.6	G5	1	..	40637b
5	3800	I.2	-49 0	10.7	11.3	A3	1	..	39657b	55	14391	I.5	-37 40	8.1	9.9	Ko	4	..	40944b
6	3985	I.3	+43 32	3.92	5.10	K5	..	0,R	3848c	56	14117	I.5	-38 26	10.1	11.0	K5	1	..	40944b
7	4617	I.3	+28 21	8.2	9.2	Ko	1	..	21671i	57	14206	I.5	-39 29	9.1	10.1	G5	3	..	40944b
8	4326	I.3	+19 40	7.9	8.3	F5	4	..	38812i	58	9798	I.5	-45 44	10.0	10.1	Go	3	..	39657b
9	5463	I.3	+16 8	10.6	10.9	F	1	..	6444m	59	7811	I.5	-57 35	9.9	10.5	Go	1	..	39382b
10	5794	I.3	-5 36	9.1	9.4	Fo	3	..	40599b	60	824	I.5	-57 56	9.6	10.6	Ko	1	2,1	39382b
11	5924	I.3	-16 17	9.1	10.1	Ko	2	0,2	40582b	61	4236	I.6	+77 4	8.3	8.3	Ao	4	0,2	38025i
12	5923	I.3	-21 9	9.2	10.0	Fo	4	..	39402b	62	4545	I.6	+24 6	7.9	8.2	Fo	4	..	37940i
13	16700	I.3	-21 20	10.8	11.0	Ao	1	..	39402b	63	4700	I.6	+12 44	8.1	8.7	Go	6	..	38129i
14	15235	I.3	-23 33	6.96	7.4	F5	10	..	39402b	64	4501	I.6	+5 44	9.0	9.1	A2	1	..	14667b
15	15253	I.3	-25 24	4.60	6.9	Ma	..	R	28,215	65	4105	I.6	+3 24	6.65	7.65	Ko	5	..	38045i
16	18074	I.3	-27 48	9.1	10.0	Ko	2	..	40637b	66	5121	I.6	-1 24	8.4	9.6	K5	3	..	14193b
17	13846	I.3	-31 54	8.1	8.8	Go	5	..	41063b	67	5490	I.6	-3 10	9.2	10.3	K2	1	..	14193b
18	13845	I.3	-46 35	10.4	9.8	F8	3	..	39657b	68	5936	I.6	-6 51	9.4	10.4	Ko	2	..	40599b
19	13788	I.3	-46 54	7.23	7.1	Ao	10	..	39657b	69	5935	I.6	-14 19	7.24	8.24	Ko	9	..	40621b
20	9995	I.3	-48 20	9.0	10.4	K5	4	..	39657b	70	5797	I.6	-14 47	10.0	10.8	G5	2	..	39392b
21	9797	I.3	-53 40	9.0	9.7	K2	3	..	39662b	71	6131	I.6	-16 22	7.29	8.29	Ko	7	R	40621b
22	7810	I.3	-57 11	9.6	10.2	Go	2	5,1	39382b	72	15237	I.6	-19 53	8.83	10.2	Ko	3	..	39402b
23	3884	I.3	-58 44	9.0	8.8	Fo	6	0,5	39382b	73	18080	I.6	-25 29	10.6	11.4	G5	2	..	39402b
24	2195	I.3	-65 29	9.9	10.4	F8	3	..	20542b	74	16409	I.6	-31 28	7.22	7.9	F5	9	..	41063b
25	3259	I.3	-72 57	6.22	6.8	Ko	..	0,8	56,147	75	14873	I.6	-32 4	10.1	10.3	G5	2	..	41063b
26	3455	I.4	+50 24	8.2	8.6	F5	4	..	38796i	76	14179	I.6	-34 16	9.7	10.5	F8	2	..	41063b
27	3279	I.4	+50 5	8.07	8.07	Ao	4	R	38796i	77	14389	I.6	-40 48	10.1	11.0	K2	1	..	39472b
28	4274	I.4	+48 39	8.1	8.1	Ao	4	..	37946i	78	13791	I.6	-41 29	11.0	11.1	F8	1	..	39472b
29	4828	I.4	+34 25	7.9	7.9	Ao	5	..	37948i	79	12828	I.6	-48 45	10.4	10.7	F2	3	..	39657b
30	4829	I.4	+20 55	8.1	8.1	Ao	3	..	38812i	80	6531	I.6	-51 45	9.8	10.7	G5	2	..	39662b
31	4746	I.4	+20 33	6.66	6.64	B9	7	..	37940i	81	2527	I.6	-60 56	8.8	9.2	Go	4	..	19897b
32	4161	I.4	+7 7	7.9	8.4	F8	7	..	14667b	82	3458	I.7	+56 41	8.9	9.4	F8	1	..	19317i
33	5678	I.4	-0 30	7.10	8.17	K2	5	..	14193b	83	4456	I.7	+49 52	8.2	9.3	K2	2	..	38796i
34	5679	I.4	-5 57	9.8	10.3	F8	2	..	40599b	84	4329	I.7	+16 53	10.2	11.2	Ko	2	..	6444m
35	5656	I.4	-6 7	9.8	10.4	Go	2	..	40599b	85	4531	I.7	+15 49	9.2	10.2	Ko	2	..	6444m
36	5889	I.4	-9 27	10.3	10.4	A3	1	..	40599b	86	4660	I.7	+14 43	9.6	10.6	Ko	2	..	6444m
37	6129	I.4	-14 54	9.6	10.6	Ko	2	..	39392b	87	4106	I.7	+0 33	9.2	9.7	F8	2	..	14658b
38	6130	I.4	-20 27	8.6	9.4	K2	5	..	39402b	88	5453	I.7	-1 22	7.18	7.52	F2	3	0,8-	38045i
39	5925	I.4	-20 37	10.4	10.2	F8	2	..	39402b	89	5466	I.7	-2 44	9.2	9.7	F8	3	..	14193b
40	14176	I.4	-21 17	8.8	9.4	F8	4	..	39402b	90	5575	I.7	-4 59	9.6	10.4	G5	2	..	40599b
41	15254	I.4	-40 14	9.5	10.7	Ko	2	..	39472b	91	5600	I.7	-7 59	9.8	10.3	F8	1	..	40599b
42	3885	I.4	-42 2	8.7	10.7	Mb	3	..	39472b	92	5851	I.7	-10 17	8.4	9.4	Ko	3	..	40599b
43	2991	I.4	-42 2	8.7	10.7	Mb	3	..	39472b	93	5798	I.7	-13 35	8.6	9.8	K5	3	..	40621b
44	3281	I.5	+52 0	7.38	7.38	Ao	7	..	38796i	94	6181	I.7	-16 9	7.49	7.99	F8	9	..	40621b
45	3167	I.5	+47 28	8.9	8.9	B9	4	..	37946i	95	5928	I.7	-16 49	var.	var.	Mc	4	0,4 R	40621b
46	3693	I.5	+46 45	8.5	9.5	Ko	1	..	37946i	96	5609	I.7	-20 54	8.5	9.6	Ko	6	..	39402b
47	4172	I.5	+44 37	8.8	9.4	Go	2	..	37946i	97	15397	I.7	-22 23	9.4	10.2	Go	2	..	39402b
48	4617	I.5	+37 14	8.4	8.5	A2	3	..	38894i	98	14872	I.7	-33 26	9.7	11.3	K5	1	..	41063b
49	5657	I.5	+13 58	9.2	10.4	K5	1	..	6444m	99	14392	I.7	-34 36	7.7	9.0	Ko	4	..	40944b
50	5850	I.5	-9 13	10.0	10.1	A2	2	..	40599b	100	14393	I.7	-38 14	9.7	11.0	G5	2	..	40944b
		I.5	-13 5	8.6	8.6	Ao	7	..	40621b				-38 42	9.2	9.5	F5	4	..	40944b

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	14209	<i>m.</i> 1.7	° -45 15	9.8	11.3	K5	1	..	39472b	51	4073	<i>m.</i> 2.1	° +26 32	6.23	7.30	K2	6	..	37940i
2	7812	1.7	-58 16	7.8	8.2	Fo	3	5,8	4424ob	52	4463	2.1	+25 15	8.31	9.49	K5	2	..	38051i
3	3802	1.8	+43 17	9.0	10.2	K5	1	..	37946i	53	4613	2.1	+ 5 3	7.31	8.31	Ko	4	..	14667b
4	4407	1.8	+40 46	8.5	8.5	A	2	E	37946i	54	4661	2.1	+ 1 4	8.41	8.69	Fo	6	..	12331b
5	4277	1.8	+34 57	8.4	9.2	G5	2	..	37948i	55	5362	2.1	- 4 0	9.1	9.9	G5	2	..	14193b
6	4331	1.8	+15 36	8.7	9.9	K5	2	..	6444m	56	5580	2.1	- 8 34	8.4	8.5	A2	7	..	40599b
7	5680	1.8	- 5 55	9.8	10.8	Ko	1	..	40599b	57	5862	2.1	-17 51	6.03	6.03	Ao	..	1,7	56,100
8	5492	1.8	- 7 36	9.4	10.5	K2	1	..	40599b	58	5612	2.1	-22 44	7.72	8.1	A5	9	..	39402b
9	5576	1.8	- 8 9	9.0	10.2	K2	3	..	40599b	59	17128	2.1	-28 39	10.4	10.0	F8	2	..	40637b
10	5658	1.8	- 9 10	9.8	10.8	Ko	1	..	40599b	60	14305	2.1	-44 28	10.0	10.9	F2	3	..	39472b
11	5601	1.8	-10 11	9.0	10.0	Ko	2	..	40599b	61	12830	2.1	-51 4	9.1	10.1	Ko	3	..	39662b
12	6182	1.8	-17 36	10.3	11.4	K2	3	..	39392b	62	3157	2.1	-69 50	10.2	11.3	K2	2	..	20542b
13	6024	1.8	-19 29	6.78	7.6	G5	7	5,10	40582b	63	2313	2.2	+59 51	7.41	7.83	F5	5	3,5	38526i
14	5610	1.8	-22 17	10.0	10.5	F5	2	..	39402b	64	2516	2.2	+55 53	8.1	8.1	Ao	4	..	37945i
15	16479	1.8	-24 19	var.	var.	Md	..	R	M	65	3174	2.2	+46 34	8.2	9.4	K5	1	..	37946i
16	15242	1.8	-25 14	9.7	10.1	F8	4	..	39402b	66	4108	2.2	- 1 10	6.51	7.51	Ko	4	..	38045i
17	17565	1.8	-29 37	9.7	10.3	F8	1	..	40637b	67	5583	2.2	- 8 47	9.4	10.5	K2	1	..	40599b
18	14125	1.8	-37 27	8.9	8.7	A2	6	..	40944b	68	5530	2.2	-11 39	8.2	8.6	F5	7	..	40621b
19	9524	1.8	-55 42	8.4	8.4	A5	6	5,7	39382b	69	5853	2.2	-13 43	9.2	9.5	F2	3	..	40621b
20	4096	1.8	-64 26	7.2	7.3	A2	10	..	20542b	70	6133	2.2	-20 26	8.6	9.4	Ko	7	..	39402b
21	4702	1.9	+18 43	8.3	8.3	Ao	2	..	38812i	71	5929	2.2	-21 31	9.2	10.5	F5	2	..	39402b
22	4503	1.9	+ 3 42	8.3	9.4	K2	1	..	12331b	72	5613	2.2	-22 4	9.4	10.2	Ko	2	..	39402b
23	5937	1.9	-14 24	9.2	10.2	Ko	3	..	40621b	73	14213	2.2	-45 25	9.4	10.1	G5	4	..	39472b
24	5893	1.9	-15 3	9.6	10.4	G5	2	..	39392b	74	13704	2.2	-47 27	9.8	11.2	F5	2	..	39657b
25	6184	1.9	-16 53	9.2	9.8	Go	4	5,3	45421b	75	7676	2.2	-59 17	10.2	10.7	F8	1	..	39382b
26	5860	1.9	-18 23	8.2	9.3	K2	3	..	40582b	76	3284	2.3	+47 24	7.7	7.7	Ao	5	..	37946i
27	5611	1.9	-21 55	9.8	11.2	Go	1	..	39402b	77	4049	2.3	+32 51	8.1	9.1	Ko	2	..	37948i
28	14302	1.9	-43 58	9.8	11.3	Ko	2	..	39472b	78	4318	2.3	+30 47	5.86	6.28	F5	7	..	37948i
29	13793	1.9	-48 39	10.4	11.6	Ko	2	..	39657b	79	4619	2.3	+14 3	8.5	9.5	Ko	4	2,1	6444m
30	9799	1.9	-56 55	9.3	10.2	Ko	3	5,2	39382b	80	6186	2.3	-16 51	9.6	10.6	Ko	3	..	39392b
31	6532	1.9	-61 22	8.9	10.2	K5	1	..	19897b	81	5930	2.3	-21 36	9.2	10.5	Ko	2	..	39402b
32	1889	2.0	+62 59	7.26	7.40	A5	4	..	38526i	82	16715	2.3	-23 42	10.4	10.5	Go	2	..	39402b
33	2514	2.0	+55 11	7.71	7.71	Ao	3	..	37945i	83	17569	2.3	-29 23	9.4	9.4	F5	4	..	40637b
34	3260	2.0	+50 45	8.7	9.3	G	1	..	38796i	84	14879	2.3	-33 56	8.1	9.3	Ko	5	..	41063b
35	4341	2.0	+38 56	8.10	8.16	A2	4	..	38942i	85	13705	2.3	-47 0	10.2	10.1	Ao	4	..	39657b
36	3970	2.0	+28 1	8.7	8.7	Ao	2	..	21671i	86	9800	2.3	-57 20	8.9	9.7	Ko	3	0,2	39582b
37	5493	2.0	- 7 35	9.6	10.0	F5	3	..	40599b	87	736	2.4	+78 55	8.3	8.8	F8	3	..	38512i
38	5581	2.0	- 8 38	6.88	6.88	Ao	10	..	40599b	88	1158	2.4	+71 8	8.1	9.1	Ko	1	5,1	38936i
39	16712	2.0	-23 1	11.1	10.5	Go	3	..	39402b	89	3403	2.4	+45 19	8.52	8.52	Ao	3	..	37946i
40	15245	2.0	-25 30	10.9	10.9	Go	2	..	39402b	90	4412	2.4	+40 35	8.5	9.5	K	1	E	37946i
41	15262	2.0	-27 12	10.2	10.6	Go	1	..	40637b	91	4343	2.4	+38 15	5.57	6.75	K5	..	0,6 R	18284c
42	14394	2.0	-38 53	10.5	10.4	F8	2	..	40944b	92	4344	2.4	+38 15	6.28	7.46	K5	..	R	18284c
43	14181	2.0	-40 45	10.1	10.7	Ko	3	..	39472b	93	4337	2.4	+32 3	8.8	9.6	G5	2	..	38894i
44	14303	2.0	-44 22	10.0	11.3	K5	1	..	39472b	94	4465	2.4	+26 8	8.1	9.2	K2	2	..	38051i
45	14210	2.0	-45 32	9.8	11.2	Ko	2	..	39472b	95	4333	2.4	+15 58	9.4	10.4	Ko	3	..	6444m
46	13702	2.0	-47 44	10.7	11.0	G5	1	..	39657b	96	..	2.4	+14 10	..	..	G	1	..	6444m
47	2281	2.1	+58 7	8.1	8.1	Ao	3	..	37945i	97	4504	2.4	+ 3 44	7.9	8.4	F8	5	..	12331b
48	2515	2.1	+56 0	8.1	8.1	Ao	3	..	37945i	98	4163	2.4	- 0 33	6.82	8.17	Mb	6	0,3-	14193b
49	3282	2.1	+48 18	8.9	8.9	A	2	..	37946i	99	5683	2.4	- 5 59	7.58	8.14	Go	8	2,4	40599b
50	4396	2.1	+36 1	9.3	9.3	Ao	2	..	38942i	100	5586	2.4	- 8 15	9.4	9.9	F8	2	..	40599b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

201100

21^h 2^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	5661	2.4	- 8 50	8.5	8.9	F5	6	..	40599b	51	14391	2.6	-43 41	8.5	8.7	Ao	7	..	39472b
2	5606	2.4	-10 36	8.0	8.6	Go	6	..	40599b	52	9999	2.6	-53 26	9.3	9.9	Go	3	..	39662b
3	5911	2.4	-12 35	9.2	9.7	F8	4	..	40621b	53	3409	2.6	-68 52	9.1	10.1	Ko	4	..	20542b
4	5800	2.4	-16 2	7.64	8.82	K5	4	..	40621b	54	4178	2.7	+37 39	7.56	7.98	F5	4	5,3	38942i
5	5865	2.4	-18 47	10.0	10.8	G5	1	..	39392b	55	4285	2.7	+34 31	8.4	8.4	B9	3	3,2	38894i
6	6026	2.4	-19 20	9.2	9.4	A3	4	..	39402b	56	4162	2.7	+33 44	7.56	7.62	A2	5	..	37948i
7	16418	2.4	-32 14	8.5	9.1	Ko	4	..	41063b	57	4164	2.7	+33 17	8.1	8.6	F8	1	..	38894i
8	14129	2.4	-37 39	6.87	7.1	B8	..	I,10	56,147	58	4548	2.7	+12 51	9.9	11.3	Ma	..	..	M
9	14215	2.4	-45 25	8.2	8.9	G5	6	..	39472b	59	4663	2.7	+ 0 47	6.87	8.05	K5	3	..	38045i
10	13708	2.4	-47 10	8.0	9.8	Mb	4	..	39657b	60	5662	2.7	- 9 5	9.2	10.3	K2	3	..	40599b
11	13707	2.4	-47 24	9.8	9.8	Fo	4	..	39657b	61	5663	2.7	- 9 33	9.4	10.4	Ko	1	..	40599b
12	628	2.4	-84 0	9.8	10.8	K	1	..	21397b	62	5940	2.7	-14 43	8.01	8.15	A5	8	..	40621b
13	2546	2.5	+53 16	8.1	8.1	Ao	4	..	37945i	63	5866	2.7	-18 36	10.0	11.0	Ko	1	..	39392b
14	3286	2.5	+47 39	7.50	7.50	Ao	4	..	37946i	64	18409	2.7	-29 56	8.97	9.5	Ko	3	..	40637b
15	3700	2.5	+44 24	8.2	9.2	Ko	2	..	37946i	65	14399	2.7	-41 2	10.3	11.5	K5	1	..	39472b
16	4459	2.5	+16 39	9.2	10.3	K2	3	3,1	6444m	66	14398	2.7	-41 22	10.8	11.1	G5	1	..	39472b
17	4335	2.5	+15 54	9.2	10.2	Ko	2	..	6444m	67	13801	2.7	-48 15	9.6	11.0	Go	4	..	39657b
18	4537	2.5	+15 0	8.4	8.8	F5	6	0,4	6444m	68	13352	2.7	-49 6	11.7	11.0	Go	2	..	39657b
19	4425	2.5	+ 1 38	9.9	9.9	Ao	2	..	12331b	69	12836	2.7	-51 19	7.7	8.6	Go	8	..	39662b
20	5456	2.5	- 2 27	6.77	6.85	A3	8	I,8	14658b	70	9528	2.7	-55 9	8.7	9.9	K2	4	0,3	39662b
21	5473	2.5	- 4 51	8.78	9.28	F8	4	..	14658b	71	R	2.7	-59 21	..	..	K2	1	..	39382b
22	5472	2.5	- 5 2	8.8	9.4	Go	3	..	14658b	72	7677	2.7	-59 49	7.18	7.2	A3	4	0,10	44240b
23	5912	2.5	-11 55	10.3	11.3	Ko	1	..	40621b	73	2091	2.8	+61 26	8.11	9.18	K2	1	..	38526i
24	5913	2.5	-12 5	9.2	10.0	G5	5	..	40621b	74	3701	2.8	+44 52	8.5	8.6	A2	3	..	37946i
25	6136	2.5	-19 49	9.8	10.2	Go	2	..	39402b	75	4305	2.8	+ 2 32	9.2	9.7	F8	2	..	12331b
26	6137	2.5	-20 15	10.0	10.5	Ko	4	..	39402b	76	4664	2.8	+ 1 7	8.29	8.57	Fo	7	5,2	12331b
27	5931	2.5	-21 23	9.6	11.0	K2	2	..	39402b	77	5474	2.8	- 4 54	8.77	8.91	A5	3	..	14658b
28	14593	2.5	-35 27	9.1	10.5	A2	1	..	41063b	78	5498	2.8	- 7 31	10.0	11.0	Ko	1	..	40599b
29	15266	2.5	-42 1	9.6	11.5	K5	1	..	39472b	79	5609	2.8	-10 17	9.0	9.5	F8	3	..	40599b
30	14392	2.5	-43 4	10.7	12.1	Go	1	..	39472b	80	5610	2.8	-10 37	9.6	10.2	Go	2	..	40599b
31	14216	2.5	-45 53	10.4	11.2	G5	1	..	39472b	81	5857	2.8	-13 17	8.2	9.3	K2	6	..	40621b
32	7813	2.5	-58 41	10.0	10.6	Go	1	..	39382b	82	5896	2.8	-15 44	9.2	10.0	G5	1	..	40621b
33	2199	2.5	-73 23	8.6	8.9	Fo	5	..	19966b	83	5932	2.8	-21 21	10.3	11.0	Go	1	..	39402b
34	1496	2.6	+64 37	7.9	7.9	Ao	4	..	37277i	84	5933	2.8	-21 36	5.27	5.27	Ao	..	R	56,147
35	2090	2.6	+61 30	8.5	8.6	A2	3	0,2	38795i	85	16488	2.8	-24 36	7.38	8.6	K2	7	..	40637b
36	2868	2.6	+52 13	8.1	9.2	K2	3	..	38796i	86	14187	2.8	-39 57	10.1	10.7	F8	3	..	39472b
37	3805	2.6	+43 24	8.3	8.7	F5	1	..	37946i	87	14311	2.8	-44 12	10.0	10.4	F2	4	..	39472b
38	4243	2.6	+23 11	8.28	9.35	K2	2	..	38051i	88	4100	2.8	-64 5	8.8	9.2	F5	5	..	20542b
39	4538	2.6	+14 29	8.9	9.9	Ko	3	5,3	36287i	89	1479	2.8	-76 17	9.8	10.4	Go	1	..	19964b
40	4616	2.6	+ 8 54	7.6	8.6	Ko	2	..	38129i	90	1478	2.8	-76 52	9.6	10.1	F8	3	..	19964b
41	5684	2.6	- 6 17	9.8	10.2	F5	2	..	40599b	91	627	2.8	-84 41	8.1	8.9	G5	6	..	21397b
42	5496	2.6	- 7 49	9.8	10.6	G5	1	..	40599b	92	..	2.9	+47 27	Neb.	Neb.	Pe	..	R	76,23
43	5607	2.6	-10 10	9.2	10.2	Ko	2	..	40599b	93	4402	2.9	+35 52	8.2	8.7	F8	2	..	37948i
44	5608	2.6	-10 47	9.8	10.3	F8	1	..	40599b	94	4322	2.9	+30 12	7.51	7.46	B8	4	0,4	21671i
45	6188	2.6	-16 55	10.7	11.8	K2	1	..	39392b	95	4342	2.9	+15 59	8.7	9.5	G5	4	..	6444m
46	6189	2.6	-17 7	8.4	8.5	A2	7	..	40621b	96	4340	2.9	+15 16	6.52	7.52	Ko	8	0,10	38129i
47	6027	2.6	-19 32	10.0	10.5	Ao	2	..	39402b	97	4621	2.9	+13 57	8.4	8.5	A5	4	5,6	38129i
48	15266	2.6	-26 54	8.7	10.0	Ko	3	..	40637b	98	4428	2.9	+ 1 49	9.2	9.5	Fo	2	..	12331b
49	15267	2.6	-27 1	8.1	9.4	K5	4	..	40637b	99	5612	2.9	- 9 51	10.3	10.9	Go	1	..	40599b
50	14397	2.6	-41 11	9.5	10.1	A3	4	..	39472b	100	5914	2.9	-12 25	9.8	10.1	Fo	3	..	40621b

THE HENRY DRAPER CATALOGUE.

201200

21^h2^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	5859	2.9	-13 9	10.3	10.3	Ao	2	..	40621b	51	3292	3.2	+47 15	4.88	6.06	K5	..	3,8R	56,100	
2	5897	2.9	-15 18	8.2	8.3	A2	7	..	40621b	52	4416	3.2	+36 33	7.8	7.8	Ao	4	2,3	38894i	
3	5614	2.9	-22 4	7.8	8.3	Go	8	..	39402b	53	4340	3.2	+32 6	7.68	7.66	B9	4	..	37948i	
4	18410	2.9	-30 27	8.7	9.5	F5	3	..	41063b	54	4544	3.2	+14 16	6.86	6.69	B3	8	5,10	38129i	
5	14128	2.9	-39 14	8.8	10.4	K5	2	..	40944b	55	4550	3.2	+12 46	8.7	9.2	F8	4	..	38129i	
6	14131	2.9	-39 22	10.3	10.7	K5	1	..	40944b	56	4549	3.2	+12 17	8.7	9.2	F8	2	..	38129i	
7	15271	2.9	-42 38	10.0	11.1	Ko	2	..	39472b	57	4618	3.2	+ 8 58	7.6	8.0	F5	4	..	38129i	
8	12837	2.9	-51 8	9.8	11.0	Go	1	..	39662b	58	5588	3.2	- 8 38	8.6	9.0	F5	7	..	40599b	
9	3522	2.9	-66 2	10.1	10.6	F8	2	..	20542b	59	5665	3.2	- 9 6	10.0	10.0	Ao	3	..	40599b	
10	2834	2.9	-70 34	8.6	9.8	K5	4	..	19966b	60	5803	3.2	-16 45	10.0	10.4	F5	4	..	39392b	
11	1485	2.9	-77 15	9.6	10.1	F8	2	..	19964b	61	6028	3.2	-19 7	8.4	9.4	Ko	7	..	39392b	
12	4440	3.0	+39 55	8.4	9.8	Ma	3	..	16270m	62	15275	3.2	-27 31	7.71	8.8	K2	6	..	40637b	
13	4438	3.0	+39 39	8.8	8.9	A3	3	..	38942i	63	16426	3.2	-32 26	7.6	8.8	Ko	6	..	41063b	
14	4249	3.0	+24 4	8.8	8.9	A2	2	..	38051i	64	14314	3.2	-44 52	10.0	11.2	Fo	2	..	39472b	
15	4248	3.0	+23 37	8.47	9.65	K5	1	..	38051i	65	13357	3.2	-49 15	9.2	9.5	A2	6	..	39662b	
16	4313	3.0	+23 1	8.2	9.4	K5	1	..	38051i	66	9810	3.2	-54 7	..	11.3	R5	2	..	39662b	
17	4543	3.0	+14 59	10.6	10.9	F	1	..	6444m	67	2092	3.3	+61 47	7.58	7.58	Ao	4	..	37277i	
18	4727	3.0	+10 10	8.92	9.34	F5	1	..	14667b	68	2551	3.3	+53 37	8.5	9.1	Go	2	..	19317i	
19	4752	3.0	+ 7 2	8.1	8.9	G5	4	..	14667b	69	3294	3.3	+47 47	7.50	7.50	Ao	5	..	37946i	
20	4707	3.0	+ 5 15	8.31	9.31	Ko	2	..	14667b	70	3410	3.3	+45 17	..	7.32	7.88	Go	4	..	37946i
21	4615	3.0	+ 4 46	6.68	6.74	A2	8	..	14667b	71	..	3.3	+45 17	..	..	Ao	..	..	..
22	4111	3.0	- 1 24	6.79	6.93	A5	4	0,4	22768b	72	4004	3.3	+41 50	8.67	..	Pe	..	0,3R	76,23	
23	5460	3.0	- 2 7	9.4	10.0	Go	1	..	14658b	73	4353	3.3	+39 6	8.5	8.6	A2	3	..	38942i	
24	5936	3.0	-20 55	10.0	11.0	Ko	2	..	39402b	74	4180	3.3	+37 55	7.7	7.7	Ao	4	..	38894i	
25	16725	3.0	-23 20	9.4	10.0	G5	4	..	39402b	75	5499	3.3	- 7 11	9.8	10.3	F8	2	..	40599b	
26	17136	3.0	-28 53	6.95	7.7	G5	8	..	40637b	76	5860	3.3	-13 44	9.1	10.3	K5	1	..	40621b	
27	18087	3.0	-31 16	8.1	8.8	F5	5	..	41063b	77	15445	3.3	-26 1	9.7	10.9	Ko	2	..	39402b	
28	14403	3.0	-38 20	7.04	8.2	G5	8	..	40944b	78	9531	3.3	-55 13	10.2	11.3	K2	1	..	39662b	
29	7815	3.0	-58 17	9.6	10.2	Go	2	0,2	39382b	79	3527	3.3	-66 41	8.7	9.5	G5	5	..	20542b	
30	1000	3.0	-80 45	7.40	7.5	B9	9	..	21397b	80	3264	3.4	+51 1	7.54	7.52	B9	6	..	38796i	
31	3291	3.1	+47 59	9.0	9.0	A	2	..	37946i	81	4710	3.4	+18 26	8.6	9.1	F8	2	..	38812i	
32	3806	3.1	+43 23	8.5	8.5	Ao	3	0,3	37946i	82	4460	3.4	+16 42	9.2	9.8	Go	4	R	6444m	
33	5477	3.1	- 5 38	9.2	10.2	Ko	3	..	40599b	83	4546	3.4	+14 52	8.5	9.5	Ko	4	2,1	6444m	
34	5685	3.1	- 6 9	10.0	10.6	Go	1	..	40599b	84	5501	3.4	- 7 23	7.8	8.8	Ko	6	..	40599b	
35	5942	3.1	-14 14	8.8	9.8	Ko	6	..	40621b	85	6029	3.4	-19 1	9.6	10.0	Go	5	..	39392b	
36	6191	3.1	-17 41	9.6	9.9	Fo	5	..	39392b	86	16495	3.4	-24 2	7.08	8.2	Ko	9	..	39402b	
37	6138	3.1	-20 23	10.0	11.2	Ko	2	..	39402b	87	15261	3.4	-25 9	11.1	10.9	Ao	3	..	39402b	
38	5938	3.1	-21 1	10.3	11.2	Ao	2	..	39402b	88	15260	3.4	-25 11	9.4	9.7	G5	4	..	39402b	
39	5615	3.1	-22 21	9.6	10.2	Go	2	..	39402b	89	17138	3.4	-28 31	9.1	8.9	A5	5	..	40637b	
40	15272	3.1	-27 24	8.9	9.2	F2	5	..	40637b	90	17586	3.4	-29 40	10.2	10.0	G5	1	..	40637b	
41	17581	3.1	-29 29	9.7	10.9	Ma	..	..	M	91	14602	3.4	-35 43	8.8	9.9	Go	3	..	40944b
42	14135	3.1	-37 6	6.55	7.4	Go	..	2,10	56,147	92	850	3.4	-82 37	8.14	8.1	A2	7	..	21397b	
43	14191	3.1	-40 22	10.3	10.7	F5	2	..	39472b	93	2552	3.5	+53 49	7.94	8.36	F5	3	..	37945i	
44	14403	3.1	-41 24	11.0	11.5	Ao	1	..	39472b	94	4471	3.5	+21 22	7.54	7.88	F2	2	..	37940i	
45	14313	3.1	-44 37	6.64	7.8	Ko	9	..	39657b	95	4626	3.5	+14 8	10.6	11.4	G5	1	..	6444m	
46	13855	3.1	-46 34	8.0	8.7	Ao	6	..	39657b	96	4624	3.5	+13 57	10.2	10.8	G	1	..	6444m	
47	9530	3.1	-54 59	7.18	7.3	Go	10	5,3	39662b	97	4552	3.5	+12 20	7.9	8.9	Ko	5	..	38129i	
48	3524	3.1	-66 45	10.1	10.6	F8	3	..	20542b	98	4754	3.5	+ 6 36	6.38	7.56	K5	7	..	14667b	
49	1159	3.2	+70 55	7.8	7.8	Ao	4	..	38025i	99	5686	3.5	- 6 7	10.3	10.9	Go	1	..	40599b	
50	3288	3.2	+48 14	8.7	8.7	A	2	..	37946i	100	5589	3.5	- 8 45	9.8	9.9	A3	2	..	40599b	

ANNALS OF HARVARD COLLEGE OBSERVATORY.

201300

21^h3^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	6140	3.5	-20 36	6.88	7.9	Ko	..	5,10	56,147	51	5945	3.9	-14 11	9.1	10.2	K2	1	..	40621b
2	15262	3.5	-25 40	10.9	11.2	Go	2	..	39402b	52	5940	3.9	-20 57	6.15	6.7	Fo	..	..	56,147
3	14224	3.5	-45 17	9.0	10.9	Ko	2	..	39472b	53	5941	3.9	-21 27	8.4	9.4	Ko	5	..	39402b
4	9804	3.5	-57 42	9.8	10.8	Ko	1	2,1	39382b	54	16732	3.9	-23 2	9.1	10.2	Ko	2	..	39402b
5	..	3.6	+82 40	var.	var.	Md	..	R	M	55	14403	3.9	-43 33	9.6	11.3	Go	3	..	39472b
6	3710	3.6	+44 16	7.42	7.40	B9	4	..	37878i	56	902	4.0	+75 8	8.42	8.92	F8	3	..	38025i
7	4553	3.6	+13 1	8.3	9.3	Ko	5	2,3	6444m	57	1162	4.0	+70 25	8.5	8.5	Ao	3	2,2	38573i
8	4755	3.6	+6 57	9.2	9.8	G	1	..	14667b	58	3465	4.0	+49 23	7.30	7.38	A3	5	..	37946i
9	5463	3.6	-1 54	9.4	9.9	F8	1	..	14658b	59	3191	4.0	+46 53	7.8	7.8	Ao	5	..	37878i
10	5688	3.6	-6 7	9.8	10.6	G5	1	..	40599b	60	4345	4.0	+31 43	8.7	8.7	Ao	1	..	38894i
11	5689	3.6	-6 44	7.8	7.9	A3	8	..	40599b	61	4253	4.0	+23 43	7.94	8.00	A2	5	..	38051i
12	5533	3.6	-11 13	8.1	9.1	Ko	7	..	40621b	62	4346	4.0	+15 25	9.2	9.7	F8	3	2,2	6444m
13	5915	3.6	-12 43	9.6	10.0	F5	3	..	40621b	63	4347	4.0	+15 18	8.54	8.96	F5	5	..	6444m
14	5804	3.6	-16 33	8.6	9.0	F5	5	..	40621b	64	4759	4.0	+6 19	8.3	8.4	A5	4	..	14667b
15	6192	3.6	-17 48	10.4	11.0	Go	1	..	39392b	65	4758	4.0	+6 15	8.7	9.7	Ko	2	..	14667b
16	14628	3.6	-36 0	10.1	9.3	Ao	5	..	40944b	66	5502	4.0	-7 47	10.0	10.5	F8	2	..	40599b
17	14402	3.6	-43 47	6.90	6.5	B9	..	..	56,147	67	5870	4.0	-18 48	10.3	10.9	Go	2	..	39392b
18	13805	3.6	-48 41	8.1	10.1	G5	6	..	39657b	68	18097	4.0	-30 54	8.7	10.6	K2	1	..	41063b
19	2554	3.7	+53 33	7.9	8.2	Fo	3	..	19317i	69	14406	4.0	-41 40	9.1	10.1	F8	3	..	39472b
20	3297	3.7	+47 20	7.12	7.12	Ao	4	..	37878i	70	13809	4.0	-48 34	8.4	8.9	A3	7	..	39657b
21	4462	3.7	+16 53	9.4	9.9	F8	3	..	6444m	71	2835	4.0	-70 32	5.08	6.9	Ma	..	R	56,147
22	5690	3.7	-5 59	6.77	7.77	Ko	9	2,8	40599b	72	1482	4.0	-75 59	9.4	9.5	A3	4	..	19964b
23	5939	3.7	-20 53	9.2	10.0	F5	4	..	39402b	73	770	4.1	+75 13	8.07	8.35	Fo	4	..	38025i
24	15263	3.7	-25 10	11.4	11.2	F8	1	..	39402b	74	4348	4.1	+15 23	8.9	9.9	Ko	3	..	6444m
25	13806	3.7	-48 27	10.4	11.3	F5	1	..	39657b	75	4555	4.1	+12 58	8.9	9.3	F5	3	..	38129i
26	13362	3.7	-49 47	9.8	11.0	G5	2	..	39657b	76	4630	4.1	+7 13	7.40	7.46	A2	7	..	14667b
27	10003	3.7	-53 32	9.9	10.5	Go	1	..	39662b	77	4173	4.1	-0 38	6.52	6.60	A3	6	1,4	38045i
28	10004	3.7	-53 53	9.3	10.4	K2	2	..	39662b	78	5372	4.1	-4 18	7.8	8.4	Go	7	..	14658b
29	3416	3.8	+45 32	8.9	8.9	Ao	3	..	37946i	79	5483	4.1	-5 21	8.6	8.6	Ao	7	0,4	40599b
30	4474	3.8	+21 39	9.0	9.0	Ao	1	..	38051i	80	5668	4.1	-9 33	9.2	10.2	Ko	2	..	40599b
31	4715	3.8	+5 57	9.4	9.9	F8	1	..	14667b	81	5538	4.1	-11 47	4.52	5.52	Ko	..	0,9R	56,100
32	4431	3.8	+1 23	7.06	7.04	B9	5	..	38045i	82	5946	4.1	-14 31	7.51	8.58	K2	7	..	40621b
33	5667	3.8	-9 0	9.2	10.2	Ko	3	..	40599b	83	5947	4.1	-14 35	9.4	10.2	G5	2	..	39392b
34	5534	3.8	-11 10	8.6	9.0	F5	6	..	40621b	84	5809	4.1	-16 31	10.3	10.9	Go	3	..	39392b
35	6193	3.8	-17 1	6.88	7.95	K2	8	..	40621b	85	16499	4.1	-24 48	8.20	8.3	G5	7	..	40637b
36	6194	3.8	-17 23	10.7	11.2	F8	1	..	39392b	86	15269	4.1	-25 18	10.4	10.0	Ao	5	..	39402b
37	6032	3.8	-18 49	9.2	10.0	G5	5	..	39392b	87	15268	4.1	-25 21	10.2	9.7	Go	4	..	39402b
38	..	3.8	-18 54	..	..	Go	1	..	39392b	88	15454	4.1	-25 59	9.7	10.0	F8	5	..	39402b
39	14404	3.8	-43 17	10.7	11.6	Go	2	..	39472b	89	15453	4.1	-26 34	8.3	9.1	Ko	6	0,5	39402b
40	14319	3.8	-44 5	9.8	10.7	Ko	2	..	39472b	90	18415	4.1	-30 8	6.60	8.2	K5	8	..	41063b
41	13363	3.8	-49 52	10.2	11.3	Go	1	..	39657b	91	18098	4.1	-31 53	7.6	8.8	G5	6	..	41063b
42	2201	3.8	-73 42	9.3	9.8	F8	2	..	19966b	92	15415	4.1	-33 46	9.9	10.3	F8	1	..	41063b
43	1892	3.9	+62 31	7.06	8.24	K5	5	..	37277i	93	14891	4.1	-33 56	10.1	11.1	K2	1	..	41063b
44	2226	3.9	+59 1	7.30	7.30	Ao	5	..	37945i	94	6533	4.1	-61 40	8.8	9.5	G5	2	..	19897b
45	4060	3.9	+33 0	7.76	7.52	Bo	5	..	37948i	95	3267	4.2	+51 6	8.1	9.3	K5	1	..	38796i
46	3996	3.9	+28 14	8.6	9.6	Ko	2	..	21671b	96	3192	4.2	+46 54	8.9	8.9	Ao	2	..	37946i
47	4463	3.9	+16 44	9.2	10.2	Ko	3	..	6444m	97	3711	4.2	+44 34	7.50	7.50	Ao	4	..	37878i
48	4731	3.9	+9 24	7.9	8.9	Ko	1	..	14667b	98	4189	4.2	+38 7	7.9	8.2	F2	5	3,2	38942i
49	4757	3.9	+7 1	8.7	9.9	K5	1	..	14667b	99	4294	4.2	+34 56	8.2	8.2	Ao	2	..	37948i
50	5371	3.9	-4 12	8.0	9.1	K2	3	..	14658b	100	4350	4.2	+15 48	9.6	10.4	G5	2	..	6444m

THE HENRY DRAPER CATALOGUE.

201400

21^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.
1	4349	4.2	+15 16	9.44	10.44	Ko	1	..	6444m	51	11828	4.5	-52 34	8.8	10.4	Ko	3	..	39662b
2	5594	4.2	- 8 31	10.0	10.6	Go	1	..	40599b	52	7816	4.5	-58 2	9.1	9.1	Fo	5	0,4	39698b
3	5615	4.2	-10 5	8.4	9.5	K2	4	..	40599b	53	6205	4.5	-62 22	9.8	10.2	F5	1	..	19897b
4	5918	4.2	-12 0	9.2	9.8	Go	2	..	40621b	54	3160	4.5	-69 20	9.8	10.4	Go	3	..	20542b
5	5948	4.2	-14 24	9.8	9.9	A5	3	5,2	39392b	55	3422	4.6	+46 2	8.8	9.6	G5	2	..	37946i
6	6035	4.2	-18 58	9.4	10.0	F8	4	..	39392b	56	3815	4.6	+43 21	7.9	8.5	Go	3	..	37946i
7	16737	4.2	-22 56	8.2	8.7	F8	7	..	39402b	57	4176	4.6	+33 13	7.96	7.96	Ao	4	..	37948i
8	15455	4.2	-26 27	9.4	10.0	Ko	4	2,3	39402b	58	4465	4.6	+16 28	8.7	9.7	Ko	4	0,1	6444m
9	15419	4.2	-33 15	7.23	7.8	G5	8	..	41063b	59	5616	4.6	-10 17	10.0	10.8	G5	1	..	40599b
10	14200	4.2	-40 46	8.9	10.1	Ko	4	..	39472b	60	5920	4.6	-11 56	9.6	10.8	K5	1	..	40621b
11	9807	4.2	-56 56	7.0	7.7	Ko	2	..	44240b	61	5949	4.6	-14 41	8.41	8.75	F2	6	..	40621b
12	3778	4.2	-67 20	9.9	11.0	K2	1	..	20542b	62	5810	4.6	-16 6	7.38	7.66	Fo	8	..	40621b
13	1484	4.2	-76 38	9.1	9.5	F5	5	..	19964b	63	5871	4.6	-18 24	10.3	10.8	F8	2	..	39392b
14	711	4.2	-83 37	7.35	7.9	Fo	8	..	21397b	64	14409	4.6	-40 56	8.6	8.9	A5	5	..	39472b
15	2476	4.3	+54 36	7.9	8.9	Ko	2	..	37945i	65	15285	4.6	-42 38	10.0	10.4	Go	2	..	39472b
16	3289	4.3	+48 27	8.1	9.1	Ko	3	..	37946i	66	14410	4.6	-43 3	9.4	10.4	F5	4	..	39472b
17	..	4.3	+15 38	var.	var.	Md	..	R	M	67	4104	4.6	-64 32	9.1	10.1	Ko	4	..	20542b
18	5863	4.3	-13 2	9.2	10.0	G5	4	..	40621b	68	1692	4.6	-75 43	9.7	10.7	Ko	2	..	19964b
19	6195	4.3	-17 39	9.4	9.9	F8	5	..	39392b	69	4014	4.7	+41 11	8.0	8.0	B9	4	0,2	38942i
20	5944	4.3	-21 3	10.4	11.0	Go	1	..	39402b	70	4087	4.7	+26 36	7.8	8.3	F8	5	..	38051i
21	5619	4.3	-21 59	10.3	11.0	Go	1	..	39402b	71	5693	4.7	- 5 54	10.0	10.6	Go	1	..	40599b
22	15271	4.3	-25 14	8.7	8.9	Go	5	..	40637b	72	5873	4.7	-18 16	10.0	10.8	G5	2	..	39392b
23	15459	4.3	-26 38	9.7	10.9	K2	1	..	40637b	73	6038	4.7	-18 52	8.8	9.6	G5	6	..	39392b
24	14203	4.3	-40 23	7.5	8.9	G5	7	..	39472b	74	R	4.7	-22 53	7.28	8.4	G5	9	..	39402b
25	14202	4.3	-40 30	9.7	9.6	F8	4	..	39472b	75	16506	4.7	-24 11	9.7	10.0	Go	4	..	39402b
26	13718	4.3	-47 45	9.8	10.4	F5	4	..	39657b	76	13367	4.7	-49 11	8.6	9.5	K2	5	..	39657b
27	11827	4.3	-52 45	7.0	7.8	F8	9	..	39662b	77	2594	4.7	-71 16	8.2	8.6	F5	8	..	19966b
28	7678	4.3	-59 40	9.0	9.8	G5	4	..	39382b	78	1697	4.8	+63 23	8.0	8.1	Ao	4	..	37277i
29	2320	4.4	+59 29	7.52	7.52	Ao	4	..	37945i	79	4466	4.8	+16 57	9.6	10.1	F8	2	..	6444m
30	2227	4.4	+58 36	7.8	8.2	F5	2	..	37945i	80	5694	4.8	- 6 29	9.2	9.5	Fo	5	..	40599b
31	2998	4.4	+51 11	7.11	7.11	Ao	7	..	38796i	81	6196	4.8	-17 21	8.4	8.7	F2	8	..	39392b
32	4420	4.4	+40 31	8.8	9.2	F5	1	..	38942i	82	17607	4.8	-29 2	8.9	9.5	G5	3	..	40637b
33	4324	4.4	+29 48	5.57	5.57	Ao	9	..	37948i	83	18423	4.8	-30 24	9.4	10.3	Ao	2	..	41063b
34	4763	4.4	+ 6 54	9.2	9.7	F8	1	..	14667b	84	14237	4.8	-45 29	var.	var.	A5	2	R	39472b
35	4620	4.4	+ 4 37	7.9	9.1	K5	2	..	14667b	85	7817	4.8	-58 41	10.2	10.7	F8	1	..	39382b
36	4510	4.4	+ 3 45	8.5	9.6	K2	2	..	12331b	86	7452	4.8	-60 27	7.8	7.8	Fo	8	..	19897b
37	5485	4.4	- 5 30	9.8	10.8	Ko	1	..	40599b	87	712	4.8	-83 42	10.0	10.0	Ao	4	..	21397b
38	5919	4.4	-12 21	9.6	10.8	K5	1	..	40621b	88	772	4.9	+75 26	8.87	9.87	Ko	2	..	38936i
39	5945	4.4	-21 16	9.8	10.5	F8	2	..	39402b	89	1180	4.9	+68 52	9.0	9.1	A2	2	..	38573i
40	18101	4.4	-31 12	9.2	10.0	Go	2	..	41063b	90	4329	4.9	+29 58	8.0	8.6	Go	2	..	38894i
41	14205	4.4	-40 18	10.3	10.4	Ko	3	..	39472b	91	4435	4.9	+ 1 24	9.2	10.4	K5	1	..	12331b
42	14231	4.4	-44 58	9.1	11.6	F8	1	..	39472b	92	5617	4.9	-10 21	8.7	9.3	Go	3	..	40599b
43	9813	4.4	-54 10	9.4	10.4	Ko	2	..	39662b	93	5921	4.9	-12 41	9.2	9.8	Go	4	..	40621b
44	4447	4.5	+39 16	8.1	8.6	F8	3	..	38942i	94	5875	4.9	-18 44	8.0	9.0	Ko	8	..	39392b
45	4192	4.5	+38 5	9.3	9.3	A	1	..	38942i	95	16744	4.9	-22 57	10.2	10.5	G5	2	..	39402b
46	4672	4.5	+ 1 10	8.31	8.87	Go	6	..	12331b	96	16743	4.9	-23 43	8.0	8.1	Go	8	..	39402b
47	15276	4.5	-25 27	10.6	10.9	Ko	1	..	39402b	97	14152	4.9	-37 41	8.8	9.3	Fo	4	..	40944b
48	17148	4.5	-28 54	7.86	8.9	K2	5	..	40637b	98	14412	4.9	-41 24	10.3	11.3	G5	2	..	39472b
49	14612	4.5	-35 13	8.5	9.6	Go	3	..	41063b	99	13721	4.9	-47 1	10.7	11.3	G5	1	..	39657b
50	14234	4.5	-45 8	10.7	11.6	Ko	1	..	39472b	100	9808	4.9	-57 37	8.6	8.6	A2	6	..	39382b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

201500

21^h4^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	1971	<i>m.</i> 4.9	<i>o</i> -74 7	8.5	9.5	Ko	3	..	19964b	51	6199	<i>m.</i> 5.2	<i>o</i> -17 1	10.9	11.4	F8	2	..	39392b
2	1970	4.9	-74 49	9.21	10.1	G5	2	..	19964b	52	5621	5.2	-22 5	10.3	10.2	A2	3	..	39402b
3	976	5.0	+72 47	8.5	9.3	G5	3	..	38936i	53	15284	5.2	-25 14	8.1	9.1	Ko	6	..	40637b
4	3817	5.0	+43 26	7.9	7.9	Ao	3	..	37878i	54	15290	5.2	-42 37	10.0	10.4	A2	2	..	39472b
5	4069	5.0	+32 22	8.12	9.12	Ko	2	..	37948i	55	13723	5.2	-47 28	10.0	11.2	G5	2	..	39657b
6	4630	5.0	+13 44	10.2	10.8	Go	2	..	6444m	56	13266	5.2	-50 8	9.4	10.7	F8	2	..	39657b
7	4311	5.0	+ 2 32	6.47	6.81	F2	7	..	38045i	57	7819	5.2	-58 46	8.9	10.0	Ko	3	5,3	39382b
8	4674	5.0	+ 0 54	9.2	9.3	A3	4	..	12331b	58	7679	5.2	-59 44	9.2	10.3	Ko	2	..	39382b
9	5671	5.0	- 9 15	9.6	10.1	F8	3	..	40599b	59	2589	5.2	-71 58	9.5	9.9	F5	2	..	19966b
10	5876	5.0	-18 40	10.0	11.0	Ko	2	..	39392b	60	4424	5.3	+41 11	8.0	9.1	K2	1	..	37946i
11	6039	5.0	-19 40	9.4	10.2	G5	3	..	39392b	61	4362	5.3	+38 19	7.8	8.9	K2	2	..	38894i
12	15467	5.0	-26 12	11.6	10.9	F8	2	..	39402b	62	4198	5.3	+37 23	8.8	8.9	A2	2	..	38942i
13	14617	5.0	-35 24	8.1	9.9	Go	4	..	41063b	63	4336	5.3	+24 23	8.1	8.2	A5	3	..	38051i
14	14645	5.0	-36 19	9.1	9.9	G5	4	..	40944b	64	4483	5.3	+21 32	8.8	8.9	A2	1	..	38051i
15	14240	5.0	-45 0	8.60	9.5	Ko	4	..	39657b	65	5378	5.3	- 4 19	9.0	9.5	F8	2	..	14658b
16	14239	5.0	-45 21	10.2	12.2	K5	1	..	39472b	66	5697	5.3	- 6 0	10.0	10.8	G5	1	..	40599b
17	13814	5.0	-48 4	10.2	11.3	Go	1	..	39657b	67	5674	5.3	- 9 46	6.51	7.51	Ko	10	..	40599b
18	12851	5.0	-51 28	8.4	8.9	Fo	6	..	39662b	68	5618	5.3	-10 1	9.4	9.8	F5	3	..	40599b
19	1487	5.0	-76 30	9.0	10.1	K2	3	..	19964b	69	5619	5.3	-10 37	8.0	8.8	G5	5	..	40621b
20	1163	5.1	+70 49	8.9	9.4	F8	2	0,1-	36922i	70	6200	5.3	-17 15	10.3	11.4	K2	1	..	39392b
21	1502	5.1	+64 40	9.1	9.2	A5	1	..	37277i	71	6145	5.3	-20 13	9.6	10.5	G5	2	..	39402b
22	3198	5.1	+46 51	7.8	7.8	Ao	4	..	37946i	72	16511	5.3	-24 0	10.2	10.0	F8	2	..	39402b
23	4303	5.1	+34 38	7.7	7.8	A3	3	2,2	38894i	73	15285	5.3	-25 20	10.6	11.2	F8	1	..	39402b
24	4005	5.1	+28 36	8.6	9.0	F5	2	..	21671i	74	15475	5.3	-26 54	8.9	9.4	G5	4	..	40637b
25	4323	5.1	+22 32	8.0	8.5	F8	3	..	38051i	75	15292	5.3	-27 33	10.2	10.0	G	1	..	40637b
26	4354	5.1	+15 47	9.2	9.6	F5	4	..	6444m	76	17613	5.3	-29 17	8.9	10.3	K5	1	..	40637b
27	5136	5.1	- 3 42	9.0	9.4	F5	2	R	14658b	77	14425	5.3	-37 57	9.1	10.4	F8	2	..	40944b
28	5376	5.1	- 3 50	9.1	10.3	K5	1	5,1	40599b	78	14424	5.3	-38 22	8.5	9.5	F5	5	..	40944b
29	5596	5.1	- 8 7	8.4	9.0	Go	5	..	40599b	79	13264	5.3	-50 47	10.7	11.6	Go	1	..	39662b
30	5813	5.1	-16 27	10.8	11.8	Ko	2	..	39392b	80	12854	5.3	-51 18	11.1	11.6	Go	1	..	39662b
31	5878	5.1	-17 53	9.1	9.6	F8	7	..	39392b	81	1489	5.3	-76 19	9.1	9.5	F5	5	..	19964b
32	5877	5.1	-18 39	10.0	10.1	A5	4	..	39392b	82	1896	5.4	+62 39	8.1	9.1	Ko	2	..	37277i
33	5949	5.1	-20 58	9.8	11.2	K2	1	..	39402b	83	2559	5.4	+53 15	8.9	8.9	A	1	..	19317i
34	15282	5.1	-25 10	10.6	11.4	K2	1	..	39402b	84	4495	5.4	+12 9	8.0	9.2	K5	3	..	38129i
35	15470	5.1	-26 14	10.2	11.2	Ko	1	..	39402b	85	4478	5.4	+10 20	8.32	8.40	A3	4	..	38129i
36	17611	5.1	-29 22	9.2	9.4	Fo	3	..	40637b	86	5698	5.4	- 6 9	9.4	9.7	F2	4	..	40599b
37	15289	5.1	-42 2	9.4	10.1	Ao	3	..	39472b	87	5699	5.4	- 6 10	8.8	9.8	Ko	4	..	40599b
38	13815	5.1	-48 12	9.2	11.3	Ko	2	..	39657b	88	5597	5.4	- 8 3	8.4	9.0	Go	5	..	40599b
39	9815	5.1	-54 27	9.8	10.4	Go	2	..	39662b	89	5541	5.4	-11 28	9.8	10.4	Go	1	..	40621b
40	7818	5.1	-58 3	9.2	9.7	G5	3	0,3	39382b	90	5926	5.4	-12 8	8.2	9.3	K2	7	..	40621b
41	3530	5.1	-66 43	9.6	10.7	K2	2	..	20542b	91	5925	5.4	-12 47	9.4	10.0	Go	3	..	40621b
42	3779	5.1	-67 22	9.3	10.4	K2	4	..	20542b	92	6041	5.4	-19 24	9.0	9.4	Go	4	..	39392b
43	2874	5.2	+52 49	7.29	7.29	Ao	7	..	37945i	93	16750	5.4	-23 16	10.6	10.5	Go	2	..	39402b
44	4453	5.2	+39 51	9.7	9.7	Ao	1	..	38942i	94	15293	5.4	-27 31	9.2	9.4	A5	4	..	40637b
45	4719	5.2	+18 49	6.99	7.41	F5	6	0,6	38129i	95	15293	5.4	-42 38	10.4	10.7	Go	1	..	39472b
46	4467	5.2	+16 15	10.2	11.0	G5	2	..	6444m	96	9810	5.4	-56 55	11.1	11.1	Ao	1	..	39382b
47	4355	5.2	+15 46	8.5	9.1	Go	3	5,7	38129i	97	636	5.5	+82 35	8.7	8.8	A5	3	..	37294i
48	4476	5.2	+10 42	8.0	8.1	A2	4	..	38129i	98	2560	5.5	+53 23	8.7	9.1	F5	1	..	19317i
49	5673	5.2	- 9 1	10.0	10.5	F8	1	..	40599b	99	3201	5.5	+46 52	7.06	7.40	F2	5	2,4	37946i
50	5868	5.2	-13 31	10.0	10.8	G5	2	..	40621b	100	4497	5.5	+11 52	8.4	9.6	K5	1	..	38129i

THE HENRY DRAPER CATALOGUE.

21^h5^m.5

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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	4732	5.5	+ 9 44	4.76	5.04	Fop	..	o, R	56,100	51	1148	5.9	+69 17	8.1	9.1	Ko	2	..	38573i
2	4676	5.5	+ 0 45	9.2	9.7	F8	4	..	12331b	52	4021	5.9	+42 2	7.7	7.7	Ao	4	..	37878i
3	5952	5.5	-21 8	10.3	10.5	A5	3	..	39402b	53	4437	5.9	+36 35	8.8	9.3	F8	2	o,2	38894i
4	16512	5.5	-24 52	10.9	11.2	F2	1	..	39402b	54	4181	5.9	+34 1	8.8	8.8	B8	2	5,3	38894i
5	15477	5.5	-26 9	9.7	10.6	Ko	3	..	39402b	55	4180	5.9	+33 37	9.1	9.1	Ao	1	..	38894i
6	14622	5.5	-35 16	9.5	10.5	Go	1	..	41063b	56	4358	5.9	+31 49	7.42	8.42	Ko	4	..	37948i
7	14654	5.5	-36 18	8.5	8.7	F2	7	..	40944b	57	4469	5.9	+16 35	8.1	9.2	K2	4	3,3	6444m
8	9535	5.5	-54 58	9.2	9.9	Fo	4	o,4	39662b	58	4468	5.9	+16 26	8.9	9.4	F8	4	..	6444m
9	1504	5.6	+64 35	8.8	9.1	Fo	1	..	37277i	59	4632	5.9	+13 11	9.9	10.7	G5	1	..	6444m
10	1698	5.6	+64 6	8.5	8.6	A2	2	..	37277i	60	4562	5.9	+13 3	9.9	10.9	Ko	1	..	6444m
11	2529	5.6	+55 42	7.86	7.86	Ao	4	R	37945i	61	16516	5.9	-24 28	9.7	10.9	K2	2	..	39402b
12	3295	5.6	+48 20	8.7	8.7	Ao	4	..	37946i	62	15291	5.9	-25 40	9.7	10.1	Go	3	..	39402b
13	4457	5.6	+39 57	9.4	10.8	Ma	1	..	16270m	63	15297	5.9	-42 20	10.0	10.9	Go	2	..	39472b
14	4419	5.6	+35 24	8.1	9.1	Ko	2	..	37948i	64	1486	5.9	-77 16	10.0	10.4	F5	2	..	19964b
15	4475	5.6	+25 53	8.6	8.9	F2	3	..	38051i	65	3204	6.0	+46 24	9.0	9.1	A5	1	..	37946i
16	4735	5.6	+ 9 38	5.99	6.05	A2	..	o,7	56,100	66	3427	6.0	+45 20	7.52	7.40	B5	4	o,3-	37946i
17	5951	5.6	-14 28	9.0	10.1	K2	2	..	40621b	67	4313	6.0	+34 51	8.0	9.0	Ko	2	..	37948i
18	5814	5.6	-15 54	9.2	9.8	Go	5	..	39392b	68	4182	6.0	+33 51	9.1	9.1	Ao	2	3,2	38894i
19	15289	5.6	-25 22	10.9	10.6	F8	2	..	39402b	69	4092	6.0	+26 53	7.8	8.8	Ko	3	..	38051i
20	14428	5.6	-38 3	10.1	10.7	Fo	1	..	40944b	70	4485	6.0	+22 3	7.72	7.72	Ao	2	R	37940i
21	15294	5.6	-42 28	8.0	8.7	Go	7	..	39472b	71	4486	6.0	+22 3	6.94	6.94	Ao	6	..	37940i
22	13818	5.6	-48 19	9.2	10.1	Ko	4	..	39657b	72	4638	6.0	+19 33	7.51	7.93	F5	4	..	38051i
23	11829	5.6	-52 20	9.3	9.9	Fo	4	..	39662b	73	4471	6.0	+16 52	9.2	9.6	F5	4	..	6444m
24	3410	5.6	-68 41	11.4	11.5	A3	2	..	20542b	74	4360	6.0	+15 56	9.2	9.2	Ao	4	..	6444m
25	4461	5.7	+39 45	8.5	8.9	F5	3	..	38942i	75	4678	6.0	+ 0 37	9.6	10.1	F8	2	..	12331b
26	4091	5.7	+26 13	8.0	9.1	K2	2	..	38051i	76	4115	6.0	- 1 24	9.6	10.1	F8	1	..	14658b
27	4358	5.7	+15 33	10.6	10.6	Ao	3	..	6444m	77	5489	6.0	- 5 12	9.2	10.3	K2	2	..	40599b
28	4357	5.7	+15 19	9.69	10.47	G5	2	..	6444m	78	15299	6.0	-42 13	8.7	9.5	Go	6	..	39472b
29	5815	5.7	-16 48	9.2	9.6	F5	5	..	39392b	79	14420	6.0	-43 17	10.2	11.2	Go	2	..	39472b
30	16753	5.7	-23 31	8.1	8.3	F5	7	..	39402b	80	13268	6.0	-50 20	10.7	11.6	K2	1	..	39657b
31	14416	5.7	-41 52	10.1	10.9	F5	2	..	39472b	81	9539	6.0	-55 15	10.4	11.4	Ko	1	2,1	39382b
32	13267	5.7	-50 26	10.4	11.6	Go	1	..	39657b	82	9811	6.0	-57 13	10.6	11.7	K2	1	..	39382b
33	12857	5.7	-51 44	9.3	10.1	F2	4	..	39662b	83	3781	6.0	-67 12	9.9	10.4	F8	4	..	20542b
34	11830	5.7	-52 18	10.0	11.0	K	1	..	39662b	84	1188	6.1	+68 12	8.01	8.09	A3	3	..	37277i
35	11831	5.7	-52 28	9.9	10.4	F8	2	..	39662b	85	4203	6.1	+37 51	8.4	8.5	A2	2	..	38894i
36	1164	5.8	+71 2	5.96	6.30	F2	8	..	38025i	86	4625	6.1	+ 9 8	7.70	7.78	A3	4	..	38129i
37	3717	5.8	+44 49	8.5	9.5	Ko	1	..	37946i	87	4514	6.1	+ 3 31	7.77	8.84	K2	5	..	12331b
38	4312	5.8	+35 5	8.72	8.72	Fp	2	R	38894i	88	5474	6.1	- 2 0	9.1	9.1	Ao	2	..	14658b
39	4844	5.8	+20 20	7.77	8.27	F8	3	..	38051i	89	5382	6.1	- 4 33	8.0	8.0	Ao	8	o,6	14658b
40	4550	5.8	+14 50	8.1	9.2	K2	4	3,2	6444m	90	5507	6.1	- 7 45	8.7	9.7	Ko	2	..	40599b
41	5677	5.8	- 9 37	10.0	11.0	Ko	1	..	40599b	91	5927	6.1	-11 57	8.7	9.3	Go	6	..	40621b
42	5678	5.8	- 9 47	9.71	10.21	F8	2	..	40599b	92	5880	6.1	-17 57	10.0	11.0	Ko	2	..	39392b
43	5870	5.8	-13 31	9.6	10.7	K2	1	..	40621b	93	16758	6.1	-23 45	10.2	10.5	Go	2	..	39402b
44	5816	5.8	-16 26	8.6	9.4	G5	4	..	40621b	94	15292	6.1	-25 12	10.6	10.9	F8	1	..	39402b
45	5879	5.8	-18 27	9.4	10.4	Ko	6	..	39392b	95	18118	6.1	-31 0	7.10	7.9	F5	9	..	41063b
46	14430	5.8	-38 35	8.9	10.1	F2	4	..	40944b	96	14245	6.1	-45 29	8.2	9.2	K2	4	..	39657b
47	14216	5.8	-40 40	5.84	6.26	F5	..	3,10	56,147	97	7454	6.1	-60 46	8.4	10.2	Ko	1	..	19897b
48	13372	5.8	-49 0	11.7	11.6	A3	1	..	39657b	98	2838	6.1	-70 26	10.9	11.0	A3	1	..	19966b
49	11832	5.8	-51 56	7.2	7.8	F5	8	..	39662b	99	3206	6.2	+46 11	8.7	8.8	A5	2	..	37946i
50	11833	5.8	-52 4	8.7	10.1	Ko	3	..	39662b	100	3430	6.2	+46 0	8.1	8.4	F	3	R	37946i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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21^h6^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	3429	6.2	+45 45	7.68	8.24	Go	4	0,3 R	37946i	51	4362	6.5	+15 27	8.7	9.7	Ko	3	5,1	6444m
2	3822	6.2	+43 48	7.58	8.58	Ko	2	..	37878i	52	4679	6.5	+ 0 16	8.58	8.58	Ao	7	..	12331b
3	4421	6.2	+36 3	8.0	9.0	Ko	1	..	38894i	53	4117	6.5	- 1 17	7.71	7.77	A2	7	1,2	12331b
4	4314	6.2	+34 28	8.4	8.5	A2	2	..	38894i	54	5956	6.5	-14 27	9.0	10.0	Ko	2	..	40621b
5	4361	6.2	+15 51	9.6	9.6	Ao	3	..	6444m	55	15440	6.5	-33 32	9.1	9.5	Ao	3	..	41063b
6	4552	6.2	+15 2	9.19	9.75	Go	4	..	6444m	56	14627	6.5	-35 7	9.1	10.5	Go	1	..	41063b
7	5908	6.2	-14 53	6.44	6.58	A5	7	..	17410b	57	13271	6.5	-50 12	8.00	9.0	G5	7	..	39662b
8	5882	6.2	-18 46	9.8	10.9	K2	2	..	39392b	58	9820	6.5	-54 3	10.3	11.4	K2	1	..	39662b
9	15301	6.2	-27 29	9.9	9.7	F5	3	..	40637b	59	2534	6.6	+55 17	7.46	7.44	B9	4	..	37945i
10	17165	6.2	-28 0	10.9	10.1	F5	2	..	40637b	60	2485	6.6	+54 38	8.7	8.7	Ao	2	..	37945i
11	9540	6.2	-55 24	7.1	8.6	Ko	6	..	39382b	61	4469	6.6	+40 7	9.02	9.00	B9	2	..	38942i
12	7820	6.2	-58 0	9.0	10.0	Ko	3	5,2	39382b	62	4477	6.6	+25 48	9.0	9.0	Ao	4	..	38051i
13	7680	6.2	-59 54	10.1	10.2	A3	2	..	39382b	63	4473	6.6	+16 12	9.2	9.3	A2	4	0,1	6444m
14	3532	6.2	-66 39	10.0	10.4	F5	2	..	20542b	64	4634	6.6	+13 23	9.6	10.7	K2	1	..	6444m
15	1360	6.3	+66 53	9.0	9.3	F2	2	..	37277i	65	5141	6.6	- 3 0	8.6	9.6	Ko	2	..	14658b
16	4515	6.3	+ 3 58	9.4	9.8	F5	2	..	12331b	66	5491	6.6	- 5 28	9.2	9.8	Go	3	..	40599b
17	4116	6.3	- 1 42	8.27	8.69	F5	5	..	12331b	67	5928	6.6	-11 55	9.1	9.6	F8	6	..	40621b
18	5476	6.3	- 2 33	7.5	7.6	A2	5	0,4	14658b	68	5911	6.6	-14 58	7.65	7.79	A5	8	..	40621b
19	5140	6.3	- 3 31	7.56	8.56	Ko	7	5,3	14658b	69	5818	6.6	-16 33	10.5	11.5	Ko	1	..	39392b
20	5138	6.3	- 3 49	8.6	10.0	Ma	..	..	M	70	15296	6.6	-25 3	10.2	11.2	Ko	1	..	39402b
21	6151	6.3	-20 44	8.06	8.7	F8	6	..	39402b	71	14668	6.6	-36 10	7.34	8.5	Ko	8	..	40944b
22	5955	6.3	-21 33	9.8	10.5	Ko	2	..	39402b	72	14152	6.6	-39 50	5.26	7.68	F5	..	..	56,147
23	5956	6.3	-21 47	10.3	10.5	Ao	4	..	39402b	73	7681	6.6	-58 56	8.8	9.1	Go	5	0,5	39382b
24	10761	6.3	-22 57	10.2	10.2	F5	3	..	39402b	74	1695	6.6	-75 27	8.4	9.5	K2	4	..	19964b
25	16518	6.3	-24 32	7.50	7.9	Ao	8	..	40637b	75	3721	6.7	+45 9	8.82	8.80	B9	2	..	37946i
26	15293	6.3	-25 47	9.2	9.7	F8	4	..	39402b	76	4205	6.7	+37 31	8.0	8.0	Ao	3	..	38894i
27	14151	6.3	-39 5	8.8	9.8	Ko	3	..	40944b	77	4447	6.7	+37 5	7.9	9.0	K2	1	..	38894i
28	15303	6.3	-42 31	10.7	11.3	Ao	1	..	39472b	78	4077	6.7	+32 41	9.3	9.7	F5	1	..	37948i
29	14248	6.3	-45 51	10.4	11.3	Go	1	..	39472b	79	4340	6.7	+30 9	8.66	8.66	A	1	..	38894i
30	13822	6.3	-48 44	10.7	11.0	F8	3	..	39657b	80	5706	6.7	- 6 13	7.8	8.8	Ko	8	..	40599b
31	1288	6.4	+67 51	6.80	6.86	A2	8	..	37277i	81	5705	6.7	- 6 22	8.4	8.4	Ao	8	..	40599b
32	2533	6.4	+56 49	7.94	8.44	F8	3	..	37945i	82	6202	6.7	-17 0	10.3	10.7	F5	2	..	39392b
33	3718	6.4	+45 6	6.52	6.40	B5	8	..	37878i	83	15483	6.7	-25 59	10.2	10.9	Ko	1	..	39402b
34	3824	6.4	+43 35	8.3	8.3	Ao	2	..	37878i	84	17170	6.7	-27 55	9.9	10.6	G5	1	..	40637b
35	4516	6.4	+ 3 49	7.7	8.7	Ko	4	..	12331b	85	14915	6.7	-34 24	9.4	10.5	A3	1	..	41063b
36	5385	6.4	- 3 54	9.2	9.3	A2	4	..	14658b	86	15306	6.7	-42 16	9.8	11.3	Ko	1	..	39472b
37	5599	6.4	- 8 22	8.4	8.7	Fo	6	..	40599b	87	14252	6.7	-45 15	10.4	11.6	G5	1	..	39472b
38	5873	6.4	-13 22	9.1	10.2	K2	3	..	40621b	88	13872	6.7	-46 3	9.2	10.4	G5	3	..	39657b
39	5954	6.4	-14 7	8.8	9.8	Ko	5	..	40621b	89	13825	6.7	-47 58	6.95	8.3	Ma	8	..	39657b
40	5910	6.4	-15 22	8.2	9.3	K2	4	..	40621b	90	9813	6.7	-57 51	11.1	11.9	G5	1	..	39382b
41	5883	6.4	-18 37	9.4	10.4	Ko	5	..	39392b	91	2596	6.7	-70 56	8.2	9.3	K2	4	..	19966b
42	5623	6.4	-22 18	9.2	10.2	G5	4	..	39402b	92	1900	6.8	+62 30	8.1	8.1	Ao	4	..	37277i
43	5624	6.4	-22 29	10.0	11.0	Go	2	..	39402b	93	2205	6.8	+60 29	8.1	8.2	A3	2	..	38526i
44	17166	6.4	-28 19	7.77	8.9	K2	5	..	40637b	94	2563	6.8	+53 21	8.2	8.8	Go	2	5,2	37945i
45	16449	6.4	-32 29	8.8	10.3	Go	1	..	41063b	95	4372	6.8	+38 33	7.8	7.6	B3	5	..	38942i
46	12861	6.4	-51 22	9.4	10.7	Ko	1	..	39662b	96	5913	6.8	-15 24	7.24	8.02	G5	8	..	40621b
47	6534	6.4	-61 21	9.6	10.6	Ko	1	..	39382b	97	5625	6.8	-21 57	10.0	10.5	Go	1	..	39402b
48	359	6.5	+85 29	8.2	8.5	Fo	6	0,3	37294i	98	16766	6.8	-23 22	10.9	10.5	F5	1	..	39402b
49	3825	6.5	+43 35	8.1	8.1	Ao	3	..	37878i	99	16763	6.8	-23 52	10.4	10.8	Go	2	..	39402b
50	4446	6.5	+36 24	7.60	7.94	F2	5	3,4	38894i	100	12863	6.8	-51 1	7.7	8.6	Fo	7	..	39662b

THE HENRY DRAPER CATALOGUE.

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21^h6^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	12866	m. 6.8	° 51 20	8.6	9.5	Fo	6	..	39662b	51	14635	m. 7.1	° 35 33	8.5	8.7	Fo	7	..	40944b
2	7455	6.8	-60 7	7.67	9.1	K2	6	..	19897b	52	14676	7.1	-36 50	6.07	7.4	Ko	..	5,10	56,147
3	2590	6.8	-72 39	9.2	10.4	K5	2	..	19966b	53	14223	7.1	-40 33	10.1	10.7	A3	3	..	39472b
4	4209	6.9	+37 49	8.5	8.5	Ao	1	..	38894i	54	14424	7.1	-43 2	10.4	11.6	Ko	1	..	39472b
5	4079	6.9	+32 19	8.8	8.8	Ao	3	..	37948i	55	7821	7.1	-58 0	10.1	10.7	Go	1	..	39382b
6	5931	6.9	-12 19	9.1	9.4	Fo	6	..	40621b	56	2290	7.2	+57 21	8.7	8.8	A2	1	..	37945i
7	6203	6.9	-17 25	9.2	9.7	F8	6	..	39392b	57	4449	7.2	+36 15	7.6	7.7	A5	3	..	37948i
8	5884	6.9	-18 48	10.0	10.6	Go	4	..	39392b	58	4083	7.2	+32 44	7.56	8.34	G5	3	..	37948i
9	5959	6.9	-21 25	7.6	9.3	Ko	6	..	39402b	59	4097	7.2	+27 9	7.56	7.56	Ao	6	..	38051i
10	5626	6.9	-22 11	9.8	10.5	G5	2	..	39402b	60	4478	7.2	+25 55	8.6	9.4	G5	2	..	38051i
11	15298	6.9	-25 48	11.1	11.2	Go	1	..	39402b	61	4729	7.2	+18 58	8.18	8.18	Ao	3	0,3	38812i
12	15307	6.9	-27 7	8.1	7.9	Ao	8	..	40637b	62	6205	7.2	-17 0	10.7	11.3	Go	2	..	39392b
13	14632	6.9	-35 15	8.8	9.9	G5	3	..	41063b	63	6204	7.2	-17 45	10.8	11.6	G5	1	..	39392b
14	13274	6.9	-50 33	9.6	9.9	Fo	4	..	39662b	64	5885	7.2	-18 15	10.3	11.3	Ko	1	..	39392b
15	9604	6.9	-56 40	7.9	9.0	G5	7	..	39382b	65	14425	7.2	-43 33	7.1	7.8	Ko	9	..	39472b
16	2839	6.9	-70 39	9.7	9.8	A2	4	..	19966b	66	R	7.2	-53 26	var.	var.	Md	..	..	M
17	1046	7.0	+71 16	7.9	8.2	F2	2	..	38025i	67	7682	7.2	-59 44	7.74	8.6	Ko	8	..	39382b
18	4374	7.0	+38 49	8.8	9.9	K2	1	..	38942i	68	4110	7.2	-64 6	8.3	8.6	F2	6	..	20542b
19	4426	7.0	+35 53	6.40	6.18	B1	7	0,7	38894i	69	3782	7.2	-67 53	10.9	11.5	Go	1	..	20542b
20	4365	7.0	+15 52	9.2	9.6	F5	2	..	6444m	70	3436	7.3	+45 42	8.3	8.6	F2	2	..	37946i
21	4441	7.0	+1 14	7.90	8.97	K2	5	..	12331b	71	4330	7.3	+23 11	8.6	9.1	F8	3	..	38051i
22	4120	7.0	-1 25	8.9	9.7	G5	1	..	14658b	72	4518	7.3	+17 30	7.7	7.8	A3	6	..	38129i
23	5477	7.0	-2 27	9.4	9.7	F2	1	..	14658b	73	4367	7.3	+15 30	9.9	11.0	K2	1	..	6444m
24	5603	7.0	-8 47	8.8	9.8	Ko	3	..	40599b	74	4368	7.3	+15 13	9.4	10.0	Go	2	..	6444m
25	5687	7.0	-9 12	9.8	10.6	G5	1	..	40599b	75	4554	7.3	+14 18	7.9	9.1	K5	3	5,5	38129i
26	5933	7.0	-12 10	9.2	10.0	G5	3	..	40621b	76	4481	7.3	+10 13	8.22	8.72	F8	3	..	38129i
27	5932	7.0	-12 13	9.2	9.8	G	5	..	40621b	77	4728	7.3	+5 24	8.7	9.8	K2	1	..	12331b
28	6049	7.0	-18 49	10.0	11.0	Ko	3	..	39392b	78	4442	7.3	+1 24	8.9	10.1	K5	2	..	12331b
29	15449	7.0	-33 23	8.9	10.6	Ko	1	..	41063b	79	5689	7.3	-9 3	9.4	10.2	G5	2	..	40599b
30	10012	7.0	-53 44	9.3	11.0	Ko	3	..	39662b	80	5544	7.3	-10 55	9.8	10.8	Ko	1	..	40621b
31	3411	7.0	-68 5	11.0	11.5	F8	1	..	20542b	81	5545	7.3	-11 4	9.6	10.6	Ko	2	..	40621b
32	826	7.1	+76 28	9.0	10.1	K2	1	..	38936i	82	5960	7.3	-14 48	var.	var.	Mc	5	0,2 R	45421b
33	1167	7.1	+70 59	8.1	9.2	K2	1	0,1	38573i	83	6206	7.3	-17 35	9.6	10.7	K2	4	..	39392b
34	2880	7.1	+53 9	5.73	5.71	B9	10	..	37945i	84	18135	7.3	-31 2	10.2	10.3	Ao	2	..	41063b
35	3008	7.1	+52 1	7.9	8.3	F5	3	..	37945i	85	14429	7.3	-41 49	8.5	10.1	Ko	6	..	39472b
36	3322	7.1	+47 17	6.36	6.24	B5	..	3,7	56,147	86	13732	7.3	-47 38	9.8	11.2	G5	3	..	39657b
37	3321	7.1	+47 15	7.9	9.3	Mb	1	..	37946i	87	9606	7.3	-56 16	9.1	9.7	Fo	4	..	39382b
38	3828	7.1	+43 53	8.3	9.4	K2	1	..	37946i	88	1903	7.4	+62 53	6.50	6.45	B8	9	3,9	38526i
39	4375	7.1	+38 22	8.5	8.5	B9	3	..	38942i	89	4264	7.4	+23 45	8.0	8.5	F8	4	..	38051i
40	4635	7.1	+13 17	9.6	10.6	Ko	1	..	6444m	90	4331	7.4	+22 41	7.9	9.0	K2	4	..	38051i
41	4569	7.1	+12 33	7.5	8.7	K5	3	..	38129i	91	4519	7.4	+17 21	7.32	7.74	F5	7	..	38129i
42	4627	7.1	+8 22	8.5	8.5	Ao	3	..	14667b	92	4502	7.4	+11 22	7.20	8.38	K5	4	..	38129i
43	4121	7.1	-1 44	9.37	9.93	Go	1	..	14658b	93	4443	7.4	+1 58	8.9	10.0	K2	1	..	12331b
44	5495	7.1	-4 58	8.60	9.38	G5	5	..	40599b	94	5389	7.4	-4 42	8.70	9.70	Ko	3	..	40599b
45	5688	7.1	-9 5	9.4	10.0	Go	3	..	40599b	95	5707	7.4	-6 39	9.4	9.7	F2	4	..	40599b
46	5821	7.1	-16 15	8.6	9.4	G5	4	..	40621b	96	5511	7.4	-7 17	9.0	9.0	Ao	7	..	40599b
47	5960	7.1	-20 58	10.0	11.5	Ko	1	..	39402b	97	5604	7.4	-8 34	8.4	8.8	F5	5	..	40599b
48	18129	7.1	-31 3	9.2	10.9	K2	1	..	41063b	98	5874	7.4	-12 58	9.6	10.2	Go	3	..	40621b
49	14920	7.1	-34 9	9.1	10.5	Ko	1	..	41063b	99	5964	7.4	-21 35	9.8	11.2	Ko	1	..	39402b
50	14637	7.1	-34 54	9.38	9.7	Go	3	..	41063b	100	5963	7.4	-21 42	9.4	10.5	Ko	2	..	39402b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

201900

21^h7^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	17178	7.4	-28 2	5.55	6.9	K5	..	0,9	56,147	51	7822	7.7	-58 27	9.5	10.3	G5	1	..	39382b
2	17179	7.4	-28 52	9.5	9.4	A5	3	..	40637b	52	6535	7.7	-61 3	9.9	10.3	F5	3	..	39382b
3	17638	7.4	-29 12	8.2	8.5	F5	6	..	40637b	53	3474	7.8	+49 59	9.3	9.4	A2	1	..	38796i
4	14430	7.4	-41 7	8.9	10.1	G5	4	..	39472b	54	5391	7.8	-4 18	9.2	10.2	Ko	1	..	40599b
5	6210	7.4	-62 48	9.7	10.1	F5	1	..	19897b	55	5963	7.8	-14 5	9.0	9.3	Fo	5	..	40621b
6	1697	7.4	-75 46	6.84	7.0	Ao	7	..	36826b	56	5964	7.8	-14 16	9.4	10.2	G5	3	..	40621b
7	1386	7.4	-78 49	8.9	10.1	K5	2	..	19964b	57	5965	7.8	-14 47	9.4	10.0	Go	3	..	39392b
8	800	7.5	+77 43	5.90	5.88	B9	8	..	38590i	58	6209	7.8	-17 32	10.8	11.4	Go	2	..	39392b
9	3473	7.5	+50 4	8.82	8.90	A3	1	..	38796i	59	..	7.8	-17 50	..	..	Go	1	..	39392b
10	4432	7.5	+40 47	7.30	7.18	B5	5	2,7	37878i	60	15306	7.8	-25 36	9.7	9.4	F5	3	..	40637b
11	4326	7.5	+34 55	8.4	8.5	A2	2	..	38894i	61	18455	7.8	-30 36	8.7	10.1	K2	2	..	41063b
12	4342	7.5	+29 18	6.77	6.65	B5	6	4,4	21671i	62	14685	7.8	-35 58	9.4	9.6	F5	5	..	40944b
13	4347	7.5	+24 59	8.8	8.9	A2	2	..	38051i	63	14228	7.8	-40 23	8.1	8.0	G5	8	..	39472b
14	4571	7.5	+13 11	9.4	9.5	A3	2	..	6444m	64	14428	7.8	-43 13	8.4	8.1	Ao	9	..	39472b
15	4643	7.5	+7 37	8.3	9.5	K5	2	..	12331b	65	14356	7.8	-44 14	8.6	8.6	Ao	6	..	39472b
16	4681	7.5	+0 29	9.2	9.5	Fo	5	..	12331b	66	7823	7.8	-58 1	8.7	10.0	K5	2	0,2	39698b
17	5512	7.5	-7 34	8.2	9.0	G5	6	..	40599b	67	2327	7.9	+59 47	8.3	9.5	K5	2	..	38526i
18	6207	7.5	-17 19	10.7	11.3	Go	1	..	39392b	68	4431	7.9	+35 14	7.62	8.69	K2	2	..	37948i
19	..	7.5	-17 54	..	..	K2	1	..	39392b	69	4555	7.9	+14 56	10.6	10.6	Ao	1	..	6444m
20	16524	7.5	-24 31	9.7	10.0	F8	4	..	39402b	70	6210	7.9	-17 25	10.3	10.9	Go	3	..	39392b
21	15304	7.5	-25 15	7.52	8.5	K2	6	..	40637b	71	14686	7.9	-36 30	9.5	9.9	F8	3	..	40944b
22	13734	7.5	-47 44	10.0	11.6	K2	1	..	39657b	72	14230	7.9	-40 10	8.6	9.8	K2	4	..	39472b
23	7456	7.5	-60 44	10.3	10.9	Go	2	..	39382b	73	13276	7.9	-50 22	9.4	10.4	Go	3	..	39662b
24	3728	7.6	+45 4	8.07	9.07	Ko	1	..	37946i	74	9816	7.9	-56 58	10.2	11.0	G5	1	..	39382b
25	4481	7.6	+25 52	9.0	9.5	F8	1	..	38051i	75	774	8.0	+75 58	8.12	8.40	Fo	3	..	38025i
26	5935	7.6	-11 58	9.2	9.8	Go	5	..	40621b	76	2488	8.0	+54 52	8.5	8.5	B9	2	..	37945i
27	6208	7.6	-17 26	10.3	10.8	F8	4	..	39392b	77	4437	8.0	+40 22	7.87	7.82	B8	3	..	37878i
28	6158	7.6	-20 36	10.4	10.2	Ao	4	..	39402b	78	4700	8.0	+27 6	8.1	9.1	Ko	2	2,2	38051i
29	5966	7.6	-21 7	10.0	10.5	F8	2	..	39402b	79	4522	8.0	+17 44	8.5	8.5	Ao	3	..	38129i
30	16773	7.6	-23 10	7.46	7.7	F8	8	..	39402b	80	4645	8.0	+7 17	7.6	7.9	F2	7	..	14667b
31	13878	7.6	-46 12	6.97	7.8	G5	9	..	39657b	81	4731	8.0	+5 26	8.9	9.9	Ko	2	..	12331b
32	13834	7.6	-48 36	10.2	11.3	Ko	2	..	39657b	82	4322	8.0	+2 24	7.78	8.20	F5	3	..	38045i
33	7683	7.6	-59 20	7.00	8.2	Ko	2	..	44240b	83	4123	8.0	-1 34	7.9	9.1	K5	3	..	12331b
34	2231	7.7	+58 30	8.7	9.5	G5	2	..	19317b	84	5393	8.0	-4 25	8.8	9.8	Ko	1	..	14658b
35	3438	7.7	+45 16	6.71	6.71	Ao	7	2,7	37878i	85	5392	8.0	-4 41	8.03	8.11	A3	7	2,6	14658b
36	4435	7.7	+40 50	7.9	8.4	F8	3	..	38942i	86	5516	8.0	-7 39	8.8	9.2	F5	5	..	40599b
37	4475	7.7	+39 38	8.4	9.8	Ma	1	..	38942i	87	5967	8.0	-14 30	9.4	9.5	A5	4	..	40621b
38	4217	7.7	+37 43	8.6	8.6	Ao	2	..	38894i	88	5628	8.0	-22 30	9.2	10.5	Ko	1	..	39402b
39	4351	7.7	+30 12	6.75	7.53	G5	4	..	37948i	89	18458	8.0	-30 5	7.52	8.1	G5	9	..	41063b
40	4638	7.7	+14 7	9.6	9.7	A5	3	R	6444m	90	15459	8.0	-33 4	9.2	9.5	K2	3	..	41063b
41	4319	7.7	+2 15	7.00	7.06	A2	7	..	38045i	91	14765	8.0	-38 59	8.0	8.0	F2	7	..	40944b
42	4445	7.7	+1 50	9.2	9.7	F8	3	..	12331b	92	14164	8.0	-39 25	8.9	9.6	Fo	5	..	40944b
43	5514	7.7	-7 11	9.6	10.6	Ko	1	..	40599b	93	14431	8.0	-43 6	8.4	9.5	K5	6	..	39472b
44	5962	7.7	-13 58	10.0	10.0	Ao	2	..	40621b	94	14358	8.0	-44 21	9.0	10.9	K5	4	..	39472b
45	16774	7.7	-22 58	7.6	8.1	F5	7	..	39402b	95	13386	8.0	-49 18	11.1	11.6	F8	2	..	39657b
46	15305	7.7	-25 17	9.5	9.1	F2	4	..	40637b	96	4647	8.0	-63 8	10.3	10.6	Fo	1	..	19897b
47	17641	7.7	-29 17	9.7	10.3	K2	2	..	40637b	97	2598	8.0	-71 46	9.0	9.6	Go	4	..	19966b
48	18138	7.7	-31 45	9.9	10.3	Go	1	..	41063b	98	679	8.1	+80 45	6.93	7.21	Fo	8	..	37294i
49	15456	7.7	-33 12	11.5	9.7	G	2	..	41063b	99	1700	8.1	+63 15	8.1	8.5	F5	1	..	37277i
50	14262	7.7	-44 54	7.80	8.6	Ko	7	..	39657b	100	2489	8.1	+54 55	7.76	7.71	B8	4	..	37945i

THE HENRY DRAPER CATALOGUE.

202000

21^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	4023	8.1	+28 33	8.0	9.2	K5	2	..	21671i	51	4573a	8.4	+12 23	var.	var.	Md	..	R	M
2	4484	8.1	+25 54	8.2	8.3	A2	4	..	38051i	52	5549	8.4	-11 11	9.0	10.0	Ko	3	..	40621b
3	5517	8.1	-7 6	9.1	9.4	Fo	6	..	40599b	53	5938	8.4	-12 22	8.8	9.8	Ko	4	..	40621b
4	6211	8.1	-17 16	9.8	10.4	Go	4	..	39392b	54	5925	8.4	-15 33	10.7	11.9	K5	1	..	39392b
5	6054	8.1	-19 11	9.8	11.0	G5	1	..	39392b	55	6212	8.4	-17 7	9.8	10.8	Ko	3	..	39392b
6	6053	8.1	-19 25	9.2	10.2	Go	3	..	39392b	56	6055	8.4	-19 16	9.2	10.0	A2	5	..	39392b
7	16781	8.1	-23 3	10.2	10.0	Ao	4	..	39402b	57	16529	8.4	-24 34	10.2	10.9	G5	2	..	39402b
8	17181	8.1	-28 45	9.4	9.7	Go	3	..	40637b	58	14236	8.4	-40 14	10.5	10.9	F8	2	..	39472b
9	14647	8.1	-35 47	7.7	8.0	Ao	9	..	40944b	59	14235	8.4	-40 26	11.0	11.1	F5	2	..	39472b
10	14360	8.1	-44 24	9.4	11.0	G5	2	..	39472b	60	14362	8.4	-44 38	9.1	10.4	Ko	3	..	39472b
11	7824	8.1	-58 8	10.1	10.9	G5	1	..	39382b	61	12874	8.4	-50 57	10.2	11.6	Go	1	..	39662b
12	1291	8.2	+68 5	var.	var.	Md	6	0,7 R	37277i	62	12873	8.4	-51 6	10.4	11.6	G5	1	..	39662b
13	3476	8.2	+50 0	7.87	8.87	Ko	3	..	38796i	63	9548	8.4	-55 21	10.5	10.8	Fo	3	..	39382b
14	4457	8.2	+37 1	8.7	9.0	Fo	2	..	38942i	64	R	8.4	-60 27	..	..	Go	2	..	39382b
15	4003	8.2	+27 56	8.5	9.0	F8	3	..	21671i	65	2205	8.4	-73 27	7.0	8.0	Ko	7	..	19966b
16	4371	8.2	+15 40	9.2	10.2	Ko	1	..	6444m	66	3011	8.5	+51 37	8.6	8.7	A2	3	..	38796i
17	4556	8.2	+15 10	8.09	8.59	F8	4	0,6	38129i	67	3220	8.5	+46 23	9.5	9.6	A2	2	..	37946i
18	4640	8.2	+13 47	8.7	8.8	A2	4	0,2	6444m	68	3442	8.5	+45 17	7.87	7.82	B8	4	..	37878i
19	5712	8.2	-6 19	7.58	8.36	G5	7	0,6	40599b	69	4332	8.5	+35 0	8.0	9.0	Ko	1	..	38894i
20	5624	8.2	-10 2	9.1	9.7	Go	3	..	40599b	70	4351	8.5	+24 47	8.0	8.5	F8	4	..	38051i
21	5878	8.2	-13 14	9.0	9.1	A3	5	..	40621b	71	4649	8.5	+19 17	8.1	9.3	K5	1	..	38051i
22	5922	8.2	-15 3	8.4	8.8	F5	7	..	40621b	72	4487	8.5	+10 47	7.9	8.7	G5	3	..	38129i
23	5886	8.2	-17 58	8.4	9.5	K2	7	..	39392b	73	4776	8.5	+6 49	7.40	7.68	Fo	4	..	38045i
24	5629	8.2	-22 28	9.0	9.4	Go	5	..	39402b	74	5879	8.5	-12 57	9.2	10.0	G5	4	..	40621b
25	5630	8.2	-22 38	6.88	7.0	Ao	7	..	43466b	75	6213	8.5	-17 41	9.4	9.9	F8	5	..	39392b
26	13387	8.2	-49 31	6.96	8.3	Ko	9	..	39657b	76	15312	8.5	-25 42	9.2	10.0	K2	2	..	40637b
27	7825	8.2	-58 3	6.76	6.5	Fo	6	..	44240b	77	18144	8.5	-31 10	7.9	9.4	G5	5	..	41063b
28	7457	8.2	-59 57	8.6	10.0	Ma	3	..	39382b	78	15464	8.5	-33 18	9.5	9.5	Go	3	..	41063b
29	4112	8.2	-64 29	9.2	9.2	Ao	5	..	20542b	79	14650	8.5	-35 20	9.7	10.8	K2	1	..	41063b
30	1552	8.3	+65 17	7.75	7.73	B9	7	..	37277i	80	14185	8.5	-37 33	8.8	9.4	Go	4	..	40944b
31	2538	8.3	+55 57	8.3	8.3	B9	2	..	37945i	81	14271	8.5	-44 57	8.15	8.5	Fo	8	..	39657b
32	4479	8.3	+39 44	7.72	8.79	K2	2	..	38942i	82	7826	8.5	-58 45	10.2	10.7	F8	1	..	39382b
33	4377	8.3	+31 37	8.2	8.2	B9	3	..	37948i	83	7685	8.5	-58 55	9.1	9.8	G5	4	..	39382b
34	5518	8.3	-6 53	7.38	8.45	K2	7	..	40599b	84	2568	8.6	+53 21	6.90	6.90	Ao	7	..	37945i
35	5923	8.3	-15 43	8.6	9.7	K2	3	..	39392b	85	3307	8.6	+48 47	8.7	8.7	A	2	..	37946i
36	5888	8.3	-18 1	9.2	9.6	F5	8	..	39392b	86	3306	8.6	+48 36	8.1	8.2	A2	4	..	37946i
37	5887	8.3	-18 26	10.0	11.1	K2	1	..	39392b	87	4389	8.6	+38 56	8.8	8.8	B9	3	..	38942i
38	6159	8.3	-20 30	7.86	9.3	Ko	5	..	39402b	88	4222	8.6	+38 9	7.13	7.11	B9	5	0,5-	38942i
39	15310	8.3	-25 17	10.2	10.6	Go	2	..	39402b	89	4006	8.6	+28 9	8.1	9.3	K5	2	..	21671i
40	15495	8.3	-26 5	10.4	10.0	A5	4	..	39402b	90	4007	8.6	+27 45	8.1	9.3	K5	2	5,1	21671b
41	15462	8.3	-32 57	8.0	8.5	Go	7	..	41063b	91	4475	8.6	+16 32	7.42	8.49	K2	5	2,7	38129i
42	14433	8.3	-43 49	9.3	9.8	A3	4	..	39472b	92	4488	8.6	+11 1	8.5	8.5	A	1	..	33571i
43	13885	8.3	-46 34	10.4	11.6	Ko	2	..	39657b	93	4777	8.6	+6 45	7.18	7.24	A2	3	..	38045i
44	13884	8.3	-46 47	10.4	12.1	K2	1	..	39657b	94	4324	8.6	+3 1	8.9	9.4	F8	3	..	12331b
45	9612	8.3	-56 49	10.1	11.1	Ko	2	..	39382b	95	5552	8.6	-11 36	8.7	8.8	A5	4	..	40621b
46	1006	8.3	-80 32	7.63	8.6	G5	7	..	21397b	96	5970	8.6	-14 6	8.7	9.7	Ko	3	..	40621b
47	1365	8.4	+66 40	8.8	9.1	F	1	..	37277i	97	5889	8.6	-18 23	10.0	10.5	F8	2	..	39392b
48	2567	8.4	+54 1	8.14	8.92	G5	2	..	37945i	98	5631	8.6	-21 51	9.8	11.0	G5	2	..	39402b
49	4088	8.4	+32 50	7.52	8.52	Ko	2	..	37948i	99	15313	8.6	-25 8	10.6	10.1	F8	4	..	39402b
50	4851	8.4	+20 39	7.95	9.02	K2	3	..	38051i	100	18466	8.6	-30 0	9.9	9.7	Go	1	..	40637b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

202100

21^h 8^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	13389	8.6	-49 18	10.2	10.4	F8	3	..	39657b	51	16791	8.9	-23 46	10.6	11.1	F5	1	..	39402b
2	12876	8.6	-51 26	8.4	9.5	F5	7	..	39662b	52	15502	8.9	-26 20	8.1	8.2	A3	8	..	40637b
3	10015	8.6	-53 41	5.84	6.6	A5	..	2,7	28,215	53	15501	8.9	-26 34	9.2	9.7	G5	3	..	40637b
4	7827	8.6	-58 43	10.8	10.9	A3	1	..	39382b	54	17658	8.9	-29 47	9.7	10.0	Go	1	..	40637b
5	3538	8.6	-66 0	10.0	10.1	A2	4	..	20542b	55	18469	8.9	-30 32	8.5	9.1	Fo	4	..	41063b
6	2592	8.6	-72 34	8.7	9.2	F8	4	..	19966b	56	14939	8.9	-33 57	8.9	10.5	K2	1	..	41063b
7	2295	8.7	+57 13	8.1	8.1	B8	4	..	37945i	57	14274	8.9	-44 54	8.95	9.5	F2	6	..	39657b
8	4356	8.7	+30 23	7.31	7.87	Go	3	..	37948i	58	13395	8.9	-49 39	9.8	9.8	Go	4	..	39657b
9	4348	8.7	+29 49	3.40	4.40	Ko	..	R	1394c	59	13281	8.9	-49 58	10.7	11.6	Go	1	..	39657b
10	4733	8.7	+5 34	8.5	9.7	K5	2	0,3	14667b	60	7686	8.9	-59 11	8.7	9.1	F8	7	..	39382b
11	5881	8.7	-12 53	7.67	8.67	Ko	8	..	40621b	61	7687	8.9	-59 46	9.7	10.2	F8	2	..	39382b
12	5882	8.7	-13 5	10.3	10.4	A2	2	..	40621b	62	2296	9.0	+58 3	7.71	7.77	A2	5	..	37945i
13	5890	8.7	-18 32	10.0	10.6	Go	5	..	39392b	63	3448	9.0	+45 22	9.0	9.0	B8	3	..	37946i
14	6161	8.7	-19 59	10.3	11.2	F8	1	..	39402b	64	3843	9.0	+43 39	8.1	9.2	K2	2	..	37878i
15	5969	8.7	-21 30	9.8	11.5	Ko	1	..	39402b	65	4335	9.0	+34 56	8.02	9.09	K2	1	..	37948i
16	16789	8.7	-23 18	8.3	8.7	Go	6	..	39402b	66	4485	9.0	+25 55	9.0	9.8	G5	1	..	38051i
17	14653	8.7	-35 29	10.1	10.5	Go	1	..	41063b	67	4495	9.0	+21 30	9.0	9.0	Ao	3	..	38051i
18	14455	8.7	-38 51	8.8	10.8	Ko	3	..	40944b	68	4476	9.0	+16 54	8.7	9.7	Ko	1	..	38129i
19	14272	8.7	-45 47	9.6	11.2	F8	2	..	39657b	69	4643	9.0	+13 45	8.5	9.5	Ko	1	..	38129i
20	10016	8.7	-53 2	8.2	9.4	Fo	5	..	39662b	70	5973	9.0	-14 33	8.8	9.8	Ko	4	..	40621b
21	9826	8.7	-54 49	10.2	10.5	Fo	3	2,2	39662b	71	16534	9.0	-23 58	9.7	10.6	G5	3	..	39402b
22	2599	8.7	-71 26	9.3	10.4	K2	2	..	19966b	72	17659	9.0	-29 31	9.7	9.7	A3	2	..	40637b
23	925	8.8	+73 18	8.8	9.8	Ko	2	..	38936i	73	18149	9.0	-31 24	7.34	8.8	G5	6	..	41063b
24	3842	8.8	+44 7	7.83	7.59	B	3	R	37946i	74	14659	9.0	-35 25	8.8	9.6	G5	4	..	41063b
25	4465	8.8	+37 0	8.4	9.4	Ko	1	2,1	38942i	75	14441	9.0	-41 49	8.5	9.6	Go	6	..	39472b
26	4435	8.8	+35 23	6.68	6.74	A2	8	..	37948i	76	15325	9.0	-42 3	9.4	10.8	F8	3	..	39472b
27	4268	8.8	+23 21	9.3	10.1	G5	1	..	38051i	77	14441	9.0	-43 4	10.4	11.6	K2	1	..	39472b
28	4375	8.8	+15 34	6.20	6.34	A5	8	5,9	38812i	78	13283	9.0	-50 31	10.7	11.3	G5	1	..	39662b
29	5155	8.8	-3 10	8.4	9.4	Ko	3	..	14658b	79	11838	9.0	-52 5	11.5	11.6	A2	1	..	39662b
30	5941	8.8	-12 30	9.4	10.6	K5	1	..	40621b	80	308	9.0	-87 43	9.4	10.0	Go	3	..	22980b
31	5972	8.8	-14 18	10.0	10.6	Go	4	..	39392b	81	1366	9.1	+66 18	7.37	8.37	Ko	5	..	37277i
32	5971	8.8	-14 26	10.0	10.5	F8	4	..	39392b	82	2540	9.1	+55 43	7.46	7.52	A2	5	..	37945i
33	5971	8.8	-21 23	10.4	11.5	A3	1	..	39402b	83	4397	9.1	+38 33	8.1	8.1	Ao	4	2,3	38894i
34	18145	8.8	-31 36	7.7	9.1	Ko	5	..	41063b	84	4336	9.1	+35 4	7.47	7.42	B8	6	..	37948i
35	14440	8.8	-40 55	6.30	6.7	Ko	..	0,6	56,147	85	4510	9.1	+11 16	8.7	9.3	G	1	..	38129i
36	14364	8.8	-44 20	10.0	11.2	G5	2	..	39472b	86	4527	9.1	+3 40	8.9	10.0	K2	1	..	12331b
37	14273	8.8	-45 19	9.6	11.2	F2	2	..	39657b	87	4185	9.1	-0 4	8.7	8.8	A2	4	..	12331b
38	13887	8.8	-46 5	9.8	10.9	Ko	2	..	39657b	88	5717	9.1	-6 27	10.3	10.3	Ao	3	..	40599b
39	9828	8.8	-54 0	10.2	10.8	Go	4	..	39662b	89	5974	9.1	-14 44	9.26	10.26	Ko	1	..	40621b
40	9827	8.8	-54 29	9.9	10.5	Go	2	0,1	39662b	90	..	9.1	-15 9	..	..	A	1	..	39392b
41	1496	8.8	-76 16	8.4	9.5	K2	5	..	19964b	91	6057	9.1	-19 24	10.9	11.5	G5	1	..	39392b
42	1554	8.9	+65 45	7.25	8.25	Ko	5	..	37277i	92	5634	9.1	-22 14	9.2	10.2	Go	3	..	39402b
43	3447	8.9	+46 8	9.0	9.0	Ao	2	..	37946i	93	13284	9.1	-50 46	9.1	9.9	Ko	4	..	39662b
44	3446	8.9	+45 27	8.1	8.9	G5	2	..	37878i	94	10018	9.1	-53 50	9.4	9.9	F8	5	..	39662b
45	4652	8.9	+19 50	8.7	9.7	Ko	1	..	38051i	95	9549	9.1	-55 16	7.5	8.3	G5	9	..	39382b
46	4125	8.9	-1 28	9.6	10.6	Ko	1	..	14658b	96	2570	9.2	+53 25	7.72	8.72	Ko	2	..	37945i
47	5715	8.9	-6 13	9.6	10.1	F8	2	..	40599b	97	4482	9.2	+39 17	8.8	8.8	Ao	2	..	38942i
48	5609	8.9	-8 39	9.8	10.4	Go	1	..	40599b	98	4197	9.2	+33 18	7.09	7.04	B8	8	..	37948i
49	5553	8.9	-11 1	6.49	6.47	B9	7	..	17410b	99	4488	9.2	+25 13	8.51	9.58	K2	1	..	38051i
50	5891	8.9	-18 19	8.4	8.9	F8	8	..	39392b	100	4478	9.2	+16 49	8.6	9.6	Ko	1	..	38129i

THE HENRY DRAPER CATALOGUE.

202200

21^h 9^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	4649	9.2	+ 7 41	8.3	8.3	Ao	7	0,3	14667b	51	2572	9.5	+ 54 3	8.5	9.0	F8	1	..	19317i
2	5694	9.2	- 9 13	9.4	10.2	G5	1	..	40599b	52	3228	9.5	+ 46 32	8.1	8.1	Ao	3	..	37878i
3	5975	9.2	- 14 15	9.6	10.0	F5	3	..	40621b	53	3850	9.5	+ 43 28	7.70	7.53	B3	4	..	37946i
4	5926	9.2	- 15 13	9.8	10.3	F8	3	..	39392b	54	4229	9.5	+ 37 59	7.8	9.0	K5	1	3,I	38942i
5	6214	9.2	- 17 38	9.2	10.2	Ko	5	..	39392b	55	4027	9.5	+ 28 54	8.6	9.8	K5	1	..	21671i
6	5972	9.2	- 21 12	7.86	9.0	G5	7	..	39402b	56	4269	9.5	+ 24 7	8.6	8.9	Fo	2	..	38051i
7	15470	9.2	- 33 36	8.1	8.6	A5	5	..	41063b	57	4479	9.5	+ 17 3	9.0	9.8	G5	2	..	38129i
8	14189	9.2	- 37 4	9.4	9.6	F8	4	..	40944b	58	4578	9.5	+ 12 35	8.0	9.2	K5	2	..	38129i
9	14175	9.2	- 39 52	8.38	9.3	Go	7	R	39472b	59	4186	9.5	- 0 19	6.58	7.76	K5	7	..	12331b
10	13839	9.2	- 48 45	10.7	11.0	F8	1	..	39657b	60	4131	9.5	- 1 14	7.31	7.31	Ao	4	0,9	23752b
11	11839	9.2	- 52 15	10.4	11.0	Go	2	..	39662b	61	6216	9.5	- 17 46	6.22	7.00	G5	6	..	17410b
12	9550	9.2	- 55 38	10.2	10.5	Fo	3	..	39382b	62	5893	9.5	- 18 31	9.0	10.0	Ko	6	..	39392b
13	2206	9.2	- 73 43	8.8	9.2	F5	3	..	19966b	63	5894	9.5	- 18 38	10.7	11.5	G5	3	..	39392b
14	2334	9.3	+ 59 35	5.65	5.46	B2	..	1,10	6932c	64	15330	9.5	- 27 21	9.4	9.1	Go	5	..	40637b
15	3310	9.3	+ 48 55	7.9	8.0	A2	5	..	37946i	65	14191	9.5	- 37 36	8.9	10.3	K2	2	..	40944b
16	3312	9.3	+ 48 11	8.1	9.1	Ko	2	..	37946i	66	14445	9.5	- 43 22	8.5	9.8	K2	4	..	39472b
17	4468	9.3	+ 36 41	8.2	8.2	Ao	2	..	37948i	67	14279	9.5	- 45 7	10.0	11.2	Go	2	..	39472b
18	4577	9.3	+ 12 49	8.5	9.1	Go	1	..	38129i	68	13890	9.5	- 46 39	9.2	10.1	F5	4	..	39657b
19	4686	9.3	+ 0 57	9.2	9.5	Fo	2	..	12331b	69	13403	9.5	- 49 51	9.40	9.8	Go	3	..	39657b
20	5486	9.3	- 2 41	9.1	9.5	F5	3	..	14658b	70	7688	9.5	- 59 0	9.1	9.2	Fo	7	..	39382b
21	5719	9.3	- 6 23	8.2	8.3	A5	7	3,6-	14658b	71	801	9.6	+ 78 0	9.5	9.5	Ao	1	..	38936i
22	5928	9.3	- 15 12	9.2	9.3	A5	4	..	40621b	72	3014	9.6	+ 51 25	8.0	8.1	A3	4	..	38796i
23	6165	9.3	- 20 29	7.56	8.7	Ko	7	..	39402b	73	4041	9.6	+ 41 13	8.7	9.9	K5	1	..	38942i
24	5635	9.3	- 22 14	7.23	8.4	Ko	8	..	39402b	74	4107	9.6	+ 26 44	9.1	9.6	F8	3	..	38051i
25	16537	9.3	- 24 39	10.6	11.2	Go	1	..	39402b	75	4746	9.6	+ 9 36	4.61	5.03	F5	..	R	56,100
26	15472	9.3	- 33 26	9.1	9.1	F5	4	..	41063b	76	4631	9.6	+ 4 16	7.5	8.7	K5	3	..	14667b
27	14696	9.3	- 36 8	8.5	9.3	Ko	6	..	40944b	77	4689	9.6	+ 1 6	8.99	9.07	A3	3	..	12331b
28	14190	9.3	- 37 46	9.5	10.0	F8	2	..	40944b	78	5488	9.6	- 2 27	8.4	9.0	Go	6	..	14658b
29	14444	9.3	- 43 16	8.2	9.0	Ko	6	..	39472b	79	5522	9.6	- 7 30	7.42	7.92	F8	8	..	40599b
30	13400	9.3	- 49 6	11.1	10.4	Go	1	..	39657b	80	5611	9.6	- 8 8	8.5	9.0	F8	5	..	40599b
31	13401	9.3	- 49 46	8.40	9.0	Ao	7	..	39657b	81	5613	9.6	- 8 46	7.32	7.74	F5	8	..	40599b
32	12878	9.3	- 50 58	7.6	9.2	Ko	6	..	39662b	82	5824	9.6	- 16 9	8.4	9.0	Go	7	..	39392b
33	10019	9.3	- 53 25	8.6	9.9	Ko	5	..	39662b	83	5895	9.6	- 18 28	10.3	11.4	K2	2	..	39392b
34	2541	9.4	+ 55 33	8.7	8.8	A2	2	..	37945i	84	5973	9.6	- 21 42	8.2	9.0	Go	6	..	39402b
35	2491	9.4	+ 54 17	8.5	9.6	K2	1	..	19317i	85	15333	9.6	- 27 29	10.2	10.0	Ao	2	..	40637b
36	2571	9.4	+ 53 29	8.1	8.1	Ao	3	..	37945i	86	14943	9.6	- 34 39	9.4	10.5	Ko	1	..	41063b
37	4483	9.4	+ 40 3	8.92	8.87	B8	2	..	38942i	87	14699	9.6	- 36 38	6.14	7.7	Ko	9	..	40944b
38	4228	9.4	+ 37 50	8.6	8.9	Fo	1	..	38894i	88	14446	9.6	- 43 28	10.4	11.6	Fo	2	..	39472b
39	4227	9.4	+ 37 44	9.4	9.4	Ao	1	..	38894i	89	3161	9.6	- 69 1	10.3	11.3	Ko	2	..	20542b
40	4470	9.4	+ 36 13	6.05	6.19	A5	8	5,9	38894i	90	1490	9.6	- 77 41	8.6	8.9	Fo	6	..	19964b
41	4745	9.4	+ 9 13	8.0	8.1	A2	4	..	38129i	91	5929	9.7	- 15 33	7.64	7.72	A3	8	..	40621b
42	4632	9.4	+ 8 15	7.9	9.0	K2	2	..	14667b	92	15334	9.7	- 27 8	10.4	10.6	G	1	..	40637b
43	4779	9.4	+ 6 33	8.5	8.5	Ao	3	..	38045i	93	14701	9.7	- 35 55	7.7	9.6	K5	5	..	40944b
44	4129	9.4	- 1 24	9.2	9.8	Go	1	..	14658b	94	13287	9.7	- 49 55	10.4	11.2	G5	1	..	39657b
45	6215	9.4	- 16 59	10.0	10.6	Go	3	..	39392b	95	13288	9.7	- 50 52	9.8	10.4	G5	2	..	39662b
46	5892	9.4	- 18 0	9.4	10.5	K2	4	..	39392b	96	10022	9.7	- 53 40	9.3	11.1	Ko	4	..	39662b
47	16794	9.4	- 22 56	9.5	9.6	Ko	4	..	39402b	97	9831	9.7	- 54 28	10.1	11.1	Ko	1	..	39662b
48	16473	9.4	- 32 45	8.8	9.7	Ko	2	..	41063b	98	9615	9.7	- 56 44	9.0	9.7	A2	5	..	39382b
49	1704	9.5	+ 63 48	7.9	9.0	K2	1	..	37277i	99	3900	9.7	- 65 6	6.41	6.41	Ao	7	..	42522b
50	1703	9.5	+ 63 23	7.9	8.9	Ko	1	..	37277i	100	3231	9.8	+ 46 30	8.7	9.0	Fo	4	..	37946i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

202300

21^h 9^m.8

H.D.	DM.	R.A. 1908	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	3230	9.8	+46 22	8.7	9.1	F5	4	..	37946i	51	4379	10.1	+16 4	6.74	7.02	Fo	7	..	38129i
2	4490	9.8	+25 50	7.87	8.15	Fo	6	..	38051i	52	4781	10.1	+ 7 11	8.9	8.9	A	2	..	12331b
3	4528	9.8	+17 15	7.92	7.98	A2	6	..	38129i	53	5722	10.1	- 6 25	8.2	9.0	G5	6	..	40599b
4	4647	9.8	+13 44	7.9	8.9	Ko	4	..	38129i	54	5696	10.1	- 9 42	8.81	9.81	Ko	2	..	40599b
5	4450	9.8	+ 1 15	8.34	9.52	K5	3	..	12331b	55	5950	10.1	-12 30	9.4	9.4	Ao	3	..	40621b
6	5159	9.8	- 3 19	var.	var.	Md	..	R	M	56	6058	10.1	-19 14	10.3	11.5	G5	1	..	39392b
7	5720	9.8	- 5 58	7.18	8.25	K2	7	0,3	40599b	57	16545	10.1	-24 26	10.4	11.2	G5	1	..	39402b
8	5948	9.8	-11 54	10.4	10.4	Ao	2	..	40621b	58	16479	10.1	-32 14	7.35	8.5	G5	8	R	41063b
9	5888	9.8	-13 30	8.7	9.0	F2	5	..	40621b	59	10025	10.1	-53 12	10.3	11.4	K2	1	..	39662b
10	5825	9.8	-16 47	10.3	10.8	F8	2	..	39392b	60	7828	10.1	-57 58	8.4	9.2	Ko	5	..	39382b
11	13289	9.8	-50 23	7.5	9.0	Ko	7	..	39662b	61	R	10.1	-60 44	..	..	Ko	1	..	39382b
12	3741	9.9	+44 45	7.62	8.62	Ko	3	..	37878i	62	2890	10.2	+52 15	8.8	9.1	F2	2	..	37945i
13	4365	9.9	+30 33	7.56	7.56	Ao	4	..	37948i	63	3852	10.2	+43 18	8.5	9.5	K	1	..	37946i
14	4354	9.9	+29 29	6.25	7.25	Ko	6	0,4	38894i	64	4097	10.2	+33 7	8.7	8.7	Ao	2	..	37948i
15	4132	9.9	- 1 36	8.7	9.0	F2	3	..	14658b	65	4014	10.2	+27 45	8.5	9.5	Ko	4	..	38051i
16	5160	9.9	- 2 59	7.06	7.06	Ao	10	2,6	14658b	66	4583	10.2	+12 49	8.9	9.5	Go	2	..	38129i
17	5931	9.9	-15 8	9.2	9.2	Ao	6	..	40621b	67	4691	10.2	+ 0 40	9.2	9.5	F2	4	..	12331b
18	5932	9.9	-15 41	9.0	10.1	K2	3	..	39392b	68	5724	10.2	- 6 36	10.0	10.8	G5	1	..	40599b
19	5826	9.9	-16 24	9.0	9.4	F5	5	..	39392b	69	5935	10.2	-15 35	5.50	6.85	Ma	..	0,7	56,147
20	5974	9.9	-21 4	5.35	6.8	Ko	..	R	56,147	70	5638	10.2	-21 51	8.0	7.7	F2	7	..	39402b
21	15325	9.9	-25 17	10.2	10.6	F5	2	..	39402b	71	16801	10.2	-23 35	9.4	8.7	F8	6	..	39402b
22	15324	9.9	-25 51	9.7	10.1	F8	3	..	39402b	72	18488	10.2	-30 48	8.7	10.1	F8	2	..	41063b
23	15481	9.9	-33 9	8.8	8.8	F8	4	..	41063b	73	14703	10.2	-36 30	9.9	9.9	G5	3	..	40944b
24	14447	9.9	-41 1	9.4	10.8	K2	3	..	39472b	74	14466	10.2	-38 14	9.1	10.5	Go	3	..	40944b
25	13290	9.9	-50 45	9.6	10.7	Ko	2	..	39662b	75	9835	10.2	-54 26	7.4	8.4	Ko	6	0,8	41053b
26	9832	9.9	-54 14	10.2	11.0	G5	1	..	39662b	76	9836	10.2	-54 45	9.8	9.9	A5	5	5,4	39662b
27	6536	9.9	-61 24	8.3	9.1	K2	4	..	19897b	77	3902	10.2	-65 34	9.5	10.1	Go	4	..	20542b
28	3233	10.0	+46 33	8.6	9.6	Ko	2	..	37946i	78	952	10.2	-80 57	9.2	9.3	A5	3	..	21397b
29	4405	10.0	+38 57	8.4	9.5	K2	2	..	38942i	79	1170	10.3	+70 59	8.7	8.7	Ao	2	..	38936i
30	4501	10.0	+21 48	7.66	8.84	K5	3	..	38051i	80	2342	10.3	+59 42	7.06	8.41	Ma	1	..	38526i
31	4650	10.0	+ 7 18	8.7	9.9	K5	1	..	12331b	81	3284	10.3	+50 26	8.9	9.0	A2	2	..	38796i
32	5630	10.0	-10 46	8.8	9.8	Ko	5	..	40599b	82	3316	10.3	+48 13	8.7	9.0	F	1	..	37946i
33	5934	10.0	-14 49	8.41	8.83	F5	6	..	40621b	83	3340	10.3	+47 39	8.5	8.5	Ao	3	..	37946i
34	5827	10.0	-16 30	8.4	8.7	Fo	8	..	39392b	84	3854	10.3	+43 35	8.7	9.0	F	1	..	37946i
35	6219	10.0	-17 31	10.8	11.4	Go	2	..	39392b	85	4347	10.3	+34 21	7.8	8.1	Fo	5	..	37948i
36	6218	10.0	-17 40	10.7	11.8	K2	1	..	39392b	86	4203	10.3	+33 53	7.02	6.97	B8	6	3,6	38894i
37	17666	10.0	-29 4	8.9	10.3	Ko	1	..	40637b	87	4204	10.3	+33 23	9.3	9.3	Ao	1	..	38894i
38	14249	10.0	-40 0	9.5	11.4	K2	2	..	39472b	88	5725	10.3	- 5 53	8.7	9.3	Go	5	..	40599b
39	14248	10.0	-40 45	9.4	9.9	F8	4	..	39472b	89	13893	10.3	-46 28	11.1	11.6	Ko	1	..	39657b
40	14451	10.0	-43 39	10.0	12.2	K2	1	..	39472b	90	9553	10.3	-55 12	9.2	11.1	K2	3	..	39382b
41	11842	10.0	-52 32	9.0	10.4	Ko	3	..	39662b	91	2300	10.4	+57 38	8.5	9.5	Ko	2	..	19317i
42	10024	10.0	-53 10	10.2	10.8	Go	2	..	39662b	92	3747	10.4	+44 13	9.0	9.3	F	1	..	37946i
43	9833	10.0	-54 16	10.4	11.4	Ko	1	..	39662b	93	4205	10.4	+33 54	8.2	8.3	A2	4	..	37948i
44	3785	10.0	-67 13	9.1	10.1	Ko	4	..	20542b	94	4633	10.4	+ 5 6	8.39	9.39	Ko	4	0,3	14204b
45	907	10.1	+74 50	6.96	7.38	F5	7	..	38025i	95	4189	10.4	- 0 40	8.4	9.4	Ko	4	..	12331b
46	2495	10.1	+54 59	8.5	9.6	K2	1	..	37945i	96	5162	10.4	- 2 57	8.8	9.6	G5	5	..	14658b
47	3456	10.1	+45 12	7.47	7.35	B5	4	..	37878i	97	5698	10.4	- 9 32	7.51	8.51	Ko	7	..	40599b
48	3744	10.1	+45 7	7.87	9.05	K5	4	..	23968i	98	14706	10.4	-36 35	8.1	8.4	F5	7	..	40944b
49	4235	10.1	+37 21	7.34	7.17	B3	6	0,6	38942i	99	14705	10.4	-36 43	10.1	10.5	G5	1	..	40944b
50	4530	10.1	+17 24	8.3	8.4	A3	3	..	38129i	100	2841	10.4	-70 30	9.5	9.8	Fo	4	..	19966b

THE HENRY DRAPER CATALOGUE.

21^h 10^m.4

202400

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	953	10.4	-81 18	9.0	9.6	Go	2	..	21397b	51	5641	10.8	-22 20	9.1	8.4	F5	5	..	39402b
2	309	10.4	-87 16	10.0	11.0	K	1	..	22980b	52	16806	10.8	-23 28	9.9	9.9	F8	3	..	39402b
3	4449	10.5	+40 44	7.17	7.95	G5	3	..	37878i	53	15334	10.8	-24 58	9.9	10.9	Go	2	..	39402b
4	4409	10.5	+38 50	7.29	8.36	K2	2	..	38894i	54	13751	10.8	-47 27	9.0	9.2	F5	6	..	39657b
5	4134	10.5	- 1 38	8.5	8.8	F2	4	..	12331b	55	12887	10.8	-51 2	9.3	10.1	F2	4	..	39662b
6	5699	10.5	- 9 48	7.76	8.10	F2	6	..	40599b	56	9838	10.8	-53 55	11.0	11.1	A2	1	..	39662b
7	5891	10.5	-13 37	6.52	7.52	Ko	9	..	40621b	57	6537	10.8	-61 46	6.72	7.4	Go	9	..	19897b
8	5639	10.5	-22 35	9.1	10.2	K2	3	..	39402b	58	4652	10.8	-63 28	8.3	8.6	Fo	7	..	19897b
9	17199	10.5	-28 42	8.1	8.5	F2	7	..	40637b	59	2600	10.8	-71 42	9.4	10.4	Ko	1	..	19966b
10	17671	10.5	-28 56	8.2	9.7	Go	5	..	40637b	60	714	10.8	-83 36	8.8	9.8	Ko	4	..	21397b
11	14454	10.5	-43 10	10.2	11.2	Ko	2	..	39472b	61	1371	10.9	+67 2	8.3	9.3	K	1	..	37277i
12	14382	10.5	-44 27	10.2	11.6	Go	1	..	39472b	62	4032	10.9	+29 4	8.6	8.6	Ao	3	..	21671i
13	13408	10.5	-49 8	8.6	10.4	K5	3	..	39657b	63	4636	10.9	+ 8 22	7.9	7.9	Ao	5	..	14667b
14	13294	10.5	-50 3	10.0	10.4	Ao	2	..	39662b	64	4532	10.9	+ 3 17	8.9	10.0	K2	2	..	14204b
15	7458	10.5	-60 12	9.2	10.0	G5	2	..	39382b	65	4190	10.9	- 0 12	8.9	9.9	Ko	1	..	12331b
16	3543	10.5	-66 48	9.5	10.1	Go	4	..	20542b	66	5700	10.9	- 9 38	6.82	8.17	Ma	7	..	40599b
17	..	10.5	-67 54	..	..	G5	1	..	20542b	67	5937	10.9	-15 43	9.8	10.6	G5	3	..	39392b
18	519	10.5	-85 14	6.40	8.3	K2	3	0,8-	6472b	68	6169	10.9	-20 0	9.6	11.5	Go	4	..	39392b
19	2239	10.6	+58 13	8.5	9.6	K2	1	..	37945i	69	16807	10.9	-23 14	9.1	8.7	F5	6	..	39402b
20	4410	10.6	+38 20	8.6	8.6	B9	2	..	38942i	70	18167	10.9	-31 28	8.2	9.7	Ko	4	..	41063b
21	4482	10.6	+36 42	8.4	9.8	Ma	1	..	38942i	71	14291	10.9	-45 25	9.6	10.9	Ko	2	..	39472b
22	4861	10.6	+21 11	9.4	9.9	F8	1	..	38812i	72	12888	10.9	-51 13	9.4	9.8	F2	3	..	39662b
23	4662	10.6	+19 26	7.9	7.9	Ao	3	..	38051i	73	6538	10.9	-61 21	9.1	9.4	F5	2	..	19897b
24	4743	10.6	+18 12	8.22	9.57	Ma	1	0,1	38129i	74	3547	10.9	-66 23	10.0	10.4	F5	4	..	20542b
25	5977	10.6	-13 53	9.2	10.4	K5	1	..	40621b	75	4493	11.0	+25 26	8.4	9.6	K5	1	..	38051i
26	5898	10.6	-18 26	10.3	10.9	Go	3	..	39392b	76	4342	11.0	+23 5	8.6	9.7	K2	1	..	38051i
27	6060	10.6	-19 39	10.3	11.1	G5	1	..	39392b	77	4745	11.0	+18 40	8.9	9.4	F8	2	..	38812i
28	14383	10.6	-44 35	10.2	11.6	Go	1	..	39472b	78	4486	11.0	+16 19	6.90	7.90	Ko	5	..	38129i
29	13848	10.6	-48 29	8.0	8.9	F5	6	..	39657b	79	4571	11.0	+14 55	8.5	8.6	A2	4	..	38129i
30	3786	10.6	-67 46	11.2	11.5	F2	2	..	20542b	80	6170	11.0	-20 36	7.56	8.2	Ko	6	..	39402b
31	1171	10.7	+70 25	7.59	7.67	A3	3	3,3	38025i	81	17674	11.0	-29 1	9.5	10.0	Go	1	..	40637b
32	1151	10.7	+70 2	7.10	8.17	K2	3	0,3	38025i	82	14186	11.0	-39 28	8.0	8.1	F8	9	..	40944b
33	4275	10.7	+23 39	8.6	9.7	K2	1	..	38051i	83	15347	11.0	-42 52	9.6	12.1	K5	1	..	39472b
34	4650	10.7	+13 29	8.5	9.6	K2	2	..	38129i	84	14457	11.0	-43 0	10.2	11.0	Go	3	..	39472b
35	6221	10.7	-17 44	10.9	11.5	Go	2	..	39392b	85	10029	11.0	-53 13	10.3	11.1	G5	1	..	39662b
36	6061	10.7	-19 46	9.18	11.5	G5	4	..	39392b	86	9839	11.0	-54 35	10.6	11.1	F8	1	..	39662b
37	16550	10.7	-23 59	9.7	10.1	G5	4	..	39402b	87	9556	11.0	-55 33	8.4	9.4	Go	6	..	39382b
38	15512	10.7	-26 47	9.9	9.7	F8	3	..	40637b	88	R	11.0	-60 8	..	..	Go	1	..	39382b
39	18492	10.7	-30 43	8.9	10.3	Go	2	..	41063b	89	7459	11.0	-60 50	10.0	10.3	Fo	2	..	39382b
40	14202	10.7	-37 12	9.5	10.5	F8	2	..	40944b	90	682	11.1	+80 37	7.13	8.20	K2	1	..	37294i
41	13295	10.7	-50 31	8.7	9.6	Ko	5	..	39662b	91	4051	11.1	+41 14	8.7	8.8	A2	2	..	37946i
42	12885	10.7	-51 35	10.0	11.0	G5	1	..	39662b	92	4498	11.1	+11 5	7.36	8.36	Ko	5	..	38129i
43	2892	10.8	+52 18	7.32	8.39	K2	4	..	37945i	93	4135	11.1	- 1 19	8.5	9.6	K2	2	..	12331b
44	4240	10.8	+37 37	3.82	4.10	Fo	..	R	2902c	94	5701	11.1	- 9 35	7.34	7.34	Ao	8	..	40621b
45	4504	10.8	+21 22	8.0	9.1	K2	2	..	38051i	95	5938	11.1	-15 14	8.0	8.0	Ao	3	..	17410b
46	4532	10.8	+17 44	8.5	8.6	A2	3	..	38129i	96	6062	11.1	-19 12	9.8	10.6	G5	3	..	39392b
47	4635	10.8	+ 4 50	4.14	4.64	F8	..	R	2802c	97	15351	11.1	-27 19	9.7	10.8	G5	2	..	40637b
48	5978	10.8	+ 4 50	..	..	A3	..	R	2802c	98	14684	11.1	-35 50	9.5	10.8	K2	1	..	41063b
49	5978	10.8	-13 59	9.2	10.4	K5	2	..	40621b	99	14187	11.1	-39 10	9.5	10.2	K2	2	..	40944b
50	5979	10.8	-14 27	9.4	10.5	K2	2	..	40621b	100	15348	11.1	-42 36	9.6	12.1	Mb	2	..	39472b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

202500

21^h 11^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	13412	II.1	-49 8	6.70	7.6	Ko	10	..	39657b	51	7463	II.4	-60 52	9.3	10.3	Ko	2	..	39382b
2	13298	II.1	-49 57	11.1	11.6	Go	1	..	39657b	52	4210	II.5	+33 27	8.0	9.0	Ko	2	5,I	37948i
3	3163	II.1	-69 26	8.6	9.8	K5	4	..	20542b	53	4536	II.5	+ 3 48	9.2	9.3	A3	3	..	14204b
4	729	II.2	+81 56	8.9	9.4	F8	2	..	37294i	54	5495	II.5	- 2 2	6.41	7.41	Ko	10	..	12331b
5	742	II.2	+78 15	7.36	7.42	A2	5	..	38590i	55	6063	II.5	-19 19	9.2	10.4	K5	2	..	39392b
6	926	II.2	+73 39	8.9	8.9	Ao	2	..	38936i	56	6173	II.5	-19 55	8.13	8.4	A5	8	..	39392b
7	2578	II.2	+54 4	7.86	8.42	Go	3	..	37945i	57	15519	II.5	-26 26	9.2	9.7	Go	4	..	40637b
8	4499	II.2	+10 17	7.66	8.84	K5	3	..	38129i	58	15488	II.5	-33 47	9.1	10.3	Ko	2	..	41063b
9	4534	II.2	+ 4 7	9.2	10.4	K5	1	..	14204b	59	14962	II.5	-34 25	8.1	9.0	F8	7	..	41063b
10	4535	II.2	+ 4 0	8.5	9.3	G5	5	..	14667b	60	14192	II.5	-39 15	6.65	7.9	Map	8	R	40944b
11	6223	II.2	-17 24	10.8	11.6	G5	2	..	39392b	61	14265	II.5	-40 11	10.8	11.1	Go	2	..	39472b
12	16553	II.2	-24 20	9.7	10.6	Ko	4	..	39402b	62	14462	II.5	-43 2	9.4	11.0	Ko	3	..	39472b
13	16491	II.2	-32 18	8.9	9.5	G5	4	..	41063b	63	13300	II.5	-50 36	9.2	9.5	F5	5	..	39662b
14	14475	II.2	-38 13	10.1	10.8	Go	2	..	40944b	64	10031	II.5	-53 14	10.4	10.8	F5	2	..	39662b
15	13755	II.2	-47 42	9.2	10.1	Ko	4	..	39657b	65	6220	II.5	-62 34	8.8	9.6	G5	3	..	19897b
16	9823	II.2	-56 59	8.8	10.5	Go	3	..	39382b	66	3164	II.5	-68 58	8.8	9.8	Ko	4	..	20542b
17	9822	II.2	-57 8	8.7	9.9	Go	4	..	39382b	67	3240	II.6	+46 38	9.0	9.1	A3	2	..	37946i
18	1915	II.3	+62 28	8.9	9.0	A2	1	..	37277i	68	4056	II.6	+41 36	6.76	7.32	Go	4	..	37878i
19	2303	II.3	+57 53	7.02	7.02	Ao	7	..	37945i	69	4492	II.6	+36 50	7.67	7.62	B8	4	..	37948i
20	4024	II.3	+42 32	8.3	8.9	G	2	..	37946i	70	4493	II.6	+36 25	8.6	9.8	K5	1	0,I	38894i
21	4023	II.3	+27 35	8.1	9.2	K2	3	..	38051i	71	4358	II.6	+34 28	8.4	8.4	Ao	2	2,2	38894i
22	4666	II.3	+19 17	7.32	7.38	A2	7	..	38051i	72	4393	II.6	+31 39	7.99	8.07	A3	4	..	37948i
23	4500	II.3	+10 32	7.9	9.3	Ma	3	..	38129i	73	4357	II.6	+25 1	7.06	7.84	G5	6	..	38051i
24	5635	II.3	-10 33	9.4	10.0	Go	2	..	40599b	74	4653	II.6	+13 45	8.5	9.7	K5	2	..	38129i
25	5939	II.3	-15 31	8.5	9.5	Ko	6	..	39392b	75	4638	II.6	+ 8 59	8.1	9.2	K2	3	..	14667b
26	6224	II.3	-17 40	9.8	10.6	G5	4	..	39392b	76	4329	II.6	+ 3 8	9.9	10.0	A2	2	..	14204b
27	14686	II.3	-35 31	10.1	10.8	G5	1	..	41063b	77	5636	II.6	-10 33	6.85	6.85	Ao	5	0,9	17410b
28	7461	II.3	-60 38	10.0	10.5	F8	2	..	39382b	78	5648	II.6	-22 9	8.1	7.7	F5	8	..	39402b
29	2498	II.4	+54 15	7.50	7.84	F2	6	..	37945i	79	5647	II.6	-22 30	9.0	9.0	Ko	5	..	39402b
30	4457	II.4	+40 47	8.2	8.8	Go	2	..	37878i	80	9619	II.6	-56 29	9.3	11.1	Ko	2	..	39382b
31	4384	II.4	+15 40	8.7	8.8	A2	3	..	38129i	81	1981	II.6	-74 17	8.4	8.7	Fo	5	..	19964b
32	4136	II.4	- 1 2	7.9	8.9	Ko	7	..	12331b	82	1708	II.7	+63 59	6.41	6.97	Go	..	0,8	56,100
33	5617	II.4	- 8 4	8.0	8.3	F2	7	..	40599b	83	2547	II.7	+56 28	7.12	8.30	K5	3	..	37945i
34	5702	II.4	- 9 45	8.56	9.56	Ko	3	..	40599b	84	3467	II.7	+45 32	9.0	9.0	A	2	..	37946i
35	5940	II.4	-14 54	9.26	10.33	K2	3	..	39392b	85	4506	II.7	+21 29	7.7	8.8	K2	3	..	38051i
36	6225	II.4	-17 23	10.9	11.4	F8	2	..	39392b	86	4786	II.7	+ 7 6	7.6	7.9	F2	7	..	14667b
37	6172	II.4	-19 53	9.28	10.9	G5	4	..	39392b	87	4639	II.7	+ 4 51	7.74	7.74	Ao	4	..	38045i
38	5646	II.4	-22 0	9.6	10.5	Go	3	..	39402b	88	5621	II.7	- 8 42	9.4	9.7	Fo	4	..	40599b
39	5645	II.4	-22 12	9.6	11.5	K2	1	..	39402b	89	5831	II.7	-16 23	9.8	11.0	K5	1	..	39392b
40	18175	II.4	-31 10	6.94	8.2	Ko	8	..	41063b	90	6175	II.7	-20 13	8.4	9.1	F8	7	..	39392b
41	14961	II.4	-34 30	8.8	10.0	Go	3	..	41063b	91	15342	II.7	-25 42	10.2	11.2	A2	3	..	39402b
42	14205	II.4	-37 19	9.1	10.8	Ko	1	..	40944b	92	13902	II.7	-46 40	7.7	9.2	Ko	5	..	39657b
43	14264	II.4	-40 27	10.5	10.8	F8	4	..	39472b	93	13758	II.7	-47 25	7.1	8.3	K5	8	..	39657b
44	14459	II.4	-41 6	9.5	10.5	A5	3	..	39472b	94	3787	II.7	-67 41	9.9	11.3	Ma	2	..	20542b
45	15352	II.4	-42 28	8.5	10.8	Ko	4	..	39472b	95	1054	II.8	+72 3	8.1	8.5	F5	3	3,I	38036i
46	15353	II.4	-42 54	9.8	11.4	Go	3	..	39472b	96	1562	II.8	+66 6	7.8	8.9	K2	2	..	37277i
47	14460	II.4	-43 20	10.7	11.6	Ko	2	..	39472b	97	3470	II.8	+46 0	8.1	9.5	Ma	2	..	37946i
48	9825	II.4	-57 27	10.4	11.0	Go	3	..	39382b	98	4057	II.8	+42 1	9.1	9.1	A	1	..	37946i
49	7689	II.4	-59 14	8.7	9.1	F5	8	..	39382b	99	4245	II.8	+38 3	8.6	9.8	K5	1	..	38942i
50	7462	II.4	-60 16	10.3	10.9	Go	1	..	39382b	100	4244	II.8	+37 55	9.4	9.4	A	1	..	38942i

THE HENRY DRAPER CATALOGUE.

202600

21^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	4575	11.8	+14 39	9.2	9.6	F5	1	..	38129i	51	12893	12.1	-51 8	8.4	9.2	F5	4	..	41053b
2	4656	11.8	+13 23	8.3	8.3	B9	4	..	38129i	52	3414	12.1	-67 56	9.9	10.4	F8	3	..	20542b
3	4639	11.8	+ 8 54	8.4	9.5	K2	2	..	14667b	53	3291	12.2	+50 19	9.02	9.10	A3	2	..	38796i
4	4696	11.8	+ 0 45	9.2	10.2	Ko	3	..	12331b	54	3348	12.2	+47 33	6.32	6.20	B5	7	3,8	9682i
5	4138	11.8	- 1 29	8.3	9.3	Ko	6	..	12331b	55	4495	12.2	+36 59	8.6	8.7	A2	2	..	38894i
6	5897	11.8	-13 42	6.18	6.18	Ao	6	..	17410b	56	4106	12.2	+32 21	8.1	9.1	Ko	2	..	37948i
7	5900	11.8	-18 30	9.8	10.4	Go	4	..	39392b	57	4538	12.2	+ 3 28	7.7	8.8	K2	5	0,2	12331b
8	16558	11.8	-24 27	9.1	9.3	F5	6	..	39402b	58	5507	12.2	- 5 47	8.0	8.8	G5	7	..	40599b
9	15357	11.8	-26 54	8.10	9.3	Ko	4	..	40637b	59	5623	12.2	- 8 16	9.2	9.3	A2	3	..	40599b
10	14692	11.8	-35 27	9.5	10.8	Ko	1	..	41063b	60	17682	12.2	-29 7	7.6	9.1	Ko	5	..	40637b
11	14480	11.8	-38 50	8.8	9.9	Go	3	..	40944b	61	16504	12.2	-32 12	9.4	10.3	Ko	1	..	41063b
12	14294	11.8	-45 43	7.4	8.1	Ao	9	..	39657b	62	14196	12.2	-39 40	8.8	8.8	Go	8	..	39472b
13	12890	11.8	-51 21	9.8	11.2	G5	1	..	39662b	63	9845	12.2	-54 38	10.4	10.5	A3	3	..	39662b
14	1295	11.9	+67 44	8.28	8.28	Ao	2	..	37277i	64	3476	12.3	+45 19	7.62	7.60	B9	3	1,4	9682i
15	3289	11.9	+51 0	7.8	8.9	K2	3	..	38796i	65	4642	12.3	+ 4 12	8.4	9.6	K5	1	..	14667b
16	3290	11.9	+50 52	7.08	8.08	Ko	6	..	38796i	66	5729	12.3	- 5 53	8.6	9.8	K5	3	..	40599b
17	3754	11.9	+44 32	7.62	7.62	Ao	4	1,5	9682i	67	5529	12.3	- 7 6	9.2	10.3	K2	1	..	40599b
18	4498	11.9	+25 56	7.26	7.60	F2	7	..	38051i	68	5706	12.3	- 9 17	9.8	10.6	G5	1	..	40599b
19	4759	11.9	+ 9 47	8.7	9.7	Ko	2	..	38129i	69	5833	12.3	-16 19	7.8	8.2	F5	7	..	39392b
20	4697	11.9	+ 0 37	8.3	9.3	Ko	6	..	12331b	70	6228	12.3	-16 58	10.0	10.8	G5	3	..	39392b
21	5637	11.9	-10 30	8.8	9.2	F5	4	..	40599b	71	5903	12.3	-18 24	5.39	5.34	B8	..	..	56,100
22	6227	11.9	-17 36	10.0	11.0	Ko	3	..	39392b	72	5981	12.3	-21 40	8.7	8.7	F5	5	..	39402b
23	5901	11.9	-18 31	10.0	10.6	Go	3	..	39392b	73	5654	12.3	-22 28	9.2	9.0	F8	4	..	39402b
24	5649	11.9	-21 49	10.0	10.8	F8	2	..	39402b	74	16506	12.3	-32 19	9.7	10.3	Go	1	..	41063b
25	5650	11.9	-22 1	8.4	7.8	A3	6	..	39402b	75	14469	12.3	-43 48	10.2	11.2	F8	2	..	39472b
26	15358	11.9	-27 39	8.7	9.1	F2	4	..	40637b	76	13306	12.3	-50 2	7.36	7.9	Ko	8	..	39662b
27	16498	11.9	-32 35	4.79	4.79	Ao	..	R	28,215	77	9620	12.3	-56 24	9.2	11.0	Ko	2	..	39382b
28	14464	11.9	-43 45	6.90	6.9	G5	5	..	41843b	78	7830	12.3	-58 34	10.1	10.7	Go	1	..	39382b
29	7829	11.9	-57 56	9.5	10.5	Ko	2	..	39382b	79	3165	12.3	-69 4	10.7	11.3	Go	2	..	20542b
30	4361	12.0	+34 13	7.9	8.9	Ko	2	..	37948i	80	855	12.3	-82 24	8.2	8.6	F5	5	..	21397b
31	4528	12.0	+11 55	8.1	9.1	Ko	2	..	38129i	81	3757	12.4	+44 23	8.9	8.9	A	2	..	37946i
32	5404	12.0	- 4 40	8.35	9.35	Ko	4	..	14658b	82	4427	12.4	+38 40	8.0	8.1	A2	3	..	38894i
33	5984	12.0	-14 25	9.8	9.8	Ao	5	0,4	39392b	83	4641	12.4	+ 8 37	8.3	8.3	Ao	4	..	38129i
34	6064	12.0	-19 20	10.3	10.8	F8	2	..	39392b	84	4331	12.4	+ 2 50	9.2	9.7	F8	3	..	14204b
35	5978	12.0	-21 40	8.6	10.2	Ko	4	..	39402b	85	5408	12.4	- 4 22	9.2	10.2	Ko	2	..	14658b
36	18183	12.0	-31 14	9.5	9.7	G5	1	..	41063b	86	5730	12.4	- 6 12	7.49	7.91	F5	9	..	40599b
37	15493	12.0	-33 17	8.5	8.5	Ao	7	..	41063b	87	14472	12.4	-43 17	10.4	11.3	G5	1	..	39472b
38	14269	12.0	-40 39	9.4	11.6	K5	1	..	39472b	88	13906	12.4	-46 22	9.8	11.2	G5	1	..	39657b
39	12891	12.0	-51 36	9.1	9.5	F5	2	..	41053b	89	9846	12.4	-54 2	9.3	10.5	Ko	2	..	41053b
40	6539	12.0	-60 56	9.5	9.8	Fo	4	..	39382b	90	9559	12.4	-54 59	8.24	8.6	F2	8	..	39382b
41	2209	12.0	-73 14	8.9	10.1	K5	1	..	19966b	91	6540	12.4	-61 23	9.6	10.0	F5	3	..	39382b
42	2499	12.1	+55 6	8.06	8.06	Ao	4	..	37945i	92	3788	12.4	-67 33	9.8	11.0	K5	2	..	20542b
43	4379	12.1	+30 57	8.0	8.1	A2	3	..	37948i	93	3167	12.4	-69 50	8.8	9.2	F5	6	..	20542b
44	4658	12.1	+13 32	7.42	7.37	B8	7	..	38129i	94	2346	12.5	+60 10	8.46	8.74	Fo	1	..	38526i
45	5987	12.1	-13 50	9.4	10.4	Ko	3	..	40621b	95	3326	12.5	+48 41	8.3	9.3	Ko	2	..	38796i
46	5986	12.1	-14 41	9.8	10.6	G5	4	..	39392b	96	4118	12.5	+26 50	8.5	9.6	K2	3	..	38051i
47	5902	12.1	-18 36	9.4	10.4	Ko	5	..	39392b	97	4350	12.5	+22 15	8.4	9.2	G5	2	5,2-	21671i
48	18503	12.1	-29 56	8.72	9.4	G5	5	..	40637b	98	4751	12.5	+18 32	8.3	9.5	K5	1	..	38812i
49	14965	12.1	-34 25	7.41	8.8	K2	7	..	41063b	99	4658	12.5	+ 7 49	7.25	8.32	K2	5	..	14667b
50	14397	12.1	-44 45	9.45	9.8	Ao	4	..	39657b	100	5563	12.5	-11 14	9.2	10.2	Ko	3	..	40599b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

21^h 12^m.5

202700

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	6065	12.5	-19 7	8.4	9.0	F8	7	..	39392b	51	4195	12.9	- 0 16	8.5	9.6	K2	4	..	12331b
2	15526	12.5	-26 8	8.7	9.3	Go	5	..	40637b	52	5499	12.9	- 2 34	7.9	9.0	K2	6	..	14658b
3	14401	12.5	-44 42	8.6	9.2	F8	6	..	39657b	53	5512	12.9	- 4 57	5.68	5.63	B8	8	..	23752b
4	13423	12.5	-49 49	7.78	8.3	Ko	6	..	39662b	54	5731	12.9	- 6 34	9.1	10.5	Ma	2	..	40599b
5	3789	12.5	-67 40	9.6	10.4	G5	4	..	20542b	55	5900	12.9	-13 44	8.5	9.0	F8	7	..	40621b
6	3168	12.5	-69 43	10.7	11.5	G5	2	..	20542b	56	5905	12.9	-17 57	9.4	10.4	Ko	6	..	39392b
7	954	12.5	-81 7	8.13	8.6	Go	6	..	21397b	57	6068	12.9	-19 39	9.8	10.5	F8	4	..	39392b
8	927	12.6	+73 52	9.5	9.5	Ao	2	..	38936i	58	16569	12.9	-24 13	8.9	8.8	Fo	6	..	39402b
9	1375	12.6	+66 12	8.55	8.55	Ao	3	..	37277i	59	14977	12.9	-34 20	8.8	9.3	B9	5	..	41063b
10	3866	12.6	+43 49	6.57	7.57	Ko	4	..	37878i	60	14476	12.9	-43 24	10.2	11.6	Ko	1	..	39472b
11	4457	12.6	+35 54	7.40	7.38	B9	4	..	37948i	61	14297	12.9	-45 37	9.6	11.2	G5	2	..	39657b
12	4508	12.6	+22 5	8.2	8.5	F2	5	..	38051i	62	13861	12.9	-47 54	10.4	11.0	A5	2	..	39657b
13	6229	12.6	-17 37	10.7	11.5	G5	2	..	39392b	63	13311	12.9	-50 42	8.0	8.6	F5	7	..	41053b
14	15502	12.6	-33 30	8.9	8.6	Ko	3	..	41063b	64	R	12.9	-59 48	..	..	G5	1	..	39382b
15	14277	12.6	-40 35	10.1	11.1	Go	2	..	39472b	65	778	13.0	+75 53	7.04	7.02	B9	8	..	38025i
16	14403	12.6	-44 37	8.4	8.6	F5	7	..	39657b	66	3329	13.0	+48 22	7.47	7.53	A2	6	..	37946i
17	13424	12.6	-49 37	9.6	10.1	F2	3	..	39657b	67	3868	13.0	+43 14	8.6	9.6	Ko	2	..	37946i
18	7690	12.6	-59 34	9.9	10.9	Ko	1	..	39382b	68	4461	13.0	+35 21	7.87	7.93	A2	3	..	37948i
19	1152	12.7	+69 38	6.80	7.80	Ko	5	0,4	37277i	69	4509	13.0	+22 7	7.20	7.54	F2	8	..	38051i
20	4067	12.7	+41 50	6.53	7.60	K2	5	0,4	37946i	70	5834	13.0	-16 37	10.3	10.8	F8	2	..	39392b
21	4140	12.7	- 1 49	8.62	9.97	Ma	2	..	12331b	71	6179	13.0	-20 48	9.2	10.5	Ko	2	..	39402b
22	5410	12.7	- 3 54	8.47	9.47	Ko	2	..	14658b	72	15367	13.0	-27 2	8.0	7.8	F8	6	..	40637b
23	5904	12.7	-17 53	6.31	6.45	A5	9	2,4	45421b	73	17692	13.0	-29 11	6.43	7.9	G5	9	..	40637b
24	6176	12.7	-20 20	10.0	10.5	F8	3	..	39402b	74	16512	13.0	-32 47	7.02	8.5	K2	7	..	41063b
25	6178	12.7	-20 45	6.69	7.3	Ko	..	5,8	56,147	75	14200	13.0	-39 46	7.42	8.8	K5	7	..	39472b
26	5983	12.7	-21 37	9.2	10.2	G5	2	..	39402b	76	9623	13.0	-56 13	8.2	10.8	K5	4	..	39382b
27	17687	12.7	-29 41	9.1	8.9	Fo	5	..	40637b	77	4658	13.0	-63 29	10.0	10.1	A3	2	..	42486b
28	14211	12.7	-37 1	8.8	10.2	G5	3	..	40944b	78	3792	13.0	-67 6	8.2	8.3	A2	9	..	20542b
29	13762	12.7	-47 29	7.09	7.6	G5	10	..	39657b	79	4402	13.1	+31 29	7.8	8.4	Go	3	..	37948i
30	10037	12.7	-53 52	4.60	4.74	A5	..	2,R	28,215	80	4874	13.1	+20 25	8.0	9.2	K5	1	..	38051i
31	2595	12.7	-72 0	7.3	8.7	Ma	6	..	19966b	81	4673	13.1	+19 35	7.62	8.62	Ko	4	..	38051i
32	1504	12.7	-75 56	7.7	8.3	Go	7	..	19964b	82	4664	13.1	+14 7	8.1	8.2	A3	5	..	38129i
33	1010	12.7	-80 35	9.1	10.1	K	1	..	21397b	83	5958	13.1	-12 41	8.0	8.5	F8	8	..	40621b
34	1515	12.8	+64 20	6.92	7.92	Ko	5	..	37277i	84	5901	13.1	-13 1	8.2	9.2	Ko	5	..	40621b
35	1711	12.8	+64 4	7.9	8.4	F8	2	..	37277i	85	5990	13.1	-13 53	9.0	10.0	Ko	2	..	40621b
36	4332	12.8	+ 3 10	8.5	8.8	F2	5	..	14204b	86	6231	13.1	-17 24	10.3	10.9	Go	1	..	39392b
37	6230	12.8	-17 10	10.3	10.9	Go	2	..	39392b	87	6069	13.1	-18 55	10.3	10.8	F8	3	..	39392b
38	6177	12.8	-20 4	10.3	11.3	F8	2	..	39392b	88	6070	13.1	-19 13	10.3	11.1	Go	3	..	39392b
39	15347	12.8	-25 27	9.2	9.9	Go	5	..	39402b	89	18510	13.1	-30 44	9.4	10.3	G5	2	..	41063b
40	15503	12.8	-33 28	9.1	10.0	Ko	2	..	41063b	90	14469	13.1	-41 28	7.7	8.1	Fo	7	..	39472b
41	14974	12.8	-34 26	8.8	10.5	K2	1	..	41063b	91	15374	13.1	-42 24	9.6	12.1	K5	1	..	39472b
42	14727	12.8	-36 39	9.1	9.6	Fo	4	..	40944b	92	14409	13.1	-44 17	9.8	11.2	G5	2	..	39472b
43	7691	12.8	-59 39	8.31	8.8	F2	6	..	39382b	93	13862	13.1	-48 52	10.2	11.6	Ko	1	..	39657b
44	6541	12.8	-60 58	9.9	10.3	F5	2	..	39382b	94	7466	13.1	-60 13	9.3	9.5	Go	4	..	39382b
45	3790	12.8	-67 9	9.4	10.4	Ko	2	..	20542b	95	6223	13.1	-62 47	9.1	10.1	Ko	3	..	19897b
46	3791	12.8	-67 20	9.4	10.4	Ko	4	..	20542b	96	3025	13.2	+52 3	8.5	8.5	Ao	4	1,4	38796i
47	4386	12.9	+30 17	8.41	8.41	Ao	2	..	38894i	97	4507	13.2	+39 36	9.0	9.0	Ao	3	..	38942i
48	4765	12.9	+10 7	8.57	9.64	K2	1	..	38129i	98	4510	13.2	+21 59	8.0	8.4	F5	4	..	38051i
49	4644	12.9	+ 8 29	8.5	9.5	Ko	3	..	14667b	99	4674	13.2	+20 5	7.95	8.01	A2	6	..	38051i
50	4333	12.9	+ 2 29	8.1	9.3	K5	2	..	38045i	100	4495	13.2	+16 43	9.2	10.6	Ma	..	..	M

THE HENRY DRAPER CATALOGUE.

202800

21^h 13^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	4701	13.2	+ 0 47	8.5	9.5	Ko	3	..	38045i	51	5503	13.5	- 1 57	10.3	11.7	Ma	..	..	M
2	5991	13.2	-14 25	9.6	10.4	G5	2	0,2	39392b	52	6182	13.5	-20 32	8.2	9.1	K5	4	..	39402b
3	5837	13.2	-15 53	9.8	10.4	Go	3	..	39392b	53	14488	13.5	-38 47	9.5	10.8	F2	2	..	40944b
4	5906	13.2	-18 40	10.3	10.9	Go	4	..	39392b	54	14412	13.5	-44 40	10.0	11.6	Ko	1	..	39472b
5	5658	13.2	-22 27	8.4	8.4	Ko	6	..	39402b	55	14300	13.5	-45 8	9.6	11.0	Ko	2	..	39472b
6	14981	13.2	-34 18	8.5	9.1	Go	6	..	41063b	56	11851	13.5	-52 12	9.3	10.1	G5	2	..	41053b
7	13767	13.2	-47 44	10.4	11.0	F2	2	..	39657b	57	9847	13.5	-54 45	10.2	10.8	Go	1	..	39662b
8	11850	13.2	-52 1	8.2	9.5	Ko	4	..	41053b	58	9831	13.5	-57 47	10.0	11.0	Ko	2	..	39382b
9	7831	13.2	-58 16	7.8	7.9	A5	2	..	44240b	59	3794	13.5	-67 11	9.8	10.6	G5	2	..	20542b
10	4045	13.3	+42 46	8.6	8.7	A3	2	..	37946i	60	2902	13.6	+52 45	8.3	8.3	B9	4	..	37945i
11	4218	13.3	+34 1	7.38	8.45	K2	4	..	37948i	61	3482	13.6	+46 6	8.9	9.9	K	1	..	37946i
12	4111	13.3	+32 52	9.3	9.4	A2	2	..	37948i	62	4046	13.6	+42 16	6.09	6.04	B8	6	..	37878i
13	4389	13.3	+30 44	8.0	8.0	Ao	3	..	37948i	63	4219	13.6	+33 20	7.7	7.8	A5	3	..	37948i
14	4541	13.3	+17 36	9.0	9.4	F5	1	..	38812i	64	4358	13.6	+22 45	8.5	8.8	F2	4	..	3805ri
15	4543	13.3	+17 13	7.72	7.78	A2	6	..	38129i	65	4513	13.6	+21 41	7.12	7.20	A3	8	..	3805ri
16	4660	13.3	+ 7 21	8.7	10.1	Mb	2	..	10143b	66	4647	13.6	+ 8 29	8.55	9.11	Go	2	2,2	14667b
17	4646	13.3	+ 4 52	9.2	9.6	F5	4	..	14204b	67	5504	13.6	- 2 33	8.4	9.2	G5	5	..	14658b
18	5413	13.3	- 4 6	7.8	8.1	Fo	8	..	14658b	68	5536	13.6	- 6 52	7.8	8.8	Ko	4	..	40599b
19	5626	13.3	- 8 28	9.8	10.9	K2	1	..	40599b	69	5992	13.6	-14 25	9.2	9.8	Go	6	5,4	39392b
20	5566	13.3	-11 3	9.2	10.2	Ko	3	..	40599b	70	16520	13.6	-32 52	10.1	9.5	Go	3	..	41063b
21	6181	13.3	-20 9	9.6	9.7	Go	5	..	39392b	71	14479	13.6	-43 6	7.6	8.5	Go	8	..	39472b
22	5987	13.3	-20 50	9.2	9.0	Fo	5	..	39402b	72	14414	13.6	-44 1	8.8	9.2	A2	7	..	39472b
23	18194	13.3	-31 36	8.1	9.4	Ko	5	..	41063b	73	14301	13.6	-45 10	10.2	11.6	Ko	2	..	39472b
24	14280	13.3	-39 54	9.08	10.5	G5	4	..	39472b	74	14302	13.6	-45 27	var.	var.	Na	..	0,5 R	56,147
25	14281	13.3	-40 17	9.9	11.1	Ko	2	..	39472b	75	14303	13.6	-45 39	9.1	9.5	A5	4	..	39657b
26	13426	13.3	-49 14	8.4	8.3	F8	7	..	39657b	76	4124	13.6	-64 50	7.56	10.1	Ma	5	..	20542b
27	13316	13.3	-50 37	10.0	10.4	Go	2	..	39662b	77	2503	13.7	+54 26	8.5	9.3	G5	1	..	37945i
28	10039	13.3	-53 10	8.6	9.9	Go	3	..	41053b	78	3484	13.7	+45 39	8.1	8.1	B9	2	..	37878i
29	9625	13.3	-56 17	10.3	10.8	F8	2	..	39382b	79	4510	13.7	+39 19	7.58	7.86	Fo	4	5,2	38942i
30	3026	13.4	+52 7	8.9	8.9	Ao	2	..	38796i	80	4432	13.7	+38 47	6.93	7.35	F5	5	5,6	37878i
31	3256	13.4	+46 56	9.0	9.3	Fo	2	..	37946i	81	4115	13.7	+32 37	8.4	8.5	A5	2	..	37948i
32	3254	13.4	+46 21	8.5	8.6	A2	3	..	37946i	82	4393	13.7	+30 23	8.11	8.11	Ao	3	..	37948i
33	4283	13.4	+23 45	9.3	9.6	F2	1	..	38051i	83	4372	13.7	+29 55	8.11	7.99	B5	3	4,3	38894i
34	4356	13.4	+22 16	9.0	9.1	A2	2	..	38051i	84	4648	13.7	+ 8 32	7.40	7.82	F5	5	..	38129i
35	4769	13.4	+ 9 50	7.30	8.30	Ko	5	..	38129i	85	4336	13.7	+ 2 20	9.2	9.2	Ao	6	..	14204b
36	5172	13.4	- 3 33	8.6	9.6	Ko	2	..	14658b	86	5538	13.7	- 7 34	8.0	9.0	Ko	4	..	40599b
37	5707	13.4	- 8 51	9.2	9.5	F2	4	..	40599b	87	5537	13.7	- 7 45	7.8	8.4	Go	6	..	40599b
38	5945	13.4	-15 32	9.4	10.4	Ko	2	..	39392b	88	5627	13.7	- 8 18	10.3	11.4	K2	1	..	40599b
39	6232	13.4	-17 32	10.0	10.3	F2	3	..	39392b	89	5902	13.7	-13 13	9.4	10.2	G5	1	..	40621b
40	5988	13.4	-21 42	8.8	9.0	G5	4	..	39402b	90	5840	13.7	-16 36	6.93	7.93	Ko	..	..	56,147
41	5989	13.4	-21 43	8.8	8.1	F2	5	..	39402b	91	6234	13.7	-16 56	9.6	10.6	Ko	4	..	39392b
42	16572	13.4	-24 51	9.7	11.6	G5	2	..	39402b	92	16576	13.7	-24 12	8.3	9.9	Ko	5	..	39402b
43	14708	13.4	-34 59	8.8	9.9	Ko	1	..	41063b	93	15359	13.7	-25 10	10.4	11.4	Ko	1	..	39402b
44	14285	13.4	-40 29	8.1	9.9	K5	4	..	39472b	94	15537	13.7	-26 29	9.7	10.5	Ko	3	..	39402b
45	14411	13.4	-44 19	10.0	11.3	Go	2	..	39472b	95	13769	13.7	-47 43	9.2	9.5	Fo	5	..	39657b
46	13911	13.4	-45 54	7.9	8.6	Go	6	..	39657b	96	13865	13.7	-47 58	9.6	11.0	Go	3	..	39657b
47	4122	13.4	-64 30	9.2	9.3	A5	3	..	42486b	97	9563	13.7	-55 25	10.2	11.4	K5	1	..	39382b
48	3554	13.4	-66 10	10.1	10.4	Fo	4	..	20542b	98	7832	13.7	-58 13	8.9	9.4	F8	4	..	39382b
49	3169	13.4	-69 4	8.7	9.8	K2	4	..	20542b	99	7692	13.7	-58 58	8.8	8.9	A2	6	..	39382b
50	4431	13.5	+38 59	4.28	4.28	Aop	..	R	56,100	100	744	13.8	+78 34	-6.95	6.78	B3	6	..	38590i

202900

21^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	1565	13.8	+05 27	8.35	8.63	Fo	3	..	37277i	51	4516	14.1	+10 47	6.32	7.50	K5	6	..	3812qi
2	3357	13.8	+47 37	8.6	9.7	K2	2	..	37946i	52	4461	14.1	+ 1 40	8.9	9.0	A5	1	..	38045i
3	4433	13.8	+38 26	9.0	9.0	Ao	2	..	38942i	53	5505	14.1	- 2 11	8.4	9.5	K2	5	..	14658b
4	4371	13.8	+34 29	4.42	4.25	B3P	..	R	5051c	54	5962	14.1	-12 46	9.0	9.8	G5	3	..	40621b
5	4285	13.8	+23 30	8.0	9.2	K5	2	..	38051i	55	5996	14.1	-14 29	9.2	10.3	K2	1	..	39407b
6	4514	13.8	+21 19	8.8	9.8	Ko	2	..	38051i	56	5949	14.1	-14 49	9.11	9.89	G5	4	0,3	39392b
7	4546	13.8	+17 18	7.57	8.75	K5	4	..	38129i	57	5910	14.1	-18 3	10.3	10.6	Fo	5	..	39392b
8	4514	13.8	+11 9	6.97	7.53	Go	7	..	38129i	58	5909	14.1	-18 26	10.5	11.7	K5	1	..	39392b
9	5709	13.8	- 9 36	9.2	9.7	F8	6	..	40599b	59	5662	14.1	-22 21	8.8	9.4	Ko	3	..	39402b
10	5841	13.8	-16 22	10.3	11.3	Ko	1	..	39392b	60	17704	14.1	-29 47	8.27	8.8	Go	6	..	40637b
11	6236	13.8	-17 2	10.3	11.3	Ko	2	..	39392b	61	18520	14.1	-29 58	9.47	9.5	F5	3	..	40637b
12	6235	13.8	-17 48	10.3	10.9	Go	2	..	39392b	62	14990	14.1	-34 34	9.1	10.5	Go	2	..	41063b
13	5908	13.8	-18 10	10.3	11.4	K2	2	..	39392b	63	14737	14.1	-35 56	8.5	10.0	K5	2	..	40944b
14	5661	13.8	-22 41	10.0	10.8	Go	2	..	39402b	64	14495	14.1	-38 50	9.1	10.8	F8	2	..	40944b
15	13771	13.8	-47 51	9.8	11.6	Ko	1	..	39657b	65	12906	14.1	-51 25	10.0	10.7	F2	2	..	39662b
16	11853	13.8	-52 23	9.1	10.1	G5	2	..	41053b	66	11854	14.1	-52 16	8.7	9.9	K2	3	..	41053b
17	10042	13.8	-53 28	8.1	8.6	G5	5	..	41053b	67	9564	14.1	-55 10	8.8	9.0	Fo	5	..	39382b
18	10043	13.8	-53 39	10.0	11.0	Ko	1	..	41053b	68	6544	14.1	-61 33	9.0	10.0	Ko	2	..	42486b
19	1494	13.8	-76 57	7.7	8.0	F2	9	..	19964b	69	3910	14.1	-65 14	9.6	10.1	F8	2	..	20542b
20	980	13.9	+72 45	7.55	7.61	A2	6	..	38025i	70	2508	14.2	+54 38	7.9	8.0	A2	6	..	37945i
21	1522	13.9	+64 42	8.30	9.30	Ko	1	..	37277i	71	2589	14.2	+53 57	8.2	8.2	Ao	1	..	37945i
22	1712	13.9	+64 7	8.5	8.6	A2	2	..	37277i	72	3486	14.2	+46 1	8.5	8.6	A2	2	..	37946i
23	2588	13.9	+53 34	5.99	5.99	Ao	9	..	37945i	73	4515	14.2	+40 1	8.77	8.77	Ao	2	..	38942i
24	4374	13.9	+30 10	7.96	7.96	Ao	3	..	37948i	74	4373	14.2	+34 30	8.8	9.3	F8	2	..	38894i
25	4368	13.9	+24 41	8.4	9.2	G5	2	..	38051i	75	4370	14.2	+24 14	6.80	7.80	Ko	7	..	38051i
26	4548	13.9	+17 34	7.22	7.64	F5	7	..	38129i	76	4885	14.2	+20 52	9.3	9.3	Ao	1	..	38051i
27	4773	13.9	+ 9 33	8.9	10.0	K2	1	..	10143b	77	4756	14.2	+18 35	8.9	9.0	A2	1	..	38129i
28	5644	13.9	-10 0	8.2	8.6	F5	8	..	40599b	78	4592	14.2	+13 9	8.3	9.3	Ko	4	..	38129i
29	5904	13.9	-13 28	6.72	6.80	A3	4	..	17410b	79	5906	14.2	-13 14	9.2	9.5	Fo	2	..	40621b
30	15362	13.9	-25 2	10.9	11.7	F8	1	..	39402b	80	3950	14.2	-15 6	10.0	11.0	Ko	2	..	39392b
31	14713	13.9	-35 1	8.38	9.3	G5	4	..	41063b	81	5663	14.2	-22 47	10.0	10.9	G5	1	..	39402b
32	13867	13.9	-48 11	9.8	10.7	G5	2	..	39657b	82	15380	14.2	-27 44	8.1	8.1	G5	6	..	40637b
33	9832	13.9	-57 3	8.8	9.9	Go	4	..	39382b	83	16526	14.2	-32 26	9.1	9.4	Fo	4	..	41063b
34	6543	13.9	-61 19	9.6	10.0	F5	3	..	39382b	84	15515	14.2	-32 57	7.7	8.8	K2	5	..	41063b
35	6542	13.9	-61 36	9.7	10.9	K5	1	..	39382b	85	14222	14.2	-37 13	8.8	9.1	F2	7	..	40944b
36	1392	13.9	-78 16	8.9	10.1	K5	2	..	19964b	86	1299	14.3	+67 56	7.62	7.90	Fo	4	..	37277i
37	4582	14.0	+14 49	8.5	8.6	A3	5	..	38129i	87	2549	14.3	+55 22	6.18	7.25	K2	6	..	37945i
38	5569	14.0	-11 24	9.6	10.1	F8	3	..	40599b	88	4081	14.3	+41 48	8.7	8.7	Ao	2	..	37946i
39	6237	14.0	-17 13	9.1	9.1	Ao	7	..	39392b	89	4439	14.3	+38 55	8.6	9.2	Go	1	..	38942i
40	15541	14.0	-26 46	6.50	7.6	G5	10	..	40637b	90	5997	14.3	-14 27	6.95	6.95	Ao	5	0,5	17410b
41	15377	14.0	-27 38	6.87	6.8	Ao	9	..	40637b	91	5843	14.3	-15 50	9.2	10.3	K2	2	..	39392b
42	16523	14.0	-32 29	9.5	9.7	F8	2	..	41063b	92	15547	14.3	-26 10	10.9	12.1	Go	2	..	39402b
43	14989	14.0	-34 46	8.33	9.0	Fo	6	..	41063b	93	18522	14.3	-30 52	7.33	8.5	K2	7	..	41063b
44	14735	14.0	-36 17	10.3	10.3	Ko	2	..	41063b	94	18202	14.3	-31 16	8.1	8.5	F5	7	..	41063b
45	14292	14.0	-40 53	7.7	8.1	F5	7	..	39472b	95	18203	14.3	-31 54	9.9	9.7	A5	2	..	41063b
46	14417	14.0	-44 0	8.6	8.6	A2	8	..	39472b	96	13917	14.3	-46 14	7.6	8.5	Go	8	..	39657b
47	10044	14.0	-52 54	8.2	9.7	G5	5	..	41053b	97	13324	14.3	-50 26	8.4	9.5	Ko	3	..	39662b
48	981	14.1	+72 59	8.5	9.5	Ko	2	..	38025i	98	911	14.4	+74 24	8.7	9.0	F2	2	..	38025i
49	4408	14.1	+31 43	9.3	9.3	Ao	1	..	38894i	99	5176	14.4	- 3 18	8.2	9.0	G5	6	..	14658b
50	4884	14.1	+20 59	9.3	9.4	A2	1	..	38051i	100	5733	14.4	- 5 55	8.0	8.5	F8	6	..	40599b

THE HENRY DRAPER CATALOGUE.

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21^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	5628	14.4	— 8 41	10.0	10.6	Go	1	..	40599b	51	5629	14.7	— 8 33	9.2	9.6	F5	3	..	40599b
2	5998	14.4	— 14 39	10.0	11.0	Ko	1	..	39407b	52	5651	14.7	— 10 39	9.1	10.1	Ko	4	..	40599b
3	5666	14.4	— 21 51	9.8	9.4	F5	4	..	39402b	53	5572	14.7	— 10 54	9.0	10.0	Ko	4	0,3	39407b
4	14738	14.4	— 36 8	7.77	8.8	Ko	8	..	40944b	54	5999	14.7	— 13 56	7.04	7.02	B9	4	..	17410b
5	14211	14.4	— 38 59	9.5	11.1	Ko	1	..	40944b	55	6239	14.7	— 17 26	9.4	10.6	K5	3	..	39392b
6	14475	14.4	— 41 14	4.92	4.98	A2p	..	R	28,215	56	14232	14.7	— 37 4	9.1	9.3	Fo	7	..	40944b
7	14477	14.4	— 41 21	10.5	11.1	A2	1	..	39472b	57	14231	14.7	— 37 30	9.5	10.2	Go	2	..	40944b
8	14476	14.4	— 41 51	10.3	11.4	Go	1	..	39472b	58	14478	14.7	— 41 18	10.5	11.1	Ko	2	..	39472b
9	13775	14.4	— 47 17	9.4	9.8	Go	5	..	39657b	59	7833	14.7	— 58 7	9.5	10.0	F8	2	..	39382b
10	13325	14.4	— 50 22	6.38	7.8	K2	8	..	39662b	60	R	14.7	— 60 5	..	..	Go	1	..	39382b
11	10045	14.4	— 53 47	8.3	8.8	Fo	5	..	41053b	61	7468	14.7	— 60 17	7.6	8.6	K2	5	..	19897b
12	2347	14.5	+ 59 52	8.8	8.9	A5	1	..	38526i	62	3912	14.7	— 65 15	9.2	9.8	Go	4	..	20542b
13	3261	14.5	+ 46 26	7.00	6.98	B9	4	1,5	9682i	63	3494	14.8	+ 49 29	8.5	8.5	Ao	4	..	38796i
14	4510	14.5	+ 36 21	8.5	9.1	Go	1	..	38894i	64	3877	14.8	+ 43 31	5.06	..	Oe5	..	0,R	6970c
15	4549	14.5	+ 17 24	6.63	6.97	F2	8	..	38129i	65	4416	14.8	+ 31 46	7.33	8.40	K2	3	..	37948i
16	5650	14.5	— 10 36	10.3	10.8	F8	1	..	40599b	66	4674	14.8	+ 13 56	8.4	9.4	Ko	3	..	38129i
17	18523	14.5	— 30 22	9.1	9.4	Go	5	..	41063b	67	4651	14.8	+ 9 6	6.91	6.97	A2	7	..	38129i
18	18524	14.5	— 30 50	9.7	10.0	F8	2	..	41063b	68	5520	14.8	— 5 32	9.2	9.6	F5	3	..	40599b
19	14212	14.5	— 39 12	8.1	8.4	G5	8	..	40944b	69	5574	14.8	— 11 14	var.	var.	A3	5	R	40599b
20	13326	14.5	— 50 35	8.8	9.5	F8	3	..	41053b	70	5845	14.8	— 16 47	10.3	11.1	G5	2	..	39392b
21	11855	14.5	— 52 11	6.80	7.3	Go	8	..	41053b	71	6074	14.8	— 19 21	10.4	10.9	F8	2	..	39392b
22	9849	14.5	— 54 7	8.8	9.9	Ko	3	..	41053b	72	15384	14.8	— 27 5	9.2	9.1	F8	4	..	40637b
23	7467	14.5	— 60 39	10.3	10.9	Go	1	..	39382b	73	14424	14.8	— 44 29	10.4	11.6	K5	1	..	39472b
24	1195	14.6	+ 68 29	8.7	8.7	A	1	..	37277i	74	13919	14.8	— 46 14	9.8	10.9	G5	2	..	39657b
25	2309	14.6	+ 58 10	6.41	6.24	B3	7	0,8	37945i	75	13330	14.8	— 50 18	9.2	9.6	G5	3	..	39662b
26	2551	14.6	+ 56 21	7.36	7.34	B9	6	..	37945i	76	1393	14.8	— 78 19	9.2	10.4	K5	1	..	19904b
27	3034	14.6	+ 51 38	8.5	8.6	A3	3	..	38796i	77	857	14.8	— 82 41	8.7	9.8	K2	2	..	21397b
28	3303	14.6	+ 50 47	7.9	8.0	A2	4	..	38796i	78	3265	14.9	+ 46 17	9.5	9.5	A	1	..	37946i
29	4473	14.6	+ 36 11	8.0	8.0	Ao	3	0,3	38894i	79	3768	14.9	+ 45 1	8.72	8.72	Ao	2	..	37946i
30	4507	14.6	+ 25 49	8.5	9.3	G5	3	..	38051i	80	4374	14.9	+ 34 29	8.6	9.6	Ko	2	..	37948i
31	4508	14.6	+ 25 40	8.2	8.5	F2	5	..	38051i	81	4463	14.9	+ 1 58	9.2	9.6	F5	2	..	14204b
32	4373	14.6	+ 25 4	8.81	8.81	Ao	5	..	38051i	82	5667	14.9	— 22 0	9.8	11.1	K2	1	..	39402b
33	5735	14.6	— 6 27	9.2	10.3	K2	2	..	40599b	83	16847	14.9	— 23 52	10.4	11.4	Ko	1	..	39402b
34	5965	14.6	— 12 15	8.2	9.2	Ko	5	..	40599b	84	15548	14.9	— 26 35	9.9	12.0	G5	2	..	39402b
35	5910	14.6	— 13 25	8.43	9.61	K5	2	..	40621b	85	18211	14.9	— 31 20	8.0	10.0	K2	2	..	41063b
36	5844	14.6	— 16 18	9.4	9.8	F5	3	..	39392b	86	18209	14.9	— 31 23	7.6	8.8	Ko	7	..	41063b
37	6238	14.6	— 16 54	9.0	9.1	A5	5	..	39392b	87	16534	14.9	— 32 27	8.8	9.7	G5	3	..	41063b
38	5911	14.6	— 18 13	10.0	11.0	Ko	3	..	39392b	88	14480	14.9	— 41 47	8.1	9.9	Ma	4	..	39472b
39	6073	14.6	— 19 22	9.2	10.8	K2	3	..	39392b	89	12910	14.9	— 51 43	10.0	10.4	A3	2	..	41053b
40	6185	14.6	— 20 15	9.2	10.5	K5p	4	R	39402b	90	9836	14.9	— 57 32	10.3	11.1	G5	2	..	39382b
41	15518	14.6	— 33 14	9.4	10.3	F8	2	..	41063b	91	7834	14.9	— 58 53	9.3	10.3	Ko	3	..	39382b
42	13777	14.6	— 47 14	10.2	10.9	G5	2	..	39657b	92	3417	14.9	— 68 15	10.4	11.0	Go	2	..	20542b
43	11857	14.6	— 52 12	9.2	10.4	G5	1	..	41053b	93	2602	14.9	— 71 17	8.6	9.6	Ko	3	..	19966b
44	9628	14.6	— 55 58	11.4	11.4	Ao	1	..	39382b	94	2510	15.0	+ 54 51	8.26	8.26	Ao	4	..	37945i
45	3415	14.6	— 68 24	11.0	11.5	F8	2	..	20542b	95	3879	15.0	+ 43 49	9.1	9.1	A	1	..	37946i
46	3035	14.7	+ 52 3	7.48	7.56	A3	5	2,3	38796i	96	4485	15.0	+ 40 37	6.23	6.37	A5	8	..	37878i
47	4440	14.7	+ 38 31	9.1	9.7	Go	1	..	38942i	97	4442	15.0	+ 38 44	8.8	9.1	Fo	1	..	38942i
48	4378	14.7	+ 29 19	7.12	7.12	Ao	5	1,5	21671i	98	4705	15.0	+ 0 26	9.6	10.7	K2	2	..	12331b
49	4364	14.7	+ 23 3	8.2	9.6	Mb	1	..	38051i	99	5738	15.0	— 6 20	9.4	10.0	Go	4	..	40599b
50	4518	14.7	+ 21 57	7.50	8.57	K2	3	..	38051i	100	5668	15.0	— 22 49	8.2	8.1	G5	8	..	39402b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

203100

21^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	18212	15.0	-31 33	8.2	9.1	Ko	4	..	41063b	51	3796	15.3	-67 21	10.0	10.4	F5	2	..	20542b
2	14999	15.0	-34 1	9.1	10.2	G5	2	..	41063b	52	2603	15.3	-71 7	10.7	10.7	Ao	1	..	19966b
3	14723	15.0	-35 52	9.1	10.3	K2	2	..	41063b	53	715	15.3	-83 28	7.11	7.0	A2	..	2,6-	56,147
4	15400	15.0	-41 55	8.8	10.8	K5	2	..	39472b	54	3267	15.4	+46 35	var.	var.	K2	2	R	37946i
5	14494	15.0	-43 23	8.0	9.2	K2	6	..	39472b	55	4445	15.4	+38 23	6.93	7.35	F5	4	..	37948i
6	14493	15.0	-43 36	9.8	11.0	Ko	2	..	39472b	56	4271	15.4	+37 49	5.83	6.17	F2	9	0,9	37948i
7	13435	15.0	-49 14	8.4	8.6	F5	7	..	39657b	57	4513	15.4	+36 49	8.6	8.6	Ao	3	0,2	38894i
8	10047	15.0	-53 51	9.0	10.5	Go	1	..	41053b	58	4383	15.4	+29 36	8.2	8.6	F5	3	..	38894i
9	6546	15.0	-61 31	9.6	10.7	K2	1	..	39382b	59	5510	15.4	- 2 9	9.2	9.5	F2	5	..	14658b
10	2554	15.1	+56 56	9.0	9.0	Ao	1	..	37945i	60	5578	15.4	-11 47	8.0	9.0	Ko	6	..	40599b
11	4087	15.1	+42 2	8.7	9.1	F5	2	..	37496i	61	5966	15.4	-12 6	9.2	9.8	Go	3	..	40599b
12	4519	15.1	+39 19	6.64	6.64	Ao	7	..	37878i	62	5912	15.4	-13 18	8.0	9.0	Ko	7	..	40621b
13	4289	15.1	+23 37	8.4	8.9	F8	3	..	38051i	63	5669	15.4	-21 53	9.2	10.5	K2	2	..	39402b
14	4520	15.1	+21 52	9.3	9.4	A2	1	..	38051i	64	16855	15.4	-23 51	11.1	11.2	Go	2	..	39402b
15	5507	15.1	- 1 55	8.4	9.2	G5	4	..	12331b	65	14483	15.4	-41 20	9.1	10.8	Ma	2	..	39472b
16	5911	15.1	-13 42	9.4	9.7	Fo	3	..	39407b	66	9634	15.4	-55 54	10.3	11.1	G5	1	..	39382b
17	6240	15.1	-17 31	10.3	11.1	G5	2	..	39392b	67	7835	15.4	-58 12	8.1	7.9	Fo	3	..	44240b
18	6076	15.1	-19 22	10.4	10.9	F8	2	..	39392b	68	2512	15.5	+54 39	8.6	8.7	A2	2	..	37945i
19	15388	15.1	-27 2	8.9	8.4	Go	5	..	40637b	69	4486	15.5	+40 15	9.17	9.23	A2	1	..	38942i
20	14235	15.1	-37 12	8.9	9.9	G5	2	..	40944b	70	4125	15.5	+32 50	7.8	8.4	Go	3	..	37948i
21	14506	15.1	-38 36	8.5	8.7	F5	6	..	40944b	71	4130	15.5	+27 4	8.1	8.9	G5	3	..	38051i
22	13921	15.1	-46 33	9.6	10.4	Ko	3	..	39657b	72	4684	15.5	+19 15	9.4	9.8	F5	1	..	38812i
23	13781	15.1	-47 10	9.6	11.0	K2	3	..	39657b	73	4708	15.5	+ 0 50	8.9	9.7	G5	5	..	12331b
24	13333	15.1	-50 37	7.5	8.3	Ko	7	..	41053b	74	5511	15.5	- 1 53	9.1	9.2	A2	5	..	12331b
25	11859	15.1	-52 18	7.22	7.3	A3	8	..	41053b	75	5523	15.5	- 5 23	10.0	10.0	Ao	2	..	40599b
26	10048	15.1	-53 8	8.4	9.0	F8	5	..	41053b	76	5716	15.5	- 9 28	9.2	9.8	Go	3	..	40599b
27	9568	15.1	-55 18	10.0	10.8	G5	2	..	39382b	77	5715	15.5	- 9 35	8.0	9.1	K2	7	..	40599b
28	R	15.1	-59 54	..	..	Ko	1	..	39382b	78	16858	15.5	-23 50	10.4	9.9	Fo	5	..	39402b
29	5508	15.2	- 2 29	8.7	9.5	G5	4	..	14658b	79	13784	15.5	-46 55	9.6	8.9	A2	6	..	39657b
30	15524	15.2	-32 57	9.5	9.7	Go	4	..	41063b	80	521	15.5	-85 24	9.17	10.5	K5	3	..	21397b
31	14496	15.2	-43 50	8.0	9.8	Ma	5	..	39472b	81	832	15.6	+76 13	8.82	9.38	Go	2	5,1	38936i
32	7469	15.2	-60 41	9.2	9.7	Go	4	5,2	39382b	82	912	15.6	+74 12	8.5	8.8	F2	2	..	38025i
33	2844	15.2	-70 10	var.	var.	Na	..	0,3R	56,147	83	3883	15.6	+43 32	9.5	10.5	K	1	..	37946i
34	831	15.3	+76 11	8.92	9.34	F5	2	..	38936i	84	4521	15.6	+40 3	8.42	8.70	Fo	3	..	38942i
35	2593	15.3	+53 45	7.37	8.55	K5	2	..	37945i	85	4502	15.6	+16 23	7.47	7.97	F8	6	..	38129i
36	3498	15.3	+49 45	8.02	9.02	Ko	2	..	38796i	86	4541	15.6	+11 43	7.9	8.2	Fo	6	..	38129i
37	3499	15.3	+49 39	7.20	8.38	K5	2	..	38796i	87	4782	15.6	+10 5	8.27	8.69	F5	3	..	38129i
38	3882	15.3	+43 48	9.6	9.9	F	1	..	37946i	88	5543	15.6	- 7 13	9.2	10.2	Ko	2	..	40599b
39	4369	15.3	+22 18	7.8	8.8	Ko	4	..	38051i	89	5968	15.6	-11 57	10.3	11.5	K5	1	..	39407b
40	4600	15.3	+12 33	7.34	8.52	K5	3	..	38129i	90	5967	15.6	-12 7	9.8	10.3	F8	3	..	39407b
41	4759	15.3	+ 6 7	8.3	8.4	A2	6	..	12331b	91	6079	15.6	-19 16	9.0	9.1	A2	6	..	39348b
42	5992	15.3	-21 15	7.08	7.7	F2	8	..	39402b	92	6078	15.6	-19 36	9.2	9.7	K2	4	..	39348b
43	15552	15.3	-26 50	8.9	9.6	Ko	4	..	40637b	93	6190	15.6	-19 55	9.4	10.5	F8	3	..	39402b
44	17235	15.3	-28 10	8.2	8.5	A3	6	2,7	40637b	94	5993	15.6	-21 2	8.6	9.7	Ko	4	..	39402b
45	14300	15.3	-40 27	8.8	9.9	F5	4	..	39472b	95	14728	15.6	-35 44	9.5	10.2	F5	3	..	41063b
46	14481	15.3	-41 30	9.5	10.2	F8	3	..	39472b	96	14751	15.6	-36 11	9.4	9.9	G5	2	..	41063b
47	12914	15.3	-51 33	7.4	7.8	F5	8	..	41053b	97	14752	15.6	-36 50	8.9	9.9	G5	3	..	40944b
48	9630	15.3	-56 13	7.4	7.7	F2	3	..	44240b	98	14431	15.6	-44 41	9.3	10.7	Ko	3	..	39472b
49	9631	15.3	-56 36	8.4	10.5	K2	3	..	39382b	99	9837	15.6	-57 50	10.5	11.0	F8	2	..	39382b
50	3557	15.3	-65 54	9.6	10.6	Ko	2	..	20542b	100	2604	15.6	-71 43	10.0	10.4	F5	2	..	19966b

THE HENRY DRAPER CATALOGUE.

203200

21^h 15^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	1983	15.6 ^m	-74 20	9.4	9.8	F5	3	..	19966b	51	5958	16.0	-15 35	8.32	9.32	Ko	5	..	39348b
2	1984	15.6	-74 26	9.3	10.4	K2	1	..	19966b	52	5913	16.0	-18 21	9.6	10.6	Ko	3	..	39348b
3	1013	15.6	-80 22	7.39	8.6	Ko	6	..	21397b	53	14754	16.0	-36 50	8.5	9.0	F5	5	..	40944b
4	4448	15.7	+38 23	9.1	9.7	Go	1	..	38942i	54	14432	16.0	-44 34	8.2	9.2	G5	7	..	39472b
5	4514	15.7	+37 1	8.8	9.2	F5	2	3,2	38942i	55	13786	16.0	-47 5	10.4	11.0	Go	3	..	39657b
6	4521	15.7	+21 37	6.15	6.13	B9	9	0,10	38812i	56	13787	16.0	-47 19	10.2	11.2	G5	2	..	39657b
7	4665	15.7	+7 46	7.7	7.8	A2	6	..	14667b	57	13877	16.0	-48 53	7.12	7.9	Ko	8	..	39657b
8	5912	15.7	-18 33	10.0	10.8	G5	2	..	39348b	58	9853	16.0	-54 9	9.3	11.0	Ko	1	..	41053b
9	6192	15.7	-19 58	8.58	8.4	Ao	7	..	39402b	59	9572	16.0	-55 25	10.0	10.8	G5	1	..	39382b
10	15377	15.7	-25 8	8.5	8.7	Fo	6	..	39402b	60	7837	16.0	-58 6	9.3	10.2	K5	2	..	39382b
11	7693	15.7	-59 38	9.0	10.0	Ko	3	..	39382b	61	7470	16.0	-60 31	10.4	10.9	F8	1	..	39382b
12	2598	15.7	-72 14	6.08	7.0	Ko	10	..	19966b	62	3914	16.0	-65 14	9.2	10.4	K5	3	..	20542b
13	2215	15.7	-73 2	6.5	7.5	Ko	9	..	19966b	63	982	16.1	+73 5	8.9	8.9	Ao	3	..	38936i
14	1495	15.7	-77 28	9.8	10.4	Go	4	..	19964b	64	1176	16.1	+71 7	9.3	9.4	A3	2	..	38936i
15	2216	15.8	+60 50	9.3	9.4	A2	2	..	38526i	65	2217	16.1	+60 45	6.80	8.15	Mb	4	0,3	38526i
16	4372	15.8	+22 39	9.3	9.4	A5	2	..	38051i	66	2248	16.1	+58 30	8.1	8.1	B9	3	3,3	19317i
17	4761	15.8	+18 47	8.1	8.2	A2	2	E	38129i	67	4485	16.1	+35 37	8.4	9.5	K2	1	..	38894i
18	4588	15.8	+14 30	8.5	9.7	K5	1	..	38129i	68	4203	16.1	-0 12	8.9	9.2	Fo	7	..	12331b
19	4603	15.8	+13 4	8.5	9.0	F8	2	..	38129i	69	5974	16.1	-12 4	9.2	10.2	Ko	1	..	40599b
20	4602	15.8	+12 44	8.1	8.7	Go	3	..	38129i	70	6081	16.1	-19 10	8.0	8.1	Go	8	..	39348b
21	5514	15.8	-2 32	9.6	10.2	Go	2	..	14658b	71	16867	16.1	-23 48	10.2	10.5	F8	2	..	39402b
22	5524	15.8	-5 0	5.97	6.97	Ko	9	..	14658b	72	15398	16.1	-27 33	9.4	8.4	Ao	6	0,7	40637b
23	5969	15.8	-12 10	10.7	11.5	G5	1	..	39407b	73	14735	16.1	-35 26	8.9	10.5	K2	2	..	41063b
24	6080	15.8	-19 37	9.2	9.0	A2	6	..	39348b	74	14514	16.1	-38 52	8.2	11.4	K2	1	..	40944b
25	6191	15.8	-20 17	9.2	9.9	Go	4	..	39402b	75	14308	16.1	-40 1	9.9	11.1	K2	3	..	39472b
26	18537	15.8	-30 34	8.9	10.3	Mb	1	..	41063b	76	13928	16.1	-46 26	10.4	11.3	Go	2	..	39682b
27	14511	15.8	-37 59	8.8	9.6	Fo	5	..	40944b	77	11862	16.1	-52 22	7.8	7.8	G5	6	..	41053b
28	9569	15.8	-55 52	9.8	10.8	Ko	3	..	39382b	78	9854	16.1	-54 48	9.8	10.8	Ko	1	..	39382b
29	7836	15.8	-58 53	10.5	10.6	A2	1	..	39382b	79	3171	16.1	-69 31	10.4	11.5	K2	1	..	20542b
30	4128	15.8	-64 50	8.6	8.9	Fo	8	..	20542b	80	2111	16.2	+62 10	2.60	2.74	A5	..	R	2004c
31	1383	15.9	+66 13	7.9	8.7	G5	4	..	37277i	81	2909	16.2	+53 3	8.1	8.1	Ao	3	..	37945i
32	2109	15.9	+61 21	7.53	8.60	K2	3	0,2	38526i	82	2910	16.2	+52 30	8.3	8.9	Go	2	0,2R	19317i
33	4274	15.9	+37 43	9.4	10.2	G5	2	..	38942i	83	3042	16.2	+51 54	7.21	7.21	Ao	7	0,8	37945i
34	4393	15.9	+15 12	9.34	10.12	G5	2	..	38129i	84	3346	16.2	+48 47	8.1	8.9	G5	3	..	37946i
35	4343	15.9	+2 41	7.9	8.4	F8	3	..	38045i	85	4486	16.2	+35 53	8.6	8.6	B9	2	R	38894i
36	4711	15.9	+0 16	8.03	8.45	F5	7	..	12331b	86	4128	16.2	+33 4	6.84	6.84	Ao	8	..	37948i
37	5182	15.9	-3 28	9.6	10.1	F8	2	..	14658b	87	4058	16.2	+28 24	7.6	8.1	F8	4	E	38051i
38	5631	15.9	-8 41	8.2	8.8	Go	8	..	40599b	88	4513	16.2	+25 49	7.7	8.9	K5	4	..	38051i
39	16863	15.9	-23 47	10.4	10.2	F8	3	..	39402b	89	4379	16.2	+24 34	8.4	9.4	Ko	1	..	38051i
40	15561	15.9	-26 1	9.9	12.0	G5	1	..	39402b	90	4762	16.2	+18 23	8.3	8.4	A2	2	..	38812i
41	15560	15.9	-26 15	10.6	11.6	F8	3	..	39402b	91	4802	16.2	+6 56	6.01	7.19	K5	5	0,7	38045i
42	17721	15.9	-29 36	6.70	8.2	Ko	8	..	40637b	92	4344	16.2	+2 39	9.2	9.2	Ao	4	..	14204b
43	14512	15.9	-38 44	9.7	11.1	F2	2	..	40944b	93	5740	16.2	-6 46	9.6	10.1	F8	2	..	40599b
44	3418	15.9	-68 40	6.7	7.5	G5	10	..	20542b	94	5915	16.2	-13 25	10.7	11.7	Ko	1	..	39407b
45	3345	16.0	+49 6	5.65	5.53	B5	9	2,9	38796i	95	6082	16.2	-18 50	10.7	10.8	A3	3	..	39348b
46	4383	16.0	+35 10	8.22	8.78	Go	3	0,2	38894i	96	5995	16.2	-21 5	9.2	11.5	K5	2	..	39402b
47	4686	16.0	+19 25	7.9	9.1	K5	1	..	38812i	97	14486	16.2	-41 5	10.5	11.4	Ko	2	..	39472b
48	5632	16.0	-8 35	9.2	9.7	F8	3	..	40599b	98	9574	16.2	-54 55	10.3	10.8	F8	2	..	39382b
49	5972	16.0	-11 53	7.9	8.4	F8	7	..	39407b	99	6227	16.2	-61 59	9.4	10.5	K2	1	..	39382b
50	5970	16.0	-12 44	9.2	9.8	Go	7	..	39407b	100	2354	16.3	+59 12	8.5	8.6	A2	3	..	38526i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

203300

21^h 16^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	4454	16.3	+38 16	8.6	9.4	G5	3	E	37948i	51	6195	16.5	-20 22	9.2	10.8	Ko	3	..	39402b
2	4044	16.3	+27 18	8.2	8.7	F8	2	..	38051i	52	16872	16.5	-23 8	9.4	9.0	Ao	6	..	39402b
3	4677	16.3	+13 55	9.2	9.5	F2	2	..	38129i	53	14738	16.5	-35 21	7.40	8.4	Ko	8	..	41063b
4	4678	16.3	+13 35	9.6	10.1	F8	1	..	38129i	54	12923	16.5	-51 35	10.0	11.0	Ko	1	..	41053b
5	4655	16.3	+ 8 53	8.7	9.5	G5	2	..	14667b	55	7838	16.5	-58 51	9.0	10.9	Ko	1	..	39382b
6	4345	16.3	+ 2 33	7.12	8.12	Ko	3	..	38045i	56	2599	16.6	+53 32	7.7	7.7	B9	3	..	37945i
7	5916	16.3	-12 59	9.8	10.4	Go	1	..	39407b	57	4457	16.6	+38 26	9.3	10.1	G5	2	..	38942i
8	6004	16.3	-13 59	9.6	10.4	G5	3	..	39407b	58	4425	16.6	+32 2	6.44	7.22	G5	7	..	37948i
9	6003	16.3	-14 28	9.2	9.7	F8	4	..	39407b	59	4609	16.6	+13 11	10.2	10.8	Go	2	..	38129i
10	5849	16.3	-16 24	8.4	9.6	K5	3	..	39348b	60	4610	16.6	+12 43	9.2	10.2	Ko	1	..	38129i
11	5850	16.3	-16 42	7.19	7.75	Go	10	..	39348b	61	4547	16.6	+12 0	9.4	10.2	G5	1	..	38129i
12	R	16.3	-22 50	10.2	11.3	K5	2	..	39402b	62	4548	16.6	+ 3 33	8.9	9.9	Ko	2	..	14204b
13	16599	16.3	-24 40	9.7	9.6	A2	5	..	39402b	63	5634	16.6	- 7 57	8.2	9.2	Ko	5	..	40599b
14	9842	16.3	-56 59	10.3	10.8	F8	2	..	39382b	64	5724	16.6	- 9 45	6.89	7.06	K2	9	..	40599b
15	7694	16.3	-59 44	9.8	10.3	F8	3	..	39382b	65	5658	16.6	-10 45	8.8	9.9	K2	3	..	40599b
16	3560	16.3	-66 3	9.0	10.4	F8	3	..	20542b	66	5999	16.6	-21 8	9.2	10.2	Go	3	..	39402b
17	318	16.4	+87 8	8.34	8.68	F2	3	6,3	37294i	67	5998	16.6	-21 25	9.6	10.5	Go	2	..	39402b
18	1303	16.4	+68 8	8.1	9.1	K	1	..	37277i	68	15386	16.6	-25 36	9.5	9.6	Fo	5	..	39402b
19	2914	16.4	+52 53	8.6	8.6	Ao	1	..	37945i	69	14227	16.6	-39 36	9.7	10.5	Gc	3	..	40944b
20	2913	16.4	+52 38	6.81	7.88	K2	5	..	37945i	70	15413	16.6	-42 24	var.	var.	Md	..	R	M
21	3275	16.4	+46 54	9.1	9.2	A5	2	..	37946i	71	11863	16.6	-52 13	10.1	10.1	Ao	2	..	41053b
22	4396	16.4	+15 24	8.29	9.47	K5	3	..	38129i	72	9857	16.6	-54 36	9.9	10.5	Go	2	..	39382b
23	4346	16.4	+ 2 28	7.62	8.62	Ko	1	..	38045i	73	3172	16.6	-69 41	9.3	10.1	G5	4	..	20542b
24	4153	16.4	- 1 16	8.7	9.8	K2	3	..	12331b	74	2112	16.7	+61 25	6.64	6.40	Bop	6	R	38526i
25	5529	16.4	- 4 55	8.10	9.17	K2	4	..	14658b	75	2250	16.7	+58 28	7.9	7.9	Ao	3	..	37945i
26	5528	16.4	- 5 45	9.1	9.5	F5	6	..	40599b	76	2312	16.7	+57 53	7.05	8.12	K2	3	..	37945i
27	5976	16.4	-12 47	9.6	10.2	Go	5	..	39407b	77	2560	16.7	+55 46	7.9	8.9	Ko	2	..	37945i
28	5917	16.4	-13 16	10.7	11.9	K5	1	..	39407b	78	2517	16.7	+55 1	7.16	8.51	Mb	3	..	37945i
29	5959	16.4	-15 31	9.32	10.32	Ko	2	..	39348b	79	2915	16.7	+52 54	7.8	7.8	Ao	4	..	37945i
30	5851	16.4	-16 8	10.0	10.1	A2	2	..	39348b	80	2916	16.7	+52 33	6.93	7.71	G5	6	..	37945i
31	6083	16.4	-19 39	9.03	11.2	K2	3	..	39348b	81	4507	16.7	+16 32	8.5	9.1	G	1	..	38129i
32	16871	16.4	-23 52	9.9	9.1	Ao	5	..	39402b	82	4347	16.7	+ 2 41	7.6	8.4	G5	2	..	38045i
33	14516	16.4	-38 38	9.5	10.8	F5	3	..	40944b	83	4465	16.7	+ 1 36	7.9	8.0	A2	4	..	38045i
34	15412	16.4	-42 22	8.8	9.9	F5	3	..	39472b	84	5433	16.7	- 4 36	8.2	9.2	Ko	5	..	14658b
35	9636	16.4	-55 58	7.4	8.2	F8	3	..	44240b	85	5532	16.7	- 4 50	9.20	9.20	Ao	3	..	14658b
36	3419	16.4	-68 3	8.7	9.3	Go	5	..	20542b	86	6246	16.7	-16 50	9.8	10.3	F8	2	..	39348b
37	781	16.5	+76 7	8.27	8.33	A2	3	..	38025i	87	6245	16.7	-17 16	4.30	5.30	Ko	..	R	56,100
38		16.5	+58 13			Ko				88	5916	16.7	-18 23	9.6	10.6	Ko	3	..	39348b
39	2249	16.5	+58 13	5.79	6.79	Ao	7	R	38526i	89	6084	16.7	-19 45	9.38	10.5	G5	3	..	39348b
40	3347	16.5	+48 12	8.1	8.9	G5	2	R	38796i	90	16874	16.7	-22 57	10.2	10.2	Go	3	..	39402b
41	3778	16.5	+44 38	8.9	9.0	A2	2	..	37946i	91	15403	16.7	-27 15	9.2	9.9	Ko	4	..	41034b
42	4490	16.5	+36 8	8.6	8.7	A2	3	..	37948i	92	17732	16.7	-29 52	7.42	7.7	F2	8	..	40637b
43	4489	16.5	+36 3	8.5	8.9	F5	3	..	38894i	93	15016	16.7	-34 6	8.1	9.3	G5	6	..	41063b
44	4294	16.5	+23 27	5.82	6.82	Ko	9	..	38051i	94	14228	16.7	-39 33	9.1	10.5	Ko	2	..	40944b
45	4786	16.5	+ 9 55	6.88	7.30	F5	8	..	38129i	95	14512	16.7	-43 22	9.6	10.4	Go	3	..	39472b
46	4547	16.5	+ 3 19	8.9	9.7	G5	6	..	14204b	96	9638	16.7	-56 50	10.0	10.5	F8	3	..	39382b
47	5184	16.5	- 3 38	8.7	9.7	Ko	2	..	14658b	97	2605	16.7	-71 9	7.8	8.9	K2	5	..	19966b
48	5977	16.5	-12 7	10.5	11.3	G5	2	..	39407b	98	688	16.8	+80 23	7.20	7.20	Ao	4	..	37294i
49	5960	16.5	-15 35	var.	var.	Md	..	R	M	99	833	16.8	+76 36	6.17	7.24	K2	7	..	38025i
50	6244	16.5	-17 28	10.3	10.9	Go	2	..	39348b	100	1573	16.8	+65 44	8.1	8.9	G5	2	..	37277i

THE HENRY DRAPER CATALOGUE.

203400

21^h 16^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	4373	16.8	+22 28	7.8	7.9	A3	7	..	38051i	51	3916	17.1	-65 42	9.3	10.4	K2	3	..	20542b
2	4594	16.8	+14 48	9.0	10.0	Ko	2	..	38129i	52	1399	17.1	-78 24	9.5	9.6	A2	3	..	19964b
3	4789	16.8	+ 9 19	8.7	9.9	K5	1	..	14667b	53	3281	17.2	+46 30	7.80	8.80	Ko	3	..	37946i
4	4466	16.8	+ 2 6	8.5	8.9	F5	5	..	14204b	54	4529	17.2	+39 55	6.46	6.96	F8	6	0,5	37878i
5	4714	16.8	+ 0 57	6.82	7.16	F2	5	..	38045i	55	4464	17.2	+38 30	9.0	10.0	K	1	..	38942i
6	6007	16.8	-13 51	9.1	9.7	Go	5	..	39407b	56	4659	17.2	+ 8 21	9.9	9.9	Ao	2	..	10143b
7	5963	16.8	-15 21	8.28	8.78	F8	7	..	39407b	57	4553	17.2	+ 4 4	7.6	7.7	A2	4	..	38045i
8	16605	16.8	-24 25	10.2	11.6	G5	2	..	39402b	58	5188	17.2	- 3 34	6.65	6.99	F2	9	..	14658b
9	14491	16.8	-41 41	9.5	11.4	F8	1	..	39472b	59	5635	17.2	- 7 56	9.2	10.2	Ko	2	..	40599b
10	13931	16.8	-46 29	10.0	11.3	Go	1	..	39682b	60	6247	17.2	-16 58	9.6	10.6	Ko	5	..	39348b
11	9579	16.8	-55 12	9.1	10.5	Ko	3	..	39382b	61	17247	17.2	-28 32	8.7	8.8	A5	6	5,5	41034b
12	9639	16.8	-56 35	10.0	10.8	G5	2	..	39382b	62	16550	17.2	-31 59	9.2	10.9	K2	1	..	41063b
13	7695	16.8	-59 7	8.5	9.7	Ko	4	..	39382b	63	14320	17.2	-40 42	7.5	8.1	Fo	9	..	39472b
14	6547	16.8	-61 6	8.8	8.9	F8	5	..	19897b	64	14496	17.2	-41 20	10.5	12.0	K2	1	..	39472b
15	3173	16.8	-69 51	9.21	10.4	Ko	3	..	20542b	65	9581	17.2	-55 1	9.04	9.9	G5	5	..	39382b
16	3348	16.9	+48 55	8.3	9.7	Mb	..	..	M	66	7840	17.2	-57 58	9.5	10.5	Ko	2	..	39382b
17	3374	16.9	+47 27	8.2	8.2	Ao	2	..	37946i	67	1527	17.3	+64 27	5.18	5.01	B3p	..	R	56,100
18	3277	16.9	+47 8	8.2	9.2	K	1	..	37946i	68	2561	17.3	+56 3	7.74	8.74	Ko	3	..	37945i
19	4509	16.9	+16 43	7.9	9.1	K5	2	..	38129i	69	4105	17.3	+41 33	7.9	7.9	Ao	3	..	37878i
20	5533	16.9	- 4 52	9.00	9.78	G5	3	..	40599b	70	4496	17.3	+35 19	8.72	8.72	Ao	3	..	37948i
21	16607	16.9	-24 15	10.4	11.1	Fo	3	..	39402b	71	4049	17.3	+28 8	8.2	9.3	K2	1	..	38811i
22	15574	16.9	-25 59	10.9	11.2	F8	3	..	39402b	72	4513	17.3	+16 47	7.7	8.8	K2	3	..	38129i
23	6549	16.9	-61 37	8.8	9.1	Ko	6	..	19897b	73	4656	17.3	+ 4 35	7.7	8.5	G5	6	..	12331b
24	6228	16.9	-62 36	9.6	10.1	F8	2	..	42486b	74	5677	17.3	-22 33	9.4	10.5	G5	2	..	39402b
25	1574	17.0	+65 34	7.60	8.60	Ko	5	..	37277i	75	16877	17.3	-23 5	5.72	7.6	K5	..	..	56,147
26	4496	17.0	+41 1	7.8	8.6	G5	2	..	37878i	76	17742	17.3	-29 30	9.4	9.1	Go	4	..	41034b
27	4894	17.0	+20 53	7.81	8.88	K2	2	..	38051b	77	18556	17.3	-29 59	9.62	10.6	G5	1	..	41034b
28	5919	17.0	-13 39	10.7	11.2	F8	1	..	39407b	78	18558	17.3	-30 41	10.4	10.9	G5	1	..	41034b
29	5918	17.0	-17 56	9.6	10.6	Ko	4	..	39348b	79	14322	17.3	-40 7	9.5	9.9	F5	3	..	39472b
30	5919	17.0	-18 1	10.0	10.5	F8	3	..	39348b	80	13452	17.3	-49 11	10.0	10.9	Ko	1	..	39682b
31	18551	17.0	-30 27	9.4	10.3	Ko	1	..	41034b	81	1060	17.4	+71 34	9.5	9.6	A2	1	..	38936i
32	15418	17.0	-41 59	7.7	8.7	G5	9	..	39472b	82	3501	17.4	+45 55	7.8	8.8	Ko	2	..	37946i
33	11865	17.0	-52 40	9.1	10.3	K2	1	..	41053b	83	4384	17.4	+24 14	7.8	7.9	A2	4	..	38051i
34	3420	17.0	-68 6	10.5	11.5	Ko	1	..	20542b	84	4296	17.4	+23 23	8.4	8.5	A3	3	..	38051i
35	522	17.0	-85 15	9.47	10.5	K5	2	..	21397b	85	4155	17.4	- 1 3	9.2	9.5	Fo	3	..	14658b
36	1058	17.1	+71 44	8.7	9.1	F5	2	..	38936i	86	5743	17.4	- 6 4	7.12	8.30	K5	6	0,4	40603b
37	2605	17.1	+53 45	7.9	7.9	B9	5	..	37945i	87	15413	17.4	-27 42	10.4	11.6	K5	1	..	41034b
38	4528	17.1	+39 36	8.4	9.6	K5	1	..	38942i	88	15543	17.4	-33 13	8.5	9.1	Go	4	..	41063b
39	4134	17.1	+32 11	6.03	6.03	Ao	9	..	37948i	89	15022	17.4	-34 6	8.5	9.4	Go	4	..	41063b
40	4551	17.1	+ 3 54	6.92	7.92	Ko	4	..	38045i	90	14255	17.4	-37 32	10.8	9.9	G5	2	..	40903b
41	5546	17.1	- 7 17	9.8	9.8	Ao	3	..	40599b	91	14520	17.4	-38 0	9.4	10.8	G5	3	..	40944b
42	5660	17.1	-10 19	10.0	10.4	F5	2	..	40599b	92	14519	17.4	-38 10	7.46	7.9	A2	10	..	40944b
43	5965	17.1	-15 12	9.8	10.8	Ko	1	..	39407b	93	14323	17.4	-40 13	7.52	7.9	F5	7	..	39472b
44	16608	17.1	-23 54	9.5	10.8	G5	3	..	39402b	94	14324	17.4	-40 15	9.5	9.6	F8	4	..	39472b
45	15390	17.1	-25 0	9.05	9.6	F5	5	..	39402b	95	..	17.4	-41 8	var.	var.	Md	..	R	M
46	15577	17.1	-26 17	9.5	12.1	K5	1	..	39402b	96	14446	17.4	-44 43	10.4	10.7	F5	3	..	39472b
47	15406	17.1	-27 31	10.4	10.5	F8	2	..	41034b	97	9846	17.4	-57 41	7.33	7.4	A5	5	..	44240b
48	18229	17.1	-31 15	7.9	8.5	Go	6	..	41063b	98	6550	17.4	-61 32	10.1	11.1	Ko	1	..	39382b
49	12925	17.1	-51 0	10.0	11.4	K2	1	..	39662b	99	2847	17.4	-70 34	8.9	9.3	F5	5	..	19966b
50	9640	17.1	-56 25	8.7	9.9	G5	5	..	39382b	100	1509	17.4	-76 30	9.5	10.1	Go	1	..	19964b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

203500

21^h 17^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	690	17.5	+80 49	6.02	6.08	A2	10	..	37294i	51	2224	17.8	+60 15	6.74	7.16	F5	7	0,4	38526i
2	2920	17.5	+52 57	8.7	8.7	A0	2	..	37945i	52	4521	17.8	+26 5	9.0	10.2	K5	1	..	38051i
3	4519	17.5	+25 23	8.0	8.1	A3	5	..	38051i	53	5922	17.8	-18 43	9.2	9.5	F2	8	..	39348b
4	4691	17.5	+19 23	4.24	5.24	K0	..	0,10	56,100	54	14329	17.8	-40 20	10.1	10.8	A0	2	..	39472b
5	4597	17.5	+14 15	8.7	9.3	G0	3	..	38129i	55	14328	17.8	-40 28	7.7	8.1	F5	8	..	39472b
6	4554	17.5	+3 19	7.9	8.9	K0	7	0,1	14204b	56	9642	17.8	-56 18	9.9	9.9	A0	5	..	39382b
7	4205	17.5	-0 21	9.2	9.7	F8	3	0,2	14204b	57	1389	17.9	+66 21	8.5	9.3	G5	1	..	37277i
8	4157	17.5	-1 10	9.9	10.0	A2	2	..	14658b	58	3284	17.9	+46 36	8.1	9.2	K2	1	..	37946i
9	4156	17.5	-1 28	8.5	8.6	A3	6	..	14658b	59	4066	17.9	+28 49	8.5	8.5	A0	1	..	21671i
10	5535	17.5	-5 34	9.6	10.6	K0	1	..	40599b	60	4386	17.9	+24 35	9.0	9.8	G5	1	..	38051i
11	5920	17.5	-13 12	8.7	9.2	F8	6	..	39407b	61	4614	17.9	+12 27	8.9	9.9	K0	2	..	38129i
12	5971	17.5	-14 50	9.4	10.5	K2	2	..	39407b	62	4811	17.9	+6 23	5.14	5.14	A0	..	2,R	56,100
13	16552	17.5	-31 58	9.2	10.0	A0	4	..	41063b	63	4469	17.9	+1 47	8.5	8.5	A0	6	2,3	14204b
14	6230	17.5	-62 35	9.9	10.4	F8	3	..	39382b	64	5638	17.9	-8 45	9.6	10.4	G5	1	..	40603b
15	2603	17.5	-72 20	8.3	8.6	F0	5	..	19966b	65	6010	17.9	-13 57	7.8	8.8	K0	10	..	39407b
16	811	17.6	+78 10	7.18	7.18	A0	5	..	38590i	66	6250	17.9	-17 31	9.8	9.8	A0	7	..	39348b
17	810	17.6	+77 14	9.6	10.1	F8	2	..	38936i	67	15398	17.9	-25 5	10.9	11.3	F0	2	..	39402b
18	3502	17.6	+45 18	8.9	8.9	A	2	..	37946i	68	13458	17.9	-49 37	8.7	10.0	K0	4	..	39682b
19	4498	17.6	+40 33	8.6	8.6	A0	2	..	38942i	69	10060	17.9	-53 10	8.5	11.0	K2	1	..	41053b
20	4670	17.6	+8 2	8.9	9.9	K0	2	..	10143b	70	7696	17.9	-59 22	8.6	9.2	K0	5	..	39382b
21	4671	17.6	+7 21	8.3	9.3	K0	3	..	14667b	71	3563	17.9	-66 25	9.3	9.8	F8	4	..	20542b
22	4348	17.6	+2 30	6.56	7.06	F8	5	..	38045i	72	2217	17.9	-73 38	9.1	10.1	K0	3	..	19966b
23	5192	17.6	-2 58	9.4	10.6	K5	2	..	10117b	73	1528	18.0	+64 12	8.20	8.48	F0	4	..	37277i
24	5191	17.6	-3 1	9.2	9.3	A3	4	2,3	10117b	74	2227	18.0	+60 21	6.24	7.24	K0	7	0,7	38526i
25	5728	17.6	-9 44	6.24	7.42	K5	10	..	40599b	75	2359	18.0	+60 1	8.7	8.7	A	1	..	38526i
26	5978	17.6	-12 5	9.4	9.8	F5	2	..	39407b	76	2922	18.0	+52 51	8.3	8.8	F8	3	..	37945i
27	15416	17.6	-27 30	10.2	10.5	G0	2	..	41034b	77	3381	18.0	+47 44	7.56	8.91	Ma	3	..	37946i
28	13936	17.6	-46 24	10.4	10.4	F8	3	..	39682b	78	4067	18.0	+42 43	7.9	7.9	A0	3	..	37878i
29	9859	17.6	-54 47	9.9	10.5	G0	2	..	39382b	79	4522	18.0	+25 46	8.7	9.8	K2	1	..	38051i
30	4132	17.6	-64 18	9.0	9.8	G5	3	..	42486b	80	4349	18.0	+3 5	8.9	10.1	K5	1	..	14204b
31	3421	17.6	-68 32	8.9	8.9	A0	6	..	20542b	81	4158	18.0	-1 13	7.7	8.7	K0	4	..	14658b
32	716	17.6	-83 7	6.52	6.5	B3	..	2,5-	56,147	82	5730	18.0	-9 42	10.3	10.8	F8	2	..	40603b
33	1202	17.7	+68 50	9.0	9.0	A0	1	..	38573i	83	5921	18.0	-13 10	10.0	10.5	F8	3	..	39407b
34	2223	17.7	+60 12	7.46	8.64	K5	1	..	38526i	84	5855	18.0	-16 19	10.0	11.1	K2	2	..	39348b
35	3283	17.7	+46 18	6.71	6.77	A2	6	..	37878i	85	14503	18.0	-41 26	5.86	5.86	Aop	..	R	28,215
36	4692	17.7	+19 35	8.4	9.2	G5	1	..	38812i	86	13884	18.0	-48 36	9.6	9.7	A0	4	..	39657b
37	4673	17.7	+7 40	8.9	9.9	K0	1	..	10143b	87	9584	18.0	-55 52	9.2	10.8	K0	3	..	39382b
38	4555	17.7	+3 39	8.9	9.2	F0	4	..	14204b	88	1512	18.0	-76 27	9.2	9.5	F0	5	..	19964b
39	5438	17.7	-3 58	8.2	9.2	K0	4	..	14658b	89	629	18.0	-84 28	9.5	10.5	K0	2	..	21397b
40	5745	17.7	-6 40	8.4	9.8	Ma	4	..	40599b	90	311	18.0	-87 33	9.7	10.5	G5	2	..	22980b
41	5584	17.7	-11 1	8.4	8.9	F8	5	..	40599b	91	2565	18.1	+56 6	7.42	7.42	A0	5	..	37945i
42	5583	17.7	-11 39	8.8	9.2	F5	5	..	39407b	92	2607	18.1	+54 10	8.5	8.5	B9	2	..	37945i
43	5972	17.7	-15 16	9.0	9.5	F8	6	..	39407b	93	4377	18.1	+23 2	8.4	9.4	K0	2	..	38051i
44	5921	17.7	-18 18	10.0	10.4	F5	3	..	39348b	94	5522	18.1	-2 15	9.0	10.1	K2	2	..	10117b
45	6204	17.7	-20 7	8.6	9.0	F5	7	..	39348b	95	5536	18.1	-5 25	9.2	9.5	F0	3	..	40599b
46	14498	17.7	-40 54	10.1	10.8	A2	2	..	39472b	96	5974	18.1	-15 28	9.15	9.15	A0	5	..	39407b
47	14451	17.7	-44 3	9.1	9.2	F2	6	..	39472b	97	R	18.1	-22 53	9.9	10.2	G5	3	..	39402b
48	13796	17.7	-47 3	6.48	7.3	A2	7	..	41843b	98	13347	18.1	-50 1	10.0	10.9	K2	1	..	39682b
49	12926	17.7	-51 6	9.4	10.0	F0	3	..	39662b	99	11867	18.1	-52 50	9.0	9.7	A5	3	..	41053b
50	2226	17.8	+60 42	8.3	8.3	A0	2	..	38526i	100	2118	18.2	+62 6	8.0	8.5	F8	3	..	37277i

THE HENRY DRAPER CATALOGUE.

203600

21^h 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	4772	18.2	+18 40	8.7	9.5	G5	1	..	38818i	51	16622	18.5	-24 4	7.32	7.1	A5	10	..	39402b
2	4401	18.2	+15 34	8.5	9.9	Ma	1	..	38129i	52	16624	18.5	-24 51	6.69	6.8	Fo	9	..	40629b
3	4600	18.2	+14 53	9.2	9.7	F8	1	..	38129i	53	15588	18.5	-26 0	7.9	7.7	Ao	8	..	41034b
4	4159	18.2	- 1 24	8.9	9.7	G5	4	..	10117b	54	17753	18.5	-29 41	9.9	10.3	G5	2	..	41034b
5	5980	18.2	-12 22	10.0	11.0	Ko	1	..	39407b	55	14761	18.5	-35 24	7.00	7.8	Ko	8	..	40903b
6	6252	18.2	-17 33	10.9	11.9	Ko	1	..	39348b	56	14511	18.5	-41 10	9.1	9.6	Fo	5	..	39472b
7	15399	18.2	-25 38	6.67	7.6	Ko	10	..	41034b	57	14525	18.5	-43 11	9.8	11.2	G5	2	..	39472b
8	3918	18.2	-65 49	4.30	4.80	F8	..	R	28,215	58	14454	18.5	-43 58	9.8	11.2	Ko	2	..	39472b
9	3317	18.3	+50 24	8.3	8.3	Ao	4	..	38796i	59	13888	18.5	-48 20	9.4	10.6	K2	2	..	39657b
10	3287	18.3	+46 28	8.7	9.7	K	1	..	37946i	60	6551	18.5	-61 46	10.0	10.8	G5	1	..	39382b
11	4533	18.3	+36 44	7.52	7.86	F2	4	..	37948i	61	3423	18.5	-68 18	9.4	9.9	F8	3	..	20542b
12	4242	18.3	+33 25	7.7	7.8	A3	3	..	37948i	62	3290	18.6	+46 26	9.3	9.3	A	1	..	37946i
13	4431	18.3	+31 32	8.6	9.0	F5	2	..	37948i	63	4468	18.6	+38 19	8.7	9.2	F8	2	..	38942i
14	4569	18.3	+17 38	8.1	8.1	Ao	5	..	38129i	64	4793	18.6	+ 9 30	8.3	8.1	B3	4	..	14667b
15	4658	18.3	+ 4 44	9.2	10.3	K2	1	..	14204b	65	4664	18.6	+ 8 45	8.3	9.4	K2	3	..	14667b
16	5587	18.3	-11 8	9.2	10.0	G5	1	..	40599b	66	4206	18.6	+ 0 7	9.4	10.5	K2	2	..	14204b
17	5981	18.3	-12 29	8.2	8.2	B8	3	..	41980b	67	5549	18.6	- 7 1	8.0	8.5	F8	8	..	40599b
18	6253	18.3	-16 52	9.4	10.5	K2	3	..	39348b	68	5550	18.6	- 7 1	8.6	9.7	K2	3	..	40599b
19	5924	18.3	-17 58	10.5	11.1	Go	2	..	39348b	69	6013	18.6	-14 8	9.6	9.9	Fo	3	..	39407b
20	17750	18.3	-29 36	9.2	9.7	Go	4	..	41034b	70	6014	18.6	-14 33	10.4	11.5	K2	1	..	39407b
21	14531	18.3	-38 17	9.5	10.5	Go	4	..	40944b	71	5977	18.6	-15 45	9.4	10.4	Ko	2	..	39407b
22	9585	18.3	-54 58	10.2	10.8	Go	3	..	39382b	72	6256	18.6	-17 32	10.0	11.0	Ko	2	..	39348b
23	7473	18.3	-60 4	9.0	10.2	K2	3	..	39382b	73	5678	18.6	-22 29	9.6	10.5	G5	2	..	39402b
24	1707	18.3	-75 27	9.1	9.5	F5	4	..	19964b	74	16890	18.6	-23 44	7.38	7.7	G5	8	..	39402b
25	1160	18.4	+69 27	8.5	8.8	F2	2	..	38573i	75	17256	18.6	-28 33	9.1	9.3	F8	4	..	41034b
26	2228	18.4	+61 2	9.0	10.1	K2	1	..	38526i	76	14457	18.6	-44 29	9.6	10.1	Ao	5	..	39472b
27	2255	18.4	+58 37	8.2	9.0	G5	1	..	38526i	77	14331	18.6	-45 27	8.8	10.1	Ko	4	..	39472b
28	4283	18.4	+37 51	9.7	9.7	A	1	..	38942i	78	13942	18.6	-46 49	10.7	11.6	G5	1	..	39682b
29	4534	18.4	+36 12	8.5	8.5	Ao	3	..	37948i	79	630	18.6	-84 19	9.7	10.5	G5	1	..	21397b
30	4397	18.4	+29 53	6.28	7.28	Ko	6	2,7	37948i	80	3795	18.7	+44 27	9.1	9.2	A3	2	..	37946i
31	4404	18.4	+16 4	7.62	8.80	K5	2	..	38129i	81	4674	18.7	+ 7 30	9.2	10.3	K2	1	..	10143b
32	4661	18.4	+ 9 2	7.7	7.8	A2	3	..	38129i	82	4471	18.7	- 1 15	7.44	8.44	Ko	3	..	38045i
33	4350	18.4	+ 2 21	7.04	7.18	A5	4	..	38045i	83	5196	18.7	- 3 48	10.0	10.0	Ao	3	..	10117b
34	5524	18.4	- 2 2	9.4	9.9	F8	4	..	10117b	84	5734	18.7	- 9 0	10.3	10.9	Go	1	..	40603b
35	5922	18.4	-13 15	9.8	10.4	Go	3	..	39407b	85	6257	18.7	-17 12	10.7	11.2	F8	1	..	39348b
36	6011	18.4	-14 20	10.3	10.8	F8	1	..	39407b	86	5926	18.7	-18 43	10.0	11.1	K2	2	..	39348b
37	6205	18.4	-20 3	8.6	9.0	F2	5	..	39348b	87	5679	18.7	-22 18	9.2	9.4	Go	5	..	39402b
38	6007	18.4	-21 16	5.47	6.8	Ko	..	..	56,147	88	16626	18.7	-24 6	9.7	11.2	G5	3	..	39402b
39	16889	18.4	-23 11	6.48	7.3	Ko	..	0,10	56,147	89	18246	18.7	-31 32	8.2	9.1	Ko	4	..	41063b
40	14508	18.4	-41 13	11.0	11.1	Ko	1	..	39472b	90	16555	18.7	-31 55	9.9	10.9	K5	1	..	41063b
41	15435	18.4	-42 26	8.2	9.0	F8	7	..	39472b	91	13462	18.7	-49 8	10.7	10.8	Go	1	..	39682b
42	3422	18.4	-68 9	10.4	11.5	K2	1	..	20542b	92	9644	18.7	-56 19	8.3	9.7	Ko	6	..	39382b
43	1204	18.5	+69 6	9.3	9.8	F8	1	..	38573i	93	7841	18.7	-58 32	8.5	9.1	G5	6	..	39382b
44	3357	18.5	+48 58	5.87	6.87	Ko	7	..	37946i	94	1206	18.8	+69 7	8.1	8.2	A5	4	..	37277i
45	4689	18.5	+13 53	9.2	9.2	Ao	2	..	38129i	95	2229	18.8	+60 17	8.58	8.58	A	1	..	38526i
46	4662	18.5	+ 8 57	8.9	9.4	F8	2	..	14667b	96	4471	18.8	+38 12	6.45	6.45	Ao	7	2,8	38894i
47	4661	18.5	+ 5 1	8.90	9.90	Ko	2	..	14204b	97	4432	18.8	+31 36	8.4	8.7	F2	2	..	37948i
48	5731	18.5	- 9 9	10.3	10.9	Go	1	..	40603b	98	4400	18.8	+29 13	7.7	8.2	F8	2	..	38894i
49	6088	18.5	-19 5	10.5	11.5	G5	2	..	39348b	99	4692	18.8	+13 37	6.71	6.59	B5p	8	R	38129i
50	6206	18.5	-20 13	8.6	9.4	F8	5	..	39348b	100	4665	18.8	+ 8 24	8.7	9.3	Go	2	..	14667b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

203700

21^h 18^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	4559	18.8	+ 3 56	8.3	8.6	Fo	7	..	14204b	51	5984	19.1	- 11 55	10.7	11.2	F8	2	..	39407b
2	4719	18.8	+ 0 54	10.2	10.3	A2	2	..	14204b	52	6016	19.1	- 14 40	9.46	9.80	F2	3	..	39407b
3	5663	18.8	- 10 7	9.2	9.6	F5	4	..	40599b	53	6260	19.1	- 17 19	10.3	11.1	G5	1	..	39348b
4	5588	18.8	- 11 3	9.4	9.9	F8	3	..	40599b	54	14765	19.1	- 35 17	6.95	6.9	F5	10	..	40903b
5	5923	18.8	- 13 19	5.54	5.68	A5	..	0,8	56,100	55	15443	19.1	- 42 8	7.6	9.0	Mb	7	..	39472b
6	5856	18.8	- 16 30	7.9	7.9	Ao	2	..	41980b	56	14529	19.1	- 43 39	10.4	11.3	A5	1	..	39472b
7	14513	18.8	- 41 53	9.5	10.8	G5	2	..	39472b	57	13946	19.1	- 46 36	8.1	8.7	F2	6	..	39682b
8	14458	18.8	- 44 42	9.1	11.0	K2	3	..	39472b	58	13804	19.1	- 47 10	7.3	7.8	A3	10	..	39657b
9	13348	18.8	- 50 38	9.3	10.0	A2	4	..	39662b	59	10064	19.1	- 53 35	8.2	10.5	K5	2	..	41053b
10	782	18.9	+ 75 40	8.87	9.87	Ko	1	..	38936i	60	9586	19.1	- 55 6	6.24	7.2	Fo	..	0,7 R	56,147
11	1392	18.9	+ 66 47	7.7	7.7	Ao	7	..	37277i	61	2849	19.1	- 70 12	9.3	9.9	Go	4	..	20544b
12	4502	18.9	+ 40 30	7.28	8.63	Mb	4	..	38942i	62	2561	19.2	+ 56 54	8.5	9.7	K5	2	..	19317i
13	4472	18.9	+ 38 16	7.30	8.30	Ko	3	..	37948i	63	2560	19.2	+ 56 15	8.5	8.5	Ao	2	..	19317i
14	4503	18.9	+ 35 56	8.5	9.9	Ma	..	..	M	64	3050	19.2	+ 51 52	8.7	8.7	Ao	3	R	38796i
15	4604	18.9	+ 14 49	9.2	9.3	A3	5	..	38129i	65	3363	19.2	+ 48 12	9.0	9.0	A	1	..	37946i
16	4605	18.9	+ 14 22	9.2	10.3	K2	2	..	38129i	66	4435	19.2	+ 31 51	9.0	9.0	A	2	..	37948i
17	4208	18.9	- 0 25	9.9	10.7	G5	3	..	10117b	67	4421	19.2	+ 30 40	7.66	8.73	K2	2	..	37948i
18	5525	18.9	- 2 21	9.8	10.6	G5	3	..	10117b	68	4352	19.2	+ 2 58	9.9	10.3	F5	2	..	14204b
19	5551	18.9	- 7 11	8.0	8.4	F5	6	..	40599b	69	5985	19.2	- 12 13	9.4	9.4	Ao	2	..	41980b
20	5664	18.9	- 10 48	9.4	9.4	Ao	4	..	40599b	70	6009	19.2	- 20 49	9.2	9.9	F8	3	..	39402b
21	6015	18.9	- 14 15	9.4	9.5	A5	3	..	39407b	71	16895	19.2	- 23 45	10.4	11.2	Ko	1	..	39402b
22	5927	18.9	- 18 23	10.3	10.9	Go	2	..	39348b	72	13947	19.2	- 46 46	10.7	11.4	F2	1	..	39682b
23	16559	18.9	- 32 21	8.9	9.7	F5	3	..	41063b	73	13892	19.2	- 48 3	9.8	10.0	F8	3	..	39657b
24	14335	18.9	- 40 45	8.8	11.1	Ko	3	..	39472b	74	12934	19.2	- 51 32	8.8	9.7	G5	4	..	41053b
25	14332	18.9	- 45 36	7.18	7.3	Ao	10	..	39682b	75	11871	19.2	- 52 11	8.7	9.5	Ko	4	..	41053b
26	13944	18.9	- 46 14	8.4	9.5	G5	7	..	39682b	76	11870	19.2	- 52 15	9.3	10.1	G5	3	..	41053b
27	7842	18.9	- 58 23	8.5	8.9	F5	6	..	39382b	77	7845	19.2	- 58 11	9.8	10.8	Ko	1	..	39382b
28	2848	18.9	- 69 54	10.4	11.0	Go	1	..	20542b	78	6552	19.2	- 61 45	9.5	10.5	Ko	2	..	39382b
29	2362	19.0	+ 60 9	7.61	8.03	F5	3	..	38526i	79	4670	19.2	- 63 5	9.2	9.8	Go	3	..	42486b
30	3897	19.0	+ 43 18	8.6	9.6	Ko	1	..	37946i	80	3565	19.2	- 66 41	10.0	10.6	Go	2	..	20542b
31	4503	19.0	+ 40 16	7.42	7.30	B5	5	E	38942i	81	2567	19.3	+ 55 11	8.46	9.53	K2	1	..	37945i
32	4288	19.0	+ 37 52	8.4	8.5	A2	2	..	38942i	82	3517	19.3	+ 46 4	8.8	9.4	G	2	..	37946i
33	4403	19.0	+ 29 22	8.0	8.8	G5	2	E	37948i	83	4476	19.3	+ 38 55	7.8	7.8	B9	4	1,5	38542i
34	4390	19.0	+ 24 32	8.6	9.4	G5	2	..	38051i	84	4537	19.3	+ 36 58	6.58	7.08	F8	7	0,7	37948i
35	4210	19.0	- 0 15	9.9	10.5	Go	3	..	10117b	85	4145	19.3	+ 26 43	9.0	9.5	F8	2	..	38051i
36	4160	19.0	- 0 49	10.6	11.2	Go	2	..	10117b	86	4537	19.3	+ 21 31	7.62	7.60	B9	6	..	38051i
37	5924	19.0	- 13 13	8.8	8.8	Ao	6	..	39407b	87	4409	19.3	+ 15 55	8.9	9.5	Go	1	..	38129i
38	5857	19.0	- 16 4	10.3	10.8	F8	2	..	39348b	88	4537	19.3	+ 10 15	8.57	8.63	A2	3	..	10143b
39	5928	19.0	- 18 27	10.7	11.2	F8	1	..	39348b	89	4562	19.3	+ 3 17	9.2	10.0	G5	2	..	14204b
40	6208	19.0	- 20 2	9.2	9.9	K2	3	..	39348b	90	4161	19.3	- 0 56	10.6	11.7	K2	1	..	10117b
41	15425	19.0	- 27 29	9.7	10.2	Go	2	..	41034b	91	5528	19.3	- 2 40	10.3	10.9	Go	2	..	10117b
42	13945	19.0	- 46 17	10.2	11.2	G5	2	..	39682b	92	5542	19.3	- 5 26	10.0	10.8	G5	1	..	40603b
43	7844	19.0	- 58 4	9.8	9.9	A3	2	..	39382b	93	5553	19.3	- 7 9	7.01	7.35	F2	9	..	40599b
44	7843	19.0	- 58 45	10.1	10.6	F8	2	..	39382b	94	5644	19.3	- 8 21	9.2	9.6	F5	4	..	40599b
45	1014	19.0	- 80 31	8.4	9.5	K2	4	..	21397b	95	..	19.3	- 10 25	..	..	K2	2	..	39407b
46	3360	19.1	+ 49 3	6.93	6.91	B9	7	..	37946i	96	6017	19.3	- 14 1	10.9	11.5	Go	1	..	39407b
47	3291	19.1	+ 47 11	8.1	8.1	Ao	3	..	37946i	97	6092	19.3	- 19 23	8.6	9.0	Fo	8	..	39348b
48	4420	19.1	+ 30 48	9.3	9.4	A3	1	..	38894i	98	5681	19.3	- 22 5	9.6	10.5	F2	3	..	39402b
49	4720	19.1	+ 0 12	8.78	8.84	A2	6	..	12331b	99	15046	19.3	- 34 26	8.5	11.4	K2	1	..	40742b
50	5589	19.1	- 11 24	9.2	10.2	Ko	4	0,3	39407b	100	14463	19.3	- 44 13	8.4	8.3	F2	8	..	39472b

THE HENRY DRAPER CATALOGUE.

203800

21^h 19^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	3799	19.3	-67 17	9.2	10.6	Ma	2	..	20542b	51	2606	19.6	-71 59	9.1	10.1	Ko	2	..	19966b
2	2564	19.4	+57 8	8.1	8.9	G5	2	..	37945i	52	2218	19.6	-73 31	9.5	10.7	K5	1	..	19966b
3	4300	19.4	+23 51	5.66	5.94	Fo	10	..	38051i	53	859	19.6	-82 22	7.65	7.7	A3	8	..	21397b
4	4620	19.4	+12 11	8.7	9.7	Ko	1	..	38129i	54	1061	19.7	+71 55	9.1	9.2	A2	1	..	38936i
5	5531	19.4	- 2 9	9.4	9.4	Ao	4	..	14658b	55	3387	19.7	+47 38	8.2	9.0	G5	2	..	38796i
6	5738	19.4	- 9 6	9.6	10.6	Ko	1	..	40603b	56	4542	19.7	+39 35	7.17	7.17	Ao	6	0,3-	38542i
7	5592	19.4	-10 57	10.3	11.1	G5	2	..	39407b	57	4543	19.7	+36 55	6.59	7.77	K5	4	..	37948i
8	5988	19.4	-11 51	10.9	11.2	F	1	..	39407b	58	4394	19.7	+24 54	6.22	6.22	Ao	9	..	38051i
9	5987	19.4	-12 2	10.0	10.6	Go	3	..	39407b	59	4302	19.7	+23 18	8.4	9.5	K2	2	..	38051i
10	5986	19.4	-12 45	10.7	11.9	K5	1	..	39407b	60	4354	19.7	+ 3 5	8.9	10.1	K5	1	..	14204b
11	5858	19.4	-15 57	10.0	10.6	Go	3	..	39348b	61	4162	19.7	- 1 22	9.9	11.0	K2	2	..	10117b
12	5859	19.4	-16 25	9.2	9.8	Go	4	..	39348b	62	6012	19.7	-20 49	9.2	9.9	Go	4	..	39402b
13	6011	19.4	-20 54	9.2	9.9	Ko	3	..	39402b	63	5682	19.7	-22 29	9.2	10.9	G5	2	..	39402b
14	6010	19.4	-21 23	9.2	9.4	A3	4	..	39402b	64	16637	19.7	-24 1	9.7	8.8	Go	6	..	39402b
15	16632	19.4	-24 26	11.1	11.1	Go	2	..	39402b	65	15411	19.7	-25 20	9.7	9.9	Go	3	..	40629b
16	15593	19.4	-26 33	9.2	10.8	Ko	1	..	41034b	66	14517	19.7	-41 30	9.7	10.5	Ao	4	..	39472b
17	14792	19.4	-36 2	8.8	9.7	F8	5	..	40903b	67	14534	19.7	-43 14	9.3	11.2	K5	1	..	39472b
18	2606	19.4	-71 34	9.4	9.9	F8	2	..	19966b	68	14466	19.7	-44 5	9.6	11.3	Ma	1	..	39472b
19	2609	19.5	+53 48	7.78	7.78	Ao	6	..	37945i	69	14336	19.7	-45 40	10.2	11.0	Fo	2	..	39682b
20	4056	19.5	+28 2	8.4	8.7	Fo	2	E	38051i	70	13952	19.7	-46 43	10.7	10.4	F5	2	..	39682b
21	4679	19.5	+ 7 34	9.2	9.2	Ao	3	..	10143b	71	9588	19.7	-55 2	10.0	10.5	F8	2	..	39382b
22	4211	19.5	+ 0 9	8.83	9.11	Fo	5	..	12331b	72	4668	19.8	+ 8 16	8.9	9.0	A3	3	..	14667b
23	..	19.5	- 0 49	..	..	K2	2	..	10117b	73	4476	19.8	+ 1 31	9.2	9.3	A2	3	..	14204b
24	..	19.5	- 1 4	..	..	K2	1	..	10117b	74	5555	19.8	- 7 29	9.4	10.2	G5	1	..	40599b
25	5443	19.5	- 4 47	8.25	8.75	F8	5	..	14658b	75	5668	19.8	-10 11	5.76	5.82	A2	8	3,8	41980b
26	5750	19.5	- 6 1	7.39	8.39	Ko	7	..	40599b	76	6019	19.8	-13 56	8.6	9.0	F5	7	..	39407b
27	5925	19.5	-13 12	9.6	10.2	Go	2	..	39407b	77	5860	19.8	-16 40	9.8	10.4	Go	2	..	39348b
28	6018	19.5	-14 48	8.91	9.41	F8	5	..	39407b	78	16898	19.8	-23 25	9.5	9.0	Go	4	..	39402b
29	6261	19.5	-17 29	9.4	10.4	Ko	3	..	39348b	79	18596	19.8	-30 19	8.5	10.6	Ko	2	..	41034b
30	16897	19.5	-23 43	9.4	8.7	Go	5	..	39402b	80	13810	19.8	-47 25	8.8	8.6	A5	7	..	39657b
31	16633	19.5	-24 30	8.5	9.1	G5	6	..	39402b	81	2850	19.8	-69 57	5.50	6.9	Mb	..	0,8-	56,147
32	17267	19.5	-28 7	8.9	10.5	Ko	2	..	41034b	82	2219	19.8	-73 27	9.1	9.5	F5	4	..	19966b
33	14245	19.5	-39 39	8.5	8.8	A2	6	..	40944b	83	2570	19.9	+55 13	8.71	8.66	B8	1	..	37945i
34	13353	19.5	-50 26	9.4	10.3	Ko	2	..	39662b	84	3325	19.9	+50 14	8.42	9.49	K2	1	..	38796i
35	3800	19.5	-67 14	7.62	8.9	Ko	8	..	20542b	85	4403	19.9	+34 43	8.2	8.2	Ao	1	..	38894i
36	319	19.6	+86 37	7.36	7.44	A3	6	0,6	37281i	86	4305	19.9	+24 6	6.42	7.42	Ko	7	..	38051i
37	1720	19.6	+63 55	7.50	8.57	K2	3	..	37277i	87	4411	19.9	+15 20	8.59	9.37	G5	1	..	38129i
38	2565	19.6	+56 24	8.7	9.7	Ko	2	..	37945i	88	4694	19.9	+14 3	8.0	9.1	K2	3	..	38129i
39	3386	19.6	+48 5	7.8	8.1	Fo	4	..	37946i	89	5533	19.9	- 2 25	8.1	8.2	A3	8	..	14658b
40	3901	19.6	+44 5	7.04	7.04	Ao	4	..	37878i	90	5532	19.9	- 2 45	8.8	9.4	Go	4	..	14658b
41	4622	19.6	+12 55	8.9	9.0	A2	1	..	38129i	91	5754	19.9	- 6 8	9.2	10.2	Ko	3	..	40599b
42	4800	19.6	+ 9 44	6.39	6.81	F5	8	..	38129i	92	5669	19.9	-10 20	9.0	9.5	F8	6	3,4	39407b
43	5444	19.6	- 3 50	6.44	6.72	Fo	10	..	14658b	93	6020	19.9	-14 43	6.86	6.86	Ao	6	..	41980b
44	5645	19.6	- 8 37	8.0	8.6	Go	8	..	40599b	94	5861	19.9	-15 54	9.6	10.6	Ko	1	..	39348b
45	6262	19.6	-16 50	9.0	9.1	A2	7	..	39348b	95	5930	19.9	-18 38	9.8	10.9	K2	3	..	39348b
46	16635	19.6	-24 49	10.6	11.6	G5	2	..	39402b	96	15432	19.9	-27 32	9.7	10.8	F8	1	..	41034b
47	17270	19.6	-28 15	9.7	11.2	Go	1	..	41034b	97	18257	19.9	-31 36	9.7	10.0	Ko	2	..	40742b
48	16563	19.6	-32 1	8.8	9.7	Go	4	..	41063b	98	14337	19.9	-45 2	8.7	10.1	F2	5	..	39472b
49	14794	19.6	-36 16	7.7	8.8	Ko	7	..	40903b	99	7477	19.9	-60 21	10.5	11.3	G5	1	..	39382b
50	9645	19.6	-56 34	8.6	9.9	G5	5	..	39382b	100	6554	19.9	-61 18	8.6	9.7	K2	1	..	42486b

203900

21^h 19^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	1516	19.9	-76 3	9.4	9.8	F5	3	..	19964b	51	7478	20.2	-60 9	9.9	10.5	Go	3	..	39382b
2	2527	20.0	+54 51	8.46	8.96	F8	2	..	37945i	52	6555	20.2	-61 6	10.1	10.2	A2	2	..	39382b
3	4396	20.0	+24 44	8.4	9.4	Ko	3	..	3805ii	53	6231	20.2	-62 20	9.9	10.4	F8	2	..	39382b
4	4682	20.0	+7 40	8.9	9.9	Ko	3	..	10143b	54	6232	20.2	-62 32	9.5	10.7	K5	1	..	39382b
5	4213	20.0	-0 41	9.9	9.9	Ao	4	0,3	14204b	55	1017	20.2	-80 29	6.72	6.2	Ao	10	..	21397b
6	4163	20.0	-1 8	9.9	10.5	Go	3	..	10117b	56	2125	20.3	+61 31	8.1	8.6	F8	1	..	38526i
7	5926	20.0	-12 59	9.6	10.4	G5	3	..	39407b	57	3392	20.3	+47 57	8.7	8.8	A2	2	..	37946i
8	6021	20.0	-14 3	10.0	10.8	G5	2	..	39407b	58	4547	20.3	+36 33	8.0	9.0	Ko	3	..	37948i
9	6263	20.0	-17 14	10.3	10.9	Go	3	..	39348b	59	4150	20.3	+32 31	7.8	9.0	K5	1	..	38894i
10	5931	20.0	-18 41	10.3	10.7	F5	3	..	39348b	60	4624	20.3	+12 46	8.7	9.3	Go	2	..	38129i
11	5683	20.0	-22 6	8.4	8.0	Fo	7	..	40629b	61	4722	20.3	+0 54	8.9	9.0	A2	7	..	12331b
12	16899	20.0	-23 37	10.2	10.8	Ko	2	..	39402b	62	4164	20.3	-1 22	9.2	9.8	Go	5	..	10117b
13	16641	20.0	-24 16	6.63	7.4	Ko	8	..	40629b	63	5740	20.3	-9 0	9.0	9.4	F5	3	..	40599b
14	15414	20.0	-25 11	8.9	9.0	Ko	4	..	40629b	64	..	20.3	-14 3	..	..	Go	1	..	39407b
15	14338	20.0	-45 17	8.0	8.9	F8	8	..	39472b	65	6265	20.3	-16 59	10.3	11.3	Ko	1	..	39348b
16	1162	20.1	+69 18	8.5	9.5	Ko	2	..	38573i	66	16904	20.3	-23 52	10.4	9.3	G5	4	..	39402b
17	2571	20.1	+55 20	8.36	9.54	K5	1	..	37945i	67	16643	20.3	-24 49	9.00	9.6	F5	4	..	40629b
18	3513	20.1	+50 4	8.17	8.67	F8	2	..	38796i	68	15418	20.3	-24 55	7.14	8.2	G5	7	..	40629b
19	4081	20.1	+42 42	8.8	8.9	A3	2	..	37946i	69	14802	20.3	-36 53	7.86	9.1	K2	6	..	40903b
20	4481	20.1	+38 43	8.8	8.8	A	2	E	38942i	70	7698	20.3	-59 48	7.87	8.1	F2	8	..	39382b
21	4510	20.1	+35 59	9.0	9.0	Ao	2	3,2	38894i	71	1710	20.3	-75 39	7.9	8.7	G5	7	..	19964b
22	4404	20.1	+34 35	8.1	8.2	A2	3	..	38894i	72	51	20.3	-89 15	9.9	10.7	G5	2	..	22980b
23	4437	20.1	+31 20	8.7	9.2	F8	2	..	38894i	73	1721	20.4	+63 48	7.8	8.8	Ko	3	..	37277i
24	4428	20.1	+30 29	6.72	6.78	A2	6	0,7	37948i	74	4247	20.4	+33 50	8.4	8.5	A2	2	..	37948i
25	4531	20.1	+25 45	5.74	6.02	Fo	10	..	3805ii	75	4248	20.4	+33 23	8.5	8.6	Ao	2	..	38894i
26	5446	20.1	-3 59	5.69	6.69	Ko	10	..	14658b	76	4149	20.4	+26 11	8.6	9.7	K2	1	..	3805ii
27	5927	20.1	-13 16	10.0	10.8	G5	2	..	39407b	77	4533	20.4	+25 27	7.06	7.06	Ao	7	..	3805ii
28	6022	20.1	-14 23	9.1	9.1	Ao	6	..	39407b	78	4214	20.4	-0 40	8.0	9.2	K5	4	0,3	14204b
29	6094	20.1	-19 1	8.0	9.0	Ko	8	..	39348b	79	4165	20.4	-1 25	8.9	9.5	Go	5	..	10117b
30	5684	20.1	-21 57	9.0	9.4	Go	3	..	40629b	80	5648	20.4	-8 15	9.6	10.1	F8	2	..	40599b
31	15415	20.1	-25 41	7.6	8.4	Ko	7	..	41034b	81	5595	20.4	-11 11	10.8	11.4	Go	1	..	39407b
32	18600	20.1	-30 22	8.1	8.9	A5	6	..	40742b	82	6095	20.4	-19 21	10.4	11.4	Ko	1	..	39348b
33	14518	20.1	-41 10	10.1	10.8	Fo	2	..	39472b	83	R	20.4	-22 54	10.4	10.5	Ko	2	2,2	39402b
34	13954	20.1	-46 30	7.4	8.1	F8	9	..	39682b	84	15452	20.4	-42 31	8.1	9.6	Ko	7	..	39472b
35	13472	20.1	-49 23	9.4	10.0	F2	4	..	39682b	85	14340	20.4	-45 15	7.7	9.2	Ko	8	..	39472b
36	3802	20.1	-67 38	9.8	9.9	A5	4	..	20542b	86	12940	20.4	-51 34	8.5	9.7	K2	4	..	41053b
37	984	20.2	+72 45	8.6	9.1	F8	3	..	38936i	87	1990	20.4	-74 38	9.0	10.1	K2	2	..	19966b
38	3294	20.2	+46 44	7.10	6.91	B2	5	..	37946i	88	3514	20.5	+50 0	8.5	9.7	K5	1	..	38796i
39	3904	20.2	+43 15	9.0	9.1	A5	2	..	37946i	89	3394	20.5	+47 16	7.9	7.9	Ao	4	..	37946i
40	4295	20.2	+37 13	7.8	8.6	G5	3	..	37948i	90	4150	20.5	+26 40	9.3	10.4	K2	1	..	3805ii
41	4406	20.2	+34 52	8.1	8.9	G5	2	..	38894i	91	4577	20.5	+18 2	7.47	7.47	Ao	4	..	38129i
42	4146	20.2	+26 12	9.1	9.4	Fo	2	..	3805ii	92	4804	20.5	+10 9	8.57	9.64	K2	2	..	10143b
43	4671	20.2	+8 58	7.7	7.8	A2	8	R	14667b	93	4477	20.5	+1 36	7.9	7.9	Ao	4	..	38045i
44	5544	20.2	-5 12	9.6	10.0	F5	2	..	40603b	94	5928	20.5	-13 30	9.2	9.8	Go	4	..	39407b
45	5594	20.2	-10 58	9.2	9.5	Fo	3	..	40603b	95	6015	20.5	-21 4	9.0	10.5	Ko	2	..	40629b
46	5593	20.2	-11 41	10.8	11.4	Go	2	..	39407b	96	15421	20.5	-24 55	8.90	9.9	F8	3	..	40629b
47	6023	20.2	-14 49	9.4	9.8	F5	3	..	39407b	97	15440	20.5	-27 37	9.5	9.3	Go	3	..	41034b
48	14551	20.2	-38 16	5.69	6.9	Ko	..	0,10	56,147	98	18262	20.5	-31 38	9.7	9.7	Go	3	..	40742b
49	14550	20.2	-38 28	8.5	10.5	K5	3	..	40944b	99	9648	20.5	-56 26	9.3	10.5	Ao	4	..	39382b
50	14550	20.2	-38 28	8.5	10.5	K5	3	..	40944b	100	2530	20.6	+54 52	7.66	7.66	Ao	5	..	37945i

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21^h 20^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	3055	20.6	+51 13	6.88	6.86	B9	8	..	38796i	51	4085	20.9	+29 1	7.16	7.16	A0	4	0.4	3881ri
2	3395	20.6	+48 7	7.36	7.36	A0	5	..	37946i	52	4166	20.9	- 1 1	9.6	10.4	G5	3	..	10117b
3	3298	20.6	+46 46	8.8	8.8	A	1	..	37946i	53	5993	20.9	-12 5	10.0	11.2	K5	2	..	39407b
4	3906	20.6	+43 28	9.0	9.3	F0	2	..	37946i	54	5929	20.9	-13 33	10.7	11.2	F8	1	..	39407b
5	4086	20.6	+43 0	9.1	9.1	A	2	..	37946i	55	6024	20.9	-14 1	9.4	9.8	F5	4	..	39407b
6	4546	20.6	+39 21	8.8	8.8	A	2	E	38042i	56	5982	20.9	-14 56	9.45	10.52	K2	2	..	39407b
7	4151	20.6	+26 58	6.88	6.83	B8	8	..	38051i	57	5983	20.9	-15 41	8.21	9.21	K0	7	..	39407b
8	4702	20.6	+14 1	8.7	8.8	A2	2	..	38129i	58	6267	20.9	-17 6	10.4	11.5	K2	1	..	39348b
9	4625	20.6	+13 1	8.7	9.7	K0	1	..	38129i	59	5936	20.9	-18 19	9.0	9.1	A5	7	..	39348b
10	4626	20.6	+12 46	9.6	10.6	K0	1	..	38129i	60	6096	20.9	-19 15	10.0	11.5	G5	2	..	39348b
11	4542	20.6	+10 55	8.3	8.8	F8	3	..	38129i	61	17279	20.9	-28 25	9.1	8.4	F2	6	..	41034b
12	4805	20.6	+ 9 12	8.3	9.5	K5	2	..	14667b	62	18265	20.9	-31 40	9.2	10.0	G5	2	..	40742b
13	5991	20.6	-12 19	10.5	11.7	K5	1	..	39407b	63	15455	20.9	-42 27	10.2	11.1	K0	2	..	39472b
14	5863	20.6	-15 55	10.0	10.6	G0	2	..	39348b	64	13902	20.9	-48 22	9.4	9.4	G0	6	..	39682b
15	5934	20.6	-18 22	10.0	10.8	G5	3	..	39348b	65	13364	20.9	-50 31	9.6	10.3	F8	4	..	39682b
16	5685	20.6	-22 16	8.4	8.7	K2	5	..	40629b	66	7700	20.9	-59 12	9.7	10.7	K0	1	..	39382b
17	18605	20.6	-30 54	9.5	9.7	G0	3	..	40742b	67	2318	21.0	+57 31	7.78	8.78	K0	1	..	37945i
18	14539	20.6	-42 59	5.61	5.69	A3p	..	R	56,147	68	4155	21.0	+26 44	8.6	8.7	A2	2	..	38051i
19	13900	20.6	-47 57	10.0	10.6	G5	3	..	39682b	69	4154	21.0	+26 24	9.0	9.6	G0	1	..	38051i
20	9855	20.6	-57 34	9.9	11.0	K2	1	..	39382b	70	4609	21.0	+15 10	6.96	8.03	K2	4	..	38129i
21	2221	20.6	-72 56	8.9	10.1	K5	1	..	19966b	71	5598	21.0	-11 21	8.2	9.2	K0	7	..	40603b
22	3516	20.7	+50 1	7.77	8.77	K0	2	..	38796i	72	5597	21.0	-11 34	10.4	11.0	G0	3	..	39407b
23	3372	20.7	+48 23	7.31	7.37	A2	5	..	37946i	73	5994	21.0	-12 32	6.65	7.65	K0	4	..	41980b
24	4607	20.7	+15 7	8.54	9.61	K2	2	..	38129i	74	6268	21.0	-17 17	9.8	10.8	K0	3	..	39348b
25	4559	20.7	+11 13	7.9	8.2	F2	6	..	38129i	75	R	21.0	-22 51	3.86	4.64	G5p	..	R	3075c
26	5650	20.7	- 8 43	8.2	9.2	K0	4	..	40599b	76	16569	21.0	-32 22	8.8	8.3	B5	6	..	40742b
27	5992	20.7	-11 53	9.4	10.0	G0	5	..	39407b	77	13478	21.0	-49 42	8.7	9.5	G5	3	..	41053b
28	5935	20.7	-18 35	9.0	10.0	K0	4	..	39348b	78	9859	21.0	-57 30	10.4	10.8	F5	2	..	39382b
29	6016	20.7	-21 26	7.27	8.1	K0	8	..	40629b	79	4156	21.1	+26 46	8.4	9.2	G5	1	..	38051i
30	18263	20.7	-30 56	7.6	9.4	K2	6	..	40742b	80	5539	21.1	- 2 8	9.0	10.2	K5	2	..	10117b
31	14782	20.7	-35 27	8.5	9.7	K0	3	..	40903b	81	5547	21.1	- 5 49	10.0	10.0	A	1	..	40603b
32	14808	20.7	-36 24	8.8	10.0	K0	4	..	40903b	82	14784	21.1	-35 21	7.7	9.2	K2	4	..	40903b
33	14542	20.7	-43 47	10.7	11.3	G0	1	..	39472b	83	13817	21.1	-47 18	8.7	10.1	K0	5	..	39682b
34	13814	20.7	-47 36	9.6	10.9	K0	4	..	39682b	84	9592	21.1	-55 36	9.3	10.2	F5	4	..	39382b
35	13363	20.7	-49 59	9.6	10.3	G5	4	..	39682b	85	7479	21.1	-60 40	10.1	10.7	G0	1	..	39382b
36	7847	20.7	-58 16	10.1	10.7	G0	1	..	39382b	86	1152	21.1	-78 59	9.3	8.3	K0	9	..	19964b
37	3057	20.8	+52 1	8.3	8.3	A0	4	..	38796i	87	1062	21.2	+71 39	7.02	7.02	A0	7	..	38025i
38	4252	20.8	+33 16	8.0	8.1	A3	3	..	38894i	88	1395	21.2	+66 40	9.0	9.0	A	2	..	37277i
39	4308	20.8	+24 4	7.9	8.0	A2	5	..	38051i	89	1535	21.2	+64 35	7.38	7.36	B9	5	..	37277i
40	4788	20.8	+18 14	8.7	9.2	F8	1	..	38812i	90	3300	21.2	+46 51	8.1	8.2	A3	3	..	37946i
41	4215	20.8	+ 0 6	6.46	6.46	A0	7	..	38045i	91	3529	21.2	+46 4	7.90	8.18	F0	3	..	37946i
42	5596	20.8	-11 7	9.6	10.7	K2	1	..	40603b	92	4554	21.2	+36 15	8.6	8.7	A5	3	3.3	37948i
43	6017	20.8	-20 52	8.6	8.2	A0	7	..	39348b	93	4409	21.2	+34 19	7.96	8.38	F5	4	5.3	38894i
44	17777	20.8	-29 27	7.6	9.1	K2	5	..	41034b	94	4629	21.2	+12 23	9.2	9.3	A3	2	..	38129i
45	18609	20.8	-30 17	var.	var.	Md	1	R	40742b	95	5930	21.2	-13 14	10.7	11.0	F0	1	..	39407b
46	15062	20.8	-34 21	8.2	10.6	K0	2	..	40742b	96	6270	21.2	-17 43	8.6	9.0	F5	8	..	39348b
47	14477	20.8	-44 22	9.0	9.8	G0	6	..	39472b	97	14287	21.2	-37 32	8.5	10.6	K5	2	..	40903b
48	9591	20.8	-55 7	10.2	10.8	G0	2	..	39382b	98	13958	21.2	-45 58	9.8	11.0	G5	3	..	39682b
49	2615	20.9	+53 23	8.7	9.1	F5	2	..	37945i	99	7848	21.2	-58 53	9.6	9.7	A3	3	..	39382b
50	3908	20.9	+43 51	8.1	9.1	K0	2	..	37946i	100	1536	21.3	+64 37	7.08	7.06	B9	6	..	37277i

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21^h 21^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	3058	21.3	+52 5	9.3	9.3	A	2	E	19317i	51	2371	21.6	+59 20	8.8	9.9	K2	1	..	38526i
2	3375	21.3	+48 58	8.2	8.2	Ao	3	..	37946i	52	2261	21.6	+59 10	8.5	9.5	Ko	1	..	38526i
3	4705	21.3	+13 23	8.9	9.5	Go	1	..	38129i	53	3305	21.6	+46 17	5.54	5.82	Fo	8	..	37946i
4	5206	21.3	- 3 26	8.4	8.9	F8	6	..	14658b	54	4156	21.6	+33 4	8.1	8.1	B9	8	..	37948i
5	5757	21.3	- 6 27	8.0	8.8	G5	5	..	40599b	55	4674	21.6	+ 5 2	8.65	9.43	G5	5	..	14204b
6	15425	21.3	-25 0	10.2	10.7	G5	2	..	40629b	56	5208	21.6	- 3 11	9.0	9.6	Go	5	..	10117b
7	16574	21.3	-32 44	8.6	9.1	A5	5	..	40742b	57	5759	21.6	- 6 15	9.2	10.4	K5	1	..	40599b
8	16572	21.3	-32 49	8.2	8.8	Go	7	..	40742b	58	5671	21.6	-10 26	9.2	10.3	K2	2	..	40603b
9	14289	21.3	-37 17	8.1	9.7	Ko	4	..	40903b	59	5864	21.6	-16 25	10.0	11.2	K5	1	..	39348b
10	11877	21.3	-52 45	6.7	7.7	Ko	7	..	41053b	60	6099	21.6	-19 44	8.28	9.0	Ko	7	..	39348b
11	9861	21.3	-57 35	9.2	11.0	Ma	2	..	39382b	61	16654	21.6	-24 3	7.9	9.0	K2	5	..	40629b
12	1714	21.3	-75 42	8.9	9.5	Go	3	..	19964b	62	15613	21.6	-26 19	9.5	11.2	Go	1	..	41034b
13	1581	21.4	+65 44	8.1	8.1	Ao	3	..	37277i	63	15451	21.6	-27 16	9.5	9.6	Go	4	..	41034b
14	2569	21.4	+57 2	8.1	9.2	K2	1	..	19317b	64	14559	21.6	-38 43	8.0	9.4	Ko	4	..	40903b
15	2576	21.4	+55 40	8.7	8.7	Ao	5	..	37945i	65	14258	21.6	-39 26	9.1	9.3	Fo	3	..	40903b
16	2533	21.4	+54 57	7.96	7.72	Bo	3	..	37945i	66	14484	21.6	-44 53	8.35	9.5	G5	7	..	39472b
17	2931	21.4	+52 57	8.1	8.4	Fo	3	..	37945i	67	4137	21.6	-63 59	9.3	10.1	G5	2	..	42486b
18	3517	21.4	+49 49	9.3	9.9	Go	1	..	38796i	68	961	21.6	-81 2	9.1	9.5	F5	3	..	21397b
19	4518	21.4	+40 39	8.02	8.44	F5	2	0,1	37913i	69	735	21.7	+81 20	7.73	8.73	Ko	2	..	37294i
20	4674	21.4	+ 8 29	9.4	9.5	A2	1	..	10143b	70	3519	21.7	+49 33	9.0	10.0	Ko	1	..	38796i
21	4726	21.4	+ 0 40	6.40	6.82	F5	7	..	38045i	71	3531	21.7	+45 38	8.1	9.1	Ko	2	..	37878i
22	5549	21.4	- 5 31	9.6	10.0	F5	2	..	40603b	72	4557	21.7	+36 14	5.84	5.60	Bo	..	0,8	56,100
23	5939	21.4	-18 30	9.8	10.8	Ko	4	..	39348b	73	4689	21.7	+ 7 26	8.5	8.8	F2	3	..	14667b
24	6097	21.4	-18 50	9.2	10.2	Ko	6	..	39348b	74	4358	21.7	+ 3 7	9.2	10.4	K5	2	..	14204b
25	6098	21.4	-19 30	7.82	9.0	K2	7	..	39348b	75	5561	21.7	- 7 25	8.7	9.3	Go	4	..	40603b
26	17783	21.4	-29 34	10.4	10.0	Ko	2	..	41034b	76	5673	21.7	-10 30	9.6	10.6	Ko	1	..	40603b
27	11878	21.4	-52 18	9.3	9.7	F8	3	..	41053b	77	15614	21.7	-26 27	9.4	11.3	Ko	1	..	41034b
28	10073	21.4	-53 16	8.7	10.8	G5	1	..	41053b	78	17287	21.7	-28 10	7.51	8.4	Ko	8	..	41034b
29	701	21.5	+79 56	7.31	7.81	F8	4	..	37294i	79	16576	21.7	-32 14	7.6	8.5	F2	8	..	40742b
30	1538	21.5	+64 30	8.0	8.0	B9	4	..	37277i	80	15579	21.7	-33 53	8.8	10.0	F5	3	..	40742b
31	3376	21.5	+48 54	6.44	6.44	Ao	8	..	37946i	81	14486	21.7	-44 49	9.35	11.0	G5	4	..	39472b
32	4093	21.5	+42 22	7.46	7.74	Fo	3	..	37878i	82	14344	21.7	-45 40	10.4	11.2	Go	2	..	39682b
33	4582	21.5	+17 37	6.76	6.76	Ao	7	..	38129i	83	12948	21.7	-51 11	9.0	10.0	G5	3	..	41053b
34	4809	21.5	+ 9 43	7.67	8.45	G5	5	..	14667b	84	11880	21.7	-52 42	8.9	10.1	Ma	2	..	41053b
35	5652	21.5	- 8 8	10.3	10.9	Go	1	..	40603b	85	2234	21.8	+60 51	8.1	8.7	Go	2	..	38526i
36	5996	21.5	-12 9	10.5	11.3	G5	2	..	39407b	86	3061	21.8	+52 3	8.6	9.2	G	2	E	19317i
37	6272	21.5	-16 53	9.4	10.4	Ko	4	..	39348b	87	4309	21.8	+38 5	8.6	8.6	Ao	2	..	38894i
38	6019	21.5	-21 10	9.6	11.5	Ko	1	..	40629b	88	4794	21.8	+18 58	6.06	6.14	A3	9	..	38051i
39	6020	21.5	-21 37	6.03	7.4	Ko	..	5,10	56,147	89	5210	21.8	- 3 27	10.0	10.1	A2	2	..	10117b
40	18276	21.5	-31 18	7.6	9.4	K2	5	..	40742b	90	5551	21.8	- 5 40	9.8	10.3	F8	2	..	40603b
41	15577	21.5	-32 57	9.7	9.7	F8	2	..	40742b	91	5563	21.8	- 6 55	8.6	9.6	Ko	4	..	40599b
42	15576	21.5	-33 19	7.96	8.8	Ko	5	..	40742b	92	5940	21.8	-18 11	9.8	9.9	A3	4	..	39348b
43	14257	21.5	-39 18	8.8	9.4	G5	3	..	40903b	93	6556	21.8	-61 29	8.9	9.0	F5	3	..	42486b
44	13905	21.5	-48 17	9.8	10.0	G5	3	..	39682b	94	3333	21.9	+50 42	7.77	7.83	A2	5	..	38796i
45	4674	21.5	-63 44	9.6	10.4	G5	1	..	42486b	95	4132	21.9	+42 6	8.7	8.7	A	2	..	37946i
46	2851	21.5	-70 14	10.0	11.0	Ko	2	..	20542b	96	4690	21.9	+ 7 31	8.7	9.8	K2	2	..	14667b
47	2609	21.5	-71 47	8.8	8.9	A3	7	..	19966b	97	5653	21.9	- 8 27	9.2	9.8	Go	2	..	40603b
48	2611	21.5	-71 48	8.8	9.6	G5	2	..	19966b	98	5747	21.9	- 9 14	7.44	7.58	A5	9	..	40603b
49	603	21.6	+83 50	7.06	7.84	G5	6	0,4	37294i	99	6025	21.9	-14 16	10.3	11.1	G5	1	..	39407b
50	2233	21.6	+60 23	7.61	7.44	B3	4	0,4	38526i	100	5986	21.9	-15 37	9.4	10.0	Go	3	..	39348b

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21^h 21^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	6273	21.9	-17 2	10.3	10.8	F8	3	..	39348b	51	5865	22.2	-15 57	9.6	10.7	K2	2	..	39348b
2	5941	21.9	-18 49	10.3	10.8	F8	4	..	39348b	52	6280	22.2	-17 18	9.8	10.3	F8	5	..	39348b
3	6211	21.9	-20 39	7.5	8.4	Ko	7	..	39348b	53	6279	22.2	-17 44	10.5	11.1	Go	1	..	39348b
4	6212	21.9	-20 43	8.5	8.7	Go	6	..	39348b	54	5942	22.2	-18 10	10.3	11.1	G5	1	..	39348b
5	14550	21.9	-43 3	9.8	10.4	F8	3	..	39472b	55	6101	22.2	-18 48	10.7	11.0	Fo	3	..	39348b
6	14489	21.9	-44 9	10.2	11.3	F5	7	..	39472b	56	6214	22.2	-20 27	9.1	9.6	F8	4	..	39348b
7	13909	21.9	-48 31	9.2	10.0	Ko	5	..	39682b	57	13910	22.2	-47 55	10.7	11.7	Ko	1	..	39682b
8	6557	21.9	-61 5	9.7	10.2	F8	3	..	39382b	58	13487	22.2	-49 52	9.2	10.0	Ko	5	..	39682b
9	962	21.9	-81 19	8.7	10.1	Ma	2	..	21397b	59	9654	22.2	-56 12	8.4	9.6	F2	6	..	39382b
10	1582	22.0	+65 44	7.9	9.0	K2	2	..	37277i	60	1214	22.3	+69 7	7.03	6.98	B8	7	1,5	37277i
11	1935	22.0	+62 34	7.20	7.20	Ao	7	..	37277i	61	2624	22.3	+54 4	8.7	8.7	B9	3	..	37945i
12	2131	22.0	+61 17	7.8	8.8	Ko	2	..	37277i	62	3922	22.3	+43 58	7.9	7.9	Ao	3	..	37946i
13	2536	22.0	+54 56	8.31	9.38	K2	1	..	37945i	63	4160	22.3	+33 9	7.92	8.20	Fo	4	..	37948i
14	4394	22.0	+22 31	8.8	9.9	K2	2	..	38051i	64	4545	22.3	+22 2	8.6	9.1	F8	3	..	38051i
15	4708	22.0	+13 16	7.08	7.14	A2	8	..	38129i	65	4675	22.3	+4 57	6.74	7.02	Fo	5	..	38045i
16	5748	22.0	-9 28	8.6	9.6	Ko	3	..	40603b	66	4729	22.3	+0 38	9.2	10.2	Ko	3	..	12331b
17	5601	22.0	-11 13	10.4	11.2	G5	1	..	39407b	67	5604	22.3	-11 33	10.3	11.3	Ko	1	..	39407b
18	5997	22.0	-12 42	9.0	9.0	Ao	6	..	39407b	68	5998	22.3	-12 6	6.83	7.25	F5	4	..	41980b
19	5931	22.0	-12 58	9.0	9.5	F8	5	..	39407b	69	5999	22.3	-12 9	10.9	12.0	K2	1	..	39407b
20	6026	22.0	-14 2	6.80	6.78	B9	6	..	41980b	70	6029	22.3	-13 59	9.2	10.2	Ko	4	..	39407b
21	6027	22.0	-14 30	9.8	10.6	G5	1	..	39407b	71	16917	22.3	-23 22	9.4	10.2	K2	3	..	40629b
22	6028	22.0	-14 33	9.8	10.8	Ko	1	..	39407b	72	14362	22.3	-40 51	8.5	10.5	K5	3	..	39472b
23	5987	22.0	-15 19	9.4	10.0	Go	4	..	39407b	73	9865	22.3	-57 48	10.0	10.5	F8	2	..	39382b
24	6275	22.0	-17 30	9.8	11.0	K5	2	..	39348b	74	3310	22.4	+46 20	9.0	9.0	Ao	2	..	37946i
25	6274	22.0	-17 37	10.7	11.5	G5	1	..	39348b	75	4522	22.4	+40 57	7.9	8.0	A3	2	1,1	37913i
26	17288	22.0	-28 18	10.9	10.2	A2	2	..	41034b	76	4452	22.4	+31 28	8.6	8.7	A2	3	0,3	37948i
27	13962	22.0	-46 16	9.8	10.4	F5	5	..	39682b	77	4416	22.4	+15 41	6.78	7.28	F8	7	..	38129i
28	9872	22.0	-54 9	6.48	7.5	K2	4	0,9	44240b	78	4566	22.4	+11 35	8.6	9.2	Go	1	..	38129i
29	9596	22.0	-55 36	9.5	10.5	Ko	2	..	39382b	79	5655	22.4	-8 35	9.8	10.4	Go	2	..	40603b
30	3568	22.0	-66 12	10.3	10.4	A5	3	..	20542b	80	5657	22.4	-8 47	7.8	9.2	Ma	3	..	40603b
31	2322	22.1	+57 39	7.06	7.56	F8	4	..	37945i	81	6282	22.4	-17 1	9.8	10.6	G5	4	..	39348b
32	4315	22.1	+23 52	8.6	9.8	K5	2	..	38051i	82	6281	22.4	-17 19	10.3	10.9	Go	2	..	39348b
33	4919	22.1	+20 18	7.70	7.76	A2	6	..	38051i	83	15435	22.4	-25 44	9.5	10.2	Ko	2	..	41034b
34	4547	22.1	+10 15	7.05	7.39	F2	5	0,5	38129i	84	15458	22.4	-27 22	9.7	9.9	Go	2	..	41034b
35	5541	22.1	-2 10	9.2	10.0	G5	2	..	10117b	85	16581	22.4	-32 49	8.6	8.8	A5	4	..	40742b
36	5565	22.1	-7 26	7.52	8.02	F8	8	..	40603b	86	13965	22.4	-46 32	10.4	11.3	F8	1	..	39682b
37	5602	22.1	-11 35	8.5	9.5	Ko	6	..	39407b	87	13370	22.4	-50 46	7.4	7.7	Go	9	..	41053b
38	6100	22.1	-19 37	9.2	9.9	F2	5	..	39348b	88	12954	22.4	-51 33	8.8	10.3	K2	2	..	41053b
39	18620	22.1	-30 6	9.7	10.6	Ko	1	..	41034b	89	4138	22.4	+64 16	9.6	10.7	K2	1	..	42486b
40	15459	22.1	-42 38	10.4	11.1	F8	1	..	39472b	90	1064	22.5	+71 41	8.5	9.1	Go	3	..	38936i
41	13486	22.1	-49 45	9.4	10.3	Ko	4	..	39682b	91	2935	22.5	+52 26	7.56	8.74	K5	2	..	38796i
42	3425	22.1	-68 8	9.8	10.4	Go	3	..	20542b	92	3404	22.5	+47 14	8.2	8.2	Ao	3	..	37946i
43	717	22.1	-83 49	9.9	10.0	A5	2	..	21397b	93	4453	22.5	+31 46	8.7	8.7	B8	3	0,1-	38894i
44	4526	22.2	+35 25	7.77	9.12	Ma	2	0,2	37948i	94	4816	22.5	+9 38	8.9	9.7	G5	1	..	10143b
45	4544	22.2	+21 45	8.0	9.1	K2	3	..	38051i	95	5675	22.5	-10 4	10.0	11.0	Ko	1	..	39407b
46	4549	22.2	+10 32	8.5	9.6	K2	1	..	10143b	96	6000	22.5	-12 15	10.0	11.2	K5	1	..	39407b
47	4828	22.2	+6 29	7.7	8.7	Ko	5	2,8	10143b	97	5933	22.5	-13 3	9.6	10.2	Go	3	..	39407b
48	4728	22.2	+0 15	8.68	9.02	F2	4	..	12331b	98	6030	22.5	-13 51	8.7	9.2	F8	6	..	39407b
49	5211	22.2	-3 11	8.1	8.1	Ao	6	..	14658b	99	5866	22.5	-16 40	9.2	9.8	Go	7	..	39348b
50	5603	22.2	-10 52	10.3	10.4	A5	2	3,2-	45132b	100	6102	22.5	-19 32	10.3	11.5	F8	2	..	39348b

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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	15459	22.5	-26 59	7.6	9.3	Ko	6	..	41034b	51	9598	22.8	-55 13	8.4	9.3	F5	6	..	39382b
2	16583	22.5	-32 39	8.3	8.8	Fo	6	..	40742b	52	9656	22.8	-56 43	7.9	8.6	A3	7	..	39382b
3	14527	22.5	-41 9	8.8	9.6	F5	5	..	39472b	53	7481	22.8	-60 39	8.1	8.1	G5	6	..	42486b
4	13911	22.5	-48 26	10.0	10.0	F2	4	..	39682b	54	6559	22.8	-60 55	8.8	9.6	G5	2	..	42486b
5	3521	22.6	+49 24	9.0	9.1	A2	2	..	38796i	55	4678	22.8	-63 33	8.8	9.2	F5	5	..	42486b
6	4098	22.6	+42 42	8.0	8.4	F5	2	..	37946i	56	1995	22.8	-74 7	9.2	10.4	K5	1	..	19966b
7	4709	22.6	+13 41	8.7	10.1	Mb	..	..	M	57	1543	22.9	+64 47	8.2	9.2	Ko	1	..	37277i
8	5213	22.6	- 3 34	8.8	9.9	K2	5	..	10117b	58	4100	22.9	+43 2	8.2	8.3	A2	2	..	37946i
9	6001	22.6	-12 21	8.6	9.7	K2	5	..	39407b	59	4138	22.9	+42 2	8.1	8.1	A	2	..	37946i
10	6032	22.6	-13 51	10.0	10.5	F8	3	..	39407b	60	4565	22.9	+36 19	8.5	9.1	G	2	..	38894i
11	6031	22.6	-14 7	8.2	9.2	Ko	5	..	39407b	61	4317	22.9	+23 54	8.6	9.8	K5	1	..	38051i
12	5990	22.6	-15 16	9.1	10.1	Ko	3	..	39407b	62	5555	22.9	- 5 3	9.2	10.2	Ko	1	..	40603b
13	5691	22.6	-22 9	8.2	8.4	G5	8	..	40629b	63	6005	22.9	-12 1	6.50	6.92	F5	6	0,10	41980b
14	15437	22.6	-25 32	9.4	10.2	K2	3	..	41034b	64	6034	22.9	-14 12	10.7	11.8	K2	1	..	39407b
15	13968	22.6	-46 48	9.3	10.7	Ko	4	..	39682b	65	6104	22.9	-19 6	9.6	10.5	Ko	3	..	39348b
16	13912	22.6	-48 31	10.0	11.2	K2	1	..	39682b	66	16926	22.9	-23 6	9.7	9.6	Go	4	..	40629b
17	10078	22.6	-53 20	8.7	10.5	Ko	3	..	41053b	67	15633	22.9	-26 5	8.1	7.7	Ao	8	..	41034b
18	2853	22.6	-70 15	9.6	10.4	G5	2	..	20542b	68	14530	22.9	-41 51	8.8	10.8	Mb	3	..	39472b
19	2611	22.6	-72 38	8.1	8.7	Go	5	..	19966b	69	13374	22.9	-50 10	11.1	11.2	Ko	1	..	39682b
20	1994	22.6	-74 20	8.4	9.8	Ma	3	..	19964b	70	13373	22.9	-50 47	7.6	7.7	A2	9	..	41053b
21	2326	22.7	+57 49	7.8	7.8	Ao	4	..	37945i	71	3805	22.9	-67 26	10.1	10.7	Go	1	..	20542b
22	3312	22.7	+47 5	8.7	8.7	A	2	..	37946i	72	737	23.0	+82 5	7.83	8.33	F8	3	..	37294i
23	4524	22.7	+40 19	7.87	8.87	Ko	2	0,2	37913i	73	1166	23.0	+69 35	7.71	7.71	Ao	4	0,3	37277i
24	4564	22.7	+37 5	7.89	8.89	Ko	2	..	37948i	74	3386	23.0	+48 51	8.1	8.1	Ao	4	..	37946i
25	5214	22.7	- 2 52	8.6	9.6	Ko	5	..	10117b	75	3929	23.0	+43 23	7.32	7.30	B9	4	..	37878i
26	5760	22.7	- 5 49	8.6	8.9	Fo	7	..	40603b	76	4566	23.0	+36 31	8.0	9.0	Ko	2	..	37948i
27	6003	22.7	-12 12	9.0	9.6	Go	7	..	39407b	77	4539	23.0	+25 18	9.01	10.01	Ko	1	..	38051i
28	5867	22.7	-16 27	10.0	10.8	G5	3	..	39348b	78	4362	23.0	+ 2 46	7.41	7.83	F8	9	..	12331b
29	6286	22.7	-16 55	9.4	10.0	Go	4	..	39348b	79	4221	23.0	- 0 42	10.6	11.1	F8	2	..	10117b
30	6285	22.7	-17 2	9.8	10.4	Go	6	..	39348b	80	6035	23.0	-14 23	9.8	10.9	K2	2	..	39407b
31	6287	22.7	-17 24	10.0	11.1	K2	3	..	39348b	81	5692	23.0	-22 15	4.59	6.4	G5	..	R	28,215
32	16671	22.7	-24 3	9.1	9.9	G5	4	..	40629b	82	15440	23.0	-25 48	9.7	9.9	A5	2	..	41034b
33	18284	22.7	-30 54	10.2	10.6	Ko	1	..	40742b	83	17297	23.0	-28 11	9.7	10.2	Ko	2	..	41034b
34	14299	22.7	-37 51	7.58	8.8	K2	6	..	40903b	84	17298	23.0	-28 24	9.5	9.9	F8	2	..	41034b
35	7703	22.7	-59 41	10.3	11.3	Ko	1	..	39382b	85	6236	23.0	-62 37	7.26	7.4	Go	8	..	19897b
36	7480	22.7	-60 8	10.1	10.7	Go	2	..	39382b	86	3409	23.1	+47 21	8.9	8.9	A	1	..	37946i
37	736	22.8	+81 36	7.47	8.47	Ko	3	..	37294i	87	4141	23.1	+41 24	8.8	9.8	Ko	1	..	37913i
38	702	22.8	+79 20	10.3	11.7	Mb	..	..	M	88	4066	23.1	+27 27	8.0	9.2	K5	3	0,1	38051i
39	3522	22.8	+49 22	8.9	9.9	Ko	1	..	38796i	89	4781	23.1	+ 6 8	8.5	9.0	F8	4	2,3	14204b
40	3314	22.8	+46 30	8.6	8.7	A2	2	..	37946i	90	4679	23.1	+ 4 15	9.0	9.3	F2	2	..	14204b
41	3313	22.8	+46 17	8.8	8.8	B9	1	..	37946i	91	5216	23.1	- 3 2	7.8	8.9	K2	4	..	14658b
42	4693	22.8	+ 7 58	8.5	8.8	Fo	3	..	14667b	92	5868	23.1	-16 35	10.3	11.5	K5	1	..	39348b
43	5761	22.8	- 6 3	9.0	9.3	Fo	6	..	40603b	93	16674	23.1	-24 25	9.4	10.8	Ko	2	..	40629b
44	5677	22.8	-10 23	9.6	10.6	Ko	1	..	39407b	94	18291	23.1	-31 41	6.60	7.4	Ao	7	0,10	8369b
45	6002	22.8	-12 31	9.4	10.4	Ko	4	..	39407b	95	14273	23.1	-39 16	8.8	8.7	F2	6	..	40903b
46	5934	22.8	-12 52	10.8	11.6	G5	1	..	39407b	96	11886	23.1	-52 35	7.8	7.8	A2	8	..	41053b
47	6288	22.8	-17 41	8.6	8.6	Ao	8	..	39348b	97	9600	23.1	-54 58	10.2	10.8	Go	2	..	39382b
48	..	22.8	-19 18	..	..	K5	1	..	39348b	98	6237	23.1	-62 41	9.2	10.4	K5	2	5,1	39382b
49	13913	22.8	-48 35	9.6	10.0	Go	4	..	39682b	99	1716	23.1	-75 52	8.2	8.7	F8	5	..	19964b
50	13371	22.8	-49 57	9.8	10.1	G5	3	..	39682b	100	2587	23.2	+56 5	9.0	10.1	K2	2	..	37945i

THE HENRY DRAPER CATALOGUE.

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21^h 23^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	2938	23.2	+52 19	7.8	7.8	B9	5	..	37945i	51	18639	23.5	-30 51	8.0	8.3	A2	8	..	40742b
2	4101	23.2	+42 48	7.7	7.7	A0	4	..	37878i	52	18295	23.5	-31 4	8.5	9.1	Go	7	..	40742b
3	4568	23.2	+36 41	5.20	5.03	B3	..	0,9	56,100	53	16590	23.5	-32 26	7.9	9.7	K2	3	..	40742b
4	5217	23.2	-3 20	6.88	7.88	K0	7	..	14658b	54	14571	23.5	-38 48	7.7	8.7	F0	6	..	40903b
5	5936	23.2	-12 52	10.7	11.5	G5	1	..	39407b	55	14568	23.5	-43 10	10.0	11.3	K0	1	..	39472b
6	6036	23.2	-14 44	10.5	10.6	A5	2	..	39407b	56	13915	23.5	-48 12	10.0	11.7	K5	1	..	39682b
7	5869	23.2	-16 45	10.0	11.0	K0	3	..	39348b	57	10082	23.5	-53 11	8.2	9.7	K0	4	..	41053b
8	836	23.3	+76 40	6.68	6.68	A0	9	..	38025i	58	1583	23.6	+65 26	8.55	9.11	Go	2	5,1	36199i
9	2134	23.3	+62 9	9.0	10.4	Mc	..	R	M	59	2574	23.6	+56 55	8.7	9.7	K0	1	..	37945i
10	2263	23.3	+58 17	7.9	8.9	K0	1	..	38526i	60	4169	23.6	+26 57	8.7	8.8	A2	1	..	38051i
11	3390	23.3	+48 24	5.31	5.39	A3	10	..	37946i	61	5547	23.6	-2 38	9.4	10.4	K0	2	..	10117b
12	3814	23.3	+44 28	7.9	8.9	K0	2	..	37946i	62	5678	23.6	-10 34	9.8	11.0	K5	1	..	39407b
13	4534	23.3	+35 50	7.8	8.8	K0	2	..	38894i	63	6007	23.6	-11 55	10.7	11.1	F5	2	..	39407b
14	4164	23.3	+27 11	5.38	5.38	A0	..	2,10	56,100	64	6038	23.6	-14 14	8.4	8.8	F5	5	..	39407b
15	4549	23.3	+21 18	7.05	7.83	G5	6	..	38051i	65	16679	23.6	-24 13	9.5	9.6	F8	5	..	40629b
16	4712	23.3	+19 41	9.2	10.0	G5	1	..	38818i	66	17810	23.6	-29 14	9.4	11.2	Mb	..	..	M
17	4821	23.3	+10 11	8.92	9.92	K0	2	..	10143b	67	14371	23.6	-40 51	8.5	9.6	K0	5	..	39472b
18	5939	23.3	-13 1	8.8	9.4	Go	5	..	39407b	68	13971	23.6	-46 1	8.1	9.8	K0	6	..	39682b
19	5938	23.3	-13 18	9.2	9.7	F8	4	..	39407b	69	10084	23.6	-53 33	10.3	10.8	F8	2	..	41053b
20	15464	23.3	-27 44	9.4	9.6	F8	4	..	41034b	70	5679	23.7	-9 50	10.0	10.4	F5	2	..	39407b
21	14569	23.3	-38 32	7.50	8.3	G5	..	5,8	56,147	71	5606	23.7	-11 26	9.8	10.8	K0	2	..	39407b
22	15469	23.3	-42 14	8.7	9.6	F8	5	..	39472b	72	6292	23.7	-17 46	10.0	10.1	A5	4	..	39348b
23	14355	23.3	-45 8	10.0	11.3	K2	1	..	39472b	73	15448	23.7	-25 15	9.7	10.8	K0	2	..	40629b
24	10081	23.3	-53 36	7.8	8.7	F5	6	..	41053b	74	15468	23.7	-27 34	9.7	9.6	Go	4	..	41034b
25	2613	23.3	-71 33	9.3	10.3	K0	1	..	19966b	75	14572	23.7	-38 8	7.10	8.1	Go	..	5,8	56,147
26	787	23.4	+76 7	6.90	7.46	Go	7	..	38025i	76	14506	23.7	-44 31	7.6	8.6	G5	7	5,8	41077b
27	1168	23.4	+69 22	7.8	8.4	Go	2	..	38573i	77	9873	23.7	-57 20	8.3	9.7	Ma	4	..	39382b
28	2939	23.4	+52 28	5.95	5.90	B8	9	..	37945i	78	7704	23.7	-59 51	7.81	9.4	K2	6	..	39382b
29	5458	23.4	-4 35	9.0	10.2	K5	1	..	10117b	79	4680	23.7	-63 30	8.6	9.6	K0	5	..	19897b
30	5764	23.4	-6 27	9.8	10.4	Go	1	..	40603b	80	3427	23.7	-68 27	9.9	10.4	F8	2	..	20542b
31	5569	23.4	-7 3	8.8	9.3	F8	4	..	40603b	81	3412	23.8	+47 45	8.2	8.2	A0	3	..	37946i
32	5752	23.4	-9 22	9.4	10.4	K0	2	..	40603b	82	3546	23.8	+46 0	7.7	8.7	K0	2	..	37946i
33	5992	23.4	-15 16	9.0	9.6	Go	5	..	39407b	83	3817	23.8	+44 12	9.1	9.2	A5	2	..	37946i
34	5993	23.4	-15 40	10.3	10.9	Go	2	..	39348b	84	4422	23.8	+34 59	7.02	7.10	A3	6	3,7	37948i
35	5871	23.4	-16 31	9.8	10.4	Go	3	..	39348b	85	4462	23.8	+31 47	5.74	6.02	F0	7	..	37948i
36	6216	23.4	-19 58	8.2	8.1	A0	7	..	39348b	86	4319	23.8	+24 11	9.4	10.8	Ma	1	..	38051i
37	14505	23.4	-43 57	7.1	8.1	G5	8	5,9	41077b	87	4320	23.8	+23 14	9.0	9.3	F2	2	..	38051i
38	R	23.4	-54 24	var.	var.	Md	2	..	39382b	88	4685	23.8	+4 59	9.23	9.51	F	2	..	14204b
39	9870	23.4	-57 19	8.8	9.6	A2	5	..	39382b	89	5571	23.8	-7 8	9.1	9.1	A0	5	..	40603b
40	7856	23.4	-58 53	9.4	10.4	K0	2	..	39382b	90	5680	23.8	-10 3	10.3	11.5	K5	1	..	39407b
41	4459	23.5	+31 21	7.9	8.9	K0	1	0,1	37948i	91	5944	23.8	-18 39	10.7	11.8	K2	1	..	39348b
42	4318	23.5	+24 10	7.8	9.0	K5	4	..	38051i	92	15451	23.8	-25 23	10.4	11.2	F8	1	..	40629b
43	4799	23.5	+18 21	8.7	8.8	A3	2	..	38818i	93	9876	23.8	-54 54	10.5	10.8	F2	2	..	39382b
44	4823	23.5	+9 31	9.0	10.1	K2	3	..	10143b	94	9876	23.8	-57 24	8.5	9.4	G5	5	..	39382b
45	4696	23.5	+7 46	6.66	8.01	Ma	4	5,5	38045i	95	1503	23.8	-77 40	8.8	8.9	A3	5	..	19964b
46	5660	23.5	-8 34	9.4	9.9	F8	3	..	40603b	96	1546	23.9	+64 50	8.15	8.65	F8	2	..	37277i
47	5753	23.5	-9 25	7.30	8.30	K0	8	..	40603b	97	3413	23.9	+47 22	8.0	8.0	A0	6	..	37946i
48	6037	23.5	-14 20	9.8	10.4	Go	2	..	39407b	98	4148	23.9	+41 34	8.6	8.9	F0	2	..	37913i
49	6217	23.5	-19 50	9.4	10.2	Go	3	..	39348b	99	4406	23.9	+24 14	9.7	10.1	F5	1	..	38051i
50	5696	23.5	-22 23	8.6	9.6	K0	3	..	40629b	100	4699	23.9	+7 20	8.5	8.5	A0	5	..	10143b

204500

21^h 23^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	4837	23.9	+ 6 37	8.5	8.6	A ₃	4	0,3-	14204b	51	15456	24.2	-25 31	10.4	11.3	Ko	1	..	40629b
2	4684	23.9	+ 4 44	8.5	8.9	F ₅	6	0,3	14204b	52	14509	24.2	-44 40	9.6	10.4	Go	3	..	39472b
3	4364	23.9	+ 2 46	9.2	10.2	Ko	1	..	14204b	53	13495	24.2	-49 27	10.4	10.8	F ₈	2	..	39682b
4	4223	23.9	- 0 23	9.9	10.9	Ko	2	..	10117b	54	12963	24.2	-51 17	8.2	8.8	F ₅	5	..	41053b
5	5681	23.9	-10 42	9.2	10.2	Ko	4	..	39407b	55	10085	24.2	-53 36	9.3	9.9	F ₅	4	..	41053b
6	6219	23.9	-20 12	8.4	8.4	F ₈	6	..	39348b	56	3176	24.2	-69 54	9.26	9.8	Ko	2	..	20542b
7	2856	23.9	-69 56	7.41	9.2	Ko	6	..	20544b	57	52	24.2	-89 16	9.7	10.7	Ko	2	..	22980b
8	2538	24.0	+55 10	8.41	9.41	Ko	2	..	19317i	58	1066	24.3	+72 6	9.0	9.5	F ₈	2	..	38936i
9	4554	24.0	+10 41	6.70	7.04	F ₂	7	..	38122i	59	4544	24.3	+26 9	7.6	8.1	F ₈	4	..	38051i
10	5459	24.0	- 4 39	9.00	10.18	K ₅	2	..	10117b	60	4592	24.3	+17 29	6.36	7.54	K ₅	5	..	38129i
11	5559	24.0	- 5 44	9.4	9.9	F ₈	2	..	40603b	61	4789	24.3	+ 5 59	8.9	9.4	F ₈	2	..	10143b
12	5756	24.0	- 8 50	9.4	10.0	Go	1	..	40603b	62	4687	24.3	+ 5 6	8.80	9.58	G ₅	2	..	10143b
13	5682	24.0	-10 45	10.0	10.4	F ₅	2	..	39407b	63	4688	24.3	+ 4 58	8.30	8.30	Ao	6	..	10143b
14	6008	24.0	-12 30	8.8	9.4	Go	6	..	39407b	64	4732	24.3	+ 0 43	8.5	8.6	A ₃	7	..	12331b
15	5941	24.0	-13 12	9.0	9.8	G ₅	3	..	39407b	65	16943	24.3	-23 40	10.4	10.2	Go	2	..	40629b
16	5942	24.0	-13 24	9.4	10.0	Go	2	..	39407b	66	14833	24.3	-36 27	8.1	9.4	K ₂	4	..	40903b
17	6293	24.0	-17 26	9.4	9.9	F ₈	5	..	39348b	67	14510	24.3	-44 41	9.6	10.1	F ₈	3	..	39472b
18	13379	24.0	-49 56	8.86	9.1	Fo	4	..	41053b	68	13920	24.3	-48 48	10.0	10.6	G ₅	2	..	39682b
19	9605	24.0	-55 43	8.2	9.3	F ₈	6	..	39382b	69	3551	24.4	+45 59	8.7	8.8	A ₂	2	..	37946i
20	4143	24.0	-64 31	9.2	9.2	Ao	6	..	42486b	70	3825	24.4	+45 9	8.57	9.13	Go	1	..	37946i
21	1169	24.1	+70 3	7.24	8.02	G ₅	4	..	38025i	71	4573	24.4	+11 31	7.39	8.46	K ₂	3	..	38122i
22	3820	24.1	+44 49	8.6	8.6	Ao	2	..	37946i	72	5608	24.4	-11 23	10.0	11.0	Ko	2	..	39407b
23	4419	24.1	+29 48	7.76	8.83	K ₂	1	..	38811i	73	6010	24.4	-12 22	10.3	10.9	Go	2	..	39407b
24	4788	24.1	+ 5 43	8.98	10.05	K ₂	1	..	10143b	74	5944	24.4	-12 48	10.0	11.0	Ko	2	..	39407b
25	4787	24.1	+ 5 14	9.56	9.62	A ₂	2	..	10143b	75	6041	24.4	-14 7	10.0	10.8	G ₅	2	..	39407b
26	5222	24.1	- 3 39	9.2	10.0	G ₅	4	..	10117b	76	6040	24.4	-14 40	10.3	11.3	Ko	1	..	39407b
27	5697	24.1	-22 27	9.1	8.7	Ao	5	..	40629b	77	6107	24.4	-19 36	6.54	6.8	F ₂	10	..	40629b
28	16940	24.1	-23 42	9.1	9.9	G ₅	3	..	40629b	78	13382	24.4	-50 5	9.1	9.7	K ₂	3	..	41053b
29	18646	24.1	-30 34	8.7	10.1	F ₈	4	..	40742b	79	7483	24.4	-60 10	9.7	10.5	G ₅	1	..	39382b
30	15606	24.1	-33 53	8.8	10.9	Ko	1	..	40742b	80	3571	24.4	-66 16	8.9	9.9	Ko	6	..	20542b
31	15477	24.1	-42 44	9.6	11.6	Go	2	..	39472b	81	964	24.4	-81 47	9.0	9.8	G ₅	2	..	21397b
32	15475	24.1	-42 46	9.6	11.1	G ₅	2	..	39472b	82	3938	24.5	+43 33	8.9	9.0	A ₂	2	..	37946i
33	6560	24.1	-61 35	8.3	9.0	Ko	5	..	42486b	83	4153	24.5	+41 26	8.1	8.1	Ao	3	..	37913i
34	4144	24.1	-64 47	9.6	10.6	Ko	1	..	42486b	84	4170	24.5	+32 30	8.4	8.4	B ₉	2	..	37948i
35	3926	24.1	-65 45	9.1	10.1	Ko	5	..	20542b	85	4555	24.5	+21 45	6.18	7.53	Mb	8	..	38051i
36	3549	24.2	+46 8	6.88	6.76	B ₅	6	3,4	37946i	86	5609	24.5	-11 40	9.4	10.4	Ko	3	..	39407b
37	4107	24.2	+42 39	8.5	9.0	F ₈	3	..	37946i	87	5945	24.5	-12 56	9.4	10.6	K ₅	4	R	39407b
38	4539	24.2	+35 42	8.6	8.7	A ₅	2	3,1	37948i	88	6042	24.5	-14 39	9.56	10.56	Ko	2	..	39407b
39	4543	24.2	+25 59	7.60	8.67	K ₂	3	..	38051i	89	5995	24.5	-15 35	8.4	8.9	F ₈	8	..	39407b
40	4542	24.2	+25 31	6.78	7.85	K ₂	6	..	38051i	90	5874	24.5	-16 43	10.7	11.9	K ₅	1	..	39348b
41	4409	24.2	+24 14	7.8	7.8	Ao	7	..	38051i	91	17818	24.5	-29 17	8.9	10.4	Ko	3	..	41034b
42	4635	24.2	+12 38	8.1	8.7	Go	2	..	38129i	92	14285	24.5	-39 5	7.36	8.3	F ₅	8	..	40903b
43	5460	24.2	- 3 57	8.6	9.2	Go	6	..	10117b	93	14573	24.5	-43 0	10.2	11.3	Go	1	..	39472b
44	5572	24.2	- 6 55	9.4	10.0	Go	1	..	40603b	94	13835	24.5	-47 44	9.8	11.2	G ₅	3	..	39682b
45	5757	24.2	- 8 54	9.2	10.3	K ₂	3	..	40603b	95	13497	24.5	-49 6	10.0	10.6	G ₅	3	..	39682b
46	5683	24.2	-10 30	10.9	11.5	Go	2	..	39407b	96	12966	24.5	-51 44	8.8	10.3	K ₂	3	..	41053b
47	6009	24.2	-11 53	10.4	11.4	Ko	2	..	39407b	97	7705	24.5	-59 12	8.3	8.7	F ₅	7	..	39382b
48	6039	24.2	-14 28	7.11	8.18	K ₂	3	..	41980b	98	1942	24.6	+63 9	7.52	7.52	Ao	6	..	37277i
49	5873	24.2	-15 57	10.4	11.4	Ko	1	..	39348b	99	2383	24.6	+59 19	6.44	7.79	Ma	3	..	37945i
50	5946	24.2	-18 47	9.2	9.3	A ₅	6	..	39348b	100	3418	24.6	+47 31	8.1	8.1	B ₉	5	..	37946i

THE HENRY DRAPER CATALOGUE.

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21^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	4829	24.6	+ 9 41	8.6	9.1	F8	2	..	10143b	51	9881	24.9	-57 45	9.1	9.0	F5	6	..	39382b
2	4839	24.6	+ 6 28	7.8	8.9	K2	4	..	10143b	52	4145	24.9	-64 36	6.96	9.2	K2	7	..	42486b
3	4790	24.6	+ 6 9	6.70	7.70	Ko	7	..	10143b	53	631	24.9	-84 36	8.7	9.5	G5	5	..	21397b
4	4226	24.6	- 0 17	9.2	9.7	F8	4	..	10117b	54	3530	25.0	+50 8	8.47	8.47	Ao	2	..	38796i
5	5758	24.6	- 9 2	9.0	10.0	Ko	3	..	40603b	55	4568	25.0	+40 2	8.82	10.00	K5	3	..	M
6	6297	24.6	-17 8	9.2	10.3	K2	4	..	39348b	56	4567	25.0	+39 57	8.37	9.44	K2	3	..	M
7	6109	24.6	-19 3	9.8	11.5	K2	2	..	39348b	57	4273	25.0	+33 46	8.4	8.5	A5	2	3,2	37948i
8	16686	24.6	-24 52	8.25	9.6	G5	5	..	40629b	58	4105	25.0	+28 26	8.6	9.4	G5	1	..	38811i
9	15459	24.6	-25 38	7.44	8.5	K5	6	..	41034b	59	4413	25.0	+24 14	8.8	9.9	K2	1	..	38051i
10	14540	24.6	-41 1	9.1	10.5	G5	3	..	41077b	60	4937	25.0	+21 4	8.4	8.9	F8	2	..	38051i
11	7706	24.6	-59 16	8.1	9.6	Ma	3	..	39382b	61	4639	25.0	+12 51	8.4	9.6	K5	1	..	38122i
12	2136	24.7	+61 39	7.56	8.56	Ko	3	..	37277i	62	4793	25.0	+ 6 8	8.7	9.8	K2	1	..	10143b
13	2578	24.7	+56 54	8.2	9.2	Ko	2	..	37945i	63	5551	25.0	- 1 58	8.4	8.5	A2	7	..	10117b
14	2945	24.7	+52 52	7.18	7.18	Ao	6	..	37945i	64	5226	25.0	- 3 14	9.2	9.8	Go	3	..	10117b
15	3325	24.7	+46 15	9.3	9.6	F	1	..	37946i	65	5767	25.0	- 5 55	9.4	9.9	F8	3	..	40603b
16	4469	24.7	+32 7	8.7	8.8	A3	2	..	38894i	66	6301	25.0	-17 20	9.4	10.4	Ko	5	..	39348b
17	5574	24.7	- 7 44	8.7	9.7	Ko	3	..	40603b	67	6220	25.0	-19 58	10.0	10.5	F8	2	..	39348b
18	6012	24.7	-12 18	10.5	11.5	Ko	1	..	39407b	68	15647	25.0	-26 9	7.38	8.7	K2	7	..	41034b
19	15097	24.7	-34 26	9.4	10.7	Go	1	..	40742b	69	14544	25.0	-41 44	10.1	11.4	Ko	1	..	41077b
20	14286	24.7	-38 57	10.3	9.9	Fo	3	..	40903b	70	13985	25.0	-46 21	9.2	10.1	G5	5	..	39682b
21	13384	24.7	-50 33	9.1	9.1	Go	6	..	41053b	71	9881	25.0	-54 38	8.6	9.6	Ao	6	..	39382b
22	7707	24.7	-59 20	10.1	11.1	K	1	..	39382b	72	3807	25.0	-67 37	9.6	10.6	Ko	1	..	20542b
23	3428	24.7	-68 8	8.5	9.5	Ko	5	..	20542b	73	3531	25.1	+50 1	7.22	7.22	Ao	5	0,5	38796i
24	788	24.8	+75 32	7.52	8.52	Ko	5	..	38025i	74	4570	25.1	+39 52	7.82	7.88	A2	3	..	38542i
25	1944	24.8	+62 39	8.1	9.1	K	1	..	37277i	75	4431	25.1	+34 32	7.8	7.9	A2	4	1,3	38894i
26	3420	24.8	+48 0	7.42	7.48	A2	6	..	37946i	76	4691	25.1	+ 5 0	8.65	9.72	K2	2	..	10143b
27	4411	24.8	+25 1	8.6	9.4	G5	2	..	38051i	77	5564	25.1	- 4 56	7.65	7.73	A3	8	..	10117b
28	4736	24.8	+ 1 10	8.89	9.17	Fo	5	..	12331b	78	6014	25.1	-11 56	10.0	11.0	Ko	1	..	39407b
29	5766	24.8	- 5 50	8.6	8.9	Fo	5	..	40603b	79	5947	25.1	-12 51	9.4	10.4	Ko	3	..	39407b
30	5575	24.8	- 7 3	9.8	10.8	Ko	1	..	40603b	80	6045	25.1	-14 35	9.4	10.2	G5	3	..	39407b
31	5686	24.8	-10 45	9.8	10.2	F5	3	..	39407b	81	5997	25.1	-14 52	8.76	9.83	K2	5	..	39407b
32	5876	24.8	-16 45	8.5	9.5	Ko	7	..	39348b	82	1068	25.2	+72 9	8.7	8.8	A2	2	..	38936i
33	5947	24.8	-18 31	10.3	10.6	F2	3	..	39348b	83	1733	25.2	+64 10	8.7	8.8	A3	1	..	37277i
34	15472	24.8	-27 28	9.7	10.2	F5	3	..	41034b	84	4113	25.2	+42 43	9.5	9.8	F	2	..	37913i
35	14317	24.8	-37 0	7.64	7.3	F2	9	..	40903b	85	4160	25.2	+41 38	8.9	8.9	Ao	2	..	37913i
36	14316	24.8	-37 32	9.5	10.6	G5	1	..	40903b	86	4108	25.2	+28 57	9.1	9.2	A2	1	..	38811i
37	14512	24.8	-44 3	10.0	11.2	Go	2	..	39472b	87	4547	25.2	+25 47	8.6	9.7	K2	1	..	38051i
38	13385	24.8	-50 14	8.8	9.4	K2	4	..	41053b	88	4577	25.2	+11 43	Cl.	Cl.	Con.	3	R	38122i
39	7708	24.8	-59 25	8.9	9.4	F8	5	..	39382b	89	4690	25.2	+ 4 46	9.2	10.3	K2	2	..	10143b
40	7484	24.8	-60 2	8.8	9.6	G5	3	..	39382b	90	4489	25.2	+ 2 2	8.1	8.4	F2	8	..	12331b
41	1548	24.9	+64 41	8.0	9.1	K2	2	..	37277i	91	6046	25.2	-14 36	9.4	10.8	Mb	3	..	39407b
42	4076	24.9	+28 9	6.83	7.90	K2	6	..	38051i	92	6047	25.2	-14 44	6.84	7.84	Ko	4	..	41980b
43	4721	24.9	+13 30	8.5	8.6	A2	3	..	38122i	93	6110	25.2	-18 48	10.3	11.1	G5	3	..	39348b
44	5996	24.9	-15 16	9.6	10.7	K2	2	..	39407b	94	15476	25.2	-27 35	9.2	9.9	Ko	3	..	41034b
45	6298	24.9	-16 52	10.7	11.3	Go	2	..	39348b	95	17828	25.2	-29 10	9.5	10.7	K2	2	..	41034b
46	6299	24.9	-17 35	9.2	10.0	G5	4	..	39348b	96	13837	25.2	-47 28	10.4	11.3	F5	2	..	39682b
47	6030	24.9	-21 6	9.4	10.5	F8	2	..	40629b	97	11889	25.2	-52 31	9.2	10.0	Go	3	..	41053b
48	15614	24.9	-33 51	9.1	10.7	Ko	1	..	40742b	98	965	25.2	-80 57	9.4	9.8	F5	2	..	21397b
49	13983	24.9	-45 59	8.8	10.1	Ko	5	..	39682b	99	3534	25.3	+49 20	6.78	6.86	A3	6	..	37946i
50	10088	24.9	-53 7	10.1	10.5	F5	2	..	41053b	100	4939	25.3	+20 31	8.00	9.18	K5	2	..	38051i

204700

21^h 25^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	4617	25.3	+14 36	8.5	9.0	F8	1	..	38122i	51	1404	25.7	+66 13	7.9	8.2	F2	3	..	37277i
2	4368	25.3	+ 2 22	7.7	8.0	Fo	8	..	12331b	52	1588	25.7	+65 38	8.1	9.5	Ma	1	..	37277i
3	5949	25.3	-13 39	9.6	10.4	G5	2	..	39407b	53	1738	25.7	+64 11	8.8	8.9	A2	2	..	37277i
4	6111	25.3	-19 3	10.5	11.7	K5	1	..	39348b	54	2544	25.7	+54 59	6.06	6.04	B9	9	0,10	19317i
5	15101	25.3	-34 20	8.8	10.7	K2	1	..	40742b	55	3072	25.7	+51 40	8.3	8.4	A2	3	..	38796i
6	14289	25.3	-39 0	10.3	10.8	K5	1	..	40903b	56	4174	25.7	+32 23	7.6	7.6	B8	4	..	37948i
7	13503	25.3	-49 36	10.7	11.2	K5	1	..	39682b	57	4327	25.7	+23 29	8.6	8.9	F2	4	..	38051i
8	7858	25.3	-58 36	9.3	10.2	F8	2	..	39382b	58	4940	25.7	+20 48	8.6	9.4	G5	2	..	38051i
9	2595	25.4	+55 58	7.9	8.9	Ko	2	..	37945i	59	4692	25.7	+ 4 57	9.20	9.70	F8	2	..	14204b
10	3832	25.4	+44 29	6.90	6.85	B8	6	..	37913i	60	5951	25.7	-12 50	10.3	11.1	G5	2	..	39407b
11	4549	25.4	+25 22	8.4	9.5	K2	3	..	38051i	61	5999	25.7	-15 47	10.0	11.1	K2	1	..	39407b
12	4578	25.4	+11 51	7.7	8.3	Go	5	..	38122i	62	6302	25.7	-17 42	8.4	8.5	A5	9	..	39348b
13	5611	25.4	-11 37	10.4	11.2	G5	2	..	39407b	63	6112	25.7	-19 46	9.33	9.0	A5	5	..	39348b
14	6017	25.4	-11 48	9.4	9.9	F8	4	..	39407b	64	6031	25.7	-21 30	9.4	10.2	Go	2	..	40629b
15	6048	25.4	-14 6	9.8	10.4	Go	2	..	39407b	65	16954	25.7	-23 0	10.4	9.9	F8	2	..	40629b
16	5878	25.4	-16 17	9.2	9.7	F8	4	..	39348b	66	14844	25.7	-36 1	8.1	9.1	F5	5	..	40903b
17	5951	25.4	-18 6	9.1	9.7	Go	5	..	39348b	67	14329	25.7	-37 36	8.9	10.3	F8	3	..	40903b
18	6221	25.4	-19 57	10.0	10.8	A5	3	..	39348b	68	13992	25.7	-46 24	9.2	10.1	F2	5	..	39682b
19	16614	25.4	-32 12	8.2	8.9	F5	5	..	40742b	69	13840	25.7	-47 41	9.0	9.2	A5	7	..	39682b
20	1735	25.5	+63 34	7.8	8.2	F5	7	..	37277i	70	1405	25.8	+66 22	5.42	5.30	B5	..	..	56,100
21	2139	25.5	+61 40	6.89	7.89	Ko	6	..	37277i	71	3558	25.8	+46 6	5.34	6.34	Ko	8	R	37878i
22	3941	25.5	+43 54	7.52	7.33	B2	4	R	37913i	72	4545	25.8	+35 45	7.63	8.63	Ko	3	..	37948i
23	4584	25.5	+36 22	8.6	9.1	F8	3	..	37948i	73	4455	25.8	+30 23	8.0	8.3	Fo	2	..	38811i
24	4325	25.5	+23 12	4.76	5.94	K5	9	5,9	38818i	74	4426	25.8	+29 27	8.4	8.4	Ao	2	..	38811i
25	4594	25.5	+18 9	7.18	7.32	A5	5	3,5	38818i	75	4832	25.8	+ 9 55	8.5	9.5	Ko	1	..	10143b
26	4618	25.5	+14 26	8.7	9.3	Go	1	..	38122i	76	4490	25.8	+ 2 3	8.3	9.4	K2	3	..	14204b
27	5952	25.5	-18 33	9.8	10.6	G5	2	..	39348b	77	5469	25.8	- 4 36	9.2	9.8	Go	2	..	10117b
28	14823	25.5	-35 31	7.7	8.5	F2	8	..	40903b	78	6000	25.8	-15 40	10.4	11.2	G5	1	..	39407b
29	7859	25.5	-58 27	8.5	9.0	A2	4	..	39382b	79	6113	25.8	-19 40	7.28	7.1	Fo	9	0,10	40629b
30	7485	25.5	-60 9	7.61	7.8	Ao	10	..	39382b	80	16700	25.8	-24 53	9.15	10.8	Ko	3	..	40629b
31	2857	25.5	-70 18	8.3	9.3	Ko	4	..	20544b	81	15465	25.8	-25 45	7.84	8.4	F5	7	..	41034b
32	2617	25.5	-72 37	9.5	10.1	Go	2	..	19966b	82	15654	25.8	-26 32	9.9	11.3	Go	2	..	41034b
33	2223	25.5	-73 37	10.0	10.1	A3	2	..	19966b	83	14550	25.8	-41 38	5.35	7.1	Ko	..	0,R	56,147
34	1737	25.6	+63 57	9.0	10.0	Ko	1	..	37277i	84	13926	25.8	-48 39	10.0	10.3	G5	2	..	39682b
35	4326	25.6	+23 29	8.6	9.1	F8	4	..	38051i	85	12970	25.8	-51 10	9.3	9.4	A5	4	..	41053b
36	4842	25.6	+ 6 44	8.3	8.9	Go	5	..	10143b	86	7486	25.8	-60 51	10.5	11.3	G5	1	..	39382b
37	4230	25.6	- 0 10	9.9	10.7	G5	3	..	10117b	87	6564	25.8	-61 48	9.3	10.4	G5	1	..	42486b
38	4229	25.6	- 0 21	9.2	9.8	Go	4	..	10117b	88	6242	25.8	-62 11	9.0	9.4	F5	3	..	42486b
39	4171	25.6	- 1 45	9.9	10.0	A2	2	..	10117b	89	4149	25.8	-64 12	9.4	10.4	Ko	1	..	42486b
40	5761	25.6	- 9 27	10.3	10.9	Go	2	..	39407b	90	932	25.9	+73 14	9.0	9.8	G5	1	..	38936i
41	6049	25.6	-14 5	9.8	10.6	G5	3	..	39407b	91	2633	25.9	+53 22	8.2	8.6	F5	1	..	37945i
42	5998	25.6	-14 57	10.0	11.0	Ko	2	..	39407b	92	4433	25.9	+15 55	8.6	8.9	Fo	2	5,2	13715i
43	5953	25.6	-18 34	9.4	10.2	G5	5	..	39348b	93	4693	25.9	+ 4 38	9.2	10.4	K5	1	..	14204b
44	5702	25.6	-22 48	9.8	11.5	Ko	1	..	40629b	94	4491	25.9	+ 1 57	9.2	9.6	F5	5	..	14204b
45	14327	25.6	-37 34	9.4	10.0	Go	2	..	40903b	95	4737	25.9	+ 0 36	9.2	9.5	F2	4	..	12331b
46	14586	25.6	-43 47	9.8	11.3	Go	3	..	39472b	96	5554	25.9	- 2 10	9.0	9.4	F5	5	..	10117b
47	13506	25.6	-49 18	8.0	8.5	A3	7	..	41053b	97	5231	25.9	- 3 28	9.2	10.3	K2	1	..	10117b
48	6563	25.6	-61 46	9.4	9.9	F8	1	..	42486b	98	5692	25.9	- 9 55	10.3	11.3	Ko	1	..	39407b
49	4148	25.6	-64 31	9.2	9.8	Go	3	..	42486b	99	5613	25.9	-11 16	10.0	11.4	Ma	1	..	39407b
50	718	25.6	-83 25	9.6	10.0	F5	3	..	21397b	100	5705	25.9	-22 27	7.8	8.1	Ko	7	..	40629b

THE HENRY DRAPER CATALOGUE.

204800

21^h 25^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	15656	25.9	-26 44	9.7	11.3	Ko	2	..	41034b	51	5953	26.2	-12 56	8.2	8.7	F8	4	..	41980b
2	16620	25.9	-31 59	7.81	8.2	F2	8	..	40742b	52	6050	26.2	-13 56	9.8	10.8	Ko	2	..	39407b
3	15619	25.9	-33 42	8.5	10.1	G5	2	..	40742b	53	15482	26.2	-27 16	9.2	11.2	Ko	1	..	41034b
4	14332	25.9	-37 25	10.1	10.6	F8	2	..	40903b	54	15110	26.2	-34 24	5.99	6.05	A2	..	..	56,147
5	14331	25.9	-37 51	9.1	10.7	G5	2	..	40903b	55	14592	26.2	-43 44	9.8	10.1	F8	4	..	39472b
6	14590	25.9	-38 12	8.8	9.4	A3	4	..	40903b	56	12973	26.2	-51 3	9.6	10.0	F5	2	..	41053b
7	14392	25.9	-40 38	8.1	9.0	G5	6	..	41077b	57	7860	26.2	-58 38	8.2	8.2	F8	7	..	39382b
8	13927	25.9	-48 20	9.8	11.2	K5	1	..	39682b	58	6565	26.2	-61 8	9.1	9.4	Go	3	..	42486b
9	7711	25.9	-59 30	9.9	9.9	Ao	3	..	39382b	59	819	26.3	+77 27	9.6	10.6	Ko	1	..	38936i
10	1589	26.0	+65 27	8.25	9.43	K5	2	..	37277i	60	3840	26.3	+45 4	6.96	6.84	B5	7	..	37913i
11	3341	26.0	+47 6	9.3	9.3	A	2	..	37946i	61	4165	26.3	+41 37	7.66	8.73	K2	2	..	37913i
12	3559	26.0	+46 0	6.77	6.85	A3	7	..	37946i	62	4583	26.3	+11 43	5.94	5.94	Ao	10	..	38122i
13	3560	26.0	+45 42	7.62	7.90	Fo	4	..	37946i	63	4709	26.3	+7 16	8.5	9.0	F8	4	..	10143b
14	3561	26.0	+45 27	7.87	8.65	G5	2	5,2	37913i	64	4568	26.3	+3 24	7.01	7.09	A3	5	..	38106i
15	4436	26.0	+35 2	7.17	7.17	Ao	6	1,7	37948i	65	5232	26.3	-3 31	9.6	10.7	K2	1	..	10117b
16	4279	26.0	+33 34	8.6	8.7	A3	2	..	37948i	66	5569	26.3	-4 53	9.05	9.55	F8	3	..	10117b
17	4176	26.0	+32 46	9.1	9.1	A	1	..	38894i	67	5770	26.3	-6 1	3.07	3.63	Go	..	R	6930c
18	4834	26.0	+9 43	7.9	8.9	Ko	4	..	10143b	68	6051	26.3	-13 56	9.4	10.5	K2	3	..	39407b
19	4800	26.0	+5 30	8.9	10.0	K2	1	..	14204b	69	6052	26.3	-14 25	10.3	10.9	Go	3	..	39407b
20	5614	26.0	-11 46	10.3	11.3	Ko	3	..	39407b	70	16961	26.3	-23 17	10.4	10.8	K2	1	..	40629b
21	6032	26.0	-21 1	9.2	9.9	F8	4	..	39348b	71	15469	26.3	-25 39	8.9	9.3	K2	5	..	41034b
22	15467	26.0	-25 52	7.18	7.3	A3	9	..	41034b	72	13393	26.3	-50 21	10.4	10.9	A2	1	..	39682b
23	13994	26.0	-46 8	9.6	10.1	F5	4	..	39682b	73	10092	26.3	-53 11	6.42	7.4	K5	2	0,8	44240b
24	12972	26.0	-51 29	11.1	10.6	F8	2	..	39669b	74	7712	26.3	-59 36	9.0	10.5	Go	2	..	39382b
25	9885	26.0	-57 44	10.4	11.0	Go	1	..	39382b	75	966	26.3	-81 8	10.1	10.1	Ao	3	..	21397b
26	3180	26.0	-69 18	8.3	8.6	Fo	7	..	20544b	76	3564	26.4	+45 12	8.37	9.15	G5	..	..	25984i
27	2272	26.1	+58 18	7.8	7.6	B	2	..	38526i	77	4183	26.4	+26 24	9.7	9.7	Ao	2	..	3805ri
28	2580	26.1	+56 17	8.3	9.3	Ko	1	..	37945i	78	4551	26.4	+25 35	9.0	10.1	K2	1	..	3805ri
29	4549	26.1	+41 5	7.24	7.24	Ao	5	..	37913i	79	4416	26.4	+24 21	8.6	8.7	A5	4	..	3805ri
30	4177	26.1	+33 1	8.6	9.1	F8	1	..	38894i	80	5579	26.4	-7 16	9.2	10.3	K2	1	..	40603b
31	4110	26.1	+28 33	8.0	8.3	F2	2	..	38811i	81	5615	26.4	-11 29	10.5	11.0	F8	1	..	39407b
32	4694	26.1	+5 7	8.46	9.81	Ma	2	..	10143b	82	5954	26.4	-13 20	10.0	10.1	A5	2	..	39407b
33	5567	26.1	-5 5	9.4	10.6	K5	1	..	40603b	83	6002	26.4	-15 39	10.0	10.4	F5	2	..	39407b
34	5762	26.1	-9 10	9.0	10.0	Ko	3	..	40603b	84	18330	26.4	-31 47	9.7	10.1	F5	2	..	40742b
35	5763	26.1	-9 28	9.4	9.8	F5	3	..	39407b	85	13930	26.4	-48 4	9.1	9.7	F5	5	..	39682b
36	5693	26.1	-10 44	9.2	9.7	F8	3	..	39407b	86	9888	26.4	-57 31	8.3	9.7	K2	5	..	39382b
37	6018	26.1	-12 22	8.6	9.0	F5	6	..	39407b	87	7487	26.4	-59 56	10.4	10.8	F5	1	..	39382b
38	6222	26.1	-20 36	9.4	11.5	K5	1	..	39348b	88	1507	26.4	-76 58	9.1	9.2	A3	6	..	19964b
39	17331	26.1	-28 46	9.9	9.3	F8	3	..	41034b	89	2252	26.5	+61 0	7.11	7.53	F5	6	0,5	38526i
40	13508	26.1	-49 39	10.7	11.2	K5	1	..	39682b	90	4481	26.5	+31 32	6.87	7.01	A5	6	..	37948i
41	3573	26.1	-66 42	9.9	10.4	F8	2	..	20542b	91	4432	26.5	+30 7	8.71	8.77	A2	2	..	38811i
42	4437	26.2	+34 37	8.5	8.5	Ao	2	..	38894i	92	4552	26.5	+25 18	8.21	9.28	K2	2	..	3805ri
43	4435	26.2	+16 8	7.9	8.0	A5	2	..	38122i	93	4640	26.5	+13 4	8.7	8.8	A2	3	..	38122i
44	4562	26.2	+10 57	7.9	9.3	Ma	2	..	10143b	94	4845	26.5	+6 19	9.2	10.3	K2	1	..	10143b
45	4231	26.2	+0 1	9.6	10.6	Ko	2	..	10117b	95	5671	26.5	-8 36	10.3	10.9	G	1	..	40603b
46	5472	26.2	-4 19	9.0	9.6	Go	3	..	10117b	96	6022	26.5	-11 57	10.4	11.4	Ko	1	..	39407b
47	5568	26.2	-4 57	8.95	9.45	F8	5	..	10117b	97	6021	26.5	-12 11	10.3	10.9	Go	3	..	39407b
48	5696	26.2	-10 11	7.39	7.95	Go	8	..	40603b	98	5957	26.5	-18 40	9.6	9.9	F2	5	..	39348b
49	5695	26.2	-10 33	9.1	9.9	G5	6	..	39407b	99	16963	26.5	-23 30	8.9	8.4	G5	5	..	40629b
50	6019	26.2	-11 50	9.8	10.2	F5	3	..	39407b	100	15114	26.5	-34 48	8.53	8.8	Go	5	..	40903b

204900

21^h 26^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	9886	26.5	-54 35	8.3	9.3	Fo	7	..	39382b	51	5561	26.9	- 1 58	8.8	9.2	F5	7	..	10117b
2	4151	26.5	-64 5	9.3	10.4	K2	2	..	42486b	52	5698	26.9	-10 44	10.3	10.9	Go	1	..	39407b
3	3809	26.5	-67 9	9.2	9.6	F5	4	..	20542b	53	5618	26.9	-10 58	9.4	10.4	Ko	3	..	39407b
4	1158	26.5	-79 54	6.33	7.0	F5	10	..	21397b	54	5958	26.9	-13 36	10.3	10.9	Go	3	..	39407b
5	2953	26.6	+52 30	7.17	7.17	Ao	7	..	37945i	55	6055	26.9	-14 42	9.31	9.81	F8	5	..	39407b
6	3346	26.6	+46 44	8.6	9.2	Go	3	..	37946i	56	6004	26.9	-15 39	9.4	9.9	F8	4	..	39407b
7	4725	26.6	+19 52	8.5	8.9	F5	2	..	38818i	57	5881	26.9	-16 9	8.6	8.7	A5	7	..	39407b
8	4802	26.6	+ 6 6	8.4	9.0	Go	3	..	10143b	58	6036	26.9	-20 49	9.1	9.6	Ko	6	..	39348b
9	5473	26.6	- 4 4	9.2	10.0	G5	2	..	10117b	59	14559	26.9	-41 45	10.1	10.8	Go	2	..	41077b
10	5672	26.6	- 8 20	9.2	10.2	Ko	2	..	40603b	60	14367	26.9	-45 18	5.73	7.4	Ko	..	O,10	56,147
11	5955	26.6	-13 12	8.4	9.5	K2	4	..	39407b	61	13515	26.9	-49 25	8.6	10.1	Ma	3	R	39682b
12	6227	26.6	-20 7	9.8	10.8	Ko	1	..	39348b	62	6244	26.9	-62 4	10.4	10.5	A2	2	..	39382b
13	6033	26.6	-20 48	9.8	11.5	Ko	1	..	39348b	63	608	27.0	+84 12	9.3	9.7	F5	1	..	37294i
14	14839	26.6	-35 2	9.13	10.0	F8	3	..	40742b	64	2387	27.0	+59 56	7.51	7.46	B8	2	..	37945i
15	14394	26.6	-40 25	9.1	9.9	Fo	3	..	41077b	65	2957	27.0	+52 31	6.08	6.08	Ao	9	..	37945i
16	2547	26.7	+54 13	8.0	9.1	K2	2	..	37945i	66	4557	27.0	+26 2	8.8	8.9	A2	2	..	38051i
17	3432	26.7	+47 57	7.36	7.36	Ao	7	..	37946i	67	4949	27.0	+20 16	8.75	9.75	Ko	1	..	38051i
18	3843	26.7	+44 26	6.77	6.91	A5	6	..	37913i	68	4695	27.0	+ 4 52	7.9	9.0	K2	3	..	38106i
19	4169	26.7	+41 47	7.8	7.9	A2	2	..	37913i	69	5700	27.0	-10 38	10.7	11.7	Ko	1	..	39407b
20	4330	26.7	+37 32	7.58	7.64	A2	4	0,5	38542i	70	6027	27.0	-12 11	9.6	10.4	G5	3	..	39407b
21	4435	26.7	+29 50	7.76	8.76	Ko	2	..	38811i	71	6026	27.0	-12 43	6.85	8.03	K5	3	..	41980b
22	4434	26.7	+29 42	8.1	8.4	F2	3	..	38811i	72	5709	27.0	-22 13	8.4	8.1	A3	7	..	40629b
23	4553	26.7	+25 37	9.3	10.5	K5	2	..	38051i	73	15482	27.0	-25 51	9.7	9.6	Go	4	..	41034b
24	4711	26.7	+ 7 31	8.5	8.8	Fo	4	..	10143b	74	14560	27.0	-41 41	9.5	11.4	Ko	1	..	41077b
25	4846	26.7	+ 6 19	7.9	8.7	G5	4	..	10143b	75	13399	27.0	-50 25	10.2	10.9	F5	1	..	39682b
26	4570	26.7	+ 3 42	8.5	8.8	F2	5	..	14204b	76	1593	27.1	+65 31	8.7	8.8	A2	2	..	37277i
27	5559	26.7	- 2 1	9.6	9.7	A2	4	..	10117b	77	3437	27.1	+47 26	8.2	8.3	A2	3	..	37946i
28	6114	26.7	-19 28	9.2	9.7	G5	4	..	39348b	78	4555	27.1	+35 26	7.62	8.62	Ko	3	..	37948i
29	16964	26.7	-23 3	8.1	8.7	K2	5	..	40629b	79	4810	27.1	+18 41	8.5	9.5	Ko	2	..	38818i
30	11890	26.7	-52 52	8.7	10.3	K2	2	..	41053b	80	4572	27.1	+ 3 17	8.3	9.4	K2	4	..	14204b
31	9668	26.7	-56 16	9.2	10.8	Ko	2	..	39382b	81	4741	27.1	+ 0 18	8.98	10.16	K5	1	3,I	14204b
32	2581	26.8	+56 45	8.3	8.6	F2	2	..	37945i	82	5562	27.1	- 2 24	9.4	9.8	F5	3	..	10117b
33	3566	26.8	+46 6	8.3	8.3	Ao	3	..	37946i	83	5236	27.1	- 3 20	9.4	10.6	K5	1	..	10117b
34	4085	26.8	+27 56	8.7	9.7	Ko	1	..	38811i	84	5235	27.1	- 3 41	9.4	9.7	Fo	3	..	10117b
35	4411	26.8	+22 18	7.7	8.7	Ko	4	..	38051i	85	16710	27.1	-24 48	10.9	10.2	A3	3	..	40629b
36	4947	26.8	+20 46	8.4	8.5	A2	3	..	38051i	86	17339	27.1	-28 27	9.7	9.6	F5	3	..	41034b
37	5772	26.8	- 6 38	9.6	10.2	Go	2	..	40603b	87	18679	27.1	-30 34	8.1	9.2	Ko	4	..	40742b
38	5673	26.8	- 8 12	9.8	9.8	A	1	..	40603b	88	14595	27.1	-43 15	10.2	11.2	Go	1	..	41077b
39	6024	26.8	-12 0	10.5	11.7	K5	1	..	39407b	89	13516	27.1	-49 31	11.1	10.9	F8	1	..	39682b
40	5957	26.8	-13 29	8.6	8.7	A5	6	..	39407b	90	12977	27.1	-50 57	8.7	9.7	F2	4	..	41053b
41	6035	26.8	-21 23	8.5	8.7	Ko	7	..	40629b	91	6566	27.1	-61 24	9.3	10.4	Ko	1	..	42486b
42	16706	26.8	-24 36	8.10	8.7	F5	7	..	40629b	92	2617	27.1	-71 18	9.0	10.1	K2	2	..	19966b
43	15479	26.8	-25 2	6.42	6.4	A5	10	..	40629b	93	2337	27.2	+57 49	9.5	9.5	A	1	..	38526i
44	14000	26.8	-46 25	9.3	10.1	F8	5	..	39682b	94	3436	27.2	+47 14	8.0	9.4	Ma	..	..	M
45	13513	26.8	-49 47	8.6	9.4	F5	6	..	39682b	95	4121	27.2	+42 40	8.5	8.5	B9	2	..	37913i
46	13397	26.8	-50 44	9.4	10.0	Ko	3	..	41053b	96	4558	27.2	+25 35	9.0	9.3	Fo	2	..	38051i
47	4553	26.9	+35 48	9.7	9.7	A	2	..	37948i	97	4950	27.2	+20 33	8.05	9.23	K5	2	..	38051i
48	4587	26.9	+11 48	8.5	9.6	K2	1	..	38122i	98	5775	27.2	- 6 45	8.6	9.6	Ko	7	..	40603b
49	4740	26.9	+ 0 55	8.9	9.0	A2	6	..	14204b	99	5581	27.2	- 7 6	9.0	9.3	Fo	4	..	40603b
50	4172	26.9	- 1 9	10.6	11.1	F8	2	..	10117b	100	5619	27.2	-10 59	8.8	9.3	F8	6	..	39407b

THE HENRY DRAPER CATALOGUE.

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21^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	6058	27.2	-13 52	8.8	9.4	Go	6	..	39407b	51	4519	27.6	+38 41	7.8	7.9	A3	2	..	11958i
2	6005	27.2	-14 55	9.00	9.28	Fo	6	..	39407b	52	4285	27.6	+33 23	7.7	7.8	A5	5	..	37948i
3	6116	27.2	-19 1	8.8	8.2	Ao	8	..	39348b	53	4697	27.6	+ 4 26	7.26	7.54	Fo	6	..	38106i
4	15495	27.2	-26 57	9.7	11.6	G5	2	..	41034b	54	5703	27.6	-10 14	9.8	10.6	G5	3	..	39407b
5	14306	27.2	-39 52	9.38	9.9	F8	3	..	40903b	55	6006	27.6	-15 45	9.2	9.7	F8	2	..	39407b
6	12978	27.2	-51 44	10.0	10.9	F5	2	..	39669b	56	6117	27.6	-19 0	8.8	9.7	Ma	5	..	39348b
7	11893	27.2	-52 27	9.9	10.3	F5	2	..	41053b	57	14606	27.6	-37 57	8.6	9.9	A2	3	..	40903b
8	9671	27.2	-56 21	10.0	10.8	G5	2	..	39382b	58	3355	27.7	+50 49	8.9	8.9	Ao	1	..	38796i
9	7713	27.2	-59 36	8.7	8.7	F8	6	..	39382b	59	3352	27.7	+46 50	8.7	9.0	Fo	3	..	37946i
10	4555	27.3	+41 6	8.4	8.4	B9	2	..	37913i	60	4123	27.7	+42 16	7.07	6.95	B5	6	..	37946i
11	4329	27.3	+23 25	6.54	7.54	Ko	7	..	38051i	61	4591	27.7	+11 24	7.7	8.9	K5	2	..	38122i
12	4598	27.3	+18 0	7.9	8.2	F2	2	3,2	38818i	62	4838	27.7	+10 7	8.62	9.62	Ko	2	..	10143b
13	4570	27.3	+10 29	7.14	7.14	Ao	8	..	38122i	63	4850	27.7	+ 6 20	8.9	10.1	K5	1	..	10143b
14	5237	27.3	- 3 30	9.0	9.3	Fo	4	..	10117b	64	4494	27.7	+ 1 32	9.2	10.4	K5	2	..	14204b
15	5701	27.3	-10 16	10.3	11.3	Ko	2	..	39407b	65	6062	27.7	-13 59	9.8	10.6	G5	3	..	39407b
16	6307	27.3	-17 39	10.0	10.3	F2	3	..	39348b	66	6118	27.7	-19 48	10.7	11.5	Ko	1	..	39348b
17	R	27.3	-19 37	10.3	10.8	F8	1	..	39348b	67	17347	27.7	-28 20	7.46	7.8	Go	7	..	41034b
18	5710	27.3	-22 19	9.8	10.8	Ko	1	..	40629b	68	11895	27.7	-52 39	8.6	10.0	K5	4	..	41053b
19	15496	27.3	-27 24	8.1	9.1	Ko	5	..	41034b	69	10097	27.7	-53 40	9.2	11.1	K5	1	..	39669b
20	14003	27.3	-46 20	10.2	11.0	Ko	2	..	39682b	70	3812	27.7	-67 46	8.7	9.5	G5	5	..	20542b
21	1173	27.4	+70 7	3.32	3.10	B1	..	R	2366c	71	1719	27.7	-75 26	8.5	9.5	Ko	4	..	19964b
22	1407	27.4	+66 37	6.90	6.96	A2	..	2,7	56,100	72	707	27.8	+80 5	6.13	7.13	Ko	8	..	38590i
23	3953	27.4	+43 35	8.1	8.2	A2	3	..	37946i	73	3446	27.8	+47 55	7.62	7.62	Ao	4	..	37946i
24	4579	27.4	+39 38	7.35	7.77	F5	4	..	38542i	74	3853	27.8	+45 5	8.62	9.40	G5	2	..	37946i
25	4282	27.4	+34 6	8.2	8.5	F2	2	..	38894i	75	4286	27.8	+33 45	8.0	8.3	Fo	7	..	37948i
26	4424	27.4	+24 45	8.0	8.0	Ao	6	..	38051i	76	4599	27.8	+17 14	9.2	9.3	A3	2	..	38818i
27	4743	27.4	+ 0 34	8.9	9.5	Go	6	..	14204b	77	5674	27.8	- 8 39	9.0	10.0	Ko	1	..	40603b
28	4235	27.4	+ 0 7	9.6	9.7	A3	4	..	10117b	78	6119	27.8	-19 29	9.4	9.7	F8	4	..	39348b
29	5764	27.4	- 9 34	10.3	11.4	K2	1	..	39407b	79	6039	27.8	-21 43	8.5	8.0	A2	8	..	40629b
30	5702	27.4	-10 45	10.5	11.5	Ko	1	..	39407b	80	5711	27.8	-22 18	10.0	10.5	A3	1	..	40629b
31	6059	27.4	-13 54	9.0	10.0	Ko	3	..	39407b	81	14608	27.8	-38 32	9.4	10.5	A5	2	..	40903b
32	5958	27.4	-18 1	9.4	10.4	Ko	5	..	39348b	82	10098	27.8	-53 47	8.8	9.7	F5	3	..	41053b
33	6231	27.4	-20 15	10.4	10.8	G5	2	..	39348b	83	648	27.9	+82 33	7.99	8.05	A2	4	..	37294i
34	6232	27.4	-20 30	9.6	11.5	Ko	2	..	39348b	84	3078	27.9	+51 45	6.83	7.83	Ko	7	..	38796i
35	6230	27.4	-20 43	8.8	8.7	F2	7	..	39348b	85	3448	27.9	+47 50	7.84	7.84	Ao	4	..	37946i
36	11894	27.4	-52 25	8.4	9.2	Ko	6	..	41053b	86	4178	27.9	+41 18	7.8	7.8	B9	3	..	37913i
37	719	27.4	-83 32	8.5	9.5	Ko	6	..	21397b	87	4418	27.9	+22 56	6.44	6.42	B9	9	R	38051i
38	2338	27.5	+57 52	8.7	8.7	A	1	..	38526i	88	4174	27.9	- 1 46	9.32	10.39	K2	1	..	10117b
39	2597	27.5	+55 27	8.6	9.7	K2	1	..	37945i	89	5239	27.9	- 3 38	9.0	9.6	Go	4	..	10117b
40	4728	27.5	+13 56	8.5	8.8	Fo	4	..	38122i	90	5779	27.9	- 6 25	9.4	10.0	Ko	1	..	40603b
41	4848	27.5	+ 6 46	8.3	9.3	Ko	2	..	10143b	91	5704	27.9	-10 3	9.8	10.9	K2	2	..	39407b
42	5563	27.5	- 2 2	8.4	9.8	Ma	5	..	10117b	92	6007	27.9	-15 19	10.0	10.5	F8	2	..	39407b
43	5959	27.5	-18 22	10.0	11.0	Ko	3	..	39348b	93	6234	27.9	-20 6	9.8	10.2	F5	4	..	39348b
44	6038	27.5	-21 7	8.6	8.7	Ko	7	..	39348b	94	15491	27.9	-25 40	9.5	9.9	G5	3	..	41034b
45	14845	27.5	-35 23	8.0	8.5	F8	7	..	40903b	95	18689	27.9	-29 55	8.52	9.2	K2	4	..	40742b
46	14604	27.5	-38 20	9.5	10.2	Ko	1	..	40903b	96	14602	27.9	-43 23	6.40	7.6	Ko	9	..	41077b
47	14538	27.5	-44 18	9.2	10.7	Go	2	..	41077b	97	4687	27.9	-63 24	7.9	8.7	G5	7	..	42486b
48	13854	27.5	-47 4	7.06	8.3	Ko	9	..	39682b	98	1720	27.9	-75 7	9.4	9.8	F5	4	..	19964b
49	10096	27.5	-53 24	10.5	11.1	Go	1	..	39669b	99	632	27.9	-84 14	9.7	10.8	K2	2	..	21397b
50	2555	27.6	+54 58	7.66	8.73	K2	2	..	37945i	100	2148	28.0	+61 28	7.9	7.9	B9	4	..	37277i

205100

21^h 28^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	3544	28.0	+49 14	8.6	8.7	A ₂	3	..	38796i	51	6042	28.3	-20 48	9.8	10.2	F ₅	3	..	39348b
2	4333	28.0	+23 47	9.3	9.8	F ₈	1	..	38051i	52	15493	28.3	-24 56	9.45	11.3	K ₂	2	..	40629b
3	4745	28.0	+0 22	9.9	10.9	K ₀	2	..	10117b	53	17354	28.3	-28 19	8.3	8.4	F ₈	5	..	41034b
4	5579	28.0	-4 57	8.85	9.35	F ₈	4	..	10117b	54	15512	28.3	-42 31	9.4	12.0	K ₅	1	..	41077b
5	..	28.0	-10 39	..	..	A ₂	1	..	39407b	55	14006	28.3	-46 40	10.2	11.2	G ₀	2	..	39682b
6	5884	28.0	-16 30	9.2	10.2	K ₀	3	..	39348b	56	13411	28.3	-50 13	8.1	8.5	G ₅	6	..	41053b
7	6120	28.0	-19 7	9.6	9.6	G ₅	4	..	39348b	57	7865	28.3	-58 4	9.5	10.5	K ₀	1	..	39382b
8	5713	28.0	-22 6	9.2	9.1	G ₅	4	..	40629b	58	7488	28.3	-60 9	7.91	8.4	G ₀	8	..	39382b
9	5714	28.0	-22 24	8.6	8.7	F ₅	6	..	40629b	59	3931	28.3	-65 35	9.8	10.4	G ₀	3	..	20428b
10	14371	28.0	-45 5	9.1	10.1	F ₅	5	3,4	39682b	60	4955	28.4	+20 16	7.11	7.53	F ₅	6	3,4	38051i
11	13522	28.0	-49 1	9.2	10.1	G ₅	4	..	39682b	61	4378	28.4	+2 50	8.5	9.7	K ₅	2	..	14204b
12	6568	28.0	-61 17	9.2	10.2	K ₀	1	..	42486b	62	5581	28.4	-5 4	9.2	10.2	K ₀	1	..	10117b
13	2279	28.1	+58 58	6.85	7.85	K ₀	4	..	37945i	63	5584	28.4	-6 49	8.6	9.6	K ₀	5	..	40603b
14	..	28.1	+52 11	..	..	K ₀	..	..	..	64	6008	28.4	-15 21	9.6	10.6	K ₀	1	..	39407b
15	3079	28.1	+52 11	6.20	7.20	A ₃	7	R	37945i	65	5886	28.4	-16 21	10.3	10.7	F ₅	2	..	39348b
16	3449	28.1	+48 9	6.73	6.73	A ₀	7	..	37946i	66	6041	28.4	-21 44	9.2	9.7	F ₈	4	..	40629b
17	3451	28.1	+48 3	8.0	8.0	A ₀	4	..	37946i	67	15129	28.4	-34 15	8.8	10.7	K ₂	2	..	40742b
18	4182	28.1	+32 43	7.9	8.9	K ₀	2	..	37948i	68	7716	28.4	-59 50	10.4	10.8	F ₅	1	..	39382b
19	6028	28.1	-12 8	10.0	10.6	G ₀	2	..	39407b	69	6569	28.4	-61 26	8.9	9.7	G ₅	2	..	42486b
20	15492	28.1	-25 6	10.2	10.7	A ₀	4	..	40629b	70	2962	28.5	+52 58	8.7	8.8	A ₂	1	..	37945i
21	16638	28.1	-32 6	8.5	9.2	F ₂	4	..	40742b	71	3409	28.5	+48 16	8.2	8.2	A	3	..	37946i
22	13523	28.1	-49 50	10.2	11.2	K ₀	1	..	39682b	72	3455	28.5	+48 8	8.1	8.1	A ₀	3	..	38810i
23	11896	28.1	-52 17	6.82	7.7	G ₅	9	..	41053b	73	4560	28.5	+35 38	8.6	9.4	G ₅	2	..	37948i
24	9622	28.1	-55 1	8.88	9.4	G ₀	5	..	39382b	74	4810	28.5	+5 15	9.6	10.2	G ₀	1	..	14204b
25	1741	28.2	+63 52	8.10	8.16	A ₂	5	..	37277i	75	4747	28.5	+1 10	8.89	9.17	F ₀	3	..	14204b
26	4440	28.2	+30 8	8.36	9.54	K ₅	1	..	38811i	76	5244	28.5	-2 48	8.8	9.2	F ₅	5	..	10117b
27	4596	28.2	+12 6	7.44	8.62	K ₅	4	..	38122i	77	5582	28.5	-5 38	8.8	9.9	K ₂	4	..	40603b
28	4840	28.2	+9 28	8.3	9.3	K ₀	3	..	10143b	78	5781	28.5	-5 52	8.2	8.2	A ₀	8	..	40603b
29	4575	28.2	+4 7	7.6	8.6	K ₀	4	..	38106i	79	6030	28.5	-12 13	9.1	10.1	K ₀	3	..	39407b
30	5705	28.2	-10 6	7.86	7.84	B ₉	8	..	40603b	80	6029	28.5	-12 34	8.8	9.6	G ₅	5	..	39407b
31	6063	28.2	-13 53	8.0	8.8	G ₅	7	..	39407b	81	6009	28.5	-15 42	9.6	10.4	G ₅	1	..	39407b
32	5885	28.2	-16 38	7.08	7.50	F ₅	5	..	41980b	82	5887	28.5	-16 20	10.3	11.4	K ₂	1	..	39348b
33	5960	28.2	-18 24	9.4	9.8	F ₅	5	..	39348b	83	5963	28.5	-18 2	9.6	10.4	G ₅	5	..	39348b
34	6121	28.2	-19 20	10.9	11.3	G	1	..	39348b	84	5716	28.5	-22 42	10.0	10.2	F ₈	1	..	40629b
35	6236	28.2	-20 31	10.5	11.5	F ₈	1	..	39348b	85	15504	28.5	-27 47	8.9	9.6	K ₂	3	..	41034b
36	18694	28.2	-30 32	8.1	9.2	F ₈	5	..	40742b	86	14356	28.5	-37 5	6.91	8.1	K ₂	9	..	40903b
37	14005	28.2	-46 25	10.4	11.2	G ₀	2	..	39682b	87	14404	28.5	-39 58	8.58	9.0	G ₅	7	..	41077b
38	4689	28.2	-62 57	9.1	10.1	K ₀	2	..	42486b	88	15515	28.5	-41 58	9.4	11.4	K ₀	1	..	41077b
39	2395	28.3	+60 1	5.52	5.28	B ₀	10	0,10	37277i	89	14375	28.5	-45 26	8.2	8.6	F ₈	6	..	39682b
40	2342	28.3	+57 49	8.8	9.2	F ₅	1	..	38526i	90	13526	28.5	-49 51	10.4	11.2	G ₅	1	..	39682b
41	2559	28.3	+54 34	8.9	9.7	G ₅	1	..	37945i	91	9892	28.5	-54 36	10.1	10.5	F ₅	1	..	39669b
42	4334	28.3	+23 40	8.6	9.6	K ₀	1	..	38051i	92	9901	28.5	-57 2	10.0	10.8	G ₅	3	..	39382b
43	4420	28.3	+23 5	9.0	9.5	F ₈	2	..	38051i	93	9903	28.5	-57 36	8.6	9.7	K ₀	5	..	39382b
44	4603	28.3	+17 17	8.7	9.9	K ₅	1	..	38818i	94	7866	28.5	-58 6	9.1	9.7	G ₀	1	..	39382b
45	4746	28.3	+0 39	8.3	8.8	F ₈	7	..	14204b	95	396	28.5	-86 18	7.82	8.6	F ₅	6	..	15173b
46	4175	28.3	-1 15	Cl.	Cl.	Con.	7	R	10117b	96	2589	28.6	+57 4	7.36	7.12	B ₀	3	..	37945i
47	5767	28.3	-9 35	8.6	8.7	A ₂	5	..	40603b	97	3082	28.6	+51 27	7.32	7.32	A ₀	4	..	38796i
48	5961	28.3	-13 23	9.2	10.3	K ₂	3	..	39407b	98	3411	28.6	+48 12	8.3	8.3	A	3	..	37946i
49	6066	28.3	-13 57	9.4	10.5	K ₂	3	..	39407b	99	3577	28.6	+45 49	8.3	8.3	A ₀	6	..	37946i
50	5962	28.3	-18 18	9.2	10.2	K ₀	5	..	39348b	100	4561	28.6	+35 20	8.37	8.65	F ₀	3	..	37948i

THE HENRY DRAPER CATALOGUE.

205200

21^h 28^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	4186	28.6	+32 20	7.17	7.15	B9	5	..	37948i	51	6125	28.9	-19 38	8.88	8.7	Go	7	..	39348b
2	4443	28.6	+29 56	8.21	8.55	F2	3	..	38811i	52	14316	28.9	-39 14	8.6	9.6	Go	4	..	40903b
3	5769	28.6	- 9 1	9.4	10.4	K0	3	..	39407b	53	6246	28.9	-62 7	10.3	10.8	F8	1	..	39382b
4	6067	28.6	-14 48	9.8	9.9	A3	4	..	39407b	54	3432	28.9	-68 37	9.0	9.8	G5	2	..	20428b
5	6308	28.6	-17 42	8.8	9.9	K2	6	..	39348b	55	4576	29.0	+10 16	8.37	9.44	K2	2	..	10143b
6	12983	28.6	-51 30	10.0	10.3	G5	2	..	39669b	56	4496	29.0	+ 1 51	8.3	9.3	K0	7	0,2	14204b
7	11897	28.6	-51 54	9.7	10.3	Go	3	..	39669b	57	4497	29.0	+ 1 36	8.9	9.2	F0	8	2,2	14204b
8	3548	28.7	+49 58	8.7	9.0	F0	2	..	38796i	58	4748	29.0	+ 0 55	9.2	10.3	K2	3	..	14204b
9	3549	28.7	+49 29	8.9	9.4	F8	1	..	38796i	59	5567	29.0	- 1 56	10.0	10.6	G	2	..	10117b
10	3457	28.7	+48 0	6.58	6.58	A0	8	..	37946i	60	5487	29.0	- 3 51	6.99	7.99	K0	8	..	10117b
11	..	28.7	+44 10	Neb.	Neb.	P	..	R	76,23	61	5963	29.0	-13 23	9.8	10.8	K0	3	..	39407b
12	4184	28.7	+41 51	7.16	8.16	K0	5	0,4	37946i	62	6071	29.0	-14 5	9.8	10.6	G5	3	..	39407b
13	4562	28.7	+35 53	8.6	8.6	A0	2	..	38894i	63	5965	29.0	-18 15	9.6	9.7	A2	6	..	39348b
14	4237	28.7	- 0 18	10.2	10.7	F8	2	..	10117b	64	6045	29.0	-21 4	9.6	9.3	F0	4	..	39348b
15	5782	28.7	- 5 56	8.84	9.91	K2	3	..	40603b	65	18703	29.0	-30 8	6.56	6.8	B8	7	0,10	8369b
16	5622	28.7	-10 55	10.3	11.1	G5	1	..	39407b	66	14361	29.0	-37 6	8.8	10.3	K0	3	..	40903b
17	6310	28.7	-16 52	9.8	10.9	K2	2	..	39348b	67	14008	29.0	-46 22	11.1	12.1	K5	1	..	39682b
18	6123	28.7	-18 53	10.4	10.8	F5	3	..	39348b	68	9628	29.0	-55 42	9.3	11.0	K0	2	..	39382b
19	15498	28.7	-25 23	8.3	9.6	A5	4	..	41034b	69	2344	29.1	+58 10	8.2	8.3	A5	4	..	37243i
20	15642	28.7	-33 4	9.1	10.7	K5	1	..	40742b	70	4296	29.1	+33 22	7.66	8.66	K0	3	..	37948i
21	6570	28.7	-61 25	10.1	11.1	K0	1	..	39382b	71	4189	29.1	+33 7	8.6	8.6	A	3	..	38894i
22	2642	28.8	+53 34	7.75	7.73	B9	3	..	37945i	72	4447	29.1	+15 15	8.24	9.31	K2	1	..	38122i
23	4527	28.8	+38 38	8.4	8.4	A	1	..	38542i	73	4700	29.1	+ 4 30	8.9	9.5	Go	4	..	14204b
24	4957	28.8	+21 8	7.24	8.42	K5	3	3,2	38051i	74	5681	29.1	- 8 1	8.7	9.1	F5	4	..	40603b
25	4238	28.8	- 0 14	8.3	9.4	K2	3	..	14204b	75	5682	29.1	- 8 40	8.4	9.4	K0	3	..	40603b
26	6124	28.8	-18 50	10.4	10.9	F8	2	..	39348b	76	5965	29.1	-12 53	10.3	11.1	G5	2	..	39407b
27	R	28.8	-22 47	10.6	10.9	G	1	..	40629b	77	6012	29.1	-15 4	8.6	9.8	K5	2	..	39407b
28	15506	28.8	-27 15	9.5	11.1	Go	1	..	41034b	78	6314	29.1	-16 58	8.6	9.6	K0	6	..	39348b
29	17876	28.8	-29 19	7.9	9.2	K0	4	..	41034b	79	6313	29.1	-17 11	9.4	10.2	G5	3	..	39348b
30	18700	28.8	-30 29	9.1	9.5	F2	3	..	40742b	80	5966	29.1	-18 28	10.9	11.5	Go	1	..	39348b
31	13938	28.8	-48 28	10.2	10.9	G5	1	..	39682b	81	15690	29.1	-26 10	10.4	10.5	Go	2	..	41034b
32	9625	28.8	-55 1	10.4	10.5	A2	3	..	39382b	82	12990	29.1	-51 48	10.2	10.6	F5	2	..	39669b
33	9627	28.8	-55 36	10.5	11.1	Go	1	..	39382b	83	9629	29.1	-55 34	10.6	11.4	G5	1	..	39382b
34	791	28.9	+75 58	7.67	7.95	F0	6	..	38025i	84	1072	29.2	+71 15	8.2	8.2	A0	3	..	38025i
35	1322	28.9	+67 51	7.06	7.04	B9	7	..	37277i	85	2151	29.2	+61 18	8.5	8.5	A0	2	..	38526i
36	2963	28.9	+52 19	8.5	8.5	A0	3	..	38796i	86	4564	29.2	+40 24	7.87	8.94	K2	3	0,4	37913i
37	4589	28.9	+39 59	7.42	8.20	G5	4	..	38542i	87	4197	29.2	+27 10	8.1	9.3	K5	2	..	38051i
38	4588	28.9	+39 47	8.6	8.7	A2	2	..	38542i	88	5568	29.2	- 2 28	9.4	10.4	K0	2	..	10117b
39	4423	28.9	+22 36	7.77	8.11	F2	5	..	38051i	89	6237	29.2	-20 31	5.79	6.3	F5	..	0,10	28,215
40	4627	28.9	+15 8	8.74	9.08	F2	2	..	38122i	90	6047	29.2	-20 53	8.2	9.3	Ma	5	..	39348b
41	4575	28.9	+10 28	8.7	9.8	K2	1	..	10143b	91	6046	29.2	-21 48	9.8	10.5	F8	3	..	40629b
42	5566	28.9	- 2 0	9.0	9.5	F8	6	..	10117b	92	16727	29.2	-24 4	9.9	10.7	Go	3	..	40629b
43	5485	28.9	- 3 54	9.2	10.2	K0	3	..	10117b	93	15689	29.2	-26 33	10.2	11.2	G5	2	..	41034b
44	5584	28.9	- 4 48	6.85	6.91	A2	10	..	10117b	94	15135	29.2	-34 46	6.85	7.6	Go	..	5,9	56,147
45	5706	28.9	- 9 56	10.0	10.5	F8	3	..	39407b	95	15521	29.2	-42 20	9.6	11.4	G5	1	..	41077b
46	5707	28.9	-10 12	10.0	10.8	G5	3	..	39407b	96	7489	29.2	-59 54	10.5	11.1	Go	1	..	39382b
47	5623	28.9	-11 22	9.4	10.4	K0	3	..	39407b	97	3933	29.2	-65 29	9.3	10.1	G5	2	..	20428b
48	6032	28.9	-12 46	9.4	10.0	Go	4	..	39407b	98	312	29.2	-87 49	9.3	10.5	K5	2	..	22980b
49	6070	28.9	-13 56	8.0	8.8	G5	7	..	39407b	99	3360	29.3	+50 48	8.9	9.5	Go	1	..	38796i
50	6312	28.9	-17 11	9.2	10.0	G5	4	..	39348b	100	4559	29.3	+17 0	7.7	8.8	K2	3	..	38122i

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ANNALS OF HARVARD COLLEGE OBSERVATORY.

205300

21^h 29^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	5684	29.3	8 36	8.2	9.2	Ko	4	..	40603b	51	4193	29.6	32 26	8.2	9.0	G5	2	5,2-	37948i
2	5708	29.3	10 1	10.0	10.4	F5	2	..	39407b	52	4337	29.6	23 39	8.2	8.5	F2	3	..	38051i
3	6072	29.3	14 20	9.0	10.0	Ko	4	..	39407b	53	4740	29.6	13 29	8.0	8.6	Go	4	..	38122i
4	6073	29.3	14 28	9.8	10.3	F8	2	..	39407b	54	4601	29.6	11 49	7.8	8.4	Go	5	..	38122i
5	6315	29.3	17 10	9.1	9.9	G5	5	..	39348b	55	4844	29.6	9 58	7.9	8.3	F5	4	..	38122i
6	6238	29.3	20 42	7.02	7.1	F8	9	0,10	40629b	56	4695	29.6	9 4	7.7	8.3	Go	5	..	10143b
7	17361	29.3	28 3	9.4	9.1	Ao	5	..	41034b	57	4502	29.6	1 49	8.7	9.7	Ko	2	..	14204b
8	9896	29.3	54 52	9.0	10.2	Go	5	..	39382b	58	4503	29.6	1 24	6.75	8.10	Mb	6	0,8	38106i
9	9686	29.3	56 49	8.4	9.7	G5	5	..	39382b	59	5772	29.6	9 17	9.4	10.2	G5	2	..	40603b
10	7490	29.3	60 53	10.2	11.3	K2	1	..	39382b	60	5967	29.6	13 16	10.0	10.6	Go	3	..	39407b
11	3934	29.3	65 45	9.1	10.1	Ko	4	..	20428b	61	5968	29.6	13 43	9.4	9.7	F2	4	..	39407b
12	3183	29.3	68 55	9.3	9.6	Fo	2	..	20428b	62	6074	29.6	14 30	9.8	10.8	Ko	1	..	39407b
13	1721	29.3	74 55	8.51	8.6	F5	7	..	19964b	63	6244	29.6	20 20	9.2	9.3	Ao	7	..	39348b
14	3553	29.4	49 30	5.76	5.76	Ao	10	0,10	38810i	64	6243	29.6	20 40	9.6	10.7	K2	2	..	39348b
15	3466	29.4	47 36	8.7	8.7	A	2	..	37946i	65	5720	29.6	22 30	9.2	10.2	G5	3	..	40629b
16	4565	29.4	25 28	8.2	9.2	Ko	3	..	38051i	66	16995	29.6	23 34	8.2	9.4	K5	3	..	40629b
17	4579	29.4	3 13	9.2	10.3	K2	1	..	14204b	67	14621	29.6	38 15	9.4	10.8	Ko	1	..	40903b
18	5685	29.4	7 50	8.0	8.3	Fo	7	..	40603b	68	14321	29.6	39 3	9.5	10.8	K2	1	..	40903b
19	5686	29.4	8 32	9.4	10.5	K2	2	..	40603b	69	13942	29.6	48 23	9.0	10.3	Mb	3	..	39682b
20	5771	29.4	9 23	9.4	10.4	Ko	2	..	40603b	70	9899	29.6	54 38	8.4	9.3	A5	5	..	41053b
21	5770	29.4	9 32	8.0	9.0	Ko	6	..	40603b	71	6571	29.6	61 50	10.2	10.8	Go	2	..	39382b
22	5966	29.4	13 1	9.6	10.4	G5	2	..	39407b	72	1183	29.7	70 23	6.94	6.94	Ao	5	0,5	37277i
23	6239	29.4	20 16	8.7	9.0	G5	6	..	39348b	73	4816	29.7	18 52	8.3	8.3	Ao	4	E	38051i
24	6241	29.4	20 36	10.0	10.5	F8	2	..	39348b	74	4580	29.7	10 29	7.9	8.9	Ko	2	2,2	10143b
25	15522	29.4	42 29	8.8	9.9	F8	3	..	41077b	75	4701	29.7	4 58	8.85	9.92	K2	3	..	14204b
26	11898	29.4	52 36	9.7	10.3	Go	3	..	39669b	76	5586	29.7	5 22	9.1	10.1	Ko	3	..	40603b
27	3816	29.4	66 54	9.4	10.4	Ko	1	..	20428b	77	5889	29.7	16 43	8.8	9.3	F8	7	..	39348b
28	1182	29.5	70 34	8.19	8.19	Ao	2	..	38025i	78	6126	29.7	19 40	8.03	8.1	F5	9	..	39348b
29	2282	29.5	59 7	8.1	8.1	B8	2	..	38526i	79	13415	29.7	50 33	9.6	9.4	Fo	4	..	41053b
30	2590	29.5	57 6	8.1	9.1	Ko	1	..	38526i	80	11899	29.7	52 15	10.2	10.8	Go	2	..	39669b
31	3468	29.5	47 51	6.92	6.92	Ao	8	..	37946i	81	2567	29.8	54 57	8.3	8.4	A2	2	..	37945i
32	3467	29.5	47 21	8.6	8.6	Ao	4	..	37946i	82	3861	29.8	44 39	8.7	9.8	K2	1	..	37913i
33	4346	29.5	38 5	8.0	8.0	B9	5	0,5 R	38542i	83	4815	29.8	5 13	9.06	9.62	Go	2	..	14204b
34	4191	29.5	32 46	7.7	7.7	Ao	4	..	37948i	84	6014	29.8	15 3	9.6	9.6	Ao	4	..	39407b
35	4496	29.5	32 0	8.6	9.7	K2	1	..	38894i	85	5890	29.8	15 55	9.2	9.5	Fo	4	..	39407b
36	4579	29.5	11 0	8.1	9.2	K2	1	..	38122i	86	5891	29.8	16 25	10.3	11.4	K2	1	..	39348b
37	4501	29.5	1 44	9.6	9.6	Ao	4	..	14204b	87	16999	29.8	22 55	9.9	10.7	K5	1	..	40629b
38	4500	29.5	1 29	9.6	10.1	F8	5	..	14204b	88	15516	29.8	27 8	9.7	10.2	Go	2	..	41034b
39	5569	29.5	2 25	10.0	10.0	A	2	..	10117b	89	15655	29.8	32 54	9.5	10.1	G5	1	..	40742b
40	6316	29.5	16 51	10.0	10.5	F8	3	..	39348b	90	12998	29.8	51 17	7.24	7.9	Ko	9	..	41053b
41	6242	29.5	20 48	10.5	11.2	G5	2	..	39348b	91	12999	29.8	51 50	7.7	9.4	K2	4	..	41053b
42	16729	29.5	23 54	6.40	7.6	Ko	9	..	40629b	92	9902	29.8	54 25	9.9	10.5	Go	2	..	41053b
43	15505	29.5	25 46	7.7	8.1	F8	8	..	41034b	93	9901	29.8	54 40	8.7	9.7	Go	3	..	41053b
44	13862	29.5	47 8	9.8	10.5	F5	2	..	39682b	94	1509	29.8	77 27	8.5	9.6	K2	3	..	19964b
45	13863	29.5	47 35	10.2	11.3	A2	1	..	39682b	95	823	29.9	77 30	7.34	8.34	Ko	3	0,3	38025i
46	10107	29.5	53 7	10.9	11.9	Ko	1	..	39669b	96	2283	29.9	58 13	8.1	8.1	Ao	3	..	37945i
47	9898	29.5	54 15	10.5	11.1	Go	1	..	39669b	97	2967	29.9	53 9	7.7	8.7	Ko	2	..	37945i
48	2861	29.5	70 4	6.92	6.7	B9	10	..	20544b	98	4567	29.9	25 56	8.6	8.7	A2	2	..	38051i
49	3584	29.6	45 25	6.56	7.63	K2	3	..	37946i	99	4961	29.9	20 58	9.0	10.0	Ko	1	..	38818i
50	4135	29.6	42 32	8.5	8.5	Ao	4	E	37946i	100	4382	29.9	2 55	9.2	9.7	F8	1	..	14204b

THE HENRY DRAPER CATALOGUE.

205400

21^h 29^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	4383	29.9	+ 2 42	9.9	10.5	Go	3	..	14204b	51	7868	30.2	- 58 19	9.8	10.8	Ko	3	..	39382b
2	4505	29.9	+ 1 47	8.5	8.9	F5	7	..	14204b	52	1178	30.3	+ 69 12	8.9	9.0	A2	2	..	37277i
3	5488	29.9	- 4 10	8.6	9.0	F5	7	..	10117b	53	2154	30.3	+ 61 35	9.5	9.5	A	1	..	38526i
4	5969	29.9	-13 10	9.4	10.4	Ko	2	..	39407b	54	4575	30.3	+ 35 50	8.4	9.2	G5	2	..	38894i
5	5970	29.9	-13 22	9.4	10.2	G5	3	..	39407b	55	4750	30.3	+ 0 32	7.38	7.88	F8	5	0,9	38106i
6	6128	29.9	-19 13	8.2	7.8	Ao	9	..	39348b	56	5777	30.3	- 9 45	10.4	10.9	F8	3	..	39407b
7	14015	29.9	-46 5	10.0	10.4	Go	2	..	39682b	57	5711	30.3	-10 26	8.6	9.6	Ko	4	..	40603b
8	13946	29.9	-48 30	10.2	11.7	K5	1	..	39682b	58	6075	30.3	-14 30	10.4	11.6	K5	1	..	39407b
9	991	30.0	+ 73 2	8.28	9.46	K5	1	..	38025i	59	6319	30.3	-17 38	9.5	10.3	G5	4	..	39348b
10	4568	30.0	+ 25 39	8.7	9.2	F8	2	..	38051i	60	6050	30.3	-20 49	9.7	10.2	Go	4	..	39348b
11	4817	30.0	+ 6 4	8.7	9.2	F8	2	..	10143b	61	6049	30.3	-21 31	9.2	9.3	F5	5	..	40629b
12	4176	30.0	- 1 28	9.6	10.0	F5	1	..	10117b	62	14868	30.3	-35 37	7.78	9.7	K5	4	0,4	40742b
13	5709	30.0	-10 44	9.2	10.2	Ko	3	..	39407b	63	14332	30.3	-39 3	8.8	9.4	F8	5	..	40903b
14	6245	30.0	-20 14	10.4	10.2	F8	3	..	39348b	64	13868	30.3	-47 38	8.8	10.7	G5	3	..	39682b
15	14619	30.0	-42 54	9.4	11.0	G5	1	..	41077b	65	6248	30.3	-62 42	8.4	9.2	G5	5	..	42486b
16	13867	30.0	-47 40	10.4	11.3	Fo	1	..	39682b	66	1564	30.4	+ 65 4	8.65	8.65	Ao	3	..	37277i
17	3937	30.0	-65 16	6.32	6.38	A2	..	..	56,147	67	4196	30.4	+ 41 15	8.3	9.5	K5	1	..	37913i
18	650	30.1	+ 82 51	8.8	9.4	Go	2	..	37294i	68	4635	30.4	+ 15 1	8.5	9.0	F8	3	2,2	38122i
19	4573	30.1	+ 35 19	8.07	8.13	A2	4	..	37948i	69	4506	30.4	+ 2 6	9.9	11.0	K2	1	..	14204b
20	4431	30.1	+ 22 19	6.37	6.87	F8	8	..	38051i	70	5892	30.4	-16 8	8.8	9.8	Ko	5	..	39407b
21	4962	30.1	+ 21 9	9.0	9.1	A2	1	..	38818i	71	15702	30.4	-26 37	5.77	5.85	A3	..	..	56,147
22	4606	30.1	+ 17 54	6.62	7.69	K2	7	..	38122i	72	18718	30.4	-30 52	8.7	9.5	F8	3	..	40742b
23	5489	30.1	- 4 26	5.85	6.85	Ko	10	..	10117b	73	18367	30.4	-31 7	8.7	9.3	F8	4	..	40742b
24	6035	30.1	-12 14	8.5	8.8	Fo	7	..	39407b	74	14629	30.4	-38 22	9.4	9.9	F2	2	..	40903b
25	5972	30.1	-13 25	8.8	9.6	G5	5	..	39407b	75	14422	30.4	-40 17	9.1	9.6	F8	3	..	41077b
26	5968	30.1	-18 34	10.4	11.0	Go	2	..	39348b	76	14622	30.4	-43 12	9.4	10.5	Go	2	..	41077b
27	16650	30.1	-32 7	9.5	9.8	Ao	3	..	40742b	77	7491	30.4	-60 44	10.2	10.8	Go	2	..	39382b
28	14372	30.1	-37 42	9.1	10.0	F5	3	..	40903b	78	1510	30.4	-77 50	3.74	4.74	Ko	..	R	28,215
29	14581	30.1	-41 8	8.8	9.3	F8	5	..	41077b	79	936	30.5	+ 73 13	8.5	8.5	Ao	4	..	38025i
30	14560	30.1	-44 17	8.2	8.6	G5	6	0,7	41077b	80	1223	30.5	+ 68 19	9.0	9.0	A	1	..	37277i
31	9904	30.1	-54 31	9.9	10.5	Go	2	..	41053b	81	2262	30.5	+ 60 37	8.3	9.1	G5	2	..	38526i
32	9636	30.1	-54 55	9.7	10.5	G5	1	R	39382b	82	2647	30.5	+ 53 52	7.46	7.46	Ao	6	..	37351i
33	4693	30.1	-63 15	9.0	9.8	G5	3	..	42486b	83	4196	30.5	+ 32 43	8.5	9.5	Ko	1	2,1-	37948i
34	2153	30.2	+ 61 32	9.5	10.5	K	1	..	37277i	84	4607	30.5	+ 17 53	9.9	11.3	Mc	..	R	M
35	3865	30.2	+ 45 9	4.22	5.22	Ko	..	R	2865c	85	5969	30.5	-18 28	10.4	11.2	G5	1	..	39348b
36	4740	30.2	+ 19 29	7.10	8.10	Ko	5	..	38051i	86	6051	30.5	-20 52	9.5	9.6	Go	5	..	39348b
37	4818	30.2	+ 18 29	7.9	8.2	Fo	4	..	38818i	87	17007	30.5	-23 15	9.2	9.7	K2	2	..	40629b
38	5587	30.2	- 5 8	8.8	9.6	G5	4	..	40603b	88	14386	30.5	-45 20	8.7	9.8	K2	3	..	39682b
39	5785	30.2	- 6 20	10.1	11.2	K2	1	..	40603b	89	14019	30.5	-46 10	8.0	9.2	Ko	5	..	39682b
40	5689	30.2	- 7 52	9.7	10.3	Go	2	..	40603b	90	11902	30.5	-52 12	9.5	10.3	G5	3	..	39669b
41	5710	30.2	-10 16	10.4	11.0	Go	2	..	39407b	91	7869	30.5	-58 47	10.3	11.5	K5	1	..	39382b
42	5624	30.2	-11 1	9.9	10.7	G5	1	..	39407b	92	4155	30.5	-64 13	9.1	10.1	Ko	3	..	42486b
43	6318	30.2	-17 6	8.6	9.6	Ko	5	..	39348b	93	792	30.6	+ 75 52	8.27	9.27	Ko	3	..	38025i
44	5722	30.2	-22 12	10.4	10.5	A5	2	..	40629b	94	1074	30.6	+ 71 38	8.9	9.3	F5	2	..	38025i
45	15700	30.2	-26 6	9.5	10.7	Ko	2	..	41034b	95	3425	30.6	+ 48 18	8.1	9.2	K2	1	..	38810i
46	15140	30.2	-34 9	9.1	10.3	F8	2	..	40742b	96	3588	30.6	+ 45 33	8.6	8.6	B9	5	..	37946i
47	14881	30.2	-36 27	9.1	10.7	K5	1	..	40903b	97	4964	30.6	+ 20 58	7.35	7.85	F8	6	0,5	38051i
48	14417	30.2	-40 46	7.12	8.8	K5	7	..	41077b	98	4452	30.6	+ 15 44	9.2	10.2	Ko	1	..	38122i
49	13000	30.2	-51 46	9.2	10.0	F8	3	..	41053b	99	4507	30.6	+ 1 39	9.2	9.8	Go	4	..	14204b
50	9638	30.2	-54 55	10.2	10.8	Go	1	R	39382b	100	5589	30.6	- 5 42	9.5	10.0	F8	3	..	40603b

205500

21^h 30^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	5590	30.6	— 6 54	9.9	10.4	F8	2	..	40603b	51	3091	31.0	+51 15	5.96	5.94	B9	9	..	38796i
2	5626	30.6	— 11 31	10.5	11.1	Go	2	..	39407b	52	3427	31.0	+49 5	7.9	7.9	Ao	5	..	38810i
3	6076	30.6	— 14 8	10.1	10.7	Go	2	..	39407b	53	4347	31.0	+23 32	7.8	8.8	Ko	3	..	38051i
4	6129	30.6	— 19 26	10.1	10.5	G5	2	..	39348b	54	4821	31.0	+18 41	9.2	9.8	Go	1	..	38818i
5	6247	30.6	— 20 20	10.1	10.5	G5	3	..	39348b	55	4821	31.0	+ 5 38	7.74	8.02	Fo	4	..	38106i
6	15662	30.6	— 33 32	9.1	9.8	K2	1	..	40742b	56	4703	31.0	+ 5 2	8.25	8.23	B9	3	..	38106i
7	9639	30.6	— 55 26	10.3	11.4	K2	1	..	39382b	57	5691	31.0	— 8 40	9.7	10.1	F5	3	..	39407b
8	4694	30.6	— 63 47	9.2	10.4	K5	2	..	42486b	58	5779	31.0	— 9 33	9.5	10.0	F8	2	..	40603b
9	1075	30.7	+71 36	7.7	8.1	F5	4	..	38025i	59	5713	31.0	— 10 9	10.4	10.4	Ao	2	..	39407b
10	2349	30.7	+57 45	8.3	8.4	A2	4	..	37945i	60	6078	31.0	— 14 25	8.8	8.9	A2	7	..	39407b
11	4199	30.7	+41 58	7.62	7.68	A2	5	1,5	37913i	61	5973	31.0	— 18 25	10.1	10.2	A5	3	..	39348b
12	4359	30.7	+38 5	4.98	5.98	Ko	..	0,10	56,100	62	6052	31.0	— 21 10	9.5	10.0	G5	3	..	39348b
13	4576	30.7	+35 26	8.2	9.2	Ko	2	..	37948i	63	5724	31.0	— 22 45	9.7	9.6	F5	2	..	40629b
14	4499	30.7	+31 20	7.21	7.21	Ao	6	0,6	38894i	64	14425	31.0	— 40 48	10.1	11.1	G5	1	..	41077b
15	5970	30.7	— 18 11	10.6	10.7	A3	2	..	39348b	65	14566	31.0	— 44 24	9.4	10.1	F8	2	..	41077b
16	15706	30.7	— 26 16	9.5	10.2	G5	3	..	41034b	66	13536	31.0	— 49 46	8.1	9.2	Ko	6	..	39682b
17	14887	30.7	— 36 19	8.8	9.8	Go	4	..	40903b	67	13005	31.0	— 51 14	9.4	10.6	K2	1	..	39682b
18	14565	30.7	— 44 26	9.3	10.4	G5	1	..	41077b	68	9641	31.0	— 55 29	10.5	11.1	Go	1	..	39382b
19	11903	30.7	— 52 2	9.0	10.0	Ko	2	..	41053b	69	9916	31.0	— 57 48	10.0	11.1	K2	1	..	39382b
20	9913	30.7	— 57 50	10.5	11.0	F8	1	..	39382b	70	2288	31.1	+59 0	8.1	8.4	Fo	1	..	38526i
21	742	30.8	+81 18	8.07	8.85	G5	2	..	37294i	71	2573	31.1	+54 44	8.7	8.8	A3	1	..	37945i
22	2396	30.8	+59 52	7.81	7.81	Ao	2	..	37945i	72	4461	31.1	+34 45	8.12	8.18	A2	3	..	37948i
23	4572	30.8	+25 50	8.4	8.5	A2	4	..	38051i	73	4462	31.1	+34 23	7.7	7.7	Ao	3	..	37948i
24	4820	30.8	+18 31	7.9	8.2	F2	4	..	38818i	74	4564	31.1	+17 4	8.1	9.2	K2	2	..	38122i
25	4751	30.8	+ 0 14	8.73	9.51	G5	4	..	14204b	75	6322	31.1	— 17 33	8.8	9.1	F2	7	..	39348b
26	6077	30.8	— 14 19	9.2	10.6	Mb	4	..	39407b	76	6132	31.1	— 19 6	9.7	10.5	K2	4	..	39348b
27	6131	30.8	— 18 50	7.65	7.99	F2	9	..	39348b	77	5726	31.1	— 21 57	7.8	8.7	Ko	7	..	40629b
28	6249	30.8	— 20 24	10.5	11.6	K2	1	..	39348b	78	5725	31.1	— 22 17	9.2	10.2	Ko	3	..	40629b
29	15664	30.8	— 33 29	6.09	6.9	A5	..	..	56,147	79	14567	31.1	— 43 55	9.2	10.9	G5	2	..	41077b
30	14888	30.8	— 36 19	7.40	8.0	F2	9	..	40903b	80	14020	31.1	— 46 29	8.6	9.5	Go	5	..	39682b
31	15530	30.8	— 41 59	8.6	9.6	G5	4	..	41077b	81	7719	31.1	— 59 15	9.6	10.2	Go	2	..	39382b
32	9640	30.8	— 55 34	10.5	11.1	Go	1	..	39382b	82	2623	31.1	— 71 57	8.4	8.9	F8	9	..	19966b
33	4695	30.8	— 63 23	10.0	10.1	A2	2	..	42486b	83	4579	31.2	+35 32	8.2	8.7	F8	3	..	37948i
34	3817	30.8	— 67 12	9.8	10.4	Go	1	..	20428b	84	4824	31.2	+ 5 42	8.3	9.4	K2	2	..	38106i
35	2229	30.8	— 72 54	10.3	10.7	F5	1	..	20544b	85	5789	31.2	— 6 27	9.9	10.5	Go	2	..	40603b
36	2005	30.8	— 74 31	6.7	7.5	G5	10	..	19964b	86	5781	31.2	— 9 11	9.5	10.3	G5	2	..	40603b
37	992	30.9	+72 38	9.0	9.1	A2	2	..	38936i	87	5976	31.2	— 17 56	10.1	10.5	F5	3	..	39348b
38	4542	30.9	+39 0	7.6	8.7	K2	1	..	38542i	88	17909	31.2	— 29 3	7.58	8.4	Ko	7	..	41034b
39	4107	30.9	+27 46	6.35	6.63	Fo	8	5,9	38811i	89	18373	31.2	— 31 0	8.1	9.3	Ko	5	..	40742b
40	4433	30.9	+24 43	8.6	9.6	Ko	1	..	38819i	90	14569	31.2	— 44 30	9.8	10.9	G5	1	..	41077b
41	4346	30.9	+24 3	6.13	6.21	A3	9	..	38051i	91	14022	31.2	— 46 1	7.30	7.3	F5	8	..	39682b
42	4345	30.9	+23 29	9.1	9.1	Ao	2	..	38051i	92	13951	31.2	— 48 46	9.4	10.3	K2	3	..	39682b
43	6321	30.9	— 17 9	8.6	8.6	Ao	7	..	39348b	93	13423	31.2	— 50 19	10.4	10.8	A3	2	..	39682b
44	5971	30.9	— 18 37	9.9	10.9	Ko	3	..	39348b	94	9642	31.2	— 55 33	10.1	11.1	Ko	1	..	39382b
45	18372	30.9	— 31 10	7.9	8.9	Go	7	..	40742b	95	7494	31.2	— 59 57	10.2	10.8	Go	1	..	39382b
46	15146	30.9	— 33 57	8.8	10.3	A5	3	..	40742b	96	7493	31.2	— 60 32	10.3	11.3	Ko	1	..	39382b
47	14587	30.9	— 41 8	8.5	9.7	G5	3	..	41077b	97	2231	31.2	— 72 55	9.3	9.8	F8	3	..	20544b
48	7492	30.9	— 59 53	9.1	10.2	G5	4	..	39382b	98	1565	31.3	+64 17	8.90	8.98	A3	2	..	37277i
49	651	31.0	+83 8	8.7	9.2	F8	3	..	37294i	99	2155	31.3	+61 21	7.9	8.0	A2	4	0,4	37277i
50	1225	31.0	+68 20	8.9	9.0	A2	2	..	37277i	100	3375	31.3	+46 39	7.9	7.9	Ao	5	..	38810i

THE HENRY DRAPER CATALOGUE.

205600

21^h 31^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	3975	31.3	+43 16	6.70	6.65	B8	6	5,7	37913i	51	14646	31.6	-38 8	8.8	9.9	A3	3	..	40903b
2	4349	31.3	+23 31	7.38	8.38	Ko	4	..	38051i	52	14390	31.6	-45 22	9.2	10.1	Go	3	..	39682b
3	4637	31.3	+14 39	6.69	7.47	G5	8	..	38122i	53	1747	31.7	+63 18	7.38	7.44	A2	5	..	37277i
4	4719	31.3	+8 12	8.7	9.8	K2	1	..	10143b	54	2576	31.7	+54 14	8.5	8.6	A5	3	..	37351i
5	5592	31.3	-5 30	7.08	8.08	Ko	8	..	40603b	55	3430	31.7	+48 58	9.0	9.1	A2	1	..	38810i
6	5782	31.3	-9 30	8.0	9.0	Ko	4	..	40603b	56	4614	31.7	+18 12	8.5	9.3	G5	2	..	38818i
7	6080	31.3	-13 54	8.0	8.1	A2	7	..	39407b	57	5593	31.7	-5 14	8.6	9.6	Ko	4	..	40603b
8	5978	31.3	-17 55	9.7	10.0	Fo	4	..	39348b	58	5792	31.7	-6 44	10.1	10.5	F5	2	..	40603b
9	5727	31.3	-21 53	9.9	9.7	Go	3	..	40629b	59	5784	31.7	-9 7	9.5	10.3	G5	3	..	40603b
10	18730	31.3	-30 12	9.4	10.1	G5	2	..	41069b	60	6325	31.7	-16 50	9.7	10.3	Go	3	..	39348b
11	13006	31.3	-51 12	10.0	10.3	A5	2	..	39682b	61	6254	31.7	-19 59	10.1	10.7	Ko	2	..	39348b
12	10114	31.3	-53 19	9.3	11.0	K5	2	..	39669b	62	15532	31.7	-26 56	9.9	11.3	Ko	1	..	41034b
13	6250	31.3	-62 36	9.4	10.4	Ko	1	..	42486b	63	15543	31.7	-41 59	10.7	12.0	K5	1	..	39674b
14	2624	31.3	-72 37	9.1	9.2	A5	4	..	19966b	64	1748	31.8	+63 34	7.8	7.8	Ao	4	..	37277i
15	1412	31.4	+66 47	8.6	9.1	F8	2	..	37277i	65	3481	31.8	+48 3	8.7	8.7	Ao	3	..	38810i
16	3096	31.4	+51 51	8.7	8.7	Ao	3	..	38796i	66	4462	31.8	+15 15	8.19	8.25	A2	6	..	38122i
17	4479	31.4	+30 33	8.0	9.0	Ko	2	..	38811i	67	5581	31.8	-1 54	9.9	10.4	F8	2	..	10117b
18	4453	31.4	+29 18	8.4	8.2	B	3	R	38811i	68	5582	31.8	-2 1	9.9	10.7	G5	2	..	10117b
19	4853	31.4	+9 20	8.0	9.0	Ko	6	..	14196b	69	5697	31.8	-7 58	9.2	9.7	F8	2	..	40603b
20	5493	31.4	-4 31	9.2	9.5	Fo	4	..	40603b	70	5696	31.8	-8 16	8.4	9.5	K2	3	..	40603b
21	6040	31.4	-12 2	10.4	11.2	G5	2	..	39407b	71	5630	31.8	-11 12	9.5	10.5	Ko	3	..	39407b
22	6039	31.4	-12 18	9.5	9.8	Fo	4	..	39407b	72	6042	31.8	-12 12	10.6	11.6	Ko	1	..	39407b
23	5974	31.4	-13 1	9.5	10.6	K2	3	..	39407b	73	6326	31.8	-17 22	10.4	11.0	Go	2	..	39348b
24	6133	31.4	-19 11	7.6	8.1	K2	8	..	39348b	74	6134	31.8	-18 53	7.05	7.47	F5	10	..	39348b
25	13873	31.4	-47 3	9.6	10.9	Ko	1	..	39682b	75	5729	31.8	-22 36	9.2	10.2	Ko	2	..	40629b
26	4575	31.5	+25 55	9.1	9.7	G	2	R	33648i	76	16748	31.8	-24 1	10.4	9.6	Ao	5	..	40629b
27	4575a	31.5	+25 55	9.3	9.9	G	2	..	33648i	77	15520	31.8	-24 54	7.88	8.2	F8	7	..	41034b
28	4823	31.5	+18 34	9.0	10.0	Ko	1	..	38818i	78	14897	31.8	-36 41	9.5	10.6	G5	1	..	40903b
29	4459	31.5	+15 36	8.7	9.1	F5	2	..	38122i	79	14633	31.8	-43 53	8.2	9.2	Ko	3	..	41077b
30	4721	31.5	+7 26	8.1	9.2	K2	6	..	14196b	80	11908	31.8	-51 54	9.4	9.7	Fo	4	..	41053b
31	5256	31.5	-3 3	9.1	9.7	Go	3	..	14195b	81	9919	31.8	-57 10	10.4	10.5	A3	2	..	39382b
32	5790	31.5	-6 27	8.2	8.5	Fo	7	..	40603b	82	7720	31.8	-59 27	9.7	10.2	F8	1	..	39382b
33	5783	31.5	-9 51	9.5	10.5	Ko	3	..	39407b	83	4156	31.8	-64 36	9.5	10.7	K5	1	..	42486b
34	5714	31.5	-10 37	7.33	7.61	Fo	8	2,7-	39407b	84	840	31.9	+76 23	9.07	10.07	K	1	..	38936i
35	6041	31.5	-11 52	9.5	10.5	Ko	3	..	39407b	85	1602	31.9	+65 18	7.75	7.75	Ao	6	..	37277i
36	5895	31.5	-15 50	8.7	9.7	Ko	5	..	39407b	86	2158	31.9	+61 51	8.5	8.5	B9	2	..	38526i
37	6251	31.5	-19 54	4.72	4.60	B5p	..	R	28,215	87	4576	31.9	+40 36	8.5	9.3	G5	1	..	37913i
38	6053	31.5	-21 29	9.0	10.2	Ko	3	..	39348b	88	4456	31.9	+29 37	6.47	7.47	Ko	5	..	37948i
39	18376	31.5	-31 13	8.1	9.8	K5	2	0,2	40742b	89	4641	31.9	+14 28	8.4	8.4	Ao	3	..	38122i
40	6573	31.5	-61 12	10.5	11.5	Ko	1	..	39382b	90	4612	31.9	+11 26	7.9	9.0	K2	1	..	38122i
41	2290	31.6	+58 35	8.7	8.7	Ao	4	..	38526i	91	4511	31.9	+1 51	9.9	10.2	Fo	1	..	14204b
42	4639	31.6	+15 3	8.99	9.07	A3	1	..	38122i	92	5698	31.9	-8 41	11.0	11.0	Ao	1	..	39407b
43	4610	31.6	+11 57	9.6	10.6	Ko	2	..	38122i	93	6044	31.9	-11 54	7.6	9.0	Ma	6	..	39407b
44	4863	31.6	+6 27	8.9	8.9	Ao	3	..	10143b	94	15521	31.9	-25 27	8.9	9.6	A5	3	..	41034b
45	5596	31.6	-6 58	9.9	10.9	Ko	1	..	40603b	95	14879	31.9	-35 7	8.1	10.0	K5	3	..	40742b
46	6081	31.6	-14 17	9.2	10.2	Ko	3	..	39407b	96	14386	31.9	-37 37	8.00	9.4	Ko	6	..	40903b
47	6082	31.6	-14 26	9.2	9.8	Go	4	..	39407b	97	4367	32.0	+37 25	7.6	7.6	Ao	4	0,4	38542i
48	6323	31.6	-16 50	10.4	10.8	F5	2	..	39348b	98	4468	32.0	+34 35	9.3	10.3	K	1	R	M
49	17021	31.6	-23 49	9.5	11.1	G5	2	..	39687b	99	4467	32.0	+34 34	8.4	9.8	Ma	1	..	M
50	17381	31.6	-28 4	9.5	9.3	Go	3	..	41034b	100	4137	32.0	+29 5	8.1	8.7	Go	2	..	38811i

205700

21^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	4704	32.0	+ 8 45	8.9	9.3	F5	5	..	14196b	51	6137	32.3	-19 2	10.4	10.2	Ao	4	..	39348b
2	4826	32.0	+ 5 22	7.63	8.13	F8	3	..	38106i	52	17031	32.3	-22 57	10.4	11.2	G5	1	..	39687b
3	4584	32.0	+ 3 27	9.6	10.0	F5	2	..	14204b	53	17030	32.3	-23 1	9.7	11.3	K2	1	..	39687b
4	5899	32.0	-16 45	9.0	10.0	Ko	5	..	39348b	54	14351	32.3	-39 45	9.18	9.6	Go	2	..	40903b
5	6136	32.0	-19 40	7.3	7.1	B9	8	..	40629b	55	14352	32.3	-39 52	9.42	9.9	F5	3	..	40903b
6	6054	32.0	-20 52	8.8	8.4	F5	8	..	39348b	56	14638	32.3	-43 9	9.0	10.1	Go	3	..	41077b
7	16750	32.0	-24 8	8.1	9.1	K2	5	..	40629b	57	2630	32.3	-72 33	9.5	10.6	K2	1	..	19966b
8	14346	32.0	-39 32	9.7	10.5	Go	2	..	40903b	58	993	32.4	+72 20	8.04	8.38	F2	4	..	38025i
9	13955	32.0	-48 50	10.7	10.3	F8	2	..	39682b	59	3985	32.4	+43 52	8.6	9.6	Ko	1	..	37913i
10	9645	32.0	-55 18	8.5	9.9	Ko	4	..	39382b	60	4438	32.4	+25 10	8.41	9.41	Ko	3	..	38051i
11	7721	32.0	-59 41	10.4	10.4	Ao	3	..	39382b	61	4354	32.4	+23 17	8.5	8.6	A2	2	..	38051i
12	2234	32.0	-72 59	9.0	10.4	Ma	2	..	20544b	62	4748	32.4	+19 21	7.30	8.30	Ko	5	..	38051i
13	720	32.0	-83 48	10.4	10.5	A5	1	..	21397b	63	4755	32.4	+ 1 11	9.6	10.1	F8	3	..	14204b
14	653	32.1	+83 0	9.0	10.4	Ma	..	..	M	64	4756	32.4	+ 1 0	10.6	11.8	K5	1	..	14204b
15	1567	32.1	+64 31	8.39	9.39	Ko	1	..	37277i	65	4180	32.4	- 0 50	6.27	6.33	A2	10	2,10	14195b
16	4550	32.1	+38 20	8.0	9.1	K2	1	..	38542i	66	5598	32.4	- 7 23	9.5	10.5	Ko	1	..	40603b
17	4386	32.1	+ 2 27	9.2	9.7	F8	3	..	14204b	67	5701	32.4	- 8 18	4.78	4.92	A5	..	R	56,100
18	4754	32.1	+ 0 28	9.9	10.4	F8	2	..	14204b	68	5979	32.4	-13 12	10.4	11.2	G5	1	..	39407b
19	5631	32.1	-10 52	9.9	10.4	F8	3	..	39407b	69	6329	32.4	-17 39	7.8	8.8	Ko	9	..	39348b
20	5976	32.1	-13 15	9.5	10.5	Ko	3	..	39407b	70	5981	32.4	-18 47	9.7	10.5	G5	4	..	39348b
21	6328	32.1	-17 21	10.4	11.4	Ko	1	..	39348b	71	15722	32.4	-25 53	7.44	8.2	G5	8	..	41034b
22	6256	32.1	-20 4	9.1	9.9	F8	4	..	39348b	72	14598	32.4	-41 30	8.1	8.4	A3	7	0,9	41077b
23	17026	32.1	-23 23	10.9	10.5	Go	2	..	39687b	73	14597	32.4	-41 33	9.1	10.8	Ko	3	5,2-	39361b
24	13548	32.1	-48 55	10.7	10.9	G5	1	..	39682b	74	9920	32.4	-57 53	10.2	10.8	Go	2	..	39382b
25	4696	32.1	-63 32	9.4	10.4	Ko	1	..	42486b	75	841	32.5	+76 46	10.3	10.9	G	1	..	38936i
26	3187	32.1	-69 49	8.86	9.2	A5	5	..	20544b	76	1416	32.5	+66 20	7.22	8.29	K2	5	..	37277i
27	2624	32.1	-71 15	8.0	8.4	F5	7	..	19966b	77	2267	32.5	+60 28	10.3	..	N	..	R	M
28	1026	32.1	-80 9	8.7	9.8	K2	2	..	42794b	78	3435	32.5	+48 13	8.7	8.7	Ao	2	..	38810i
29	2651	32.2	+53 14	8.1	8.2	A2	3	..	37351i	79	4154	32.5	+42 52	8.7	9.7	Ko	1	..	37913i
30	3877	32.2	+44 56	var.	var.	Mc	..	5,5 R	1592c	80	4209	32.5	+32 16	7.9	8.3	F5	3	5,3	37948i
31	4151	32.2	+42 26	8.1	8.2	A2	2	..	37913i	81	4117	32.5	+27 29	8.8	9.6	G5	1	..	38819i
32	4205	32.2	+41 29	7.7	8.5	G5	3	..	37913i	82	4706	32.5	+ 4 14	6.87	7.01	A5	8	..	38106i
33	4504	32.2	+31 39	var.	var.	Ma	1	5,1 R	38894i	83	4757	32.5	+ 0 49	8.9	9.3	F5	7	..	14204b
34	4828	32.2	+ 5 24	7.9	8.2	Fo	3	..	38106i	84	4241	32.5	+ 0 9	7.73	8.80	K2	8	..	14204b
35	4585	32.2	+ 3 59	9.0	9.5	F8	3	..	14204b	85	5587	32.5	- 2 48	9.1	9.7	Go	1	..	14195b
36	5632	32.2	-11 28	8.7	9.0	K5	4	..	39407b	86	5600	32.5	- 7 0	9.0	10.0	Ko	4	..	40603b
37	5977	32.2	-13 22	10.1	11.3	K5	1	..	39407b	87	5720	32.5	-10 3	8.0	8.1	A2	6	..	40603b
38	17028	32.2	-23 31	9.2	8.4	F2	7	..	40629b	88	6025	32.5	-15 26	9.9	10.5	Go	2	..	39407b
39	16667	32.2	-32 11	8.0	8.9	F8	6	..	40742b	89	18747	32.5	-30 5	7.65	8.6	A2	8	..	40742b
40	14881	32.2	-34 56	8.9	10.3	F5	2	..	40742b	90	13433	32.5	-50 6	10.4	10.6	Go	2	..	39682b
41	1415	32.3	+66 17	7.01	8.01	Ko	6	..	37277i	91	11909	32.5	-52 26	10.3	10.9	Go	1	..	39669b
42	3984	32.3	+43 59	8.7	8.7	Ao	2	..	37913i	92	9696	32.5	-56 47	10.2	10.5	Fo	2	..	39382b
43	4577	32.3	+40 59	8.6	9.8	K5	1	..	37913i	93	4697	32.5	-63 15	8.2	8.6	F5	7	..	42486b
44	4206	32.3	+32 47	7.38	8.38	Ko	3	..	37948i	94	2598	32.6	+57 1	8.7	8.7	B8	2	..	37351i
45	4505	32.3	+32 0	7.7	8.7	Ko	1	2,1	37948i	95	3562	32.6	+50 3	7.00	6.98	B9	7	..	38796i
46	4613	32.3	+11 16	7.20	7.20	Ao	8	..	38122i	96	3489	32.6	+48 11	8.3	8.3	Ao	3	..	38810i
47	4706	32.3	+ 8 14	8.5	9.7	K5	1	0,1	10143b	97	4155	32.6	+42 37	8.8	8.9	A2	1	..	37913i
48	5717	32.3	-10 27	9.0	9.5	F8	5	..	39407b	98	4307	32.6	+33 17	8.0	8.3	Fo	3	..	37948i
49	5901	32.3	-16 42	8.6	9.4	G5	8	..	39348b	99	4215	32.6	+26 55	8.7	9.9	K5	1	..	23009b
50	5980	32.3	-17 58	9.9	10.9	Ko	2	..	39348b	100	4971	32.6	+20 57	8.6	9.1	F8	1	..	38818i

THE HENRY DRAPER CATALOGUE.

205800

21^h 32^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	4867	32.6	+ 6 16	8.9	10.0	K2	2	..	10143b	51	4141	33.0	+29 2	8.0	8.5	F8	2	..	38811i
2	5597	32.6	- 5 41	8.6	9.4	G5	5	..	40603b	52	4827	33.0	+18 52	5.29	5.57	Fo	9	0,10	38818i
3	5788	32.6	- 9 9	8.6	8.6	Ao	7	..	40603b	53	4648	33.0	+14 37	7.9	8.2	F2	4	R	38122i
4	6086	32.6	-13 54	9.7	10.7	Ko	2	..	39407b	54	4243	33.0	+ 0 10	9.23	9.65	F5	4	..	10117b
5	14026	32.6	-46 33	10.2	9.8	B9	3	..	39682b	55	5588	33.0	- 2 44	8.8	9.6	G5	3	..	14195b
6	10120	32.6	-53 52	10.3	11.7	Ma	1	..	39669b	56	5605	33.0	- 6 58	9.9	10.0	A5	2	..	40603b
7	2983	32.7	+52 22	8.1	8.4	F2	2	..	38810i	57	5604	33.0	- 7 40	9.9	10.5	Go	2	..	40603b
8	3377	32.7	+50 14	7.22	7.20	B9	6	..	38796i	58	5792	33.0	- 9 42	8.46	9.02	Go	5	..	40603b
9	3385	32.7	+46 20	8.3	9.5	K5	1	..	37913i	59	6333	33.0	-17 19	8.2	9.2	Ko	7	..	39348b
10	4589	32.7	+10 45	8.1	8.9	G5	3	..	38122i	60	16677	33.0	-32 21	7.7	8.9	F5	7	..	40742b
11	4830	32.7	+ 6 10	6.34	6.34	Ao	10	R	38106i	61	14584	33.0	-44 17	9.6	9.8	Ao	3	..	41077b
12	4181	32.7	- 1 14	9.2	10.0	G5	1	..	14195b	62	14029	33.0	-46 46	9.1	9.2	Fo	5	..	39682b
13	5634	32.7	-10 54	9.2	9.5	Fo	6	..	39407b	63	9923	33.0	-57 26	9.8	11.0	K5	1	..	39382b
14	6046	32.7	-12 37	9.9	10.4	F8	2	..	39407b	64	9924	33.0	-57 41	9.3	9.9	Go	4	..	39382b
15	6047	32.7	-12 46	9.7	10.5	G5	4	..	39407b	65	7496	33.0	-60 46	10.6	11.1	F8	1	..	39382b
16	5980	32.7	-13 39	9.2	9.7	F8	4	..	39407b	66	4869	33.1	+ 6 44	8.7	9.7	Ko	3	..	14196b
17	17032	32.7	-23 45	9.7	9.6	A5	4	..	40629b	67	4587	33.1	+ 3 40	9.2	9.2	Ao	3	..	14204b
18	17391	32.7	-28 20	7.9	7.8	F5	8	..	41034b	68	5703	33.1	- 7 59	9.2	10.4	K5	2	..	40603b
19	15677	32.7	-33 48	8.8	10.7	G5	2	..	40742b	69	6089	33.1	-13 53	9.9	10.5	Go	3	..	39407b
20	14582	32.7	-44 46	10.2	10.9	F8	1	..	41077b	70	5903	33.1	-16 3	8.4	9.2	G5	5	..	39407b
21	757	32.8	+78 28	8.98	9.04	A2	1	..	38590i	71	6138	33.1	-19 8	8.6	8.7	Go	7	..	39348b
22	3103	32.8	+51 13	8.5	8.5	Ao	2	..	38796i	72	15163	33.1	-34 7	6.34	7.8	Ko	..	5,9	56,147
23	4355	32.8	+23 13	8.6	9.1	F8	1	..	38051i	73	14395	33.1	-37 17	10.1	10.3	Go	2	..	40903b
24	4750	32.8	+19 55	7.9	8.9	Ko	3	..	38818i	74	14402	33.1	-45 2	7.95	8.1	A3	6	0,7	39682b
25	4708	32.8	+ 4 29	9.2	10.0	G5	2	..	14204b	75	13964	33.1	-48 47	10.2	9.7	Go	3	..	39682b
26	5635	32.8	-11 21	9.2	9.8	Go	6	..	39407b	76	13015	33.1	-50 56	7.7	8.5	A5	8	..	41053b
27	6048	32.8	-12 29	8.4	9.4	Ko	6	..	39407b	77	11911	33.1	-52 48	6.28	7.2	F5	5	3,10	44240b
28	6088	32.8	-13 59	8.0	8.0	Ao	4	..	41980b	78	9699	33.1	-56 47	10.1	10.5	F5	3	..	39382b
29	6027	32.8	-15 21	7.14	7.92	G5	8	..	39407b	79	633	33.1	-84 25	7.65	7.4	B9	8	0,10	15173b
30	5983	32.8	-18 6	10.8	11.3	F8	2	..	39348b	80	4473	33.2	+34 54	7.27	8.27	Ko	4	..	37948i
31	17034	32.8	-23 35	9.5	9.7	G5	2	..	40629b	81	4309	33.2	+34 9	7.82	8.38	Go	3	..	37948i
32	15160	32.8	-34 47	9.43	10.3	F8	3	..	40742b	82	4356	33.2	+23 32	8.4	8.5	A3	3	..	38051i
33	7495	32.8	-60 28	10.0	10.5	F8	2	..	39382b	83	4244	33.2	- 0 47	8.9	9.5	Go	2	..	14195b
34	527	32.8	-85 0	8.5	9.5	Ko	7	2,2	21397b	84	5704	33.2	- 8 38	9.9	10.4	F8	2	..	40603b
35	4612	32.9	+39 58	5.09	5.23	A5	..	3,10	56,100	85	5637	33.2	-11 24	10.8	11.3	F8	2	..	39407b
36	4440	32.9	+24 53	8.6	9.7	K2	2	..	38051i	86	6051	33.2	-12 6	10.9	11.5	Go	1	..	39407b
37	4647	32.9	+14 46	7.53	8.53	Ko	6	..	38122i	87	6090	33.2	-14 0	9.7	10.3	Go	4	..	39407b
38	4861	32.9	+10 12	9.22	10.40	K5	1	..	14196b	88	6257	33.2	-20 4	7.24	7.7	F8	8	0,9	40629b
39	4725	32.9	+ 7 59	8.5	9.0	F8	5	..	14196b	89	15528	33.2	-24 54	7.63	9.0	K2	5	..	41034b
40	4182	32.9	- 1 12	9.2	9.3	A2	4	..	14195b	90	15165	33.2	-34 11	8.8	10.3	Ko	1	..	40742b
41	5498	32.9	- 4 2	9.2	10.2	Ko	2	..	10117b	91	14396	33.2	-37 35	8.0	8.8	Go	7	..	40903b
42	5602	32.9	- 6 54	10.1	10.9	G5	1	..	40603b	92	14662	33.2	-38 4	8.5	9.6	Ko	3	..	40903b
43	5636	32.9	-10 59	9.7	10.7	Ko	3	..	39407b	93	14364	33.2	-39 21	10.1	10.8	Ko	1	..	40903b
44	14440	32.9	-39 58	7.82	9.0	K5	5	..	40903b	94	14643	33.2	-43 29	9.1	10.4	Ko	2	..	41077b
45	14028	32.9	-46 29	9.3	9.5	Ao	5	..	39682b	95	2581	33.3	+54 22	7.9	8.0	A5	3	..	37351i
46	13962	32.9	-48 0	10.7	11.2	K2	1	..	39682b	96	3389	33.3	+46 59	8.7	9.3	Go	1	..	37913i
47	11910	32.9	-52 1	7.9	8.2	Fo	8	..	41053b	97	4977	33.3	+20 35	8.10	8.88	G5	3	..	38818i
48	7875	32.9	-57 53	7.3	8.4	Ko	2	..	44240b	98	4711	33.3	+ 4 54	8.9	9.2	Fo	5	..	14204b
49	1569	33.0	+65 8	7.93	7.93	Ao	6	..	37277i	99	5590	33.3	- 2 28	9.1	10.2	K2	2	..	14195b
50	2600	33.0	+57 1	8.8	9.2	F5	2	..	37351i	100	5795	33.3	- 9 34	10.1	10.6	F8	2	..	40603b

205900

21^h 33^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	5984	33.3	-17 50	10.1	10.7	Go	4	..	39348b	51	3380	33.7	+50 23	9.3	10.3	Ko	1	..	3881oi
2	5734	33.3	-21 57	9.9	10.5	F8	2	..	39687b	52	4558	33.7	+38 52	6.66	6.64	B9	6	..	38894i
3	5735	33.3	-22 10	7.70	8.5	Ko	8	..	40629b	53	4464	33.7	+29 25	8.1	8.1	Ao	3	..	3881ii
4	15730	33.3	-26 10	9.1	9.1	F8	4	..	41034b	54	4751	33.7	+13 14	7.6	8.7	K2	2	..	38122i
5	15550	33.3	-27 45	6.74	7.6	Go	9	..	41034b	55	5268	33.7	- 2 58	9.2	9.5	Fo	3	..	14195b
6	14897	33.3	-35 27	8.5	10.6	K5	1	..	40742b	56	5706	33.7	- 8 44	9.5	10.7	K5	3	3,1	39407b
7	13557	33.3	-49 30	10.4	10.9	Ko	1	..	39682b	57	5982	33.7	-12 48	9.7	10.3	Go	4	..	39407b
8	9926	33.3	-57 9	9.1	10.5	Ko	2	..	39382b	58	5906	33.7	-16 34	10.4	11.2	G5	3	..	39348b
9	4579	33.4	+26 6	9.1	9.2	A3	1	..	38819i	59	5737	33.7	-22 0	10.6	10.5	A2	1	..	39687b
10	4589	33.4	+ 3 49	8.5	9.0	F8	6	..	14204b	60	15555	33.7	-27 25	9.5	9.6	A3	3	..	41034b
11	5503	33.4	- 4 2	8.4	9.5	K2	3	..	14195b	61	15553	33.7	-27 47	9.7	9.6	A3	3	..	41034b
12	15168	33.4	-34 5	8.5	10.0	K2	2	..	40742b	62	15686	33.7	-33 12	8.5	9.5	K2	3	..	40742b
13	14645	33.4	-42 53	6.93	6.3	A3	10	..	41077b	63	14032	33.7	-46 19	10.0	10.4	Go	2	..	39682b
14	13558	33.4	-49 24	9.2	9.2	F2	6	..	39682b	64	9918	33.7	-54 16	10.3	11.7	Ma	..	..	M
15	2628	33.4	-71 1	9.1	10.3	K5	1	..	19966b	65	3381	33.8	+50 55	7.8	9.0	K5	1	..	3881oi
16	1229	33.5	+68 48	8.9	9.2	Fo	3	..	36199i	66	3382	33.8	+50 37	7.42	8.60	K5	2	0,2	38796i
17	2295	33.5	+58 16	8.1	9.1	Ko	1	..	38526i	67	4216	33.8	+32 40	7.58	8.58	Ko	2	..	37948i
18	3568	33.5	+50 4	8.00	8.00	Ao	2	..	38796i	68	4615	33.8	+17 33	8.7	9.2	F8	1	..	38818i
19	4584	33.5	+40 51	8.6	9.6	Ko	1	..	37913i	69	5593	33.8	- 2 1	9.7	10.3	Go	2	..	14195b
20	4221	33.5	+26 45	8.8	9.3	F8	2	..	2300ji	70	5799	33.8	- 9 19	10.5	11.6	K2	1	..	39407b
21	4865	33.5	+ 9 44	7.9	8.0	A5	5	..	38122i	71	6054	33.8	-12 42	9.9	10.0	A3	4	..	39407b
22	4707	33.5	+ 8 35	8.9	9.0	A3	3	0,2-	14196b	72	6094	33.8	-14 20	7.30	8.30	Ko	8	..	39407b
23	4727	33.5	+ 8 8	8.1	8.2	A2	7	..	14196b	73	6095	33.8	-14 30	8.2	9.3	K2	6	..	39407b
24	4834	33.5	+ 5 19	5.80	6.08	Fo	10	..	38106i	74	6140	33.8	-18 53	9.5	9.8	F2	5	..	39348b
25	5504	33.5	- 4 36	7.05	8.40	Ma	6	..	14195b	75	16685	33.8	-32 44	8.9	10.4	K5	1	..	40742b
26	5905	33.5	-15 54	8.4	9.0	Go	6	..	39407b	76	15173	33.8	-34 33	8.8	9.4	A3	4	..	40742b
27	17040	33.5	-23 23	11.1	10.8	Ko	2	..	39687b	77	14913	33.8	-36 17	8.1	9.1	F2	7	..	40903b
28	17041	33.5	-23 31	11.6	11.3	Go	1	..	39687b	78	14602	33.8	-40 56	9.1	9.9	G5	4	0,3	39674b
29	18752	33.5	-30 45	7.66	9.2	Ma	6	..	40742b	79	9654	33.8	-55 47	8.6	10.5	K2	5	..	39382b
30	14397	33.5	-37 6	8.6	9.4	F8	5	..	40903b	80	9701	33.8	-56 2	9.2	10.2	Go	4	..	39382b
31	14663	33.5	-38 5	9.5	10.5	Go	2	..	40903b	81	7877	33.8	-58 11	8.4	9.0	Ko	7	..	39382b
32	14366	33.5	-39 39	8.5	9.3	Ko	6	..	40903b	82	4159	33.8	-64 35	8.3	8.6	Fo	7	..	42486b
33	14647	33.5	-43 35	6.88	7.1	Ko	8	..	41077b	83	1531	33.8	-75 56	9.5	10.1	Go	3	..	19964b
34	14404	33.5	-45 7	10.0	10.4	F8	2	..	41077b	84	2583	33.9	+54 40	7.96	7.96	Ao	3	..	3735ii
35	9700	33.5	-56 11	6.42	7.9	Ko	5	5,10	44240b	85	4446	33.9	+23 10	8.8	8.8	A	1	..	38819i
36	6253	33.5	-62 1	9.6	10.8	K5	1	..	42486b	86	5722	33.9	- 9 57	9.26	9.68	F5	4	..	39407b
37	744	33.6	+81 45	9.6	9.6	Ao	2	..	37294i	87	5639	33.9	-10 54	9.9	10.7	G5	2	..	39407b
38	1329	33.6	+67 46	7.52	7.50	B9	8	..	37277i	88	5983	33.9	-13 32	9.7	10.2	F8	3	..	39407b
39	3889	33.6	+44 14	6.11	6.19	A3	..	0,8	1592c	89	5907	33.9	-16 19	10.9	11.4	F8	2	..	39348b
40	3989	33.6	+43 36	8.9	8.9	Ao	1	..	37913i	90	..	33.9	-18 10	..	..	Go	2	..	39348b
41	4215	33.6	+32 45	7.50	8.50	Ko	3	..	37948i	91	6142	33.9	-18 52	10.4	11.0	Go	4	..	39348b
42	4871	33.6	+ 6 37	9.2	9.7	F8	2	..	14196b	92	6141	33.9	-19 40	8.73	8.7	F2	7	..	39348b
43	5798	33.6	- 8 50	9.0	9.1	A3	4	..	40603b	93	14650	33.9	-43 5	9.6	10.1	Fo	2	..	41077b
44	5797	33.6	- 9 33	9.2	10.0	G5	3	..	40603b	94	14590	33.9	-44 51	9.10	10.1	K2	3	2,2	39682b
45	18754	33.6	-29 55	9.17	9.2	Fo	4	..	40742b	95	9655	33.9	-55 2	10.2	10.8	Go	2	..	39669b
46	10125	33.6	-53 0	10.0	10.5	F8	3	..	39669b	96	3396	34.0	+46 17	8.9	10.0	K2	1	..	37913i
47	1753	33.7	+63 17	7.81	7.81	Ao	4	..	37277i	97	4213	34.0	+41 26	8.7	8.7	Ao	1	..	37913i
48	2605	33.7	+57 8	8.3	8.2	B5	2	..	3735ii	98	4589	34.0	+40 38	7.42	8.60	K5	2	..	37913i
49	2655	33.7	+54 12	7.80	7.80	Ao	4	..	3735ii	99	4561	34.0	+38 32	8.8	8.8	Ao	2	..	38542i
50	2990	33.7	+52 56	7.52	7.52	Ao	5	..	3735ii	100	4830	34.0	+18 32	7.9	7.9	Ao	6	..	38818i

THE HENRY DRAPER CATALOGUE.

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21^h 34^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	4714	34.0	+ 4 51	9.2	9.3	A ₅	3	..	14204b	51	14036	34.3	-46 38	8.5	9.6	K ₀	4	..	39682b
2	4514	34.0	+ 1 28	9.9	10.0	A ₂	2	..	14204b	52	13885	34.3	-47 40	10.7	11.0	F ₅	1	..	39682b
3	5608	34.0	- 7 44	10.1	10.5	F ₅	2	..	40603b	53	528	34.3	-85 29	6.71	7.9	K ₀	3	0,9-	6472b
4	5724	34.0	-10 22	9.2	9.6	F ₅	5	..	39407b	54	2610	34.4	+55 19	8.91	8.91	A	2	R	37351i
5	5640	34.0	-11 1	6.18	7.18	K ₀	7	..	41980b	55	2611	34.4	+55 19	8.91	8.91	A	2	R	37351i
6	6338	34.0	-17 0	9.9	10.5	G ₀	3	..	39348b	56	4755	34.4	+20 9	7.95	8.37	F ₅	3	..	38818i
7	5986	34.0	-18 34	9.5	9.8	F ₀	5	..	39348b	57	4572	34.4	+16 53	8.9	9.9	K ₀	1	..	38818i
8	6062	34.0	-21 8	9.5	10.2	G ₅	4	..	39687b	58	4245	34.4	- 0 30	6.80	7.30	F ₈	8	3,7	14195b
9	14905	34.0	-35 1	9.5	10.3	G ₀	2	..	40742b	59	5643	34.4	-11 38	9.0	9.5	F ₈	3	..	39407b
10	14369	34.0	-39 20	8.8	9.6	G ₅	4	..	40903b	60	6096	34.4	-14 3	9.5	10.3	G ₅	1	..	39407b
11	2629	34.0	-71 53	9.5	10.3	G ₅	1	..	20544b	61	16763	34.4	-24 42	9.9	11.7	G ₅	3	..	39687b
12	3105	34.1	+51 12	8.3	9.3	K ₀	1	..	38810i	62	15537	34.4	-25 8	8.7	9.1	F ₈	4	..	41034b
13	4122	34.1	+27 14	8.6	8.7	A ₂	3	..	38819i	63	14906	34.4	-34 59	6.71	8.3	K ₀	8	..	40903b
14	4867	34.1	+ 9 25	7.7	8.7	K ₀	3	..	14196b	64	14653	34.4	-43 37	10.4	11.3	G ₀	1	..	39674b
15	4711	34.1	+ 8 38	8.3	9.5	K ₅	3	..	14196b	65	865	34.4	-82 35	9.0	9.5	F ₈	3	..	21397b
16	4591	34.1	+ 4 8	9.6	9.6	A ₀	2	..	14204b	66	4164	34.5	+42 51	7.8	8.8	K ₀	3	..	37913i
17	4592	34.1	+ 3 55	9.2	9.2	A ₀	3	..	14204b	67	4517	34.5	+ 1 48	5.33	6.33	K ₀	10	R	38106i
18	5800	34.1	- 9 39	10.8	11.8	K ₀	1	..	39407b	68	5595	34.5	- 2 19	9.2	10.3	K ₂	1	..	14195b
19	5725	34.1	-10 46	9.0	10.2	K ₅	3	..	39407b	69	5602	34.5	- 5 27	9.0	9.6	G ₀	3	..	40603b
20	15536	34.1	-25 40	8.1	9.1	K ₀	5	..	41034b	70	5709	34.5	- 8 41	8.8	8.9	A ₂	6	..	40603b
21	15690	34.1	-33 38	8.8	9.9	G ₅	2	..	40742b	71	6097	34.5	-14 9	11.0	11.0	A ₀	1	..	39407b
22	14652	34.1	-43 29	10.4	11.0	G ₀	2	..	39674b	72	6065	34.5	-21 23	10.1	10.2	F ₅	3	..	39687b
23	14034	34.1	-46 10	10.4	10.7	G ₀	1	..	39682b	73	14448	34.5	-40 13	9.5	9.9	G ₀	4	..	39674b
24	13884	34.1	-47 6	9.6	10.9	K ₀	3	..	39682b	74	13969	34.5	-48 3	10.7	10.6	G ₀	1	..	39682b
25	13560	34.1	-49 10	7.6	8.2	G ₀	8	..	39682b	75	7879	34.5	-58 13	9.9	10.2	F ₂	1	..	39382b
26	1754	34.2	+64 5	8.7	8.7	B ₉	2	..	37277i	76	7724	34.5	-59 17	8.7	9.7	K ₀	4	..	39382b
27	4445	34.2	+25 4	6.30	7.08	G ₅	7	..	38051i	77	3188	34.5	-69 39	8.8	9.6	G ₅	2	..	20428b
28	4359	34.2	+23 57	8.0	8.0	A ₀	5	..	38051i	78	2166	34.6	+61 52	7.7	8.7	K ₀	4	2,4	37277i
29	4471	34.2	+16 2	9.2	10.3	K ₂	1	..	38818i	79	2271	34.6	+60 38	8.06	8.12	A ₂	3	2,3	38526i
30	4595	34.2	+11 11	8.0	8.8	G ₅	3	..	38122i	80	2300	34.6	+58 18	7.8	7.8	A ₀	5	..	37351i
31	5708	34.2	- 8 40	9.2	10.0	G ₅	3	..	40603b	81	2610	34.6	+57 7	8.7	8.7	A ₀	1	..	38526i
32	5985	34.2	-13 4	8.4	9.0	G ₀	6	..	39407b	82	4581	34.6	+25 51	8.7	9.7	K ₀	1	..	38819i
33	6339	34.2	-17 1	10.1	11.1	K ₀	2	..	39348b	83	4593	34.6	+21 42	9.0	9.1	A ₃	1	..	38818i
34	17044	34.2	-23 39	8.9	8.4	A ₀	7	..	40629b	84	4717	34.6	+ 4 49	8.5	9.6	K ₂	3	..	14204b
35	17045	34.2	-23 47	10.4	10.7	A ₂	3	..	39687b	85	5270	34.6	- 3 17	10.1	11.2	K ₂	1	..	10117b
36	14669	34.2	-38 10	8.9	10.5	G ₅	2	..	40903b	86	5804	34.6	- 9 9	9.9	10.5	G ₀	1	..	40603b
37	14604	34.2	-40 55	9.5	10.8	K ₅	2	0,1	39674b	87	5805	34.6	- 9 42	9.01	10.08	K ₂	2	..	40603b
38	14605	34.2	-41 38	7.04	7.9	K ₀	7	0,9	41077b	88	6340	34.6	-17 7	3.80	4.08	Fop	..	R	3044c
39	13563	34.2	-49 16	10.0	11.0	K ₂	2	..	39682b	89	5989	34.6	-18 23	9.7	10.5	G ₅	4	..	39348b
40	2659	34.3	+53 36	6.20	6.98	G ₅	7	..	37351i	90	6145	34.6	-18 53	8.7	9.2	F ₈	7	..	39348b
41	3505	34.3	+48 2	7.9	7.9	B ₈	5	..	38810i	91	6144	34.6	-19 37	10.5	10.7	A ₀	2	..	39348b
42	4591	34.3	+40 31	8.5	8.6	A ₂	1	..	37913i	92	17401	34.6	-28 32	9.9	11.2	G ₅	2	..	41069b
43	4754	34.3	+19 48	5.76	6.04	F ₀	8	0,9	38818i	93	14408	34.6	-37 32	9.1	10.6	G ₅	1	..	40903b
44	5802	34.3	- 9 32	9.0	9.1	A ₂	5	..	40603b	94	14655	34.6	-43 46	9.8	11.0	K ₀	2	..	39674b
45	5642	34.3	-11 40	10.1	10.9	G ₅	2	..	39407b	95	13971	34.6	-47 57	9.3	10.0	K ₂	3	..	39682b
46	5909	34.3	-16 28	9.7	10.7	K ₀	3	..	39348b	96	721	34.6	-82 53	7.03	7.4	F ₅	..	0,8	56,147
47	5988	34.3	-18 29	10.5	11.6	K ₂	1	..	39348b	97	1755	34.7	+63 32	8.7	8.7	A	1	..	37277i
48	6259	34.3	-20 12	10.1	10.5	G ₅	2	..	39348b	98	3613	34.7	+45 50	8.2	8.3	A ₂	4	1,4	37913i
49	6260	34.3	-20 41	9.5	10.5	K ₅	3	..	39348b	99	4981	34.7	+20 53	8.4	9.2	G ₅	1	..	38818i
50	5739	34.3	-22 37	8.8	9.3	G ₀	5	..	40629b	100	4982	34.7	+20 16	8.75	8.81	A ₂	1	..	38818i

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21^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	4518	34.7	+ 1 42	7.9	8.9	Ko	7	2,2	14204b	51	13974	35.0	-48 34	9.2	9.1	F5	6	..	39682b
2	5799	34.7	- 5 51	9.5	9.5	Ao	3	..	40603b	52	13568	35.0	-49 1	10.0	10.8	K5	1	..	39682b
3	5644	34.7	-11 47	9.5	9.5	Ao	4	..	39407b	53	842	35.1	+76 43	10.0	10.0	A	1	..	38936i
4	6030	34.7	-15 26	9.5	10.3	G5	1	..	39407b	54	4756	35.1	+13 19	8.3	9.1	G5	2	..	38122i
5	5911	34.7	-15 58	9.9	10.9	Ko	1	..	39348b	55	4714	35.1	+ 8 44	6.78	6.78	Ao	8	..	38122i
6	5990	34.7	-18 33	10.4	11.4	Ko	2	..	39348b	56	4841	35.1	+ 5 14	8.71	9.13	F5	4	..	10143b
7	17047	34.7	-23 37	Cl.	Cl.	Con.	5	R	40629b	57	5611	35.1	- 6 50	8.2	9.6	Ma	4	0,3	40605b
8	16764	34.7	-24 44	10.9	11.7	Ao	2	..	39687b	58	5612	35.1	- 7 16	8.2	9.0	G5	5	..	40603b
9	17936	34.7	-29 41	8.7	10.4	Ko	1	..	41069b	59	5729	35.1	-10 27	8.6	9.6	Ko	5	..	39407b
10	3452	34.8	+48 59	8.3	8.3	Ao	3	..	38810i	60	6343	35.1	-17 14	8.6	9.6	Ko	5	..	39348b
11	3451	34.8	+48 16	7.7	8.9	K5	2	..	38810i	61	16696	35.1	-32 22	8.0	9.3	K2	4	..	40742b
12	4599	34.8	+35 56	8.2	8.5	Fo	3	..	37948i	62	13890	35.1	-47 25	10.0	11.3	G5	1	..	39682b
13	4522	34.8	+31 15	8.2	8.7	F8	4	..	38099i	63	7880	35.1	-58 4	8.9	9.0	G5	7	..	39382b
14	4361	34.8	+24 2	7.21	8.28	K2	3	..	38051i	64	7499	35.1	-60 26	9.3	9.3	Go	4	..	39382b
15	4878	34.8	+ 6 21	8.7	8.7	Ao	5	..	14196b	65	2169	35.2	+61 38	4.87	4.68	B2p	..	3,8R	56,100
16	5728	34.8	-10 14	8.0	8.5	F8	8	..	39407b	66	3003	35.2	+53 8	7.06	7.34	Fo	6	..	37351i
17	5645	34.8	-11 15	8.6	9.6	Ko	5	..	39407b	67	3995	35.2	+43 54	9.0	9.0	Ao	1	..	37913i
18	17938	34.8	-29 1	8.9	10.1	F8	3	..	41069b	68	4474	35.2	+29 42	8.6	8.7	A5	3	..	33649i
19	15577	34.8	-42 53	10.4	11.9	F8	2	..	39674b	69	4440	35.2	+24 30	8.7	9.7	Ko	2	..	38819i
20	10126	34.8	-53 32	8.1	10.2	K5	2	..	41053b	70	4833	35.2	+18 47	8.5	9.7	K5	1	..	38818i
21	3579	34.9	+49 20	7.07	7.85	G5	4	0,4	38810i	71	4871	35.2	+ 9 32	8.6	9.0	F5	3	..	14196b
22	4314	34.9	+33 29	9.3	9.4	A5	2	..	33649i	72	5600	35.2	- 2 28	8.7	9.3	Go	3	..	14195b
23	4495	34.9	+30 19	8.71	10.06	Ma	..	..	M	73	5613	35.2	- 7 26	7.01	8.01	Ko	7	..	40603b
24	4582	34.9	+26 8	8.4	9.4	Ko	1	..	38819i	74	5731	35.2	-10 40	8.7	8.7	Ao	6	..	39407b
25	4619	34.9	+17 31	8.5	8.5	Ao	3	..	38122i	75	6033	35.2	-14 50	9.16	9.44	Fo	7	..	39407b
26	4718	34.9	+ 4 47	8.9	9.3	F5	4	..	14204b	76	6344	35.2	-17 20	9.9	11.0	K2	1	..	39348b
27	5509	34.9	- 4 30	8.8	9.2	F5	3	..	14195b	77	6067	35.2	-21 31	9.9	9.9	F5	4	..	39687b
28	6066	34.9	-21 43	9.7	9.7	Go	4	..	39687b	78	17050	35.2	-23 14	10.4	9.7	F5	3	..	40629b
29	18402	34.9	-31 7	8.9	8.9	Fo	5	..	40742b	79	16768	35.2	-24 15	9.4	9.7	Fo	5	..	40629b
30	18401	34.9	-31 30	8.9	9.9	K5	2	..	40742b	80	15745	35.2	-26 17	8.3	9.4	Ko	4	..	41034b
31	14910	34.9	-34 58	8.15	9.8	Mb	3	..	40903b	81	14930	35.2	-36 2	7.03	8.5	Ko	9	..	40903b
32	13972	34.9	-48 21	9.6	10.3	K2	2	..	39682b	82	3440	35.2	-68 31	7.10	9.2	Ma	6	..	20428b
33	9660	34.9	-55 2	10.2	11.0	G5	1	..	39669b	83	2614	35.3	+56 32	8.1	8.1	B9	4	E	37351i
34	4699	34.9	-63 8	9.2	10.4	K5	2	..	42486b	84	3109	35.3	+52 3	8.1	8.1	Ao	2	..	38796i
35	1332	35.0	+67 44	8.5	8.5	Ao	3	2,3	38573i	85	3996	35.3	+43 44	8.8	8.9	A5	1	..	37913i
36	1613	35.0	+65 37	8.2	9.2	Ko	1	..	37277i	86	4597	35.3	+ 3 17	8.3	8.7	F5	2	..	38106i
37	4496	35.0	+31 5	8.1	8.6	F8	1	..	38099i	87	5272	35.3	- 2 58	7.8	9.0	K5	4	..	14195b
38	4755	35.0	+14 8	8.9	9.7	G5	1	..	38122i	88	5608	35.3	- 4 54	8.70	9.88	K5	2	..	14195b
39	4597	35.0	+10 33	9.2	9.2	Ao	3	..	14196b	89	5647	35.3	-10 56	9.2	10.2	Ko	2	..	39407b
40	4760	35.0	+ 0 43	8.9	10.1	K5	4	..	14204b	90	6034	35.3	-15 9	9.5	10.3	G5	2	..	39407b
41	6057	35.0	-11 52	9.9	10.7	G5	2	..	39407b	91	5914	35.3	-15 52	9.9	11.0	K2	1	..	39348b
42	5988	35.0	-12 59	10.1	11.1	Ko	2	..	39407b	92	5742	35.3	-22 38	9.2	10.5	Ko	3	..	39687b
43	5913	35.0	-15 55	9.7	10.7	Ko	2	..	39348b	93	15580	35.3	-42 5	9.8	10.8	F5	3	..	39674b
44	5992	35.0	-18 3	9.1	8.9	B3	6	..	39348b	94	14042	35.3	-46 12	8.0	8.6	A5	6	..	39682b
45	5991	35.0	-18 20	10.4	10.5	A2	4	..	39348b	95	613	35.4	+83 24	8.8	9.1	Fo	3	..	37294i
46	6146	35.0	-19 21	7.39	8.5	K5	7	..	39348b	96	4222	35.4	+41 34	9.1	9.4	Fo	2	5,1	33688i
47	16766	35.0	-24 21	8.1	10.0	K5	4	..	40629b	97	4627	35.4	+40 11	8.07	8.07	Ao	3	..	37913i
48	18764	35.0	-30 12	8.3	9.6	Ko	4	..	41069b	98	4476	35.4	+29 28	8.2	8.3	A2	2	..	38811i
49	14928	35.0	-36 6	8.6	8.8	Fo	6	..	40903b	99	4365	35.4	+23 30	9.0	10.0	Ko	1	..	38819i
50	14412	35.0	-45 10	9.8	10.1	Go	3	..	41077b	100	4880	35.4	+ 6 49	9.2	9.6	F5	2	..	14196b

THE HENRY DRAPER CATALOGUE.

206200

21^h 35^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	5512	35.4	— 4 1	9.0	9.8	G5	3	..	10117b	51	6068	35.7	— 21 24	10.5	10.8	F8	1	..	39687b
2	5614	35.4	— 7 29	10.4	11.0	Go	1	..	40603b	52	15706	35.7	— 32 59	6.98	8.0	Ko	8	..	40742b
3	6099	35.4	— 14 3	9.5	9.8	Fo	3	..	39407b	53	14934	35.7	— 36 1	8.9	9.2	Fo	5	..	40903b
4	6147	35.4	— 19 45	9.9	10.7	Ko	3	..	39348b	54	15583	35.7	— 41 59	9.3	10.6	Ko	2	..	39674b
5	6262	35.4	— 20 12	10.4	10.8	G5	2	..	39348b	55	13446	35.7	— 50 33	7.6	8.2	G5	7	..	41053b
6	16770	35.4	— 24 53	9.20	10.0	F5	4	..	40629b	56	7884	35.7	— 58 38	9.2	9.3	A2	4	..	39382b
7	15748	35.4	— 26 5	9.7	10.6	Ko	2	..	41034b	57	6577	35.7	— 60 58	9.9	10.7	G5	2	..	39382b
8	14043	35.4	— 46 13	9.6	11.0	K2	1	..	39682b	58	2630	35.7	— 71 42	9.1	9.9	G5	1	..	20544b
9	3825	35.4	— 67 16	10.2	10.6	F5	1	..	20428b	59	3112	35.8	+ 51 54	7.48	7.48	Ao	5	..	38796i
10	3190	35.4	— 69 21	9.2	10.3	K2	1	..	20428b	60	4601	35.8	+ 41 8	8.8	8.9	A2	1	..	37913i
11	972	35.4	— 81 41	8.6	9.2	Go	4	..	21397b	61	4567	35.8	+ 39 3	6.77	6.83	A2	7	..	38542i
12	3618	35.5	+ 45 43	7.58	7.56	B9	5	0,6	37913i	62	4599	35.8	+ 3 25	7.12	8.30	K5	3	..	38106i
13	4498	35.5	+ 30 41	8.5	9.0	F8	2	..	38099i	63	5611	35.8	— 5 11	9.2	9.2	Ao	4	..	14195b
14	4391	35.5	+ 3 1	9.2	9.8	Go	2	..	14204b	64	5615	35.8	— 7 40	9.2	10.2	Ko	3	..	40603b
15	4393	35.5	+ 2 45	9.2	10.4	K5	2	..	14204b	65	5990	35.8	— 12 51	9.9	11.0	K2	2	..	39407b
16	4762	35.5	+ 0 46	9.6	10.7	K2	3	..	14204b	66	5745	35.8	— 22 23	7.85	8.4	Ko	8	..	40629b
17	5915	35.5	— 16 5	11.0	11.0	Ao	1	..	39348b	67	2617	35.9	+ 57 2	5.64	..	Oe5	..	R	3031c
18	6148	35.5	— 19 9	10.1	10.5	Go	2	..	39348b	68	3403	35.9	+ 46 45	7.71	8.71	Ko	3	0,3	37913i
19	9936	35.5	— 57 14	9.3	10.5	F8	2	..	39382b	69	4486	35.9	+ 34 15	9.1	9.1	Ao	2	..	38099i
20	7882	35.5	— 58 51	9.3	10.7	Ko	2	..	39382b	70	4764	35.9	+ 0 50	10.2	10.3	A3	2	..	14204b
21	7501	35.5	— 60 27	9.3	9.6	Fo	4	..	39382b	71	4191	35.9	— 1 42	9.57	9.57	Ao	3	..	14195b
22	2612	35.6	+ 55 20	7.91	7.91	Ao	4	..	37351i	72	6101	35.9	— 14 23	9.1	9.4	Fo	6	..	39407b
23	4172	35.6	+ 42 50	8.6	8.7	A2	1	R	37913i	73	6069	35.9	— 21 45	9.5	9.9	G5	4	..	39687b
24	4224	35.6	+ 41 16	8.1	9.1	Ko	5	R	33688i	74	5746	35.9	— 22 7	7.85	9.0	K2	6	..	40629b
25	4225	35.6	+ 41 16	8.7	9.7	Ko	2	..	38819i	75	14683	35.9	— 38 9	8.8	10.0	Ko	4	..	40903b
26	4366	35.6	+ 23 53	9.3	10.3	Ko	1	..	38818i	76	14616	35.9	— 41 34	9.1	9.4	Ko	4	2,3	39674b
27	4575	35.6	+ 16 52	8.5	9.6	K2	1	..	38122i	77	15586	35.9	— 42 12	10.0	11.7	K2	1	..	39674b
28	4872	35.6	+ 10 10	7.10	8.10	Ko	6	..	40603b	78	13898	35.9	— 46 53	11.7	11.0	Go	1	..	39682b
29	5809	35.6	— 9 36	8.0	8.8	G5	6	..	39407b	79	13036	35.9	— 51 3	9.6	10.6	Ko	3	..	39669b
30	5734	35.6	— 10 40	9.7	9.8	A2	4	..	39348b	80	4002	36.0	+ 43 59	6.70	6.68	B9	8	..	37913i
31	5994	35.6	— 18 0	9.5	10.5	Ko	3	..	39348b	81	4368	36.0	+ 23 48	8.6	9.7	K2	1	..	38819i
32	6264	35.6	— 20 8	9.9	11.2	Ko	2	..	39348b	82	4765	36.0	+ 0 52	8.5	8.9	F5	8	3,3	14204b
33	6263	35.6	— 20 48	10.1	10.5	G5	3	..	39687b	83	5613	36.0	— 5 14	8.6	9.6	Ko	4	..	14195b
34	15569	35.6	— 27 26	9.9	11.4	Mb	..	..	M	84	5649	36.0	— 11 47	10.8	11.2	F5	1	..	39407b
35	15705	35.6	— 33 2	9.5	9.6	K2	1	..	40742b	85	6061	36.0	— 11 56	10.4	11.0	Go	1	..	39407b
36	14614	35.6	— 41 8	8.8	9.5	Ko	5	0,4	39674b	86	6060	36.0	— 12 13	9.5	10.3	G5	4	..	39407b
37	15582	35.6	— 41 59	10.2	10.9	Go	1	..	39674b	87	6059	36.0	— 12 32	10.1	11.1	Ko	1	..	39407b
38	11917	35.6	— 52 39	9.1	10.0	F8	3	..	41053b	88	6037	36.0	— 15 18	7.10	7.38	Fo	5	..	41980b
39	7726	35.6	— 59 28	9.6	10.4	G5	2	..	39382b	89	5917	36.0	— 16 5	10.1	10.6	F8	2	..	39348b
40	722	35.6	— 83 11	5.38	6.1	Go	..	..	56,147	90	6070	36.0	— 21 1	9.2	9.7	F8	4	..	39687b
41	722	35.6	— 83 11	5.38	6.1	A3	..	R	56,147	91	15545	36.0	— 25 33	6.49	8.1	Ko	10	..	41034b
42	1574	35.7	+ 65 12	8.30	9.30	Ko	2	..	37277i	92	14424	36.0	— 37 30	8.5	9.7	Ko	5	..	40903b
43	1575	35.7	+ 64 55	6.95	7.95	Ko	3	..	37277i	93	13899	36.0	— 47 46	10.4	11.3	K2	1	..	39682b
44	2671	35.7	+ 53 20	8.1	8.4	F2	3	..	37351i	94	4603	36.1	+ 35 58	8.0	8.8	G5	2	..	37948i
45	3895	35.7	+ 44 44	9.6	11.0	Mb	..	..	M	95	4321	36.1	+ 33 46	8.6	8.7	A5	3	..	38099i
46	3999	35.7	+ 43 59	8.5	8.9	F5	3	..	25984i	96	4460	36.1	+ 22 44	8.2	9.4	K5	1	..	38819i
47	4450	35.7	+ 24 32	8.6	9.6	Ko	1	..	38819i	97	4576	36.1	+ 16 15	9.2	10.2	Ko	1	..	38818i
48	4522	35.7	+ 1 51	9.2	10.2	Ko	3	..	14204b	98	4722	36.1	+ 4 33	7.12	7.26	A5	6	..	38106i
49	5735	35.7	— 10 39	9.5	10.3	G5	3	..	39407b	99	4600	36.1	+ 3 32	9.2	10.3	K2	1	..	14204b
50	5648	35.7	— 11 14	8.6	8.9	Fo	6	..	39407b	100	5737	36.1	— 10 6	9.9	10.9	Ko	3	..	39407b

206300

21^h 36^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	6102	36.1	-14 29	5.28	6.06	G5	..	5,8	56,147	51	4600	36.1	+11 12	8.5	8.9	F5	3	..	38122i
2	18407	36.1	-31 43	8.5	8.4	F5	8	..	40742b	52	5603	36.4	- 2 23	8.6	9.1	F8	3	..	14195b
3	14618	36.1	-41 39	8.3	8.5	Go	5	2,7	41077b	53	6038	36.4	-15 33	9.5	10.0	F8	3	..	39407b
4	13573	36.1	-49 50	9.8	10.8	K2	2	..	39682b	54	6349	36.4	-17 40	7.26	8.26	Ko	9	..	39348b
5	13039	36.1	-51 26	9.2	10.3	K5	2	..	39682b	55	6149	36.4	-19 46	10.4	11.3	K2	1	..	39348b
6	13040	36.1	-51 33	10.2	10.3	F8	2	..	39669b	56	17057	36.4	-23 43	5.32	7.3	Ko	..	0,10	56,147
7	9922	36.1	-54 51	9.3	10.5	F8	4	..	39669b	57	16779	36.4	-24 2	10.2	11.2	F8	2	..	39687b
8	4701	36.1	-63 52	8.8	9.2	F5	6	..	42486b	58	17409	36.4	-27 55	8.5	9.7	Ko	3	..	41034b
9	1028	36.1	-80 50	8.0	9.2	K5	7	..	21397b	59	14423	36.4	-45 24	9.6	10.1	F5	4	3,2	39674b
10	724	36.1	-83 30	9.5	9.8	F2	4	..	21397b	60	13902	36.4	-47 50	9.8	10.7	K2	1	..	39682b
11	1759	36.2	+63 56	7.42	8.60	K5	3	..	37277i	61	11921	36.4	-52 33	10.3	10.8	F8	2	..	39669b
12	3457	36.2	+48 41	7.26	8.33	K2	5	..	38810i	62	827	36.5	+78 10	var.	var.	Nc	..	R	M
13	4835	36.2	+18 48	8.1	8.2	A2	3	E	38122i	63	3005	36.5	+52 57	8.2	8.2	Ao	3	..	3735ii
14	4834	36.2	+18 20	9.2	10.3	K2	1	..	38818i	64	3403	36.5	+51 6	8.3	8.4	A2	3	..	38810i
15	4599	36.2	+10 49	9.2	10.3	K2	1	..	14196b	65	3590	36.5	+49 14	7.16	7.14	B9	7	..	38810i
16	5991	36.2	-13 27	9.9	10.4	F8	1	..	39407b	66	4230	36.5	+32 21	8.0	9.2	K5	1	..	38099i
17	6266	36.2	-20 15	7.06	8.4	Ko	4	0,9	41861b	67	4599	36.5	+21 46	7.38	8.56	K5	2	..	38819i
18	5747	36.2	-22 38	10.4	10.7	Go	1	..	39687b	68	5740	36.5	-10 32	9.9	10.9	Ko	1	..	39407b
19	15547	36.2	-25 6	8.25	9.1	Ko	4	..	41034b	69	5993	36.5	-12 51	9.7	10.0	F2	4	..	39407b
20	18779	36.2	-30 8	8.7	10.4	Ko	1	..	41069b	70	15592	36.5	-42 39	9.8	10.6	G5	2	..	39674b
21	14598	36.2	-44 40	9.1	9.6	G5	3	..	41077b	71	14667	36.5	-43 14	10.2	11.3	Ko	1	..	39674b
22	13979	36.2	-47 57	9.8	10.0	Go	4	..	39682b	72	13450	36.5	-49 59	9.76	10.8	K2	1	..	39682b
23	11919	36.2	-52 41	9.3	9.7	F5	3	..	41053b	73	4162	36.6	+28 53	8.0	8.6	G	1	..	38811i
24	7885	36.2	-58 14	8.5	8.7	Fo	7	..	39382b	74	4237	36.6	+26 18	7.43	8.21	G5	5	..	38819i
25	6258	36.2	-62 7	9.1	10.2	K2	2	..	42486b	75	4661	36.6	+12 17	8.4	9.5	K2	2	..	38122i
26	723	36.2	-83 52	9.5	10.1	G	1	..	21397b	76	5605	36.6	- 2 10	9.2	10.0	G5	1	..	14195b
27	2276	36.3	+61 6	8.5	..	Oe5	3	R	31321i	77	6065	36.6	-12 42	8.0	8.1	A2	2	..	41980b
28	2359	36.3	+57 25	8.3	9.3	Ko	3	..	37351i	78	14621	36.6	-41 47	10.1	10.0	Go	3	0,2	39674b
29	3625	36.3	+45 49	8.7	8.7	Ao	2	..	37913i	79	13982	36.6	-48 38	8.1	8.5	A5	7	..	39682b
30	4177	36.3	+42 49	5.35	6.53	K5	7	..	37913i	80	9668	36.6	-55 33	10.3	10.8	F8	3	..	39669b
31	4323	36.3	+33 46	8.7	9.3	Go	1	..	38099i	81	9939	36.6	-57 49	7.2	8.3	Ko	8	..	39382b
32	4161	36.3	+28 18	7.33	8.11	G5	4	..	38811i	82	..	36.6	-65 30	..	..	Ro	..	..	M
33	4525	36.3	+ 1 45	9.9	11.0	K2	3	..	14204b	83	2680	36.7	+53 31	7.7	7.6	B5	4	..	37351i
34	4192	36.3	- 1 39	9.37	10.44	K2	1	..	14195b	84	4502	36.7	+31 7	8.4	8.8	F5	4	..	38099i
35	5739	36.3	- 9 51	9.11	9.53	F5	5	..	39407b	85	4481	36.7	+29 51	7.36	8.43	K2	2	..	38811i
36	6062	36.3	-12 11	9.1	10.1	Ko	5	..	39407b	86	4837	36.7	+18 15	8.7	9.7	Ko	2	..	38818i
37	6103	36.3	-14 39	9.11	9.39	Fo	6	..	39407b	87	4847	36.7	+ 5 58	8.3	9.1	G5	5	5,4	14204b
38	6348	36.3	-17 44	10.4	10.8	F5	2	..	39348b	88	6067	36.7	-11 58	10.8	11.6	G5	1	..	39407b
39	6267	36.3	-19 49	10.6	11.3	G5	1	..	39348b	89	6040	36.7	-15 5	9.2	10.2	Ko	4	..	39407b
40	15756	36.3	-26 19	7.50	8.8	Ma	5	..	41034b	90	6352	36.7	-17 26	9.7	10.3	Go	3	..	39348b
41	17407	36.3	-28 8	7.7	8.6	Ko	7	..	41034b	91	5749	36.7	-22 13	9.2	9.7	G5	3	..	39687b
42	15711	36.3	-32 57	7.18	8.3	K2	7	..	40742b	92	5748	36.7	-22 43	10.1	10.7	Go	2	..	39687b
43	14686	36.3	-38 23	7.35	7.5	Fo	9	..	40903b	93	18414	36.7	-31 30	9.7	9.3	Go	3	..	40742b
44	13576	36.3	-48 53	9.8	9.5	Go	5	..	39682b	94	14940	36.7	-36 2	8.1	9.7	Ko	4	..	40903b
45	7886	36.3	-58 21	8.5	9.0	Go	6	..	39382b	95	14601	36.7	-43 57	6.80	7.0	Go	9	2,10	39674b
46	6578	36.3	-61 51	8.9	9.6	K5	2	..	42486b	96	13452	36.7	-50 5	9.6	10.1	K2	3	..	39682b
47	1234	36.4	+68 54	8.9	9.5	Go	2	5,1	38573i	97	6259	36.7	-62 34	7.24	7.5	Fo	8	..	42486b
48	2590	36.4	+54 55	7.66	8.66	Ko	4	..	37351i	98	2631	36.7	-71 17	9.4	9.8	F5	3	..	20544b
49	3401	36.4	+51 1	6.78	7.85	K2	4	..	38810i	99	2632	36.7	-71 28	6.18	6.1	B8	..	..	56,147
50	3589	36.4	+49 46	9.3	9.4	A2	1	..	38810i	100	4492	36.8	+34 38	8.0	9.0	Ko	1	..	38099i

THE HENRY DRAPER CATALOGUE

206400

21^h 36^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	4493	36.8	+34 13	7.22	8.29	K2	6	0,4	38099i	51	6354	37.1	-17 1	9.2	10.2	Ko	3	..	39348b
2	4324	36.8	+33 54	8.4	8.8	F5	2	..	38099i	52	6355	37.1	-17 15	9.5	10.1	Go	4	..	39348b
3	4600	36.8	+21 29	6.94	6.94	Ao	7	..	38819i	53	6152	37.1	-19 19	4.82	6.3	G5	7	5,R	10108b
4	4249	36.8	- 0 6	7.67	8.09	F5	6	0,3	14195b	54	15717	37.1	-33 5	9.1	9.5	F2	2	..	40742b
5	5609	36.8	- 2 36	8.8	9.3	F8	3	..	14195b	55	15716	37.1	-33 43	8.8	9.8	G5	3	..	40742b
6	5801	36.8	- 6 22	9.1	9.7	Go	1	..	40603b	56	14946	37.1	-36 5	9.9	10.3	A5	2	..	40903b
7	5743	36.8	-10 25	11.0	11.8	G5	1	..	39407b	57	14606	37.1	-44 46	10.4	11.0	F8	2	..	39674b
8	5742	36.8	-10 40	10.5	11.6	K2	1	..	39407b	58	R	37.1	-53 11	var.	var.	Md	2	..	39669b
9	6069	36.8	-12 3	10.1	11.1	Ko	2	..	39407b	59	9671	37.1	-55 31	7.8	9.0	K2	4	..	41053b
10	6070	36.8	-12 9	9.9	9.4	F8	4	..	39407b	60	926	37.2	+74 46	7.92	7.92	Ao	5	..	38025i
11	5996	36.8	-12 49	10.8	11.8	Ko	1	..	39407b	61	4608	37.2	+40 49	8.6	8.6	Ao	3	..	37913i
12	6041	36.8	-15 6	10.1	10.9	G5	1	..	39407b	62	4576	37.2	+39 1	7.8	8.8	Ko	2	..	38542i
13	6353	36.8	-17 20	9.5	10.1	Go	4	..	39348b	63	4646	37.2	+36 13	8.4	9.6	K5	2	..	38099i
14	15714	36.8	-33 6	9.5	9.5	Go	2	..	40742b	64	4663	37.2	+12 19	8.7	8.8	A3	2	..	38122i
15	15594	36.8	-42 20	10.2	10.3	F8	2	..	39674b	65	4877	37.2	+ 9 32	8.5	9.6	K2	2	..	14196b
16	15595	36.8	-42 46	10.2	10.9	Go	1	..	39674b	66	4734	37.2	+ 7 57	8.5	9.6	K2	2	..	14196b
17	4658	36.9	+14 13	8.5	8.6	A2	3	..	38122i	67	4726	37.2	+ 4 22	7.46	8.53	K2	3	..	38106i
18	4883	36.9	+ 6 54	8.5	8.9	F5	3	..	14196b	68	4528	37.2	+ 1 56	9.2	9.8	Go	4	..	14204b
19	5812	36.9	- 9 11	8.6	9.1	F8	4	..	40603b	69	5815	37.2	- 8 55	8.2	8.6	F5	6	..	40603b
20	5995	36.9	-17 51	10.5	11.5	Ko	1	0,1	39397b	70	5745	37.2	-10 22	9.2	10.2	Ko	5	..	39407b
21	15581	36.9	-27 26	8.9	9.4	A3	3	..	41034b	71	6074	37.2	-12 30	9.1	10.1	Ko	5	..	39407b
22	18787	36.9	-30 48	8.9	9.6	Go	4	..	41069b	72	6042	37.2	-15 14	9.2	9.8	Go	4	..	39407b
23	14604	36.9	-43 54	9.8	9.8	Go	2	2,2	41077b	73	6268	37.2	-19 50	10.1	10.5	F8	2	..	39348b
24	14603	36.9	-44 26	10.4	11.3	K2	1	..	39674b	74	6074	37.2	-21 21	9.9	9.9	F2	4	..	39687b
25	13984	36.9	-48 4	10.4	10.0	F8	3	..	39682b	75	6075	37.2	-21 46	9.9	10.2	Go	3	..	39687b
26	11922	36.9	-52 35	9.5	10.1	Go	2	..	41053b	76	5751	37.2	-22 34	10.4	10.7	F5	2	..	39687b
27	9929	36.9	-54 26	6.3	8.6	F5	6	..	41053b	77	17963	37.2	-29 8	9.1	11.0	Ko	1	..	41069b
28	9941	36.9	-57 44	6.96	7.5	Go	4	..	44240b	78	14677	37.2	-43 36	10.2	12.1	Ma	1	..	39674b
29	9940	36.9	-57 47	6.78	7.2	Go	4	..	44240b	79	14607	37.2	-44 38	11.1	11.3	G5	1	..	39674b
30	4988	37.0	+21 9	6.96	7.04	A3	5	..	38819i	80	13985	37.2	-48 35	10.7	10.6	F8	2	..	39682b
31	4989	37.0	+20 52	8.4	8.4	A	1	..	38819i	81	3193	37.2	-69 49	8.11	8.1	A5	8	..	20544b
32	4659	37.0	+14 36	7.9	9.1	K5	3	..	38122i	82	2623	37.3	+57 8	7.08	7.50	F5	5	..	37351i
33	4874	37.0	+ 9 37	9.0	9.5	F8	1	..	14196b	83	2684	37.3	+53 52	var.	var.	Mc	..	R	M
34	4733	37.0	+ 8 7	8.9	9.4	F8	2	..	14196b	84	3406	37.3	+50 52	8.3	8.8	F8	1	..	38810i
35	6071	37.0	-12 22	10.4	11.4	Ko	2	..	39407b	85	4841	37.3	+18 30	7.6	8.6	Ko	3	..	38122i
36	5750	37.0	-21 52	10.5	10.8	G5	1	..	39687b	86	4664	37.3	+12 50	7.9	9.1	K5	2	..	38122i
37	15556	37.0	-25 9	9.2	10.8	Ko	4	..	39687b	87	4850	37.3	+ 5 14	5.63	6.98	Ma	..	0,7	56,100
38	15762	37.0	-26 27	8.3	9.1	Go	4	..	41034b	88	4251	37.3	- 0 1	8.28	8.78	F8	4	..	14195b
39	17416	37.0	-27 56	9.7	10.6	F8	2	..	41034b	89	5612	37.3	- 2 8	9.5	9.9	F5	2	..	14195b
40	18789	37.0	-30 50	9.1	10.1	Ko	1	..	41069b	90	5517	37.3	- 3 48	9.5	10.5	Ko	2	..	10117b
41	14674	37.0	-43 51	9.2	9.6	Ko	4	0,2	39674b	91	5619	37.3	- 7 35	8.6	9.1	F8	4	..	40603b
42	13583	37.0	-49 19	8.7	8.9	F8	7	..	39682b	92	5716	37.3	- 8 13	9.2	10.0	G5	3	..	40603b
43	9670	37.0	-54 57	7.18	8.7	Ma	5	..	41053b	93	6075	37.3	-12 27	9.2	10.2	Ko	4	..	39407b
44	7503	37.0	-60 40	9.9	10.5	Go	2	..	39382b	94	6107	37.3	-14 26	9.9	10.2	Fo	3	..	39407b
45	4770	37.1	+ 0 49	5.80	6.98	K5	5	3,10	38106i	95	6043	37.3	-15 47	9.0	9.5	F8	3	..	39407b
46	5619	37.1	- 4 48	8.50	8.58	A3	6	..	14195b	96	5996	37.3	-18 46	9.5	9.8	F2	5	..	39348b
47	5804	37.1	- 6 6	8.6	9.8	K5	2	..	40603b	97	6076	37.3	-20 52	8.6	8.5	A2	3	2,8	41861b
48	5651	37.1	-11 32	9.0	9.8	G5	7	..	39407b	98	17067	37.3	-23 12	10.6	10.8	K2	2	..	39687b
49	6073	37.1	-12 7	10.6	11.2	Go	3	..	39407b	99	17068	37.3	-23 37	7.58	8.5	Ko	7	..	39687b
50	5924	37.1	-16 13	8.0	9.0	Ko	7	..	39348b	100	14626	37.3	-41 44	9.7	10.3	F8	2	..	39674b

206500

21^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	14678	37.3	-43 41	9.3	11.3	Ma	2	..	39674b	51	18424	37.6	-31 42	7.45	8.6	Ko	8	..	40742b
2	9716	37.3	-55 56	7.02	8.3	Mb	6	..	41053b	52	9934	37.6	-54 35	9.5	10.1	Go	3	..	39669b
3	3829	37.3	-67 33	8.7	10.1	Ma	3	..	20428b	53	53	37.6	-89 19	6.54	6.2	A5	..	5,R	56,147
4	2633	37.3	-71 32	8.1	8.1	B9	7	..	20544b	54	1190	37.7	+70 51	7.14	7.56	F5	4	..	38025i
5	1170	37.3	-78 54	8.2	9.2	Ko	5	..	19964b	55	1339	37.7	+68 9	8.7	9.7	Ko	1	..	37277i
6	700	37.4	+80 43	8.3	8.7	F5	2	..	38590i	56	4626	37.7	+17 23	8.5	9.5	Ko	1	..	38818i
7	1189	37.4	+70 0	8.04	8.54	F8	1	..	38025i	57	4880	37.7	+ 9 45	7.67	8.67	Ko	3	..	38122i
8	2278	37.4	+61 3	8.5	8.6	A3	2	..	38526i	58	5283	37.7	- 2 53	8.6	9.1	F8	4	..	14195b
9	2595	37.4	+54 25	6.16	7.16	Ko	7	..	37351i	59	5285	37.7	- 3 18	9.1	9.6	F8	3	..	14195b
10	3522	37.4	+47 22	8.29	9.29	Ko	2	..	37913i	60	5820	37.7	- 9 47	8.56	8.98	F5	6	..	39407b
11	4497	37.4	+34 23	8.4	9.6	K5	1	..	38099i	61	6046	37.7	-14 51	5.99	6.13	A5	..	5,8	56,147
12	4851	37.4	+ 5 28	7.76	7.90	A5	8	..	14196b	62	15560	37.7	-25 7	9.7	10.9	F5	2	..	39687b
13	5613	37.4	- 2 45	8.4	9.2	G5	3	..	14195b	63	15586	37.7	-27 10	8.9	9.4	Go	3	..	41034b
14	5747	37.4	-10 6	8.8	9.4	Go	7	..	39407b	64	14398	37.7	-39 50	9.12	9.8	G5	3	..	39674b
15	6269	37.4	-20 11	10.1	10.2	Go	3	5,3	39687b	65	15600	37.7	-42 38	8.1	8.6	F2	6	0,5	39674b
16	R	37.4	-22 8	11.4	11.3	Ao	2	..	39687b	66	13988	37.7	-48 49	10.7	10.3	Ao	3	..	39682b
17	17070	37.4	-23 31	9.7	11.3	K5	1	..	39687b	67	759	37.8	+78 37	9.08	9.16	A3	1	..	38590i
18	15765	37.4	-25 54	10.6	11.4	Ko	2	..	39687b	68	1580	37.8	+64 21	8.6	9.8	K5	1	..	37277i
19	15719	37.4	-33 14	8.8	9.5	K2	3	..	40742b	69	4642	37.8	+40 4	8.12	8.12	Ao	2	..	37913i
20	9932	37.4	-53 59	9.9	10.4	F8	2	..	39669b	70	4500	37.8	+35 3	6.38	..	Nb	4	0,3 R	38099i
21	9717	37.4	-56 18	9.2	10.5	Ko	3	..	39669b	71	5615	37.8	- 2 20	9.2	10.2	Ko	2	..	14195b
22	1626	37.5	+65 17	9.10	9.10	A	1	..	37277i	72	5997	37.8	-18 13	10.4	11.0	Go	1	..	39397b
23	3407	37.5	+47 5	7.37	8.44	K2	4	..	37913i	73	13455	37.8	-49 55	10.7	11.2	K2	1	..	39682b
24	4011	37.5	+44 2	9.1	9.2	A5	1	..	37913i	74	13045	37.8	-51 26	10.2	10.3	Ao	2	..	39682b
25	4991	37.5	+20 45	9.0	10.0	Ko	1	..	38818i	75	9721	37.8	-56 47	8.9	10.5	Go	2	..	39382b
26	4603	37.5	+11 3	8.5	9.1	Go	2	5,1	14196b	76	9944	37.8	-57 53	9.5	10.1	Go	2	..	39382b
27	4720	37.5	+ 8 29	8.5	9.5	Ko	3	..	14196b	77	3946	37.8	-65 45	9.9	10.7	G5	1	..	20428b
28	5281	37.5	- 3 25	9.0	9.8	G5	2	..	14195b	78	1340	37.9	+67 40	8.7	8.8	A2	2	..	37277i
29	5819	37.5	- 8 52	9.5	10.3	G5	2	..	40605b	79	4650	37.9	+36 26	8.0	9.1	K2	3	..	38099i
30	6153	37.5	-19 38	10.4	10.5	G5	2	..	39348b	80	4844	37.9	+18 33	9.2	9.3	A2	4	..	38818i
31	16715	37.5	-32 38	8.1	8.9	Fo	7	..	40742b	81	5616	37.9	- 2 29	8.7	9.7	Ko	3	..	14195b
32	14696	37.5	-38 36	8.6	10.3	Ko	3	..	40903b	82	5617	37.9	- 2 34	10.1	10.4	Fo	2	..	14195b
33	13905	37.5	-47 4	9.4	10.4	Ko	4	..	39682b	83	6002	37.9	-13 44	10.4	11.0	Go	1	..	39407b
34	9720	37.5	-56 35	9.3	10.8	G5	2	..	39382b	84	13990	37.9	-48 46	8.4	9.1	G5	6	..	39682b
35	6261	37.5	-62 18	8.0	8.1	A5	6	..	42486b	85	13457	37.9	-50 44	10.0	10.1	K5	3	..	39682b
36	2409	37.6	+59 18	6.95	7.95	Ko	5	0,5	38526i	86	4237	38.0	+42 6	7.7	8.3	Go	3	..	37913i
37	2597	37.6	+54 54	7.98	8.98	Ko	3	..	37351i	87	4651	38.0	+37 5	8.26	8.40	A5	3	..	38099i
38	4611	37.6	+40 21	6.05	6.05	Ao	8	..	37913i	88	4166	38.0	+28 15	9.0	9.6	G	1	..	23009i
39	4232	37.6	+32 35	8.6	9.8	K5	2	..	38099i	89	4883	38.0	+10 3	9.17	9.17	A	2	..	14196b
40	4604	37.6	+10 21	5.95	5.90	B8	10	..	38122i	90	4882	38.0	+ 9 59	9.4	9.4	Ao	2	..	14196b
41	4853	37.6	+ 5 16	8.56	8.84	Fo	4	..	14196b	91	5749	38.0	-10 45	10.1	11.1	Ko	1	..	39407b
42	5652	37.6	-11 6	9.7	10.3	Go	3	..	39407b	92	6076	38.0	-12 43	9.7	10.7	Ko	2	..	39407b
43	6110	37.6	-14 8	9.5	10.1	Go	5	..	39407b	93	6004	38.0	-13 13	9.0	9.8	G5	4	..	39407b
44	6045	37.6	-15 20	9.9	10.5	Go	2	..	39407b	94	6111	38.0	-14 38	9.5	10.1	Go	2	..	39407b
45	6358	37.6	-17 6	10.4	11.5	K2	1	..	39348b	95	6048	38.0	-15 36	9.5	10.5	Ko	3	0,1	39397b
46	6270	37.6	-20 4	6.17	7.2	A3	..	3,7 R	28,215	96	5998	38.0	-17 51	8.2	9.4	K5	6	..	39348b
47	6077	37.6	-21 22	9.9	10.5	F8	2	..	39687b	97	14699	38.0	-38 29	9.1	9.8	Go	3	..	40903b
48	16790	37.6	-24 36	7.20	8.3	Ko	8	..	41034b	98	14402	38.0	-39 41	8.8	10.0	G5	4	..	39674b
49	15768	37.6	-26 1	10.6	11.7	F5	1	..	39687b	99	14613	38.0	-44 39	11.1	11.6	Ao	1	..	39674b
50	15767	37.6	-26 28	9.1	9.7	F8	3	..	41034b	100	11927	38.0	-52 11	10.0	10.6	Go	2	..	39669b

THE HENRY DRAPER CATALOGUE.

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21^h 38^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	3471	38.1 ^{m.}	+48 50	7.7	8.7	Ko	2	..	3881oi	51	15729	38.4 ^{m.}	-33 14	10.1	10.1	Go	1	..	40742b
2	4582	38.1	+39 4	7.47	8.54	K2	3	..	38542i	52	..	38.4	-65 46	var.	var.	Na	..	R	M
3	4330	38.1	+34 6	9.1	9.5	F5	2	..	33649i	53	3444	38.4	-68 3	7.25	7.6	B9	10	..	20428b
4	4329	38.1	+33 37	8.4	9.8	Ma	1	..	38099i	54	939	38.5	+74 9	9.1	9.1	A	1	..	38936i
5	4532	38.1	+31 25	8.4	9.2	G5	3	..	38099i	55	4241	38.5	+41 22	7.97	8.11	A5	2	..	37913i
6	4855	38.1	+ 5 55	8.1	8.6	F8	6	..	14196b	56	4617	38.5	+40 36	7.54	7.82	Fo	3	..	37913i
7	4195	38.1	- 0 54	9.2	9.2	Ao	3	..	14195b	57	4333	38.5	+33 58	9.0	10.0	Ko	1	..	38099i
8	5619	38.1	- 2 11	9.2	10.2	Ko	2	..	14195b	58	4641	38.5	+12 4	8.1	8.7	Go	5	..	38122i
9	5622	38.1	- 7 9	9.2	10.3	K2	2	..	40605b	59	4723	38.5	+ 8 59	9.4	9.4	A	1	..	14196b
10	5719	38.1	- 7 52	8.2	9.2	Ko	4	..	40603b	60	4257	38.5	+ 0 5	7.06	7.84	G5	6	5,4	14195b
11	17073	38.1	-23 2	10.4	10.8	Ko	1	..	39687b	61	5654	38.5	-11 30	9.7	10.8	K2	1	..	39407b
12	17424	38.1	-28 24	10.6	10.9	Go	2	..	41069b	62	6360	38.5	-17 27	10.5	11.3	G5	1	..	39397b
13	14628	38.1	-41 23	8.8	9.8	F8	5	..	39674b	63	6000	38.5	-18 39	9.5	10.3	G5	4	..	39348b
14	14629	38.1	-41 39	9.7	10.3	F8	3	..	39674b	64	17428	38.5	-28 8	9.9	11.4	Ko	1	..	41069b
15	3194	38.1	-69 8	8.6	9.8	K5	4	..	20428b	65	17427	38.5	-28 48	9.7	9.8	G5	4	..	41069b
16	1191	38.2	+70 59	8.1	8.2	A2	2	..	38025i	66	18805	38.5	-30 40	9.7	10.1	A3	1	..	41069b
17	1238	38.2	+68 38	8.9	9.7	G5	1	..	38580i	67	15609	38.5	-42 35	7.8	8.2	Go	7	0,8	41077b
18	4603	38.2	+22 1	var.	var.	Mb	..	R	M	68	14689	38.5	-43 44	10.0	11.3	K2	1	..	39674b
19	4886	38.2	+10 3	9.32	9.32	Ao	3	..	14196b	69	14432	38.5	-44 56	10.20	11.3	G5	3	..	39674b
20	4739	38.2	+ 7 39	9.2	9.6	F5	2	..	14196b	70	725	38.5	-83 7	8.97	9.8	F8	5	..	21397b
21	5623	38.2	- 6 52	9.2	9.7	F8	3	..	40605b	71	3125	38.6	+51 50	7.14	8.14	Ko	5	..	37351i
22	5750	38.2	-10 20	9.2	10.2	Ko	3	..	39407b	72	3410	38.6	+50 44	4.78	4.61	B3	..	R	56,100
23	5751	38.2	-10 27	8.6	9.1	F8	8	..	39407b	73	4243	38.6	+41 59	7.29	7.29	Ao	5	..	37913i
24	5653	38.2	-11 36	8.8	9.6	G5	6	..	39407b	74	4455	38.6	+25 4	7.66	7.72	A2	6	..	38819i
25	6080	38.2	-21 13	9.2	9.7	Go	5	..	39687b	75	4724	38.6	+ 8 42	8.5	9.1	Go	7	..	14196b
26	15591	38.2	-26 59	8.2	8.3	Fo	6	..	41034b	76	6113	38.6	-14 25	9.1	9.6	F8	3	..	39407b
27	17425	38.2	-28 20	10.2	9.4	Go	5	..	41069b	77	6052	38.6	-15 12	5.90	6.04	A5	..	0,7	56,147
28	13993	38.2	-48 33	9.8	10.3	G5	3	..	39682b	78	6361	38.6	-17 34	10.8	11.6	G5	1	..	39397b
29	13587	38.2	-49 18	8.2	9.5	K2	4	..	39682b	79	6157	38.6	-19 6	10.1	10.5	Ko	2	..	39348b
30	10139	38.2	-52 55	9.3	10.4	K2	1	..	41053b	80	16799	38.6	-23 58	9.7	11.4	K5	2	..	39687b
31	1343	38.3	+67 55	8.6	8.6	Ao	3	..	37277i	81	14970	38.6	-36 4	8.0	9.4	G5	6	..	40903b
32	3637	38.3	+45 18	6.47	7.82	Mb	6	0,4	37913i	82	15613	38.6	-42 45	8.2	8.8	Go	6	2,4	39674b
33	4510	38.3	+30 51	8.4	9.6	K5	1	..	38099i	83	13052	38.6	-50 54	8.0	9.1	G5	5	..	41053b
34	4728	38.3	+ 4 38	8.3	9.4	K2	3	3,2	14204b	84	9675	38.6	-55 44	9.0	10.1	K2	3	..	39669b
35	4529	38.3	+ 1 20	8.37	9.37	Ko	6	..	14204b	85	7727	38.6	-59 36	9.3	9.3	Ao	4	..	39382b
36	4254	38.3	- 0 24	8.5	8.5	Ao	4	..	14195b	86	7504	38.6	-60 15	9.1	9.7	Go	2	..	39382b
37	5824	38.3	- 9 26	10.4	11.2	G5	1	..	40605b	87	4188	38.7	+42 32	8.1	9.3	K5	1	..	37913i
38	6156	38.3	-19 3	9.1	9.1	F8	5	..	39348b	88	4534	38.7	+31 21	9.3	10.3	Ko	1	..	38099i
39	5753	38.3	-22 26	10.4	10.7	F2	2	..	39687b	89	4889	38.7	+ 7 5	6.74	7.74	Ko	5	..	38596i
40	15567	38.3	-24 58	9.15	10.8	Ko	3	2,2	39687b	90	13463	38.7	-49 57	6.52	7.5	Ko	9	..	39682b
41	15226	38.3	-33 55	9.5	10.0	G5	3	..	40742b	91	4703	38.7	-63 0	6.96	8.0	Ko	6	..	42486b
42	14405	38.3	-39 0	6.30	7.4	G5	9	..	40903b	92	2237	38.7	-73 8	7.6	7.9	Fo	8	..	20544b
43	9945	38.3	-57 39	9.6	10.1	F8	2	..	39382b	93	1518	38.7	-77 44	8.6	9.6	Ko	3	..	19964b
44	4615	38.4	+40 38	5.48	5.48	Ao	9	1,10	38542b	94	1239	38.8	+69 3	9.0	9.6	Go	1	..	38580i
45	4237	38.4	+32 48	9.3	10.7	Ma	..	..	M	95	2603	38.8	+54 22	9.5	10.9	Mb	..	..	M
46	4463	38.4	+22 51	6.92	7.92	Ko	5	..	38819i	96	3411	38.8	+50 24	7.22	7.20	B9	5	..	3881oi
47	6277	38.4	-19 58	8.09	9.0	Ko	2	0,4	41861b	97	4189a	38.8	+43 7	var.	var.	Pec.	5	R	M
48	6278	38.4	-20 24	9.2	8.7	Ao	7	0,2	40629b	98	4404	38.8	+37 25	8.0	8.0	Ao	6	..	38099i
49	16797	38.4	-24 26	10.2	11.4	Ko	1	..	39687b	99	4616	38.8	+35 33	8.0	9.0	Ko	2	..	38099i
50	18803	38.4	-30 14	9.4	10.4	G5	1	..	41069b	100	4378	38.8	+23 48	8.6	9.2	Go	3	..	33647i

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21^h 38^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	4845	38.8	+19 10	7.43	7.71	Fo	6	..	38818i	51	4892	39.1	+ 6 42	7.9	8.2	F2	5	2,4	14196b
2	6078	38.8	-12 9	9.9	10.5	Go	4	..	39407b	52	6362	39.1	-16 51	9.9	10.4	F8	2	..	39397b
3	5933	38.8	-16 26	8.4	8.5	A2	3	..	41980b	53	6280	39.1	-19 48	10.4	11.2	Ko	2	..	39397b
4	5932	38.8	-16 31	9.5	10.7	K5	2	..	39348b	54	6281	39.1	-20 3	10.1	10.2	A5	3	..	39397b
5	6081	38.8	-21 22	9.7	11.1	Go	1	..	39687b	55	6084	39.1	-21 44	9.1	9.7	Fo	5	..	39687b
6	6083	38.8	-21 22	9.7	10.0	Go	3	..	39687b	56	17432	39.1	-27 56	9.9	11.4	Ko	2	..	41069b
7	15571	38.8	-25 22	7.29	8.1	F2	7	3,8	40629b	57	15619	39.1	-42 26	9.1	10.0	Ko	3	5,2	39674b
8	15570	38.8	-25 29	9.9	10.6	Go	3	..	39687b	58	13597	39.1	-49 39	10.2	10.1	Go	2	..	39682b
9	14412	38.8	-38 54	7.37	7.9	A2	9	..	40903b	59	10141	39.1	-53 34	8.7	9.5	F8	4	..	41053b
10	14413	38.8	-39 14	10.3	10.3	Go	1	..	40903b	60	9949	39.1	-57 20	9.6	10.1	F8	2	..	39382b
11	14633	38.8	-41 12	8.8	10.6	Mb	2	..	39674b	61	2639	39.1	-72 25	9.6	10.1	F8	3	..	20544b
12	14695	38.8	-43 34	9.3	9.8	F8	5	0,3	39674b	62	634	39.1	-84 9	10.0	10.0	Ao	3	..	21397b
13	13914	38.8	-46 55	8.8	9.8	F2	4	..	39682b	63	3019	39.2	+52 47	7.65	7.60	B8	4	..	37351i
14	13913	38.8	-47 38	9.2	9.2	F8	4	..	39682b	64	4167	39.2	+28 57	8.7	8.8	A3	2	..	23009i
15	13055	38.8	-51 3	9.6	10.3	F5	4	..	39669b	65	4260	39.2	- 0 18	8.9	9.0	A5	3	..	14195b
16	11929	38.8	-52 1	10.1	10.9	G5	2	..	39669b	66	5628	39.2	- 5 11	6.72	6.78	A2	7	2,10	44047b
17	1029	38.8	-80 0	8.56	10.1	K2	3	..	21397b	67	6363	39.2	-16 59	8.1	8.9	G5	6	..	39348b
18	4662	38.9	+36 45	8.5	8.9	F5	2	..	38099i	68	15600	39.2	-26 57	7.64	9.1	K5	4	..	41034b
19	4379	38.9	+23 26	8.6	9.0	F5	2	..	33647i	69	14057	39.2	-46 53	10.4	10.5	Fo	2	..	39682b
20	4608	38.9	+10 39	7.50	8.68	K5	4	..	38122i	70	7891	39.2	-58 51	9.7	10.2	F8	4	..	39382b
21	4400	38.9	+ 2 22	9.2	9.5	Fo	5	..	14204b	71	2635	39.2	-71 38	9.2	9.2	Ao	6	..	20544b
22	5657	38.9	-11 14	8.6	9.7	K2	4	..	39407b	72	1190	39.3	+70 4	8.49	9.27	G5	2	0,1-	38573i
23	6079	38.9	-12 12	8.8	10.2	Ma	3	..	39407b	73	2374	39.3	+57 17	6.98	6.74	Bop	5	R	38526i
24	6279	38.9	-19 59	9.2	9.6	F5	6	..	39397b	74	4408	39.3	+37 50	5.62	5.62	Ao	10	..	38099i
25	15731	38.9	-33 9	9.1	9.5	G5	5	..	40742b	75	4381	39.3	+23 40	8.4	9.4	Ko	1	..	38819i
26	15232	38.9	-34 44	8.8	10.3	Go	2	..	14139b	76	4769	39.3	+19 28	8.9	9.2	F2	1	..	38818i
27	13596	38.9	-48 54	10.2	10.9	G5	2	..	39682b	77	4848	39.3	+18 54	8.5	8.9	F5	3	..	38818i
28	6264	38.9	-62 16	8.8	9.4	Go	3	..	42486b	78	4891	39.3	+ 9 25	2.54	3.54	Ko	..	R	2088c
29	1418	38.9	-78 41	7.8	8.9	K2	6	..	19964b	79	4606	39.3	+ 3 46	9.2	9.7	F8	3	..	14204b
30	1192	39.0	+70 20	7.44	8.62	K5	2	..	38025i	80	4402	39.3	+ 2 45	9.2	10.4	K5	2	..	14204b
31	3480	39.0	+49 8	6.12	7.12	Ko	8	..	38810i	81	5812	39.3	- 5 58	8.8	10.0	K5	2	..	40605b
32	3911	39.0	+44 22	8.6	8.7	A3	1	..	37913i	82	5723	39.3	- 8 7	8.7	9.1	F5	4	..	40605b
33	4457	39.0	+24 31	8.8	10.0	K5	2	..	38819i	83	5936	39.3	-15 50	9.0	9.6	Go	3	5,3	39483b
34	4482	39.0	+15 22	9.04	9.82	G5	1	..	38122i	84	R	39.3	-20 15	9.9	10.5	Go	1	..	39687b
35	4891	39.0	+ 6 42	9.2	9.6	F5	2	3,2	14196b	85	16727	39.3	-32 6	8.6	9.6	G5	2	..	14139b
36	4401	39.0	+ 3 7	9.2	9.2	Ao	6	..	14204b	86	14621	39.3	-44 36	9.2	9.8	Ko	4	2,4	41077b
37	5626	39.0	- 5 44	9.5	10.5	Ko	1	..	40605b	87	13057	39.3	-51 4	9.3	10.3	K5	2	..	39682b
38	5624	39.0	- 7 37	8.0	9.0	Ko	6	..	40605b	88	11934	39.3	-52 3	9.2	10.0	Go	5	..	39669b
39	6080	39.0	-12 14	8.8	9.6	G5	5	..	39407b	89	11933	39.3	-52 42	9.3	10.0	F5	3	..	41053b
40	6001	39.0	-18 8	9.7	10.3	Go	4	..	39348b	90	2689	39.4	+53 18	7.7	8.7	Ko	2	..	37351i
41	15782	39.0	-26 45	7.7	9.1	Ko	4	..	41034b	91	4024	39.4	+43 53	8.39	8.89	F8	1	..	37913i
42	15734	39.0	-33 29	4.35	4.35	Ao	..	R	28,215	92	4145	39.4	+27 24	8.0	8.4	F5	6	..	38819i
43	15616	39.0	-41 54	8.7	9.4	F8	5	0,4	39674b	93	4465	39.4	+22 22	6.65	7.72	K2	6	..	38819i
44	9940	39.0	-54 28	9.3	9.9	Go	4	..	39669b	94	4893	39.4	+ 9 36	8.7	9.0	Fo	5	..	14196b
45	7889	39.0	-58 27	10.1	10.7	Go	2	..	39382b	95	5526	39.4	- 4 30	9.1	9.6	F8	2	..	14195b
46	2634	39.0	-71 44	9.2	9.5	F2	5	..	20544b	96	6114	39.4	-14 26	9.1	9.9	G5	3	..	39407b
47	3017	39.1	+52 33	8.0	8.3	F2	3	..	37351i	97	17083	39.4	-23 1	7.25	7.8	F2	6	..	41861b
48	3597	39.1	+49 42	7.77	8.84	K2	3	..	38810i	98	15602	39.4	-27 20	9.1	10.0	K5	2	..	41034b
49	4623	39.1	+40 42	5.54	6.89	Ma	6	0,6	38542i	99	15603	39.4	-27 24	8.9	9.2	Ao	5	..	41034b
50	4407	39.1	+37 34	var.	var.	N	..	R	M	100	17433	39.4	-28 0	10.4	10.9	Go	2	..	41069b

THE HENRY DRAPER CATALOGUE.

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21^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	14479	39.4	-40 3	10.3	11.2	Ko	1	..	39674b	51	5661	39.7	-11 12	9.7	10.7	Ko	1	..	39407b
2	14635	39.4	-41 32	10.1	10.3	G5	1	..	39674b	52	5756	39.7	-22 20	9.0	9.7	Go	5	..	39687b
3	9679	39.4	-54 55	9.8	10.6	G5	1	..	39669b	53	17086	39.7	-23 6	10.4	11.1	K2	1	..	39687b
4	7893	39.4	-58 8	8.6	10.2	Ma	4	..	39382b	54	17438	39.7	-28 35	7.51	8.5	K5	4	..	14139b
5	7892	39.4	-58 27	8.4	10.7	K5	2	..	39382b	55	13920	39.7	-47 52	7.2	8.9	K2	5	..	39682b
6	614	39.5	+83 30	8.6	9.0	F5	3	..	37281i	56	3833	39.7	-67 16	8.5	8.6	A3	9	..	20428b
7	4410	39.5	+37 51	6.87	6.87	Ao	7	..	38099i	57	3127	39.8	+51 56	7.8	8.9	K2	2	..	37351i
8	4850	39.5	+18 50	8.7	9.8	K2	1	..	38818i	58	4253	39.8	+26 36	8.4	9.0	Go	2	..	38819i
9	4728	39.5	+8 21	9.2	9.5	Fo	2	..	14196b	59	4582	39.8	+16 54	4.52	5.30	G5	10	R	38122i
10	5294	39.5	-3 47	8.6	8.9	Fo	5	..	14195b	60	4668	39.8	+14 19	6.10	6.66	Go	9	..	38122i
11	5630	39.5	-5 41	9.0	9.6	Go	4	..	40605b	61	4893	39.8	+6 46	8.7	9.2	F8	2	..	38596i
12	5626	39.5	-6 49	8.0	8.0	Ao	6	..	14195b	62	4858	39.8	+5 58	7.9	8.4	F8	3	..	38596i
13	5625	39.5	-7 30	9.9	9.9	Ao	2	..	40605b	63	4404	39.8	+2 32	7.6	8.7	K2	8	..	14204b
14	5826	39.5	-9 31	9.2	9.7	F8	3	..	40605b	64	5726	39.8	-8 44	10.1	10.2	A5	2	..	40605b
15	5755	39.5	-10 40	9.0	10.1	K2	4	..	39407b	65	5756	39.8	-10 47	9.7	10.7	Ko	1	..	39407b
16	6082	39.5	-11 52	10.4	10.9	F8	2	..	39407b	66	6083	39.8	-12 36	10.5	11.0	F8	1	..	39407b
17	6283	39.5	-20 34	9.2	9.6	Fo	5	..	39687b	67	6158	39.8	-19 3	9.5	9.7	Go	3	..	39348b
18	14480	39.5	-40 11	9.5	10.9	Ko	2	..	39674b	68	17984	39.8	-29 10	7.6	8.3	F2	7	..	14139b
19	7894	39.5	-58 41	10.3	10.7	F5	3	..	39382b	69	14457	39.8	-37 39	8.8	10.6	K2	1	..	40903b
20	6583	39.5	-60 54	10.0	10.5	F8	2	..	39382b	70	14443	39.8	-45 7	9.8	10.9	A2	3	..	39674b
21	1191	39.6	+69 14	8.2	8.2	Ao	5	0,3	37277i	71	14442	39.8	-45 37	8.8	10.1	K5	2	3,1	41077b
22	2606	39.6	+55 4	8.16	8.14	B9	4	..	37351i	72	9951	39.8	-56 55	9.3	9.9	Go	3	..	39382b
23	2690	39.6	+54 6	7.15	8.22	K2	5	..	37351i	73	2636	39.8	-71 40	9.7	9.8	A2	3	..	20544b
24	3481	39.6	+49 11	8.6	9.6	Ko	1	..	38810i	74	4171	39.9	+28 20	6.90	7.04	A5	6	..	38819i
25	4026	39.6	+44 5	8.6	9.6	Ko	1	..	37913i	75	4608	39.9	+25 50	7.8	8.9	K2	1	..	38819i
26		39.6	+28 18	4.73	5.15	F5		R	56,100	76	5001	39.9	+20 16	9.00	9.06	A2	3	..	38818i
27	4169	39.6	+28 18	6.08	6.50					77	5629	39.9	-7 21	9.0	10.0	Ko	1	..	40605b
28	4607	39.6	+26 3	8.2	9.0	G5	2	..	38819i	78	6116	39.9	-14 8	8.8	9.8	Ko	3	..	39407b
29	4459	39.6	+24 42	7.86	7.94	A3	5	..	38819i	79	6057	39.9	-15 36	10.4	11.4	Ko	1	..	39397b
30	4581	39.6	+16 36	7.7	8.0	Fo	6	..	38122i	80	6056	39.9	-15 41	10.4	11.0	Go	1	..	39397b
31	4742	39.6	+7 30	8.5	8.9	F5	3	..	14196b	81	6365	39.9	-17 4	9.7	10.2	F8	3	..	39397b
32	5725	39.6	-7 53	9.5	10.5	Ko	2	..	40605b	82	15609	39.9	-26 56	8.3	9.7	K5	3	..	41034b
33	5827	39.6	-9 30	7.08	8.08	Ko	7	..	40605b	83	14458	39.9	-37 13	9.5	10.6	Go	1	..	40903b
34	5829	39.6	-9 32	5.28	6.28	Ko		0,7R	56,100	84	14418	39.9	-38 59	8.8	8.9	Fo	5	..	40903b
35	5938	39.6	-16 4	9.1	9.7	Go	3	2,3	39348b	85	3949	39.9	-65 31	9.5	10.1	Go	4	..	20428b
36	6085	39.6	-21 42	9.5	9.7	F2	4	..	39687b	86	867	39.9	-82 53	9.3	10.1	G5	2	..	21397b
37	14637	39.6	-41 41	8.5	9.4	Go	5	5,4	39674b	87	3485	40.0	+48 25	7.86	8.20	F2	3	..	38810i
38	13058	39.6	-51 31	9.3	10.0	G5	5	..	39669b	88	4515	40.0	+31 3	8.8	9.9	K2	1	..	38099i
39	9944	39.6	-54 39	10.6	10.6	Ao	1	..	39669b	89	4173	40.0	+28 48	7.23	8.23	Ko	3	..	38819i
40	7895	39.6	-58 19	10.2	10.7	F8	2	..	39382b	90	4462	40.0	+24 33	var.	var.	Md		R	M
41	6265	39.6	-62 40	8.0	8.3	F2	6	..	42486b	91	4405	40.0	+2 46	9.2	10.0	G5	3	..	14204b
42	2314	39.7	+58 48	6.21	7.28	K2		3,7	1525c	92	5728	40.0	-7 57	8.6	10.0	Ma	2	..	40605b
43	2607	39.7	+54 45	8.2	8.8	Go	3	..	37351i	93	6008	40.0	-13 14	6.66	7.08	F5	5	..	41980b
44	3416	39.7	+50 33	8.1	8.9	G5	3	R	M	94	15789	40.0	-26 20	9.7	11.2	Ko	2	..	39687b
45		39.7	+50 33			A2				95	7731	40.0	-59 10	9.2	10.2	Ko	3	..	39382b
46	4507	39.7	+34 27	8.6	9.4	G5	2	..	38099i	96	4705	40.0	-63 22	9.2	9.3	A3	2	..	42486b
47	4244	39.7	+32 54	7.8	8.2	F5	3	..	38099i	97	1634	40.1	+65 54	7.7	7.7	Ao	5	..	37277i
48	4384	39.7	+24 7	8.2	8.7	F8	1	..	38819i	98	4511	40.1	+34 48	8.6	8.6	Ao	4	..	38099i
49	4403	39.7	+2 22	9.2	10.2	Ko	4	..	14204b	99	4496	40.1	+29 51	8.2	9.2	K	1	..	23009i
50	5627	39.7	-7 32	8.7	8.8	A2	6	..	40605b	100	4174	40.1	+28 44	7.12	7.12	Ao	7	..	38819i

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21^h 40^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	4463	40.1	+25 11	4.27	4.69	F5	..	R	1630c	51	868	40.4	-82 8	8.5	9.5	Ko	4	..	21397b
2	4486	40.1	+16 9	8.7	8.7	Ao	1	..	38122i	52	1193	40.5	+70 51	4.85	5.85	Ko	..	0,10	56,100
3	4677	40.1	+12 36	8.9	9.0	A2	3	..	38122i	53	1768	40.5	+63 45	8.1	8.4	Fo	5	..	37277i
4	5816	40.1	- 5 58	9.5	10.5	Ko	2	..	40605b	54	3489	40.5	+48 48	7.9	7.9	Ao	7	..	38810i
5	6119	40.1	-14 7	8.8	9.4	Go	5	..	39407b	55	3646	40.5	+46 0	8.5	8.6	A5	3	..	25984i
6	6366	40.1	-17 24	10.1	10.7	Go	2	..	39397b	56	6005	40.5	-18 2	9.9	10.5	Go	2	..	39397b
7	16730	40.1	-32 47	8.6	9.3	Ko	2	..	14139b	57	15576	40.5	-25 16	7.9	7.9	A3	6	..	41034b
8	13998	40.1	-48 5	10.0	10.6	K2	1	..	39682b	58	15744	40.5	-33 10	6.84	8.4	Ko	8	..	14139b
9	9683	40.1	-55 38	9.6	10.4	G5	2	..	39669b	59	11938	40.5	-52 8	10.2	10.3	A3	3	..	39669b
10	7732	40.1	-59 19	8.8	9.0	F8	6	..	39382b	60	9948	40.5	-54 7	9.5	9.6	A5	3	..	41053b
11	4167	40.1	-64 23	8.4	9.2	G5	4	..	20428b	61	530	40.5	-84 54	9.0	10.1	K2	4	..	21397b
12	635	40.1	-84 11	9.5	10.1	Go	2	..	21397b	62	2694	40.6	+53 50	8.3	9.3	Ko	1	..	37351i
13	1764	40.2	+63 15	7.01	7.43	F5	8	..	37277i	63	3422	40.6	+46 24	6.62	7.04	F5	7	3,8	37913i
14	4512	40.2	+35 8	8.92	9.99	K2	2	..	38099i	64	4669	40.6	+36 30	8.6	8.6	Ao	2	..	38099i
15	4465	40.2	+24 24	7.8	7.9	A5	3	..	33647i	65	4469	40.6	+22 56	8.6	9.1	F8	3	..	33647i
16	5296	40.2	- 3 25	8.0	8.3	Fo	6	..	14195b	66	4467	40.6	+22 25	8.28	8.28	A	5	..	38819i
17	6009	40.2	-12 50	9.9	10.7	G5	1	..	39407b	67	5003	40.6	+20 29	9.0	9.3	Fo	1	..	38818i
18	6120	40.2	-14 44	10.1	11.2	K2	1	..	39407b	68	4776	40.6	+ 1 11	8.69	9.76	K2	2	..	14195b
19	15790	40.2	-26 5	10.6	11.9	Ko	1	..	39687b	69	5632	40.6	- 7 34	9.2	10.0	G5	3	..	40605b
20	14419	40.2	-39 43	8.88	9.5	Ko	5	..	39674b	70	17093	40.6	-22 54	10.4	10.2	Fo	2	..	39687b
21	14704	40.2	-43 24	8.5	9.5	Ko	6	2,5	39674b	71	18822	40.6	-30 6	9.1	10.1	Ko	1	..	41069b
22	1766	40.3	+64 11	8.7	8.7	Ao	2	..	37277i	72	14445	40.6	-45 19	10.2	11.0	G5	2	..	39674b
23	2185	40.3	+61 33	7.9	7.9	Ao	4	..	37277i	73	13473	40.6	-50 39	10.4	10.6	A	2	..	39669b
24	4773	40.3	+19 43	9.2	10.0	G5	1	..	38818i	74	13472	40.6	-50 47	11.1	10.8	Go	1	..	39669b
25	4261	40.3	- 0 42	8.5	9.5	Ko	3	..	14195b	75	13064	40.6	-51 39	9.3	10.0	K5	2	..	39682b
26	6010	40.3	-13 0	9.0	9.8	G5	3	..	39407b	76	7896	40.6	-57 57	10.1	11.1	Ko	2	..	39382b
27	5940	40.3	-15 51	9.9	10.7	G5	1	..	39397b	77	4621	40.7	+35 45	8.7	8.8	A5	3	..	38099i
28	6003	40.3	-18 27	8.2	9.0	G5	7	..	39348b	78	4499	40.7	+29 56	8.8	9.4	G	1	..	23009i
29	6286	40.3	-20 14	10.4	9.9	F8	2	..	39687b	79	4178	40.7	+28 46	8.0	9.0	Ko	2	..	38819i
30	6088	40.3	-21 23	10.1	10.2	F2	3	..	39687b	80	4611	40.7	+25 28	9.3	10.5	K5	1	..	23009i
31	15611	40.3	-27 10	9.9	10.8	Go	4	..	41069b	81	5664	40.7	-11 39	10.1	10.7	Go	2	..	39407b
32	15743	40.3	-33 20	9.5	9.5	F8	2	..	14139b	82	6061	40.7	-14 55	9.10	10.10	Ko	4	0,4	39407b
33	14421	40.3	-39 11	8.5	8.6	F5	9	..	39674b	83	6060	40.7	-15 42	9.2	10.4	K5	1	3,1	39348b
34	14705	40.3	-43 29	9.8	11.0	Ko	1	..	39674b	84	6006	40.7	-18 38	10.4	11.4	Ko	1	..	39397b
35	1537	40.3	-76 47	10.0	10.1	A3	3	..	19964b	85	6089	40.7	-21 12	10.6	11.3	Go	1	..	39687b
36	2316	40.4	+58 19	var.	var.	Ma	..	0,R	1525c	86	13923	40.7	-46 55	9.28	9.8	A2	4	..	39682b
37	4467	40.4	+24 13	8.2	9.2	Ko	1	..	38819i	87	3927	40.8	+44 51	8.8	10.2	Ma	..	..	M
38	4775	40.4	+ 0 13	9.18	9.96	G5	1	..	14195b	88	4247	40.8	+33 4	8.6	8.7	A2	2	..	38099i
39	5627	40.4	- 1 54	9.2	9.5	Fo	5	..	14195b	89	4540	40.8	+31 31	8.6	9.7	K2	2	..	38099i
40	5632	40.4	- 4 54	8.30	8.36	A2	5	..	14195b	90	4256	40.8	+26 54	8.4	9.4	Ko	1	..	38819i
41	6085	40.4	-12 44	10.5	11.1	Go	1	..	39407b	91	4257	40.8	+26 31	7.18	7.16	B9	7	..	38819i
42	6121	40.4	-13 48	9.0	10.0	Ko	3	..	39407b	92	4587	40.8	+16 26	8.5	8.5	Ao	3	..	38122i
43	6059	40.4	-15 6	9.5	10.5	Ko	2	0,2	39407b	93	4745	40.8	+ 7 32	7.34	8.12	G5	4	..	38596i
44	6058	40.4	-15 36	8.6	9.2	Go	5	0,5	39348b	94	6086	40.8	-12 27	10.1	11.3	K5	1	..	39407b
45	15794	40.4	-25 54	11.1	11.4	F8	2	..	39687b	95	5942	40.8	-16 27	8.6	9.6	Ko	4	..	39348b
46	14641	40.4	-40 55	10.3	10.6	Go	2	..	39674b	96	5762	40.8	-22 36	9.9	9.9	F8	2	..	39687b
47	14064	40.4	-46 28	9.4	10.4	Ko	2	0,1	39682b	97	15005	40.8	-36 10	7.9	8.5	Ao	9	..	13854b
48	14065	40.4	-46 51	7.79	8.9	Ko	7	..	39682b	98	9736	40.8	-56 7	8.5	9.0	F8	6	..	39669b
49	10148	40.4	-53 8	8.2	9.8	K2	2	..	41053b	99	7897	40.8	-58 30	9.0	9.9	K2	3	..	39382b
50	9947	40.4	-54 47	9.24	10.1	K5	3	..	39669b	100	1538	40.8	-76 40	9.6	10.4	G5	3	..	19964b

THE HENRY DRAPER CATALOGUE.

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21^h 40^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	4195	40.9	+42 59	7.87	9.05	K5	2	..	37913i	51	5534	41.2	- 4 36	8.6	9.0	F5	5	..	14195b
2	4387	40.9	+24 4	8.2	8.7	F8	2	..	38819i	52	6087	41.2	-11 50	5.43	5.43	Ao	..	0,7 R	56,148
3	4854	40.9	+18 23	9.0	9.0	Ao	2	..	38818i	53	15581	41.2	-25 32	8.0	8.8	F5	8	..	41069b
4	5819	40.9	- 6 46	9.0	10.0	Ko	4	..	40605b	54	15801	41.2	-26 6	8.9	10.3	Ko	3	..	41069b
5	5833	40.9	- 9 44	6.20	7.55	Ma	..	0,9	56,100	55	14449	41.2	-44 57	10.2	11.3	K2	1	..	39674b
6	6012	40.9	-13 3	7.23	8.01	G5	7	..	39407b	56	13068	41.2	-51 44	10.0	10.6	F5	1	..	39669b
7	6007	40.9	-18 23	7.54	8.54	Ko	8	..	39348b	57	4197	41.3	+42 52	8.7	8.7	A	1	R	37913i
8	17444	40.9	-28 25	10.4	10.6	Go	1	..	41069b	58	4250	41.3	+32 39	8.09	8.51	F5	4	..	38099i
9	17994	40.9	-28 57	9.1	10.4	G5	2	..	41069b	59	4181	41.3	+28 24	8.2	8.2	Ao	4	..	38819i
10	14490	40.9	-40 17	9.1	10.6	Ko	2	..	39674b	60	4780	41.3	+13 35	8.6	8.7	A2	4	..	38122i
11	14643	40.9	-41 26	11.0	10.3	Fo	3	..	39674b	61	6088	41.3	-12 9	7.02	7.52	F8	4	..	41980b
12	13475	40.9	-50 34	10.0	10.3	Go	2	..	39682b	62	6160	41.3	-18 52	9.2	10.0	G5	4	..	39348b
13	11939	40.9	-52 46	8.8	10.0	G5	3	..	41053b	63	6290	41.3	-20 16	10.4	10.5	F8	2	..	39687b
14	6586	40.9	-61 1	9.1	10.2	Ko	3	..	39382b	64	R	41.3	-21 38	11.2	11.3	A2	1	..	39687b
15	3586	40.9	-65 58	6.95	7.5	F2	10	..	20428b	65	17097	41.3	-23 8	10.9	10.7	Go	1	..	39687b
16	1732	40.9	-75 46	8.5	9.6	K2	5	..	19964b	66	15750	41.3	-33 24	8.8	10.4	K2	2	..	14139b
17	1973	41.0	+62 18	8.3	8.1	B	2	R	38526i	67	2285	41.4	+60 25	7.46	8.24	G5	5	..	38526i
18	2188	41.0	+62 9	7.9	8.3	F5	3	..	37277i	68	4674	41.4	+36 56	8.0	8.0	Ao	5	..	38099i
19	2612	41.0	+54 55	7.81	8.88	K2	2	..	37351i	69	4156	41.4	+28 9	8.5	8.5	Ao	3	..	38819i
20	3491	41.0	+49 3	8.6	8.6	Ao	2	R	38810i	70	4614	41.4	+25 50	8.6	9.0	F5	2	..	35085i
21	4249	41.0	+32 19	7.42	7.56	A5	7	..	38099i	71	4471	41.4	+25 6	6.56	6.51	B8	..	1,8	1630c
22	4629	41.0	+17 17	8.7	9.2	F8	1	..	38818i	72	5007	41.4	+20 42	9.0	9.8	G5	1	..	38818i
23	4778	41.0	+ 0 47	9.2	10.2	Ko	1	..	14195b	73	4734	41.4	+ 8 54	8.0	8.0	Ao	5	E	38122i
24	6013	41.0	-13 33	9.5	10.1	Go	1	..	39407b	74	4866	41.4	+ 5 36	8.9	9.0	A5	2	..	14196b
25	15800	41.0	-26 17	9.9	11.7	Ko	1	..	39687b	75	5632	41.4	- 2 31	9.0	9.3	F2	2	..	14195b
26	15614	41.0	-27 3	9.1	9.4	F8	6	..	41069b	76	5631	41.4	- 2 40	7.16	8.51	Mb	9	..	14195b
27	14964	41.0	-35 9	8.1	9.4	A2	6	..	14139b	77	5734	41.4	- 8 28	8.4	9.2	G5	6	..	40605b
28	7734	41.0	-59 49	9.11	9.6	F8	5	..	39382b	78	5838	41.4	- 8 54	8.6	8.9	Fo	7	..	40605b
29	797	41.1	+75 52	9.02	9.08	A2	2	..	38936i	79	6089	41.4	-12 24	9.1	9.7	Go	4	..	39407b
30	1244	41.1	+68 35	7.9	9.0	K2	2	..	37277i	80	6370	41.4	-17 0	9.5	10.6	K2	3	..	39397b
31	3651	41.1	+46 5	8.3	9.1	G5	2	..	37913i	81	5764	41.4	-22 8	8.8	9.3	A2	5	..	39687b
32	4491	41.1	+15 17	8.09	8.87	G5	4	5,3	38122i	82	14635	41.4	-44 33	9.8	10.7	Go	2	..	39674b
33	4653	41.1	+11 25	8.5	9.1	Go	2	..	14196b	83	13478	41.4	-50 3	8.46	9.1	F5	5	..	39682b
34	5667	41.1	-11 17	8.4	8.7	F2	7	..	39407b	84	1173	41.4	-79 6	8.9	9.5	Go	3	..	19964b
35	6122	41.1	-14 44	10.1	10.7	Go	2	..	39483b	85	977	41.4	-81 3	9.6	10.4	G5	2	..	21397b
36	6008	41.1	-18 37	8.4	9.0	Go	5	..	39348b	86	2392	41.5	+57 45	7.8	8.8	Ko	6	..	37351i
37	R	41.1	-21 10	10.3	11.3	Ko	1	..	39687b	87	4037	41.5	+43 28	8.65	9.65	Ko	1	..	37913i
38	17096	41.1	-22 57	9.1	10.2	Ma	3	..	39687b	88	4626	41.5	+35 24	6.60	7.60	Ko	8	..	38099i
39	15615	41.1	-27 33	9.2	9.2	Go	4	..	41069b	89	4472	41.5	+22 30	5.45	6.45	Ko	8	..	38819i
40	16734	41.1	-32 24	8.2	9.6	Ko	2	..	14139b	90	4867	41.5	+ 6 5	7.7	8.1	F5	4	..	38596i
41	13476	41.1	-50 17	10.0	10.8	K2	1	..	39682b	91	5823	41.5	- 6 33	9.2	10.2	K	4	R	14195b
42	13067	41.1	-51 5	10.2	10.3	G5	3	..	39669b	92	5822	41.5	- 6 35	8.6	9.6	K	4	..	14195b
43	10151	41.1	-53 23	7.4	8.4	G5	7	..	41053b	93	5635	41.5	- 7 45	9.0	9.8	G5	1	..	40605b
44	7505	41.1	-60 0	8.66	9.6	K5	4	..	39382b	94	5736	41.5	- 8 24	9.2	10.0	G5	3	..	40605b
45	6587	41.1	-61 18	9.1	10.2	G5	2	..	42486b	95	5839	41.5	- 8 56	8.6	9.6	Ko	5	..	40605b
46	1733	41.1	-75 14	8.6	9.6	Ko	6	..	19964b	96	6015	41.5	-12 58	9.7	10.3	Go	3	..	39407b
47	398	41.1	-86 23	8.9	9.4	F8	4	..	15173b	97	6124	41.5	-13 59	9.9	10.3	F5	2	..	39407b
48	1975	41.2	+63 8	8.1	8.2	A5	3	..	37277i	98	5943	41.5	-16 35	2.98	3.22	A5	..	R	2838c
49	2386	41.2	+57 17	9.1	9.1	A	1	..	37351i	99	6009	41.5	-18 41	10.4	10.9	F8	2	..	39397b
50	3929	41.2	+44 39	8.7	8.8	A2	2	..	37913i	100	6291	41.5	-20 35	10.6	11.2	Go	2	..	39687b

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21^h 41^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	6091	41.5	-21 0	9.2	9.3	Fo	6	..	39687b	51	6091	41.9	-12 27	9.7	10.5	G5	2	..	39407b
2	15621	41.5	-27 34	9.7	10.9	Ko	3	..	41069b	52	6012	41.9	-18 20	10.1	10.2	A5	4	..	39397b
3	18003	41.5	-29 17	9.2	9.6	F2	4	..	41069b	53	6093	41.9	-21 14	9.2	9.4	A2	6	..	39687b
4	14729	41.5	-38 25	6.86	7.7	G5	9	..	13854b	54	15624	41.9	-27 51	8.2	9.7	Ko	6	..	41069b
5	14495	41.5	-40 15	10.1	10.9	F8	2	..	39674b	55	18466	41.9	-31 21	5.09	5.15	A2	..	R	28,215
6	14637	41.5	-44 28	10.0	11.3	Ma	2	..	39674b	56	14434	41.9	-39 6	10.3	10.0	F5	4	..	39674b
7	14450	41.5	-45 17	8.6	9.8	K2	3	3,2	41077b	57	13618	41.9	-49 18	8.7	10.0	Go	3	..	39682b
8	14451	41.5	-45 27	8.0	8.6	A2	7	3,8	41077b	58	9743	41.9	-56 44	6.74	7.0	B9	7	..	44240b
9	2638	41.5	-71 47	8.9	9.3	F5	6	..	20544b	59	9960	41.9	-57 26	9.5	10.1	Go	2	..	39382b
10	1976	41.6	+62 16	8.1	8.4	Fo	4	..	37277i	60	1421	41.9	-78 16	8.7	9.2	F8	4	..	19964b
11	3497	41.6	+49 1	8.8	8.9	A5	1	R	38810i	61	3934	42.0	+44 42	8.9	8.9	Ao	1	..	37913i
12	4256	41.6	+41 42	8.1	9.1	Ko	1	..	37913i	62	4160	42.0	+27 18	8.6	8.6	Ao	3	..	38819i
13	4638	41.6	+40 57	8.7	8.7	Ao	1	..	37913i	63	4265	42.0	+26 17	8.2	8.7	F8	2	..	38819i
14	14497	41.6	-39 58	7.52	7.7	A2	9	..	39674b	64	4858	42.0	+19 1	7.6	7.9	F2	4	..	38818i
15	726	41.6	-83 30	8.6	9.8	K5	5	..	21397b	65	4781	42.0	+13 15	6.57	6.65	A3	9	..	38122i
16	314	41.6	-87 46	9.2	10.3	K2	2	..	22980b	66	4900	42.0	+ 6 42	7.9	9.1	K5	1	..	38596i
17	2624	41.7	+55 26	8.9	9.7	G5	1	..	37351i	67	5637	42.0	- 5 39	9.2	9.3	A3	4	..	40605b
18	3027	41.7	+53 1	8.8	8.8	Ao	2	..	37351i	68	5638	42.0	- 5 42	9.7	10.8	K2	2	..	40605b
19	3135	41.7	+51 48	6.69	7.87	K5	3	..	37351i	69	5737	42.0	- 8 12	9.1	10.1	Ko	1	..	40605b
20	4340	41.7	+33 49	8.4	9.6	K5	1	..	38099i	70	6019	42.0	-13 23	9.5	10.3	G5	2	..	39483b
21	4616	41.7	+25 27	8.0	9.2	K5	2	..	38819i	71	6018	42.0	-13 35	8.0	8.3	Fo	8	..	39483b
22	5760	41.7	-10 36	9.2	10.4	K5	1	..	40605b	72	6066	42.0	-15 41	9.7	10.5	G5	1	..	39397b
23	6064	41.7	-15 9	8.6	8.9	Fo	6	..	39483b	73	6372	42.0	-16 53	9.9	10.4	F8	2	..	39397b
24	6010	41.7	-18 6	10.8	11.4	Go	2	..	39397b	74	6371	42.0	-17 14	8.0	9.0	Ko	8	..	39397b
25	17101	41.7	-23 24	10.2	9.9	F2	2	..	39687b	75	17454	42.0	-28 13	7.45	8.1	K2	6	..	14139b
26	16828	41.7	-24 2	11.1	11.7	Go	1	..	39687b	76	14453	42.0	-45 26	10.2	11.3	K2	1	..	39674b
27	15622	41.7	-27 18	10.2	10.8	Ko	2	..	41069b	77	13483	42.0	-50 1	10.4	10.6	F5	1	..	39669b
28	15016	41.7	-36 5	9.5	9.7	A2	4	..	13854b	78	10158	42.0	-53 29	9.3	9.9	G5	3	..	39669b
29	13928	41.7	-47 45	5.70	7.2	G5	..	..	56,148	79	7506	42.0	-60 48	8.9	9.0	A3	3	..	42486b
30	1082	41.8	+71 52	5.40	6.40	Ko	10	..	38025i	80	1176	42.0	-79 3	7.2	8.3	K2	8	..	19964b
31	2697	41.8	+54 3	8.8	9.4	G	1	..	37351i	81	3936	42.1	+44 38	8.9	8.9	B9	1	..	37913i
32	3659	41.8	+45 18	8.17	9.24	K2	2	..	37913i	82	4261	42.1	+41 55	8.1	8.4	Fo	1	..	37913i
33	4629	41.8	+35 58	8.7	9.2	F8	2	..	38099i	83	4675	42.1	+36 56	8.0	8.0	B9	5	..	38099i
34	4473	41.8	+25 6	6.48	7.48	Ko	5	..	38819i	84	4901	42.1	+ 6 40	8.6	9.7	K2	1	..	14196b
35	4474	41.8	+22 29	7.68	7.76	A3	4	..	38819i	85	4202	42.1	- 1 0	9.2	10.2	Ko	1	..	14195b
36	4779	41.8	+ 0 24	7.68	8.02	F2	7	0,4	14195b	86	5761	42.1	-10 14	8.4	9.4	Ko	3	..	40605b
37	6125	41.8	-13 58	9.2	10.2	Ko	1	..	39407b	87	5945	42.1	-16 17	10.6	11.8	K5	1	..	39397b
38	6065	41.8	-14 59	7.60	8.02	F5	8	..	39483b	88	6373	42.1	-17 45	7.19	7.17	B9	3	..	41980b
39	6161	41.8	-19 32	9.0	9.7	Ma	4	..	39397b	89	6163	42.1	-19 17	9.5	9.7	Ko	4	..	39397b
40	16829	41.8	-24 8	9.4	9.7	F8	5	..	39687b	90	6293	42.1	-20 2	7.46	8.1	F8	4	..	41861b
41	15806	41.8	-26 22	9.1	9.8	F8	7	..	41069b	91	15809	42.1	-26 17	10.6	11.4	F8	3	..	39687b
42	15255	41.8	-34 8	8.5	10.0	Fo	3	..	14139b	92	..	42.1	-47 22	var.	var.	Md	..	R	M
43	14432	41.8	-39 27	9.1	10.0	Ko	4	..	39674b	93	14013	42.1	-48 14	6.96	7.5	A5	..	5,8R	56,148
44	14498	41.8	-40 43	8.5	9.4	Ko	6	..	39674b	94	9745	42.1	-55 56	9.6	10.4	G5	1	..	39669b
45	14452	41.8	-45 24	10.2	11.0	Go	2	..	39674b	95	7899	42.1	-58 24	9.0	9.6	Go	3	..	39382b
46	657	41.9	+82 28	8.7	9.5	G5	3	E	37294i	96	4708	42.1	-63 24	9.4	10.0	Go	1	..	42486b
47	4615	41.9	+21 43	6.86	6.92	A2	6	..	38819i	97	2643	42.1	-72 36	7.8	8.9	K2	6	..	20544b
48	4200	41.9	- 1 7	9.2	10.2	Ko	1	..	14195b	98	2193	42.2	+61 59	5.97	5.78	B2	9	0,10	38526i
49	5635	41.9	- 2 23	9.2	10.2	Ko	1	..	14195b	99	4342	42.2	+33 49	8.19	9.26	K2	3	..	38099i
50	5636	41.9	- 2 45	7.59	8.01	F5	8	..	14195b	100	4476	42.2	+22 28	8.78	8.78	Ao	2	..	38819i

THE HENRY DRAPER CATALOGUE.

207200

21^h 42^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	4784	42.2	+19 27	7.7	8.8	K ₂	3	..	38818i	51	15627	42.5	-27 37	9.4	10.6	K ₀	2	..	41069b
2	4613	42.2	+3 56	7.7	8.7	K ₀	7	0,3	14204b	52	17457	42.5	-28 41	8.1	9.2	K ₅	3	..	14139b
3	4414	42.2	+2 14	5.50	5.50	A ₀	..	0,10	56,101	53	15761	42.5	-33 23	9.5	10.4	G ₅	1	..	14139b
4	5640	42.2	-5 4	6.86	6.92	A ₂	7	2,9	44047b	54	13486	42.5	-50 26	9.8	10.3	F ₂	2	..	39682b
5	5738	42.2	-8 32	9.5	10.3	G ₅	2	..	40605b	55	7509	42.5	-60 20	8.2	9.6	K ₂	3	..	42486b
6	6020	42.2	-13 2	9.7	10.5	G ₅	3	..	39407b	56	7508	42.5	-60 31	8.4	8.1	A ₀	6	..	42486b
7	6068	42.2	-15 22	10.1	10.6	F ₈	3	..	39397b	57	4710	42.5	-63 20	7.6	8.2	G ₀	6	..	42486b
8	6013	42.2	-18 41	7.6	7.7	A ₃	3	..	41980b	58	3447	42.5	-68 33	8.5	9.5	K ₀	4	..	20428b
9	5766	42.2	-21 49	9.7	10.8	K ₀	1	..	39687b	59	2240	42.5	-73 38	8.9	8.9	A ₀	5	0,5	20544b
10	16834	42.2	-24 14	9.5	10.3	G ₅	4	..	39687b	60	2288	42.6	+60 40	4.46	4.52	A _{2p}	..	0,8R	56,101
11	15626	42.2	-27 40	8.7	9.7	K ₀	4	..	41069b	61	3031	42.6	+52 24	8.6	9.6	K ₀	1	..	37351i
12	16744	42.2	-32 48	8.01	8.6	A ₀	8	..	14139b	62	3547	42.6	+47 46	8.6	8.6	A ₀	2	..	38810i
13	15019	42.2	-36 18	8.1	10.3	K ₀	3	..	13854b	63	4679	42.6	+37 11	7.7	9.1	Ma	3	..	38099i
14	14735	42.2	-38 10	9.4	10.1	K ₀	3	..	13854b	64	4392	42.6	+23 39	7.8	8.8	K ₀	3	..	38819i
15	14736	42.2	-38 50	8.8	9.7	A ₀	3	..	13854b	65	4391	42.6	+23 22	9.9	11.3	Mb	..	..	M
16	14649	42.2	-41 29	10.5	11.7	K ₀	1	..	39674b	66	4617	42.6	+21 33	7.34	7.48	A ₅	4	..	38819i
17	6269	42.2	-61 56	8.4	9.0	G ₀	5	..	42486b	67	4861	42.6	+18 38	9.0	10.1	K ₂	1	..	38818i
18	4204	42.3	+42 35	6.43	6.43	A ₀	7	0,7	37913i	68	4627	42.6	+10 18	8.27	8.35	A ₃	2	..	38122i
19	4203	42.3	+42 25	8.7	9.5	G ₅	1	..	37913i	69	4903	42.6	+6 38	8.7	9.2	F ₈	2	..	14196b
20	4667	42.3	+39 23	8.1	8.1	A ₀	2	..	38542i	70	5764	42.6	-10 20	8.6	9.4	G ₅	4	..	40605b
21	4633	42.3	+36 1	8.8	9.3	F ₈	2	..	33649i	71	6094	42.6	-12 6	9.5	10.5	K ₀	2	..	39407b
22	5009	42.3	+20 49	8.0	8.0	A ₀	2	..	38819i	72	6095	42.6	-12 37	8.8	9.8	K ₀	3	..	39407b
23	4598	42.3	+16 44	6.24	6.52	F ₀	..	0,9	56,101	73	6022	42.6	-13 48	9.9	10.7	G ₅	2	..	39483b
24	5739	42.3	-8 8	8.0	8.8	G ₅	7	..	40605b	74	15815	42.6	-26 30	10.9	11.7	F ₈	1	..	39687b
25	6375	42.3	-16 53	9.7	9.8	A ₃	4	..	39397b	75	15816	42.6	-26 52	10.4	11.7	F ₅	2	..	39687b
26	17104	42.3	-23 13	11.1	11.2	A ₀	1	..	39687b	76	14738	42.6	-38 15	8.8	9.7	F ₈	5	..	13854b
27	18843	42.3	-30 5	9.9	10.7	G ₀	1	..	41069b	77	14438	42.6	-39 32	8.5	9.1	K ₀	6	..	39674b
28	13070	42.3	-51 50	7.6	7.7	A ₃	9	..	41053b	78	14502	42.6	-39 57	9.68	10.1	G ₅	3	..	39674b
29	3951	42.3	-65 10	5.65	7.2	K ₀	..	..	56,148	79	13934	42.6	-47 21	8.81	10.1	Ma	3	..	39682b
30	2874	42.3	-69 54	9.4	9.9	F ₈	2	..	20428b	80	13622	42.6	-49 27	9.8	10.6	K ₀	1	..	39682b
31	2639	42.3	-71 49	9.1	10.1	K ₀	3	..	20544b	81	13072	42.6	-50 59	9.8	10.3	F ₈	2	..	39669b
32	3430	42.4	+50 12	7.02	7.00	B ₉	6	..	38810i	82	9698	42.6	-55 41	9.6	10.4	G ₅	1	..	39669b
33	4253	42.4	+32 18	8.4	9.2	G ₅	2	..	38099i	83	4712	42.6	-63 3	9.3	10.3	K ₀	1	..	42486b
34	4626	42.4	+10 38	8.3	9.3	K ₀	1	..	38122i	84	5011	42.7	+20 46	8.6	9.4	G ₅	2	..	38818i
35	5827	42.4	-6 23	6.20	6.28	A ₃	..	2,7-	56,101	85	5843	42.7	-9 24	9.2	10.2	K ₀	4	..	40605b
36	5763	42.4	-10 21	9.7	10.7	K ₀	1	..	40605b	86	6098	42.7	-12 15	10.1	10.9	G ₅	2	..	39407b
37	5946	42.4	-16 33	8.4	9.2	G ₅	9	..	39397b	87	6096	42.7	-12 38	9.7	10.7	K ₀	1	..	39407b
38	15812	42.4	-26 20	7.70	8.8	G ₅	8	..	41069b	88	6014	42.7	-18 5	9.9	10.7	G ₅	2	..	39397b
39	9696	42.4	-55 19	9.1	10.1	K ₀	3	..	39669b	89	6165	42.7	-18 50	9.5	10.5	K ₀	4	..	39397b
40	4709	42.4	-63 47	9.5	9.5	A ₀	2	..	42486b	90	15817	42.7	-26 42	8.2	9.1	F ₅	7	..	41069b
41	2873	42.4	-70 6	5.50	7.2	K ₂	..	2,R	56,148	91	14979	42.7	-35 40	8.8	10.7	K ₅	1	..	14139b
42	4254	42.5	+32 32	7.93	8.27	F ₂	5	..	38099i	92	13074	42.7	-51 8	9.1	10.3	K ₅	2	..	39682b
43	4508	42.5	+29 39	8.5	9.5	K ₀	2	..	23009i	93	4170	42.7	-64 41	9.3	9.8	F ₈	4	..	20428b
44	4268	42.5	+27 11	8.7	9.7	K ₀	1	0,1	23009i	94	3199	42.7	-68 57	8.4	9.2	G ₅	6	..	20428b
45	4390	42.5	+23 13	8.6	9.6	K ₀	2	..	38819i	95	1085	42.8	+71 35	8.8	9.1	F ₂	2	..	38025i
46	5637	42.5	-2 11	9.0	9.3	F ₂	3	..	14195b	96	3501	42.8	+48 45	8.6	8.7	A ₃	2	..	38810i
47	5671	42.5	-11 45	9.7	10.3	G ₀	2	..	39483b	97	3551	42.8	+48 9	8.2	8.2	A ₀	3	..	38810i
48	6377	42.5	-17 2	9.9	10.5	G ₀	2	..	39397b	98	4163	42.8	+27 37	8.5	9.6	K ₂	1	..	23009i
49	6378	42.5	-17 30	9.7	10.8	K ₂	1	..	39397b	99	5830	42.8	-6 36	9.5	10.7	K ₅	1	..	40605b
50	16836	42.5	-24 31	8.5	9.1	F ₀	7	..	39687b	100	5637	42.8	-6 56	7.8	7.9	A ₂	3	2,10	44047b

207300

21^h 42^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	5844	42.8	— 9 40	9.9	10.7	G5	1	..	40605b	51	4268	43.2	+41 33	8.3	8.3	Ao	2	..	37913i
2	5768	42.8	— 22 8	9.5	10.0	G5	2	..	39687b	52	4525	43.2	+30 51	8.8	9.6	G5	1	..	38099i
3	16839	42.8	— 24 48	10.6	10.6	Go	2	..	39687b	53	4193	43.2	+28 33	8.5	8.6	A2	4	..	38819i
4	14651	42.8	— 41 39	10.3	11.0	G5	1	..	39674b	54	4397	43.2	+24 1	8.2	8.3	A5	2	..	35085i
5	3448	42.8	— 68 37	10.4	10.4	Ao	1	..	20428b	55	4900	43.2	+10 11	8.72	9.14	F5	3	..	14196b
6	2640	42.8	— 71 35	9.2	10.3	K2	2	..	20544b	56	4906	43.2	+ 6 34	8.3	9.3	Ko	3	..	14196b
7	1521	42.8	— 77 52	9.1	10.1	Ko	1	..	19964b	57	4745	43.2	+ 4 59	9.05	9.55	F8	2	..	14196b
8	2194	42.9	+61 50	7.9	7.7	B2	4	..	37277i	58	4205	43.2	— 1 25	9.2	10.3	K2	1	..	14195b
9	4266	42.9	+42 0	8.3	8.3	Ao	1	..	37913i	59	6072	43.2	—15 44	8.4	9.4	Ko	3	..	39483b
10	4191	42.9	+28 15	8.7	9.7	Ko	1	..	38819i	60	6166	43.2	—19 15	9.9	11.3	K2	1	..	39397b
11	4870	42.9	+ 5 20	8.71	9.71	Ko	2	..	14196b	61	16842	43.2	—24 6	9.2	10.9	K5	2	..	39687b
12	18016	42.9	— 29 44	9.82	10.4	Go	1	..	41069b	62	18019	43.2	—29 39	10.6	10.7	Go	1	..	41069b
13	14463	42.9	— 45 21	10.2	10.9	F8	2	..	39674b	63	15029	43.2	—36 6	7.7	8.4	F8	8	..	13854b
14	14016	42.9	— 48 26	8.8	9.1	Go	4	..	39682b	64	4713	43.2	—63 14	9.3	9.7	F5	3	..	42486b
15	13628	42.9	— 49 35	8.0	8.8	F2	6	..	39682b	65	2877	43.2	—70 49	7.7	8.1	F5	7	..	20544b
16	13076	42.9	— 51 14	10.2	10.6	F5	1	..	39669b	66	2242	43.2	—73 16	8.7	8.7	Ao	6	..	20544b
17	7510	42.9	— 60 29	9.0	9.0	Go	4	..	42486b	67	1736	43.2	—75 22	10.6	10.7	A5	4	..	42794b
18	6590	42.9	— 60 58	9.9	10.5	Go	2	..	39382b	68	1032	43.2	—80 50	8.6	8.9	F2	6	..	21397b
19	4164	43.0	+28 6	8.5	8.6	A2	2	..	38819i	69	1357	43.3	+67 17	8.2	8.2	B9	3	..	37277i
20	4743	43.0	+ 4 37	8.7	9.8	K2	2	..	14196b	70	4527	43.3	+31 4	8.1	8.1	B8	4	..	38099i
21	4539	43.0	+ 1 30	10.6	11.4	G5	1	..	12040b	71	4194	43.3	+29 0	8.7	9.7	Ko	2	..	38819i
22	5539	43.0	— 4 27	9.2	9.3	A2	3	..	40605b	72	4268	43.3	— 0 16	8.5	9.3	G5	4	..	14195b
23	5846	43.0	— 9 22	9.7	10.7	Ko	2	..	40605b	73	5834	43.3	— 6 43	7.8	7.9	A3	3	I,10	44047b
24	5770	43.0	— 22 36	8.8	10.2	Ko	4	..	39687b	74	6296	43.3	—20 8	9.5	9.9	Go	4	..	39687b
25	16749	43.0	— 32 51	9.4	9.2	F8	3	..	14139b	75	15030	43.3	—35 57	8.25	8.7	Fo	8	..	13854b
26	15641	43.0	— 42 5	9.2	10.3	Ko	3	..	39674b	76	13941	43.3	—47 4	7.10	8.3	Ko	..	0,7	56,148
27	1193	43.1	+69 31	8.5	8.8	F2	2	0,2-	38573i	77	7901	43.3	—58 46	7.8	8.4	G5	7	..	20558b
28	2396	43.1	+57 36	7.58	8.93	Ma	2	..	37351i	78	4714	43.3	—63 41	10.1	10.1	Ao	2	..	19898b
29	3144	43.1	+51 39	7.45	7.26	B2	4	..	38810i	79	4512	43.4	+29 16	8.1	9.1	Ko	4	..	38819i
30	3504	43.1	+48 51	4.26	4.09	B3	..	R	56,101	80	5016	43.4	+20 31	8.6	9.4	G5	1	..	38818i
31	4207	43.1	+42 51	8.1	8.1	Ao	2	..	37913i	81	4632	43.4	+10 43	8.5	8.9	F5	3	..	38122i
32	4477	43.1	+24 24	8.8	9.9	K2	1	..	23009i	82	5743	43.4	— 7 50	8.6	8.9	Fo	6	..	40605b
33	4664	43.1	+11 18	8.7	9.9	K5	1	..	14196b	83	5674	43.4	—11 36	10.1	10.9	G5	2	..	39483b
34	4899	43.1	+ 9 23	8.5	9.1	Go	1	..	38596i	84	5675	43.4	—11 40	10.1	10.7	Go	3	..	39483b
35	4540	43.1	+ 1 48	9.2	9.6	F5	2	..	12040b	85	5947	43.4	—16 42	9.5	10.6	K2	3	..	39397b
36	5639	43.1	— 7 10	9.1	10.2	K2	3	..	40605b	86	6167	43.4	—19 4	9.7	10.5	K2	3	..	39397b
37	5847	43.1	— 9 2	10.8	11.3	F8	1	..	40605b	87	6297	43.4	—20 37	9.2	9.4	F8	6	..	39687b
38	5766	43.1	—10 46	9.7	10.7	Ko	3	..	40605b	88	17463	43.4	—28 6	10.4	11.4	G5	1	..	41069b
39	5673	43.1	—11 26	9.2	9.8	Go	3	..	39483b	89	14084	43.4	—46 27	9.3	10.4	Ko	2	..	19941b
40	6128	43.1	—14 38	9.36	10.36	Ko	3	..	39483b	90	7902	43.4	—58 2	9.7	10.2	F8	2	..	39382b
41	6295	43.1	—19 53	8.88	9.7	G5	6	..	39687b	91	2641	43.4	—71 36	10.0	10.3	F2	2	..	20544b
42	16841	43.1	— 24 48	10.6	11.7	Ko	1	..	39687b	92	2016	43.4	—74 36	9.2	10.4	K5	3	3,3	20544b
43	15593	43.1	— 24 55	9.00	9.4	F5	6	..	39687b	93	4195	43.5	+28 20	8.1	8.6	F8	4	..	38819i
44	15820	43.1	— 26 32	9.4	9.7	Go	4	..	41069b	94	4166	43.5	+28 11	8.5	8.6	A5	3	..	23009i
45	18018	43.1	— 28 57	8.7	10.1	Ko	3	..	41069b	95	4417	43.5	+ 2 21	9.2	10.3	K2	1	E	12040b
46	18017	43.1	— 29 50	8.62	9.2	Ko	3	..	14139b	96	5836	43.5	— 6 21	10.4	10.5	A5	2	..	40605b
47	14488	43.1	— 37 37	9.4	10.8	Ko	2	..	13854b	97	6131	43.5	—14 12	9.2	9.8	Go	4	..	39483b
48	979	43.1	— 81 26	9.1	9.2	A5	3	..	21397b	98	17117	43.5	—23 17	8.0	8.8	Go	7	..	39687b
49	2290	43.2	+60 38	8.1	8.7	Go	1	..	38526i	99	14494	43.5	—37 10	8.17	10.0	Ma	4	..	13854b
50	3552	43.2	+47 31	7.7	8.0	Fo	2	..	38810i	100	14024	43.5	—48 11	6.62	7.7	Ko	..	5,8	56,148

THE HENRY DRAPER CATALOGUE

207400

21^h 43^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	13632	43.5	-49 31	9.8	10.3	G5	2	..	39669b	51	14087	43.9	-46 15	9.2	10.1	F8	2	..	19941b
2	9961	43.5	-54 52	9.18	9.6	F2	5	..	39669b	52	13079	43.9	-51 30	8.7	9.1	F0	6	..	39669b
3	4716	43.5	-63 51	9.7	10.5	G5	1	..	19898b	53	10168	43.9	-53 48	9.6	10.4	G5	1	..	39669b
4	4174	43.5	-64 15	9.7	10.5	G5	1	..	19898b	54	6591	43.9	-61 11	9.0	9.6	G5	5	5,2	39382b
5	832	43.6	+77 47	8.9	9.5	G0	2	..	38936i	55	1033	43.9	-80 11	8.9	9.0	A2	5	..	21397b
6	4261	43.6	+32 54	8.2	8.3	A2	3	..	38099i	56	4400	44.0	+23 54	9.1	10.2	K2	1	..	23009i
7	4746	43.6	+4 24	8.9	9.2	F0	4	0,1	14196b	57	4867	44.0	+18 18	8.7	9.8	K2	1	..	38818i
8	5540	43.6	-4 4	8.8	9.3	F8	1	..	14195b	58	5838	44.0	-6 40	10.1	10.9	G5	1	..	40605b
9	15273	43.6	-34 6	9.1	10.5	K2	2	..	14139b	59	6133	44.0	-14 4	8.2	8.3	A2	7	..	39483b
10	14445	43.6	-39 2	10.1	10.1	G0	1	..	13854b	60	6170	44.0	-19 5	9.5	9.6	G0	4	..	39397b
11	14656	43.6	-44 25	9.6	10.1	F2	4	0,2	39674b	61	6171	44.0	-19 8	9.9	10.5	K0	2	..	39397b
12	14025	43.6	-48 50	10.2	10.0	F0	2	..	39669b	62	6097	44.0	-20 59	9.5	9.7	G5	4	..	39687b
13	9965	43.6	-57 15	9.3	9.9	G0	4	0,3	39382b	63	5774	44.0	-22 17	9.5	10.2	G0	3	..	39687b
14	7903	43.6	-58 29	9.8	10.4	G0	2	..	39382b	64	15831	44.0	-26 6	9.1	9.4	F0	5	..	41069b
15	7511	43.6	-60 6	7.71	8.4	K0	6	..	42486b	65	15638	44.0	-27 5	10.4	11.2	F8	2	..	39687b
16	1647	43.7	+65 28	8.2	8.3	A2	3	..	37277i	66	9968	44.0	-57 32	9.9	10.4	F8	2	..	39382b
17	3035	43.7	+52 50	8.7	8.7	A0	2	..	37351i	67	2017	44.0	-74 11	8.6	9.6	K0	4	5,4	19967b
18	4530	43.7	+35 1	8.4	9.0	G0	2	..	38099i	68	4274	44.1	+41 52	8.09	9.27	K5	1	..	37913i
19	4399	43.7	+24 0	7.28	8.46	K5	3	..	38819i	69	4263	44.1	+32 20	6.79	6.79	A0	9	..	38099i
20	5643	43.7	-7 2	9.5	10.5	K0	1	..	40605b	70	4200	44.1	+28 15	8.6	9.6	K0	2	..	38819i
21	5949	43.7	-16 37	10.4	11.0	G0	2	..	39397b	71	4790	44.1	+20 2	8.60	8.94	F2	2	..	38818i
22	6382	43.7	-17 19	9.9	10.9	K0	1	..	39397b	72	4902	44.1	+9 23	9.0	9.3	F2	3	..	14196b
23	5772	43.7	-22 28	8.5	10.5	K5	3	..	39687b	73	4750	44.1	+4 49	8.7	9.8	K2	2	..	14196b
24	17120	43.7	-23 5	10.2	10.2	G5	3	..	39687b	74	5642	44.1	-2 31	9.2	9.5	F	1	..	14195b
25	15635	43.7	-27 8	10.6	11.7	K0	1	..	39687b	75	5840	44.1	-6 42	9.5	10.3	G5	3	..	40605b
26	18852	43.7	-30 22	9.7	10.7	G0	1	..	41069b	76	15600	44.1	-25 19	10.4	10.6	A0	3	..	39687b
27	14471	43.7	-45 33	10.7	10.9	F8	1	..	39674b	77	15601	44.1	-25 37	8.1	8.8	A0	8	..	41069b
28	9702	43.7	-55 38	7.6	8.9	K0	8	..	39669b	78	15833	44.1	-26 37	9.9	10.8	F8	3	..	39687b
29	2878	43.7	-69 56	8.7	9.8	K2	4	0,3	20428b	79	15640	44.1	-27 3	10.6	11.2	F5	1	..	39687b
30	2642	43.7	-71 1	8.2	9.2	K0	6	..	20544b	80	15639	44.1	-27 52	7.15	6.9	A0	9	..	14139b
31	4048	43.8	+43 32	7.58	7.58	A0	4	..	37913i	81	14753	44.1	-38 42	8.6	10.9	K5	1	..	13854b
32	4749	43.8	+7 58	8.9	10.0	K2	1	..	14196b	82	1539	44.1	-76 44	9.9	11.0	K2	1	..	19964b
33	4420	43.8	+2 41	8.7	9.7	K0	3	E	12040b	83	727	44.1	-83 13	9.0	10.0	K0	5	..	21397b
34	4269	43.8	-0 45	8.9	10.1	K5	1	..	14195b	84	1087	44.2	+71 41	7.32	7.30	B9	5	..	38025i
35	5837	43.8	-5 52	6.81	7.81	K0	8	..	14195b	85	1195	44.2	+69 52	8.5	9.3	G5	2	..	38025i
36	5849	43.8	-9 7	9.9	10.7	G5	2	..	40605b	86	3680	44.2	+45 20	7.97	9.04	K2	3	..	37913i
37	5850	43.8	-9 15	9.7	10.7	K0	1	..	40605b	87	4050	44.2	+43 52	7.9	8.9	K0	3	..	37913i
38	6075	43.8	-15 35	7.69	7.75	A2	8	..	39483b	88	4275	44.2	+41 41	8.0	8.8	G5	1	..	37913i
39	6169	43.8	-18 52	7.8	7.9	A2	4	..	41861b	89	4611	44.2	+38 29	7.16	7.72	G0	4	5,4	38542i
40	15596	43.8	-25 18	10.4	10.9	F5	2	..	39687b	90	4622	44.2	+21 58	7.08	7.14	A2	5	..	38819i
41	15274	43.8	-34 0	8.1	10.2	K5	3	..	14139b	91	4874	44.2	+5 16	8.61	9.68	K2	3	..	14196b
42	14733	43.8	-43 9	8.2	9.6	K0	5	2,3	39674b	92	6385	44.2	-77 0	9.9	10.5	G0	3	..	39397b
43	14657	43.8	-43 54	8.0	8.3	A3	6	1,7	41077b	93	14501	44.2	-37 47	9.5	10.8	K0	1	..	13854b
44	1425	43.8	-78 13	9.1	10.1	K0	2	..	19964b	94	10171	44.2	-53 53	9.0	9.8	G5	4	..	39669b
45	3946	43.9	+44 30	8.7	9.8	K2	1	..	37913i	95	3956	44.2	-65 31	8.8	9.4	G0	3	..	20428b
46	4643	43.9	+36 6	6.60	7.78	K5	6	..	38099i	96	1522	44.2	-77 48	7.8	8.9	K2	5	..	19964b
47	4749	43.9	+4 54	9.2	9.3	A2	3	..	14196b	97	188	44.2	-88 17	9.01	9.7	G5	4	..	22980b
48	4270	43.9	+0 8	9.6	10.1	F8	1	..	14195b	98	4621	44.3	+25 14	7.96	8.24	F0	4	5,4R	23009i
49	18857	43.9	-30 35	9.5	9.6	G0	3	..	41069b	99	4403	44.3	+23 16	8.6	9.4	G5	1	..	38819i
50	14449	43.9	-39 4	7.21	7.4	F8	9	..	13854b	100	4781	44.3	+0 34	10.6	11.0	F5	1	..	14195b

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	5745	44.3	— 8 17	10.1	10.7	Go	1	..	40605b	51	6076	44.7	— 15 12	9.9	10.7	G5	2	..	39397b
2	5746	44.3	— 8 47	8.4	8.5	A3	7	..	40605b	52	6389	44.7	— 17 19	6.47	7.47	Ko	4	..	41861b
3	6027	44.3	— 13 11	6.12	6.12	Ao	5	0,9	41980b	53	6388	44.7	— 17 47	9.0	9.6	Go	5	..	39397b
4	6098	44.3	— 20 56	8.8	9.4	G5	6	..	39687b	54	6017	44.7	— 18 40	10.1	10.7	Go	3	..	39397b
5	6099	44.3	— 21 15	10.1	10.5	F8	2	..	39687b	55	6100	44.7	— 21 45	8.8	9.7	Go	5	..	39687b
6	15602	44.3	— 25 19	9.9	10.3	F5	2	..	39687b	56	5776	44.7	— 22 41	9.0	9.7	F8	4	..	39687b
7	18030	44.3	— 29 0	9.7	9.9	Go	4	..	41069b	57	16858	44.7	— 24 7	10.2	10.9	Ko	2	..	39687b
8	15776	44.3	— 33 3	9.9	9.9	F8	1	..	14139b	58	18862	44.7	— 30 27	8.9	9.8	F5	3	..	41069b
9	14502	44.3	— 37 16	8.8	10.5	G5	2	..	13854b	59	14479	44.7	— 45 20	9.8	10.9	F8	2	..	39674b
10	14513	44.3	— 40 15	9.7	10.0	Fo	3	..	39674b	60	2644	44.7	— 71 32	9.3	10.1	G5	3	..	20544b
11	14476	44.3	— 45 16	8.7	9.6	Ao	5	0,7	41077b	61	2708	44.8	+ 53 55	8.1	8.4	Fo	5	..	37351i
12	14088	44.3	— 46 14	8.7	9.6	Ko	4	..	19941b	62	4352	44.8	+ 34 8	8.6	9.4	G5	1	..	38099i
13	2245	44.3	— 73 28	8.8	9.3	F8	4	..	20544b	63	4793	44.8	+ 20 0	6.16	5.99	B3	8	0,9	38819i
14	2399	44.4	+ 57 48	8.7	9.5	G5	2	..	37351i	64	4637	44.8	+ 10 15	9.27	9.77	F8	2	..	14196b
15	3438	44.4	+ 51 9	7.7	7.7	Ao	4	..	37351i	65	4752	44.8	+ 7 47	8.5	8.5	Ao	3	..	14196b
16	4427	44.4	+ 38 11	5.80	5.78	B9	9	..	38542i	66	4624	44.8	+ 3 45	8.9	9.2	F2	3	..	14196b
17	4623	44.4	+ 21 25	7.8	7.9	A2	3	..	38819i	67	5842	44.8	— 6 47	9.7	10.9	K5	1	..	40605b
18	4877	44.4	+ 5 39	8.1	9.3	K5	3	..	14196b	68	6104	44.8	— 11 49	8.2	9.2	Ko	6	..	39483b
19	6029	44.4	— 13 23	9.2	10.0	G5	2	..	39483b	69	15646	44.8	— 27 48	8.5	8.3	F8	7	..	41069b
20	6030	44.4	— 13 29	9.2	9.8	Go	2	..	39483b	70	17474	44.8	— 28 17	9.9	10.0	Go	2	..	41069b
21	6172	44.4	— 19 10	8.7	9.1	F8	6	..	39397b	71	18863	44.8	— 30 13	9.1	10.7	K2	1	..	41069b
22	16854	44.4	— 24 17	9.7	10.0	A5	4	..	39687b	72	14659	44.8	— 41 19	9.5	10.3	Go	2	..	39674b
23	15836	44.4	— 26 40	9.4	10.0	Ko	3	..	39687b	73	10173	44.8	— 53 9	9.8	10.4	Go	1	..	39669b
24	15777	44.4	— 33 25	9.1	10.7	Ko	1	..	14139b	74	7736	44.8	— 59 29	10.5	11.3	G5	1	..	39382b
25	11945	44.4	— 52 48	10.2	10.8	Go	2	..	39669b	75	6271	44.8	— 62 31	7.0	7.5	F8	8	..	42486b
26	7512	44.4	— 59 53	8.66	9.0	F5	4	..	42486b	76	1523	44.8	— 77 25	7.9	9.3	Mb	3	..	19964b
27	1178	44.4	— 79 4	8.8	9.8	Ko	1	..	19964b	77	2199	44.9	+ 61 35	8.7	8.8	A3	2	..	37277i
28	2294	44.5	+ 60 14	5.64	6.99	Ma	..	0,7	56,148	78	4521	44.9	+ 29 13	9.3	10.7	Ma	..	..	M
29	3444	44.5	+ 46 21	8.3	8.9	Go	3	..	37913i	79	4484	44.9	+ 23 5	8.6	9.6	Ko	1	..	38819i
30	4612	44.5	+ 38 37	7.7	8.9	K5	1	..	38570i	80	4626	44.9	+ 22 8	8.4	8.8	F5	2	..	38819i
31	4622	44.5	+ 26 2	9.1	9.1	A	1	..	38819i	81	4753	44.9	+ 4 44	7.50	8.50	Ko	7	0,3	14196b
32	4607	44.5	+ 17 6	7.9	8.9	Ko	1	..	38822i	82	5549	44.9	— 3 48	9.2	10.3	K2	1	..	40605b
33	4909	44.5	+ 6 52	8.9	9.4	F8	2	..	14196b	83	5952	44.9	— 16 40	7.8	8.6	G5	6	..	39483b
34	4424	44.5	+ 2 54	8.9	9.7	G5	2	E	14196b	84	6390	44.9	— 16 57	9.7	10.3	Go	3	..	39397b
35	15644	44.5	— 27 3	10.9	12.0	K2	1	..	39687b	85	16860	44.9	— 24 39	8.1	10.8	G5	2	..	39687b
36	15037	44.5	— 36 28	8.8	10.0	Go	3	..	13854b	86	15839	44.9	— 26 11	10.6	11.2	G5	2	..	39687b
37	9971	44.5	— 57 29	9.3	10.4	G5	1	..	39382b	87	17476	44.9	— 27 59	11.1	10.9	Go	1	..	41069b
38	2420	44.6	+ 59 14	7.03	6.86	B3	5	..	38526i	88	18865	44.9	— 30 47	9.4	9.6	F2	2	..	41069b
39	3038	44.6	+ 53 1	8.8	9.4	G	1	..	37351i	89	14453	44.9	— 39 18	10.5	10.0	A2	3	..	39674b
40	5677	44.6	— 11 30	10.1	10.7	Go	2	..	39483b	90	10175	44.9	— 53 12	8.2	8.6	Fo	5	0,7	41053b
41	16857	44.6	— 24 30	11.8	10.3	F2	4	..	39687b	91	2648	44.9	— 72 45	8.1	8.4	Fo	7	..	20544b
42	2018	44.6	— 74 7	9.3	10.4	K2	2	3,1	20544b	92	2019	44.9	— 74 23	9.6	10.6	Ko	3	2,3	42794b
43	3040	44.7	+ 52 37	7.9	7.9	Ao	5	..	37351i	93	4537	45.0	+ 30 17	8.36	8.36	Ao	2	R	38099i
44	4276	44.7	+ 41 20	8.2	9.2	Ko	1	..	37913i	94	4679	45.0	+ 15 8	8.39	9.46	K2	2	..	38122i
45	4505	44.7	+ 15 18	7.24	8.24	Ko	7	..	38122i	95	4428	45.0	+ 2 13	9.9	10.3	F5	3	..	12040b
46	4545	44.7	+ 1 20	10.6	10.7	A5	2	..	12040b	96	4547	45.0	+ 1 17	8.89	9.96	K2	2	..	12040b
47	4274	44.7	— 0 7	9.9	10.9	Ko	1	..	14195b	97	5548	45.0	— 4 46	8.90	9.90	Ko	2	..	14195b
48	4273	44.7	— 0 47	9.6	10.6	Ko	1	..	14195b	98	5748	45.0	— 8 45	9.5	10.5	Ko	1	..	40605b
49	5643	44.7	— 2 27	9.0	9.5	F8	2	..	14195b	99	5679	45.0	— 11 23	10.1	10.6	F8	2	..	39483b
50	6103	44.7	— 12 5	8.4	9.2	G5	6	..	39483b	100	6019	45.0	— 18 22	10.4	10.8	F5	2	..	39397b

THE HENRY DRAPER CATALOGUE

207600

21^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	6301	45.0	-20 11	9.5	10.2	G5	3	..	39397b	51	4871	45.4	+18 59	7.10	7.24	A5	7	..	38818i
2	6101	45.0	-20 57	9.7	10.2	Go	3	..	39687b	52	4612	45.4	+16 49	5.32	5.66	F2	10	..	38122i
3	17477	45.0	-28 24	7.40	7.5	B9	8	..	14139b	53	4784	45.4	+0 16	7.83	8.90	K2	6	0,2	14195b
4	14761	45.0	-38 13	8.6	9.1	Fo	6	..	13854b	54	5308	45.4	-3 40	9.5	10.0	F8	1	..	14195b
5	13087	45.0	-51 3	9.1	9.4	Ao	6	..	39669b	55	5648	45.4	-7 47	9.9	10.9	Ko	1	..	40605b
6	13088	45.0	-51 21	9.6	10.6	Go	2	..	39669b	56	5749	45.4	-8 16	9.0	9.6	Go	6	..	40605b
7	9704	45.0	-55 7	7.24	7.9	Ao	4	2,9	44240b	57	5681	45.4	-11 14	9.2	10.2	Ko	2	..	39483b
8	3448	45.1	+46 26	7.9	8.4	F8	3	..	37913i	58	14664	45.4	-41 1	9.5	10.3	A5	1	..	39674b
9	4277	45.1	+41 53	7.96	9.14	K5	2	..	37913i	59	13500	45.4	-50 37	9.6	10.8	Ko	1	..	39669b
10	4644	45.1	+40 45	8.4	9.2	G5	1	..	37913i	60	2020	45.4	-74 5	8.6	8.9	Fo	5	0,5	20544b
11	4209	45.1	-1 4	7.70	8.20	F8	7	..	14195b	61	3632	45.5	+50 3	7.32	7.32	Ao	5	0,4	38810i
12	6020	45.1	-18 29	9.5	9.8	F2	6	..	39397b	62	3565	45.5	+47 58	8.1	8.6	F8	1	..	38810i
13	14516	45.1	-40 38	9.1	10.6	Ko	1	..	39674b	63	4540	45.5	+34 27	7.72	7.72	Ao	7	..	38099i
14	14662	45.1	-41 39	9.7	10.9	K2	2	..	39674b	64	4508	45.5	+15 16	8.04	8.38	F2	4	..	38122i
15	14031	45.1	-48 17	8.6	8.5	Ao	6	0,6	19941b	65	5648	45.5	-5 7	8.8	9.6	G5	2	..	14195b
16	9705	45.1	-55 42	10.0	10.4	F5p	1	R	39669b	66	5649	45.5	-7 37	9.7	10.1	F5	2	..	40605b
17	9757	45.1	-56 11	9.5	10.1	Go	2	..	39669b	67	5751	45.5	-8 40	9.5	10.3	G5	2	..	40605b
18	9758	45.1	-56 15	7.1	8.3	Ko	9	..	39669b	68	14667	45.5	-41 23	9.5	10.9	Ko	2	..	39674b
19	2403	45.2	+57 29	8.3	8.4	A2	3	..	37351i	69	15662	45.5	-42 8	8.4	9.4	Ko	5	0,4	41077b
20	2402	45.2	+57 22	8.7	8.8	A2	2	..	38526i	70	1034	45.5	-80 11	7.45	8.1	Ko	8	..	21397b
21	4646	45.2	+40 33	8.2	8.3	A2	2	..	37913i	71	3041	45.6	+52 56	8.7	8.7	Ao	3	..	37351i
22	4433	45.2	+37 54	8.1	9.3	K5	2	..	38570i	72	4057	45.6	+43 44	8.7	8.8	A5	1	..	37913i
23	4269	45.2	+32 51	7.06	7.84	G5	6	..	38099i	73	4648	45.6	+40 40	6.49	6.49	Ao	6	2,6 R	38542i
24	4203	45.2	+28 32	8.7	9.2	F8	4	..	38819i	74	4526	45.6	+29 19	8.2	8.2	Ao	3	..	38099i
25	4406	45.2	+23 36	7.8	9.0	K5	2	..	38819i	75	4483	45.6	+25 7	7.26	7.68	F5	6	..	38819i
26	4638	45.2	+10 20	7.77	8.05	Fo	5	..	38122i	76	4640	45.6	+10 28	8.7	9.8	K2	3	..	14196b
27	5854	45.2	-9 27	6.75	7.75	Ko	..	2,8	56,148	77	5649	45.6	-5 36	10.1	11.5	Mb	1	..	40605b
28	6077	45.2	-15 36	10.1	10.9	G5	1	..	39397b	78	5682	45.6	-11 7	8.4	9.2	G5	5	..	40605b
29	6102	45.2	-21 1	8.0	7.7	F8	5	..	41861b	79	6142	45.6	-13 58	10.1	10.6	F8	2	..	39483b
30	15609	45.2	-25 47	9.4	10.9	K2	4	..	39687b	80	16866	45.6	-24 44	11.4	11.7	A2	1	..	39687b
31	17479	45.2	-28 11	9.9	9.8	F8	2	..	41069b	81	15789	45.6	-33 0	8.5	8.6	F5	6	..	14139b
32	15655	45.2	-42 21	8.7	10.0	Ko	3	0,3	39674b	82	13502	45.6	-50 32	10.4	10.9	F8	1	..	39669b
33	13498	45.2	-50 3 9	9.8	10.3	G5	3	..	39669b	83	616	45.7	+83 51	9.0	9.1	A3	3	..	37281i
34	9759	45.2	-56 52	9.1	9.9	G5	2	..	39669b	84	1594	45.7	+64 41	6.98	7.98	Ko	7	..	37277i
35	637	45.2	-84 25	9.2	9.8	Go	3	..	21397b	85	4649	45.7	+41 7	8.6	8.6	B9	2	..	37913i
36	1198	45.3	+69 41	6.42	6.42	Ao	9	0,7	37277i	86	5772	45.7	-9 55	9.16	9.94	G5	3	..	40605b
37	4685	45.3	+36 38	8.0	9.1	K2	2	..	38099i	87	5774	45.7	-10 31	7.32	7.88	Go	8	..	40605b
38	4610	45.3	+17 10	8.3	9.4	K2	1	..	38822i	88	6078	45.7	-15 17	9.0	10.0	Ko	2	..	39483b
39	5551	45.3	-4 25	9.0	9.5	F8	2	..	14195b	89	6303	45.7	-20 20	8.8	9.6	K2	5	..	39397b
40	6391	45.3	-17 31	10.4	11.2	G5	1	..	39397b	90	6104	45.7	-21 38	10.5	11.2	Go	1	..	39687b
41	6392	45.3	-17 39	10.1	10.6	F8	2	..	39397b	91	5779	45.7	-22 14	8.4	9.6	F8	5	..	39687b
42	6302	45.3	-20 40	8.0	9.4	Ma	6	..	39397b	92	17135	45.7	-23 44	6.85	7.7	F8	7	..	41861b
43	15650	45.3	-26 54	10.6	10.9	Go	2	..	39687b	93	15846	45.7	-25 55	10.4	11.4	F2	1	..	39687b
44	14512	45.3	-37 52	8.6	10.2	G5	3	..	13854b	94	15654	45.7	-27 52	7.95	9.1	Ko	6	..	41069b
45	14521	45.3	-40 31	8.8	9.5	A2	5	..	39674b	95	17480	45.7	-28 44	9.2	10.3	G5	2	..	41069b
46	9708	45.3	-55 33	9.8	10.4	Go	1	..	39669b	96	18498	45.7	-30 58	9.1	10.4	Go	1	..	41069b
47	3631	45.4	+49 13	7.7	8.7	Ko	3	..	38810i	97	15664	45.7	-42 50	9.8	9.5	F5	4	3,2	39674b
48	4614	45.4	+38 32	8.2	9.2	Ko	1	..	38570i	98	14753	45.7	-43 32	9.0	9.6	F5	3	3,3	39674b
49	4647	45.4	+35 39	8.0	8.5	F8	4	..	38099i	99	14483	45.7	-45 28	9.6	10.9	K2	3	..	39674b
50	4525	45.4	+29 43	5.00	5.00	Ao	..	..	56,101	100	2021	45.7	-73 54	7.32	8.2	Go	8	0,8	20544b

207700

21^h 45^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	4438	45.8	+37 17	8.4	8.4	Ao	3	..	38099i	51	18047	46.1	-29 5	10.4	10.7	K2	1	..	41069b
2	4542	45.8	+34 20	7.7	8.9	K5	2	..	38099i	52	16778	46.1	-32 44	9.1	9.8	A5	2	..	14139b
3	4556	45.8	+31 22	7.30	8.30	Ko	5	..	38099i	53	7518	46.1	-60 3	9.0	8.7	Go	3	..	42486b
4	4882	45.8	+ 5 18	8.26	8.32	A2	3	..	38596i	54	4061	46.2	+43 25	7.32	8.32	Ko	4	..	37913i
5	4275	45.8	- 0 47	9.6	9.7	A3	2	..	14195b	55	4226	46.2	+42 24	7.9	8.9	Ko	3	..	37913i
6	5555	45.8	- 4 20	9.5	10.1	Go	2	..	14195b	56	4558	46.2	+32 11	6.90	7.90	Ko	7	..	38099i
7	5753	45.8	- 8 23	7.8	8.3	F8	8	..	40605b	57	4673	46.2	+12 9	7.6	..	Pec.	6	R	38122i
8	5956	45.8	-16 34	9.7	9.8	A2	3	..	39483b	58	4913	46.2	+ 9 55	8.02	8.44	F5	4	..	38122i
9	6173	45.8	-18 52	10.5	11.3	G5	1	..	39397b	59	6394	46.2	-17 45	9.9	10.9	Ko	1	..	39397b
10	6105	45.8	-21 20	10.4	11.2	Ko	1	..	39687b	60	6176	46.2	-19 5	6.14	7.1	F2	7	..	41861b
11	18869	45.8	-30 26	9.7	9.9	F8	2	..	41069b	61	6106	46.2	-21 43	9.1	9.9	K5	3	..	39687b
12	15294	45.8	-34 22	8.2	10.0	Go	3	..	14139b	62	15617	46.2	-25 45	9.9	10.9	Go	2	..	39687b
13	15045	45.8	-36 7	9.4	10.5	Ko	1	..	13854b	63	18873	46.2	-30 47	7.85	8.4	Fo	7	..	14139b
14	15044	45.8	-36 25	8.5	10.0	K5	3	..	13854b	64	14522	46.2	-37 48	8.8	10.8	Ma	1	..	13854b
15	9976	45.8	-57 48	7.5	8.9	Ko	6	..	20558b	65	14669	46.2	-41 53	6.85	8.2	Ko	8	0,8	39674b
16	7516	45.8	-60 5	9.1	9.6	F8	2	..	39382b	66	3449	46.2	-68 26	9.0	9.8	G5	3	..	20428b
17	4720	45.8	-63 20	9.6	10.1	F8	1	..	19898b	67	801	46.3	+76 1	8.67	9.74	K2	2	..	38936i
18	3959	45.8	-65 11	9.3	9.7	F5	4	..	20428b	68	1199	46.3	+70 5	8.99	9.05	A2	2	..	38580i
19	4629	45.9	+21 29	7.15	8.15	Ko	3	..	38819i	69	4284	46.3	+41 24	8.1	9.3	K5	1	..	37913i
20	4551	45.9	+ 1 54	9.2	10.2	Ko	3	..	12040b	70	4653	46.3	+40 36	8.02	8.02	Ao	3	..	37913i
21	4785	45.9	+ 0 18	8.68	9.75	K2	2	..	14195b	71	4691	46.3	+37 7	8.0	9.0	Ko	2	..	38099i
22	6174	45.9	-19 20	9.2	10.5	G5	3	..	39397b	72	4756	46.3	+ 7 52	8.5	9.3	G5	4	..	14196b
23	15615	45.9	-25 31	9.5	10.0	Ao	5	..	39687b	73	5646	46.3	- 2 43	8.0	9.0	Ko	5	..	14195b
24	15011	45.9	-35 30	8.8	10.8	K5	1	..	14139b	74	5755	46.3	- 7 53	8.8	9.6	G5	4	..	40605b
25	14517	45.9	-37 23	10.3	10.2	A2	2	..	13854b	75	6177	46.3	-19 19	9.2	10.2	Ma	3	..	39397b
26	14754	45.9	-43 27	7.5	9.2	K2	6	2,5	41077b	76	6108	46.3	-21 46	9.7	10.8	K5	1	..	39687b
27	980	45.9	-81 40	9.3	10.4	K2	2	..	21397b	77	13960	46.3	-47 8	9.6	10.9	K2	1	..	19941b
28	2712	46.0	+53 54	8.1	8.1	B8	2	..	37351i	78	3595	46.3	-65 56	10.0	10.6	Go	1	..	20428b
29	2711	46.0	+53 21	8.1	9.1	Ko	1	..	37351i	79	324	46.4	+86 33	8.3	8.4	A2	4	3,3	37281i
30	3519	46.0	+48 19	8.8	8.8	Ao	1	..	38810i	80	2300	46.4	+60 49	6.41	7.76	Ma	5	0,5	38526i
31	4630	46.0	+21 48	8.0	9.1	K2	1	..	38819i	81	2716	46.4	+53 47	8.1	8.1	Ao	4	..	37351i
32	6112	46.0	-12 42	9.0	9.1	A5	4	..	39483b	82	4618	46.4	+38 57	8.0	8.1	A3	5	..	38570i
33	6143	46.0	-14 4	9.9	10.5	G	1	..	39483b	83	4643	46.4	+10 26	8.47	9.47	Ko	1	..	38596i
34	..	46.0	-18 43	..	..	Ko	1	..	39397b	84	4885	46.4	+ 6 11	9.09	9.59	F8	3	..	14196b
35	15657	46.0	-27 2	10.4	11.4	F8	2	..	39687b	85	5849	46.4	- 6 12	10.1	11.1	Ko	1	..	40605b
36	13504	46.0	-50 3	7.70	8.2	Fo	8	..	19941b	86	5684	46.4	-11 31	9.9	10.4	F8	3	..	39483b
37	9709	46.0	-55 12	9.4	9.8	F5	3	..	39669b	87	5957	46.4	-16 0	9.7	10.9	K5	2	..	39397b
38	9977	46.0	-57 6	8.5	9.6	K2	4	..	20558b	88	17142	46.4	-23 13	8.9	9.6	Ko	5	..	39687b
39	4060	46.1	+43 29	8.5	9.3	G5	1	..	37913i	89	16874	46.4	-24 52	9.1	9.8	Fo	6	..	39687b
40	4209	46.1	+28 18	8.0	8.8	G5	3	..	38819i	90	14671	46.4	-41 2	8.1	8.5	Go	8	..	39674b
41	4684	46.1	+14 46	8.9	9.0	A3	2	..	38122i	91	15667	46.4	-42 11	9.1	9.1	F5	5	0,5	39674b
42	4433	46.1	+ 2 39	8.9	9.0	A5	2	5,3	10346b	92	14038	46.4	-48 12	9.1	9.4	F2	4	0,3	19941b
43	5645	46.1	- 2 4	9.2	9.7	F8	1	..	14195b	93	3043	46.5	+52 14	6.56	6.37	B2	6	..	37351i
44	5557	46.1	- 4 10	9.7	10.3	Go	1	..	14195b	94	4210	46.5	+28 41	9.3	10.3	Ko	1	..	38819i
45	5650	46.1	- 7 8	9.2	10.0	G5	3	..	40605b	95	4788	46.5	+ 0 22	8.9	10.0	K2	3	..	14195b
46	5651	46.1	- 7 28	9.7	10.9	K5	1	..	40605b	96	4787	46.5	+ 0 17	6.86	7.86	Ko	7	0,7	14195b
47	6113	46.1	-12 8	9.5	10.1	Go	2	..	39483b	97	6145	46.5	-14 24	8.7	9.5	G5	3	..	39483b
48	6144	46.1	-13 58	8.2	8.5	Fo	7	..	39483b	98	14674	46.5	-41 1	11.0	11.4	F5	1	..	39674b
49	6080	46.1	-15 0	9.7	10.2	F8	2	..	39483b	99	14755	46.5	-43 19	8.4	8.9	Fo	6	..	39674b
50	6304	46.1	-20 36	9.7	10.5	Ko	3	..	39397b	100	14486	46.5	-45 48	8.6	9.8	Ko	3	..	19941b

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21^h46^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	14108	46.5	-46 29	9.6	10.9	Ko	1	..	19941b	51	15670	46.9	-42 39	8.5	8.9	Ko	5	2,4	39674b
2	4721	46.5	-63 34	7.8	7.8	Ao	7	..	42486b	52	13963	46.9	-47 18	7.8	8.6	F8	7	..	19941b
3	834	46.6	+77 47	7.18	7.18	Ao	6	..	38590i	53	13509	46.9	-50 49	10.2	10.9	F2	2	..	39662b
4	4559	46.6	+32 11	8.5	9.5	Ko	2	..	38099i	54	1180	46.9	-79 29	9.0	9.6	Go	3	..	42794b
5	4560	46.6	+32 11	8.5	8.5	Ao	5	..	38099i	55	3451	47.0	+50 32	7.82	8.10	Fo	3	5,3	38810i
6	5687	46.6	-11 44	10.4	11.2	G5	2	..	39483b	56	4065	47.0	+44 3	8.1	9.2	K2	1	..	37913i
7	6023	46.6	-17 56	10.6	11.2	Go	2	..	39397b	57	4621	47.0	+39 5	6.19	6.17	B9	9	0,9	38542i
8	6022	46.6	-18 23	10.6	11.1	F8	1	..	39397b	58	4283	47.0	+26 16	8.0	8.5	F8	3	..	38819i
9	6178	46.6	-19 37	9.2	9.3	F2	5	..	39397b	59	4874	47.0	+18 51	6.85	7.19	F2	7	..	38818i
10	15856	46.6	-26 41	10.4	11.4	G5	2	..	39687b	60	4704	47.0	+12 16	8.4	8.9	F8	1	..	38122i
11	14668	46.6	-44 47	9.75	10.5	F8	3	..	39674b	61	4645	47.0	+10 39	6.90	7.04	A5	7	..	38122i
12	14488	46.6	-45 36	9.8	10.4	Go	3	..	39674b	62	4753	47.0	+ 8 36	7.9	8.0	A5	5	..	38596i
13	6594	46.6	-61 21	9.0	9.0	A3	4	..	42486b	63	5757	47.0	- 8 47	9.0	10.2	K5	3	..	40605b
14	1525	46.6	-77 6	8.9	9.9	Ko	4	..	19964b	64	5862	47.0	- 9 24	9.9	10.9	Ko	1	..	40605b
15	3521	46.7	+48 51	8.2	9.3	K2	1	..	38810i	65	6395	47.0	-17 13	9.2	10.4	K5	3	..	39397b
16	4493	46.7	+22 23	8.0	9.0	Ko	2	..	38819i	66	6307	47.0	-20 18	9.5	9.9	K5	4	..	39397b
17	5648	46.7	- 2 38	9.5	9.9	F5	1	..	14195b	67	15798	47.0	-33 41	8.5	10.7	K5	2	..	14139b
18	5653	46.7	- 7 4	9.2	9.5	F2	3	..	40605b	68	3844	47.0	-67 22	9.5	10.3	G5	1	..	20428b
19	R	46.7	-22 52	10.2	9.9	F5	2	..	39687b	69	3204	47.0	-69 29	8.8	9.6	G5	3	..	20428b
20	15626	46.7	-25 50	8.5	10.6	Ko	5	..	39687b	70	2884	47.0	-70 35	6.82	6.6	Ao	..	0,10	56,148
21	15661	46.7	-27 47	7.9	8.5	Ko	7	..	41069b	71	762	47.1	+78 33	8.18	9.53	Mb	1	..	38590i
22	15051	46.7	-36 28	8.1	8.1	Fo	9	..	13854b	72	2424	47.1	+59 43	7.9	7.8	B5	2	..	38526i
23	14770	46.7	-38 39	9.5	10.1	A2	2	..	13854b	73	4916	47.1	+ 9 56	9.4	9.8	F5	2	..	14196b
24	10183	46.7	-53 30	9.2	9.8	F5	2	..	39669b	74	4552	47.1	+ 1 26	8.9	10.0	K2	3	2,2	14195b
25	1362	46.8	+67 49	8.1	9.2	K2	2	..	37277i	75	4790	47.1	+ 0 57	8.5	9.5	Ko	4	0,2	14195b
26	1441	46.8	+66 20	6.51	6.85	F2	7	R	37277i	76	5778	47.1	-10 42	10.1	11.3	K5	1	..	40605b
27	4619	46.8	+39 9	8.4	9.0	Go	2	..	38570i	77	5961	47.1	-16 44	9.0	9.4	F5	4	..	39483b
28	4677	46.8	+11 33	7.60	7.68	A3	6	..	38122i	78	6308	47.1	-20 0	8.2	9.0	K2	7	..	39397b
29	4751	46.8	+ 8 34	8.1	8.2	A3	3	..	38596i	79	14469	47.1	-39 3	9.7	10.3	A5	1	..	13854b
30	4886	46.8	+ 5 48	8.9	10.0	K2	2	..	14196b	80	13649	47.1	-49 39	8.5	9.1	G5	5	..	19941b
31	6115	46.8	-12 24	9.7	10.5	G5	2	..	39483b	81	9715	47.1	-55 2	9.24	9.5	F5	4	..	39669b
32	15858	46.8	-26 29	8.5	9.4	G5	5	..	41069b	82	3450	47.1	-68 20	8.7	9.8	K2	4	..	20428b
33	15857	46.8	-26 46	10.6	11.4	F8	1	..	39687b	83	1540	47.1	-76 41	6.62	7.6	Ko	10	..	19964b
34	15662	46.8	-27 34	8.9	10.3	K5	2	..	41069b	84	1596	47.2	+64 46	7.90	9.25	Ma	3	5,2	23686i
35	14529	46.8	-40 19	9.5	10.9	K2	1	..	39674b	85	2633	47.2	+54 29	8.6	8.7	A2	2	..	37351i
36	14676	46.8	-41 20	9.1	9.4	F8	6	..	39674b	86	3463	47.2	+46 43	8.6	8.7	A5	2	3,2-	38810i
37	14761	46.8	-43 30	9.3	11.0	K2	2	..	39674b	87	4915	47.2	+ 7 3	8.9	9.3	F5	2	..	14196b
38	3597	46.8	-66 51	8.8	9.8	Ko	2	..	20428b	88	5316	47.2	- 3 39	6.55	6.55	Ao	6	..	44047b
39	3524	46.9	+48 59	7.74	8.74	Ko	2	..	38810i	89	5779	47.2	- 9 53	7.31	7.73	F5	8	..	40605b
40	4797	46.9	+19 22	5.68	5.66	B9	9	1,10	38818i	90	5963	47.2	-16 17	9.2	10.0	G5	4	..	39483b
41	4645	46.9	+17 24	8.7	8.7	A	1	..	38822i	91	6397	47.2	-17 33	8.0	9.0	Ko	7	..	39397b
42	4212	46.9	- 1 44	8.47	8.97	F8	4	..	14195b	92	18059	47.2	-29 14	9.4	10.1	Ko	2	..	41069b
43	5656	46.9	- 7 27	10.1	11.3	K5	1	..	40605b	93	15028	47.2	-35 20	8.1	9.0	F5	5	..	13854b
44	5756	46.9	- 7 50	9.7	10.8	K2	1	..	40605b	94	15057	47.2	-36 30	9.5	10.0	F2	3	..	13854b
45	5959	46.9	-16 2	10.6	11.1	F8	1	..	39397b	95	14530	47.2	-37 22	7.05	8.1	G5	10	..	13854b
46	6306	46.9	-19 53	10.5	10.5	Go	3	..	39397b	96	2885	47.2	-70 32	6.66	7.0	A2	..	1,9	56,148
47	17145	46.9	-23 9	9.4	10.2	G5	2	..	39687b	97	617	47.3	+83 52	9.1	10.1	Ko	2	..	37294i
48	15663	46.9	-26 58	11.1	11.7	F8	1	..	39687b	98	2634	47.3	+54 57	8.8	9.4	G	1	..	37351i
49	18055	46.9	-29 22	9.2	9.9	Ko	3	..	41069b	99	4067	47.3	+43 58	7.58	8.58	Ko	3	..	37913i
50	14677	46.9	-41 7	10.3	10.6	Ko	1	..	39674b	100	4212	47.3	+28 28	9.0	9.3	Fo	2	..	35085i

207900

21^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	4480	47.3	+24 14	8.4	9.2	G5	2	..	38819i	51	2208	47.8	+61 20	8.1	8.1	B8	2	..	37277i
2	4797	47.3	+14 8	8.3	9.5	K0	2	..	38122i	52	3467	47.8	+46 41	7.8	7.8	A0	3	..	37913i
3	6181	47.3	-18 55	9.2	10.0	G5	4	..	39397b	53	3703	47.8	+45 44	8.2	8.2	B9	3	..	37913i
4	6310	47.3	-22 30	9.2	9.7	G0	0	..	39397b	54	4658	47.8	+41 11	7.8	8.6	G5	1	..	37913i
5	5784	47.3	-22 22	9.2	10.5	G5	2	..	39687b	55	4441	47.8	+37 59	8.0	9.0	K0	2	..	38570i
6	14470	47.3	-20 57	9.2	10.0	F8	3	..	39674b	56	4415	47.8	+23 33	7.48	7.54	A2	6	..	38819i
7	4060	47.4	+48 55	7.7	8.8	K2	2	..	37913i	57	5662	47.8	-7 28	9.5	10.1	G0	2	..	40605b
8	4562	47.4	+31 20	7.40	8.50	K2	3	..	38099i	58	6149	47.8	-14 1	5.18	5.46	F0	2, R	..	56,10i
9	4889	47.4	+0 5	8.0	9.0	A5	2	..	14196b	59	6311	47.8	-20 9	10.4	11.3	G5	2	..	39397b
10	5563	47.4	-4 11	9.0	9.5	F8	2	..	14195b	60	15635	47.8	-25 38	9.9	11.2	G0	2	..	39687b
11	5850	47.4	-5 50	8.6	9.2	G0	6	..	40605b	61	15867	47.8	-26 5	11.1	11.2	F5	2	..	39687b
12	5780	47.4	-10 17	9.2	9.7	F8	2	..	40605b	62	18889	47.8	-30 47	9.4	9.9	G	2	..	41069b
13	6117	47.4	-12 0	9.2	9.6	F5	4	..	39483b	63	14534	47.8	-37 19	9.1	9.3	A2	4	..	13854b
14	6148	47.4	-14 23	9.0	10.0	K0	2	..	39483b	64	6277	47.8	-62 21	5.89	6.9	F0	5, 10	..	56,148
15	6024	47.4	-17 54	10.1	11.3	K5	1	..	39397b	65	1662	47.9	+65 26	8.8	8.9	A2	2	..	37277i
16	6182	47.4	-19 28	10.4	11.1	F8	1	..	39397b	66	4291	47.9	+41 54	7.83	8.61	G5	3	..	37913i
17	6183	47.4	-19 29	10.4	11.2	G5	1	..	39397b	67	4625	47.9	+38 29	7.7	8.7	K0	2	..	38570i
18	2648	47.4	-71 0	8.7	9.5	G5	2	..	20544b	68	5865	47.9	-8 56	9.9	10.5	G	2	..	40605b
19	4487	47.5	+25 3	9.0	10.0	K0	1	..	38819i	69	6150	47.9	-14 39	8.00	8.14	A5	7	..	39483b
20	5564	47.5	-4 28	6.69	7.47	G5	8	..	14195b	70	18065	47.9	-29 9	7.6	8.9	G5	6	..	14139b
21	6037	47.5	-13 26	8.6	9.4	G5	6	..	39483b	71	14536	47.9	-37 50	3.16	3.11	B8	..	R	28,216
22	6085	47.5	-15 9	10.1	10.9	G5	2	..	39397b	72	14679	47.9	-44 16	9.2	9.8	F8	5	..	39674b
23	6184	47.5	-19 37	9.0	9.4	G5	7	..	39397b	73	4725	47.9	-63 41	8.7	9.7	K0	2	..	42486b
24	15630	47.5	-25 1	9.9	11.2	F8	1	..	39687b	74	3599	47.9	-66 38	9.2	10.0	G5	2	..	20428b
25	14768	47.5	-43 42	9.3	10.7	K2	3	..	39674b	75	2719	48.0	+53 49	8.8	8.9	A5	1	..	37351i
26	10189	47.5	-53 36	7.8	8.6	F5	6	..	39669b	76	3647	48.0	+49 33	8.9	9.0	A2	1	..	38810i
27	9970	47.5	-54 11	9.8	10.1	F0	3	..	39669b	77	4371	48.0	+33 56	7.42	8.42	K0	5	..	38099i
28	7740	47.5	-59 17	9.2	10.2	K0	2	..	20558b	78	4215	48.0	+28 20	5.62	6.04	F5	9	..	38819i
29	325	47.6	+86 25	8.5	9.5	K0	3	0,2	37294i	79	4799	48.0	+13 14	8.3	8.8	F8	3	..	38122i
30	2409	47.6	+58 10	8.9	9.9	K	1	..	37351i	80	4705	48.0	+13 2	7.6	8.6	K0	5	..	38122i
31	4184	47.6	+27 19	8.7	8.8	A3	2	..	38819i	81	5565	48.0	-4 35	9.9	10.7	G5	1	..	40605b
32	5027	47.6	+20 48	7.05	8.40	Mb	4	..	38819i	82	5658	48.0	-5 37	10.1	10.7	G	1	..	40605b
33	4681	47.6	+12 5	7.9	8.9	K0	1	..	38122i	83	5783	48.0	-10 43	8.4	9.4	K0	4	..	40605b
34	5851	47.6	-6 11	10.1	11.2	K2	1	..	40605b	84	5964	48.0	-16 42	9.5	9.8	F0	3	..	39397b
35	5659	47.6	-6 48	9.2	9.7	F8	5	..	40605b	85	6025	48.0	-18 1	9.2	9.7	F8	3	..	39397b
36	5690	47.6	-11 2	6.82	7.82	K0	9	..	40605b	86	5786	48.0	-22 11	8.7	9.1	A5	5	..	39687b
37	6119	47.6	-11 47	9.0	10.1	K2	3	..	39483b	87	13111	48.0	-51 50	10.2	11.2	F0	1	..	39669b
38	15668	47.6	-27 3	9.7	10.0	K0	2	..	41069b	88	9985	48.0	-57 34	9.3	10.1	F0	2	..	39669b
39	15061	47.6	-36 18	8.1	9.7	K2	5	..	13854b	89	7909	48.0	-58 29	8.4	9.7	K2	3	..	20558b
40	14471	47.6	-39 13	10.1	10.6	G5	2	..	39674b	90	2303	48.1	+61 9	7.13	7.19	A2	6	..	37277i
41	14494	47.6	-45 23	9.8	11.3	K2	2	..	39674b	91	3584	48.1	+47 58	7.14	8.32	K5	2	..	38810i
42	13967	47.6	-47 29	9.6	10.4	K0	2	..	19941b	92	4694	48.1	+39 21	8.7	9.5	G5	2	..	38570i
43	13109	47.6	-51 27	10.2	10.9	G0	1	..	39669b	93	4626	48.1	+38 27	8.5	9.3	G5	1	..	38570i
44	9716	47.6	-55 39	9.3	10.4	K2	1	..	39669b	94	4489	48.1	+24 36	8.4	9.2	G5	3	..	38819i
45	3644	47.7	+49 25	8.3	9.3	K0	1	..	38810i	95	5566	48.1	-4 38	10.1	10.1	A	1	..	40605b
46	4535	47.7	+29 44	8.4	8.4	B9	5	..	38099i	96	6312	48.1	-20 3	10.4	11.2	K0	2	..	39397b
47	5653	47.7	-5 1	9.2	10.3	K2	4	..	40605b	97	17498	48.1	-28 14	9.7	9.8	F5	3	..	41069b
48	5660	47.7	-6 57	9.5	10.3	G5	2	..	40605b	98	14780	48.1	-38 30	8.8	9.8	F8	3	..	13854b
49	5781	47.7	-10 23	9.7	10.8	K2	1	..	40605b	99	14544	48.1	-40 24	9.1	10.0	K0	4	..	39674b
50	16889	47.7	-24 32	8.5	9.8	K0	6	..	39687b	100	14543	48.1	-40 25	8.8	10.0	K2	2	..	39674b

THE HENRY DRAPER CATALOGUE

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21^h 48^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	4187	48.1	−64 5	9.5	10.1	Go	1	..	19898b	51	2410	48.5	+58 4	8.6	9.6	Ko	2	..	3735ii
2	938	48.2	+74 31	8.9	9.9	Ko	2	..	38025i	52	3049	48.5	+52 15	9.0	9.0	Ao	2	..	3735ii
3	2652	48.2	+57 8	8.3	8.3	Ao	3	..	3735ii	53	3465	48.5	+50 58	8.5	8.6	A2	2	E	3735ii
4	4294	48.2	+42 11	9.3	9.4	A3	2	..	37913i	54	3648	48.5	+49 20	9.3	10.3	Ko	4	R	1627Im
5	4551	48.2	+34 43	8.8	8.8	Ao	3	..	38099i	55	4299	48.5	+49 20	8.3	8.6	Ao	1	..	37913i
6	4491	48.2	+24 23	8.6	9.8	K5	2	R	35085i	56	4635	48.5	+41 57	5.05	4.88	Fo	1	..	37913i
7	4519	48.2	+15 27	7.29	8.36	K2	6	..	38122i	57	6027	48.5	−17 50	10.4	11.0	B3	..	5,10	56,101
8	5785	48.2	−10 47	6.50	6.48	B9	6	0,9	44047b	58	14477	48.5	−38 58	9.1	9.7	Go	1	..	39397b
9	5965	48.2	−16 0	10.9	11.9	Ko	1	..	39397b	59	14683	48.5	−41 17	10.8	10.9	F5	4	..	13854b
10	6398	48.2	−17 13	8.2	8.3	A5	7	..	39397b	60	14054	48.5	−48 15	9.6	10.2	F8	1	..	39674b
11	6313	48.2	−20 28	8.1	8.3	F8	4	..	41861b	61	1738	48.5	−75 24	10.1	10.7	Go	1	..	19941b
12	15642	48.2	−25 37	9.4	10.5	F8	4	..	39687b	62	2638	48.6	+55 19	7.26	7.26	Go	2	..	42794b
13	15875	48.2	−26 14	8.2	8.8	A3	7	..	41069b	63	4651	48.6	+11 9	8.0	9.0	A	..	R	15216c
14	15671	48.2	−27 10	9.7	10.0	Go	2	R	41069b	64	4762	48.6	+7 42	9.2	9.6	Ko	3	..	38122i
15	14476	48.2	−38 56	8.5	8.9	F8	6	..	13854b	65	6402	48.6	+2 10	9.6	9.6	F5	2	..	14196b
16	14682	48.2	−41 44	7.7	9.5	Ma	5	..	39674b	66	6401	48.6	−17 6	10.1	10.7	Ao	4	0,2	12040b
17	14681	48.2	−44 15	9.1	10.5	K2	3	..	39674b	67	18898	48.6	−30 43	9.2	10.0	Go	2	..	39397b
18	14682	48.2	−44 38	9.4	10.4	Ko	3	..	39674b	68	16800	48.6	−32 45	9.2	11.2	Go	6	..	39397b
19	11952	48.2	−51 59	10.0	10.4	F5	3	..	39669b	69	14783	48.6	−37 53	8.2	9.1	Go	3	..	41069b
20	706	48.3	+80 15	8.30	8.64	F2	2	..	38590i	70	7522	48.6	−60 1	9.8	10.2	Go	1	..	41066b
21	939	48.3	+74 20	8.6	9.6	Ko	1	..	38025i	71	1092	48.7	+71 17	8.7	9.3	G5	7	..	13854b
22	3585	48.3	+48 5	7.70	7.68	B9	3	..	38810i	72	1446	48.7	+66 23	8.3	8.7	F5	1	..	39382b
23	4074	48.3	+43 19	8.1	9.3	K5	1	..	37913i	73	2427	48.7	+59 28	7.8	7.8	Go	2	..	38025i
24	4295	48.3	+41 24	8.1	8.2	A3	2	..	37913i	74	4630	48.7	+38 22	7.33	8.33	F5	1	..	37277i
25	4416	48.3	+23 15	8.2	9.0	G5	1	..	38819i	75	4373	48.7	+33 20	8.5	9.5	Ao	6	..	38526i
26	4650	48.3	+17 27	8.26	9.26	Ko	2	..	38822i	76	4636	48.7	+25 17	8.46	9.81	Ko	4	..	38570i
27	4893	48.3	+5 56	8.3	8.8	F8	3	..	14196b	77	4895	48.7	+6 7	8.3	9.3	Ma	2	..	38099i
28	5866	48.3	−8 52	9.0	9.8	G5	4	..	40605b	78	5664	48.7	−6 59	8.8	9.9	Ko	2	..	35085i
29	6087	48.3	−15 33	8.2	8.8	Go	5	..	39483b	79	5760	48.7	−8 5	9.7	10.8	K2	3	..	14196b
30	5966	48.3	−16 11	9.5	10.0	F8	2	..	39483b	80	5761	48.7	−8 13	9.9	10.7	K2	1	..	40605b
31	6399	48.3	−16 59	9.2	9.5	Fo	4	..	39397b	81	5692	48.7	−11 11	9.2	10.2	Ko	1	..	40605b
32	15672	48.3	−27 0	9.4	10.9	Ko	1	..	41069b	82	5693	48.7	−11 36	9.9	10.4	F8	2	..	39483b
33	15067	48.3	−36 32	6.79	7.9	Ko	9	..	13854b	83	6155	48.7	−14 44	9.5	10.3	F8	2	..	39483b
34	14497	48.3	−45 17	9.2	10.1	F8	4	..	39674b	84	6403	48.7	−17 6	9.9	11.0	G5	1	..	39483b
35	11953	48.3	−52 51	9.7	10.8	K2	1	..	39669b	85	6029	48.7	−18 3	8.6	8.6	Ko	1	..	39397b
36	1779	48.4	+63 32	8.1	8.1	B9	3	1,3	38902b	86	6186	48.7	−19 16	10.4	11.1	Ao	6	..	39397b
37	2636	48.4	+54 47	9.1	9.7	G	1	..	3735ii	87	6315	48.7	−20 29	9.9	9.9	Go	1	..	39397b
38	5029	48.4	+20 28	8.35	9.35	Ko	1	..	38819i	88	17156	48.7	−23 26	9.7	9.1	Go	3	..	39397b
39	4554	48.4	+1 20	10.6	11.1	F8	2	..	12040b	89	15674	48.7	−27 6	9.1	10.0	A2	6	..	39687b
40	4279	48.4	+0 9	8.58	9.08	F8	5	..	14195b	90	17504	48.7	−28 17	9.7	9.4	K5	1	..	41069b
41	5663	48.4	−7 36	10.1	10.1	Ao	3	..	40605b	91	14544	48.7	−37 41	9.5	10.0	F8	4	..	41069b
42	5786	48.4	−10 15	8.6	9.1	F8	5	..	40605b	92	317	48.7	−86 58	8.14	8.2	F5	2	..	13854b
43	6153	48.4	−14 25	9.2	9.6	F5	2	..	39483b	93	2639	48.8	+55 20	5.54	5.37	Ao	8	..	15173b
44	6088	48.4	−15 6	9.5	10.5	Ko	2	..	39397b	94	2724	48.8	+54 1	8.9	9.0	B3	..	..	56,101
45	5967	48.4	−15 53	9.0	10.1	K2	2	..	39483b	95	4444	48.8	+37 53	8.6	9.2	Fo	2	..	3735ii
46	6114	48.4	−21 12	9.9	9.9	Fo	3	..	39687b	96	4283	48.8	+32 16	8.2	9.3	Go	2	..	38570i
47	6113	48.4	−21 38	10.1	9.9	G5	2	..	39687b	97	5659	48.8	−5 17	9.9	10.7	K2	1	..	38099i
48	14683	48.4	−44 7	9.8	10.4	F5	3	..	39674b	98	15320	48.8	−34 1	8.1	9.9	G5	2	..	40605b
49	3846	48.4	−66 56	9.3	10.3	Ko	1	..	20428b	99						Ko	4	..	14139b
50	981	48.4	−81 31	9.4	9.5	A2	3	..	21397b	100									

ANNALS OF HARVARD COLLEGE OBSERVATORY

208100

21^h48^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	15319	48.8	-34 36	7.7	8.7	F5	7	..	13854b	51	7741	49.2	-59 29	9.9	10.5	Go	2	..	39382b
2	10194	48.8	-53 14	9.6	10.1	F8	1	..	39669b	52	7742	49.2	-59 49	8.46	9.0	G5	6	..	20558b
3	1183	48.8	-79 46	9.2	9.8	Go	3	5,2	42794b	53	6597	49.2	-61 2	9.9	11.1	K5	1	..	42486b
4	1093	48.9	+71 31	9.1	9.2	A5	1	..	38025i	54	6598	49.2	-61 37	8.7	8.7	Ao	5	..	42486b
5	1599	48.9	+64 15	7.8	8.8	Ko	4	..	37277i	55	1428	49.2	-78 51	9.6	10.4	G5	1	..	42794b
6	2209	48.9	+61 27	8.1	7.9	B3	5	..	37277i	56	4653	49.3	+17 56	8.3	8.8	F8	3	..	38822i
7	2638	48.9	+54 13	7.01	8.01	Ko	5	..	37351i	57	4652	49.3	+17 36	8.4	8.4	Ao	2	..	38822i
8	4879	48.9	+19 13	5.76	5.76	Ao	8	0,9	38818i	58	4654	49.3	+17 35	8.6	8.6	Ao	1	..	38822i
9	4878	48.9	+18 43	7.6	9.0	Ma	1	..	38822i	59	4802	49.3	+13 18	8.7	9.8	K2	1	..	38122i
10	4919	48.9	+6 23	6.58	7.14	Go	8	..	38596i	60	4653	49.3	+10 49	8.9	9.9	Ko	2	..	14196b
11	5568	48.9	-4 45	5.91	6.91	Ko	10	..	14195b	61	5764	49.3	-7 59	8.6	9.8	K5	3	..	40605b
12	6122	48.9	-11 50	9.0	9.4	F5	5	..	39483b	62	6090	49.3	-15 3	9.0	10.0	Ko	3	..	39483b
13	6316	48.9	-20 37	10.5	11.1	F8	1	..	39397b	63	5969	49.3	-16 33	10.5	11.3	G5	1	..	39397b
14	6117	48.9	-20 50	10.4	9.9	F8	3	..	39397b	64	18903	49.3	-30 24	9.5	10.6	Go	2	..	41069b
15	18073	48.9	-29 18	8.9	10.5	G5	4	..	41069b	65	18530	49.3	-31 11	9.2	11.4	Ko	1	..	41069b
16	15809	48.9	-33 20	8.1	10.3	Ko	4	..	14139b	66	16809	49.3	-32 16	8.9	10.3	Go	4	5,3	41069b
17	14501	48.9	-45 10	9.8	10.9	Ko	2	..	39674b	67	14693	49.3	-44 50	10.4	11.0	F5	3	..	39674b
18	10195	48.9	-53 39	9.2	9.5	F2	4	..	39669b	68	13659	49.3	-49 28	9.2	9.6	Go	4	..	19941b
19	7524	48.9	-60 42	7.4	8.4	F2	7	..	42486b	69	13120	49.3	-51 45	9.4	10.8	Ma	1	..	39669b
20	2651	48.9	-72 27	8.9	9.9	Ko	4	..	20544b	70	9974	49.3	-54 48	9.57	10.4	Ko	2	..	39669b
21	4662	49.0	+41 8	7.32	7.38	A2	6	0,7	37913i	71	1037	49.3	-80 1	10.0	10.1	A3	3	7,2 R	42794b
22	4809	49.0	+19 56	7.50	8.50	Ko	3	2,3	38818i	72	728	49.3	-83 7	9.1	9.5	F5	5	..	21397b
23	4921	49.0	+9 56	8.5	9.6	K2	3	..	14196b	73	2428	49.4	+59 51	7.56	8.56	Ko	4	..	38526i
24	4758	49.0	+8 14	8.6	8.7	A5	4	..	14196b	74	4191	49.4	+27 53	6.71	6.77	A2	6	..	38819i
25	5859	49.0	-5 49	7.36	7.78	F5	8	..	14195b	75	4710	49.4	+13 6	8.6	9.8	K5	1	..	38122i
26	5869	49.0	-9 0	9.2	9.3	A2	3	..	40605b	76	5331	49.4	-3 28	7.44	7.44	Ao	8	..	14195b
27	6123	49.0	-11 50	9.7	10.5	G5	2	..	39483b	77	5329	49.4	-3 46	6.18	6.68	F8	10	..	14195b
28	6124	49.0	-12 9	9.5	10.0	F8	4	..	39483b	78	6046	49.4	-13 21	9.0	10.2	K5	2	..	39483b
29	6318	49.0	-20 47	10.5	11.1	Ko	1	..	39397b	79	5970	49.4	-16 23	10.1	10.9	G5	1	..	39397b
30	14503	49.0	-45 13	10.2	11.3	Ko	1	..	39674b	80	17164	49.4	-23 5	10.4	10.2	F8	2	..	39687b
31	4726	49.0	-63 47	9.3	10.3	Ko	2	..	19898b	81	15040	49.4	-35 7	8.1	9.3	Ko	5	..	13854b
32	1664	49.1	+65 17	6.41	6.47	A2	7	R	37277i	82	14687	49.4	-41 50	9.7	9.4	F5	6	..	39674b
33	1664	49.1	+65 17	6.41	6.47	G	7	R	37277i	83	15687	49.4	-42 10	8.6	9.4	G5	6	..	39674b
34	2640	49.1	+54 35	7.27	7.22	B8	..	0,7	56,101	84	10106	49.4	-52 56	6.66	7.8	Ko	10	..	39669b
35	4664	49.1	+35 40	7.57	8.75	K5	3	..	38099i	85	1992	49.5	+62 38	7.7	7.5	B3	6	..	37277i
36	4375	49.1	+33 48	8.0	8.0	Ao	4	..	38099i	86	2640	49.5	+55 27	9.6	10.4	G5	1	..	37351i
37	4801	49.1	+13 31	8.7	9.8	K2	1	..	38122i	87	4656	49.5	+17 57	8.5	8.8	F2	4	..	38822i
38	4763	49.1	+7 21	8.9	10.0	K2	1	..	14196b	88	4657	49.5	+17 33	8.12	9.19	K2	1	..	38822i
39	14480	49.1	-39 28	8.0	7.9	A5	8	..	39674b	89	4711	49.5	+12 17	6.66	6.64	B9	10	..	38122i
40	1739	49.1	-75 38	10.4	11.0	Go	2	..	42794b	90	4896	49.5	+5 38	8.5	9.0	F8	4	..	14196b
41	1600	49.2	+64 27	7.01	8.01	Ko	7	..	37277i	91	5662	49.5	-5 15	9.9	9.9	Ao	3	..	40605b
42	2414	49.2	+57 53	8.3	8.4	A2	4	..	37351i	92	5862	49.5	-5 55	10.4	11.2	G5	1	..	40605b
43	4924	49.2	+9 28	8.9	9.4	F8	3	..	14196b	93	15813	49.5	-33 29	7.46	9.1	K5	6	..	14139b
44	4630	49.2	+3 50	8.5	8.8	Fo	3	..	14196b	94	15041	49.5	-34 59	9.13	9.3	A5	5	..	13854b
45	6187	49.2	-19 1	10.5	12.1	Ko	1	..	39397b	95	14550	49.5	-40 42	9.5	10.1	Go	3	..	39674b
46	15676	49.2	-27 29	9.7	11.2	G5	1	..	39687b	96	14506	49.5	-45 43	7.9	8.9	Ko	7	..	19941b
47	15039	49.2	-35 6	9.1	9.6	Fo	4	..	13854b	97	11955	49.5	-52 5	9.2	10.0	G5	3	..	39669b
48	9973	49.2	-54 31	9.8	10.1	Fo	2	..	39669b	98	9771	49.5	-56 10	7.4	10.2	Ko	6	..	39669b
49	7911	49.2	-58 22	6.34	6.8	A3	10	..	20558b	99	1740	49.5	-74 55	8.81	9.6	Fo	5	..	42794b
50	7910	49.2	-58 38	10.5	11.1	Go	2	..	39382b	100	4556	49.6	+34 24	9.3	9.8	F8	1	..	38099i

THE HENRY DRAPER CATALOGUE

208200

21^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	4497	49.6	+24 58	8.2	9.2	Ko	3	..	38819i	51	10200	49.8	-53 31	7.9	8.0	A3	7	..	39669b
2	4814	49.6	+19 15	6.33	7.33	Ko	6	5,6	38822i	52	399	49.8	-86 50	9.5	10.5	Ko	3	..	22980b
3	4760	49.6	+ 8 19	8.5	9.7	K5	1	..	14196b	53	2727	49.9	+53 32	6.64	6.70	A2	7	..	37351i
4	4796	49.6	+ 0 47	9.2	10.2	Ko	2	..	14195b	54	4671	49.9	+35 42	9.0	9.3	Fo	1	..	38099i
5	5657	49.6	- 2 12	9.0	9.0	Ao	3	..	14195b	55	5572	49.9	- 4 23	9.5	10.1	G	1	..	14195b
6	5569	49.6	- 4 40	9.9	10.0	A3	2	..	40605b	56	5701	49.9	-11 9	9.9	10.5	Go	2	..	39483b
7	5663	49.6	- 5 44	8.5	9.5	Ko	3	..	14195b	57	6032	49.9	-18 43	9.2	10.2	Ko	4	..	39397b
8	6126	49.6	-12 26	8.0	8.0	Ao	7	..	39483b	58	14487	49.9	-39 47	7.78	8.3	F8	8	..	39674b
9	6092	49.6	-15 44	7.04	8.04	Ko	7	..	39483b	59	14791	49.9	-43 2	8.7	9.8	G5	4	..	39674b
10	6030	49.6	-18 11	10.1	10.9	G5	2	..	39397b	60	13661	49.9	-49 2	10.2	10.2	Ao	2	..	39669b
11	17166	49.6	-23 5	9.5	9.9	Go	4	..	39687b	61	11956	49.9	-51 53	7.4	7.8	Ko	8	..	39669b
12	15887	49.6	-26 4	10.2	11.2	G5	2	..	39687b	62	7525	49.9	-59 57	8.06	8.4	F5	7	..	20558b
13	18907	49.6	-30 31	8.5	8.9	B5	5	..	14139b	63	3847	49.9	-67 36	8.4	8.7	Fo	8	..	20428b
14	14789	49.6	-43 47	9.6	11.0	Ko	2	..	39674b	64	2887	49.9	-70 6	9.2	9.5	Fo	4	0,3	20428b
15	13978	49.6	-47 24	6.68	7.6	F5	10	..	19941b	65	1095	50.0	+71 25	8.3	8.4	A2	2	..	38025i
16	10197	49.6	-53 20	9.4	9.8	F5	2	..	39669b	66	2430	50.0	+60 10	8.11	7.99	B5	3	..	38526i
17	6281	49.6	-62 19	7.6	7.6	Ao	8	..	42486b	67	4884	50.0	+19 7	9.2	9.2	A	1	..	38822i
18	1994	49.7	+62 13	6.76	6.54	B1	7	..	37277i	68	6048	50.0	-13 5	9.7	10.2	F8	2	..	39483b
19	2641	49.7	+55 44	6.86	7.86	Ko	..	0,5	56,101	69	6321	50.0	-19 53	8.93	9.4	G5	7	..	39397b
20	4241	49.7	+43 1	9.0	..	Oe5	4	..	M	70	6119	50.0	-20 53	8.6	8.7	Ko	8	..	39397b
21	4664	49.7	+40 13	9.05	9.11	A2	1	..	38570i	71	6120	50.0	-21 36	7.17	8.7	Mb	9	..	39687b
22	4701	49.7	+39 57	9.1	9.9	G5	1	..	38570i	72	18913	50.0	-30 11	8.5	9.1	G5	3	..	14139b
23	4702	49.7	+36 56	8.6	8.7	A2	2	..	38099i	73	15817	50.0	-32 57	8.8	9.7	F8	3	..	14139b
24	4557	49.7	+34 45	8.2	9.4	K5	1	..	38099i	74	717	50.1	+80 12	8.55	8.83	Fo	1	..	38590i
25	4815	49.7	+20 1	8.07	8.85	G5	2	..	38822i	75	4703	50.1	+39 24	9.1	9.2	A5	1	..	38570i
26	4439	49.7	+ 2 22	9.2	10.0	G5	3	E	12040b	76	4541	50.1	+29 47	8.4	9.4	Ko	1	..	38099i
27	4559	49.7	+ 1 26	9.9	10.7	G5	3	..	12040b	77	4692	50.1	+14 45	7.9	8.0	A3	6	..	38122i
28	6158	49.7	-14 38	9.9	10.0	A3	3	..	39483b	78	4923	50.1	+ 6 25	9.2	9.2	Ao	1	..	14196b
29	6031	49.7	-18 9	10.1	10.6	F8	2	..	39397b	79	4441	50.1	+ 2 24	8.9	10.0	K2	2	E	12040b
30	16901	49.7	-24 12	9.4	10.0	Ko	6	..	39687b	80	5333	50.1	- 3 31	9.2	10.2	Ko	2	..	14195b
31	15681	49.7	-27 50	9.1	9.4	K2	2	..	41069b	81	6033	50.1	-18 31	10.5	11.1	Go	1	..	39397b
32	15045	49.7	-35 29	8.9	10.5	Ko	1	..	13854b	82	6121	50.1	-21 1	9.9	10.5	F8	4	..	39397b
33	3452	49.7	-68 41	9.3	9.9	Go	3	..	20428b	83	17173	50.1	-23 29	11.4	10.8	A	1	..	39687b
34	947	49.8	+73 44	9.3	10.1	G5	1	..	38025i	84	17171	50.1	-23 32	7.92	9.3	K5	7	..	39687b
35	4080	49.8	+43 23	9.3	10.1	G5	1	..	37913i	85	18541	50.1	-31 5	6.53	7.8	G5	9	..	14139b
36	4670	49.8	+36 7	7.8	9.0	K5	2	..	38099i	86	15819	50.1	-33 40	8.8	10.6	Ko	1	..	14139b
37	4559	49.8	+34 21	8.8	9.6	G5	2	..	38099i	87	15089	50.1	-36 36	8.8	9.7	F5	4	..	13854b
38	4804	49.8	+14 4	9.0	9.1	A3	1	..	38122i	88	4554	50.2	+31 8	8.0	8.5	F8	3	..	38099i
39	4655	49.8	+10 28	8.6	8.9	F2	4	..	14196b	89	4762	50.2	+ 8 59	9.2	9.3	A5	3	..	14196b
40	4656	49.8	+10 19	8.77	9.05	Fo	4	..	14196b	90	4218	50.2	- 0 56	8.9	9.9	Ko	1	..	14195b
41	4898	49.8	+ 6 3	8.9	9.5	Go	1	..	14196b	91	5971	50.2	-15 59	9.2	9.7	F8	2	..	39483b
42	4440	49.8	+ 2 21	9.6	10.0	F5	2	E	12040b	92	6322	50.2	-20 33	10.1	10.3	F5	3	..	39397b
43	5570	49.8	- 4 41	8.45	9.63	K5	2	..	14195b	93	18544	50.2	-31 24	7.9	8.8	F5	6	..	14139b
44	5666	49.8	- 6 48	9.7	10.5	G5	2	..	40605b	94	14560	50.2	-37 37	10.1	10.2	F8	2	..	13854b
45	6406	49.8	-16 47	10.4	11.0	Go	1	..	39397b	95	3976	50.2	-65 4	8.8	9.1	F2	5	..	20428b
46	6405	49.8	-16 59	9.9	10.5	Go	2	..	39397b	96	4379	50.3	+34 2	8.0	9.1	K2	2	..	38099i
47	6319	49.8	-20 6	8.6	9.7	Go	7	..	39397b	97	5335	50.3	- 3 30	8.8	9.1	F2	7	..	14195b
48	5792	49.8	-22 47	9.5	10.8	G5	2	..	39687b	98	5574	50.3	- 4 24	9.0	9.6	Go	3	..	14195b
49	17167	49.8	-23 45	8.5	9.4	Mb	5	..	39687b	99	5972	50.3	-16 7	9.1	9.9	G5	3	..	39483b
50	15655	49.8	-25 29	9.2	10.6	Ko	2	..	39687b	100	15684	50.3	-26 53	9.9	10.8	F8	2	..	39687b

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	14563	50.3	-37 17	8.5	8.7	F5	8	..	13854b	51	5667	50.6	-6 55	10.4	11.6	K5	1	..	40605b
2	14694	50.3	-41 30	8.8	10.6	Go	4	..	39674b	52	5706	50.6	-10 49	10.1	10.2	A3	3	..	39483b
3		50.3	-41 30		10.6					53	5704	50.6	-10 54	9.2	9.7	F8	3	..	39483b
4	3978	50.3	-65 46	9.6	10.1	F8	1	..	20428b	54	5705	50.6	-11 43	9.2	10.0	G5	3	..	39483b
5	3453	50.3	-68 44	9.3	10.4	K2	1	..	20428b	55	6127	50.6	-12 26	9.5	9.6	A5	3	..	39483b
6	618	50.4	+83 34	7.02	7.16	A5	5	..	37281i	56	17517	50.6	-28 25	9.4	10.0	G5	1	..	41069b
7	1002	50.4	+72 22	8.8	9.4	Go	2	..	38936i	57	18086	50.6	-29 49	9.37	10.5	K2	1	..	41069b
8	2418	50.4	+57 19	8.9	9.9	K	1	..	37351i	58	18547	50.6	-31 41	9.9	11.3	G5	1	..	41069b
9	3481	50.4	+46 32	7.8	8.8	Ko	3	..	37913i	59	14559	50.6	-39 54	8.8	9.8	K2	4	..	39674b
10	3980	50.4	+45 5	8.52	8.52	Ao	3	..	37913i	60	13533	50.6	-50 10	7.64	8.7	Go	7	..	19941b
11	4286	50.4	+32 43	9.3	9.3	B9	2	..	38099i	61	1204	50.7	+71 9	8.11	8.09	B9	4	0,3	38936i
12	4575	50.4	+32 13	7.62	7.62	Ao	7	..	38099i	62	3484	50.7	+46 41	7.37	7.65	Fo	5	..	37913i
13	4574	50.4	+31 52	7.6	8.6	Ko	4	..	38099i	63	5041	50.7	+20 23	6.92	7.70	G5	6	..	38819i
14	4573	50.4	+31 36	9.0	9.8	G5	3	..	38099i	64	4926	50.7	+6 48	8.3	8.8	F8	5	..	14196b
15	4443	50.4	+2 20	9.6	9.7	A2	3	E	12040b	65	4284	50.7	-0 10	7.9	7.9	Ao	4	0,8-	38106i
16	5575	50.4	-4 41	9.10	10.10	Ko	1	..	14195b	66	5865	50.7	-6 23	9.9	10.4	F8	3	..	40605b
17	6160	50.4	-14 38	9.81	9.87	A2	4	..	39483b	67	5707	50.7	-11 23	9.9	10.9	Ko	1	..	39483b
18	15892	50.4	-26 15	9.9	10.6	G5	3	..	39687b	68	6052	50.7	-13 4	10.6	10.6	Ao	2	..	39483b
19	15686	50.4	-27 32	10.4	10.6	F8	1	..	39687b	69	6163	50.7	-14 30	8.11	9.46	Ma	5	..	39483b
20	15822	50.4	-33 29	9.2	9.5	F2	3	..	14139b	70	14702	50.7	-44 47	8.66	10.4	Ko	4	..	39674b
21	14565	50.4	-37 44	5.55	5.61	A2	..	..	56,148	71		50.7	-51 33						
22	14799	50.4	-38 53	9.1	9.4	F5	5	..	13854b	72	13125	50.7	-51 33	9.6	9.9	F8	4	R	39669b
23	13982	50.4	-46 57	7.7	8.3	Fo	8	..	19941b	73	2653	50.7	-72 15	9.3	9.9	Go	1	..	19967b
24	2652	50.4	-72 13	9.1	10.3	K5	1	..	19967b	74	2022	50.7	-74 22	9.4	10.4	Ko	2	..	42794b
25	2732	50.5	+53 50	9.1	9.1	Ao	2	..	37351i	75	1096	50.8	+72 1	7.16	7.14	B9	6	..	38025i
26	3183	50.5	+51 52	8.5	8.8	F2	2	..	37351i	76	1370	50.8	+67 38	9.6	9.6	A	1	..	37277i
27	4246	50.5	+42 47	8.1	8.1	Ao	2	..	37913i	77	4636	50.8	+38 14	8.6	8.6	Ao	1	..	38570i
28	4451	50.5	+37 45	9.3	10.3	Ko	1	..	38570i	78	4303	50.8	+26 18	9.1	9.6	F8	2	..	38819i
29	4556	50.5	+31 10	8.2	9.2	Ko	1	..	38099i	79	4643	50.8	+25 27	8.8	9.6	G5	3	..	38819i
30	4232	50.5	+28 53	8.4	9.5	K2	1	..	38819i	80	4644	50.8	+21 51	9.4	9.4	Ao	1	..	38819i
31	4659	50.5	+17 33	8.5	8.9	F5	3	..	38822i	81	17176	50.8	-23 45	9.4	11.4	K5	2	..	39687b
32	4657	50.5	+10 40	8.5	9.5	Ko	5	5,2	14196b	82	15895	50.8	-25 58	7.6	8.3	G5	7	..	39687b
33	5338	50.5	-3 6	8.2	9.4	K5	3	..	14195b	83	17518	50.8	-28 31	10.4	10.3	A5	1	..	41069b
34	5337	50.5	-3 15	9.0	10.0	Ko	2	..	14195b	84	18549	50.8	-31 51	7.7	8.2	Ao	7	..	14139b
35	5767	50.5	-7 59	9.5	10.3	G5	2	..	40605b	85	15827	50.8	-33 44	9.5	11.2	F8	3	..	41066b
36	16908	50.5	-24 17	9.7	10.6	G5	4	..	39687b	86	9731	50.8	-55 6	9.9	10.4	F8	1	..	39669b
37	15688	50.5	-27 46	9.5	9.8	Go	2	..	41069b	87	7914	50.8	-58 31	8.8	10.2	Ko	3	..	20558b
38	14065	50.5	-48 31	8.4	9.6	K2	4	..	19941b	88	6602	50.8	-61 22	9.2	9.7	Ko	2	..	42486b
39	847	50.6	+76 15	8.97	9.25	Fo	2	..	38936i	89	2023	50.8	-74 35	10.0	11.0	Ko	1	..	20544b
40	3056	50.6	+52 30	8.7	8.7	Ao	2	..	37351i	90	367	50.9	+85 59	8.7	8.7	A	3	..	37281i
41	4084	50.6	+43 35	7.9	8.7	G5	2	..	37913i	91	836	50.9	+77 18	8.02	9.02	Ko	1	..	38590i
42	4706	50.6	+39 27	8.2	8.2	B9	2	..	38570i	92	2216	50.9	+62 8	7.10	6.93	B3	4	..	37277i
43	4452	50.6	+37 58	9.7	10.2	F8	1	..	38570i	93	3057	50.9	+52 53	8.5	9.5	Ko	1	..	37351i
44	4563	50.6	+34 19	7.42	7.48	A2	8	..	38099i	94	3603	50.9	+47 44	7.35	7.41	A2	7	..	37913i
45	4577	50.6	+31 52	7.10	8.28	K5	4	..	38099i	95	3721	50.9	+45 19	8.27	8.27	Ao	3	..	37913i
46	458c	50.6	+31 47	8.4	9.6	K5	1	..	38099i	96	4766	50.9	+8 24	9.0	9.1	A2	3	..	14196b
47	4300	50.6	+26 20	9.3	9.6	Fo	3	..	35085i	97	5578	50.9	-4 31	9.7	10.2	F8	1	..	14195b
48	4659	50.6	+10 27	7.92	8.70	G5	3	..	38122i	98	5867	50.9	-6 18	7.46	8.46	Ko	6	..	14195b
49	4560	50.6	+1 53	7.12	7.18	A2	4	1,9-	17420b	99	5868	50.9	-6 37	10.4	10.8	F5	2	..	40605b
50	4798	50.6	+0 44	9.2	10.3	K2	2	..	12040b	100	6324	50.9	-19 55	9.03	9.6	G5	5	..	39397b

THE HENRY DRAPER CATALOGUE

208400

21^h 50^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	6325	50.9	-20 7	9.5	10.2	G5	4	..	39397b	51	10002	51.1	-57 11	7.4	9.2	Ma	7	..	39669b
2	5794	50.9	-22 35	8.6	9.7	G5	4	..	39687b	52	1204	51.2	+69 13	7.36	7.42	A2	4	0,4	37277i
3	16911	50.9	-24 2	9.9	10.0	F8	4	..	39687b	53	2422	51.2	+58 13	8.5	8.5	B9	3	..	37351i
4	16912	50.9	-24 38	10.2	10.3	A3	3	..	39687b	54	3667	51.2	+49 42	9.0	10.4	Mc	..	R	M
5	16821	50.9	-32 33	9.7	10.5	G5	1	..	41066b	55	4250	51.2	+42 42	8.10	9.28	K5	1	..	37913i
6	16820	50.9	-32 52	10.1	10.0	F5	2	..	14139b	56	4566	51.2	+34 29	7.05	7.11	A2	8	..	38099i
7	14705	50.9	-44 44	9.70	11.0	G5	2	..	39674b	57	4644	51.2	+25 57	8.6	9.4	G5	3	..	38819i
8	11957	50.9	-52 5	8.9	9.3	F2	6	..	39669b	58	5667	51.2	-5 3	9.5	10.6	K2	1	..	40605b
9	10000	50.9	-56 55	9.3	10.1	Ko	4	..	39669b	59	5666	51.2	-5 13	8.0	9.2	K5	3	..	14195b
10	1371	51.0	+68 1	7.40	7.40	Ao	5	..	37277i	60	5870	51.2	-5 56	9.0	9.6	Go	4	..	40605b
11	1372	51.0	+67 39	7.56	8.56	Ko	3	..	37277i	61	5770	51.2	-8 2	9.2	9.7	F8	4	..	40605b
12	3722	51.0	+45 47	8.0	9.1	K2	2	..	37913i	62	6036	51.2	-18 6	10.4	11.2	G5	1	..	39397b
13	4249	51.0	+42 47	8.1	8.4	Fo	2	..	37913i	63	6189	51.2	-19 33	9.9	11.4	K5	1	..	39397b
14	4248	51.0	+42 26	8.8	9.1	Fo	1	..	37913i	64	17521	51.2	-28 42	8.3	8.1	F2	6	..	14139b
15	4558	51.0	+30 21	7.96	8.96	Ko	4	..	38099i	65	14495	51.2	-39 46	9.1	9.7	Fo	5	..	39674b
16	4304	51.0	+26 57	9.0	9.8	G5	2	..	35085i	66	14135	51.2	-46 22	8.6	9.5	F2	5	..	19941b
17	4502	51.0	+24 34	8.6	10.0	Ma	2	..	35085i	67	13670	51.2	-49 19	9.0	9.6	Ko	4	..	19941b
18	4809	51.0	+13 23	7.7	8.9	K5	2	..	38122i	68	4733	51.2	-63 47	9.2	10.3	K2	1	..	42486b
19	5869	51.0	-6 10	9.2	9.2	Ao	4	..	40605b	69	4190	51.2	-64 36	8.5	9.7	K5	2	..	20428b
20	5669	51.0	-7 27	7.44	7.42	B9	5	..	44047b	70	3603	51.2	-66 2	9.5	10.5	Ko	1	..	20428b
21	5794	51.0	-9 59	9.0	9.8	G5	3	..	40605b	71	3492	51.3	+46 59	7.60	7.60	Ao	6	..	37913i
22	5709	51.0	-11 11	10.4	11.0	Go	2	..	39483b	72	4087	51.3	+43 57	7.40	8.40	Ko	2	..	37913i
23	6166	51.0	-14 4	9.2	10.0	G5	3	..	39483b	73	4567	51.3	+34 36	7.8	7.8	Ao	5	..	38099i
24	5973	51.0	-16 33	10.1	10.6	F8	2	..	39397b	74	4931	51.3	+9 49	9.4	9.5	A2	2	..	14196b
25	6035	51.0	-17 55	10.1	10.7	Go	1	..	39397b	75	4767	51.3	+9 7	9.2	9.7	F8	2	..	14196b
26	6326	51.0	-20 30	9.2	10.8	K5	2	..	39397b	76	4766	51.3	+5 3	8.35	8.35	Ao	3	..	38596i
27	6125	51.0	-21 0	9.2	9.4	G5	4	..	39397b	77	4220	51.3	-1 8	8.3	9.1	G5	2	..	14195b
28	6124	51.0	-21 14	9.5	10.2	G5	2	..	39687b	78	6098	51.3	-15 46	10.8	11.8	Ko	1	..	39397b
29	5795	51.0	-22 14	9.2	9.9	F8	2	..	39687b	79	5975	51.3	-16 28	10.4	11.0	Go	3	..	39397b
30	15671	51.0	-25 50	10.2	10.9	F8	1	..	39687b	80	5977	51.3	-16 39	10.1	11.3	K5	1	..	39397b
31	18087	51.0	-29 17	8.1	9.1	Ko	5	..	14139b	81	6038	51.3	-17 59	9.7	10.3	Go	2	..	39397b
32	15336	51.0	-34 9	9.5	10.8	Go	2	..	41066b	82	6037	51.3	-18 22	6.61	6.61	Ao	9	..	41861b
33	15054	51.0	-35 50	7.42	7.4	Ao	7	..	14139b	83	15696	51.3	-26 57	7.64	8.3	F5	8	..	41069b
34	14802	51.0	-38 8	7.20	8.5	K2	9	..	13854b	84	15695	51.3	-27 30	8.9	9.1	F2	5	..	41069b
35	14801	51.0	-38 13	6.19	6.5	Fo	..	..	56,148	85	18929	51.3	-30 32	9.7	10.8	K2	1	..	41069b
36	14132	51.0	-45 54	9.8	11.0	G5	1	..	19941b	86	15831	51.3	-32 56	8.3	8.9	F2	7	..	14139b
37	13989	51.0	-47 20	9.2	9.5	F5	4	..	19941b	87	14804	51.3	-38 14	7.7	7.9	F8	9	..	13854b
38	4732	51.0	-63 11	8.9	10.1	K5	1	..	42486b	88	13129	51.3	-51 15	9.4	10.8	K2	2	..	39669b
39	1784	51.1	+63 16	8.1	8.1	Ao	6	..	37277i	89	9982	51.3	-54 2	8.7	8.9	Ao	7	..	39669b
40	2217	51.1	+62 6	8.8	8.8	B8	3	..	37277i	90	4638	51.4	+38 20	8.8	9.4	Go	1	..	38570b
41	3605	51.1	+48 5	7.74	7.74	Ao	4	..	38810i	91	4560	51.4	+30 48	7.7	8.9	K5	2	..	38099i
42	4675	51.1	+35 41	6.91	7.91	Ko	6	..	38099i	92	4825	51.4	+19 35	8.3	9.1	G5	1	..	38822i
43	4930	51.1	+9 38	7.9	8.9	Ko	4	..	38122i	93	5978	51.4	-16 5	8.8	9.3	F8	4	..	39483b
44	5670	51.1	-6 55	10.4	11.2	G5	1	..	40605b	94	5796	51.4	-22 29	9.5	10.2	G5	2	..	39687b
45	5795	51.1	-10 3	8.4	9.8	Mb	5	..	40605b	95	14069	51.4	-48 1	8.8	8.7	Ao	7	..	19941b
46	6096	51.1	-15 31	10.4	11.4	Ko	2	..	39397b	96	7744	51.4	-59 29	6.26	7.1	F5	10	..	20558b
47	5974	51.1	-16 20	9.2	9.5	Fo	3	..	39483b	97	7527	51.4	-60 22	8.8	9.6	Go	4	..	39382b
48	16914	51.1	-24 29	8.3	9.7	G5	8	..	39687b	98	3604	51.4	-66 33	8.5	9.7	K5	3	..	20428b
49	14571	51.1	-37 17	10.3	10.2	F8	1	..	13854b	99	3206	51.4	-69 42	9.1	10.1	Ko	2	..	20428b
50	9733	51.1	-55 28	4.56	4.84	Fo	..	R	28,216	100	1430	51.4	-78 8	6.64	7.3	A5	5	..	5603b

208500

21^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	2644	51.5	+56 8	6.01	5.99	B9p	6	R	40482i	51	5047	51.9	+20 41	7.20	8.20	Ko	4	..	38819i
2	2735	51.5	+53 27	6.91	7.33	F5	6	..	3735ii	52	4528	51.9	+15 41	8.3	8.8	F8	3	..	38122i
3	4428	51.5	+23 52	8.0	8.0	Ao	6	..	38819i	53	6173	51.9	-14 21	9.2	10.0	G5	4	..	39483b
4	4930	51.5	+6 46	8.6	9.1	F8	6	..	14196b	54	5982	51.9	-16 43	9.0	9.8	G5	7	..	39397b
5	6130	51.5	-12 41	9.5	10.7	K5	1	..	39483b	55	6128	51.9	-21 37	9.0	9.4	F8	5	..	39687b
6	6169	51.5	-13 49	8.6	8.9	Fo	6	..	39483b	56	5799	51.9	-22 45	9.2	9.9	F5	4	..	39687b
7	6190	51.5	-19 39	7.73	8.4	G5	5	..	41861b	57	15702	51.9	-27 12	9.5	10.0	K2	2	..	41069b
8	15057	51.5	-35 21	9.4	9.9	F5	3	..	13854b	58	17523	51.9	-28 15	9.4	9.7	F8	2	..	41069b
9	1003	51.6	+73 14	6.58	6.58	Ao	9	..	38025i	59	18934	51.9	-30 32	9.7	11.4	Ko	1	..	41069b
10	1097	51.6	+71 31	7.01	6.99	B9	7	..	38025i	60	10209	51.9	-53 30	9.2	9.8	Go	3	..	39669b
11	2737	51.6	+53 15	8.6	8.7	A2	3	..	3735ii	61	9778	51.9	-56 36	8.8	10.1	K2	2	..	39669b
12	3673	51.6	+50 2	9.77	..	Nc	..	R	M	62	3207	51.9	-69 18	8.9	10.1	K5	2	..	20428b
13	3985	51.6	+44 29	7.8	7.8	B9	5	..	37913i	63	3063	52.0	+52 47	6.78	7.78	Ko	6	..	3735ii
14	4672	51.6	+40 22	8.07	9.14	K2	1	..	37978i	64	4254	52.0	+42 51	8.7	8.7	A	1	..	37913i
15	4932	51.6	+9 41	9.2	10.3	K2	2	..	14196b	65	4696	52.0	+11 36	5.59	5.65	A2	..	0,10	56,101
16	4770	51.6	+8 10	8.9	9.0	A2	3	..	14196b	66	4447	52.0	+2 17	8.7	9.5	G5	4	..	12040b
17	4769	51.6	+7 54	9.2	10.4	K5	1	..	14196b	67	4286	52.0	+0 7	8.38	9.38	Ko	3	..	14195b
18	6055	51.6	-13 27	8.7	9.5	G5	4	..	39483b	68	4221	52.0	-1 15	8.3	8.7	F5	4	..	14195b
19	6170	51.6	-14 35	9.9	11.3	Mb	..	..	M	69	5581	52.0	-4 21	8.8	9.4	Go	4	..	14195b
20	6100	51.6	-14 53	9.5	10.0	F8	3	..	39483b	70	6409	52.0	-17 2	9.7	10.1	F5	1	..	39397b
21	6191	51.6	-19 11	9.1	10.5	K5	2	..	39397b	71	5801	52.0	-21 53	9.7	9.9	F5	4	..	39687b
22	14807	51.6	-38 48	9.4	10.1	K5	3	..	13854b	72	15678	52.0	-25 21	9.9	10.9	Ko	1	..	39687b
23	7915	51.6	-58 0	9.2	10.2	G5	2	..	20558b	73	18093	52.0	-29 35	9.2	10.3	Ko	3	..	41069b
24	2740	51.7	+53 42	8.1	9.3	K5	1	..	3735ii	74	14702	52.0	-41 27	9.5	10.3	G5	2	..	39674b
25	3486	51.7	+50 32	8.9	9.0	A2	1	..	38810i	75	13544	52.0	-50 41	9.6	10.7	K5	2	..	39669b
26	4508	51.7	+22 24	var.	var.	Nb	1	R	38819i	76	9985	52.0	-54 42	9.1	9.5	F8	4	..	39669b
27	5046	51.7	+20 48	6.62	7.80	K5	4	..	38819i	77	6604	52.0	-61 5	7.8	8.1	F2	8	..	42486b
28	5045	51.7	+20 13	8.70	9.26	G	1	..	38822i	78	6605	52.0	-61 41	9.3	10.8	K2	1	..	42486b
29	4695	51.7	+12 12	8.3	9.5	K5	3	..	38122i	79	6285	52.0	-62 1	8.7	9.0	F2	4	..	42486b
30	4635	51.7	+3 32	7.9	9.1	K5	1	..	14196b	80	4736	52.0	-62 57	8.2	8.3	A3	6	..	42486b
31	5979	51.7	-16 25	9.2	9.6	F5	5	..	39397b	81	2221	52.1	+61 31	8.1	9.1	Ko	3	..	37277i
32	6327	51.7	-20 5	10.8	11.1	G5	1	..	39397b	82	2432	52.1	+59 31	8.8	8.8	B9	3	..	38526i
33	14573	51.7	-37 7	8.6	9.0	Ko	7	..	13854b	83	4712	52.1	+36 23	8.2	8.3	A3	4	..	38099i
34	13541	51.7	-50 31	10.7	11.1	K2	1	..	39669b	84	4583	52.1	+31 35	9.3	9.3	Ao	2	..	38099i
35	1374	51.8	+67 30	8.2	9.2	K	1	..	37277i	85	4632	52.1	+16 57	7.9	8.9	Ko	2	..	38822i
36	4384	51.8	+34 5	7.8	8.8	Ko	5	..	38099i	86	4287	52.1	+0 13	8.88	9.95	K2	1	..	14195b
37	4649	51.8	+25 54	9.0	9.0	A	1	..	38819i	87	6041	52.1	-18 35	10.4	11.0	Go	2	..	39397b
38	4770	51.8	+5 1	8.80	9.30	F8	4	..	14196b	88	17186	52.1	-23 11	10.4	11.1	K2	2	..	39687b
39	6193	51.8	-19 22	9.0	9.3	Fo	7	..	39397b	89	17526	52.1	-28 10	10.4	10.6	G	1	..	41069b
40	17184	51.8	-23 10	8.5	9.0	Go	5	..	39687b	90	15064	52.1	-35 32	8.8	9.0	F5	6	..	13854b
41	18932	51.8	-30 17	9.4	10.9	G5	2	..	41069b	91	14504	52.1	-39 34	9.5	9.7	F5	4	..	39674b
42	15832	51.8	-33 3	8.1	9.7	K2	5	..	14139b	92	14571	52.1	-40 38	7.7	8.8	Ko	5	..	20549b
43	14812	51.8	-43 19	8.7	9.2	F8	5	..	20549b	93	3981	52.1	-65 5	9.4	9.4	Ao	6	..	20428b
44	13542	51.8	-50 43	10.4	11.1	Ko	1	..	39669b	94	3454	52.1	-68 23	10.0	10.3	Fo	2	..	20428b
45	9984	51.8	-54 28	8.6	8.9	Ao	6	..	39669b	95	2652	52.1	-70 59	8.8	9.9	K2	2	..	20544b
46	3187	51.9	+52 3	7.7	8.0	F2	3	..	3735ii	96	4387	52.2	+33 51	9.4	9.4	Ao	2	..	38099i
47	4385	51.9	+33 45	9.0	10.0	Ko	1	..	38099i	97	4299	52.2	+32 51	8.2	9.2	Ko	1	..	38099i
48	4298	51.9	+32 54	6.96	8.03	K2	4	..	38099i	98	5670	52.2	-5 45	9.2	9.8	Go	4	..	40605b
49	4505	51.9	+24 25	9.9	10.7	G5	1	..	38819i	99	6132	52.2	-12 1	10.4	11.0	Go	2	..	39483b
50	4650	51.9	+21 21	7.7	7.8	A2	3	..	38819i	100	6175	52.2	-14 34	9.1	9.4	Fo	4	..	39483b

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	6102	52.2	-15 3	10.1	10.7	Go	2	..	39397b	51	13999	52.6	-47 37	9.0	10.4	K5	1	..	19941b
2	14505	52.2	-39 32	10.3	10.3	G5	2	..	39674b	52	13680	52.6	-49 28	8.6	10.4	Ma	2	..	19941b
3	14521	52.2	-45 14	8.4	9.5	Fo	6	..	19941b	53	9989	52.6	-54 15	9.3	9.8	G5	3	..	39669b
4	1528	52.2	-77 47	7.8	7.9	A5	8	..	19964b	54	6607	52.6	-61 15	7.6	9.0	K2	4	..	42486b
5	982	52.2	-81 6	8.7	9.0	F2	5	..	21397b	55	3605	52.6	-66 45	8.7	9.8	K2	3	..	20428b
6	2318	52.3	+61 4	6.22	7.40	K5	6	3,6-	38526i	56	837	52.7	+77 52	8.57	8.63	A2	2	..	38590i
7	3065	52.3	+52 26	8.5	8.8	F2	2	..	3735ii	57	1680	52.7	+65 15	7.15	7.15	Ao	5	..	37277i
8	3497	52.3	+47 0	8.6	8.7	A2	1	..	38810i	58	4247	52.7	+28 21	7.98	8.98	Ko	2	..	38031i
9	4634	52.3	+17 13	7.32	8.50	K5	3	..	38822i	59	5584	52.7	- 4 13	8.8	9.6	G5	2	..	14195b
10	4661	52.3	+10 19	8.16	9.23	K2	2	..	38114b	60	5720	52.7	-11 36	9.0	9.4	F5	5	..	39483b
11	5877	52.3	- 6 25	9.7	10.8	K2	2	..	40605b	61	6130	52.7	-21 13	9.2	9.9	Ko	3	..	39687b
12	5876	52.3	- 9 3	6.60	6.58	B9	5	..	44047b	62	18941	52.7	-30 13	8.9	10.0	F8	3	..	14139b
13	..	52.3	-16 40	..	..	Ao	1	..	39397b	63	15068	52.7	-35 39	9.1	9.6	A5	4	..	13854b
14	14144	52.3	-46 13	7.7	8.3	A2	9	..	19941b	64	7529	52.7	-60 3	8.21	8.4	A2	6	..	42486b
15	2025	52.3	-74 20	9.6	11.0	Ma	1	5,1	20544b	65	1606	52.8	+65 12	9.00	9.00	A	1	..	37277i
16	1604	52.4	+64 32	8.7	8.7	Ao	4	..	37277i	66	2435	52.8	+59 21	7.8	7.8	Ao	5	..	38526i
17	3491	52.4	+50 38	8.9	8.9	Ao	1	..	38810i	67	4510	52.8	+23 8	7.7	8.7	Ko	2	..	38819i
18	4506	52.4	+24 47	8.01	9.36	Ma	2	..	35085i	68	4700	52.8	+11 28	8.5	8.5	Ao	6	..	38122i
19	5877	52.4	- 9 3	8.8	8.8	B9	2	..	44047b	69	4939	52.8	+ 9 59	7.30	7.86	Go	4	..	38122i
20	6176	52.4	-14 22	9.1	9.7	Go	5	..	39483b	70	4940	52.8	+ 9 40	8.1	8.1	Ao	2	E	38122i
21	6103	52.4	-15 36	7.20	7.26	A2	9	..	39483b	71	4288	52.8	+ 0 8	8.13	9.13	Ko	5	..	14195b
22	6328	52.4	-20 44	10.6	11.1	Ko	1	..	39397b	72	5672	52.8	- 5 40	8.6	9.4	G5	5	..	14195b
23	16828	52.4	-32 36	10.1	10.9	G5	2	..	41066b	73	6104	52.8	-15 34	8.7	9.8	K2	3	..	39483b
24	14814	52.4	-38 37	8.5	9.4	K2	5	..	13854b	74	16832	52.8	-32 50	7.61	8.1	Ao	9	..	14139b
25	15711	52.4	-42 12	6.64	8.3	K5	7	..	39674b	75	15120	52.8	-36 36	8.8	10.5	Ko	1	..	13854b
26	15710	52.4	-42 25	9.8	10.3	K2	1	..	39674b	76	14819	52.8	-38 13	8.9	10.3	K2	3	..	13854b
27	14717	52.4	-44 32	6.60	7.8	Ko	10	..	19941b	77	14575	52.8	-40 0	8.1	10.0	K5	5	..	39674b
28	11959	52.4	-52 12	10.1	11.1	Ko	1	..	39669b	78	9780	52.8	-56 12	9.3	10.4	K2	2	..	39669b
29	1375	52.5	+67 18	7.02	7.30	Fo	6	..	37277i	79	7745	52.8	-59 35	9.0	9.4	F8	4	..	20558b
30	3499	52.5	+47 2	8.8	9.3	F8	1	..	38810i	80	6286	52.8	-62 35	8.3	8.6	Fo	5	..	42486b
31	4665	52.5	+17 18	8.6	10.0	Mc	..	..	M	81	1741	52.8	-74 59	8.41	8.6	Fo	7	..	42794b
32	4640	52.5	+ 3 42	7.05	7.47	F5	6	0,3	38596i	82	1607	52.9	+64 52	5.85	5.66	B2	8	..	37277i
33	5799	52.5	-10 46	10.1	11.1	Ko	1	..	39483b	83	2650	52.9	+55 55	9.0	9.8	G5	1	..	3735ii
34	6059	52.5	-13 24	8.7	9.7	Ko	4	..	39483b	84	3068	52.9	+52 58	8.5	9.5	Ko	2	..	3735ii
35	6196	52.5	-19 27	10.4	11.1	F8	1	..	39397b	85	3194	52.9	+52 3	8.5	8.5	Ao	2	..	3735ii
36	14573	52.5	-40 40	10.1	11.0	K5	1	..	39674b	86	4571	52.9	+34 52	8.4	8.4	Ao	4	..	38099i
37	15712	52.5	-42 27	10.0	10.3	A2	2	..	39674b	87	4589	52.9	+32 13	8.2	8.3	A3	3	..	38099i
38	1541	52.5	-76 9	6.54	8.6	K5	8	..	42794b	88	4533	52.9	+15 23	9.9	11.3	Ma	..	..	M
39	4680	52.6	+35 41	8.4	8.4	B9	4	..	38099i	89	4223	52.9	- 1 20	8.7	9.3	Go	2	..	14195b
40	4586	52.6	+31 23	7.7	8.9	K5	2	..	38099i	90	5585	52.9	- 3 58	7.8	8.1	Fo	8	..	14195b
41	4210	52.6	+27 32	8.4	9.2	G5	2	..	38819i	91	6134	52.9	-12 35	8.4	9.4	Ko	6	..	39483b
42	4772	52.6	+ 4 33	8.5	8.6	A3	3	..	14196b	92	6178	52.9	-14 42	10.1	11.1	Ko	2	..	39397b
43	4222	52.6	- 1 6	8.5	9.1	Go	3	..	14195b	93	6105	52.9	-15 46	9.5	10.6	K2	1	..	39483b
44	5583	52.6	- 3 48	9.2	10.4	K5	1	..	40605b	94	6198	52.9	-19 2	9.0	9.6	Go	6	..	39397b
45	5719	52.6	-11 11	8.4	9.2	G5	5	..	39483b	95	6330	52.9	-19 51	9.38	9.7	Go	5	..	39397b
46	5983	52.6	-16 31	10.1	10.6	F8	3	..	39397b	96	14580	52.9	-37 19	9.1	9.6	F2	4	..	13854b
47	6042	52.6	-18 5	9.0	10.0	Ko	4	..	39397b	97	13135	52.9	-51 27	9.6	9.6	F5	4	..	39669b
48	17188	52.6	-23 42	7.6	8.7	K2	8	..	39687b	98	1040	52.9	-80 18	8.4	9.2	G5	5	..	21397b
49	16924	52.6	-24 29	10.2	10.8	Ko	2	..	39687b	99	4324	53.0	+42 9	7.69	7.69	Ao	4	..	37913i
50	15908	52.6	-26 38	9.9	10.8	G5	2	..	23813b	100	4249	53.0	+28 50	7.25	8.43	K5	3	..	38099i

208700

21^h 53^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	4511	53.0	+23 4	8.4	8.5	A2	3	..	38819i	51	4814	53.3	+13 52	8.5	9.7	K5	1	..	38114i
2	4833	53.0	+19 50	7.30	7.30	Ao	7	..	38819i	52	5878	53.3	- 8 48	9.2	9.2	Ao	4	..	40605b
3	5878	53.0	- 5 54	6.21	6.55	F2	7	0,10	44047b	53	6332	53.3	-20 5	8.6	9.0	F8	7	..	39397b
4	6060	53.0	-13 9	7.03	7.81	G5	..	5,8	56,148	54	5807	53.3	-22 6	9.5	10.3	G5	1	..	39687b
5	6061	53.0	-13 30	8.8	9.2	F5	6	..	39483b	55	18102	53.3	-29 44	10.4	11.3	Ko	1	..	41069b
6	6106	53.0	-15 3	9.9	10.7	G5	3	..	39397b	56	18948	53.3	-30 38	8.5	9.5	Fo	3	..	14139b
7	16930	53.0	-24 23	10.6	11.2	A5	2	..	39687b	57	14825	53.3	-43 17	7.6	9.5	K2	5	..	20549b
8	15911	53.0	-26 3	9.9	10.0	F8	4	..	39687b	58	13547	53.3	-50 43	9.2	9.4	F2	4	..	19941b
9	16833	53.0	-32 41	10.1	10.6	Go	3	..	41066b	59	3982	53.3	-65 26	10.1	10.1	Ao	2	..	20428b
10	14147	53.0	-46 49	7.4	9.2	K2	6	..	19941b	60	838	53.4	+78 4	8.8	8.8	Ao	2	..	38590i
11	4194	53.0	-63 55	8.4	9.5	K2	4	..	42486b	61	2006	53.4	+62 25	8.7	8.6	B5	5	..	37277i
12	1455	53.1	+66 14	7.87	8.15	Fo	3	..	37277i	62	4683	53.4	+41 59	8.1	8.1	Ao	2	..	37978i
13	2004	53.1	+62 47	7.12	7.54	F5	5	..	37277i	63	4306	53.4	+32 55	8.1	8.5	F5	5	..	38099i
14	2430	53.1	+57 56	7.9	8.2	Fo	5	..	37351i	64	4509	53.4	+24 17	8.4	8.4	Ao	4	..	38819i
15	4720	53.1	+39 26	9.0	10.4	Ma	1	..	38570i	65	4727	53.4	+13 2	8.5	9.5	Ko	2	..	38114i
16	4251	53.1	+28 18	7.9	7.9	Ao	4	..	38031i	66	5880	53.4	- 6 6	10.4	11.4	Ko	1	..	40605b
17	4835	53.1	+19 23	7.28	7.34	A2	6	..	38822i	67	5879	53.4	- 8 57	9.1	10.1	Ko	5	..	40605b
18	4910	53.1	+ 5 29	6.65	6.71	A2	7	..	38596i	68	6107	53.4	-15 36	9.0	10.4	Mb	4	..	39397b
19	5668	53.1	- 2 18	8.5	9.0	F8	2	..	14195b	69	6045	53.4	-17 53	9.9	10.4	F8	1	..	39397b
20	5351	53.1	- 3 13	8.5	9.0	F8	5	..	14195b	70	15690	53.4	-25 50	8.5	9.8	K5	4	..	39687b
21	5774	53.1	- 8 2	9.2	10.2	Ko	2	..	40605b	71	16836	53.4	-32 2	9.1	10.5	K5	1	..	14139b
22	6064	53.1	-13 44	8.0	8.8	G5	7	..	39483b	72	15125	53.4	-36 50	8.9	10.2	F8	2	..	13854b
23	3606	53.1	-66 17	8.7	9.1	F5	6	..	20428b	73	2654	53.4	-71 50	9.5	10.1	Go	1	..	19967b
24	2889	53.1	-69 56	9.0	10.1	K2	2	..	20428b	74	720	53.5	+79 29	8.3	8.3	Ao	3	..	38590i
25	1207	53.2	+69 19	9.5	9.5	A	1	..	38580i	75	4652	53.5	+26 3	8.6	9.8	K5	1	..	38819i
26	2652	53.2	+55 27	9.00	9.08	A3	1	..	37351i	76	4644	53.5	+ 3 18	7.07	7.57	F8	5	0,4-	38596i
27	3618	53.2	+48 12	6.35	6.35	Ao	9	..	38810i	77	5678	53.5	- 6 49	10.1	11.1	Ko	2	..	40605b
28	3741	53.2	+46 7	7.02	8.02	Ko	5	..	37913i	78	6333	53.5	-20 46	10.4	11.1	K2	1	..	39687b
29	4433	53.2	+23 15	8.5	9.0	F8	3	..	35085i	79	15917	53.5	-25 58	11.4	10.9	F5	1	..	39687b
30	5879	53.2	- 6 38	8.8	9.4	Go	4	..	40605b	80	14585	53.5	-37 7	9.9	10.5	G5	1	..	13854b
31	5800	53.2	-10 41	10.4	11.0	Go	1	..	39483b	81	14586	53.5	-37 45	8.5	9.7	K5	4	..	13854b
32	5722	53.2	-11 21	9.9	10.4	F8	2	..	39483b	82	11961	53.5	-52 32	7.6	8.1	Fo	8	..	39669b
33	6137	53.2	-12 27	9.1	9.9	G5	5	..	39483b	83	11962	53.5	-52 47	8.2	8.5	F5	7	..	39669b
34	6331	53.2	-20 18	9.9	11.0	Go	2	..	39397b	84	6609	53.5	-61 8	9.3	10.2	Ko	2	..	42486b
35	6131	53.2	-21 40	6.23	8.1	Mb	6	0,10	44861b	85	3692	53.6	+50 1	7.57	8.57	Ko	3	..	38810i
36	15914	53.2	-26 34	9.9	10.8	F8	4	..	23813b	86	3622	53.6	+47 34	7.98	7.98	Ao	3	..	38810i
37	14820	53.2	-38 52	5.59	6.9	Ko	..	..	56,148	87	4256	53.6	+42 47	7.82	8.38	Go	3	..	37913i
38	15717	53.2	-42 31	9.2	9.7	Go	4	..	39674b	88	4573	53.6	+34 13	8.2	9.4	K5	2	..	38099i
39	10215	53.2	-53 41	8.4	9.8	Ko	3	..	39669b	89	4816	53.6	+13 34	6.66	7.73	K2	6	..	38122i
40	9741	53.2	-55 8	9.3	10.1	G5	3	..	39669b	90	4289	53.6	+ 0 4	7.88	8.95	K2	5	..	14195b
41	1542	53.2	-76 36	5.91	6.0	F2	..	..	56,148	91	5724	53.6	-11 45	8.2	9.2	Ko	7	..	39483b
42	768	53.3	+79 5	6.80	7.98	K5	4	..	38590i	92	6334	53.6	-19 48	9.08	9.3	F8	6	..	39397b
43	1683	53.3	+65 58	8.7	8.7	Ao	2	..	37277i	93	16935	53.6	-24 19	7.08	7.2	Ao	7	..	44861b
44	2436	53.3	+59 19	6.81	6.81	Ao	8	..	38526i	94	16934	53.6	-24 22	8.5	9.4	K2	7	..	39687b
45	2431	53.3	+58 9	8.3	8.6	Fo	3	..	37351i	95	16842	53.6	-32 1	10.1	11.4	Go	2	..	41066b
46	3070	53.3	+52 59	8.9	8.9	Ao	2	..	37351i	96	9784	53.6	-56 22	6.21	7.1	B8	..	..	28,216
47	4680	53.3	+40 28	9.0	9.0	Ao	2	..	38570i	97	3508	53.7	+46 57	7.8	7.8	Ao	3	..	38810i
48	4640	53.3	+38 55	9.0	10.1	K2	1	..	38570i	98	4393	53.7	+33 39	8.4	9.5	K2	1	..	38099i
49	4305	53.3	+32 34	8.6	8.7	A3	2	..	38099i	99	4657	53.7	+21 46	8.0	9.0	Ko	1	..	38819i
50	4316	53.3	+26 45	8.8	9.6	G5	2	..	38819i	100	4915	53.7	+ 5 33	7.9	8.0	A2	4	..	38596i

THE HENRY DRAPER CATALOGUE

208800

21^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	5674	53.7	- 4 51	6.42	7.42	Ko	9	..	14195b	51	17533	53.9	-28 7	7.46	7.4	Fo	9	..	14139b
2	5803	53.7	-10 39	8.6	9.6	Ko	4	..	40605b	52	15851	53.9	-33 40	10.1	11.3	F8	3	..	41066b
3	6110	53.7	-14 59	8.2	9.2	Ko	4	..	39483b	53	15078	53.9	-35 34	8.8	9.3	Fo	6	..	13854b
4	6109	53.7	-15 37	9.1	10.2	K2	2	..	39483b	54	14829	53.9	-43 26	10.2	11.3	K5	1	..	39674b
5	6046	53.7	-17 49	9.7	10.7	Ko	1	..	39397b	55	13551	53.9	-50 43	9.6	10.4	K5	2	..	39669b
6	6335	53.7	-20 26	9.9	10.5	F5	3	..	39397b	56	13138	53.9	-51 3	10.2	10.8	Ko	1	..	39669b
7	17198	53.7	-23 9	10.2	10.2	Ko	2	..	39687b	57	9992	53.9	-54 12	10.4	10.4	Ao	1	..	39669b
8	17199	53.7	-23 21	7.39	7.9	F5	6	..	41861b	58	9993	53.9	-54 35	8.3	8.9	Ko	6	..	39669b
9	15693	53.7	-24 57	8.75	10.0	Ko	4	..	39687b	59	3210	53.9	-69 29	9.2	9.2	Ao	5	..	20428b
10	18106	53.7	-29 32	7.10	8.5	Ko	8	..	14139b	60	1544	53.9	-76 23	10.5	11.0	F8	1	..	42794b
11	14588	53.7	-40 13	9.7	10.6	K2	3	..	39674b	61	4257	54.0	+42 41	7.62	7.68	A2	5	..	37913i
12	14727	53.7	-43 57	8.0	8.9	F8	5	..	19941b	62	4573	54.0	+31 8	8.7	9.0	Fo	2	..	38099i
13	14077	53.7	-48 8	8.0	9.6	Ma	3	..	19941b	63	4658	54.0	+22 7	8.4	9.2	G5	2	..	38819i
14	13549	53.7	-50 10	9.4	10.4	K5	2	..	39669b	64	4706	54.0	+14 35	7.9	9.0	K2	3	..	38122i
15	3983	53.7	-64 54	9.1	10.1	Ko	1	..	20428b	65	5988	54.0	-16 45	9.9	10.9	Ko	1	..	39397b
16	2007	53.8	+63 9	5.35	6.70	Map	..	0,7 R	56,101	66	6412	54.0	-17 47	8.0	8.6	Go	7	..	39397b
17	4705	53.8	+14 50	7.84	8.84	Ko	3	..	38122i	67	6047	54.0	-18 28	8.0	9.4	Mb	5	..	39397b
18	4290	53.8	- 0 23	8.6	8.7	A3	7	2,2	14195b	68	6339	54.0	-19 57	10.1	10.3	F8	2	..	39397b
19	5675	53.8	- 5 35	9.2	10.2	Ko	1	..	14195b	69	18107	54.0	-29 6	7.28	8.2	F2	8	..	14139b
20	5804	53.8	-10 14	8.4	9.5	K2	2	..	40605b	70	18956	54.0	-30 27	8.9	9.5	Go	3	..	14139b
21	5987	53.8	-16 7	9.1	9.7	Go	5	..	39397b	71	15079	54.0	-35 2	8.43	10.0	K5	3	..	13854b
22	6337	53.8	-20 13	9.5	9.9	Go	4	..	39397b	72	15129	54.0	-36 49	9.5	11.1	Ko	1	..	13854b
23	6336	53.8	-20 29	8.8	9.1	A5	7	..	39397b	73	15725	54.0	-42 42	9.3	10.0	K2	2	..	39674b
24	5808	53.8	-22 35	9.7	10.5	F8	1	..	39687b	74	14013	54.0	-47 26	9.6	10.1	Go	1	..	19941b
25	15695	53.8	-25 7	9.7	9.8	Go	3	..	39687b	75	14078	54.0	-48 17	8.7	9.0	Ao	6	..	19941b
26	15719	53.8	-27 44	10.4	10.0	F8	3	..	41069b	76	11063	54.0	-51 58	8.1	8.4	F2	5	..	19941b
27	16844	53.8	-32 13	9.1	10.3	Ko	1	..	14139b	77	10008	54.0	-56 57	8.5	8.3	A2	7	..	39669b
28	15352	53.8	-34 16	10.1	10.8	Go	2	..	41066b	78	4260	54.1	+42 46	7.38	7.36	B9	6	..	37913i
29	14711	53.8	-41 1	8.1	8.9	Ko	5	..	20549b	79	4704	54.1	+11 43	8.7	9.7	Ko	2	..	38114i
30	14150	53.8	-46 44	9.4	10.1	F2	3	..	19941b	80	4453	54.1	+ 2 45	8.7	9.3	Go	3	5,I	12040b
31	13688	53.8	-49 19	9.6	9.7	A5	3	..	19941b	81	5881	54.1	- 5 57	8.7	8.8	A2	5	..	14195b
32	10216	53.8	-53 40	9.3	10.1	G5	1	..	39669b	82	6050	54.1	-18 32	9.7	10.2	F8	4	..	39397b
33	1742	53.8	-74 56	8.81	9.2	A2	7	..	42794b	83	6048	54.1	-18 41	9.7	10.5	G5	4	..	39397b
34	2432	53.9	+57 55	8.7	8.7	Ao	2	..	37351i	84	6136	54.1	-21 11	10.6	10.2	F8	2	..	39687b
35	3512	53.9	+46 23	7.39	7.39	Ao	6	..	37913i	85	5809	54.1	-22 12	9.5	9.9	F8	2	..	39687b
36	4724	53.9	+40 4	9.4	10.2	G5	1	..	38570i	86	16848	54.1	-32 0	7.12	7.2	B8	10	..	14139b
37	4643	53.9	+38 27	7.6	7.6	B8	5	..	38570i	87	15081	54.1	-35 9	8.8	9.9	G5	3	..	13854b
38	4319	53.9	+26 57	8.7	8.8	A2	2	..	38819i	88	14832	54.1	-43 22	10.7	10.9	Ao	2	..	39674b
39	4517	53.9	+23 5	8.1	9.1	Ko	2	..	38819i	89	13689	54.1	-49 49	9.4	10.0	F5	2	..	39669b
40	5054	53.9	+20 27	8.50	8.56	A2	2	..	38822i	90	13554	54.1	-50 31	9.6	9.9	Ko	4	..	39669b
41	4666	53.9	+10 32	9.2	9.5	Fo	1	..	38596i	91	1433	54.1	-78 40	9.1	9.6	F8	4	..	42794b
42	5780	53.9	- 8 19	9.7	10.1	F5	1	..	40910b	92	1610	54.2	+64 20	9.1	9.2	A2	2	..	37277i
43	5881	53.9	- 9 26	8.8	10.2	Mb	4	..	40605b	93	3504	54.2	+50 34	8.3	8.3	Ao	2	..	38810i
44	6067	53.9	-13 27	9.7	10.7	Ko	2	..	39483b	94	3699	54.2	+50 5	8.37	8.37	Ao	3	..	38810i
45	6112	53.9	-15 16	9.9	10.5	Go	2	..	39397b	95	4683	54.2	+35 37	8.4	8.9	F8	2	..	38099i
46	6111	53.9	-15 33	8.2	8.5	Fo	6	..	39483b	96	4395	54.2	+34 11	8.8	9.9	K2	1	..	38099i
47	6411	53.9	-17 19	9.2	9.8	Go	3	..	39397b	97	4899	54.2	+18 33	6.57	7.57	Ko	7	..	38822i
48	6133	53.9	-21 37	9.9	10.8	F5	2	..	39687b	98	5673	54.2	- 1 51	8.1	8.2	A2	4	..	14195b
49	15920	53.9	-26 11	9.4	9.2	F8	4	..	39687b	99	6181	54.2	-13 54	9.0	10.0	Ko	3	..	39483b
50	15919	53.9	-26 13	9.2	9.2	F8	5	..	39687b	100	6114	54.2	-15 44	10.4	11.0	Go	3	..	39397b

208900

21^h54^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	6414	54.2	-16 48	9.2	9.6	F5	4	..	39397b	51	4554	54.7	+30 3	7.91	8.98	K2	3	..	38099i
2	6139	54.2	-21 6	10.1	10.5	Go	2	..	39687b	52	5883	54.7	-9 39	9.5	10.5	Ko	1	..	40605b
3	6140	54.2	-21 19	10.4	10.5	Ko	1	..	39687b	53	6069	54.7	-13 11	9.1	9.5	F5	4	..	39483b
4	1611	54.3	+65 9	7.60	7.43	B3	4	..	37277i	54	6115	54.7	-15 36	10.4	11.2	G5	1	..	39397b
5	2320	54.3	+60 49	6.90	6.73	B3	7	..	37277i	55	16943	54.7	-23 59	9.9	9.8	G5	4	..	39687b
6	4550	54.3	+29 21	6.83	7.25	F5	6	..	38099i	56	15706	54.7	-25 25	9.5	9.8	F5	5	..	39687b
7	4779	54.3	+5 8	9.11	9.67	Go	2	..	14196b	57	15925	54.7	-26 45	9.9	9.8	A3	3	..	41069b
8	5677	54.3	-5 5	8.8	9.3	F8	5	..	14195b	58	14084	54.7	-47 56	7.5	8.4	Ko	8	..	19941b
9	17537	54.3	-27 55	9.1	9.7	K5	3	..	41069b	59	4197	54.7	-64 49	9.22	10.0	G5	1	..	19898b
10	18111	54.3	-29 27	9.4	10.5	K2	2	..	41069b	60	2321	54.8	+60 32	7.96	8.52	Go	2	..	38526i
11	13139	54.3	-51 26	8.7	9.3	Go	4	..	19941b	61	2658	54.8	+55 47	8.7	8.8	A2	1	..	37351i
12	9786	54.3	-56 14	9.1	9.6	F8	4	..	39669b	62	4333	54.8	+41 13	7.23	7.21	B9	5	..	37978i
13	4738	54.3	-63 51	9.8	10.6	G5	1	..	19898b	63	4710	54.8	+15 12	8.14	8.14	Ao	3	..	38114i
14	2657	54.3	-72 1	8.9	9.9	Ko	3	..	19967b	64	5887	54.8	-6 4	9.9	10.0	A2	2	..	40605b
15	2363	54.4	+58 39	8.3	9.5	K5	1	..	38526i	65	6143	54.8	-12 42	9.1	9.9	G5	4	..	39483b
16	4096	54.4	+43 41	7.62	8.69	K2	2	..	37913i	66	6416	54.8	-16 52	9.1	9.5	F5	5	..	39397b
17	4684	54.4	+36 13	8.0	9.0	Ko	3	..	38099i	67	..	54.8	-19 32	..	..	K2	1	..	39397b
18	4669	54.4	+10 50	9.2	10.0	G5	1	..	38114i	68	6143	54.8	-21 14	10.8	10.8	F5	1	..	39687b
19	4780	54.4	+4 18	8.5	9.7	K5	2	..	14196b	69	13555	54.8	-50 39	10.4	10.8	Ko	1	..	39669b
20	4568	54.4	+1 45	10.2	11.0	G5	2	..	12040b	70	11965	54.8	-52 29	9.8	10.8	Ko	1	..	39669b
21	5884	54.4	-6 45	8.0	9.0	Ko	6	..	40605b	71	1693	54.9	+65 40	7.04	8.22	K5	4	3.3	37277i
22	5726	54.4	-10 47	7.62	8.04	F5	8	..	39483b	72	4579	54.9	+34 49	9.1	9.2	A3	3	..	38099i
23	5989	54.4	-16 0	10.5	11.5	Ko	1	..	39397b	73	4310	54.9	+33 9	7.8	7.6	B3	6	..	38099i
24	16940	54.4	-24 19	10.4	10.8	G5	2	..	39687b	74	4805	54.9	+0 51	9.6	9.9	Fo	2	..	14195b
25	15721	54.4	-27 47	10.4	10.3	Go	2	..	41069b	75	4806	54.9	+0 27	8.5	9.6	K2	7	0.3	14195b
26	14835	54.4	-42 56	7.3	8.1	F8	8	R	39674b	76	5888	54.9	-6 20	9.1	9.9	G5	3	..	40605b
27	11964	54.4	-42 56	7.3	8.1	A3	8	R	39674b	77	6144	54.9	-12 3	9.9	10.4	F8	3	..	39483b
28	11964	54.4	-52 32	8.6	9.0	F5	5	..	39669b	78	5991	54.9	-16 41	10.1	11.1	Ko	1	..	39397b
29	729	54.4	-83 7	8.8	9.8	Ko	6	..	21397b	79	6052	54.9	-17 51	7.8	7.9	A5	5	2.9	41861b
30	1690	54.5	+65 33	7.48	8.26	G5	5	5.4	38902i	80	6145	54.9	-21 18	9.1	9.9	Ko	4	..	39687b
31	3507	54.5	+51 9	8.6	8.6	Ao	2	..	37351i	81	16945	54.9	-24 43	10.4	10.3	F8	2	..	39687b
32	4642	54.5	+16 39	7.9	9.0	K2	2	..	38822i	82	15359	54.9	-33 59	7.7	9.9	K2	3	..	14139b
33	5353	54.5	-3 28	8.8	9.1	F2	3	..	14195b	83	14598	54.9	-37 21	9.1	9.6	F2	4	..	13854b
34	6200	54.5	-19 14	10.8	11.4	F8	1	..	39397b	84	14544	54.9	-45 8	9.8	10.9	Ko	2	..	39674b
35	16942	54.5	-24 34	11.4	11.4	Ao	1	..	39687b	85	10222	54.9	-53 25	8.8	9.8	Go	4	..	39669b
36	14019	54.5	-47 42	8.6	9.8	Ko	3	..	19941b	86	9753	54.9	-54 55	9.5	10.1	Go	1	..	39669b
37	3985	54.5	-65 43	6.9	7.9	Ko	8	..	20428b	87	4556	55.0	+29 25	8.2	9.3	K2	2	..	38031i
38	2224	54.6	+61 15	8.6	9.1	F8	3	0.1	38902i	88	4220	55.0	+27 40	8.5	8.6	A2	1	..	38819i
39	3207	54.6	+51 47	8.8	8.8	Ao	2	..	37351i	89	5729	55.0	-10 58	8.7	9.3	Go	5	..	39483b
40	4098	54.6	+44 13	8.1	8.4	Fo	3	..	37913i	90	6070	55.0	-13 20	9.1	10.2	K2	3	..	39483b
41	4597	54.6	+31 59	7.79	7.77	B9	5	..	38099i	91	R	55.0	-18 55	11.9	11.9	A	1	..	39397b
42	4948	54.6	+10 7	7.30	8.48	K5	3	..	38114i	92	14599	55.0	-37 2	6.75	7.7	Ko	10	..	13854b
43	6415	54.6	-17 23	9.9	11.1	K5	1	..	39397b	93	14526	55.0	-39 22	8.8	9.4	F5	6	..	39674b
44	15703	54.6	-25 17	9.5	9.7	Fo	5	..	39687b	94	14716	55.0	-41 47	9.5	10.0	F8	3	..	20549b
45	15704	54.6	-25 35	9.2	9.7	F8	4	..	39687b	95	14087	55.0	-48 21	8.8	9.0	F5	5	..	19941b
46	14543	54.6	-44 57	9.36	10.7	G5	4	..	39674b	96	14086	55.0	-48 41	9.8	10.2	Ko	2	..	19941b
47	1691	54.7	+65 41	6.28	6.11	B3	6	0.8	37277i	97	10223	55.0	-53 3	9.3	10.4	K2	1	..	39669b
48	2657	54.7	+56 7	9.0	9.1	A3	1	..	37351i	98	10224	55.0	-53 34	7.16	7.6	F8	9	..	39669b
49	4462	54.7	+37 27	8.6	8.7	A2	3	..	38570i	99	9999	55.0	-54 38	7.99	8.3	F2	8	..	39669b
50	4727	54.7	+36 47	8.0	8.5	F8	3	..	38570i	100	7535	55.0	-60 12	9.0	9.4	F5	3	..	20558b

THE HENRY DRAPER CATALOGUE

209000

21^h 55^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	3610	55.0	-66 13	9.8	10.3	F8	1	..	20428b	51	5683	55.4	-6 54	8.6	8.6	Ao	7	..	40605b
2	3456	55.0	-68 51	8.4	9.2	G5	5	..	20428b	52	6147	55.4	-11 54	9.0	9.6	Go	6	..	39483b
3	638	55.0	-84 24	9.0	10.0	Ko	3	..	21397b	53	6202	55.4	-19 1	10.4	11.9	Ko	1	..	39397b
4	1461	55.1	+67 7	8.9	8.9	A	2	..	37277i	54	6147	55.4	-20 49	9.5	9.3	F8	5	..	39397b
5	4335	55.1	+41 29	8.2	8.2	B9	2	..	37978i	55	17549	55.4	-28 48	10.6	9.7	F5	2	..	41069b
6	4399	55.1	+33 41	7.8	7.9	A2	6	..	38099i	56	17550	55.4	-28 49	9.7	8.8	F5	4	..	41069b
7	4732	55.1	+13 12	9.2	10.3	K2	1	..	38114i	57	15093	55.4	-35 34	9.1	10.0	A3	2	..	13854b
8	4940	55.1	+6 14	5.99	5.82	B3	9	5.5	38596i	58	14025	55.4	-47 16	9.8	10.9	Ko	1	..	19941b
9	5782	55.1	-7 52	9.2	10.4	K5	1	..	40910b	59	4323	55.5	+26 18	7.7	7.7	B9	7	..	38819i
10	6071	55.1	-13 25	9.5	10.0	F8	3	..	39483b	60	4663	55.5	+21 35	8.0	8.5	F8	2	..	13717i
11	5993	55.1	-16 19	9.9	10.9	Ko	1	..	39397b	61	4841	55.5	+19 25	8.1	8.1	Ao	4	..	38822i
12	17212	55.1	-23 47	8.1	8.3	G5	7	..	39687b	62	4809	55.5	+1 9	9.6	9.6	Ao	3	..	14195b
13	17214	55.1	-23 51	10.2	11.1	K5	1	..	39687b	63	5885	55.5	-9 47	10.4	11.2	G5	1	..	40605b
14	18119	55.1	-28 56	5.42	5.9	B8	..	R	56,148	64	6419	55.5	-17 39	9.5	10.1	Go	3	..	39397b
15	15137	55.1	-35 56	7.7	8.1	A2	8	..	13854b	65	6340	55.5	-20 16	10.5	11.1	Go	1	..	39397b
16	14156	55.1	-46 28	10.0	10.4	Go	2	..	19941b	66	6148	55.5	-21 25	10.1	10.5	Ko	1	..	39687b
17	10000	55.1	-54 34	9.2	9.8	Fo	3	..	39669b	67	17217	55.5	-23 9	9.2	9.9	Ko	3	..	39687b
18	7750	55.1	-59 41	8.7	9.3	G5	5	..	20558b	68	15713	55.5	-25 4	9.9	10.3	F5	1	..	39687b
19	2247	55.1	-73 13	8.7	10.1	Mb	4	..	20544b	69	15714	55.5	-25 29	7.90	9.4	Ko	7	..	39687b
20	1463	55.2	+66 39	9.0	9.4	F5	2	R	38580i	70	15733	55.5	-42 33	9.2	9.4	Go	4	..	20549b
21	2752	55.2	+66 39	8.7	8.7	A	4	..	37351i	71	10002	55.5	-54 31	9.9	10.4	F8	1	..	39669b
22	4691	55.2	+53 46	8.4	8.5	B9	4	..	37978i	72	9756	55.5	-54 58	9.08	9.8	G5	4	..	39669b
23	4651	55.2	+40 54	8.8	8.9	A2	1	..	38570i	73	9757	55.5	-55 15	8.9	9.0	Ao	5	..	39669b
24	4465	55.2	+38 19	8.2	9.2	A2	2	..	38570i	74	10014	55.5	-57 46	9.5	10.1	Go	2	E	39382b
25	4442	55.2	+37 30	7.00	8.35	Ko	1	..	38819i	75	4742	55.5	-63 27	9.6	10.1	Go	2	..	19898b
26	4952	55.2	+23 27	8.9	9.9	Mb	3	..	14196b	76	3513	55.6	+50 21	8.82	8.82	F8	1	..	38810i
27	6188	55.2	+9 28	8.9	9.9	Ko	2	..	39483b	77	4924	55.6	+5 30	8.3	8.9	Ao	2	..	14196b
28	6187	55.2	-14 13	7.23	7.51	Fo	8	..	39483b	78	4457	55.6	+2 19	8.9	9.3	Go	5	..	10174b
29	15729	55.2	-14 38	7.60	8.02	F5	7	..	39483b	79	5680	55.6	+4 58	9.5	10.3	F5	2	..	40605b
30	18121	55.2	-27 0	8.5	9.4	Ko	4	..	41069b	80	6074	55.6	-13 30	7.08	7.50	G5	2	..	40605b
31	14738	55.2	-29 22	9.7	10.5	Go	2	..	41069b	81	15369	55.6	-13 30	7.08	7.50	F5	9	..	39483b
32	14089	55.2	-44 45	10.0	10.9	Go	2	..	41066b	82	15368	55.6	-34 11	9.9	10.2	Go	4	..	41066b
33	11966	55.2	-48 2	8.6	8.8	Ko	3	R	39674b	83	15141	55.6	-34 19	7.37	8.4	Ko	9	..	13854b
34	985	55.2	-48 2	8.6	8.8	A3	6	..	19941b	84	15141	55.6	-36 32	8.5	9.0	F2	4	..	13854b
35	730	55.2	-52 34	10.1	11.1	Ko	1	..	39669b	85	14723	55.6	-41 52	9.4	9.4	Fo	5	..	20549b
36	5783	55.2	-81 25	9.7	10.7	K	1	..	21397b	86	14161	55.6	-46 52	9.4	9.4	Fo	4	..	20549b
37	5884	55.2	-83 51	7.41	8.8	Ko	7	2.4	21397b	87	10225	55.6	-46 52	9.8	10.9	Ko	1	..	19941b
38	6146	55.3	-8 1	9.0	9.1	A5	5	..	40605b	88	7919	55.6	-53 37	9.9	10.4	F8	1	..	39669b
39	16857	55.3	-8 1	9.0	9.1	A5	5	..	40605b	89	771	55.6	-58 47	8.2	9.3	F8	6	..	20558b
40	620	55.3	-9 0	8.6	9.4	G5	6	..	40605b	90	2667	55.7	+78 22	8.6	9.4	G5	1	..	38590i
41	944	55.3	-11 33	10.1	10.1	Ao	4	..	39483b	91	5062	55.7	+56 28	8.7	9.3	Go	2	..	37351i
42	1263	55.3	-21 18	10.5	11.0	Ko	1	..	39687b	92	5887	55.7	+20 51	8.4	8.4	Ao	3	..	38819i
43	4515	55.3	-31 59	9.2	11.4	K2	1	..	41066b	93	5888	55.7	-9 21	9.9	10.5	Go	1	..	40910b
44	4443	55.3	-31 59	9.2	11.4	K2	1	..	41066b	94	6191	55.7	-9 36	10.1	11.1	Ko	1	..	40910b
45	4808	55.3	+83 34	9.3	10.3	Ko	2	..	37294i	95	6190	55.7	-14 21	9.2	10.3	K2	3	..	39397b
46	4807	55.3	+74 46	9.5	10.3	G5	1	..	38936i	96	6190	55.7	-14 40	9.21	9.99	G5	3	..	39483b
47	5678	55.4	+68 13	9.0	10.1	K2	2	R	37277i	97	6203	55.7	-19 4	9.9	11.4	Ko	1	..	39397b
48	5890	55.4	+24 50	8.8	8.8	Ao	3	..	38819i	98	6341	55.7	-19 47	8.78	9.6	F8	6	..	39397b
49	5890	55.4	+23 37	8.6	9.0	F5	2	..	38819i	99	17554	55.7	-19 47	8.78	9.6	F8	6	..	39397b
50	5890	55.4	+0 50	10.6	11.8	K5	1	..	14195b	100	18126	55.7	-28 22	8.9	8.2	Ao	6	..	14139b
			+0 44	8.9	9.7	G5	4	5.2	14195b		15142	55.7	-29 16	9.9	10.1	F2	3	..	41069b
			-5 14	9.1	9.2	A5	3	..	40605b		15142	55.7	-36 37	8.5	9.3	Fo	4	..	13854b
			-6 9	9.7	10.2	F8	2	..	40605b		10015	55.7	-57 12	4.74	6.9	K5	..	R	28,216

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	945	55.8	+74 39	9.6	9.7	A3	2	..	38936i	51	4824	56.1	+13 27	8.5	9.7	K5	1	..	38114i
2	2442	55.8	+59 35	7.9	8.4	F8	3	..	38526i	52	4778	56.1	+ 8 10	8.5	8.8	Fo	5	..	14196b
3	3566	55.8	+48 39	7.42	7.42	Ao	7	..	3881oi	53	4929	56.1	+ 5 22	8.81	9.81	Ko	3	..	14196b
4	4314	55.8	+32 57	8.8	8.9	A5	5	..	38099i	54	5998	56.1	-16 5	7.06	7.84	G5	9	..	39397b
5	4777	55.8	+ 7 23	7.7	7.7	Ao	3	..	38596i	55	6054	56.1	-17 54	10.5	11.5	Ko	1	..	39397b
6	5681	55.8	- 4 59	9.5	10.3	G5	2	..	40605b	56	6150	56.1	-21 12	10.4	10.5	F8	1	..	39687b
7	6150	55.8	-11 49	8.7	9.0	Fo	7	..	39483b	57	5814	56.1	-21 55	10.4	10.5	Go	1	..	39687b
8	6053	55.8	-18 0	8.2	9.2	Ko	8	..	39397b	58	15936	56.1	-25 57	9.1	9.8	G5	7	..	23813b
9	15144	55.8	-36 48	9.1	9.7	G5	3	..	13854b	59	15873	56.1	-33 30	9.1	10.5	A5	4	..	41066b
10	14845	55.8	-43 2	10.0	11.0	K5	1	..	39674b	60	14166	56.1	-46 31	9.6	10.1	A2	2	..	19941b
11	721	55.9	+79 50	6.60	7.95	Mb	5	..	3859oi	61	11969	56.1	-52 49	9.2	9.9	Ko	3	..	39669b
12	2010	55.9	+62 13	6.16	7.51	Mb	..	0,5	56,101	62	2012	56.2	+62 47	9.0	9.0	B8	2	..	37277i
13	4012	55.9	+44 30	8.1	8.2	A2	3	..	37913i	63	3711	56.2	+50 3	8.77	8.91	A5	1	..	3881oi
14	4944	55.9	+ 6 58	8.5	8.6	A2	2	..	38596i	64	4658	56.2	+26 0	8.2	9.4	K5	1	..	3881oi
15	5995	55.9	-15 54	9.5	10.0	F8	4	..	39397i	65	4907	56.2	+18 48	8.9	9.0	A2	2	..	38822i
16	5994	55.9	-16 41	9.5	10.5	Ko	2	..	39397b	66	4737	56.2	+12 38	5.66	6.00	F2	9	..	38114i
17	16950	55.9	-24 27	9.9	10.3	G5	2	..	39687b	67	4779	56.2	+ 7 47	5.85	6.92	K2	7	0,7	38596i
18	14840	55.9	-38 26	8.9	9.7	F5	3	..	13854b	68	5360	56.2	- 3 41	9.0	9.6	Go	1	..	14195b
19	14606	55.9	-40 40	9.9	10.6	A5	2	R	39674b	69	6205	56.2	-19 31	10.4	11.6	K2	1	..	39397b
20	14605	55.9	-40 48	9.4	10.6	Go	3	..	39674b	70	6206	56.2	-19 43	10.4	11.6	K2	1	..	39397b
21	10017	55.9	-57 45	9.6	10.6	Ko	1	E	39382b	71	5815	56.2	-22 7	9.7	10.5	G5	1	..	39687b
22	1792	56.0	+64 5	9.3	10.1	G5	2	..	38902i	72	15374	56.2	-34 52	7.72	9.3	K5	6	..	13854b
23	2323	56.0	+61 11	7.9	8.0	A3	..	1,6	56,101	73	15099	56.2	-35 15	9.5	11.5	K5	1	..	41066b
24	2670	56.0	+57 10	6.49	6.49	Ao	7	..	37351i	74	15146	56.2	-36 2	7.31	8.8	Ko	7	..	13854b
25	4344	56.0	+42 6	7.50	7.56	A2	6	2,7	37913i	75	14099	56.2	-48 10	9.1	9.0	F8	4	..	19941b
26	4405	56.0	+34 8	6.93	8.11	K5	6	..	38099i	76	10228	56.2	-53 14	9.6	10.4	G5	1	..	39669b
27	4928	56.0	+ 5 38	var.	var.	Md	..	R	M	77	318	56.2	-87 46	8.6	9.4	G5	3	..	15173b
28	4296	56.0	+ 0 7	5.75	6.75	Ko	6	0,9-	17420b	78	1794	56.3	+63 31	9.0	9.0	B8	2	..	38902i
29	5682	56.0	- 5 35	9.2	10.0	G5	4	..	40605b	79	2758	56.3	+53 36	9.0	9.0	A	2	..	37351i
30	5683	56.0	- 5 46	9.9	10.5	Go	1	..	40605b	80	4228	56.3	+27 35	8.2	9.3	K2	1	..	3881oi
31	6119	56.0	-14 48	8.01	9.01	Ko	6	..	39483b	81	4665	56.3	+21 23	7.78	8.78	Ko	3	..	3881oi
32	5997	56.0	-16 3	9.7	9.8	A5	4	..	39397b	82	4908	56.3	+19 4	8.9	9.0	A2	1	..	38822i
33	15718	56.0	-25 21	8.9	8.5	Fo	7	..	39687b	83	5893	56.3	- 9 22	9.2	10.0	G5	2	..	40910b
34	17558	56.0	-28 30	9.7	9.2	F8	4	..	41069b	84	6152	56.3	-12 28	9.2	10.0	G5	6	..	39483b
35	17559	56.0	-28 50	9.9	9.8	Go	1	..	41069b	85	6153	56.3	-12 28	9.5	10.3	G5	6	..	39483b
36	16861	56.0	-31 57	9.2	10.9	Ko	3	..	41066b	86	6055	56.3	-17 56	9.1	10.1	Ko	3	..	39397b
37	16862	56.0	-32 33	9.4	10.0	F5	5	..	41066b	87	17223	56.3	-23 1	9.5	9.9	F5	2	..	39687b
38	14610	56.0	-37 39	8.5	8.7	A2	8	..	13854b	88	14612	56.3	-36 56	9.1	10.0	F2	3	..	13854b
39	14846	56.0	-43 2	10.2	11.8	Mb	..	..	M	89	15742	56.3	-42 34	8.6	9.1	Ko	5	..	20549b
40	14028	56.0	-47 38	8.8	9.8	K2	4	..	19941b	90	4203	56.3	-64 1	8.9	9.7	G5	4	..	42486b
41	14098	56.0	-48 33	9.3	9.9	K2	2	..	19941b	91	2026	56.3	-74 0	10.2	11.0	G5	2	..	19967b
42	13146	56.0	-51 46	7.6	7.8	A3	9	..	19941b	92	3518	56.4	+51 2	7.7	8.0	Fo	4	..	37351i
43	9793	56.0	-56 30	9.6	9.9	Fo	2	2,2 R	39669b	93	4584	56.4	+30 57	7.04	7.32	Fo	7	..	38099i
44	4743	56.0	-63 16	9.9	10.9	Ko	1	..	19898b	94	5685	56.4	- 5 37	9.5	10.3	G5	3	..	40605b
45	2443	56.1	+59 50	7.96	7.91	B8	5	..	38526i	95	5893	56.4	- 6 42	8.0	9.0	Ko	6	..	40605b
46	2671	56.1	+56 23	7.26	7.54	Fo	6	..	37351i	96	5684	56.4	- 7 44	9.9	10.9	Ko	1	..	40910b
47	4106	56.1	+44 4	7.7	7.8	A2	4	..	37913i	97	5894	56.4	- 9 11	10.8	10.9	A3	2	..	40910b
48	4406	56.1	+33 31	9.0	9.0	Ao	3	..	38099i	98	6421	56.4	-17 15	8.6	9.2	Go	7	..	39397b
49	4316	56.1	+32 33	6.46	6.88	F5	9	0,9	38099i	99	15719	56.4	-25 50	9.7	10.0	Ko	6	..	23813b
50	4713	56.1	+14 48	8.24	8.74	F8	2	..	38114i	100	15938	56.4	-26 48	10.6	10.8	F8	4	..	23813b

THE HENRY DRAPER CATALOGUE

209200

21^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	15738	56.4	-27 33	10.9	11.4	Ko	2	..	23813b	51	6121	56.8	-15 27	9.1	9.7	Go	3	..	39483b
2	7537	56.4	-60 39	8.1	8.4	Ao	7	..	42486b	52	15940	56.8	-26 42	10.9	11.2	Ko	4	..	23813b
3	2759	56.5	+53 38	7.44	7.94	F8	5	..	3735i	53	16868	56.8	-32 37	6.68	7.2	F5	10	..	14139b
4	3573	56.5	+48 34	7.9	8.9	Ko	1	..	3881oi	54	14848	56.8	-38 27	9.5	10.0	Ao	2	..	13854b
5	4586	56.5	+31 3	7.49	7.49	Ao	7	..	3809gi	55	14032	56.8	-47 35	8.8	10.1	K2	3	..	19941b
6	4587	56.5	+30 15	8.66	8.72	A2	2	..	3809gi	56	7920	56.8	-58 44	8.1	9.9	Ko	4	..	20558b
7	5686	56.5	-5 20	9.2	10.4	K5	2	..	40605b	57	6615	56.8	-61 20	8.7	9.9	K5	2	..	42486b
8	5812	56.5	-10 21	8.0	8.6	Go	6	2,6	4091ob	58	946	56.9	+74 31	6.64	7.82	K5	6	0,6	38936i
9	6001	56.5	-15 52	8.6	10.0	Mb	3	..	39397b	59	4698	56.9	+40 14	8.92	8.98	A2	2	..	3857oi
10	15739	56.5	-27 19	10.4	10.6	F8	3	..	23813b	60	4656	56.9	+38 47	7.08	7.08	Ao	7	..	37978i
11	15151	56.5	-36 19	8.1	8.0	A5	8	..	13854b	61	4779	56.9	+8 30	9.0	9.6	Go	2	..	14196b
12	14743	56.5	-44 16	10.2	10.9	Go	1	..	39674b	62	4788	56.9	+4 19	7.7	8.5	G5	7	0,3	14196b
13	14742	56.5	-44 52	9.60	10.5	F5	2	..	39674b	63	5897	56.9	-6 13	9.9	10.4	F8	2	..	40605b
14	10230	56.5	-53 34	9.6	10.4	G5	2	..	39669b	64	6124	56.9	-15 29	10.8	12.2	Mb	..	..	M
15	2324	56.6	+60 38	8.7	8.8	A2	2	..	38803i	65	17568	56.9	-28 13	10.2	11.4	K2	3	..	23813b
16	2445	56.6	+60 4	8.26	8.26	Ao	3	..	38526i	66	14175	56.9	-46 12	8.8	10.1	K2	3	..	19941b
17	2675	56.6	+56 15	8.1	8.2	A2	2	..	3735ii	67	14101	56.9	-48 45	9.2	9.3	F8	4	..	19941b
18	2661	56.6	+54 33	7.9	7.8	B5	4	..	3735ii	68	9798	56.9	-56 27	6.9	7.5	Go	..	2,8	28,216
19	4108	56.6	+43 39	7.50	8.57	K2	3	..	37913i	69	130	57.0	+88 23	9.11	9.39	F	3	..	37793i
20	4109	56.6	+43 35	8.7	9.2	F8	1	..	37913i	70	4699	57.0	+40 36	8.6	8.6	Ao	2	..	37978i
21	4584	56.6	+34 49	8.4	8.4	Ao	5	..	3809gi	71	4469	57.0	+38 5	8.8	9.8	Ko	1	..	3857oi
22	4409	56.6	+33 25	9.3	10.1	G5	1	..	3809gi	72	4692	57.0	+35 58	7.8	7.8	B9	6	..	3809gi
23	4328	56.6	+26 21	7.8	7.8	B9	8	..	3881oi	73	4318	57.0	+32 42	8.0	8.0	B9	4	..	3809gi
24	4233	56.6	-1 36	7.7	8.2	F8	7	..	14195b	74	4448	57.0	+24 5	8.6	9.1	F8	2	..	38819i
25	5597	56.6	-4 5	8.7	9.2	F8	4	..	14195b	75	4650	57.0	+3 59	8.3	9.5	K5	1	..	10174b
26	5816	56.6	-22 35	8.8	9.9	F5	4	..	39687b	76	5898	57.0	-6 46	10.1	10.9	G5	1	..	40605b
27	16959	56.6	-24 6	7.52	8.5	Ko	8	..	39687b	77	6003	57.0	-16 40	9.0	9.5	F8	5	..	39397b
28	14614	56.6	-37 34	8.5	9.0	F5	6	..	13854b	78	6422	57.0	-17 27	6.49	6.55	A2	8	..	41861b
29	14851	56.6	-43 0	10.0	10.7	G5	2	..	39674b	79	6207	57.0	-19 27	10.1	10.5	Go	2	..	39397b
30	14554	56.6	-45 47	9.2	10.4	Fo	2	..	19941b	80	15743	57.0	-27 51	7.04	8.6	Ko	8	..	41069b
31	14029	56.6	-47 23	10.0	10.9	Ko	1	..	19941b	81	18610	57.0	-31 12	9.1	10.5	K2	4	0,2	41066b
32	13566	56.6	-50 48	7.6	9.1	Ko	5	..	19941b	82	14856	57.0	-43 43	8.6	9.8	Ko	4	..	20549b
33	13151	56.6	-51 18	9.3	9.6	Go	4	..	39669b	83	6294	57.0	-62 21	7.8	8.8	Ko	6	..	42486b
34	6613	56.6	-60 55	7.8	8.7	Go	8	..	42486b	84	3222	57.1	+52 4	8.6	8.7	A2	2	..	3735ii
35	3854	56.6	-67 20	9.4	10.0	Go	2	..	20428b	85	3522	57.1	+50 45	8.5	8.5	Ao	2	..	3735ii
36	4655	56.7	+39 4	7.66	8.66	Ko	2	..	37978i	86	3657	57.1	+47 53	7.9	9.1	K5	1	..	3881oi
37	4297	56.7	-0 7	8.3	9.3	Ko	3	5,1	14195b	87	3531	57.1	+47 10	8.1	8.9	G5	1	..	3881oi
38	5784	56.7	-8 12	9.5	10.7	K5	1	..	4091ob	88	4676	57.1	+10 29	6.36	6.31	B8	7	1,7	38596i
39	6002	56.7	-16 14	10.4	11.0	Go	1	..	39397b	89	4946	57.1	+7 11	8.9	9.2	Fo	2	..	14196b
40	6056	56.7	-18 23	6.38	7.16	G5	8	..	41861b	90	4810	57.1	+0 56	9.4	10.6	K5	1	..	12040b
41	18136	56.7	-29 8	9.4	10.0	G5	3	..	41069b	91	5785	57.1	-8 8	8.6	9.6	Ko	4	..	40605b
42	14618	56.7	-40 8	7.7	8.9	K2	5	..	20549b	92	6345	57.1	-19 52	10.4	10.5	Ao	2	..	39397b
43	11970	56.7	-52 31	10.8	10.8	Ao	2	..	39669b	93	13155	57.1	-51 41	10.0	10.2	Go	2	..	39669b
44	4744	56.7	-63 26	9.7	10.3	Go	1	..	19898b	94	7754	57.1	-59 44	9.21	10.2	G5	3	..	20558b
45	2014	56.8	+62 47	8.9	9.7	G5	1	..	37277i	95	3989	57.1	-65 13	7.26	7.9	A2	10	..	20428b
46	4270	56.8	+43 9	7.64	7.78	A5	4	..	37913i	96	2676	57.2	+56 14	8.1	8.1	Ao	3	..	3735ii
47	4234	56.8	-0 48	8.7	9.7	Ko	1	..	14195b	97	4270	57.2	+29 11	9.4	10.6	K5	1	..	3803ii
48	5896	56.8	-6 15	9.9	10.5	G	1	..	40605b	98	4662	57.2	+25 54	8.0	8.1	A3	6	..	38819i
49	5896	56.8	-9 45	8.46	9.46	Ko	6	..	40605b	99	4529	57.2	+23 6	8.2	8.2	Ao	3	..	38819i
50	6125	56.8	-14 49	8.96	9.52	Go	4	..	39483b	100	4741	57.2	+12 14	8.9	9.0	A5	2	..	38114i

209300

21^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	4678	57.2	+11 7	8.5	9.0	F8	3	..	38114i	51	6159	57.6	-12 3	9.7	10.7	Ko	3	..	39463b
2	5898	57.2	- 9 39	10.4	11.2	G5	1	..	4091ob	52	6079	57.6	-13 38	9.5	10.3	G5	2	..	39463b
3	5734	57.2	-11 30	10.4	11.6	K5	1	..	39463b	53	15749	57.6	-27 0	9.9	10.6	Go	1	..	41069b
4	6004	57.2	-16 14	9.7	10.5	G5	3	..	39397b	54	18146	57.6	-29 5	10.4	10.9	G5	2	..	41069b
5	15745	57.2	-27 21	10.6	10.9	G5	3	..	23813b	55	14746	57.6	-44 32	9.3	10.0	A5	5	..	20549b
6	731	57.2	-83 27	9.7	10.3	Go	2	..	21397b	56	9801	57.6	-56 23	9.3	9.8	K2	3	..	39669b
7	808	57.3	+75 37	7.97	9.04	K2	2	..	38025i	57	4677	57.7	+17 59	8.7	9.7	Ko	1	..	38822i
8	2766	57.3	+53 41	9.3	9.3	B9	2	..	3735ii	58	4784	57.7	+ 8 2	8.1	9.1	Ko	3	..	38596i
9	4111	57.3	+44 11	8.2	8.2	Ao	3	..	37913i	59	5603	57.7	- 3 57	9.1	9.4	F2	2	..	14195b
10	5686	57.3	- 7 14	9.9	10.7	G5	1	..	4091ob	60	5901	57.7	- 8 59	7.35	8.35	Ko	7	..	4091ob
11	6157	57.3	-11 58	10.4	11.0	Go	2	..	39463b	61	6160	57.7	-11 56	9.7	10.3	Go	4	..	39463b
12	6423	57.3	-16 55	9.5	10.0	F8	3	..	39397b	62	6348	57.7	-20 21	10.1	10.8	Go	1	..	39397b
13	6058	57.3	-17 49	10.1	10.7	Go	1	..	39397b	63	6347	57.7	-20 36	9.1	10.2	Go	3	..	39397b
14	18143	57.3	-29 30	9.9	10.5	Go	3	..	41069b	64	17235	57.7	-23 45	10.6	9.9	A5	2	..	39687b
15	14544	57.3	-39 14	8.8	9.8	G5	3	..	39674b	65	15946	57.7	-26 9	9.7	9.2	Ao	8	..	23813b
16	14179	57.3	-46 37	8.0	9.5	K2	7	..	19941b	66	16878	57.7	-32 5	8.9	10.0	G5	3	..	14139b
17	1613	57.4	+64 57	7.25	8.43	K5	3	..	37277i	67	7922	57.7	-58 39	8.6	9.9	F8	3	..	20558b
18	4112	57.4	+43 24	var.	var.	G5	..	R	M	68	6616	57.7	-60 57	8.9	9.9	Ko	1	..	42486b
19	4411	57.4	+33 48	8.7	9.7	Ko	2	..	38099i	69	1009	57.8	+72 42	5.15	5.57	F5	10	3,10	38936i
20	4531	57.4	+23 0	8.0	8.5	F8	2	..	38819i	70	5903	57.8	- 9 36	9.5	10.3	G5	3	..	4091ob
21	4236	57.4	- 1 24	7.6	8.7	K2	4	..	14195b	71	6208	57.8	-19 18	10.5	11.4	G5	1	..	39413b
22	5602	57.4	- 3 49	9.1	9.4	Fo	1	..	14195b	72	14108	57.8	-48 3	10.2	9.9	F2	2	..	19941b
23	5899	57.4	- 9 22	9.2	10.2	Ko	3	..	4091ob	73	9803	57.8	-56 47	8.5	8.2	F8	6	..	39669b
24	5735	57.4	-11 9	9.5	10.5	Ko	3	..	39463b	74	2027	57.8	-74 13	10.0	11.0	Ko	2	..	19967b
25	15748	57.4	-27 32	7.7	7.7	A2	9	..	41069b	75	2767	57.9	+53 30	8.6	8.6	Ao	3	..	3735ii
26	15109	57.4	-35 16	8.8	10.5	Ko	3	..	41066b	76	4663	57.9	+25 42	9.3	9.9	G	2	..	35085i
27	13157	57.4	-51 31	9.8	10.5	Go	1	..	39669b	77	4523	57.9	+24 17	9.1	9.4	F	1	..	38819i
28	1382	57.5	+67 29	7.92	8.34	F5	4	3,2	37277i	78	4534	57.9	+23 7	8.0	8.0	Ao	7	..	38819i
29	3660	57.5	+47 49	7.9	8.3	F5	3	..	3881oi	79	4679	57.9	+17 50	9.2	10.0	G5	1	..	38822i
30	4659	57.5	+38 43	8.4	8.4	Ao	3	..	37978i	80	4548	57.9	+15 31	6.72	6.72	Ao	8	..	38114i
31	4739	57.5	+36 47	8.6	8.9	Fo	2	..	3857oi	81	4785	57.9	+ 7 47	8.7	9.9	K5	1	..	14196b
32	4811	57.5	+ 0 59	9.9	10.2	Fo	3	..	12040b	82	6161	57.9	-11 58	9.5	10.0	F8	4	..	39463b
33	6059	57.5	-17 55	8.8	9.6	G5	5	..	39397b	83	6129	57.9	-15 26	8.1	9.1	Ko	6	..	39483b
34	18145	57.5	-29 39	10.2	10.5	Ko	1	..	41069b	84	6005	57.9	-16 39	9.2	10.0	G5	4	..	39397b
35	18975	57.5	-30 23	6.98	8.2	Fo	9	..	14139b	85	5822	57.9	-22 11	8.6	9.6	A5	3	..	39687b
36	16875	57.5	-31 56	7.52	8.5	Mb	5	..	14139b	86	18148	57.9	-29 50	7.32	6.7	Ao	9	..	14139b
37	14624	57.5	-37 27	8.8	9.9	Ao	3	..	13854b	87	16879	57.9	-32 25	9.4	10.0	A2	3	..	41066b
38	10022	57.5	-57 40	10.0	10.4	F5	2	..	20558b	88	11974	57.9	-52 42	8.3	8.7	Fo	6	..	39669b
39	2233	57.6	+62 0	6.48	6.24	Bo	..	5,7	56,101	89	7923	57.9	-58 14	9.0	10.7	Ko	1	..	20558b
40	2667	57.6	+55 31	8.7	9.3	Go	2	..	3735ii	90	1044	57.9	-80 50	9.7	10.7	K	1	..	21397b
41	3225	57.6	+51 37	8.3	8.3	Ao	2	..	3735ii	91	2768	58.0	+53 19	8.0	8.0	Ao	2	..	3735ii
42	4704	57.6	+41 4	7.21	8.28	K2	4	..	37978i	92	3665	58.0	+48 6	8.3	8.8	F8	3	..	3881oi
43	4740	57.6	+36 27	8.4	9.6	K5	1	..	3857oi	93	4116	58.0	+43 50	7.9	8.7	G5	2	..	37913i
44	4589	57.6	+34 49	8.7	9.7	Ko	1	..	38099i	94	4743	58.0	+36 29	7.18	8.53	Mb	5	..	38099i
45	4844	57.6	+19 57	8.7	9.1	F5	1	..	38822i	95	4743	58.0	+12 37	9.9	10.0	A2	1	..	38114i
46	4913	57.6	+18 21	8.1	8.2	A2	3	..	38822i	96	5688	58.0	- 7 1	5.60	6.38	G5	7	..	44047b
47	4679	57.6	+10 52	8.5	9.1	Go	1	..	38114i	97	5736	58.0	-11 39	9.9	10.7	G5	3	..	39463b
48	5363	57.6	- 2 58	8.4	9.0	Go	3	..	14195b	98	..	58.0	-16 36	..	..	A	1	..	39397b
49	5787	57.6	- 7 55	8.6	9.7	K2	4	..	40605b	99	6060	58.0	-18 30	10.8	12.0	K5	1	..	39413b
50	5900	57.6	- 8 53	10.4	11.4	Ko	1	..	4091ob	100	17574	58.0	-28 32	var.	var.	Md	5	R	23813b

THE HENRY DRAPER CATALOGUE

209400

21^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	1688I	58.0	-32 51	8.2	8.5	A2	5	..	14139b	51	1266	58.4	+68 37	8.8	8.8	Ao	3	..	3858oi
2	10235	58.0	-53 1	8.5	9.5	K2	4	..	39669b	52	1704	58.4	+65 36	8.2	8.2	B8	3	..	38902i
3	10008	58.0	-54 3	9.3	10.4	K2	2	..	39669b	53	2234	58.4	+61 29	7.12	8.19	K2	3	..	37277i
4	1212	58.1	+69 52	8.49	8.83	F2	2	..	3858oi	54	2329	58.4	+61 4	7.7	7.7	B8	5	..	38902i
5	4415	58.1	+33 54	7.7	8.9	K5	3	..	38099i	55	4474	58.4	+37 40	8.8	9.6	G5	3	..	3857oi
6	4834	58.1	+13 35	7.9	9.1	K5	2	..	38114i	56	4745	58.4	+37 7	8.6	9.0	F5	1	..	3857oi
7	4949	58.1	+7 9	7.9	8.4	F8	3	..	38596i	57	4274	58.4	+29 12	7.8	9.0	K5	1	..	38031i
8	4465	58.1	+2 42	7.9	9.0	K2	3	..	10174b	58	4917	58.4	+18 24	7.58	8.08	F8	4	..	38822i
9	568I	58.1	-2 38	4.66	4.54	B5P	..	0,9 R	56,10I	59	468I	58.4	+10 54	5.75	5.75	Ao	9	..	38114i
10	608I	58.1	-13 17	10.1	10.9	G5	1	R	39463b	60	579I	58.4	-8 16	8.4	9.8	Ma	4	..	40605b
11	6007	58.1	-16 26	10.4	10.8	F5	3	..	39397b	61	6164	58.4	-12 33	10.1	10.7	Go	4	..	39463b
12	6427	58.1	-17 23	10.4	11.2	G5	1	..	39397b	62	4746	58.5	+37 11	8.1	8.2	A2	3	..	3857oi
13	6426	58.1	-17 33	9.7	10.7	Ko	2	..	39397b	63	4593	58.5	+34 46	8.4	8.4	Ao	2	..	38099i
14	1697I	58.1	-24 24	10.4	10.6	Go	1	..	39687b	64	479I	58.5	+4 59	7.49	8.67	K5	3	..	14693b
15	15724	58.1	-25 11	10.2	9.7	F2	3	..	39687b	65	14866	58.5	-38 32	9.1	10.9	K2	1	..	13854b
16	15894	58.1	-33 13	10.1	10.9	F8	1	..	41066b	66	14188	58.5	-45 59	9.1	9.7	F8	4	..	19941b
17	14862	58.1	-43 4	9.0	11.8	K2	2	..	20549b	67	3615	58.5	-66 9	7.7	8.5	G5	8	..	20428b
18	2658	58.1	-71 24	9.4	9.9	F8	3	..	19967b	68	3214	58.5	-69 14	7.5	7.5	Ao	10	..	20428b
19	3083	58.2	+52 24	5.66	5.54	B5	8	..	37351i	69	4280	58.6	+42 20	7.06	7.04	B9	7	..	37978i
20	424I	58.2	+28 2	8.8	9.9	K2	1	..	38819i	70	4667	58.6	+38 59	7.9	7.9	Ao	3	..	37978i
21	4549	58.2	+15 18	7.24	7.58	F2	5	..	38114i	71	4782	58.6	+8 36	8.3	9.3	Ko	2	..	38596i
22	4787	58.2	+7 33	8.7	9.2	F8	2	..	38596i	72	4654	58.6	+3 55	7.9	8.3	F5	3	..	10174b
23	6428	58.2	-16 57	9.9	10.7	G5	1	..	39397b	73	5367	58.6	-3 17	9.0	9.5	F8	2	..	14195b
24	6429	58.2	-17 46	9.7	10.8	K2	2	..	39397b	74	5737	58.6	-11 6	9.9	10.4	F8	3	..	39463b
25	15725	58.2	-25 18	9.1	9.1	Go	4	..	39687b	75	5824	58.6	-22 15	8.0	8.3	A2	4	..	41861b
26	15726	58.2	-25 19	8.9	8.9	Go	5	..	39687b	76	18985	58.6	-30 24	6.69	8.1	K5	7	..	14139b
27	18150	58.2	-29 8	9.9	11.4	Fo	1	..	41069b	77	14189	58.6	-46 15	7.8	8.9	K2	5	..	19941b
28	15895	58.2	-33 2	9.5	10.6	Go	1	..	41066b	78	4748	58.6	-63 36	8.8	9.8	Ko	3	..	42486b
29	14867	58.2	-42 57	9.8	11.2	F2	2	..	20549b	79	1546	58.6	-76 47	10.4	11.0	Go	1	..	42794b
30	14865	58.2	-43 13	8.7	9.1	A3	6	..	20549b	80	2442	58.7	+57 34	8.2	8.2	A	3	R	38803i
31	14864	58.2	-43 29	9.2	11.8	K5	1	..	39674b	81	2441	58.7	+57 31	5.50	5.26	Bo	10	..	37351i
32	14750	58.2	-43 55	9.6	10.6	Go	3	..	20549b	82	3771	58.7	+45 44	8.7	8.7	A	1	..	3881oi
33	4747	58.2	-63 44	8.4	9.2	G5	4	..	42486b	83	4668	58.7	+39 5	7.78	7.78	Ao	4	..	37978i
34	3213	58.2	-69 42	9.7	10.3	Go	1	..	20428b	84	4568	58.7	+29 44	7.01	6.99	B9	7	..	38099i
35	2659	58.2	-71 35	8.6	9.0	F5	6	..	20544b	85	5692	58.7	-5 29	8.8	9.2	F5	4	..	40910b
36	2028	58.2	-74 34	9.1	9.6	F8	4	..	42794b	86	5905	58.7	-9 24	9.7	10.3	Go	2	..	40910b
37	2448	58.3	+60 6	8.96	9.46	F8	1	..	38803i	87	5738	58.7	-11 43	10.4	10.9	F8	3	..	39463b
38	4356	58.3	+41 57	8.6	9.6	Ko	1	..	3857oi	88	6086	58.7	-12 53	10.6	10.7	A5	2	..	39463b
39	4324	58.3	+32 54	6.87	6.95	A3	7	..	38099i	89	6084	58.7	-13 19	10.1	10.7	Go	1	..	39463b
40	459I	58.3	+30 17	8.21	8.29	A3	3	..	38099i	90	6085	58.7	-13 30	7.43	7.43	Ao	8	2,8	39483b
41	4812	58.3	+0 52	9.9	11.0	K2	1	..	12040b	91	6061	58.7	-18 18	8.2	9.2	Ko	8	..	39397b
42	4299	58.3	-0 13	9.9	11.0	K2	1	..	41073b	92	15957	58.7	-25 58	10.6	11.4	Ao	2	..	23813b
43	5365	58.3	-3 33	8.6	8.7	A3	2	..	14195b	93	17578	58.7	-28 11	10.6	11.4	F8	2	..	23813b
44	590I	58.3	-6 11	7.66	8.66	Ko	7	..	40605b	94	18986	58.7	-30 53	9.5	10.9	K5	1	..	41066b
45	5902	58.3	-6 22	8.0	8.5	F8	7	..	40605b	95	15391	58.7	-34 16	8.5	9.3	Ko	3	..	14139b
46	5690	58.3	-7 38	10.4	10.4	Ao	1	..	40910b	96	15121	58.7	-35 34	10.1	10.5	F8	2	..	41066b
47	5789	58.3	-7 56	8.4	9.8	Ma	3	..	40605b	97	14556	58.7	-39 8	10.3	10.3	Go	2	..	13854b
48	6009	58.3	-16 23	8.6	9.6	Ko	6	..	39397b	98	11976	58.7	-52 22	8.4	9.3	Ko	5	..	39669b
49	14553	58.3	-39 22	7.13	7.9	G5	8	..	39674b	99	7756	58.7	-59 27	8.3	9.0	G5	7	..	20558b
50	2248	58.3	-73 52	10.1	10.7	Go	2	..	20544b	100	4569	58.8	+29 17	7.7	8.9	K5	2	..	38031i

209500

21^h 58^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	4794	58.8	+ 4 18	7.7	7.7	Ao	6	..	10174b	51	13717	59.1	-49 12	8.0	8.1	A3	8	..	19941b
2	5822	58.8	- 9 55	10.11	11.11	Ko	1	..	40910b	52	7759	59.1	-59 19	9.0	9.6	G5	3	..	20558b
3	6167	58.8	-12 1	10.1	10.7	Go	4	..	39463b	53	3993	59.1	-65 34	9.0	10.0	Ko	2	..	20428b
4	6012	58.8	-16 39	8.0	9.0	Ko	7	..	39397b	54	3857	59.1	-67 35	9.5	10.7	K5	1	..	20428b
5	6210	58.8	-18 55	10.4	10.5	Go	1	..	39413b	55	2662	59.1	-72 7	8.7	9.8	K2	3	..	20544b
6	15959	58.8	-26 22	6.97	7.7	Ko	10	..	23813b	56	201	59.2	+87 19	8.3	8.7	F5	3	3,3-	36335i
7	15166	58.8	-36 11	7.75	9.3	Ma	6	..	13854b	57	2330	59.2	+60 37	8.2	8.2	Ao	5	..	38902i
8	14636	58.8	-37 32	9.5	10.2	F8	1	..	13854b	58	4711	59.2	+40 34	8.6	8.6	Ao	2	..	37978i
9	14637	58.8	-37 51	9.5	10.2	F8	2	..	13854b	59	5903	59.2	- 6 33	9.9	10.2	F2	2	..	40910b
10	13167	58.8	-51 36	10.2	10.5	Go	1	..	39669b	60	5908	59.2	- 9 12	7.22	7.50	Fo	9	..	40910b
11	2896	58.8	-70 26	9.2	10.4	K5	2	..	19967b	61	6158	59.2	-21 10	9.5	9.9	G5	2	..	39687b
12	..	58.8	-75 16	var.	var.	Md	..	R	M	62	16978	59.2	-24 12	8.9	9.1	Go	5	..	39687b
13	2450	58.9	+59 45	8.6	9.8	K5	1	..	38803i	63	15962	59.2	-25 58	10.6	11.4	Go	2	..	23813b
14	2669	58.9	+55 29	7.16	7.11	B8	7	..	37351i	64	18994	59.2	-30 20	9.7	10.5	Go	3	..	41069b
15	4119	58.9	+44 10	5.52	5.52	Ao	9	..	37913i	65	15903	59.2	-33 27	9.5	10.5	G5	2	..	41066b
16	4594	58.9	+30 30	8.2	8.2	Ao	3	..	38099i	66	15127	59.2	-35 40	8.1	9.6	G5	4	..	13854b
17	4570	58.9	+29 33	7.39	7.37	B9	5	..	38099i	67	10027	59.2	-56 58	8.7	8.6	Go	6	..	20558b
18	5740	58.9	-11 7	9.9	10.7	G5	2	..	39463b	68	987	59.2	-81 26	9.7	10.7	K	1	..	21397b
19	6203	58.9	-14 33	9.5	10.5	Ko	2	..	39463b	69	3586	59.3	+48 22	8.5	8.5	Ao	3	..	38810i
20	6154	58.9	-20 53	8.0	8.7	A3	3	..	41861b	70	4120	59.3	+44 11	8.7	8.7	Ao	1	..	37978i
21	15730	58.9	-25 15	10.4	10.9	Ko	2	o,1	23813b	71	5742	59.3	-11 22	8.8	9.2	F5	5	..	39463b
22	15757	58.9	-27 19	5.84	5.9	B5	..	o,R	56,148	72	6063	59.3	-18 2	10.4	11.4	Ko	1	..	39413b
23	18155	58.9	-28 55	7.02	7.7	Ko	6	..	14139b	73	6064	59.3	-18 3	10.4	11.0	Go	1	..	39413b
24	18626	58.9	-31 19	8.1	9.4	G5	4	..	14139b	74	15732	59.3	-25 24	10.6	11.4	Go	1	..	23813b
25	14629	58.9	-40 11	8.8	9.4	Go	4	..	20549b	75	15963	59.3	-26 12	10.9	11.7	G5	1	..	23813b
26	14747	58.9	-41 22	8.8	10.6	G5	2	..	20549b	76	14642	59.3	-37 49	8.5	9.9	G5	4	..	13854b
27	11977	58.9	-52 37	9.3	10.0	Ko	3	..	39669b	77	15757	59.3	-42 11	10.4	10.6	F8	2	..	20549b
28	9769	58.9	-55 26	9.3	10.4	K2	2	..	39669b	78	14756	59.3	-44 1	10.0	11.8	K2	2	2,1	20549b
29	7541	58.9	-60 7	5.60	7.4	K5	..	3,9	56,148	79	191	59.3	-88 0	9.1	10.3	K5	3	..	22980b
30	6299	58.9	-61 56	9.3	9.3	Ao	2	..	42486b	80	1384	59.4	+67 41	8.6	8.6	Ao	2	..	37277i
31	3553	59.0	+47 4	8.1	9.3	K5	1	..	38810i	81	4240	59.4	- 1 17	9.9	10.9	Ko	1	..	41073b
32	6133	59.0	-14 56	7.65	8.72	K2	6	..	39483b	82	5697	59.4	- 5 19	8.0	8.3	Fo	8	..	40910b
33	6432	59.0	-17 18	10.9	10.9	Ao	2	..	39397b	83	6170	59.4	-11 57	10.1	10.9	G5	3	..	39463b
34	6431	59.0	-17 21	10.9	10.9	Ao	2	..	39397b	84	6013	59.4	-16 17	9.9	10.9	Ko	2	..	39413b
35	15960	59.0	-26 19	11.4	11.4	F8	2	..	23813b	85	6212	59.4	-19 33	8.2	9.6	G5	4	..	39413b
36	15900	59.0	-33 2	8.8	10.0	K2	3	..	41066b	86	6160	59.4	-21 33	9.9	10.2	F2	1	..	39687b
37	15754	59.0	-42 3	7.6	9.5	K2	4	..	20549b	87	5828	59.4	-22 43	8.6	9.7	Ko	4	..	39687b
38	9770	59.0	-55 6	9.3	10.4	K2	2	..	39669b	88	5827	59.4	-22 47	9.2	10.5	K5	1	..	39687b
39	1530	59.0	-77 39	8.7	9.1	F5	5	..	42794b	89	17587	59.4	-28 41	9.1	10.1	Ko	3	..	41069b
40	775	59.1	+78 30	8.7	9.2	F8	1	..	38590i	90	18996	59.4	-30 52	9.1	9.4	F8	4	..	14139b
41	4710	59.1	+40 55	7.6	8.7	K2	3	..	37978i	91	13170	59.4	-51 37	9.6	11.1	Ko	1	..	39669b
42	4475	59.1	+37 14	8.4	9.4	Ko	1	..	38570i	92	10011	59.4	-54 22	9.4	9.9	F8	3	..	39669b
43	4342	59.1	+26 28	8.6	9.6	Ko	2	..	38819i	93	9808	59.4	-56 29	9.1	10.1	Ko	1	..	42494b
44	5687	59.1	- 2 35	9.1	9.4	Fo	3	..	14195b	94	1708	59.5	+65 21	8.10	8.10	Ao	6	0,2	37277i
45	6169	59.1	-11 54	9.5	10.9	Ma	3	..	39463b	95	3677	59.5	+48 12	8.1	8.1	Ao	4	..	38810i
46	6088	59.1	-13 6	10.1	10.7	Go	2	..	39463b	96	..	59.5	+45 5	..	..	Na	1	..	38929i
47	17242	59.1	-23 42	10.4	10.3	Go	1	..	39687b	97	4597	59.5	+30 24	8.2	9.3	K2	2	..	38099i
48	15731	59.1	-25 36	9.1	8.8	F8	8	..	23813b	98	4243	59.5	+27 52	var.	var.	Mc	3	5,3 R	38819i
49	18628	59.1	-31 22	9.4	11.2	Go	3	..	41066b	99	4850	59.5	+19 48	8.1	9.1	Ko	1	..	38822i
50	14639	59.1	-36 59	9.5	10.2	F5	1	..	13854b	100	4554	59.5	+15 47	8.1	9.1	Ko	2	..	38114i

THE HENRY DRAPER CATALOGUE

209600

21^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	4751	59.5	+13 10	7.04	7.40	F5	7	..	38114i	51	14761	59.8	-43 59	9.8	11.5	Ko	I	..	39674b
2	5904	59.5	- 6 33	9.0	9.3	F2	3	..	40910b	52	3858	59.8	-67 29	9.9	10.3	F5	2	..	20428b
3	6091	59.5	-13 29	8.8	9.4	Go	4	0,3	39463b	53	3460	59.8	-68 31	7.16	7.7	Go	10	..	20428b
4	16982	59.5	-24 42	10.4	9.1	F5	3	..	39687b	54	2671	59.9	+55 18	9.01	9.07	A2	2	..	3735ii
5	15761	59.5	-27 20	10.6	9.2	Fo	7	..	23813b	55	4699	59.9	+35 16	9.17	9.17	Ao	2	..	38099i
6	17588	59.5	-28 2	10.6	11.1	F8	1	..	23813b	56	5372	59.9	- 3 42	8.4	8.9	F8	4	..	41073b
7	15132	59.5	-35 39	8.1	9.9	Ko	2	..	13854b	57	6136	59.9	-14 52	10.6	11.2	Go	2	..	39463b
8	10029	59.5	-57 48	9.2	10.1	Go	3	..	20558b	58	15764	59.9	-27 1	10.6	11.8	K5	1	..	23813b
9	841	59.6	+77 40	8.9	9.4	F8	3	..	38936i	59	18636	59.9	-31 12	7.9	8.5	Go	6	..	14139b
10	947	59.6	+74 35	8.7	8.7	Ao	2	..	38025i	60	14645	59.9	-37 14	10.1	10.8	Go	2	..	38147b
11	1617	59.6	+65 1	8.2	8.2	Ao	3	..	37277i	61	14763	59.9	-44 27	7.00	7.8	Ko	8	..	19941b
12	3588	59.6	+49 11	7.36	7.34	B9	7	..	38810i	62	14572	59.9	-45 2	7.72	8.7	Fo	8	..	19941b
13	4840	59.6	+13 21	8.6	9.2	Go	2	..	38114i	63	3087	0.0	+52 14	8.0	9.1	K2	2	..	3735ii
14	4686	59.6	+10 17	8.67	9.01	F2	3	..	14196b	64	4031	0.0	+44 47	8.6	8.6	A	2	E	38844i
15	4975	59.6	+ 9 45	6.98	7.98	Ko	4	..	38114i	65	4525	0.0	+25 11	7.11	7.11	Ao	7	..	38819i
16	4783	59.6	+ 8 26	7.9	8.4	F8	2	..	38596i	66	15971	0.0	-26 42	11.1	11.2	Go	3	..	23813b
17	15967	59.6	-26 5	10.6	11.4	Go	1	..	23813b	67	18163	0.0	-28 54	10.4	10.9	Go	1	..	41069b
18	18161	59.6	-29 48	9.7	10.3	Go	2	..	41069b	68	15401	0.0	-34 8	8.9	9.6	K2	3	..	14139b
19	14561	59.6	-38 54	9.1	10.9	K5	1	..	13854b	69	14881	0.0	-38 7	10.6	10.9	F8	2	..	38147b
20	874	59.6	-82 25	8.5	9.5	Ko	4	..	21397b	70	14637	0.0	-40 44	8.9	10.0	G5	2	..	20549b
21	5071	59.7	+20 34	8.8	..	R3	..	..	M	71	14051	0.0	-47 7	8.8	9.7	F8	3	..	19941b
22	4558	59.7	+15 22	7.97	8.75	G5	3	..	38114i	72	13721	0.0	-48 58	8.6	9.3	Ko	4	..	19941b
23	4841	59.7	+13 38	9.2	9.8	Go	1	..	38114i	73	7764	0.0	-59 39	8.7	9.7	Ko	2	..	42494b
24	4578	59.7	+ 1 18	8.44	8.78	F2	3	..	10174b	74	3619	0.0	-66 13	8.9	9.7	G5	3	..	20428b
25	4242	59.7	- 1 24	5.23	5.31	A3	..	1,7-	1328c	75	1386	0.1	+67 47	8.9	9.7	G5	1	..	38580i
26	6092	59.7	-12 55	10.8	11.3	F8	2	..	39463b	76	1800	0.1	+63 38	8.6	9.6	Ko	1	..	38902i
27	6214	59.7	-19 19	9.2	10.3	Go	2	..	39413b	77	2331	0.1	+60 22	7.66	8.66	Ko	3	..	38803i
28	16984	59.7	-23 56	8.2	9.2	G5	5	..	39687b	78	3088	0.1	+52 43	8.4	8.2	B	2	..	3735ii
29	15904	59.7	-33 46	9.7	10.6	Go	2	..	41066b	79	4122	0.1	+43 52	6.57	6.63	A2	7	..	37913i
30	14119	59.7	-48 25	9.0	9.0	F5	5	..	19941b	80	4573	0.1	+29 28	8.7	9.9	K5	1	..	3803ii
31	13582	59.7	-50 10	8.05	8.5	F5	6	..	19941b	81	4816	0.1	+ 1 7	9.24	9.80	G	1	..	10174b
32	3995	59.7	-65 28	9.0	10.1	K2	1	..	20428b	82	4245	0.1	- 1 11	9.5	10.5	Ko	2	..	41073b
33	3618	59.7	-66 22	9.3	10.1	G5	2	..	20428b	83	4244	0.1	- 1 38	9.42	9.92	F8	3	..	41073b
34	3216	59.7	-69 29	9.6	10.1	F8	1	..	20428b	84	6205	0.1	-14 15	9.3	9.3	B8	4	..	39463b
35	2899	59.7	-70 47	6.82	7.0	F8	9	..	20544b	85	17251	0.1	-23 51	10.9	10.5	F8	1	..	39687b
36	2677	59.8	+54 24	6.98	6.96	B9	7	..	3735ii	86	16990	0.1	-24 1	9.5	9.8	Go	3	..	39687b
37	3726	59.8	+49 17	7.36	8.36	Ko	3	..	38810i	87	14647	0.1	-37 46	9.6	10.5	Go	1	..	13854b
38	3774	59.8	+46 6	8.1	8.2	A2	1	..	38810i	88	14639	0.1	-40 2	4.60	6.7	K2	..	R	28,216
39	4029	59.8	+44 15	8.1	8.2	A3	3	1,2	37913i	89	14754	0.1	-41 48	8.9	8.9	A2	7	..	20549b
40	4121	59.8	+44 7	7.7	7.7	Ao	5	..	37913i	90	7765	0.1	-59 37	8.7	9.3	Go	3	..	42494b
41	..	59.8	+34 38	var.	var.	Md	..	R	M	91	1712	0.2	+65 35	6.76	6.71	B8	9	..	38902i
42	4657	59.8	+ 3 28	8.5	8.9	F5	2	..	10174b	92	3777	0.2	+45 52	8.1	8.1	Ao	1	..	38810i
43	5371	59.8	- 3 22	9.0	10.0	Ko	3	..	41073b	93	4329	0.2	+32 27	6.39	7.17	G5	7	..	38099i
44	5905	59.8	- 6 20	9.9	10.7	G5	1	..	40910b	94	5074	0.2	+20 35	8.1	9.2	K2	1	..	38822i
45	5695	59.8	- 6 47	7.60	7.60	Ao	3	..	44047b	95	4788	0.2	+ 8 42	8.6	9.6	Ko	1	..	38596i
46	6173	59.8	-12 38	10.1	10.9	G5	2	..	39463b	96	4302	0.2	- 0 37	9.3	10.5	K5	3	..	41073b
47	6015	59.8	-16 3	10.4	11.2	G5	1	..	39413b	97	5689	0.2	- 1 55	8.3	8.8	F8	6	..	41073b
48	6065	59.8	-18 11	9.5	10.5	Ko	2	..	39397b	98	5794	0.2	- 8 5	9.1	9.9	G5	4	..	40910b
49	6066	59.8	-18 17	10.8	10.9	A5	2	..	39413b	99	5829	0.2	-10 2	9.8	10.8	Ko	1	..	40910b
50	18162	59.8	-29 28	10.2	10.5	Go	1	..	41069b	100	6017	0.2	-16 20	10.5	11.3	G5	2	..	39413b

209700

22^h 0^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	6434	0.2	-17 16	10.5	11.0	F8	2	..	39413b	51	5910	0.6	- 8 59	9.8	10.8	Ko	3	..	40910b
2	18637	0.2	-31 51	9.1	9.4	Ao	5	..	14139b	52	5747	0.6	-11 17	10.0	10.5	F8	3	..	39463b
3	15140	0.2	-34 53	8.68	10.2	K5	4	..	41066b	53	6176	0.6	-12 8	10.2	10.8	Go	2	..	39463b
4	14884	0.2	-43 28	8.3	9.1	F8	7	..	20549b	54	6019	0.6	-16 29	8.5	9.1	Go	7	..	39413b
5	6301	0.2	-62 2	9.1	9.9	G5	2	..	42486b	55	15975	0.6	-26 13	10.6	10.1	Fo	6	..	23813b
6	2673	0.3	+55 21	7.86	8.36	F8	5	..	37351i	56	15767	0.6	-42 1	9.5	9.8	F8	3	..	20549b
7	4617	0.3	+31 34	8.8	9.6	G5	1	..	38099i	57	10037	0.6	-57 8	9.8	10.1	Fo	3	..	20558b
8	4680	0.3	+22 9	7.40	7.48	A3	6	..	38819i	58	3859	0.6	-66 59	8.2	8.2	Ao	9	..	20428b
9	4730	0.3	+14 20	6.72	8.07	Ma	5	..	38114i	59	1104	0.7	+71 34	8.6	9.4	G5	2	..	38025i
10	4724	0.3	+12 7	7.53	7.53	Ao	5	..	38114i	60	4332	0.7	+32 20	8.9	9.4	F8	2	..	38099i
11	4303	0.3	- 0 14	8.0	8.1	A3	4	0,6	17420b	61	4671	0.7	+26 12	5.93	6.93	Ko	8	..	38031i
12	5796	0.3	- 8 11	8.1	8.6	F8	8	..	40910b	62	4957	0.7	+ 6 31	8.6	8.9	Fo	3	2,4-	38596b
13	5830	0.3	-10 23	9.1	9.9	G5	4	..	40910b	63	4798	0.7	+ 4 52	8.0	8.4	F5	2	..	38596i
14	6093	0.3	-13 20	10.0	10.8	G5	1	..	39463b	64	5691	0.7	- 2 6	9.1	10.2	K2	2	..	41073b
15	6137	0.3	-15 22	9.6	10.7	K2	3	..	39413b	65	5832	0.7	-10 14	10.2	11.0	G5	1	..	40910b
16	6068	0.3	-18 13	10.2	11.0	G5	1	..	39413b	66	6094	0.7	-13 3	10.2	11.2	Ko	1	..	39463b
17	6217	0.3	-19 9	7.54	7.9	A3	5	..	41861b	67	6139	0.7	-15 23	7.10	7.52	F5	7	..	39463b
18	6356	0.3	-20 15	8.3	9.1	F5	6	..	39413b	68	6357	0.7	-19 59	10.0	11.1	K2	1	..	39413b
19	16992	0.3	-24 0	10.4	10.6	Ao	2	..	39687b	69	19005	0.7	-30 32	9.4	10.0	Go	4	..	41066b
20	3996	0.3	-65 36	7.7	8.8	K2	6	..	20428b	70	2660	0.7	-71 1	9.4	10.6	K5	2	..	19967b
21	3218	0.3	-69 46	9.43	10.4	Ko	1	..	20428b	71	2027	0.8	+63 9	9.0	9.0	Ao	2	..	38902i
22	1470	0.4	+66 46	7.9	8.0	A2	3	..	37277i	72	2028	0.8	+62 38	5.46	6.81	Mb	..	0,3	56,101
23	2380	0.4	+58 41	7.8	8.3	F8	3	..	38803i	73	4755	0.8	+36 59	8.7	9.7	Ko	1	..	38570i
24	4924	0.4	+18 56	9.3	9.6	F	1	R	38822i	74	4421	0.8	+33 59	8.1	9.1	Ko	2	..	38099i
25	4842	0.4	+14 0	7.62	8.69	K2	2	..	38114i	75	4660	0.8	+17 1	7.7	8.0	Fo	6	..	38822i
26	4304	0.4	+ 0 9	7.18	8.18	Ko	3	0,6	17420b	76	4947	0.8	+ 5 30	7.61	8.61	Ko	4	..	38596i
27	5745	0.4	-11 33	10.5	11.0	F8	2	..	39463b	77	5692	0.8	- 2 33	9.3	10.1	G5	1	..	41073b
28	6018	0.4	-16 7	10.5	11.3	G5	1	..	39413b	78	5375	0.8	- 3 36	8.3	9.4	K2	4	..	41073b
29	6435	0.4	-17 30	10.0	11.0	Ko	2	..	39413b	79	5908	0.8	- 5 51	7.51	8.07	Go	9	..	40910b
30	6069	0.4	-18 35	9.3	9.9	Go	4	..	39413b	80	5912	0.8	- 9 13	10.7	11.1	F5	1	..	40910b
31	6218	0.4	-19 25	9.3	10.3	Ko	2	..	39413b	81	6208	0.8	-14 28	9.49	9.83	F2	2	..	39463b
32	15972	0.4	-26 40	9.9	10.6	K2	4	..	23813b	82	6437	0.8	-17 25	9.6	10.6	Ko	4	..	39413b
33	17592	0.4	-28 31	8.7	8.2	F8	6	..	41069b	83	17256	0.8	-23 36	8.5	9.3	Go	4	..	39687b
34	14883	0.4	-38 3	9.8	11.4	Ko	2	..	38147b	84	15979	0.8	-26 48	10.6	11.4	Ko	1	..	23813b
35	10018	0.4	-54 8	9.8	10.4	Go	1	..	39669b	85	15773	0.8	-26 54	10.6	11.2	G5	2	..	23813b
36	10019	0.4	-54 16	9.4	10.4	Ko	2	..	39669b	86	16903	0.8	-32 4	7.7	9.5	Ma	2	..	14139b
37	4035	0.5	+44 55	8.8	8.8	Ao	2	..	38844i	87	14570	0.8	-39 15	9.6	10.3	K2	2	..	13854b
38	6138	0.5	-15 8	10.2	11.2	Ko	1	..	39413b	88	7766	0.8	-59 48	7.08	8.3	Ko	..	0,7	56,148
39	15974	0.5	-26 27	10.2	10.1	K2	5	..	23813b	89	1471	0.9	+66 38	8.4	8.4	B8	1	R	38580i
40	18169	0.5	-29 11	7.7	8.5	K2	4	..	14139b	90	1802	0.9	+64 8	4.57	4.65	A3	..	R	56,101
41	18168	0.5	-29 34	7.9	7.7	Ao	9	..	14139b	91	1802	0.9	+64 8	6.47	7.03	G	..	R	56,101
42	14576	0.5	-45 52	8.3	9.5	Ko	4	..	19941b	92	4677	0.9	+39 0	7.9	8.2	F2	5	..	37978i
43	849	0.6	+76 51	8.0	8.0	Ao	3	..	38903i	93	4726	0.9	+12 4	8.56	9.34	G5	3	..	38114i
44	2456	0.6	+59 19	6.74	6.62	B5	7	..	38803i	94	4948	0.9	+ 5 37	8.6	9.2	Go	3	..	38596i
45	4578	0.6	+29 24	8.7	9.5	G5	2	..	38031i	95	4801	0.9	+ 4 23	7.7	8.5	G5	2	..	38596i
46	4753	0.6	+13 3	9.0	10.0	Ko	1	..	38114i	96	4820	0.9	+ 0 54	8.5	9.6	K2	1	..	10174b
47	4800	0.6	+ 4 34	4.90	6.08	K5	6	0,7 R	38118i	97	4819	0.9	+ 0 46	9.3	10.4	K2	1	..	10174b
48	4579	0.6	+ 1 18	8.44	8.72	Fo	4	..	10174b	98	5833	0.9	- 9 50	10.5	11.7	K5	1	..	40910b
49	4818	0.6	+ 0 19	8.88	9.66	G5	3	..	10174b	99	6070	0.9	-18 21	9.8	10.1	Fo	4	..	39413b
50	4246	0.6	- 0 48	3.19	3.75	Go	..	0, R	1328c	100	17257	0.9	-23 35	8.9	9.9	Ko	2	..	39687b

THE HENRY DRAPER CATALOGUE

209800

22^h 0^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	18173	m. 0.9	° -29 15	9.7	10.6	Ko	4	..	23813b	51	16910	m. 1.2	° -32 11	9.8	10.0	F5	2	..	41066b
2	14757	0.9	-41 37	7.6	8.6	G5	7	..	20549b	52	15146	1.2	-35 42	8.6	9.9	Ko	3	..	13854b
3	14770	0.9	-44 9	10.3	11.2	F2	3	..	39674b	53	14655	1.2	-37 16	10.6	11.1	Go	1	..	38147b
4	14769	0.9	-44 13	9.5	10.9	F8	4	3,3	20549b	54	14576	1.2	-39 25	8.9	9.1	F5	7	..	13854b
5	14126	0.9	-48 21	9.4	9.3	Go	2	..	19941b	55	1547	1.2	-76 22	6.52	7.6	K2	..	0,8	56,148
6	11980	0.9	-52 42	8.9	10.4	Ko	2	..	39669b	56	3600	1.3	+48 50	7.8	7.8	Ao	3	..	38810i
7	10038	0.9	-57 20	8.4	9.2	G5	6	..	20558b	57	3574	1.3	+46 16	6.29	7.64	Mb	5	..	38810i
8	2460	1.0	+60 5	8.26	8.54	Fo	4	..	38803i	58	4252	1.3	+27 29	8.1	8.7	Go	3	..	38031i
9	2459	1.0	+59 23	6.97	6.97	Ao	8	..	38803i	59	5076	1.3	+20 19	7.75	7.83	A3	4	..	38822i
10	2461	1.0	+59 21	7.9	7.9	A	4	R	38803i	60	4248	1.3	- 1 46	8.47	8.97	F8	5	..	41073b
11	2381	1.0	+58 18	7.59	7.59	Ao	5	..	38803i	61	6221	1.3	-19 37	10.5	11.6	Ko	1	..	39413b
12	3728	1.0	+49 37	8.2	9.2	Ko	1	..	38810i	62	6358	1.3	-20 6	10.2	10.3	F8	2	..	39413b
13	3572	1.0	+46 45	6.52	7.52	Ko	6	..	38810i	63	15777	1.3	-27 2	10.2	10.9	Go	3	..	23813b
14	4036	1.0	+44 17	8.2	8.2	Ao	4	..	37978i	64	18648	1.3	-31 25	7.7	9.5	K2	5	..	41066b
15	4678	1.0	+39 11	7.79	8.97	K5	1	..	37978i	65	15410	1.3	-34 29	8.9	10.2	G5	4	..	41066b
16	5699	1.0	- 6 51	10.2	11.2	Ko	1	..	40910b	66	14890	1.3	-37 55	10.6	11.7	Go	1	..	38147b
17	5913	1.0	- 9 32	11.0	12.2	K5	1	..	40910b	67	7545	1.3	-60 6	9.3	9.4	A3	3	..	42494b
18	6096	1.0	-13 15	9.6	10.4	G5	1	..	39463b	68	1620	1.4	+65 6	8.57	9.64	K2	1	..	38902i
19	6209	1.0	-14 21	4.35	4.30	B8	..	R	56,101	69	2243	1.4	+61 55	8.8	8.8	Ao	3	..	38902i
20	6210	1.0	-14 34	8.8	9.6	G5	3	..	39463b	70	3549	1.4	+51 13	7.14	7.20	A2	6	..	37351i
21	15774	1.0	-27 37	10.4	10.0	Go	4	..	23813b	71	4758	1.4	+36 56	9.4	9.5	A5	1	..	38570i
22	15775	1.0	-27 53	10.4	11.2	F8	3	..	23813b	72	4597	1.4	+34 52	var.	var.	Mc	..	R	M
23	18646	1.0	-31 1	8.9	8.5	Fo	6	..	14139b	73	4854	1.4	+20 10	8.85	8.85	Ao	1	..	38822i
24	18645	1.0	-31 28	9.7	10.3	A5	3	..	41066b	74	4735	1.4	+14 23	8.4	9.5	K2	1	..	38114i
25	15407	1.0	-34 4	9.6	10.2	Go	4	..	41066b	75	4583	1.4	+ 1 23	7.54	8.04	F8	6	0,3	10174b
26	14653	1.0	-37 47	9.8	11.1	G5	1	..	38147b	76	5799	1.4	- 8 24	10.0	11.0	Ko	1	..	40910b
27	14892	1.0	-43 0	8.7	10.6	K2	4	..	20549b	77	6100	1.4	-12 49	10.2	10.8	Go	2	..	39463b
28	6304	1.0	-62 8	8.2	8.7	F8	6	..	42486b	78	6101	1.4	-13 0	9.3	10.5	K5	4	..	39463b
29	4213	1.0	-64 0	7.9	8.2	F2	8	..	20428b	79	6021	1.4	-16 8	10.2	11.6	Ma	..	..	M
30	2463	1.1	+59 26	8.0	8.0	Ao	5	..	38803i	80	6022	1.4	-16 44	10.6	11.2	Go	1	..	39413b
31	2777	1.1	+53 27	8.6	8.6	Ao	2	..	37351i	81	6359	1.4	-19 52	10.2	10.8	G5	2	..	39413b
32	4624	1.1	+31 18	9.5	9.5	Ao	1	..	38099i	82	17600	1.4	-28 33	9.1	10.0	Ko	5	..	23813b
33	4284	1.1	+28 28	5.58	5.58	Ao	9	..	38031i	83	14773	1.4	-44 43	9.9	11.2	Go	2	..	20549b
34	5798	1.1	- 8 39	10.0	11.1	K2	1	..	40910b	84	7927	1.4	-57 59	8.6	9.9	Ko	4	..	20558b
35	6140	1.1	-14 55	10.2	10.6	F5	2	..	39463b	85	672	1.5	+83 1	8.2	8.5	Fo	6	5,4	37294i
36	15776	1.1	-27 27	10.9	10.9	Go	3	..	23813b	86	957	1.5	+73 20	7.8	8.9	K2	4	..	38025i
37	19007	1.1	-30 7	8.07	8.5	Fo	7	..	14139b	87	1717	1.5	+65 15	8.65	9.15	F8	2	..	38902i
38	14129	1.1	-48 21	10.5	9.6	Ao	2	..	19941b	88	2245	1.5	+61 29	9.4	9.4	Ao	2	..	38902i
39	11981	1.1	-52 22	8.8	9.0	F8	5	..	39669b	89	2464	1.5	+59 14	8.6	8.6	Ao	3	..	38803i
40	2661	1.1	-71 24	6.93	7.6	Ko	8	..	20544b	90	..	1.5	+33 2	var.	var.	Pec.	..	R	M
41	951	1.2	+74 52	8.0	8.8	G5	4	..	38025i	91	5700	1.5	- 7 26	8.8	9.8	Ko	3	..	40910b
42	1105	1.2	+72 12	8.6	9.6	Ko	1	..	38025i	92	5751	1.5	-10 54	9.6	9.7	A5	3	..	40910b
43	4703	1.2	+35 55	7.62	7.60	B9	6	..	38099i	93	6211	1.5	-14 23	10.0	10.4	F5	2	..	39463b
44	4582	1.2	+29 25	7.7	9.1	Ma	3	..	38031i	94	17007	1.5	-24 8	9.1	10.6	K5	2	..	39687b
45	4984	1.2	+ 9 36	7.14	7.20	A2	5	..	38114i	95	15986	1.5	-26 0	10.6	11.2	Go	3	..	23813b
46	5376	1.2	- 2 58	9.1	9.7	Go	3	..	41073b	96	15916	1.5	-33 16	9.6	11.3	Ko	1	..	41066b
47	6141	1.2	-15 13	9.6	10.2	Go	3	0,3	39413b	97	7546	1.5	-59 59	8.51	8.7	F5	4	..	42486b
48	6439	1.2	-17 9	9.3	9.4	A2	7	..	39413b	98	2334	1.6	+60 51	7.21	7.27	A2	7	..	38902i
49	15749	1.2	-25 38	10.9	11.4	F8	2	..	23813b	99	2335	1.6	+60 30	8.6	9.0	F5	3	..	38803i
50	16908	1.2	-32 8	9.6	10.6	A5	2	..	41066b	100	3095	1.6	+53 1	8.9	8.9	A	1	..	37351i

209900

22^h 1^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	3243	1.6	+51 53	8.6	8.6	Ao	2	..	3735ii	51	6362	1.9	-20 3	7.44	8.8	Ko	8	..	39413b
2	4722	1.6	+40 52	7.9	7.9	B9	5	..	37978i	52	14063	1.9	-47 27	2.16	2.04	B5	..	R	28,216
3	4804	1.6	+ 4 43	7.60	7.60	Ao	4	0,6-	17420b	53	13594	1.9	-50 36	7.9	7.8	Fo	7	..	19941b
4	4469	1.6	+ 2 58	9.0	9.3	F2	2	..	10174b	54	10247	1.9	-53 51	8.9	9.6	F5	4	..	39669b
5	4584	1.6	+ 1 57	6.54	6.52	B9	7	0,5-	17420b	55	9817	1.9	-56 36	9.1	10.1	Ko	1	..	42494b
6	5378	1.6	- 3 38	9.3	10.3	Ko	1	..	41073b	56	10042	1.9	-56 56	8.3	8.0	F2	8	..	20558b
7	5701	1.6	- 7 13	7.6	7.7	A2	7	..	40910b	57	3220	1.9	-69 33	9.2	9.6	F5	3	..	20428b
8	5918	1.6	- 9 17	9.6	10.2	Go	4	..	40910b	58	878	1.9	-82 41	8.7	9.5	G5	3	..	21397b
9	5917	1.6	- 9 24	9.2	9.5	Fo	6	..	40910b	59	376	2.0	+85 23	8.6	8.9	Fo	2	..	3728ii
10	6023	1.6	-16 25	10.9	11.5	Go	2	..	39413b	60	2029	2.0	+62 18	5.39	6.57	K5	..	0,8-	56,101
11	6442	1.6	-16 54	10.5	11.0	F8	2	..	39413b	61	3692	2.0	+47 45	6.16	5.99	B3	9	..	38810i
12	15779	1.6	-27 16	10.6	10.6	F8	4	..	23813b	62	4681	2.0	+39 9	8.5	8.5	Ao	2	..	37978i
13	18652	1.6	-30 55	9.1	9.1	G5	6	..	41066b	63	4614	2.0	+30 26	8.1	9.3	K5	1	..	38099i
14	18653	1.6	-31 2	9.4	10.6	Ko	2	..	41066b	64	4585	2.0	+30 5	8.71	8.99	Fo	2	..	3803ii
15	15413	1.6	-34 5	10.2	10.5	F8	2	..	41066b	65	4307	2.0	+ 0 5	7.58	8.14	Go	3	0,5	17420b
16	11982	1.6	-52 12	10.4	10.5	A2	1	..	39669b	66	5920	2.0	- 9 40	8.96	9.96	Ko	5	..	40910b
17	2781	1.7	+53 53	9.0	9.0	Ao	2	..	3735ii	67	15756	2.0	-24 53	8.10	8.5	Ko	9	..	23813b
18	3551	1.7	+50 39	8.6	8.6	Ao	1	..	38810i	68	15755	2.0	-25 45	10.6	11.8	K5	1	..	23813b
19	4378	1.7	+41 28	8.2	8.5	F2	3	0,2	38570i	69	17604	2.0	-28 33	8.1	7.9	Go	8	..	23813b
20	4729	1.7	+11 59	7.20	7.26	A2	5	..	38114i	70	17605	2.0	-28 38	7.28	7.5	Fo	10	..	23813b
21	4727	1.7	+11 29	9.1	10.2	K2	1	..	38114i	71	15416	2.0	-34 31	9.8	10.2	Go	3	..	41066b
22	4249	1.7	- 1 13	8.4	9.5	K2	4	..	41073b	72	15158	2.0	-35 31	9.6	10.5	G5	2	..	41066b
23	5754	1.7	-11 27	10.0	10.4	F5	3	..	39463b	73	10024	2.0	-54 1	10.3	10.4	A5	1	..	39669b
24	5834	1.7	-22 35	9.3	9.9	F8	1	..	23121b	74	4216	2.0	-64 50	9.2	9.5	F2	2	..	20428b
25	5833	1.7	-22 44	6.89	8.1	G5	7	..	41861b	75	2246	2.1	+61 48	5.17	..	Oe5	..	R	56,101
26	14207	1.7	-46 32	9.4	10.9	Ko	1	..	19941b	76	4130	2.1	+44 9	8.1	8.2	A2	1	..	37978i
27	14132	1.7	-47 54	9.7	9.6	Go	2	..	19941b	77	4730	2.1	+11 17	7.26	8.61	Ma	3	..	38114i
28	13734	1.7	-49 14	8.6	9.3	Ko	5	..	19941b	78	6444	2.1	-17 14	10.0	10.8	G5	2	..	39413b
29	4214	1.7	-64 23	7.5	8.6	K2	5	..	20428b	79	6166	2.1	-21 15	7.47	8.7	Ko	6	..	23121b
30	3463	1.7	-68 25	9.1	9.2	A2	3	..	20543b	80	17011	2.1	-24 26	9.4	10.3	G5	4	..	23813b
31	3605	1.8	+48 45	8.9	8.9	Ao	1	..	38810i	81	15758	2.1	-25 0	8.40	9.8	Ko	8	..	23813b
32	4041	1.8	+44 37	6.42	6.42	Ao	5	0,8	38844i	82	15991	2.1	-26 15	11.1	10.9	Go	3	..	23813b
33	4126	1.8	+43 48	7.83	9.01	K5	1	..	37978i	83	17606	2.1	-28 32	10.9	11.2	G5	1	..	23813b
34	4487	1.8	+37 54	8.5	8.6	A2	3	..	38570i	84	15417	2.1	-34 16	9.5	10.0	F8	5	..	41066b
35	4612	1.8	+30 39	8.7	9.7	Ko	1	..	38099i	85	14138	2.1	-48 1	9.5	9.9	Ko	2	..	19941b
36	4348	1.8	+26 27	8.7	9.1	F5	2	..	38819i	86	13736	2.1	-49 11	9.7	9.6	Go	2	..	19941b
37	4531	1.8	+24 40	7.9	7.9	B9	6	..	38819i	87	10043	2.1	-57 7	9.3	9.8	F8	3	..	20558b
38	19013	1.8	-30 29	9.7	10.9	K5	2	..	41066b	88	1548	2.1	-76 32	9.7	10.7	Ko	3	..	42794b
39	14579	1.8	-39 14	8.9	10.6	K5	2	..	13854b	89	1216	2.2	+69 43	8.4	9.2	G5	4	5,2	37244i
40	7767	1.8	-59 42	9.6	10.2	Go	1	..	42494b	90	2337	2.2	+60 15	7.26	8.26	Ko	6	..	38803i
41	7768	1.8	-59 47	7.87	9.4	K5	3	..	42486b	91	2702	2.2	+56 38	7.54	7.96	F5	4	..	3735ii
42	673	1.9	+82 23	7.12	7.54	F5	6	R	3728ii	92	3105	2.2	+53 8	7.09	8.09	Ko	5	..	3735ii
43	674	1.9	+82 23	7.37	7.79	F5	6	..	3728ii	93	4044	2.2	+44 46	6.08	6.14	A2	6	2,9	38844i
44	2450	1.9	+57 45	7.9	8.9	Ko	2	..	3735ii	94	4255	2.2	+27 51	8.3	9.3	Ko	1	..	3803ii
45	4043	1.9	+44 31	5.32	6.50	K5	7	..	37978i	95	4250	2.2	- 1 18	9.3	9.3	Ao	2	..	41073b
46	4128	1.9	+43 58	7.8	7.8	Ao	5	..	37978i	96	5615	2.2	- 4 34	9.3	10.3	Ko	1	..	41073b
47	4665	1.9	+16 15	7.55	7.63	A3	3	0,3 R	38822i	97	5616	2.2	- 4 38	9.20	10.20	Ko	2	..	41073b
48	4586	1.9	+ 1 25	9.3	9.3	Ao	2	..	10174b	98	5703	2.2	- 6 52	10.0	10.4	F5	2	..	40910b
49	5919	1.9	- 9 40	10.5	11.0	F8	1	..	40910b	99	5805	2.2	- 8 42	9.6	10.4	G5	3	..	40910b
50	5756	1.9	-10 56	7.00	8.35	Mb	6	..	39463b	100	6143	2.2	-14 59	6.62	6.62	Ao	9	..	39463b

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	6364	2.2	-20 11	9.3	9.9	Ko	4	..	39413b	51	14906	2.5	-43 32	7.06	8.4	K2	8	..	20549b
2	6168	2.2	-21 35	9.6	9.9	Go	2	..	23121b	52	13187	2.5	-51 7	9.9	10.2	Go	2	..	39669b
3	15759	2.2	-25 11	10.2	10.1	Go	6	..	23813b	53	11984	2.5	-52 41	9.3	10.4	F8	1	..	39669b
4	19018	2.2	-29 59	9.22	10.6	K2	3	..	41066b	54	10249	2.5	-53 16	9.0	9.8	F8	2	..	39669b
5	16917	2.2	-32 52	8.9	9.1	F2	7	0,3	41066b	55	2665	2.5	-72 28	7.9	7.9	Ao	7	..	20544b
6	15918	2.2	-33 41	10.2	11.4	K2	1	..	41066b	56	1549	2.5	-76 37	6.21	7.3	Ko	..	0,9	56,148
7	15419	2.2	-34 43	10.2	10.8	F8	2	..	41066b	57	879	2.5	-82 13	9.1	10.1	Ko	2	..	21397b
8	2663	2.2	-72 46	9.1	9.2	A5	5	..	20544b	58	1473	2.6	+66 17	8.1	8.2	A2	2	..	37277i
9	1533	2.2	-77 39	9.2	10.2	Ko	2	..	42794b	59	1720	2.6	+65 48	8.7	8.8	A2	2	..	37277i
10	1393	2.3	+67 53	8.5	8.6	A2	3	R	3858oi	60	4586	2.6	+29 49	7.41	8.41	Ko	4	..	38099i
11	2032	2.3	+63 6	8.0	8.8	G5	7	..	38902i	61	4472	2.6	+2 55	9.1	10.1	Ko	1	..	10174b
12	2385	2.3	+58 23	8.8	9.2	F5	2	..	3735ii	62	5839	2.6	-10 10	9.8	9.9	A2	2	..	40910b
13	2452	2.3	+57 49	8.6	8.6	Ao	2	..	3735ii	63	5759	2.6	-11 25	9.8	10.4	Go	2	..	39463b
14	3736	2.3	+49 48	7.57	8.75	K5	2	..	3881oi	64	6447	2.6	-17 20	9.2	9.7	F8	4	..	39413b
15	6026	2.3	-16 44	10.7	11.2	F8	1	..	39413b	65	6223	2.6	-19 44	10.2	10.8	Fo	2	..	39413b
16	5836	2.3	-22 5	8.1	8.1	F5	7	..	23121b	66	15421	2.6	-34 32	5.09	6.6	K5	..	0,9R	28,216
17	15785	2.3	-27 52	11.1	11.4	F8	2	..	23813b	67	15164	2.6	-35 28	8.7	10.8	G5	2	..	41066b
18	17608	2.3	-28 0	10.4	10.9	F8	4	..	23813b	68	15202	2.6	-36 27	10.2	11.5	Ko	1	..	38147b
19	18660	2.3	-31 18	9.7	10.6	F8	2	..	41066b	69	15203	2.6	-36 47	9.5	9.9	Ao	4	..	13854b
20	15198	2.3	-36 21	10.6	11.4	Go	2	..	38147b	70	13598	2.6	-50 23	9.7	10.4	Ko	2	..	39669b
21	14662	2.3	-37 6	8.9	10.2	G5	3	..	13854b	71	2679	2.7	+55 51	6.22	6.20	B9	9	..	3735ii
22	14778	2.3	-44 33	9.3	10.6	F8	5	..	20549b	72	2683	2.7	+54 46	8.0	8.0	B8	4	..	3735ii
23	14587	2.3	-45 13	8.1	9.1	F5	6	..	19941b	73	4428	2.7	+34 2	6.98	7.40	F5	7	..	38099i
24	3737	2.4	+49 45	8.4	9.4	Ko	1	..	3881oi	74	4930	2.7	+18 59	5.78	6.06	Fo	10	..	38822i
25	4634	2.4	+31 51	9.4	9.5	A2	1	..	38099i	75	4696	2.7	+10 16	7.48	8.48	Ko	3	..	38114i
26	4676	2.4	+26 8	7.9	8.9	Ko	3	..	3803ii	76	5914	2.7	-5 59	8.3	8.4	A2	8	..	40910b
27	4533	2.4	+24 51	3.96	4.38	F5	..	R	1418c	77	5806	2.7	-7 51	8.8	9.6	G5	5	..	40910b
28	4758	2.4	+12 30	9.1	10.3	K5	2	..	38114i	78	6183	2.7	-12 23	10.2	10.7	F8	2	..	39463b
29	5711	2.4	-5 47	9.3	10.5	K5	1	..	40910b	79	6449	2.7	-17 11	9.3	10.1	G5	3	..	39413b
30	5837	2.4	-10 34	7.46	8.46	Ko	6	..	39463b	80	6224	2.7	-18 54	10.6	11.4	Go	1	..	39413b
31	6180	2.4	-12 36	10.9	11.0	A2	3	..	39463b	81	17016	2.7	-24 13	7.9	8.5	G5	8	..	23813b
32	6214	2.4	-14 4	8.7	9.7	Ko	4	..	39463b	82	17611	2.7	-28 49	10.9	11.7	G5	1	..	23813b
33	6072	2.4	-18 25	8.7	9.7	Ko	5	..	39413b	83	14659	2.7	-39 57	8.18	8.1	Ao	8	..	20549b
34	17267	2.4	-23 6	9.1	9.9	Ko	3	..	39687b	84	11987	2.7	-52 18	9.2	10.4	K5	1	..	39669b
35	17014	2.4	-24 1	9.9	10.1	G5	4	..	23813b	85	4132	2.8	+43 44	8.4	9.4	Ko	1	..	37978i
36	19022	2.4	-30 44	9.2	9.5	Ao	6	..	41066b	86	4489	2.8	+37 23	7.9	8.9	Ko	4	..	3857oi
37	15201	2.4	-36 48	9.8	11.4	Ko	1	..	38147b	87	4712	2.8	+35 37	7.72	7.80	A3	6	..	38099i
38	14588	2.4	-45 5	8.7	9.7	F8	3	..	19941b	88	4429	2.8	+33 54	8.7	8.8	A2	3	..	38099i
39	4000	2.4	-65 44	9.4	9.7	Fo	2	..	20428b	89	4466	2.8	+23 33	8.7	9.5	G5	1	..	38819i
40	2248	2.5	+61 46	9.2	9.3	A3	2	..	38902i	90	4693	2.8	+17 32	6.43	7.78	Ma	6	..	38822i
41	4792	2.5	+9 11	7.02	7.00	B9	6	..	38114i	91	5807	2.8	-8 26	9.3	9.9	Go	3	..	40910b
42	5382	2.5	-2 51	9.3	10.3	Ko	1	..	41073b	92	5840	2.8	-9 51	9.66	10.66	Ko	2	..	40910b
43	5912	2.5	-6 19	7.9	8.9	Ko	7	..	40910b	93	5760	2.8	-11 25	9.6	9.9	Fo	4	..	39463b
44	5705	2.5	-7 22	8.8	9.8	Ko	3	..	40910b	94	6075	2.8	-18 19	7.76	8.32	Go	8	..	39413b
45	6027	2.5	-16 29	8.7	9.9	K5	4	..	39413b	95	15422	2.8	-34 37	10.2	10.8	K2	1	..	41066b
46	6446	2.5	-17 27	9.2	10.0	G5	4	..	39413b	96	14902	2.8	-38 35	8.6	8.3	A5	8	..	13854b
47	6073	2.5	-17 52	10.6	11.4	G5	1	..	39413b	97	3465	2.8	-68 49	7.1	8.1	Ko	7	..	20543b
48	18189	2.5	-29 42	10.4	10.9	F8	3	..	23813b	98	2901	2.8	-70 2	8.8	9.2	F5	3	..	19967b
49	15922	2.5	-33 29	4.62	4.68	A2	..	R	28,216	99	2662	2.8	-71 52	9.4	9.9	F8	3	..	20544b
50	15163	2.5	-35 3	7.06	8.4	Ma	9	..	41066b	100	3248	2.9	+51 19	7.05	7.00	B8	7	..	3735ii

210100

22^h 2^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	3695	2.9	+47 23	8.6	8.6	Ao	1	..	3881oi	51	6185	3.2	-12 6	7.9	8.9	Ko	7	..	39463b
2	4601	2.9	+35 8	8.62	8.68	A2	3	..	38099i	52	6150	3.2	-15 8	8.9	9.9	Ko	6	..	39413b
3	4536	2.9	+25 8	8.26	8.32	A2	4	..	38819i	53	17020	3.2	-24 49	10.2	10.1	F5	4	..	23813b
4	4253	2.9	- 1 26	10.0	10.6	Go	1	..	41073b	54	15788	3.2	-26 55	9.7	10.6	F8	5	..	23813b
5	5706	2.9	- 7 10	9.3	10.1	G5	3	..	4091ob	55	4665	3.3	+ 4 2	8.6	9.6	Ko	1	..	10174b
6	5808	2.9	- 8 1	10.0	10.8	G5	1	..	4091ob	56	5811	3.3	- 8 47	9.3	9.9	Go	4	..	4091ob
7	5761	2.9	-11 16	10.2	10.7	F8	1	..	39463b	57	15768	3.3	-25 50	10.2	10.3	Go	4	..	23813b
8	6184	2.9	-12 22	10.0	10.8	G5	2	..	39463b	58	15790	3.3	-27 10	9.5	9.7	G5	6	..	23813b
9	6145	2.9	-15 46	10.2	11.0	G5	2	..	39413b	59	15789	3.3	-27 42	9.5	10.6	K2	4	..	23813b
10	6225	2.9	-19 35	9.1	9.7	F5	5	..	39413b	60	14667	3.3	-37 44	10.6	11.5	F5	1	..	38147b
11	15926	2.9	-33 37	6.44	6.3	A2	..	2,10	28,216	61	15795	3.3	-42 9	10.1	10.9	G5	2	..	38147b
12	14903	2.9	-37 55	9.2	11.2	Ko	2	..	38147b	62	14911	3.3	-43 7	10.5	10.9	F8	3	..	20549b
13	14904	2.9	-38 16	8.3	9.4	Ko	6	..	13854b	63	13744	3.3	-49 15	9.5	10.4	Mb	..	..	M
14	11988	2.9	-52 23	8.4	8.5	F5	7	..	39669b	64	1534	3.3	-77 50	9.4	10.4	Ko	1	..	42794b
15	9791	2.9	-55 32	9.3	9.8	F8	3	..	39669b	65	320	3.3	-87 9	8.7	9.7	Ko	2	..	15173b
16	4217	2.9	-64 13	9.1	9.5	F5	2	..	20428b	66	1722	3.4	+66 13	8.0	8.4	F5	3	..	37277i
17	2663	2.9	-71 22	9.3	10.3	Ko	3	..	20544b	67	2465	3.4	+60 11	7.76	8.26	F8	5	..	38803i
18	3111	3.0	+52 18	8.5	9.5	Ko	1	..	37351i	68	2392	3.4	+58 20	8.6	9.2	Go	2	..	38803i
19	3613	3.0	+48 47	8.6	8.6	Ao	3	..	3881oi	69	4343	3.4	+32 56	8.6	8.7	A5	2	..	38099i
20	4537	3.0	+24 31	8.6	8.9	F2	3	..	38819i	70	4673	3.4	+17 4	6.98	6.98	Ao	7	..	38822i
21	5617	3.0	- 4 1	7.51	7.49	B9	3	..	17420b	71	6109	3.4	-12 55	9.3	10.1	G5	3	..	39463b
22	5708	3.0	- 6 52	8.3	9.4	K2	5	..	4091ob	72	6218	3.4	-13 47	6.90	7.32	F5	7	..	39463b
23	6451	3.0	-17 2	7.44	8.22	G5	9	..	39413b	73	6030	3.4	-16 15	9.6	9.9	F2	4	..	39413b
24	6450	3.0	-17 41	10.2	10.7	F8	1	..	39413b	74	17272	3.4	-23 13	10.2	11.1	Ko	1	..	23121b
25	17018	3.0	-23 56	10.6	10.9	Ko	2	..	23813b	75	15174	3.4	-35 16	9.6	10.2	Ko	4	..	41066b
26	9821	3.0	-56 41	9.8	10.4	Go	2	..	42494b	76	14912	3.4	-43 34	10.5	10.8	G5	1	..	20549b
27	1474	3.1	+67 3	8.4	8.9	F8	1	..	38902i	77	14142	3.4	-48 50	9.3	9.3	F2	4	..	19941b
28	2706	3.1	+56 43	8.6	8.6	Ao	2	..	37351i	78	10052	3.4	-57 29	8.6	9.5	Go	4	..	20558b
29	4695	3.1	+21 13	5.66	5.64	B8	8	1,7 R	37216i	79	7548	3.4	-60 15	9.2	9.9	G5	1	..	42494b
30	4760	3.1	+12 34	7.56	7.70	A5	3	..	38114i	80	3251	3.5	+52 9	8.8	8.8	Ao	2	..	37351i
31	5709	3.1	- 7 16	9.6	10.6	Ko	1	..	4091ob	81	4760	3.5	+39 38	8.7	9.9	K5	1	..	38570i
32	5810	3.1	- 7 56	9.8	11.0	K5	1	..	4091ob	82	4689	3.5	+38 50	8.1	9.3	K5	2	..	38570i
33	5809	3.1	- 8 6	9.3	9.7	F5	4	..	4091ob	83	4295	3.5	+29 12	8.0	8.0	Ao	3	..	38099i
34	5762	3.1	-11 9	10.5	11.1	Go	2	..	39463b	84	4734	3.5	+11 23	8.6	9.1	F8	1	..	38114i
35	6454	3.1	-17 6	9.1	10.2	K2	3	..	39413b	85	4311	3.5	- 0 9	7.98	9.05	K2	3	..	10174b
36	6452	3.1	-17 18	9.2	9.8	Go	5	..	39413b	86	4310	3.5	- 0 25	8.65	9.07	F5	2	..	10174b
37	6453	3.1	-17 27	9.8	10.1	F2	3	..	39413b	87	5700	3.5	- 1 55	9.6	10.6	Ko	1	..	41073b
38	5838	3.1	-22 11	9.3	10.5	K2	1	..	39687b	88	5814	3.5	- 8 11	9.8	10.8	Ko	2	..	4091ob
39	15998	3.1	-26 16	7.06	7.4	A2	8	..	41878b	89	6220	3.5	-14 42	10.2	11.0	G5	1	..	39463b
40	15930	3.1	-32 59	8.2	8.9	Mb	6	5,3	41066b	90	6076	3.5	-18 23	9.6	10.4	G5	2	..	39413b
41	15210	3.1	-36 26	11.1	11.1	F8	1	..	38147b	91	6227	3.5	-19 1	5.74	5.57	B3	..	..	56,101
42	15212	3.1	-36 33	7.37	8.4	Ko	8	..	13854b	92	14771	3.5	-41 29	9.6	10.0	F8	4	..	20549b
43	10050	3.1	-57 43	9.3	10.1	G5	2	..	20558b	93	14770	3.5	-41 43	7.7	7.7	Go	8	..	20549b
44	3112	3.2	+52 39	7.9	8.9	Ko	3	..	37351i	94	14216	3.5	-46 9	9.3	10.3	F5	1	..	19941b
45	3806	3.2	+45 52	7.9	8.0	A2	2	..	3881oi	95	4220	3.5	-64 31	8.1	9.1	Ko	3	..	20428b
46	4431	3.2	+33 35	8.3	8.4	A2	3	..	38099i	96	3630	3.5	-66 50	8.0	8.6	Go	7	..	20543b
47	4254	3.2	- 1 43	10.0	11.2	K5	1	..	41073b	97	4741	3.6	+14 33	9.0	9.3	F	1	..	38114i
48	5713	3.2	- 4 57	9.2	10.3	K2	1	..	41073b	98	6228	3.6	-18 58	8.7	9.0	F8	7	..	39413b
49	5711	3.2	- 7 23	9.3	10.5	K5	1	..	4091ob	99	16004	3.6	-26 39	10.6	10.3	F8	4	..	23813b
50	5923	3.2	- 8 52	10.2	11.3	K2	2	..	4091ob	100	18197	3.6	-28 58	10.4	11.4	G5	2	..	23813b

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	18196	3.6	-29 44	10.22	11.2	F2	3	..	23813b	51	4738	4.0	+12 3	var.	var.	Md	..	R	M
2	15215	3.6	-36 19	10.6	11.4	G5	1	..	38147b	52	5918	4.0	-6 6	8.9	9.4	F8	4	..	40910b
3	14597	3.6	-39 36	9.8	10.9	Ko	3	..	38147b	53	5713	4.0	-7 44	8.7	8.7	Ao	7	..	40910b
4	14143	3.6	-48 36	6.38	8.1	K2	9	..	19941b	54	6113	4.0	-13 14	9.6	10.4	G5	2	..	39463b
5	4756	3.6	-63 36	7.9	8.5	Go	8	..	42486b	55	6231	4.0	-18 56	9.3	9.9	A	3	..	39413b
6	4221	3.6	-64 4	9.0	10.0	Ko	2	..	42486b	56	6232	4.0	-18 57	9.1	9.7	A3	4	..	39413b
7	3571	3.7	+50 29	9.2	10.6	Mb	2	..	16271m	57	17275	4.0	-23 23	9.9	10.3	Go	2	..	23121b
8	4303	3.7	+42 27	7.52	7.50	B9	4	..	37978i	58	17033	4.0	-24 44	10.2	10.6	G5	3	..	23813b
9	4728	3.7	+41 8	8.9	8.9	Ao	1	..	37978i	59	17032	4.0	-24 50	10.9	10.6	F5	3	..	23813b
10	4540	3.7	+25 3	6.03	6.31	Fo	..	0,8	1418c	60	15796	4.0	-27 5	10.4	10.9	G5	3	..	23813b
11	4472	3.7	+23 41	6.60	7.38	G5	5	..	38819i	61	2251	4.1	+61 33	9.2	10.4	K5	1	..	38902i
12	4968	3.7	+6 51	8.0	9.2	K5	2	0,2	14693b	62	2684	4.1	+55 15	8.56	9.56	Ko	1	..	37351i
13	5701	3.7	-2 29	9.3	9.9	Go	2	..	41073b	63	3116	4.1	+52 23	9.2	9.2	A	1	..	37351i
14	5924	3.7	-8 57	10.5	11.0	F8	2	..	40910b	64	4696	4.1	+21 40	7.08	7.86	G5	4	0,4	37216i
15	6455	3.7	-17 13	9.6	11.0	Mb	2	..	39413b	65	4802	4.1	+8 58	7.8	7.8	Ao	3	..	38114i
16	17028	3.7	-24 4	10.9	10.6	F2	4	..	23813b	66	4970	4.1	+6 59	8.0	8.5	F8	3	..	38596i
17	15798	3.7	-41 54	9.2	10.1	Ko	2	..	20549b	67	4474	4.1	+2 14	6.59	6.59	Ao	7	0,8-	17420b
18	622	3.8	+83 52	9.2	9.3	A5	2	..	37281i	68	5816	4.1	-8 11	9.1	10.2	K2	3	..	40910b
19	2466	3.8	+60 8	8.76	8.76	A	3	R	31321i	69	5817	4.1	-8 40	6.99	7.77	G5	9	..	40910b
20	2393	3.8	+58 21	6.31	7.09	G5	..	5,7	56,101	70	19033	4.1	-30 38	9.1	9.1	F8	5	..	41066b
21	3114	3.8	+52 49	6.50	6.58	A3p	8	R	37351i	71	15430	4.1	-34 31	5.49	5.63	A5	..	..	28,216
22	4135	3.8	+43 43	7.43	8.61	K5	2	..	37978i	72	9825	4.1	-55 57	7.8	7.9	Go	7	0,8	42494b
23	4764	3.8	+12 30	8.8	10.0	K5	1	..	38114i	73	6621	4.1	-61 10	9.0	9.9	Fo	4	..	42486b
24	4800	3.8	+8 24	9.0	9.1	A3	2	0,1R	14693b	74	4223	4.1	-64 31	7.4	8.8	Ma	4	..	20428b
25	4667	3.8	+3 29	8.6	9.7	K2	1	..	10174b	75	4697	4.2	+17 59	8.6	9.1	F8	2	..	38822i
26	4255	3.8	-1 28	9.3	10.4	K2	2	..	41073b	76	5919	4.2	-6 40	9.8	10.8	Ko	1	..	40910b
27	5618	3.8	-4 10	9.3	10.5	K5	1	..	41073b	77	5818	4.2	-8 2	6.63	7.19	Go	10	..	40910b
28	5844	3.8	-10 31	9.3	9.7	F5	4	..	39463b	78	5927	4.2	-9 17	8.7	9.0	F2	5	..	40910b
29	5765	3.8	-11 1	8.9	9.9	Ko	3	..	39463b	79	6192	4.2	-12 3	10.5	11.0	F8	1	..	39463b
30	6112	3.8	-13 25	9.6	10.4	G5	2	..	39463b	80	6115	4.2	-13 25	9.6	10.1	F8	3	..	39463b
31	6111	3.8	-13 39	9.8	10.4	Go	2	..	39463b	81	6367	4.2	-20 23	9.2	10.2	Go	4	..	39413b
32	15181	3.8	-35 16	9.2	10.2	Ko	5	..	41066b	82	15775	4.2	-25 43	10.9	10.9	Go	3	..	23813b
33	14669	3.8	-40 7	8.7	10.1	Ko	2	..	20549b	83	15776	4.2	-25 44	10.2	10.3	Go	5	..	23813b
34	14218	3.8	-46 23	9.3	10.3	F8	2	..	19941b	84	15939	4.2	-33 6	9.0	9.4	Ko	4	..	41066b
35	14145	3.8	-48 52	9.5	9.6	F5	3	..	19941b	85	10054	4.2	-57 4	9.5	10.1	Go	1	..	42494b
36	11992	3.8	-52 27	7.4	8.1	F8	8	..	39669b	86	10055	4.2	-57 15	9.3	10.1	G5	1	..	42494b
37	1438	3.8	-78 50	8.3	8.7	F5	8	..	42794b	87	3467	4.2	-68 26	8.9	10.3	Ma	1	..	20543b
38	2250	3.9	+61 53	9.4	10.4	Ko	1	..	38902i	88	2666	4.2	-71 5	9.3	9.6	Fo	3	..	20544b
39	4669	3.9	+3 45	8.0	8.6	Go	4	..	38596i	89	3746	4.3	+49 18	6.58	7.76	K5	6	0,3	38810i
40	4473	3.9	+2 36	8.4	9.5	K2	1	..	10174b	90	4693	4.3	+38 53	7.8	7.8	Ao	5	..	37978i
41	6191	3.9	-11 51	8.3	9.3	Ko	5	..	39463b	91	4829	4.3	+1 7	8.74	9.74	Ko	2	..	10174b
42	6190	3.9	-12 14	9.8	10.4	Go	2	..	39463b	92	4314	4.3	+0 12	9.23	9.79	G	1	..	10174b
43	6230	3.9	-19 29	8.9	9.3	F5	6	..	39413b	93	5920	4.3	-6 21	10.5	11.3	G5	2	..	40910b
44	17029	3.9	-24 9	6.51	7.7	G5	5	..	41878b	94	6116	4.3	-13 38	9.3	10.1	G5	3	..	39463b
45	15428	3.9	-34 15	10.2	10.0	F8	4	..	41066b	95	6222	4.3	-14 6	9.3	10.1	G5	2	..	39463b
46	15799	3.9	-42 16	9.4	10.6	F5	2	..	20549b	96	6223	4.3	-14 23	8.3	9.7	Ma	4	..	39463b
47	14146	3.9	-48 5	9.3	9.3	A3	3	..	19941b	97	6151	4.3	-15 4	8.9	9.9	Ko	4	..	39413b
48	10029	3.9	-54 30	9.2	10.1	Ko	1	..	39669b	98	17279	4.3	-23 32	9.1	9.7	Go	4	..	23121b
49	2468	4.0	+59 43	9.0	9.8	G5	2	..	38803i	99	15799	4.3	-27 26	10.9	10.9	Go	2	..	23813b
50	4437	4.0	+33 27	9.8	9.8	A	1	..	38031i	100	17622	4.3	-28 47	6.46	6.9	A3	..	1,10	56,101

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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	18677	4.3	31 38	9.9	11.4	Ko	1	..	41066b	51	1219	4.8	+69 44	8.0	8.0	Ao	2	..	38025i
2	15941	4.3	-33 3	5.06	5.9	F8	..	R	28,216	52	2342	4.8	+60 38	8.8	8.8	B9	2	..	38803i
3	6622	4.3	-61 3	7.8	8.0	F2	7	..	42486b	53	3706	4.8	+47 27	6.83	6.83	Ao	8	..	38810i
4	6623	4.3	-61 47	8.9	10.8	K5	2	..	42486b	54	4349	4.8	+32 41	5.65	6.65	Ko	..	0,9	56,10i
5	2249	4.3	-73 33	9.5	10.6	K2	2	..	19967b	55	5848	4.8	-10 45	10.0	11.0	Ko	1	..	40910b
6	2470	4.4	+60 12	8.61	9.03	F5	2	..	38803i	56	6118	4.8	-12 54	10.2	10.8	G	2	..	39463b
7	2688	4.4	+54 27	9.0	10.2	K5	1	..	34819i	57	6156	4.8	-15 29	9.3	10.4	K2	3	..	39413b
8	3621	4.4	+48 43	8.1	8.1	Ao	4	..	38810i	58	6033	4.8	-16 16	9.2	10.0	G5	4	..	39413b
9	4763	4.4	+39 38	8.1	9.1	Ko	1	..	37978i	59	6235	4.8	-19 43	9.6	10.5	Go	4	..	39413b
10	4438	4.4	+34 0	8.8	9.8	Ko	1	..	38031i	60	6370	4.8	-20 31	9.1	9.7	G5	5	..	39413b
11	4578	4.4	+15 29	8.8	9.9	K2	1	..	38114i	61	6170	4.8	-21 29	8.5	9.6	Ko	4	..	23121b
12	4766	4.4	+13 11	8.6	9.4	G5	1	..	38114i	62	17039	4.8	-24 30	10.9	11.2	G5	2	..	23813b
13	4767	4.4	+12 28	8.8	10.2	Ma	1	..	38114i	63	14916	4.8	-38 40	9.6	10.1	F5	4	3,2	38147b
14	5705	4.4	- 2 31	8.9	10.3	Ma	2	..	41073b	64	14605	4.8	-39 32	9.3	9.7	G5	4	..	38147b
15	5715	4.4	- 6 53	8.9	8.9	Ao	6	..	40910b	65	14148	4.8	-47 56	9.3	9.6	A3	2	..	19941b
16	5766	4.4	-11 27	9.6	10.2	Go	3	..	39463b	66	13751	4.8	-49 10	9.9	9.7	F5	2	..	19941b
17	6152	4.4	-15 37	8.9	9.7	G5	6	..	39413b	67	7773	4.8	-59 20	8.7	9.9	F5	4	..	42494b
18	17035	4.4	-24 17	10.6	11.2	G5	3	..	23813b	68	2667	4.8	-71 38	9.5	10.3	G5	1	..	19967b
19	15800	4.4	-27 13	10.9	11.2	G5	3	..	23813b	69	1107	4.9	+71 43	7.60	8.67	K2	3	..	38025i
20	17624	4.4	-28 10	8.9	9.1	G5	6	..	23813b	70	2343	4.9	+61 6	8.6	9.7	K2	1	..	38803i
21	15225	4.4	-36 28	8.7	9.0	G5	4	..	13854b	71	2793	4.9	+53 47	8.9	9.2	F2	2	..	37351i
22	2688	4.5	+56 6	8.4	8.7	Fo	4	..	37351i	72	4736	4.9	+40 14	8.72	8.72	Ao	2	1,2	37978i
23	4694	4.5	+38 55	8.7	9.3	Go	2	..	38570i	73	4698	4.9	+21 45	7.62	8.62	Ko	3	5,3	38821i
24	6154	4.5	-15 26	10.2	10.7	F8	1	..	39413b	74	4587	4.9	+ 1 39	8.8	9.2	F5	3	..	10174b
25	6077	4.5	-18 24	9.3	9.8	F8	5	..	39413b	75	5928	4.9	- 8 47	9.8	10.3	F8	3	..	40910b
26	6369	4.5	-20 24	9.1	9.4	Fo	6	..	39413b	76	5849	4.9	-10 15	9.3	9.8	F8	6	..	39463b
27	15778	4.5	-25 33	10.2	11.2	K2	2	..	23813b	77	6119	4.9	-12 50	8.9	9.5	Go	6	..	39463b
28	14914	4.5	-38 40	9.6	9.7	F2	5	3,4	38147b	78	5848	4.9	-22 25	9.8	10.5	Go	1	..	23121b
29	14777	4.5	-40 55	9.5	10.8	G5	2	..	20549b	79	17041	4.9	-24 3	8.9	9.1	Fo	8	..	23813b
30	13750	4.5	-49 23	9.3	9.3	F8	4	..	19941b	80	17040	4.9	-24 52	10.9	11.2	G5	2	..	23813b
31	2029	4.5	-74 26	9.3	9.6	Fo	3	0,3	20544b	81	19041	4.9	-30 25	9.7	10.3	G5	3	..	41066b
32	1195	4.5	-79 51	9.56	10.2	Ko	3	..	42794b	82	14918	4.9	-38 28	10.0	10.6	G5	3	0,2	38147b
33	811	4.6	+76 7	8.87	9.94	K2	1	..	38903i	83	15802	4.9	-42 37	9.4	10.1	Ao	4	..	20549b
34	3813	4.6	+45 15	6.52	7.30	G5	6	5,6R	38844i	84	14802	4.9	-43 57	8.9	10.9	G5	3	..	20549b
35	5921	4.6	- 5 47	9.8	10.6	G5	2	..	40910b	85	1535	4.9	-77 26	7.9	8.4	F8	6	..	42794b
36	5767	4.6	-11 33	10.5	11.3	G5	1	..	39463b	86	1807	5.0	+63 15	8.6	8.5	B5	4	..	38902i
37	6078	4.6	-18 29	8.8	9.9	K2	5	..	39413b	87	4058	5.0	+44 22	6.72	6.72	Ao	5	1,8	38844i
38	17627	4.6	-28 45	10.6	11.4	Ko	3	..	23813b	88	4610	5.0	+34 37	7.29	7.85	Go	5	..	38099i
39	14915	4.6	-38 15	7.15	7.3	F5	10	..	13854b	89	4642	5.0	+31 42	8.2	9.2	Ko	1	..	38031i
40	10057	4.6	-56 55	8.7	9.8	G5	4	..	20558b	90	4806	5.0	+ 7 28	8.0	8.6	Go	3	..	38596i
41	1402	4.7	+67 49	7.48	7.82	F2	6	0,4	37277i	91	4672	5.0	+ 3 35	7.62	8.18	Go	7	..	10174b
42	4697	4.7	+22 3	8.1	8.5	F5	2	0,2	37216i	92	5720	5.0	- 5 25	8.3	8.9	Go	4	..	41073b
43	5620	4.7	- 4 38	9.00	9.50	F8	4	..	41073b	93	6034	5.0	-16 26	8.7	9.3	Go	6	..	39413b
44	6194	4.7	-12 13	10.5	11.1	Go	1	..	39463b	94	16012	5.0	-26 3	10.2	10.6	K2	3	..	23813b
45	6155	4.7	-15 28	10.0	10.0	Ao	5	..	39413b	95	14677	5.0	-40 2	7.93	8.3	Go	7	..	20549b
46	6234	4.7	-18 53	10.2	11.0	G5	1	..	39413b	96	14678	5.0	-40 47	8.0	8.5	Ko	6	..	20549b
47	6233	4.7	-19 25	10.2	10.5	F5	3	..	39413b	97	14780	5.0	-41 34	10.6	11.6	Ko	1	..	38147b
48	5846	4.7	-22 38	9.3	10.5	Ko	1	..	23121b	98	10059	5.0	-57 46	8.7	9.5	A2	5	..	20558b
49	15438	4.7	-34 19	7.40	7.9	Go	7	..	41066b	99	2903	5.0	-70 11	9.2	9.8	Go	3	..	19967b
50	14676	4.7	-40 45	8.9	9.8	Ko	3	..	20549b	100	1439	5.0	-78 0	9.3	9.9	Go	3	..	42794b

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	1221	5.1	+70 12	7.00	7.00	Ao	5	1,7	38573i	51	16016	5.4	-26 20	9.5	10.6	K2	3	..	23813b
2	1808	5.1	+63 52	8.7	9.9	K5	1	..	38902i	52	19047	5.4	-30 43	9.5	10.0	F8	4	..	41066b
3	2346	5.1	+60 35	8.6	8.7	A3	4	..	38803i	53	15236	5.4	-36 11	10.2	11.5	G5	1	..	38147b
4	3711	5.1	+48 2	7.32	8.10	G5	5	..	38810i	54	14612	5.4	-39 51	10.4	10.8	F8	3	..	38147b
5	4059	5.1	+44 21	6.62	6.60	B9	5	0,8	38844i	55	4007	5.4	-64 53	9.22	10.1	K2	1	..	42486b
6	4350	5.1	+32 36	9.4	10.8	Ma	..	..	M	56	1812	5.5	+63 40	8.2	9.2	Ko	1	..	38902i
7	4857	5.1	+13 19	9.0	10.4	Ma	..	..	M	57	3600	5.5	+46 25	7.7	8.2	F8	3	..	38810i
8	5624	5.1	- 3 55	9.6	10.6	Ko	1	..	41073b	58	4498	5.5	+38 1	9.5	9.6	A2	1	R	38570i
9	5851	5.1	- 9 53	9.16	9.94	G5	5	..	40910b	59	4352	5.5	+32 41	4.38	4.80	F5	..	R	56,101
10	17042	5.1	-24 31	9.9	9.4	Ao	6	..	23813b	60	4946	5.5	+19 8	6.07	6.63	Go	8	..	38822i
11	19043	5.1	-30 17	10.6	11.3	G5	1	..	41066b	61	4861	5.5	+14 7	6.41	7.41	Ko	7	..	38114i
12	9798	5.1	-55 51	9.1	10.1	Ko	2	..	42494b	62	4860	5.5	+13 16	8.2	8.8	Go	4	..	38114i
13	2347	5.2	+60 45	7.78	8.85	K2	3	..	38803i	63	5708	5.5	- 2 37	8.9	9.9	Ko	2	..	41073b
14	2689	5.2	+55 32	8.6	9.2	Go	2	..	37351i	64	6173	5.5	-21 44	6.10	6.6	F5	..	3,10-	56,148
15	3582	5.2	+50 17	8.62	8.62	Ao	2	..	38810i	65	15790	5.5	-25 14	10.9	10.9	Go	3	..	23813b
16	4718	5.2	+35 57	8.9	9.7	G5	1	..	38570i	66	15791	5.5	-25 52	8.2	7.9	A5	8	..	23813b
17	4611	5.2	+34 53	8.1	9.3	K5	1	..	38570i	67	15809	5.5	-26 56	10.6	10.0	Fo	5	..	23813b
18	4061	5.2	+ 5 42	3.70	3.76	A2	..	R	3039c	68	15239	5.5	-36 33	9.6	10.5	Ko	3	..	38147b
19	5623	5.2	- 4 23	6.10	6.10	Ao	8	0,7	44122b	69	14923	5.5	-38 32	8.2	8.1	A2	8	..	38147b
20	5852	5.2	-10 0	10.2	10.8	Go	2	..	40910b	70	14783	5.5	-41 22	10.9	11.9	Ko	1	..	38147b
21	5772	5.2	-10 59	9.6	10.0	F5	2	..	39463b	71	14610	5.5	-45 15	7.8	8.4	F5	6	..	19941b
22	5770	5.2	-11 18	7.03	8.03	Ko	8	..	39463b	72	7931	5.5	-58 22	9.3	10.5	K5	1	..	20558b
23	5771	5.2	-11 33	9.2	10.0	G5	2	..	39463b	73	3222	5.5	-69 12	8.7	9.2	F8	4	..	20543b
24	6196	5.2	-12 4	5.40	5.28	B5	..	3,9 R	56,101	74	2668	5.5	-72 7	9.5	10.7	K5	1	..	19967b
25	6224	5.2	-14 15	9.3	10.1	G5	2	..	39463b	75	2030	5.5	-73 55	8.4	9.2	G5	5	..	20544b
26	6171	5.2	-21 10	9.8	10.5	F8	1	..	23121b	76	952	5.6	+74 58	8.2	8.8	Go	2	..	38025i
27	15806	5.2	-27 23	10.6	11.2	Go	1	..	23813b	77	1405	5.6	+68 2	7.9	8.3	F5	3	..	37277i
28	13200	5.2	-51 21	10.1	10.2	Go	2	..	39669b	78	2348	5.6	+60 30	7.26	7.21	B8	7	..	38803i
29	4006	5.2	-65 6	8.17	9.4	Ko	3	2,3	42486b	79	2397	5.6	+58 22	8.0	9.0	Ko	4	..	37351i
30	2667	5.2	-72 0	9.5	10.7	K5	1	..	19967b	80	2713	5.6	+56 33	8.4	8.4	Ao	2	..	37351i
31	1109	5.3	+71 53	7.00	7.00	Ao	6	..	38025i	81	3714	5.6	+47 28	8.6	8.7	A5	2	..	38810i
32		5.3	+58 48			Ao	..	..		82	4307	5.6	+43 9	7.86	8.93	K2	3	..	37978i
33	2395	5.3	+58 48	6.56	6.56	Ao	..	0,5	R56,101	83	4947	5.6	+18 18	7.9	8.5	Go	4	..	38822i
34	5625	5.3	- 4 46	6.13	7.13	Ko	5	5,7	17420b	84	5626	5.6	- 4 15	9.3	10.3	Ko	2	..	41073b
35	5721	5.3	- 5 42	8.8	9.3	F8	3	..	41073b	85	5854	5.6	- 9 54	9.6	10.6	Ko	1	..	40910b
36	6371	5.3	-20 39	9.3	9.7	Go	4	..	39413b	86	6037	5.6	-16 42	9.3	9.9	Go	3	..	39413b
37	15788	5.3	-25 12	8.0	8.8	Ko	7	..	23813b	87	6373	5.6	-20 31	10.2	11.1	K2	1	..	39413b
38	16014	5.3	-26 48	10.6	10.3	F5	3	..	23813b	88	17292	5.6	-22 58	8.7	9.9	Ko	4	..	23121b
39	15947	5.3	-33 41	9.6	10.9	G5	2	..	41066b	89	17045	5.6	-24 38	9.9	11.2	Ko	2	..	23813b
40	14611	5.3	-38 55	9.3	9.7	F2	4	..	38147b	90	16018	5.6	-26 53	10.6	11.2	K2	2	..	23813b
41	14805	5.3	-44 20	6.68	7.5	G5	8	..	19941b	91	18212	5.6	-28 58	9.9	10.7	G5	1	..	23813b
42	734	5.3	-82 55	9.9	10.5	Go	2	..	21397b	92	15192	5.6	-35 26	8.9	10.0	G5	3	..	41066b
43	2039	5.4	+62 14	8.0	8.0	Ao	5	..	38803i	93	2258	5.7	+61 58	9.5	10.0	F8	3	0,3	38902i
44	4563	5.4	+22 38	7.28	7.70	F5	5	0,5	38821i	94	2692	5.7	+55 42	8.6	8.6	Ao	2	..	37351i
45	4973	5.4	+ 6 13	8.8	8.9	A2	1	..	14693b	95	2798	5.7	+53 40	8.4	9.5	K2	2	..	37351i
46	5823	5.4	- 8 44	10.5	11.3	G5	2	..	40910b	96	4309	5.7	+42 41	7.6	8.8	K5	5	..	37978i
47	6197	5.4	-12 10	9.2	9.7	F8	4	..	39463b	97	4769	5.7	+40 12	8.77	9.95	K5	1	..	38570i
48	6120	5.4	-13 35	10.2	11.0	G5	2	..	39463b	98	4500	5.7	+37 49	8.5	9.7	K5	1	..	38570i
49	6372	5.4	-20 1	10.0	11.1	Ko	2	..	39413b	99	4644	5.7	+31 51	7.9	8.9	Ko	3	..	38099i
50	15789	5.4	-25 49	10.6	10.6	F5	3	..	23813b	100	4949	5.7	+19 7	8.2	8.2	Ao	5	..	38822i

210500

22^h 5^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	4586	5.7	+16 13	7.7	7.7	Ao	4	..	38114i	51	2259	6.0	+62 1	9.5	10.6	K2	1	..	38902i
2	4701	5.7	+11 8	5.92	7.10	K5	7	..	38114i	52	4623	6.0	+30 19	8.01	8.43	F5	4	..	38099i
3	6121	5.7	-13 44	10.2	10.8	Go	2	..	39463b	53	4746	6.0	+15 13	8.29	8.85	Go	3	..	38114i
4	6236	5.7	-18 53	10.6	11.4	F8	1	..	39413b	54	4862	6.0	+13 27	8.8	8.9	A3	2	..	38114i
5	15807	5.7	-42 29	8.9	9.4	F5	6	..	20549b	55	5925	6.0	- 6 23	9.3	10.5	K5	2	..	40910b
6	9801	5.7	-55 9	9.3	10.1	G5	1	..	39669b	56	5826	6.0	- 8 19	10.0	10.8	G5	1	..	40910b
7	9800	5.7	-55 28	9.1	10.1	Ko	1	..	20558b	57	5827	6.0	- 8 31	10.2	10.8	Go	2	..	40910b
8	9803	5.7	-55 41	8.8	9.6	G5	3	..	20558b	58	6124	6.0	-13 43	9.3	10.1	G5	3	..	39463b
9	2905	5.7	-70 21	8.9	9.9	Ko	2	..	19967b	59	6238	6.0	-19 10	10.2	11.1	K2	2	..	39413b
10	1744	5.7	-75 30	8.5	8.6	A2	7	..	42794b	60	7776	6.0	-59 3	9.7	10.3	Go	2	..	42494b
11	963	5.8	+73 34	9.4	9.4	Ao	1	..	38936i	61	3868	6.0	-67 6	8.9	9.7	G5	3	..	20543b
12	4142	5.8	+44 7	8.0	9.2	K5	1	..	37978i	62	3867	6.0	-67 17	7.4	8.5	K2	7	..	20543b
13	4614	5.8	+34 43	6.84	6.90	A2	8	..	38099i	63	3470	6.0	-68 38	6.76	8.7	K2	7	..	20543b
14	4645	5.8	+31 48	7.33	8.68	Mb	3	..	38099i	64	4146	6.1	+43 59	8.2	8.2	Ao	2	..	37978i
15	4545	5.8	+24 51	8.3	8.3	Ao	3	..	38821i	65	4145	6.1	+43 35	8.0	9.1	K2	2	..	37978i
16	5093	5.8	+20 29	6.40	6.46	A2	9	..	38822i	66	4817	6.1	+ 4 48	8.8	10.0	K5	1	..	14693b
17	4259	5.8	- 1 41	10.0	10.6	Go	1	..	41073b	67	15813	6.1	-27 0	10.9	11.2	F8	2	..	23813b
18	5825	5.8	- 8 31	9.6	10.6	Ko	3	..	40910b	68	18217	6.1	-29 28	9.7	10.9	K2	3	..	23813b
19	6158	5.8	-15 20	9.6	10.2	Go	4	..	39413b	69	19054	6.1	-30 2	9.17	9.4	F2	6	..	41066b
20	6237	5.8	-19 25	9.3	10.3	Ko	4	..	39413b	70	16945	6.1	-32 24	9.5	10.1	F8	3	..	41066b
21	5850	5.8	-22 42	8.5	8.7	G5	7	..	23121b	71	14928	6.1	-38 48	6.71	7.4	F2	10	..	38147b
22	15795	5.8	-25 26	9.7	9.7	F5	5	..	23813b	72	10034	6.1	-54 47	7.88	7.8	F8	6	..	39669b
23	15812	5.8	-27 0	10.4	11.4	G5	1	..	23813b	73	10066	6.1	-56 55	9.3	10.4	Ko	2	..	20558b
24	15811	5.8	-27 39	7.04	7.7	Ko	9	..	23813b	74	10065	6.1	-57 47	9.3	10.4	G5	2	5,1	20558b
25	15193	5.8	-34 58	6.72	7.1	F2	9	..	41066b	75	6626	6.1	-61 42	8.9	9.3	Fo	3	..	42486b
26	15243	5.8	-36 23	10.2	10.8	Ko	3	..	38147b	76	2669	6.1	-71 16	9.3	10.1	G5	2	..	20544b
27	14152	5.8	-48 40	8.7	9.9	K2	2	..	19941b	77	4774	6.2	+36 36	8.5	9.7	K5	1	..	38570i
28	9832	5.8	-56 1	9.3	9.6	Ko	3	..	20558b	78	4569	6.2	+23 6	8.5	9.3	G5	2	R	38821i
29	3637	5.8	-66 10	8.5	9.1	Go	6	..	20543b	79	5720	6.2	- 7 29	10.2	10.8	Go	2	..	40910b
30	1537	5.8	-77 39	9.7	10.5	G5	1	..	42794b	80	5828	6.2	- 8 11	10.6	11.4	G5	1	..	40910b
31	192	5.8	-88 50	8.3	8.8	F8	7	..	22980b	81	5775	6.2	-11 31	8.7	9.2	F8	6	..	39463b
32	953	5.9	+74 14	7.8	9.2	Ma	1	..	38025i	82	6239	6.2	-19 2	10.2	10.5	Fo	4	..	39413b
33	1224	5.9	+69 29	8.2	8.2	A	2	..	38025i	83	5852	6.2	-21 52	9.3	10.5	G5	1	..	23121b
34	3601	5.9	+47 12	8.5	9.0	F8	2	..	38810i	84	15814	6.2	-26 55	10.2	10.3	G5	4	..	23813b
35	3819	5.9	+45 22	9.22	9.30	A3	2	..	38844i	85	18218	6.2	-29 18	10.6	11.2	Go	1	..	23813b
36	5723	5.9	- 5 40	10.0	11.2	K5	1	..	40910b	86	18690	6.2	-31 53	9.7	11.4	K2	1	..	41066b
37	5717	5.9	- 7 16	10.2	10.7	F8	1	..	40910b	87	15197	6.2	-35 46	9.8	11.4	Ko	1	..	38147b
38	5856	5.9	- 9 50	10.0	10.0	Ao	4	..	40910b	88	14155	6.2	-48 47	9.1	9.3	Go	3	..	19941b
39	5855	5.9	-10 13	9.3	9.9	Go	5	..	39463b	89	13605	6.2	-50 47	9.7	10.0	F5	2	..	39669b
40	16019	5.9	-26 17	10.6	11.4	F8	2	..	23813b	90	9834	6.2	-56 43	9.5	9.9	F5	1	..	20558b
41	15194	5.9	-35 40	9.6	11.1	Go	2	..	38147b	91	7551	6.2	-60 11	8.1	7.5	Ao	8	..	42486b
42	14926	5.9	-38 18	10.2	10.6	F5	4	..	38147b	92	1278	6.3	+69 4	8.6	9.6	Ko	2	..	38580i
43	14787	5.9	-41 37	11.1	11.2	Ao	2	..	38147b	93	2260	6.3	+61 41	9.2	9.2	Ao	3	..	38803i
44	14932	5.9	-43 38	8.6	10.6	Ma	4	..	20549b	94	4604	6.3	+30 4	6.38	6.52	A5	7	..	38099i
45	13604	5.9	-50 13	8.9	9.6	Ko	2	..	41899b	95	4482	6.3	+23 59	8.8	9.6	G5	1	..	38821i
46	6310	5.9	-62 19	8.9	9.9	Ko	1	..	42486b	96	4978	6.3	+ 6 20	8.6	9.8	K5	1	..	14693b
47	6311	5.9	-62 29	9.3	9.9	Go	4	..	42486b	97	5930	6.3	- 9 3	9.8	10.9	K2	1	..	40910b
48	535	5.9	-85 10	8.7	10.1	Mb	5	R	21397b	98	6201	6.3	-11 51	9.3	9.9	Go	3	..	39463b
49	1016	6.0	+72 27	8.6	9.7	K2	1	..	38025i	99	15797	6.3	-25 35	10.6	11.2	F8	3	..	23813b
50	1225	6.0	+69 29	8.2	8.2	Ao	3	..	38025i	100	15810	6.3	-42 25	10.3	10.8	F8	3	..	20549b

THE HENRY DRAPER CATALOGUE.

210600

22^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	13763	6.3	-49 16	8.1	8.1	F5	8	..	19941b	51	5726	6.7	- 5 39	9.6	11.0	Ma	1	..	41073b
2	9835	6.3	-56 27	7.1	8.4	Ma	7	..	20558b	52	5928	6.7	- 6 2	8.7	9.3	Go	4	..	41073b
3	990	6.3	-80 58	8.5	9.5	Ko	3	..	21397b	53	6375	6.7	-20 21	10.9	11.1	F8	2	..	39413b
4	1409	6.4	+67 14	8.0	8.0	Ao	4	..	37277i	54	17055	6.7	-24 17	10.9	10.6	A3	2	..	23813b
5	1814	6.4	+63 36	9.2	9.3	A3	1	..	38902i	55	16025	6.7	-26 13	11.1	11.4	F8	2	..	23813b
6	3595	6.4	+50 22	9.22	10.57	Ma	2	..	16271m	56	14933	6.7	-37 57	10.4	11.7	F5	2	..	38147b
7	4774	6.4	+39 46	8.1	8.6	F8	2	..	37978i	57	13764	6.7	-49 33	7.56	8.4	G5	8	..	19941b
8	4307	6.4	+29 9	8.7	9.8	K2	1	..	38031i	58	6314	6.7	-62 47	9.5	10.3	G5	1	..	42486b
9	4260	6.4	- 1 28	9.0	10.2	K5	1	..	41073b	59	735	6.7	-83 8	9.0	9.8	G5	6	..	21397b
10	5394	6.4	- 3 26	8.9	9.5	Go	3	..	41073b	60	4780	6.8	+36 47	8.1	9.3	K5	2	..	38570i
11	6082	6.4	-18 28	9.6	10.6	Ko	2	..	39413b	61	4309	6.8	+28 45	7.44	7.50	A2	7	..	38031i
12	15798	6.4	-25 20	10.6	11.4	Go	2	..	23813b	62	4864a	6.8	+13 52	var.	var.	Md	..	R	M
13	15954	6.4	-33 2	8.2	9.4	K5	3	..	41066b	63	6228	6.8	-14 43	8.31	8.73	F5	6	..	39463b
14	15248	6.4	-36 40	9.6	10.8	K2	3	..	38147b	64	15803	6.8	-25 39	10.9	10.6	F5	2	..	23813b
15	1017	6.5	+72 17	7.54	8.89	Mb	2	..	38025i	65	15255	6.8	-36 40	10.2	11.1	A2	3	..	38147b
16	2800	6.5	+54 4	7.7	7.7	Ao	5	..	37351i	66	4315	6.9	+42 32	6.80	7.80	Ko	6	..	37978i
17	4707	6.5	+17 15	8.4	8.5	A3	3	..	38822i	67	4725	6.9	+35 46	7.25	8.25	Ko	5	..	38099i
18	4812	6.5	+ 9 12	8.2	9.2	Ko	2	..	14693b	68	4279	6.9	+28 2	8.7	9.0	F2	2	3,2	36910i
19	5860	6.5	-10 14	8.9	9.9	Ko	5	..	39463b	69	4968	6.9	+ 5 48	8.5	8.8	Fo	3	..	38596i
20	17304	6.5	-23 48	10.6	11.4	Fo	2	..	23813b	70	4677	6.9	+ 3 23	9.3	9.8	F8	2	..	10174b
21	15956	6.5	-32 55	9.6	9.4	F8	3	..	41066b	71	6204	6.9	-12 6	9.3	9.4	A5	4	..	39463b
22	14687	6.5	-40 42	6.66	7.0	Ko	9	..	20549b	72	6161	6.9	-15 28	10.7	10.8	A5	1	..	39413b
23	11993	6.5	-52 12	9.0	9.4	F8	4	..	39669b	73	6461	6.9	-17 44	10.2	10.7	F8	1	..	39413b
24	7778	6.5	-59 14	9.1	10.3	K5	1	..	42494b	74	6083	6.9	-18 37	10.2	11.3	K2	1	..	39413b
25	1726	6.6	+65 49	8.5	8.6	A2	2	..	38902i	75	6240	6.9	-19 36	10.2	11.1	G5	2	..	39413b
26	2261	6.6	+61 25	8.9	8.9	Ao	2	..	38803i	76	16027	6.9	-25 58	10.9	10.9	F8	2	..	23813b
27	2721	6.6	+56 59	8.7	9.8	K2	2	..	37351i	77	15820	6.9	-27 19	10.6	10.6	F8	3	..	23813b
28	2695	6.6	+55 36	6.87	6.75	B5	7	..	37351i	78	15821	6.9	-27 35	7.44	8.2	Ko	9	..	23813b
29	3720	6.6	+47 25	7.62	8.04	F5	6	..	38810i	79	15256	6.9	-36 3	9.6	10.5	Go	1	..	41066b
30	4314	6.6	+42 14	8.0	8.1	A2	4	..	37978i	80	14793	6.9	-41 32	10.9	10.5	F5	2	..	38147b
31	4966	6.6	+ 5 41	8.6	9.2	Go	4	..	14693b	81	403	6.9	-86 39	8.4	9.4	Ko	5	..	15173b
32	4261	6.6	- 1 43	8.49	9.49	Ko	4	..	41073b	82	4318	7.0	+43 2	7.48	8.55	K2	3	0,2	37978i
33	6039	6.6	-15 59	9.6	10.8	K5	3	..	39413b	83	4775	7.0	+39 41	7.9	8.0	A2	4	..	37978i
34	6460	6.6	-17 38	10.5	11.1	G	1	..	39413b	84	4647	7.0	+31 35	7.8	8.1	Fo	6	..	38099i
35	15800	6.6	-25 44	9.9	10.3	F2	4	..	23813b	85	4365	7.0	+26 46	8.5	9.5	Ko	1	..	38597i
36	16949	6.6	-32 33	8.1	8.2	F5	7	..	41066b	86	4981	7.0	+ 6 24	7.01	7.29	Fo	5	..	38596i
37	14932	6.6	-38 47	9.6	9.4	F5	4	..	38147b	87	5777	7.0	-11 34	7.36	8.71	Ma	7	..	39463b
38	14935	6.6	-43 2	8.3	8.8	A2	8	..	20549b	88	6241	7.0	-19 45	9.6	9.9	F8	4	..	39413b
39	14097	6.6	-47 1	8.7	9.7	F8	3	..	19941b	89	17059	7.0	-24 27	10.9	11.9	Ko	1	..	23813b
40	1226	6.7	+69 45	8.2	8.5	F2	3	..	38025i	90	14618	7.0	-39 3	10.6	11.4	F8	1	..	38147b
41	1815	6.7	+63 38	7.07	7.13	A2	..	0,2	56,101	91	15818	7.0	-42 15	9.1	9.8	Go	3	..	20549b
42	2475	6.7	+60 12	8.26	8.76	F8	3	..	38803i	92	14621	7.0	-45 48	9.1	10.0	A2	3	..	19941b
43	2471	6.7	+57 19	8.5	8.9	F5	1	..	38803i	93	9838	7.0	-55 58	9.0	9.6	Go	3	..	20558b
44	3126	6.7	+52 53	9.2	9.2	Ao	2	..	37351i	94	6315	7.0	-61 57	8.7	9.9	K5	3	..	42486b
45	3596	6.7	+50 19	7.97	7.97	Ao	3	..	37351i	95	814	7.1	+75 59	8.47	8.89	F5	3	3,2	38903i
46	4276	6.7	+27 14	7.07	7.07	Ao	5	..	38031i	96	3633	7.1	+48 33	7.6	8.8	K5	1	..	38810i
47	4684	6.7	+17 2	8.7	9.7	Ko	1	..	38822i	97	3722	7.1	+48 11	6.72	6.70	B9	8	..	38810i
48	4262	6.7	- 0 51	8.55	8.97	F5	4	..	10174b	98	4701	7.1	+39 13	7.40	8.58	K5	3	..	37978i
49	4263	6.7	- 1 12	9.44	10.44	Ko	2	..	41073b	99	4360	7.1	+32 54	9.4	9.8	F5	3	..	38099i
50	5727	6.7	- 5 25	9.2	10.2	Ko	3	..	41073b	100	4649	7.1	+31 19	9.4	10.2	G5	1	..	38031i

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	4574	7.1	+22 37	9.1	9.7	Go	1	5,I	27807i	51	4982	7.4	+7 1	8.4	8.9	F8	3	..	14693b
2	4592	7.1	+15 33	6.06	7.06	Ko	8	..	38114i	52	5727	7.4	-6 58	7.37	7.93	Go	10	..	40910b
3	5725	7.1	-7 34	8.8	9.6	G5	5	..	40910b	53	6232	7.4	-13 58	9.2	10.0	G5	4	..	39463b
4	6129	7.1	-13 7	9.8	10.6	G5	2	..	39463b	54	6231	7.4	-14 23	9.3	10.3	Ko	2	..	39463b
5	6229	7.1	-14 42	6.17	6.45	Fo	8	..	39463b	55	5858	7.4	-21 59	9.2	9.6	G5	4	..	23121b
6	6040	7.1	-15 48	9.3	10.1	G5	3	..	39413b	56	15823	7.4	-27 0	8.0	8.5	Ko	8	..	23813b
7	6084	7.1	-18 31	8.7	9.3	Go	6	..	39413b	57	17646	7.4	-28 47	9.1	9.7	Ko	5	..	23813b
8	6377	7.1	-20 37	9.6	11.0	Ko	2	..	39413b	58	19062	7.4	-30 2	9.07	10.0	K2	4	..	41066b
9	15262	7.1	-35 56	8.6	10.2	Ko	2	..	41066b	59	1728	7.5	+65 49	7.9	7.9	Ao	5	..	38902i
10	14815	7.1	-44 15	8.9	10.6	G5	3	..	20549b	60	2476	7.5	+57 26	8.0	8.1	A5	6	..	37351i
11	3640	7.1	-66 26	9.0	10.0	Ko	2	..	20543b	61	3277	7.5	+51 49	8.0	9.0	Ko	1	..	37351i
12	2670	7.1	-70 59	8.6	8.6	Ao	6	..	20544b	62	4548	7.5	+24 28	6.14	7.14	Ko	5	..	38597i
13	1048	7.1	-80 44	8.9	9.9	Ko	3	..	21397b	63	5732	7.5	-5 13	6.41	6.83	F5	7	5,10	44122b
14	3273	7.2	+51 55	8.6	8.6	A	1	..	37351i	64	6164	7.5	-15 10	9.6	10.4	G5	3	..	39413b
15	3602	7.2	+50 20	5.44	5.50	A2	9	..	37351i	65	6381	7.5	-20 18	10.5	11.1	F8	2	..	39413b
16	4751	7.2	+11 15	8.7	9.9	K5	1	..	14693b	66	18234	7.5	-29 20	10.9	11.7	G5	2	..	23813b
17	5000	7.2	+9 41	8.0	9.1	K2	3	..	14693b	67	14938	7.5	-37 59	7.8	7.9	A3	8	..	38147b
18	4818	7.2	+7 58	8.1	8.6	F8	5	..	14693b	68	9808	7.5	-55 48	8.1	7.9	Ao	8	..	20558b
19	4476	7.2	+2 14	7.02	7.30	Fo	3	0,7-	38118i	69	7932	7.5	-58 31	9.2	9.9	G5	3	..	20558b
20	5398	7.2	-3 9	9.6	10.7	K2	1	..	41073b	70	1634	7.6	+65 1	7.55	7.55	Ao	6	..	37257i
21	6379	7.2	-20 37	9.3	9.9	Go	5	..	39413b	71	4703	7.6	+38 32	8.3	8.7	F5	3	..	38570i
22	5854	7.2	-22 0	9.3	10.3	Go	3	..	23121b	72	4785	7.6	+37 10	7.62	8.12	F8	4	..	38570i
23	17644	7.2	-28 53	10.6	11.4	F8	3	..	23813b	73	4984	7.6	+6 55	8.4	8.5	A2	3	..	38596i
24	14939	7.2	-43 24	8.6	9.8	K2	6	..	20549b	74	4985	7.6	+6 38	9.3	9.6	F2	2	..	14693b
25	14817	7.2	-44 10	8.9	11.2	K2	2	..	20549b	75	4836	7.6	+0 41	8.4	9.2	G5	3	..	10174b
26	11994	7.2	-52 45	7.8	8.1	F5	5	..	42094b	76	6130	7.6	-13 31	8.7	9.5	G5	4	..	39463b
27	7552	7.2	-60 0	8.3	8.5	F5	5	..	42486b	77	6042	7.6	-16 15	9.8	11.4	Go	2	..	39413b
28	992	7.2	-81 29	8.9	9.3	F5	4	..	21397b	78	6085	7.6	-17 55	10.0	11.0	Ko	2	..	39413b
29	1633	7.3	+64 29	8.7	8.7	Ao	1	..	38902i	79	6382	7.6	-20 7	10.2	10.5	G5	2	..	39413b
30	3274	7.3	+51 41	8.6	8.6	A	1	..	37351i	80	5860	7.6	-21 54	8.3	8.1	Ao	8	..	23121b
31	3611	7.3	+46 39	7.7	8.2	F8	4	..	38810i	81	15266	7.6	-36 24	9.8	11.6	Ko	1	..	38147b
32	4484	7.3	+23 17	8.0	9.4	Mb	..	..	M	82	14798	7.6	-41 38	9.3	9.5	F8	6	..	20549b
33	5830	7.3	-8 31	7.04	7.38	F2	10	..	40910b	83	14103	7.6	-47 15	8.3	8.7	Go	5	..	19941b
34	5778	7.3	-10 55	8.5	8.5	Ao	7	..	39463b	84	9810	7.6	-55 6	9.3	9.9	Go	2	..	39669b
35	6205	7.3	-11 55	9.6	11.0	Mb	2	..	39463b	85	7554	7.6	-60 35	9.2	10.2	Ko	2	..	42494b
36	6380	7.3	-20 11	10.2	10.5	Go	2	..	39413b	86	1196	7.6	-78 56	8.5	9.6	K2	5	..	42794b
37	6175	7.3	-21 23	7.59	8.1	F5	8	..	39413b	87	3132	7.7	+52 29	8.6	8.9	Fo	3	..	37351i
38	16032	7.3	-26 25	9.9	10.0	F5	5	..	23813b	88	4507	7.7	+37 23	8.06	9.06	Ko	3	..	38570i
39	16033	7.3	-26 50	6.16	6.4	A2	9	..	41878b	89	4550	7.7	+24 59	8.5	9.5	Ko	1	..	38821i
40	15819	7.3	-42 43	9.3	9.4	A2	5	..	20549b	90	6207	7.7	-12 39	9.6	9.9	Fo	4	..	39463b
41	10070	7.3	-57 43	7.6	9.6	Ma	4	..	20558b	91	6233	7.7	-14 22	8.1	9.1	Ko	6	..	39463b
42	2671	7.3	-71 9	7.3	8.3	Ko	7	..	20544b	92	6463	7.7	-17 7	8.7	9.0	Fo	5	..	39413b
43	1818	7.4	+63 52	8.5	8.5	Ao	4	..	38902i	93	15267	7.7	-36 15	8.7	9.3	G5	4	..	41066b
44	2042	7.4	+63 3	9.0	9.1	A2	1	..	38902i	94	14626	7.7	-45 51	9.1	10.1	F8	3	..	19941b
45	2475	7.4	+57 42	3.62	4.62	Ko	..	R	56,101	95	14241	7.7	-46 18	7.6	8.4	Ko	6	..	19941b
46	4414	7.4	+41 41	9.4	9.5	A2	3	..	38570i	96	14242	7.7	-46 25	8.1	9.7	G5	3	..	19941b
47	4506	7.4	+37 55	7.36	8.71	Ma	4	..	38570i	97	10262	7.7	-53 48	9.6	10.4	G5	2	..	39669b
48	4689	7.4	+25 32	8.1	8.1	Ao	4	..	38597i	98	7780	7.7	-59 48	8.72	9.9	K2	4	..	42494b
49	4866a	7.4	+14 4	var.	var.	Md	..	R	M	99	1049	7.7	-80 22	9.7	10.5	G5	1	..	42794b
50	4779	7.4	+13 0	8.8	9.6	G5	1	..	38114i	100	3764	7.8	+49 26	7.8	8.6	G5	2	0,2	37028i

THE HENRY DRAPER CATALOGUE.

210800

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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	4486	7.8	+23 16	7.50	8.57	K2	2	..	3882ii	51	15209	8.1	-35 16	7.8	7.6	Fo	8	..	41066b
2	5867	7.8	-10 31	9.8	10.8	Ko	2	..	39463b	52	7781	8.1	-59 10	9.5	10.7	K5	1	..	42494b
3	5781	7.8	-11 41	9.3	10.1	G5	3	..	39463b	53	1442	8.1	-78 1	5.63	5.8	A5	..	R	56,148
4	6243	7.8	-19 5	10.7	11.4	Go	2	..	39413b	54	1220	8.2	+71 2	8.6	9.2	F5	2	..	36227i
5	14692	7.8	-40 33	9.6	10.8	G5	3	..	38147b	55	2727	8.2	+56 21	5.42	5.92	F8	..	0,8	2808c
6	1020	7.9	+72 54	8.5	8.5	Ao	3	..	38025i	56	3283	8.2	+51 44	8.9	10.3	Ma	..	..	M
7	1111	7.9	+71 51	4.99	5.77	G5	..	5,10	56,101	57	3640	8.2	+48 45	7.6	7.9	Fo	2	..	38810i
8	2045	7.9	+62 55	8.0	7.9	B5	5	3,2	38902i	58	4756	8.2	+40 26	8.9	8.9	Ao	1	..	38570i
9	3281	7.9	+51 56	7.7	7.5	B2	5	R	3735ii	59	4821	8.2	+ 5 3	9.00	10.07	K2	1	..	14693b
10	4364	7.9	+32 15	9.1	10.1	Ko	1	..	3803ii	60	4322	8.2	- 0 15	7.99	9.17	K5	3	0,1	10174b
11	4869	7.9	+13 25	8.6	9.2	Go	1	..	38114i	61	4267	8.2	- 1 19	10.0	11.1	K2	2	..	41073b
12	4707	7.9	+10 54	9.3	9.3	Ao	2	..	14693b	62	5714	8.2	- 2 9	7.24	8.31	K2	2	..	17420b
13	4264	7.9	- 1 43	9.87	10.87	Ko	1	..	41073b	63	5833	8.2	- 8 44	9.6	10.2	Go	3	..	40910b
14	6043	7.9	-16 27	9.6	10.2	Go	3	..	39413b	64	6210	8.2	-11 48	9.3	9.8	F8	3	..	39463b
15	6384	7.9	-20 39	10.0	10.3	Go	3	..	39413b	65	6133	8.2	-12 53	10.2	11.3	K2	1	..	39463b
16	17065	7.9	-24 40	10.6	11.2	Ko	1	..	23813b	66	6086	8.2	-17 50	10.5	11.1	Go	1	..	39413b
17	14802	7.9	-40 57	11.1	11.6	Ko	1	..	38147b	67	6245	8.2	-19 36	10.7	11.1	Ko	1	..	39413b
18	11996	7.9	-52 1	9.3	10.4	G5	1	..	39669b	68	17317	8.2	-23 40	10.2	10.3	G5	2	..	23813b
19	3767	8.0	+49 42	7.30	7.58	Fo	5	5,5	38810i	69	15268	8.2	-36 14	10.2	11.1	Go	2	..	38147b
20	3612	8.0	+46 36	6.67	6.67	Ao	9	..	38810i	70	14698	8.2	-37 24	10.6	11.6	Ko	1	..	38147b
21	4068	8.0	+45 4	9.02	9.02	A	1	..	38844i	71	14629	8.2	-39 16	9.5	10.5	F8	4	..	38147b
22	4753	8.0	+14 31	8.4	8.5	A2	3	..	38114i	72	10039	8.2	-54.45	8.2	10.4	Ko	2	..	39669b
23	4971	8.0	+ 5 39	8.7	9.1	F5	5	..	14693b	73	1112	8.3	+71 37	6.36	6.34	B9	10	..	38025i
24	4477	8.0	+2 50	9.0	10.1	K2	1	..	10174b	74	2265	8.3	+62 2	9.4	9.5	A2	3	..	38803i
25	4265	8.0	- 1 12	9.44	9.44	Ao	2	..	10174b	75	2478	8.3	+57 13	8.5	8.6	A2	2	..	38803i
26	5635	8.0	- 4 22	9.1	10.1	Ko	3	..	41073b	76	3730	8.3	+47 18	8.0	9.0	Ko	3	..	38810i
27	5934	8.0	- 9 38	9.56	9.62	A2	4	..	40910b	77	4973	8.3	+ 5 21	9.06	10.13	K2	1	..	14693b
28	6132	8.0	-13 30	9.6	10.6	Ko	1	..	39463b	78	5834	8.3	- 7 52	8.7	9.2	F8	6	..	40910b
29	6166	8.0	-15 31	10.5	11.0	F8	1	..	39413b	79	6246	8.3	-18 57	9.8	10.5	G5	4	..	39413b
30	6165	8.0	-15 44	10.5	11.0	F8	2	..	39413b	80	5862	8.3	-22 45	8.5	9.3	G5	5	..	23121b
31	6464	8.0	-17 44	9.8	10.9	K2	1	..	39413b	81	17072	8.3	-24 11	9.1	8.9	F5	6	..	23813b
32	6386	8.0	-19 52	10.9	11.4	G5	1	..	39413b	82	18701	8.3	-30 59	7.7	9.4	K2	5	..	41066b
33	6385	8.0	-20 5	10.0	10.2	F5	5	..	39413b	83	15828	8.3	-42 49	8.1	8.8	F8	8	..	20549b
34	17648	8.0	-27 57	8.7	9.1	F5	6	..	23813b	84	1228	8.4	+69 38	5.54	5.88	F2	10	..	38025i
35	18699	8.0	-31 21	8.1	9.4	G5	5	..	41066b	85	2482	8.4	+59 13	7.6	8.6	Ko	..	0,5	56,101
36	14632	8.0	-45 13	8.6	9.5	Go	5	..	20549b	86	2701	8.4	+55 16	9.5	9.5	A	1	..	3735ii
37	10038	8.0	-54 5	7.9	8.2	Fo	5	..	42094b	87	4070	8.4	+45 4	9.17	9.17	A	1	..	38844i
38	321	8.0	-87 37	9.7	10.5	G5	3	..	22980b	88	4512	8.4	+37 33	9.4	10.6	K5	1	..	38570i
39	2402	8.1	+58 56	5.19	..	Od	..	R	56,101	89	4456	8.4	+34 7	5.42	6.42	Ko	9	..	38099i
40	3606	8.1	+50 49	8.7	9.2	F8	2	0,1	37028i	90	4712	8.4	+17 48	6.62	7.69	K2	4	..	38822i
41	3727	8.1	+47 22	8.6	8.6	Ao	2	..	38810i	91	4708	8.4	+10 22	8.22	8.50	Fo	3	0,2	14693b
42	4607	8.1	+29 45	8.3	8.7	F5	4	..	3803ii	92	4824	8.4	+ 7 56	8.7	8.7	Ao	3	..	14693b
43	5403	8.1	- 3 14	9.3	10.5	K5	2	..	41073b	93	4268	8.4	- 1 19	10.0	11.1	K2	1	..	41073b
44	5782	8.1	-11 15	9.6	10.2	Go	4	..	39463b	94	5735	8.4	- 5 4	9.3	10.4	K2	1	..	41073b
45	6209	8.1	-12 25	7.06	7.84	G5	7	..	39463b	95	6136	8.4	-13 12	9.3	10.4	K2	2	..	39463b
46	6244	8.1	-19 37	10.9	11.4	G5	1	..	39413b	96	6135	8.4	-13 43	9.8	10.9	K2	1	..	39463b
47	6178	8.1	-21 9	9.8	10.5	Go	3	..	39413b	97	6167	8.4	-15 22	9.8	10.1	Fo	3	..	39413b
48	15815	8.1	-25 41	5.58	5.9	F8	..	..	56,148	98	6168	8.4	-15 26	9.3	9.8	F8	4	..	39413b
49	18238	8.1	-29 10	9.1	11.3	Ko	3	..	23813b	99	15816	8.4	-25 7	7.7	9.4	Ko	6	..	23813b
50	16959	8.1	-32 0	8.9	9.4	F5	4	..	41066b	100	14699	8.4	-40 15	8.2	9.4	Go	6	..	20549b

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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	193	8.4	-88 46	10.0	11.0	Ko	2	..	22980b	51	6629	8.7	-61 19	9.3	9.9	Go	2	2,3	19898b
2	1221	8.5	+70 39	7.64	8.20	Go	4	..	38025i	52	1222	8.8	+70 28	7.84	7.90	A2	3	..	38025i
3	1819	8.5	+63 29	8.5	9.5	Ko	1	..	38902i	53	1286	8.8	+68 22	8.0	8.0	Ao	4	..	37277i
4	2356	8.5	+61 5	8.5	8.5	Ao	4	..	38803i	54	4152	8.8	+43 49	8.7	8.7	Ao	2	..	38844i
5	2403	8.5	+58 34	6.52	7.52	Ko	..	0,6	56,101	55	4650	8.8	+30 53	7.86	8.93	K2	2	..	38031i
6	4758	8.5	+40 18	8.22	9.22	Ko	2	..	38570i	56	4490	8.8	+23 33	8.3	8.6	Fo	3	..	38821i
7	4709	8.5	+38 34	9.2	10.3	K2	1	..	38570i	57	4959	8.8	+18 25	8.2	8.5	Fo	3	..	38822i
8	4644	8.5	+30 28	8.9	9.9	Ko	2	..	38031i	58	4598	8.8	+15 22	8.64	9.64	Ko	2	..	38114i
9	4781	8.5	+12 13	8.2	9.3	K2	2	2,1	33781i	59	5937	8.8	- 5 58	10.2	11.0	G5	2	..	40910b
10	5637	8.5	- 4 16	8.7	9.5	G5	4	..	41073b	60	6180	8.8	-21 35	5.45	6.9	G5	..	..	56,148
11	5736	8.5	- 5 38	10.9	11.7	G5	1	..	40910b	61	15821	8.8	-25 40	10.6	10.6	Go	2	..	23813b
12	5835	8.5	- 8 19	9.2	9.3	A5	5	..	40910b	62	19073	8.8	-29 54	8.76	8.9	Ko	4	..	41066b
13	17319	8.5	-23 38	10.9	10.3	F8	3	..	23813b	63	10266	8.8	-53 12	7.9	8.0	F8	5	..	42094b
14	17074	8.5	-24 25	10.2	10.6	K2	2	..	23813b	64	10072	8.8	-57 22	8.8	9.8	G5	4	..	20558b
15	19068	8.5	-30 48	9.7	10.6	Ko	2	..	41066b	65	6631	8.8	-61 40	9.2	9.7	G5	2	5,1	42494b
16	15269	8.5	-36 11	10.0	11.3	G5	2	..	38147b	66	3475	8.8	-68 51	8.4	9.4	Ko	4	..	20543b
17	14945	8.5	-38 17	8.6	10.1	Ko	6	..	38147b	67	995	8.8	-80 57	5.11	6.5	Mb	..	R	56,148
18	14804	8.5	-41 51	6.40	6.4	Go	..	0,10	28,216	68	4420	8.9	+41 17	8.1	9.3	K5	1	..	38570i
19	11999	8.5	-52 42	7.5	8.7	Ko	5	..	42094b	69	5103	8.9	+20 34	8.05	8.05	Ao	4	..	38822i
20	9849	8.5	-56 1	8.9	9.3	Ko	5	..	20558b	70	5005	8.9	+ 9 35	9.3	10.3	Ko	1	..	14693b
21	1745	8.5	-75 27	9.3	10.4	K2	3	..	42794b	71	6248	8.9	-19 24	10.2	11.0	F8	3	..	39413b
22	2702	8.6	+54 36	7.44	8.51	K2	5	..	37351i	72	6249	8.9	-19 44	7.14	8.1	F5	9	..	39413b
23	4368	8.6	+33 6	7.32	7.88	Go	5	..	38099i	73	18704	8.9	-31 11	8.9	9.4	F8	4	..	41066b
24	4318	8.6	+28 43	8.7	8.8	A2	2	..	38031i	74	16964	8.9	-32 42	10.2	10.9	G5	1	..	41066b
25	4691	8.6	+25 26	6.79	7.57	G5	4	..	38597i	75	16963	8.9	-32 49	9.2	10.9	Ko	1	..	41066b
26	5738	8.6	- 4 57	7.29	8.29	Ko	7	..	41073b	76	14702	8.9	-37 3	8.6	8.0	F8	7	..	38147b
27	5739	8.6	- 5 9	8.8	9.3	F8	4	..	41073b	77	14117	8.9	-46 59	9.5	10.0	A2	2	..	19941b
28	5936	8.6	- 6 10	9.3	10.5	K5	1	..	41073b	78	10040	8.9	-54 29	8.6	8.6	Fo	4	..	42094b
29	6212	8.6	-12 6	9.3	10.3	Ko	3	..	39463b	79	767	9.0	+82 10	7.68	7.68	Ao	3	..	38590i
30	6247	8.6	-19 6	10.9	11.1	F5	2	..	39413b	80	2047	9.0	+62 59	7.69	8.76	K2	2	..	38902i
31	5864	8.6	-21 54	8.1	8.0	Ao	10	..	23121b	81	2702	9.0	+55 43	8.9	10.1	K5	1	..	37351i
32	17320	8.6	-23 10	10.2	10.3	F5	1	..	23121b	82	3643	9.0	+48 52	7.89	9.07	K5	1	..	38810i
33	15818	8.6	-25 49	10.4	10.9	G5	2	..	23813b	83	4651	9.0	+31 8	8.3	9.3	Ko	2	..	38031i
34	17653	8.6	-28 16	5.40	5.38	B9	..	R	56,101	84	4821	9.0	+ 8 58	8.0	9.0	Ko	5	..	14693b
35	19070	8.6	-30 34	9.5	9.5	F5	4	..	41066b	85	4975	9.0	+ 5 17	8.17	8.67	F8	7	..	14693b
36	15467	8.6	-34 40	9.6	10.2	F8	2	..	41066b	86	4823	9.0	+ 5 0	8.85	9.41	Go	2	0,1	14693b
37	14638	8.6	-45 0	10.8	10.9	Ao	2	..	20549b	87	4269	9.0	- 1 9	9.0	10.1	K2	2	..	41073b
38	4014	8.6	-65 19	8.9	9.4	F8	4	..	20543b	88	5938	9.0	- 6 15	7.7	8.1	F5	7	..	41073b
39	2358	8.7	+60 16	5.52	6.52	Ko	9	..	38803i	89	6138	9.0	-12 51	10.0	10.8	G5	3	..	39463b
40	2485	8.7	+59 35	7.6	8.8	K5	2	0,1	38803i	90	6468	9.0	-17 7	9.1	9.7	Go	3	..	39413b
41	2810	8.7	+53 37	8.7	8.7	Ao	1	..	37351i	91	6183	9.0	-21 26	9.1	9.1	F8	4	..	23121b
42	4071	8.7	+44 17	8.0	8.6	Go	3	..	38844i	92	6182	9.0	-21 32	9.3	9.3	F5	3	..	23121b
43	4513	8.7	+37 57	8.7	9.9	K5	2	..	38570i	93	6181	9.0	-21 42	9.3	10.3	F8	1	..	23121b
44	4379	8.7	+26 49	7.18	7.60	F5	4	0,3	38031i	94	17079	9.0	-24 32	11.1	11.4	G	1	..	23813b
45	4826	8.7	+ 7 13	7.9	9.0	K2	3	..	14693b	95	18248	9.0	-29 23	8.9	9.1	A5	5	..	41066b
46	4838	8.7	+ 1 7	8.14	9.14	Ko	3	..	10174b	96	15978	9.0	-33 39	9.5	10.3	G5	3	..	41066b
47	4837	8.7	+ 0 23	7.82	8.32	F8	5	0,2	10174b	97	15214	9.0	-35 14	9.6	10.9	G5	1	..	41066b
48	6214	8.7	-12 39	10.2	11.0	G5	2	..	39463b	98	15275	9.0	-36 42	9.3	9.3	Go	5	..	38147b
49	6044	8.7	-16 41	8.7	9.0	Fo	6	..	39413b	99	14948	9.0	-38 40	10.4	11.2	Go	2	..	38147b
50	18244	8.7	-29 37	8.5	10.0	K2	3	..	41066b	100	14825	9.0	-44 42	8.3	8.8	F5	6	..	20549b

THE HENRY DRAPER CATALOGUE.

211000

22^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	14118	9.0	-47 2	8.3	9.1	F2	5	..	19941b	51	6251	9.4	-19 18	10.2	11.4	Go	3	..	39413b
2	13781	9.0	-49 12	8.7	9.0	G5	6	..	41899b	52	14827	9.4	-44 8	7.12	8.0	Ko	8	..	20549b
3	1229	9.1	+69 53	8.34	8.62	Fo	3	..	3858oi	53	14644	9.4	-44 57	6.16	7.1	Ko	10	..	20549b
4	3616	9.1	+50 41	8.0	8.8	G5	3	0,1	37028i	54	12000	9.4	-52 40	8.4	9.3	K2	3	..	42094b
5	4710	9.1	+38 43	8.1	8.9	G5	4	..	3857oi	55	7936	9.4	-58 4	7.19	8.7	Mb	7	..	20558b
6	4280	9.1	+28 7	6.01	7.08	K2	9	..	3803ii	56	7783	9.4	-59 44	9.02	9.6	G5	3	..	42494b
7	4823	9.1	+8 44	8.2	9.2	Ko	3	..	14693b	57	2708	9.5	+54 49	8.0	8.0	B9	7	..	3735ii
8	5717	9.1	-1 56	9.6	10.6	Ko	2	..	41073b	58	2815	9.5	+53 24	9.2	9.2	A	1	..	3735ii
9	5869	9.1	-10 37	9.6	10.6	Ko	1	..	39463b	59	4662	9.5	+31 26	8.7	8.8	A2	3	..	3803ii
10	6237	9.1	-14 1	9.8	10.4	G5	1	..	39463b	60	4652	9.5	+30 54	8.9	9.0	A2	1	..	3803ii
11	6045	9.1	-16 4	9.3	10.1	G5	3	..	39413b	61	4270	9.5	-1 45	9.3	10.1	G5	1	..	41073b
12	17656	9.1	-28 12	9.7	10.6	Ko	3	..	23813b	62	5732	9.5	-6 54	7.7	7.8	A2	10	..	40910b
13	10042	9.1	-54 44	8.88	9.2	A3	2	..	42094b	63	5870	9.5	-10 38	10.2	10.7	F8	2	..	39463b
14	1820	9.2	+63 13	7.8	7.8	Ao	4	..	38902i	64	6171	9.5	-15 13	10.0	10.8	G5	2	..	39413b
15	4611	9.2	+30 7	9.01	9.01	Ao	2	..	3803ii	65	16043	9.5	-26 9	7.6	8.9	K5	5	..	23813b
16	4756	9.2	+11 41	8.1	8.5	F5	3	3,2	38114i	66	14710	9.5	-40 5	10.2	11.6	Mb	..	..	M
17	4824	9.2	+8 48	8.8	8.8	A	4	..	14693b	67	14959	9.5	-42 57	9.9	11.8	G5	2	..	20549b
18	4325	9.2	-0 27	8.0	9.2	K5	2	..	10174b	68	14960	9.5	-43 29	9.9	10.9	G5	3	..	20549b
19	5940	9.2	-6 4	8.7	8.8	A2	5	..	41073b	69	9853	9.5	-56 35	9.2	9.8	Go	2	..	42494b
20	5785	9.2	-11 46	9.2	10.2	Ko	2	..	39463b	70	2709	9.6	+54 58	8.1	9.1	Ko	4	..	34819i
21	6218	9.2	-12 45	8.3	9.1	G5	6	..	39463b	71	3146	9.6	+52 39	7.60	7.74	A5	6	..	3735ii
22	6169	9.2	-15 36	7.02	7.36	F2	10	..	39413b	72	4426	9.6	+41 58	8.6	8.6	A	2	..	3857oi
23	6087	9.2	-18 15	9.8	10.8	Ko	3	..	39413b	73	4711	9.6	+39 13	4.64	5.71	K2	..	0,10	56,101
24	17081	9.2	-24 30	6.83	7.5	F5	10	..	23813b	74	4325	9.6	+28 44	8.5	8.6	A2	6	..	3803ii
25	16965	9.2	-32 40	8.6	8.5	F2	7	..	41066b	75	4714	9.6	+17 33	8.6	9.7	K2	1	..	38822i
26	14119	9.2	-47 17	9.2	10.3	Ko	2	..	19941b	76	4694	9.6	+16 41	6.59	7.66	K2	6	0,5	38822i
27	13620	9.2	-50 3	9.7	9.7	Go	2	..	41899b	77	4828	9.6	+8 20	8.2	8.2	Ao	2	..	38114i
28	2674	9.2	-72 0	10.0	10.8	G5	1	..	19967b	78	4271	9.6	-0 53	9.0	9.6	Go	3	..	41073b
29	2048	9.3	+62 48	6.06	7.41	Ma	6	0,3	38902i	79	4272	9.6	-1 17	9.0	10.1	K2	3	..	41073b
30	2813	9.3	+53 29	8.6	8.6	Ao	2	..	3735ii	80	5944	9.6	-6 23	8.3	8.9	Go	6	..	41073b
31	4757	9.3	+12 11	8.8	9.9	K2	1	..	38114i	81	6048	9.6	-16 30	10.2	11.0	G5	1	..	39413b
32	4976	9.3	+5 51	8.7	9.2	F8	3	..	14693b	82	6469	9.6	-17 39	9.2	9.8	Go	2	..	39413b
33	4593	9.3	+1 29	9.3	10.3	Ko	1	..	10174b	83	6392	9.6	-20 23	8.9	9.8	Ko	5	..	39413b
34	5742	9.3	-5 37	10.5	10.9	F5	2	..	40910b	84	15824	9.6	-25 44	10.4	10.3	G5	2	..	23813b
35	5942	9.3	-6 47	9.6	10.4	G5	2	..	40910b	85	16044	9.6	-26 29	8.1	7.8	F5	8	..	23813b
36	6219	9.3	-11 49	9.8	9.9	A2	4	..	39463b	86	14705	9.6	-37 4	10.9	10.9	Go	2	..	38147b
37	6047	9.3	-16 12	7.9	9.0	K2	5	..	39413b	87	14640	9.6	-39 31	9.6	10.8	G5	3	..	38147b
38	6046	9.3	-16 19	6.60	7.38	G5	10	..	39413b	88	14810	9.6	-41 51	4.86	6.0	Go	..	R	28,216
39	6250	9.3	-19 11	8.8	9.4	G5	7	..	39413b	89	13223	9.6	-51 49	8.1	8.1	Ao	4	..	42094b
40	6184	9.3	-21 41	10.0	9.9	Go	2	..	23121b	90	10044	9.6	-54 3	8.6	9.0	F8	3	..	42094b
41	16042	9.3	-26 7	8.7	10.6	Ma	2	..	23813b	91	2675	9.6	-72 28	9.6	10.2	Go	3	..	19967b
42	17660	9.3	-28 13	10.9	11.5	Go	1	..	23813b	92	998	9.6	-80 57	8.97	8.9	G5	4	..	21397b
43	16966	9.3	-32 13	9.0	11.3	K2	1	..	41066b	93	2409	9.7	+58 48	7.23	7.37	A5	..	2,6	56,101
44	14639	9.3	-39 39	9.8	10.5	Ko	3	..	38147b	94	3649	9.7	+48 58	7.26	7.68	F5	6	..	38810i
45	4765	9.3	-63 51	7.3	7.7	F5	8	..	42486b	95	3625	9.7	+46 40	8.8	9.9	K2	1	..	38844i
46	2706	9.4	+54 25	9.9	10.2	F2	1	..	3735ii	96	4073	9.7	+44 57	5.51	5.51	Ao	..	0,10	56,101
47	3646	9.4	+48 52	7.56	8.63	K2	2	..	38810i	97	4787	9.7	+39 59	9.4	9.4	Ao	1	..	3857oi
48	4829	9.4	+7 28	6.60	6.60	Ao	6	..	38114i	98	5640	9.7	-4 27	8.7	9.8	K2	3	..	41073b
49	5943	9.4	-6 29	10.2	10.8	Go	2	..	40910b	99	5733	9.7	-7 14	7.7	7.7	B9	5	..	44122b
50	6170	9.4	-15 24	10.2	11.0	G5	3	..	39413b	100	5942	9.7	-9 29	8.5	8.6	A2	6	..	39463b

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	5871	9.7	10 32	9.3	10.1	G5	4	..	39463b	51	4657	10.1	+31 3	8.2	8.3	A2	4	..	3803ri
2	6393	9.7	20 10	9.3	9.5	Go	5	..	39413b	52	4493	10.1	+23 48	6.96	7.38	F5	5	..	3882ri
3	6185	9.7	20 57	9.8	10.2	Ko	3	..	39413b	53	4719	10.1	+22 2	6.69	7.69	Ko	4	..	38822i
4	17325	9.7	23 21	9.9	9.9	F8	4	..	23813b	54	4715	10.1	+10 32	8.8	8.8	Ao	3	..	14693b
5	15825	9.7	25 29	8.3	8.9	F2	7	..	23813b	55	5734	10.1	-7 16	9.6	10.6	Ko	1	..	4091ob
6	15826	9.7	25 45	10.2	10.6	Ko	2	..	23813b	56	6394	10.1	-20 9	9.2	9.3	Go	6	..	39413b
7	15836	9.7	27 29	10.9	11.4	F8	1	..	23813b	57	15831	10.1	-25 6	9.1	8.9	B8	6	..	23813b
8	15983	9.7	33 41	10.2	10.6	Ko	1	..	41066b	58	15987	10.1	-33 12	8.9	9.7	G5	3	..	41066b
9	14954	9.7	38 31	9.2	10.8	G5	3	..	38147b	59	13626	10.1	-49 54	9.46	9.9	G5	2	..	41899b
10	15839	9.7	42 20	9.5	10.8	Ko	2	5,2	38147b	60	10274	10.1	-53 8	10.5	11.3	G5	3	..	39669b
11	14253	9.7	46 19	8.9	10.6	K5	2	..	19941b	61	3150	10.2	+52 16	8.2	8.2	Ao	2	..	3735ri
12	1484	9.8	+66 25	8.6	8.6	B9	2	..	38902i	62	4714	10.2	+38 54	9.4	9.4	Ao	1	..	3857oi
13	3293	9.8	+52 4	8.0	8.0	B9	4	..	3735ri	63	4520	10.2	+37 54	8.9	9.2	Fo	2	..	3857oi
14	4589	9.8	+23 8	8.3	8.3	B9	3	..	3882ri	64	4373	10.2	+32 19	8.5	9.7	K5	2	..	3803ri
15	4687	9.8	+3 46	7.06	8.06	Ko	6	0,3	14693b	65	5735	10.2	-7 32	8.9	9.2	F2	5	..	4091ob
16	16048	9.8	-26 42	11.4	10.3	F2	3	..	23813b	66	5873	10.2	-10 37	9.3	9.9	Go	4	..	39463b
17	15837	9.8	-27 19	10.4	10.9	G5	2	..	23813b	67	6092	10.2	-18 0	10.0	10.8	G5	1	..	39413b
18	15479	9.8	-34 8	9.6	10.8	G5	1	..	41066b	68	6186	10.2	-21 46	8.8	9.5	Ko	4	..	23121b
19	14707	9.8	-37 43	10.4	10.9	F8	2	..	38147b	69	15832	10.2	-25 37	11.1	11.4	G5	1	..	23813b
20	15841	9.8	-42 47	9.1	9.5	Fo	6	..	20549b	70	17665	10.2	-28 29	9.7	10.6	G5	4	..	23813b
21	14254	9.8	-46 21	9.2	10.9	K5	1	..	19941b	71	18260	10.2	-28 55	10.9	11.5	Go	2	..	23813b
22	2677	9.8	-72 50	10.2	11.0	G5	1	..	19967b	72	18261	10.2	-29 11	10.9	11.7	G5	1	..	23813b
23	2260	9.9	+62 4	8.8	8.8	Ao	2	..	38803i	73	16974	10.2	-32 22	8.2	8.2	G5	6	..	41066b
24	2736	9.9	+57 8	8.2	8.3	A2	5	..	3735ri	74	15286	10.2	-36 18	10.2	10.9	G5	1	..	38147b
25	3295	9.9	+51 53	8.0	8.0	B8	5	..	3735ri	75	14960	10.2	-38 27	10.0	10.5	Go	4	..	38147b
26	5720	9.9	-2 34	8.1	9.1	Ko	5	..	41073b	76	14833	10.2	-44 52	9.04	11.5	G	2	..	20549b
27	5840	9.9	-8 33	9.3	9.8	F8	2	..	4091ob	77	9857	10.2	-56 25	9.6	10.6	Ko	1	..	42494b
28	5786	9.9	-11 19	10.5	10.6	A5	2	..	39463b	78	3624	10.3	+50 56	8.0	9.1	K2	2	3,1	3735ri
29	6140	9.9	-13 15	9.3	9.9	Go	3	..	39463b	79	4332	10.3	+43 10	8.1	8.1	Ao	4	..	37978i
30	6141	9.9	-13 31	9.8	10.8	Ko	1	..	39463b	80	5106	10.3	+20 48	8.1	8.7	Go	2	..	3882ri
31	18255	9.9	-29 37	10.4	11.3	G5	3	..	23813b	81	4761	10.3	+14 57	9.3	10.4	K2	1	..	38114i
32	14713	9.9	-40 48	11.6	10.5	Go	2	..	20549b	82	4762	10.3	+11 43	8.2	9.2	Ko	2	..	38114i
33	14963	9.9	-43 12	7.4	9.5	K5	6	..	20549b	83	4989	10.3	+6 33	8.4	9.4	Ko	6	..	14693b
34	1197	9.9	-79 48	8.41	8.7	A3	7	..	42794b	84	4829	10.3	+4 48	9.3	9.7	F5	2	..	10174b
35	955	10.0	+75 10	8.82	9.24	F5	2	3,2	38903i	85	5842	10.3	-8 11	9.6	10.2	Go	1	..	4091ob
36	2704	10.0	+56 6	9.4	9.4	A	1	..	3735ri	86	5943	10.3	-8 54	8.5	9.0	F8	5	..	4091ob
37	4790	10.0	+40 0	8.1	9.2	K2	2	..	37978i	87	5874	10.3	-10 7	9.1	10.1	Ko	3	..	4091ob
38	4789	10.0	+36 20	7.46	7.46	Ao	6	..	3857oi	88	6093	10.3	-18 39	10.2	11.2	Ko	3	..	39413b
39	4327	10.0	+29 4	7.10	7.52	F5	8	..	3803ri	89	17331	10.3	-23 13	8.9	9.5	Ko	4	..	23813b
40	5947	10.0	-6 5	8.2	9.0	G5	5	..	41073b	90	14646	10.3	-39 27	10.2	10.5	A5	4	..	38147b
41	5787	10.0	-11 31	10.2	10.6	F5	3	..	39463b	91	14715	10.3	-40 18	9.0	10.1	Go	4	..	38147b
42	15830	10.0	-25 46	8.5	9.7	Ko	5	..	23813b	92	14647	10.3	-44 55	9.46	11.8	K5	1	..	20549b
43	16970	10.0	-32 19	9.6	10.3	F8	2	..	41066b	93	1287	10.4	+68 28	7.32	7.32	Ao	7	0,3	37277i
44	15222	10.0	-35 26	9.6	10.9	G5	1	..	41066b	94	4521	10.4	+37 59	8.7	9.2	F8	3	..	3857oi
45	15283	10.0	-35 53	10.2	11.3	G5	1	..	38147b	95	4746	10.4	+35 39	8.07	9.14	K2	2	..	3857oi
46	14710	10.0	-37 24	9.6	10.0	G5	5	..	38147b	96	4285	10.4	+28 5	8.7	8.8	A5	2	..	38597i
47	14168	10.0	-48 31	9.9	9.6	A2	3	..	41899b	97	4831	10.4	+7 27	9.3	9.7	F5	3	..	14693b
48	1230	10.1	+69 24	8.8	8.8	Ao	2	..	3858oi	98	6145	10.4	-13 44	9.3	9.9	Go	4	..	39463b
49	3149	10.1	+52 46	7.6	7.8	K5	2	..	3735ri	99	15834	10.4	-25 36	10.9	9.7	Fo	4	..	23813b
50	3842	10.1	+46 12	8.1	9.3	K5	1	..	38844i	100	15835	10.4	-25 53	8.9	10.3	Ko	4	..	23813b

THE HENRY DRAPER CATALOGUE.

211200

22^h 10^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	16976	10.4	-32 32	8.9	9.7	Ko	3	..	41066b	51	5875	10.7	-10 24	10.0	10.6	Go	2	..	39463b
2	15846	10.4	-42 8	5.19	6.4	G5	..	R	28,216	52	6175	10.7	-14 51	9.16	10.16	Ko	2	..	39413b
3	14834	10.4	-44 15	8.1	9.8	K2	5	..	20549b	53	6477	10.7	-17 26	9.8	10.3	F8	3	..	39413b
4	10048	10.4	-54 19	9.1	9.5	G5	2	..	42094b	54	6254	10.7	-19 38	10.7	11.4	Go	1	..	39413b
5	9860	10.4	-55 54	8.7	10.4	K5	3	..	42494b	55	6396	10.7	-20 29	9.3	9.5	Go	5	..	39413b
6	3879	10.4	-67 42	8.7	9.5	G5	5	..	20543b	56	6188	10.7	-21 37	9.8	11.0	K5	2	..	23121b
7	323	10.4	-87 50	7.6	8.6	Ko	5	..	15173b	57	19081	10.7	-30 5	9.1	10.5	K2	3	..	41066b
8	3821	10.5	+54 3	9.5	9.5	A	1	..	37351i	58	15229	10.7	-35 41	8.9	9.0	Fo	4	..	41066b
9	3152	10.5	+52 26	7.9	9.0	K2	3	..	37351i	59	14128	10.7	-47 44	8.9	10.6	Ko	3	..	41899b
10	3782	10.5	+49 22	8.6	8.6	Ao	2	..	3881oi	60	12002	10.7	-52 29	8.1	8.4	F5	5	..	42094b
11	4333	10.5	+42 28	5.70	5.70	Ao	8	I,10	38844i	61	10051	10.7	-54 50	7.28	7.6	Fo	8	..	42494b
12	4596	10.5	+1 26	8.6	9.0	F5	5	..	10174b	62	7938	10.7	-58 17	8.3	9.0	G5	5	..	20558b
13	4842	10.5	+0 29	9.0	9.4	F5	2	..	10174b	63	3784	10.8	+49 21	8.8	8.8	Ao	1	..	3881oi
14	5950	10.5	-6 10	9.6	10.6	Ko	1	..	41073b	64	3656	10.8	+48 51	7.52	8.02	F8	4	..	3881oi
15	6146	10.5	-13 10	10.0	10.6	Go	2	..	39463b	65	4464	10.8	+33 29	8.1	8.2	A2	3	..	38031i
16	6253	10.5	-19 33	9.6	9.6	Go	7	..	39413b	66	4763	10.8	+11 25	9.5	9.8	F	1	..	33781i
17	5871	10.5	-21 48	9.6	10.7	Ko	2	..	23121b	67	5744	10.8	-5 25	10.0	10.8	G5	1	..	41073b
18	16051	10.5	-26 45	9.9	10.1	Ko	3	..	23813b	68	5843	10.8	-7 50	8.5	9.6	K2	4	..	4091ob
19	15839	10.5	-26 56	10.4	10.6	F5	3	..	23813b	69	6094	10.8	-18 1	10.0	10.4	F5	3	..	39413b
20	18714	10.5	-30 55	8.9	10.6	K2	2	..	41066b	70	6397	10.8	-20 31	9.6	9.5	F8	5	..	39413b
21	16978	10.5	-31 53	9.2	10.6	Ko	2	..	41066b	71	15841	10.8	-27 35	10.6	11.2	F5	3	..	23813b
22	16979	10.5	-32 0	9.2	10.3	Go	2	..	41066b	72	18270	10.8	-29 51	9.97	10.5	A3	3	..	41066b
23	14816	10.5	-41 40	9.2	10.0	Go	2	..	20549b	73	3155	10.9	+52 44	8.6	8.7	A3	3	..	37351i
24	4016	10.5	-65 31	7.8	7.9	A3	8	..	20543b	74	4162	10.9	+43 16	6.95	7.95	Ko	4	..	37978i
25	1538	10.5	-77 0	8.5	9.0	F8	7	..	42794b	75	4792	10.9	+39 16	8.1	8.7	Go	4	..	37978i
26	2716	10.6	+54 57	8.6	8.6	Ao	3	..	37351i	76	5737	10.9	-7 35	8.7	9.5	G5	5	..	4091ob
27	3298	10.6	+52 1	7.94	9.01	K2	2	..	37351i	77	6223	10.9	-12 45	9.8	9.9	A3	4	..	39463b
28	3655	10.6	+48 19	8.0	8.0	Ao	5	..	3881oi	78	6478	10.9	-17 43	8.5	8.5	Ao	8	..	39413b
29	4982	10.6	+6 8	8.4	8.4	B9	7	..	14693b	79	6398	10.9	-20 2	10.5	11.0	Ko	1	..	39413b
30	4831	10.6	+4 44	8.6	10.0	Ma	1	I,1-	14693b	80	6399	10.9	-20 10	8.3	9.2	K2	7	..	39413b
31	4689	10.6	+3 46	7.36	7.64	Fo	7	0,3	14693b	81	9821	10.9	-55 27	9.8	11.0	K5	2	..	42494b
32	5412	10.6	-2 56	9.3	9.7	F5	2	..	41073b	82	1198	10.9	-79 46	9.41	10.7	Ko	1	..	42794b
33	5951	10.6	-6 12	10.2	10.3	A2	1	..	41073b	83	2268	11.0	+61 25	9.0	9.0	Ao	1	..	38803i
34	6174	10.6	-14 56	8.05	9.05	Ko	7	..	39413b	84	4635	11.0	+34 24	9.1	10.1	Ko	2	..	38031i
35	6050	10.6	-16 29	9.3	9.6	F2	3	..	39413b	85	4465	11.0	+34 1	8.7	9.8	K2	1	..	38031i
36	17334	10.6	-23 31	7.22	7.5	A3	10	..	23813b	86	4764	11.0	+14 56	8.6	9.0	F5	2	..	38114i
37	15993	10.6	-33 23	8.9	10.3	Go	3	..	41066b	87	4834	11.0	+8 3	6.03	6.03	Ao	8	..	38114i
38	14717	10.6	-40 46	8.9	9.7	Ko	3	..	20549b	88	5844	11.0	-8 11	9.1	9.9	G5	3	..	4091ob
39	14650	10.6	-45 4	10.8	11.2	Ao	2	..	20549b	89	6242	11.0	-14 33	8.2	9.0	G5	6	..	39463b
40	10050	10.6	-54 35	10.4	11.0	Go	2	..	39669b	90	6176	11.0	-15 4	10.5	11.7	K5	1	..	39413b
41	1551	10.6	-76 38	8.3	8.7	F5	7	..	42794b	91	16057	11.0	-26 24	6.27	7.7	Ko	..	..	56,148
42	2053	10.7	+62 40	6.21	6.19	B9	5	I,9	38955i	92	15843	11.0	-27 5	10.4	10.9	Go	2	..	23813b
43	2267	10.7	+62 0	9.4	9.5	A2	1	..	38803i	93	17674	11.0	-28 17	11.4	11.5	A2	1	..	23813b
44	4717	10.7	+18 7	8.1	8.5	F5	3	..	38822i	94	18721	11.0	-31 0	7.81	8.3	G5	7	..	41066b
45	4763	10.7	+14 16	9.0	10.0	Ko	1	..	38114i	95	15292	11.0	-36 18	9.8	10.2	Go	3	..	38147b
46	5009	10.7	+9 58	8.2	8.3	A2	3	..	38114i	96	13790	11.0	-49 6	8.3	9.3	K2	6	..	41899b
47	4832	10.7	+7 50	9.5	9.5	Ao	4	..	14693b	97	13630	11.0	-50 35	9.1	9.6	K2	2	..	41899b
48	4327	10.7	-0 28	8.6	8.6	B8	3	..	10174b	98	7556	11.0	-60 48	9.4	10.2	G5	3	..	42494b
49	4275	10.7	-1 26	9.3	10.1	G5	2	..	41073b	99	4769	11.0	-63 19	7.09	7.4	F5	9	..	42486b
50	5413	10.7	-3 15	8.5	8.8	Fo	5	..	41073b	100	1022	11.1	+72 49	6.11	6.89	G5	7	..	38025i

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	3627	II.1	+50 59	7.70	7.70	A0	3	..	3735ii	51	324	II.3	-87 29	9.3	9.4	A2	3	..	15173b
2	4081	II.1	+45 2	8.8	8.8	A0	1	..	38844i	52	2719	II.4	+54 56	9.2	9.3	A2	2	..	3735ii
3	4880	II.1	+13 18	9.5	10.6	K2	1	..	3378ii	53	3629	II.4	+50 55	8.6	8.6	B8	3	..	3735ii
4	4765	II.1	+11 15	7.04	7.02	B9	8	..	38114i	54	4468	II.4	+33 33	9.4	9.5	A2	1	..	3803ii
5	4483	II.1	+ 2 45	9.3	10.3	K0	1	..	10174b	55	4277	II.4	- 0 50	9.3	9.8	F8	2	..	41073b
6	5645	II.1	- 4 26	9.3	9.3	A0	3	..	41073b	56	5726	II.4	- 2 6	6.09	6.15	A2	6	0,8-	38118i
7	6224	II.1	-12 10	9.3	10.3	K0	4	..	39463b	57	5954	II.4	- 6 39	9.6	10.7	K2	1	..	40910b
8	17094	II.1	-24 33	10.9	11.4	G5	2	..	23813b	58	5792	II.4	-11 2	8.9	9.9	K0	5	..	39463b
9	15844	II.1	-26 59	10.2	10.6	K0	4	..	23813b	59	5791	II.4	-11 42	9.3	9.8	F8	5	..	39463b
10	18272	II.1	-29 42	10.6	11.4	F8	2	..	23813b	60	6227	II.4	-12 9	7.21	7.99	G5	7	..	39463b
11	14650	II.1	-39 42	9.2	10.8	G5	3	..	38147b	61	6148	II.4	-13 20	5.55	6.55	K0	..	0,9	56,148
12	14839	II.1	-44 9	10.1	11.2	G0	2	..	20549b	62	6480	II.4	-16 53	8.1	8.6	F8	7	..	39413b
13	14653	II.1	-45 15	9.9	11.5	G5	2	..	20549b	63	6401	II.4	-20 31	7.36	7.6	A2	10	..	39413b
14	10275	II.1	-52 55	9.0	11.0	F8	1	..	42094b	64	17344	II.4	-23 39	6.36	7.3	G5	7	5,10	41878b
15	7559	II.1	-60 0	9.22	10.7	K5	2	..	42494b	65	15846	II.4	-25 2	11.1	10.3	G5	4	..	23813b
16	3880	II.1	-67 31	9.4	9.7	F2	4	..	20543b	66	19084	II.4	-30 39	8.1	8.4	G5	6	..	41066b
17	3481	II.1	-68 49	7.3	8.1	G5	9	..	20543b	67	15235	II.4	-35 16	6.88	7.8	K0	8	..	41066b
18	1444	II.1	-77 56	8.9	9.4	F8	4	..	42794b	68	14973	II.4	-37 55	9.6	11.2	K2	3	..	38147b
19	1232	II.2	+69 39	8.0	8.0	A0	2	..	38025i	69	13794	II.4	-49 9	8.6	9.3	K0	5	..	41899b
20	2739	II.2	+57 12	8.6	9.2	G0	2	..	3735ii	70	7787	II.4	-59 14	8.4	10.3	K5	2	..	42494b
21	2824	II.2	+53 59	8.9	8.9	A0	2	..	3735ii	71	4772	II.4	-62 56	9.1	10.5	Ma	1	..	42486b
22	4769	II.2	+40 21	7.92	8.92	K0	2	..	37978i	72	2680	II.4	-71 55	9.2	9.7	F8	3	..	20544b
23	4524	II.2	+37 14	8.6	8.7	A3	4	..	38570i	73	2681	II.4	-72 51	10.1	10.7	G0	3	..	19967b
24	5790	II.2	-11 16	9.8	10.9	K2	3	..	39463b	74	818	II.5	+75 58	7.12	8.19	K2	4	0,4	38903i
25	6053	II.2	-16 11	10.9	11.7	G5	1	..	39413b	75	3792	II.5	+49 54	8.0	8.3	F0	4	5,4	38810i
26	16059	II.2	-26 40	11.1	11.4	G5	1	..	23813b	76	4721	II.5	+38 21	7.9	8.9	K0	2	..	37978i
27	18274	II.2	-29 50	9.42	10.5	K2	3	..	41066b	77	5793	II.5	-10 56	9.8	10.6	G5	3	..	39463b
28	14823	II.2	-41 53	10.2	10.6	F2	2	..	20549b	78	6149	II.5	-13 31	9.3	9.7	F5	5	..	39463b
29	14840	II.2	-44 44	10.8	11.2	A0	2	..	20549b	79	6243	II.5	-14 15	10.5	11.1	G0	1	..	39463b
30	10052	II.2	-54 16	9.9	10.4	F8	3	..	39669b	80	6180	II.5	-15 10	7.09	7.59	F8	6	..	39463b
31	6322	II.2	-62 4	8.3	9.3	K0	3	..	42486b	81	6179	II.5	-15 41	9.1	9.7	G0	6	..	39413b
32	4771	II.2	-63 31	8.5	9.1	G0	5	2,4	19898b	82	17675	II.5	-28 33	10.6	11.2	G0	2	..	23813b
33	4017	II.2	-65 4	8.4	8.8	F5	5	..	20543b	83	15497	II.5	-34 18	8.2	9.9	Ma	3	..	41066b
34	2679	II.2	-72 47	10.5	11.1	G0	1	..	19967b	84	15299	II.5	-36 27	8.6	9.0	F2	6	..	38147b
35	1490	II.3	+66 26	8.2	8.2	A0	4	..	38902i	85	13635	II.5	-50 50	8.1	8.5	F0	7	..	41899b
36	2741	II.3	+56 33	4.23	4.51	F0	..	R	2808c	86	1234	II.6	+69 24	8.0	9.0	K0	2	..	38580i
37	3790	II.3	+49 23	8.6	8.6	A0	1	..	38810i	87	4525	II.6	+37 23	8.8	9.3	F8	1	..	38570i
38	4163	II.3	+43 15	7.51	7.51	A0	5	..	37978i	88	4526	II.6	+37 15	4.22	5.22	K0	..	0,9	56,101
39	4638	II.3	+35 2	8.2	8.2	A0	3	..	38570i	89	5957	II.6	- 6 7	10.5	11.5	K0	1	0,1	40910b
40	4662	II.3	+30 48	8.06	8.06	A0	6	..	3803ii	90	5739	II.6	- 7 39	8.7	9.2	F8	6	..	40910b
41	4604	II.3	+15 31	8.2	8.7	F8	1	..	38114i	91	5845	II.6	- 8 17	4.32	5.32	K0	..	5,9R	56,101
42	4691	II.3	+ 3 32	9.0	9.8	G5	2	..	10174b	92	5948	II.6	- 9 32	6.08	7.08	K0	9	5,4	39463b
43	5415	II.3	- 3 23	9.1	10.3	K5	1	..	41073b	93	6244	II.6	-14 18	10.9	10.9	A	1	..	39463b
44	6178	II.3	-15 28	8.5	9.3	G5	8	..	39413b	94	6481	II.6	-17 29	9.1	9.4	F0	5	..	39413b
45	15845	II.3	-25 39	10.6	11.4	K0	2	..	23813b	95	17678	II.6	-27 54	7.15	8.3	K0	9	..	23813b
46	16060	II.3	-26 23	11.4	10.9	F0	2	..	23813b	96	16002	II.6	-33 19	8.9	8.7	F5	5	..	41066b
47	18275	II.3	-29 18	10.2	10.8	G0	4	..	23813b	97	14721	II.6	-37 34	10.4	10.2	F5	3	..	38147b
48	18724	II.3	-31 40	9.2	10.3	F8	3	..	41066b	98	9862	II.6	-56 17	8.7	10.2	K0	3	..	42494b
49	15496	II.3	-34 43	7.93	9.0	G5	6	..	41066b	99	7788	II.6	-59 13	8.8	9.3	F8	4	..	42494b
50	14719	II.3	-36 57	10.9	10.8	F5	2	..	38147b	100	782	II.7	+79 9	8.5	8.9	F5	2	..	38590i

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	2368	11.7	+61 13	8.8	8.8	Ao	3	5,2	38902i	51	17099	12.0	-24 13	8.9	9.1	G5	6	..	23813b
2	2413	11.7	+58 36	7.08	7.14	A2	..	2,7	56,101	52	17100	12.0	-24 23	10.9	11.2	K2	1	..	23813b
3	2489	11.7	+57 46	8.7	9.3	Go	2	..	38803i	53	15238	12.0	-35 16	9.6	10.0	F8	2	..	41066b
4	3307	11.7	+51 22	8.6	8.6	Ao	3	2,2	37028i	54	14263	12.0	-46 47	9.9	9.8	A	3	..	41899b
5	4165	11.7	+43 25	7.40	7.38	B9	5	..	37978i	55	131	12.1	+88 58	8.60	8.74	A5	4	..	37793i
6	4621	11.7	+29 33	7.9	8.4	F8	4	..	38031i	56	2270	12.1	+61 48	8.9	9.0	A2	1	..	38902i
7	4700	11.7	+25 45	8.7	9.5	G5	1	..	38597i	57	2370	12.1	+60 30	8.6	8.7	A2	2	..	38803i
8	4498	11.7	+23 41	8.7	8.7	Ao	3	..	38821i	58	4341	12.1	+43 1	8.0	9.1	K2	1	..	37978i
9	4835	11.7	+5 2	8.65	9.83	K5	2	..	14693b	59	4471	12.1	+34 1	8.1	8.2	A5	4	..	38570i
10	6245	11.7	-14 42	8.31	9.31	Ko	6	..	39463b	60	4337	12.1	+28 41	6.75	7.53	G5	8	..	38031i
11	6482	11.7	-17 9	10.2	11.2	Ko	1	..	39413b	61	4836	12.1	+7 52	8.2	8.5	Fo	3	..	38114i
12	17345	11.7	-23 53	9.9	10.1	F8	3	..	23813b	62	5797	12.1	-11 47	9.3	9.8	F8	3	..	39463b
13	15301	11.7	-36 49	9.6	10.5	Go	2	..	38147b	63	6057	12.1	-16 29	7.12	8.12	Ko	8	..	39413b
14	14975	11.7	-38 17	10.0	10.6	Go	5	..	38147b	64	6096	12.1	-18 40	8.1	8.9	G5	5	..	39413b
15	10055	11.7	-54 7	5.44	6.5	Go	..	0,10	28,216	65	6190	12.1	-20 58	9.6	10.7	K2	3	..	39413b
16	7561	11.7	-60 45	2.91	3.98	K2	..	2,4R	28,216	66	18281	12.1	-29 21	10.2	10.5	F8	5	..	23813b
17	736	11.7	-83 0	9.5	10.1	Go	2	..	21397b	67	16005	12.1	-32 59	8.6	8.7	G5	6	..	41066b
18	3658	11.8	+48 57	9.7	9.7	Ao	1	..	38810i	68	14724	12.1	-37 25	10.9	10.8	F8	2	..	38147b
19	4469	11.8	+33 14	7.24	7.74	F8	5	..	38031i	69	14844	12.1	-44 3	8.7	11.2	K2	2	..	45063b
20	4793	11.8	+12 27	7.54	8.54	Ko	3	..	38114i	70	14843	12.1	-44 9	10.1	11.2	Go	2	..	20549b
21	4599	11.8	+1 27	10.0	11.0	Ko	1	..	10174b	71	4776	12.1	-63 2	9.5	10.6	K2	1	..	19898b
22	5846	11.8	-8 15	9.6	10.2	Go	2	..	40910b	72	2831	12.2	+54 10	7.8	8.6	G5	4	..	37351i
23	6055	11.8	-16 2	10.6	11.4	G5	1	..	39413b	73	3659	12.2	+49 12	9.2	9.2	Ao	2	..	38810i
24	16066	11.8	-26 13	10.6	10.1	Go	4	..	23813b	74	4625	12.2	+29 35	7.59	7.54	B8	7	..	38031i
25	16995	11.8	-32 16	7.07	7.7	G5	9	..	41066b	75	4796	12.2	+13 4	8.7	9.7	Ko	1	..	38114i
26	14652	11.8	-39 18	10.2	10.8	Go	3	..	38147b	76	4797	12.2	+12 23	6.94	7.50	Go	6	..	38114i
27	14261	11.8	-46 51	9.4	10.1	Ko	2	..	41899b	77	4279	12.2	-1 12	8.6	9.6	Ko	3	..	41073b
28	2683	11.8	-72 47	9.7	10.7	Ko	2	..	19967b	78	5740	12.2	-7 32	10.2	11.2	Ko	1	..	40910b
29	1116	11.9	+71 58	8.0	9.0	Ko	3	0,3	38936i	79	6230	12.2	-12 26	10.2	11.2	Ko	1	..	39463b
30	2709	11.9	+55 19	7.46	7.44	B9	5	..	37351i	80	6154	12.2	-13 16	10.0	10.8	G5	2	..	39463b
31	4083	11.9	+44 35	7.12	7.20	A3	..	1,6	56,102	81	6183	12.2	-15 30	10.2	10.6	F5	2	..	39413b
32	4288	11.9	+27 18	6.43	7.43	Ko	7	0,7	38031i	82	6403	12.2	-20 41	10.5	11.0	G5	1	..	39413b
33	4601	11.9	+22 24	6.80	6.80	Ao	6	..	38822i	83	18730	12.2	-31 40	7.7	9.4	K2	3	..	41066b
34	5960	11.9	-5 54	5.80	6.58	G5	7	..	44122b	84	15307	12.2	-36 43	9.2	9.9	F8	5	..	38147b
35	6151	11.9	-13 46	10.0	10.6	Go	3	..	39463b	85	14655	12.2	-39 18	10.4	11.2	G5	2	..	38147b
36	6056	11.9	-16 33	8.7	9.7	Ko	5	..	39413b	86	14178	12.2	-48 43	10.3	10.2	Go	1	..	41899b
37	6256	11.9	-19 18	9.8	10.1	Go	3	..	39413b	87	639	12.2	-84 2	8.08	8.1	A5	6	5,7-	21397b
38	6402	11.9	-19 55	10.0	10.1	Go	2	..	39413b	88	728	12.3	+79 34	8.4	9.5	K2	1	..	38590i
39	16068	11.9	-26 23	10.9	10.6	F8	2	..	23813b	89	2722	12.3	+54 20	8.2	8.5	Fo	4	..	37351i
40	16067	11.9	-26 43	9.5	9.1	F5	5	..	23813b	90	4342	12.3	+42 41	8.2	8.3	A2	2	..	37978i
41	15846	11.9	-27 37	10.4	10.6	Ao	3	..	23813b	91	5798	12.3	-11 17	9.8	10.3	F8	3	..	39463b
42	15302	11.9	-35 55	9.6	10.5	F8	2	..	38147b	92	6231	12.3	-12 45	9.3	9.7	F5	6	..	39463b
43	14176	11.9	-48 41	9.3	9.6	Ko	3	..	41899b	93	19092	12.3	-30 6	var.	var.	Md	..	R	M
44	1445	11.9	-78 53	8.9	9.4	F8	6	..	42794b	94	13640	12.3	-50 25	8.7	9.0	Go	6	..	41899b
45	2710	12.0	+55 37	9.5	9.5	Ao	2	..	37351i	95	3753	12.4	+47 28	8.4	8.4	Ao	2	..	38810i
46	4668	12.0	+32 7	7.58	8.76	K5	3	..	38031i	96	4343	12.4	+42 20	8.5	8.5	A	2	..	37978i
47	4391	12.0	+26 27	9.5	9.5	A	1	..	38597i	97	4380	12.4	+33 4	8.0	9.0	Ko	3	..	38031i
48	4605	12.0	+15 52	8.2	8.7	F8	1	..	33781i	98	4626	12.4	+29 49	8.2	8.3	A3	3	..	38031i
49	5420	12.0	-3 31	8.7	9.7	Ko	2	..	41073b	99	4394	12.4	+27 5	9.4	10.0	Go	1	5,1	38597i
50	17351	12.0	-23 37	7.57	8.6	Ko	7	..	23813b	100	4766	12.4	+14 33	7.17	8.17	Ko	5	..	38114i

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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	4838	12.4	+ 7 40	9.1	10.1	Ko	1	..	14693b	51	3651	12.7	-66 42	9.3	10.3	Ko	1	..	20543b
2	6232	12.4	-11 53	10.5	11.6	K2	1	..	39463b	52	682	12.8	+83 5	8.6	9.6	Ko	2	..	37281i
3	6184	12.4	-15 17	10.5	11.0	F8	2	..	39413b	53	1823	12.8	+63 43	8.4	8.4	Ao	5	..	38902i
4	6058	12.4	-16 26	9.3	10.1	G5	3	..	39413b	54	2746	12.8	+56 43	6.05	7.05	Ko	..	0,7	2808c
5	15309	12.4	-36 46	9.5	9.9	G5	4	..	38147b	55	4705	12.8	+25 53	7.34	8.34	Ko	4	..	38597i
6	14726	12.4	-37 6	7.13	7.3	Fo	8	..	38147b	56	4839	12.8	+ 7 47	8.8	9.9	K2	1	..	14693b
7	14656	12.4	-39 15	10.2	10.8	G5	2	..	38147b	57	5423	12.8	- 3 41	9.3	10.5	K5	1	..	41073b
8	14848	12.4	-44 22	10.3	11.8	Go	2	..	20549b	58	16074	12.8	-26 32	11.1	12.3	K5	1	..	23813b
9	10278	12.4	-53 35	8.8	10.2	F5	2	..	42094b	59	15850	12.8	-27 48	8.7	10.3	K5	3	..	23813b
10	4778	12.4	-63 36	9.5	10.1	Go	1	..	42486b	60	18286	12.8	-29 25	9.7	10.5	Ko	3	..	23813b
11	1746	12.4	-75 29	7.9	9.3	Ma	5	..	42794b	61	18734	12.8	-31 9	9.7	9.9	F2	2	..	41066b
12	1236	12.5	+69 30	7.8	8.8	Ko	2	..	38580i	62	14725	12.8	-40 4	8.08	8.3	F2	7	..	20549b
13	3638	12.5	+50 30	8.17	9.17	Ko	1	..	38810i	63	2372	12.9	+60 19	8.11	8.17	A2	4	..	38803i
14	4801	12.5	+36 43	9.4	9.9	F8	1	2,2	36318i	64	..	12.9	+55 7	11.07	..	Oc	..	..	76,29
15	4723	12.5	+21 54	7.44	7.50	A2	4	..	38822i	65	4672	12.9	+31 47	8.7	9.1	F5	1	..	33699i
16	4837	12.5	+ 4 39	7.8	9.2	Ma	2	..	14693b	66	4709	12.9	+16 54	8.2	8.5	F2	2	..	38860i
17	5647	12.5	- 3 51	8.9	9.2	F2	3	..	41073b	67	4280	12.9	- 1 38	9.02	9.58	Go	4	..	41073b
18	5879	12.5	-10 15	8.5	8.8	Fo	5	..	39463b	68	6258	12.9	-19 42	10.2	10.9	G5	2	..	39413b
19	6191	12.5	-21 0	9.1	9.3	Go	7	..	39413b	69	17361	12.9	-23 50	7.25	7.9	F5	9	..	23813b
20	18284	12.5	-29 50	10.08	11.3	F8	3	..	23813b	70	17686	12.9	-28 37	8.5	9.1	Ko	7	..	23813b
21	15244	12.5	-35 4	9.2	8.8	Fo	5	..	41066b	71	18735	12.9	-31 11	7.9	8.4	A2	7	..	41066b
22	15310	12.5	-36 0	9.0	9.6	G5	4	..	38147b	72	16010	12.9	-33 51	8.2	8.7	K2	5	..	41066b
23	14270	12.5	-46 39	7.5	8.0	Ko	7	..	41899b	73	14727	12.9	-40 26	8.2	8.3	A2	7	..	20549b
24	6639	12.5	-61 18	8.7	9.3	Go	6	0,6 R	19898b	74	4236	12.9	-64 8	8.8	9.8	Ko	2	..	42486b
25	6640	12.5	-61 18	8.4	9.0	Go	2	..	38570i	75	4333	13.0	- 0 45	6.36	6.78	F5	7	0,4-	17420b
26	4645	12.6	+34 52	8.2	8.8	Go	2	..	38570i	76	5728	13.0	- 2 43	9.3	9.8	F8	2	..	41073b
27	4381	12.6	+32 29	8.1	8.1	Ao	4	..	38031i	77	5803	13.0	-10 59	10.0	10.4	F5	3	..	39463b
28	4724	12.6	+21 31	8.2	9.3	K2	2	..	38821i	78	6404	13.0	-20 7	10.2	10.1	F5	3	..	39413b
29	5422	12.6	- 2 50	9.3	10.5	K5	2	..	41073b	79	6194	13.0	-21 5	10.0	10.1	Go	2	..	23121b
30	5648	12.6	- 4 46	8.70	8.76	A2	4	..	41073b	80	6193	13.0	-21 30	8.32	9.0	F8	5	..	23121b
31	5749	12.6	- 5 46	10.2	11.0	G5	2	..	41073b	81	17105	13.0	-24 52	11.6	12.8	K5	1	..	23813b
32	5847	12.6	- 8 5	9.3	10.1	G5	3	..	40910b	82	18287	13.0	-29 49	9.87	10.5	G5	4	..	23813b
33	15246	12.6	-35 49	9.8	11.1	F8	1	..	38147b	83	19094	13.0	-30 15	9.7	10.5	K2	3	..	23813b
34	14658	12.6	-39 39	10.6	11.2	Go	2	..	38147b	84	16013	13.0	-33 15	9.0	9.4	Ko	4	..	41066b
35	12004	12.6	-52 44	8.9	9.6	G5	1	..	42094b	85	15508	13.0	-34 9	8.9	9.9	Ko	4	..	41066b
36	7791	12.6	-59 48	8.42	9.6	K5	4	..	42494b	86	14661	13.0	-38 56	8.7	9.4	Ko	7	..	38147b
37	4779	12.6	-63 47	7.8	8.2	F5	5	..	42486b	87	14181	13.0	-48 33	8.7	9.9	Ma	3	..	41899b
38	3882	12.6	-67 23	7.4	7.7	Fo	9	..	20543b	88	9865	13.0	-56 41	9.3	10.7	Go	1	..	42494b
39	406	12.6	-86 29	5.74	7.2	Ko	..	0,7 R	56,148	89	2272	13.1	+61 49	7.00	7.08	A3	6	..	37257i
40	2493	12.7	+57 28	8.2	9.4	K5	1	..	38803i	90	2416	13.1	+58 29	8.2	8.2	Ao	3	..	38803i
41	4472	12.7	+33 43	9.2	10.2	Ko	1	..	38031i	91	4669	13.1	+30 19	8.96	9.02	A2	1	..	38031i
42	4707	12.7	+16 19	8.5	9.3	G5	1	..	38860i	92	4771	13.1	+11 55	8.8	9.9	K2	1	..	38114i
43	6185	12.7	-15 1	8.7	9.8	K2	4	..	39463b	93	4281	13.1	- 0 59	9.0	9.4	F5	3	..	41073b
44	6484	12.7	-17 38	10.9	11.7	G5	1	..	39413b	94	5964	13.1	- 6 21	8.3	9.3	Kop	3	R	41073b
45	6099	12.7	-18 29	10.0	10.5	F8	3	..	39413b	95	6188	13.1	-15 31	8.7	9.5	G5	6	..	39463b
46	5879	12.7	-21 56	9.1	9.5	Go	4	..	23121b	96	6060	13.1	-16 10	9.3	10.5	K5	3	..	39413b
47	R	12.7	-22 48	7.6	7.6	A3	9	..	23121b	97	6405	13.1	-20 46	8.8	9.3	A3	8	..	39413b
48	16073	12.7	-26 12	10.2	11.2	F8	2	..	23813b	98	6196	13.1	-21 0	9.3	10.1	K5	2	..	23121b
49	15849	12.7	-26 57	11.1	11.7	Go	2	..	23813b	99	6198	13.1	-21 4	9.3	9.3	Fo	4	..	23121b
50	4234	12.7	-64 27	9.3	10.1	G5	1	..	42486b	100	6197	13.1	-21 14	7.7	9.0	K5	6	..	23121b

THE HENRY DRAPER CATALOGUE.

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22^h 13^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	17008	13.1	32 3	8.9	9.4	F5	3	..	41066b	51	5882	13.4	22 45	9.6	9.8	F8	2	..	23121b
2	14732	13.1	37 9	9.5	10.0	Ko	4	..	38147b	52	17364	13.4	23 36	10.2	11.0	Ko	1	..	23813b
3	14983	13.1	43 6	10.1	11.2	Go	2	..	45063b	53	17107	13.4	24 43	10.6	10.3	G5	3	..	23813b
4	2713	13.2	+55 39	8.5	8.6	A5	3	..	3735ii	54	18742	13.4	31 13	9.7	10.7	Ko	1	..	41066b
5	3760	13.2	+47 25	9.2	10.6	Ma	1	..	16271m	55	14731	13.4	40 48	8.0	9.1	K5	4	..	20549b
6	4399	13.2	+26 26	6.80	7.98	K5	4	..	3803ii	56	6329	13.4	62 25	10.1	11.1	Ko	1	..	19898b
7	4887	13.2	+13 27	7.02	8.02	Ko	5	..	38114i	57	4780	13.4	63 31	9.5	10.5	Ko	1	..	42486b
8	4799	13.2	+12 51	9.7	10.8	K2	1	..	38114i	58	2375	13.5	+60 21	8.81	8.87	A2	2	..	38902i
9	6189	13.2	-15 9	9.3	10.1	G5	4	..	39463b	59	2715	13.5	+55 21	9.9	10.0	A3	2	..	3735ii
10	..	13.2	-21 24	var.	var.	Md	..	R	M	60	3665	13.5	+48 37	6.62	7.62	Ko	8	..	38810i
11	17362	13.2	-23 35	10.6	10.7	F8	2	..	23813b	61	4167	13.5	+44 13	8.8	9.1	F2	1	..	38844i
12	18740	13.2	-31 22	9.2	10.5	G5	2	..	41066b	62	4348	13.5	+42 17	8.0	9.0	Ko	2	..	37978i
13	14667	13.2	-39 39	10.9	10.8	A5	2	..	38147b	63	4535	13.5	+38 7	8.5	9.5	Ko	2	..	38570i
14	14833	13.2	-41 48	10.4	10.5	Go	2	0,2	20549b	64	6254	13.5	-14 37	10.0	10.5	F8	1	..	39463b
15	14141	13.2	-47 12	8.00	7.8	A2	9	..	41899b	65	6487	13.5	-16 52	9.6	10.4	G5	3	..	39413b
16	6642	13.2	-61 32	9.3	10.3	Ko	2	5,2	42494b	66	6486	13.5	-17 39	9.6	10.4	G5	4	..	39413b
17	4022	13.2	-65 45	8.4	8.5	A3	6	..	20543b	67	17365	13.5	-23 18	8.3	9.0	Ko	6	..	23813b
18	2727	13.3	+54 19	8.9	8.9	B9	2	..	3735ii	68	17367	13.5	-23 25	9.4	9.3	A5	6	..	23813b
19	3168	13.3	+52 30	8.1	8.2	A2	3	..	3735ii	69	17014	13.5	-32 13	8.9	9.9	Ko	2	..	41066b
20	3801	13.3	+49 53	8.6	8.6	Ao	5	0,3	38810i	70	14669	13.5	-38 58	10.4	11.2	G5	1	..	38147b
21	3799	13.3	+49 48	8.4	9.5	K2	1	..	37028i	71	9824	13.5	-55 28	8.9	10.7	K5	3	..	42494b
22	4087	13.3	+44 46	8.0	9.2	K5	1	..	38844i	72	4772	13.6	+40 54	9.2	9.2	Ao	1	..	38570i
23	4632	13.3	+30 6	9.31	9.31	A	1	..	3803ii	73	5953	13.6	-9 43	9.31	9.87	Go	3	..	40910b
24	4970	13.3	+18 33	7.9	8.9	Ko	2	..	38822i	74	6236	13.6	-12 4	8.1	9.1	Ko	6	..	39463b
25	4611	13.3	+15 54	8.0	8.5	F8	3	..	38114i	75	6159	13.6	-12 48	10.0	11.0	Ko	2	..	39463b
26	4800	13.3	+13 2	9.0	10.1	K2	1	..	38114i	76	6255	13.6	-13 48	6.09	7.09	Ko	8	..	39463b
27	5016	13.3	+9 58	8.8	8.8	Ao	3	..	14693b	77	6190	13.6	-14 55	10.2	11.2	Ko	1	..	39463b
28	4282	13.3	-1 37	7.59	8.66	K2	4	..	10174b	78	6061	13.6	-15 59	10.0	10.6	Go	2	..	39413b
29	5743	13.3	-7 9	9.1	9.6	F8	4	..	40910b	79	18745	13.6	-31 8	10.4	9.9	A5	2	..	41066b
30	6235	13.3	-12 36	10.0	10.6	Go	3	..	39463b	80	10281	13.6	-53 29	8.5	10.1	Ko	2	..	42094b
31	6157	13.3	-13 37	10.2	10.8	Go	2	..	39463b	81	505	13.7	+84 55	8.05	8.61	Go	3	..	37281i
32	6260	13.3	-19 37	10.7	11.0	Go	1	..	39413b	82	4402	13.7	+26 34	8.7	9.3	Go	1	..	38597i
33	6406	13.3	-20 44	8.6	10.1	Ko	6	..	39413b	83	5019	13.7	+9 50	8.2	9.3	K2	3	..	14693b
34	15853	13.3	-27 17	9.9	10.0	F8	3	..	23813b	84	4842	13.7	+7 22	8.0	9.1	K2	6	..	14693b
35	17689	13.3	-28 2	10.9	11.4	G5	1	..	23813b	85	5805	13.7	-11 5	10.2	11.2	Ko	1	..	39463b
36	14736	13.3	-37 52	10.0	10.2	G5	5	..	38147b	86	6489	13.7	-17 1	10.2	10.8	Go	1	..	39413b
37	15869	13.3	-42 15	9.4	10.1	Go	2	..	20549b	87	17694	13.7	-28 43	6.84	8.8	K5	7	..	23813b
38	15870	13.3	-42 23	10.3	10.8	G	1	..	20549b	88	18292	13.7	-29 2	10.4	11.2	G5	1	..	23813b
39	9866	13.3	-56 6	8.2	9.5	G5	4	..	42494b	89	18293	13.7	-29 6	10.2	10.8	Go	1	..	23813b
40	6328	13.3	-62 17	10.1	10.5	F5	1	..	19898b	90	16018	13.7	-33 11	9.6	10.8	Ko	2	..	39342b
41	3484	13.3	-68 50	9.0	10.0	Ko	2	..	20543b	91	14183	13.7	-48 30	8.8	9.6	Ko	4	..	41899b
42	2056	13.4	+63 12	7.38	8.16	G5	4	..	37257i	92	10059	13.7	-54 14	9.3	10.7	F5	3	..	39669b
43	2714	13.4	+55 40	7.16	7.22	A2	7	..	3735ii	93	1225	13.8	+71 10	8.9	10.0	K2	1	..	38580i
44	3648	13.4	+50 18	8.35	8.41	A2	2	2,2	38810i	94	3651	13.8	+50 49	7.8	7.8	B8	5	..	3735ii
45	4727	13.4	+38 31	7.48	8.55	K2	3	..	37978i	95	4796	13.8	+39 17	8.9	8.9	Ao	2	..	38570i
46	4724	13.4	+17 55	8.2	8.7	F8	2	..	38860i	96	4346	13.8	+28 13	8.1	8.2	A2	4	..	3803ii
47	4801	13.4	+13 5	9.3	10.7	Mb	..	..	M	97	4803	13.8	+12 26	8.6	9.6	Ko	1	..	38114i
48	4850	13.4	+0 22	8.78	9.12	F2	4	..	10174b	98	4726	13.8	+10 56	8.8	9.3	F8	2	0,2	14693b
49	5730	13.4	-2 30	9.8	10.8	Ko	1	..	41073b	99	4694	13.8	+3 38	9.0	9.3	Fo	2	..	10174b
50	5753	13.4	-5 43	9.2	10.2	Ko	1	..	41073b	100	15872	13.8	-42 10	9.2	9.5	Go	4	..	20549b

211700

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	2680	13.8	-71 11	9.1	10.2	K2	1	..	19967b	51	6063	14.2	-16 2	9.1	10.2	K2	4	..	39413b
2	3805	13.9	+49 19	8.0	9.1	K2	2	..	3881oi	52	6261	14.2	-19 24	10.2	11.0	G5	2	..	39413b
3	4571	13.9	+24 29	8.5	8.5	A0	2	..	38597i	53	17700	14.2	-27 53	7.64	8.9	K0	8	..	23813b
4	4994	13.9	+ 6 51	8.0	9.2	K5	1	..	14693b	54	14673	14.2	-39 16	8.3	8.8	K0	6	..	20549b
5	5426	13.9	- 3 9	10.5	10.5	A0	1	..	41073b	55	14186	14.2	-48 22	10.8	10.2	G0	1	..	41899b
6	5850	13.9	- 7 49	8.9	9.5	G0	5	..	40910b	56	13243	14.2	-51 18	9.3	9.6	G0	1	..	41899b
7	5851	13.9	- 8 19	8.8	9.3	F8	6	..	40910b	57	10080	14.2	-57 29	8.9	11.0	K5	1	..	42494b
8	6490	13.9	-17 24	10.5	10.6	A3	1	..	39413b	58	1828	14.3	+64 13	8.0	8.3	F2	4	..	37257i
9	17113	13.9	-24 19	8.1	8.8	G0	7	..	23813b	59	4732	14.3	+38 33	8.5	8.6	A5	1	..	3857oi
10	17114	13.9	-24 22	10.2	9.8	G0	4	..	23813b	60	4725	14.3	+18 11	8.6	9.4	G5	2	..	3886oi
11	17697	13.9	-28 41	10.2	10.1	F8	5	..	23813b	61	5885	14.3	-10 19	8.5	9.5	K0	5	..	39463b
12	13810	13.9	-49 8	10.1	10.2	G5	2	..	41899b	62	6408	14.3	-20 0	9.8	11.0	K0	2	..	39413b
13	9868	13.9	-56 44	10.1	10.7	G0	2	..	42494b	63	17120	14.3	-24 36	9.1	10.0	K0	4	..	23813b
14	1199	13.9	-79 43	8.96	9.3	A2	6	..	42794b	64	15858	14.3	-27 23	11.4	11.4	G0	1	..	23813b
15	327	13.9	-87 20	8.5	9.7	K5	2	..	15173b	65	17023	14.3	-32 29	8.9	9.4	F8	2	..	41066b
16	1826	14.0	+64 10	8.5	8.6	A2	4	..	38902i	66	15522	14.3	-34 12	8.2	8.1	F5	7	..	41066b
17	4388	14.0	+32 17	8.1	9.3	K5	2	..	38031i	67	14675	14.3	-39 39	10.6	10.8	F8	2	..	38147b
18	4897	14.0	+19 28	7.05	8.12	K2	3	..	38821i	68	14858	14.3	-44 1	7.6	8.8	K0	7	..	20549b
19	5807	14.0	-11 18	9.1	10.2	K2	5	..	39463b	69	7793	14.3	-59 18	9.3	10.3	K0	2	..	42494b
20	17020	14.0	-32 46	8.9	9.9	K2	1	..	41066b	70	2922	14.3	-70 10	9.1	10.2	K2	2	..	19967b
21	16021	14.0	-32 57	9.3	9.9	K2	1	..	41066b	71	1025	14.4	+73 6	8.2	8.5	F2	3	..	38025i
22	14737	14.0	-37 5	10.2	10.5	F8	2	..	38147b	72	1237	14.4	+69 25	8.0	8.0	A0	4	..	3858oi
23	14738	14.0	-37 47	10.0	11.6	K2	1	..	38147b	73	2718	14.4	+55 38	8.8	9.4	G0	3	..	37351i
24	13647	14.0	-50 53	9.4	10.0	K0	1	..	41899b	74	2732	14.4	+54 46	8.9	8.9	A0	2	..	37351i
25	13241	14.0	-51 37	9.2	9.3	G0	2	..	42094b	75	4727	14.4	+17 35	8.6	9.8	K5	1	..	3886oi
26	7942	14.0	-58 1	6.34	8.0	K5	..	3,8	28,216	76	6258	14.4	-14 41	9.56	10.06	F8	5	..	39463b
27	7792	14.0	-59 25	8.5	10.2	K5	2	..	42494b	77	6102	14.4	-18 45	10.0	10.8	G5	1	..	39413b
28	6330	14.0	-62 11	9.1	9.9	G5	2	..	19898b	78	18295	14.4	-29 39	9.7	10.0	K0	4	..	23813b
29	4782	14.0	-63 3	6.72	7.2	G0	10	..	42486b	79	17024	14.4	-32 26	8.9	9.4	F5	2	..	41066b
30	969	14.1	+73 49	8.6	9.6	K0	2	..	38025i	80	2682	14.4	-71 23	10.1	10.7	G0	1	..	19967b
31	4806	14.1	+36 56	8.5	9.3	G5	2	..	3857oi	81	2277	14.5	+61 37	9.2	10.0	G5	1	..	38902i
32	4709	14.1	+25 16	7.61	7.69	A3	4	..	38597i	82	3770	14.5	+47 23	8.0	8.0	A0	3	..	3881oi
33	4617	14.1	+15 45	6.91	6.91	A0	7	..	38114i	83	4456	14.5	+41 38	7.8	8.9	K2	2	..	37978i
34	5020	14.1	+10 2	8.8	9.9	K2	2	..	14693b	84	4404	14.5	+27 10	8.0	8.1	A3	6	..	38031i
35	5732	14.1	- 1 55	9.3	9.8	F8	2	..	41073b	85	4892	14.5	+13 35	7.82	7.88	A2	4	..	38114i
36	5757	14.1	- 5 22	9.6	10.4	G5	1	..	41073b	86	4776	14.5	+11 57	8.0	8.8	G5	3	..	38114i
37	5969	14.1	- 6 22	9.6	10.6	K0	2	..	40918b	87	4284	14.5	- 1 6	9.07	10.14	K2	2	..	41073b
38	6491	14.1	-17 13	7.37	7.87	F8	10	..	39413b	88	5733	14.5	- 2 19	8.7	9.3	G0	5	..	41073b
39	15869	14.1	-25 8	9.7	10.6	K2	3	..	23813b	89	5854	14.5	- 8 11	9.3	10.1	G5	3	..	40910b
40	16022	14.1	-33 34	9.6	10.5	K2	1	..	41066b	90	6194	14.5	-15 32	10.9	11.4	F8	2	..	39413b
41	15519	14.1	-34 4	8.9	9.9	K2	3	..	41066b	91	5887	14.5	-21 50	9.2	10.2	K0	2	..	23121b
42	14739	14.1	-37 13	10.0	10.0	G0	4	..	38147b	92	5888	14.5	-22 31	8.1	8.6	G5	8	..	23121b
43	15875	14.1	-42 5	9.9	10.6	G5	1	..	38147b	93	16087	14.5	-26 0	10.9	11.5	G0	2	..	23813b
44	14857	14.1	-44 51	9.06	10.6	G0	2	..	45063b	94	16086	14.5	-26 45	10.2	10.9	K0	3	..	23813b
45	6644	14.1	-60 57	8.4	8.0	A0	8	2,7	42494b	95	14859	14.5	-44 13	9.2	10.6	K0	2	..	45063b
46	1746	14.2	+65 38	7.00	7.00	A0	6	..	37257i	96	2841	14.6	+53 59	8.2	8.3	A5	3	..	37351i
47	4843	14.2	+ 8 14	8.8	9.9	K2	1	..	14693b	97	4537	14.6	+37 15	6.11	6.39	F0	8	..	3857oi
48	5958	14.2	- 9 1	8.9	9.7	G5	6	..	40910b	98	4392	14.6	+32 24	9.1	9.2	A5	2	..	33699i
49	6240	14.2	- 12 25	8.9	9.4	F8	5	..	39463b	99	4348	14.6	+28 21	7.11	7.61	F8	5	..	38031i
50	6192	14.2	-14 49	9.71	9.85	A5	5	..	39463b	100	4772	14.6	+15 3	7.19	8.37	K5	3	..	38114i

THE HENRY DRAPER CATALOGUE.

211800

22^h 14^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	4695	14.6	+ 3 45	9.3	10.3	Ko	1	..	10174b	51	2686	14.9	- 71 59	9.7	10.0	Fo	3	..	20544b
2	5655	14.6	- 4 34	7.75	7.83	A3	7	..	41073b	52	2031	14.9	- 74 11	10.4	11.0	Go	2	..	19967b
3	6163	14.6	-13 37	10.0	10.4	F5	2	..	39463b	53	2721	15.0	+55 37	9.0	..	Ob	..	..	76,29
4	6103	14.6	-17 58	8.7	9.7	Ko	5	..	39413b	54	3880	15.0	+45 29	7.97	8.97	Ko	3	..	38844i
5	15861	14.6	-27 1	10.6	11.4	G5	1	..	23813b	55	4711	15.0	+16 17	8.2	9.2	Ko	1	..	38860i
6	19102	14.6	-30 14	9.4	9.4	K5	2	..	41066b	56	4779	15.0	+11 56	8.0	8.3	F2	4	..	38114i
7	14845	14.6	-41 11	10.6	10.8	F8	2	..	38147b	57	4493	15.0	+ 2 15	8.8	9.8	Ko	3	..	10174b
8	3886	14.6	-67 36	7.9	8.3	F5	8	..	20543b	58	5736	15.0	- 2 35	9.3	10.4	K2	2	..	41073b
9	1540	14.6	-77 22	8.5	9.3	G5	6	..	42794b	59	6495	15.0	-16 49	9.8	10.4	Go	2	..	39413b
10	2378	14.7	+60 37	8.8	9.6	G5	2	..	38803i	60	6496	15.0	-17 5	9.2	9.8	Go	4	..	39413b
11	4393	14.7	+33 0	7.30	8.30	Ko	6	..	38031i	61	17707	15.0	-28 25	10.2	11.4	K2	2	..	23813b
12	6195	14.7	-15 17	8.8	9.4	Go	6	..	39413b	62	17706	15.0	-28 44	9.5	9.7	Go	6	..	23813b
13	6065	14.7	-15 48	9.3	9.3	Ao	5	..	39413b	63	15264	15.0	-35 1	6.88	8.0	G5	8	..	41066b
14	19106	14.7	-30 45	9.2	9.9	G5	3	..	41066b	64	15330	15.0	-36 24	9.0	9.6	F5	6	..	38147b
15	14863	14.7	-44 9	9.9	11.2	Ko	1	..	45063b	65	14748	15.0	-37 49	10.4	10.0	Go	5	..	38147b
16	10282	14.7	-53 9	9.2	10.7	Go	3	..	39669b	66	12010	15.0	-52 46	7.8	8.1	Fo	6	..	42094b
17	9871	14.7	-56 36	9.3	10.7	G5	2	..	42494b	67	1238	15.1	+69 33	7.48	8.48	Ko	2	..	38025i
18	7945	14.7	-58 51	8.8	9.9	G5	4	..	42494b	68	2844	15.1	+54 4	8.0	8.1	A3	3	..	37351i
19	1830	14.8	+63 36	8.9	9.9	Ko	1	..	38902i	69	4775	15.1	+14 19	9.3	9.8	F8	1	..	38114i
20	2720	14.8	+55 41	8.6	9.0	F5	3	..	37351i	70	6196	15.1	-15 4	8.7	9.0	Fo	7	..	39413b
21	2842	14.8	+54 4	9.0	9.1	A2	2	..	37351i	71	6263	15.1	-19 15	10.5	10.9	Go	2	..	39413b
22	3324	14.8	+52 9	7.35	8.35	Ko	3	..	37351i	72	6264	15.1	-19 41	10.2	11.8	K5	1	..	39413b
23	5126	14.8	+20 30	7.75	8.75	Ko	2	..	38821i	73	6262	15.1	-19 43	9.18	10.2	G5	4	..	39413b
24	5759	14.8	- 5 8	9.3	9.9	Go	2	..	41073b	74	17376	15.1	-23 7	9.7	10.9	K5	1	..	23121b
25	17375	14.8	-23 29	9.7	10.2	Ko	3	..	23813b	75	14850	15.1	-41 21	9.6	10.1	G5	3	5,1	38147b
26	15874	14.8	-24 54	11.1	11.4	Ko	1	..	23813b	76	14999	15.1	-43 45	10.8	11.2	Ao	3	..	20549b
27	15873	14.8	-25 4	11.4	11.4	G5	2	..	23813b	77	14191	15.1	-48 5	9.7	9.6	Go	3	..	41899b
28	15866	14.8	-27 27	10.6	11.6	Ko	1	..	23813b	78	13246	15.1	-51 37	7.8	8.4	F5	6	..	42094b
29	18301	14.8	-29 48	9.45	9.6	F5	5	..	23813b	79	970	15.2	+73 36	8.6	9.4	G5	2	..	38025i
30	18758	14.8	-30 54	9.5	10.2	Fo	2	..	41066b	80	2061	15.2	+62 43	8.5	8.5	B8	4	R	37257i
31	14995	14.8	-38 27	10.2	11.4	G5	1	..	38147b	81	3329	15.2	+52 10	8.2	9.2	Ko	1	..	37028i
32	9826	14.8	-55 31	9.2	11.3	K5	2	..	42494b	82	4739	15.2	+39 6	9.4	10.4	Ko	1	..	38570i
33	2059	14.9	+62 18	5.99	7.17	K5	6	..	37257i	83	4295	15.2	+27 46	9.2	9.2	Ao	2	..	38597i
34	3659	14.9	+50 17	8.55	8.55	Ao	2	E	37351i	84	4576	15.2	+25 13	7.61	8.68	K2	2	..	38597i
35	3879	14.9	+45 18	8.47	8.23	B	2	R	37978i	85	5762	15.2	- 4 59	9.2	10.3	K2	1	..	41073b
36	4477	14.9	+34 1	7.05	8.12	K2	4	..	38570i	86	15875	15.2	-25 37	9.4	9.4	Go	5	..	23813b
37	4620	14.9	+15 40	8.6	8.7	A5	3	..	38114i	87	1644	15.3	+64 21	8.9	8.9	Ao	1	..	38902i
38	5855	14.9	- 8 19	5.36	5.31	B8	..	I,9 R	56,102	88	4350	15.3	+28 20	8.8	9.8	Ko	1	..	38031i
39	6244	14.9	-12 25	9.8	10.4	Go	4	..	39463b	89	4342	15.3	- 0 35	7.91	8.33	F5	5	3,2	10174b
40	6242	14.9	-12 30	10.5	11.5	Ko	1	..	39463b	90	5656	15.3	- 4 41	9.00	10.00	Ko	3	..	41073b
41	6243	14.9	-12 44	8.3	9.3	Ko	5	..	39463b	91	5751	15.3	- 7 39	9.3	9.6	F2	4	..	40910b
42	6493	14.9	-17 47	10.2	10.7	F8	2	..	39413b	92	5962	15.3	- 9 33	9.3	9.8	F8	3	..	40910b
43	16091	14.9	-26 51	10.4	10.6	Go	4	..	23813b	93	6245	15.3	-12 26	10.0	10.6	Go	3	..	39463b
44	15867	14.9	-27 44	10.9	11.9	Ko	1	..	23813b	94	6246	15.3	-12 46	9.3	10.3	Ko	3	..	39463b
45	14747	14.9	-37 3	8.9	9.9	G5	5	..	38147b	95	17380	15.3	-23 14	8.9	9.3	F8	5	..	23121b
46	14742	14.9	-40 35	9.2	9.1	A3	5	..	20549b	96	15869	15.3	-27 50	11.1	12.1	Ko	1	..	23813b
47	15880	14.9	-41 56	8.8	9.1	Go	6	..	20549b	97	18306	15.3	-29 8	10.6	11.7	G5	2	..	23813b
48	14997	14.9	-43 15	9.3	10.6	G5	2	..	45063b	98	17034	15.3	-32 38	8.9	9.3	Go	3	..	41066b
49	9872	14.9	-56 17	7.5	8.3	F8	5	..	42494b	99	15333	15.3	-36 51	8.9	9.4	A5	6	..	38147b
50	7564	14.9	-60 27	8.3	9.4	K2	5	3,3	42494b	100	14287	15.3	-46 38	10.1	11.2	Ko	1	..	41899b

211900

22^h 15^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	1553	15.3	-76 18	9.9	11.0	K2	1	..	42794b	51	5895	15.7	-22 8	9.1	9.8	Ko	3	..	23121b
2	1831	15.4	+64 11	8.8	8.8	Ao	2	..	38902i	52	17130	15.7	-24 13	9.7	10.6	G5	4	..	23813b
3	2723	15.4	+55 47	8.9	8.9	A	2	..	37351i	53	15878	15.7	-25 38	9.7	9.7	F8	5	..	23813b
4	4776	15.4	+14 34	9.0	10.0	Ko	1	..	38114i	54	15871	15.7	-27 45	10.9	12.0	K2	1	..	23813b
5	4731	15.4	+10 33	7.78	8.78	Ko	3	..	38114i	55	17043	15.7	-32 15	10.2	10.5	A3	1	..	41066b
6	4732	15.4	+10 19	9.12	9.18	A2	2	..	14693b	56	16031	15.7	-33 12	9.2	10.7	K5	1	..	41066b
7	5658	15.4	-4 2	9.3	9.7	F5	3	..	41073b	57	7947	15.7	-58 31	8.4	8.7	Go	4	..	42494b
8	6247	15.4	-12 33	9.8	10.4	Go	3	..	39463b	58	2381	15.8	+60 33	8.4	9.5	K2	1	..	38803i
9	6262	15.4	-14 29	9.1	9.6	F8	7	..	39463b	59	4638	15.8	+29 43	9.4	9.4	Ao	2	..	38031i
10	6409	15.4	-20 27	8.9	9.8	Go	5	..	39413b	60	4896	15.8	+13 32	6.65	7.65	Ko	5	..	38114i
11	16096	15.4	-26 5	9.7	10.3	Go	3	..	23813b	61	5000	15.8	+6 27	8.5	9.0	F8	4	..	14693b
12	17036	15.4	-32 41	9.2	10.2	F8	1	..	41066b	62	5737	15.8	-2 46	9.6	10.1	F8	1	..	41073b
13	15270	15.4	-35 30	9.6	11.1	Ko	2	..	38147b	63	5767	15.8	-4 58	10.0	10.6	Go	2	..	41073b
14	15886	15.4	-42 4	9.9	10.8	Ko	1	2,1-	45063b	64	5768	15.8	-5 38	9.3	9.8	F8	3	..	41073b
15	10283	15.4	-53 42	10.1	10.7	Go	3	..	39669b	65	5753	15.8	-7 29	var.	var.	Fo	4	R	40910b
16	9829	15.4	-55 32	8.4	9.5	A2	4	..	42494b	66	17712	15.8	-28 4	10.9	11.5	Go	2	..	23813b
17	7794	15.4	-58 59	8.4	9.3	Ko	4	..	42494b	67	16032	15.8	-33 0	10.2	10.8	Go	2	..	39342b
18	6646	15.4	-61 1	9.2	9.4	G5	3	5,3-	42486b	68	15338	15.8	-36 27	8.0	8.5	F2	8	..	38147b
19	3887	15.4	-67 33	10.4	11.0	Go	2	..	20543b	69	13822	15.8	-49 34	9.3	10.8	K5	1	..	41899b
20	2252	15.4	-73 19	8.7	8.7	Ao	5	..	20544b	70	9831	15.8	-55 5	9.1	10.7	K5	1	..	42094b
21	2032	15.4	-73 57	9.1	9.6	F8	4	..	19967b	71	2506	15.9	+59 38	7.16	7.11	B8	4	..	38803i
22	4681	15.5	+30 38	8.9	9.9	Ko	1	..	38031i	72	3181	15.9	+52 22	7.73	8.91	K5	2	3,2	37040i
23	4730	15.5	+21 19	8.1	8.1	Ao	2	..	38821i	73	3334	15.9	+51 30	7.90	8.32	F5	4	3,2	37028i
24	4998	15.5	+5 17	5.35	5.23	B5	..	3,10	56,102	74	3665	15.9	+46 58	7.7	7.8	A2	4	..	38844i
25	4490	15.5	+3 2	9.3	9.4	A2	1	..	10174b	75	4397	15.9	+33 3	9.1	9.2	A3	2	..	38031i
26	4343	15.5	+0 2	8.4	8.4	B9	4	1,1	10174b	76	4853	15.9	+7 41	6.17	6.59	F5	7	..	38114i
27	4285	15.5	-1 1	9.37	10.44	K2	1	..	41073b	77	4346	15.9	+0 9	9.08	9.08	Ao	2	..	10174b
28	5431	15.5	-3 31	10.0	10.5	F8	2	..	41073b	78	6198	15.9	-15 29	8.9	9.9	Ko	4	..	39413b
29	5893	15.5	-22 9	9.3	10.2	G5	1	..	23121b	79	5896	15.9	-21 51	9.8	10.2	Go	2	..	23121b
30	9873	15.5	-56 7	9.3	11.0	Ko	1	..	42494b	80	14751	15.9	-37 50	10.4	10.8	F8	2	..	38147b
31	2253	15.5	-73 19	8.4	8.4	Ao	6	..	20544b	81	4027	15.9	-65 40	10.0	10.0	Ao	4	..	20543b
32	2064	15.6	+62 43	9.2	9.2	Ao	3	..	38902i	82	2724	16.0	+55 40	7.30	8.30	Ko	5	..	37351i
33	4351	15.6	+29 0	8.7	9.1	F5	3	..	38031i	83	4768	16.0	+35 48	8.3	8.6	Fo	1	..	38570i
34	5024	15.6	+10 3	9.32	9.40	A3	2	..	14693b	84	4618	16.0	+22 33	7.9	8.9	Ko	1	..	38821i
35	5963	15.6	-9 17	7.43	8.43	Ko	8	..	40910b	85	5001	16.0	+6 5	8.5	9.0	F8	6	..	14693b
36	6264	15.6	-14 5	9.3	9.8	F8	4	..	39463b	86	5000	16.0	+5 51	8.8	8.9	A2	2	..	14693b
37	6197	15.6	-15 26	8.1	8.9	G5	6	..	39413b	87	4857	16.0	+0 33	8.6	9.4	G5	4	5,2	10174b
38	6105	15.6	-17 51	10.9	11.5	Go	1	..	39413b	88	5755	16.0	-6 57	9.6	10.6	Ko	2	..	40910b
39	17385	15.6	-23 0	9.2	9.8	F5	3	..	23121b	89	5857	16.0	-8 11	9.3	10.4	K2	1	..	40910b
40	15877	15.6	-24 59	11.4	12.5	K2	1	..	23813b	90	6251	16.0	-12 42	9.6	10.7	K2	3	..	39463b
41	14678	15.6	-39 45	10.9	11.2	F8	1	..	38147b	91	6265	16.0	-19 1	8.1	9.5	Ko	5	..	39413b
42	10067	15.6	-54 22	7.3	7.8	Ko	6	..	42094b	92	15874	16.0	-27 5	10.6	10.9	F2	2	..	23813b
43	9874	15.6	-56 18	9.3	9.8	A5	4	..	42494b	93	18313	16.0	-29 17	8.1	8.2	B9	9	..	23813b
44	2689	15.6	-72 16	9.6	10.8	K5	1	..	19967b	94	14860	16.0	-41 3	10.2	10.5	F8	3	..	38147b
45	1293	15.7	+68 14	8.6	9.0	F5	2	..	38580i	95	15010	16.0	-43 44	9.9	10.9	Go	3	..	20549b
46	1645	15.7	+65 7	8.80	8.86	A2	2	..	38902i	96	14879	16.0	-44 33	8.9	10.3	F8	4	..	20549b
47	3661	15.7	+46 23	8.0	9.2	K5	1	..	38844i	97	4784	16.0	-63 7	9.3	10.3	Ko	2	..	42486b
48	4353	15.7	+28 45	9.4	9.7	Fo	2	5,1	38597i	98	2690	16.0	-72 44	5.42	6.1	Go	..	R	56,148
49	6499	15.7	-17 13	10.5	11.1	Go	2	..	39413b	99	2383	16.1	+60 25	9.4	9.5	A2	1	..	38902i
50	6498	15.7	-17 26	10.2	10.8	Go	2	..	39413b	100	3182	16.1	+52 22	8.0	8.0	B9	4	..	37351i

THE HENRY DRAPER CATALOGUE.

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22^h 16^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	3337	16.1	7 51 15	8.5	8.5	A	1	..	3735ii	51	6170	16.4	-13 4	8.9	10.3	Mb	5	..	39463b
2	4811	16.1	+36 48	6.98	7.98	Ko	5	..	3857oi	52	17390	16.4	-23 48	10.2	10.9	G5	4	..	23813b
3	4657	16.1	+34 38	7.30	7.58	Fo	5	..	3857oi	53	16102	16.4	-26 46	10.4	10.3	F8	3	..	23813b
4	4639	16.1	+29 27	9.4	10.4	Ko	1	..	3803ii	54	17721	16.4	-28 38	10.4	11.4	Ko	1	..	23813b
5	4580	16.1	+24 26	8.3	9.3	Ko	1	..	38597i	55	17720	16.4	-28 49	9.7	10.9	Go	3	..	23813b
6	4347	16.1	- 0 39	9.5	10.1	Go	3	..	24041b	56	19117	16.4	-30 6	9.7	9.4	Ao	6	..	23813b
7	5739	16.1	- 2 36	9.8	10.3	F8	1	..	41073b	57	13823	16.4	-49 21	9.3	9.6	Go	3	..	41899b
8	6252	16.1	-12 31	9.8	10.6	G5	3	..	39463b	58	3778	16.5	+47 20	8.4	8.5	A2	2	..	38844i
9	6200	16.1	-14 58	8.1	9.2	K2	5	..	39463b	59	5005	16.5	+ 6 40	8.1	9.2	K2	7	..	14693b
10	5897	16.1	-22 5	5.40	7.0	Ko	..	..	56,148	60	4498	16.5	+ 2 47	9.3	10.3	Ko	1	..	10174b
11	17387	16.1	-23 20	9.7	10.2	Ko	3	..	23121b	61	5741	16.5	- 1 53	3.97	3.97	Ao	..	R	6192b
12	15875	16.1	-27 9	10.4	10.9	G5	2	..	23813b	62	5858	16.5	- 8 7	8.7	10.1	Mb	3	R	40910b
13	17716	16.1	-28 9	10.9	11.5	Go	1	..	23813b	63	6171	16.5	-12 57	10.5	11.1	Go	3	..	39463b
14	15005	16.1	-38 10	10.9	10.8	Go	2	..	38147b	64	6501	16.5	-17 3	10.0	10.6	Go	2	..	39413b
15	14679	16.1	-39 50	10.2	11.2	G5	1	..	38147b	65	6107	16.5	-18 34	10.5	11.0	F8	2	..	39413b
16	15012	16.1	-43 36	10.3	11.2	G	2	..	20549b	66	6207	16.5	-21 20	8.7	9.3	Ko	5	..	23121b
17	9832	16.1	-55 42	9.7	10.7	Ko	3	..	42494b	67	18770	16.5	-31 39	8.7	10.2	Ko	2	..	41066b
18	9875	16.1	-56 40	7.4	7.8	A3	7	..	42494b	68	14749	16.5	-40 29	9.2	10.6	G5	1	..	20549b
19	4745	16.2	+38 48	9.4	9.3	B5	2	4,I	36318i	69	14291	16.5	-46 24	9.5	10.1	Ko	2	..	41899b
20	4735	16.2	+10 23	8.77	9.77	Ko	1	..	38114i	70	2726	16.6	+55 35	9.0	9.0	A	2	..	3735ii
21	4348	16.2	- 0 42	9.7	10.3	Go	2	..	24041b	71	3673	16.6	+50 28	6.55	7.62	K2	6	2,5	37028i
22	5972	16.2	- 6 44	7.46	7.52	A2	3	0,8	44122b	72	3689	16.6	+48 42	7.6	8.8	K5	2	0,2	38842i
23	6201	16.2	-15 24	10.5	11.1	Go	1	..	39463b	73	4582	16.6	+24 56	8.7	9.3	Go	2	..	38597i
24	6206	16.2	-21 18	9.2	10.1	Ko	3	..	23121b	74	4782	16.6	+14 24	8.0	9.1	K2	2	..	38114i
25	15279	16.2	-35 1	7.38	8.1	F2	8	..	41066b	75	4898	16.6	+13 52	6.94	7.02	A3	7	..	38114i
26	13653	16.2	-50 6	9.4	9.7	F5	2	..	41899b	76	4784	16.6	+11 42	4.93	4.76	B3p	..	0,R	56,102
27	1426	16.3	+67 55	7.52	8.52	Ko	3	..	3858oi	77	4737	16.6	+11 5	8.6	8.7	A3	3	..	38114i
28	3821	16.3	+49 47	8.9	8.9	Ao	2	R	37028i	78	4696	16.6	+ 4 4	9.3	9.3	Ao	2	..	10174b
29	3890	16.3	+45 54	8.0	8.6	Go	2	..	38844i	79	4350	16.6	+ 0 8	7.93	7.93	Ao	5	0,2	10174b
30	4855	16.3	+ 8 6	8.2	8.3	A5	3	..	38114i	80	5973	16.6	- 6 21	10.0	11.0	Ko	1	..	40918b
31	4846	16.3	+ 5 13	8.36	8.86	F8	4	..	14693b	81	5974	16.6	- 6 41	8.1	9.5	Ma	5	..	40910b
32	5740	16.3	- 2 37	8.9	9.4	F8	3	..	41073b	82	5896	16.6	-10 7	9.2	9.3	A5	4	..	40918b
33	6169	16.3	-13 9	9.3	10.1	G5	2	..	39463b	83	6411	16.6	-19 57	7.90	8.6	Go	8	..	39413b
34	15887	16.3	-25 52	7.66	8.3	Ko	7	..	23813b	84	15012	16.6	-37 56	9.6	10.1	G5	5	..	38147b
35	15280	16.3	-34 59	7.28	7.8	F2	8	..	41066b	85	14750	16.6	-40 14	10.4	10.8	Go	1	..	38147b
36	14747	16.3	-40 19	8.3	8.8	Go	5	..	20549b	86	14882	16.6	-43 55	10.1	10.6	Go	3	..	20549b
37	14166	16.3	-47 11	8.7	9.5	Go	3	..	41899b	87	14292	16.6	-46 27	6.65	8.0	S	6	R	45071b
38	13248	16.3	-51 17	9.1	9.3	G5	4	R	41899b	88	14294	16.6	-46 41	8.7	8.7	F2	5	..	41899b
39	12015	16.3	-52 4	8.5	9.0	Go	3	..	42094b	89	14293	16.6	-46 51	9.7	10.0	Go	2	..	41899b
40	10284	16.3	-53 18	9.3	10.4	F8	2	..	42094b	90	9877	16.6	-56 24	9.3	10.7	G5	2	..	42494b
41	7795	16.3	-59 35	8.6	9.3	Go	4	..	42494b	91	3890	16.6	-67 26	8.6	9.4	G5	3	..	20543b
42	1646	16.4	+64 17	8.0	8.1	A5	7	5,2	38902i	92	3234	16.6	-69 28	8.5	9.7	K5	3	..	20543b
43	2755	16.4	+56 25	6.54	6.49	B8	9	..	3735ii	93	2740	16.7	+55 11	8.16	8.14	B9	5	..	3735ii
44	3341	16.4	+51 21	7.08	6.89	B2p	4	R	3735ii	94	2849	16.7	+53 18	8.4	8.5	A3	1	..	3735ii
45	4682	16.4	+31 59	8.7	9.7	Ko	2	5,I	33699i	95	3824	16.7	+49 28	8.8	8.9	A2	2	..	37028i
46	4685	16.4	+30 48	7.65	8.65	Ko	4	..	3803ii	96	4789	16.7	+41 5	8.1	9.2	K2	3	..	37978i
47	4410	16.4	+26 26	6.50	7.85	Ma	5	0,3	38597i	97	4299	16.7	+27 50	4.88	4.83	B8	..	0,10	56,102
48	4731	16.4	+17 27	8.0	8.3	F2	6	..	3886oi	98	5133	16.7	+20 34	7.85	7.85	Ao	3	..	3882ii
49	5770	16.4	- 5 29	9.8	10.4	Go	2	..	41073b	99	6202	16.7	-15 23	9.3	10.1	G5	2	..	39463b
50	5893	16.4	-10 25	9.6	10.4	G5	1	..	40918b	100	6502	16.7	-17 22	9.6	10.2	Go	2	..	39413b

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22^h 16^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	6109	16.7	-17 57	9.8	10.6	G5	1	..	39413b	51	960	17.1	+74 39	8.7	9.7	Ko	1	..	38903i
2	15889	16.7	-41 55	9.3	10.3	K5	2	0,I	38147b	52	2509	17.1	+59 35	8.0	8.1	A2	3	..	38803i
3	15890	16.7	-42 23	9.7	10.8	G5	2	..	20549b	53	4467	17.1	+41 17	8.0	8.0	Ao	3	..	37978i
4	14883	16.7	-44 51	8.5	8.9	F2	6	..	20549b	54	4791	17.1	+40 46	9.1	10.5	Ma	..	..	M
5	4032	16.7	-65 52	7.5	7.8	Fo	8	..	20543b	55	4663	17.1	+34 23	8.6	8.9	Fo	3	..	33699i
6	2741	16.8	+54 21	8.0	8.4	F5	5	..	3735ii	56	4300	17.1	+27 45	9.4	9.8	F5	1	..	38597i
7	3893	16.8	+45 34	7.42	7.84	F5	4	..	38844i	57	4857	17.1	+ 7 23	8.6	9.7	K2	2	..	14693b
8	4516	16.8	+23 34	8.1	8.2	A2	3	..	38821i	58	6071	17.1	-15 54	9.3	10.4	K2	2	..	39413b
9	5744	16.8	- 2 26	9.2	9.8	Go	2	..	41073b	59	6070	17.1	-16 22	8.7	9.7	Ko	4	..	39413b
10	5433	16.8	- 2 47	9.1	10.3	K5	1	..	41073b	60	6211	17.1	-21 35	9.8	10.4	Go	1	..	23121b
11	5662	16.8	- 4 19	8.5	9.5	Ko	4	..	41073b	61	15896	17.1	-25 11	9.9	9.4	F8	6	..	23813b
12	5966	16.8	- 9 16	9.3	10.1	G5	2	..	40918b	62	16106	17.1	-26 13	9.7	9.4	Ao	5	..	23813b
13	6254	16.8	-12 44	10.2	11.2	Ko	2	..	39463b	63	18777	17.1	-31 3	8.9	10.7	Ko	3	..	39342b
14	16040	16.8	-33 24	8.2	9.0	Ko	5	..	41066b	64	15545	17.1	-34 26	8.6	9.6	Ao	4	..	41066b
15	15544	16.8	-34 4	9.0	10.8	K2	1	..	41066b	65	14886	17.1	-43 54	7.9	9.5	G5	6	..	20549b
16	15013	16.8	-38 13	10.9	11.2	Go	1	..	38147b	66	10287	17.1	-53 7	9.3	10.4	A5	2	..	42094b
17	1754	16.9	+65 55	8.0	8.0	Ao	3	..	38902i	67	1747	17.1	-75 14	9.3	9.8	F8	4	..	42794b
18	2742	16.9	+54 47	8.6	8.7	A5	3	..	3735ii	68	1748	17.1	-75 31	6.17	6.8	Go	..	0,10	56,148
19	3185	16.9	+52 16	8.8	8.9	A2	2	..	3735ii	69	2387	17.2	+61 5	8.2	8.7	F8	2	..	38803i
20	3894	16.9	+46 2	4.66	4.54	B5	..	..	56,102	70	4351	17.2	- 0 25	9.0	9.0	Ao	6	..	24041b
21	4815	16.9	+36 27	8.5	9.5	Ko	1	..	38570i	71	5745	17.2	- 2 31	9.6	10.1	F8	2	..	41073b
22	5760	16.9	- 7 5	8.7	9.0	Fo	6	..	40910b	72	5435	17.2	- 2 58	9.3	9.9	Go	3	..	41073b
23	5817	16.9	-11 21	7.9	8.9	Ko	5	2,7	40918b	73	5773	17.2	- 4 56	9.85	10.85	Ko	2	..	41073b
24	6203	16.9	-15 7	10.2	11.2	Ko	1	..	39463b	74	6204	17.2	-15 1	10.5	11.6	K2	1	..	39463b
25	6504	16.9	-17 12	9.2	10.0	G5	3	..	39413b	75	6414	17.2	-19 51	8.93	9.5	G5	5	..	39413b
26	6413	16.9	-20 41	8.5	9.3	Ko	7	..	39413b	76	5899	17.2	-22 41	9.3	10.1	Go	2	..	23121b
27	17727	16.9	-27 54	9.7	9.2	F8	5	..	23813b	77	17729	17.2	-28 4	9.7	10.3	Go	4	..	23813b
28	14755	16.9	-36 56	10.2	10.8	G5	1	..	38147b	78	14686	17.2	-39 24	8.6	9.5	Ko	4	..	20549b
29	14684	16.9	-39 15	8.9	8.8	Fo	7	..	20549b	79	14679	17.2	-45 49	8.1	8.4	F2	7	..	45063b
30	14884	16.9	-44 34	7.9	8.5	Fo	7	..	20549b	80	14171	17.2	-47 10	7.06	7.1	A2	..	0,9	56,148
31	14677	16.9	-45 37	8.2	8.3	A5	7	..	45063b	81	9879	17.2	-56 47	12.0	11.0	Ko	2	..	42494b
32	14295	16.9	-46 25	5.82	6.10	Fo	..	5,R	56,148	82	1201	17.2	-79 3	8.8	8.8	Ao	6	..	42794b
33	12017	16.9	-52 35	8.5	9.6	G5	2	..	42094b	83	2729	17.3	+55 30	7.89	7.87	B9	6	..	3735ii
34	3660	16.9	-66 47	8.7	9.8	K2	4	..	20543b	84	2855	17.3	+54 13	8.9	9.0	A5	1	..	3735ii
35	2386	17.0	+60 40	8.4	9.5	K2	1	..	38902i	85	4106	17.3	+45 9	9.12	10.47	Mb	..	..	M
36	2508	17.0	+57 54	6.53	7.53	Ko	6	0,5	38803i	86	4786	17.3	+15 8	6.69	6.69	Ao	8	..	38114i
37	2851	17.0	+53 16	8.8	8.9	A2	2	..	3735ii	87	4739	17.3	+10 34	8.7	9.5	G5	2	..	38114i
38	3676	17.0	+50 34	8.6	8.7	A2	1	..	37028i	88	5029	17.3	+10 9	8.17	9.17	Ko	2	..	38114i
39	3781	17.0	+47 44	7.7	7.7	Ao	5	..	38844i	89	4287	17.3	- 1 13	10.7	11.8	K2	1	..	24041b
40	5027	17.0	+ 9 35	9.1	9.5	F5	2	..	14693b	90	5774	17.3	- 5 8	9.2	10.2	Ko	1	..	41073b
41	4850	17.0	+ 9 11	8.4	9.2	G5	2	..	38114i	91	5862	17.3	- 7 58	9.3	9.9	Go	4	..	40918b
42	6069	17.0	-15 58	8.3	8.9	Go	6	..	39413b	92	6268	17.3	-13 57	9.6	10.2	Go	3	..	39463b
43	6505	17.0	-17 4	10.5	11.3	G5	1	..	39413b	93	17399	17.3	-23 31	10.4	10.7	A2	1	..	23813b
44	6266	17.0	-18 47	9.8	9.9	A5	4	..	39413b	94	15898	17.3	-25 7	10.4	11.4	F8	1	..	23813b
45	18318	17.0	-29 11	10.4	11.0	Go	3	..	23813b	95	17730	17.3	-28 2	8.9	8.8	F2	6	..	23813b
46	19122	17.0	-30 7	8.1	8.5	G5	8	..	23813b	96	15547	17.3	-34 49	10.2	10.5	F8	3	..	39649b
47	17053	17.0	-32 28	9.2	10.7	G5	2	..	39342b	97	15897	17.3	-42 26	9.4	10.8	Ko	2	..	20549b
48	9833	17.0	-55 46	10.2	11.0	G5	1	..	42494b	98	14887	17.3	-44 37	8.9	10.0	F8	5	..	20549b
49	9878	17.0	-56 20	10.5	11.6	K2	1	..	42494b	99	4787	17.3	-63 39	8.0	8.1	A2	6	2,8	42486b
50	820	17.1	+76 0	6.56	6.56	Ao	9	..	38025i	100	2856	17.4	+54 3	8.6	8.6	Ao	3	..	3735ii

THE HENRY DRAPER CATALOGUE.

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22^h 17^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	4813	17.4	+39 30	8.3	9.3	Ko	1	..	37978i	51	5979	17.8	- 6 23	10.0	10.6	Go	2	..	40918b
2	4664	17.4	+35 14	9.07	9.07	Ao	1	..	38570i	52	6073	17.8	-16 34	10.2	10.7	F8	2	..	39413b
3	4499	17.4	+ 2 30	9.3	9.3	Ao	2	..	10174b	53	6508	17.8	-17 24	10.0	10.6	Go	2	..	39413b
4	5663	17.4	- 4 15	8.1	9.1	Ko	5	..	41073b	54	15902	17.8	-25 6	10.9	11.4	K2	1	..	23813b
5	5863	17.4	- 8 10	9.8	10.6	G5	2	..	40918b	55	16112	17.8	-26 43	10.9	11.9	Ko	1	..	23813b
6	6206	17.4	-14 59	10.5	11.0	F8	2	..	39463b	56	15883	17.8	-27 35	11.1	12.1	Ko	1	..	23813b
7	15018	17.4	-38 29	9.2	10.1	G5	4	..	38147b	57	17734	17.8	-27 56	11.1	11.7	Go	2	..	23813b
8	14888	17.4	-43 54	8.7	9.4	F5	6	..	20549b	58	15553	17.8	-34 38	10.6	10.2	Go	4	..	39649b
9	6649	17.4	-61 11	9.0	9.9	Ko	2	0,2	19898b	59	15026	17.8	-38 50	10.2	10.0	Go	3	..	38147b
10	3661	17.4	-66 7	7.2	7.2	Ao	10	..	20543b	60	14690	17.8	-39 4	9.8	9.7	Go	5	..	38147b
11	2686	17.4	-70 56	5.95	6.23	Fo	..	..	56,148	61	14761	17.8	-40 33	9.6	10.1	Go	3	..	20549b
12	4814	17.5	+40 10	6.72	7.79	K2	5	..	37978i	62	9837	17.8	-55 31	9.3	11.0	Ko	2	..	42494b
13	4776	17.5	+35 58	8.5	8.8	Fo	2	..	38570i	63	7951	17.8	-58 40	9.2	10.3	Ko	1	..	42494b
14	4288	17.5	- 1 45	10.7	11.5	G5	2	..	24041b	64	1050	17.8	-80 11	8.9	9.9	Ko	3	..	42794b
15	5818	17.5	-11 45	8.9	9.2	Fo	5	..	39463b	65	1295	17.9	+68 52	7.8	8.2	F5	5	..	38580i
16	17054	17.5	-32 15	10.0	10.8	F8	1	..	39342b	66	1649	17.9	+64 49	7.95	8.01	A2	4	..	37257i
17	15019	17.5	-38 15	11.6	11.7	Go	1	..	38147b	67	2068	17.9	+62 43	8.1	8.1	Ao	5	2,3	38902i
18	14758	17.5	-39 58	10.4	11.2	Go	1	..	38147b	68	3695	17.9	+48 21	8.0	8.1	A3	3	..	38844i
19	4249	17.5	-64 10	9.7	9.8	A2	2	..	19898b	69	4903	17.9	+14 7	9.3	9.4	A2	1	..	38114i
20	3892	17.5	-67 21	8.8	9.4	Go	3	..	20543b	70	6208	17.9	-15 27	7.06	7.48	F5	8	..	39463b
21	2857	17.6	+53 24	9.9	10.0	A2	1	..	37351i	71	15905	17.9	-25 16	5.61	7.2	Ko	..	0,7	56,148
22	4469	17.6	+41 36	6.27	6.10	B3	7	2,9-	38844i	72	17735	17.9	-28 23	8.5	9.7	Ko	6	..	23813b
23	4740	17.6	+11 2	8.8	9.9	K2	1	..	38114i	73	19128	17.9	-30 12	9.1	9.4	Ko	6	..	23813b
24	5030	17.6	+ 9 26	8.0	8.3	Fo	3	..	38114i	74	15554	17.9	-34 51	9.68	10.2	Go	4	..	39649b
25	5010	17.6	+ 7 5	8.1	8.2	A2	5	..	14693b	75	15029	17.9	-38 26	9.8	10.6	Ma	2	..	38147b
26	5008	17.6	+ 5 58	7.9	8.0	A3	9	..	14693b	76	14691	17.9	-39 12	10.9	10.5	Fo	3	..	38147b
27	4865	17.6	+ 0 19	9.28	10.28	Ko	3	..	24041b	77	7953	17.9	-58 47	9.1	9.7	Go	3	..	42494b
28	5746	17.6	- 2 9	10.5	10.9	F5	1	..	24041b	78	1501	18.0	+66 28	7.26	7.40	A5	4	..	37257i
29	5977	17.6	- 6 21	10.2	11.0	G5	2	..	40918b	79	2762	18.0	+56 18	8.2	8.3	A2	3	..	37351i
30	17406	17.6	-23 26	10.6	10.7	G5	1	..	23813b	80	4645	18.0	+29 51	7.61	8.17	Go	4	..	38031i
31	16110	17.6	-26 20	7.84	8.5	Go	7	..	23813b	81	5665	18.0	- 4 1	9.6	9.7	A5	3	..	41073b
32	15287	17.6	-35 17	9.6	10.0	Go	4	..	39649b	82	17410	18.0	-23 14	9.7	10.1	G5	1	..	23121b
33	15288	17.6	-35 27	8.9	9.6	Fo	5	..	39649b	83	15294	18.0	-35 24	9.6	10.5	F8	2	..	39649b
34	14689	17.6	-39 42	10.2	10.5	F2	3	..	38147b	84	14302	18.0	-46 12	10.3	10.6	F5	2	..	45071b
35	13253	17.6	-50 56	8.3	9.3	K2	4	..	41899b	85	13660	18.0	-50 23	9.9	9.6	Go	2	..	41899b
36	733	17.7	+79 16	8.6	9.4	G5	2	..	38590i	86	2257	18.0	-72 55	9.2	9.6	F5	4	..	19967b
37	822	17.7	+75 31	7.37	7.37	Ao	7	..	38025i	87	1839	18.1	+63 19	8.9	9.9	Ko	1	..	38902i
38	1029	17.7	+72 32	9.4	10.5	K2	1	0,1	38903i	88	2858	18.1	+53 39	8.6	9.0	F5	1	..	37351i
39	3680	17.7	+50 58	8.5	9.9	Ma	..	..	M	89	4695	18.1	+30 15	8.01	9.08	K2	2	..	38031i
40	4644	17.7	+29 55	8.8	8.8	Ao	1	..	38031i	90	4585	18.1	+24 45	8.9	9.5	Go	1	..	38597i
41	5748	17.7	- 2 31	9.8	10.4	Go	1	..	41073b	91	4856	18.1	+ 8 58	7.8	8.6	G5	2	..	38114i
42	6269	17.7	-14 43	8.46	8.54	A3	7	..	39463b	92	6075	18.1	-16 28	8.5	9.0	F8	6	..	39413b
43	5901	17.7	-22 35	var.	var.	Md	2	R	23121b	93	6416	18.1	-20 12	9.2	10.1	K2	2	..	39413b
44	15881	17.7	-27 12	11.4	11.4	Go	2	..	23813b	94	6213	18.1	-20 48	8.7	9.5	Ma	4	..	39413b
45	15290	17.7	-35 8	10.6	10.5	Go	2	..	39649b	95	16113	18.1	-26 14	10.9	10.6	A5	1	..	23813b
46	1541	17.7	-76 58	10.6	10.7	A3	3	..	42794b	96	17736	18.1	-28 40	10.6	11.4	G5	1	..	23813b
47	4178	17.8	+43 15	8.0	9.1	K2	1	..	38844i	97	19130	18.1	-30 27	10.4	11.3	G5	2	..	39342b
48	4301	17.8	+27 30	9.8	10.3	F8	1	..	38597i	98	15364	18.1	-36 13	8.2	9.4	G5	6	..	38147b
49	5033	17.8	+10 13	8.70	9.20	F8	1	..	38114i	99	15022	18.1	-43 39	10.8	11.2	Go	2	..	45063b
50	5437	17.8	- 3 5	9.3	10.4	K2	1	..	41073b	100	7566	18.1	-60 17	9.2	10.5	K2	1	..	42494b

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	1447	18.1	-78 13	7.9	8.4	F8	9	..	42794b	51	2287	18.5	+61 45	8.0	9.2	K5	2	3,2	38902i
2	4980	18.2	+18 34	8.7	8.8	A3	2	..	38821i	52	4182	18.5	+44 8	8.6	9.0	F5	2	..	38844i
3	4817	18.2	+12 16	8.6	8.7	A2	2	..	38114i	53	4417	18.5	+26 37	8.7	9.8	K2	2	..	32312i
4	5777	18.2	-4 59	9.1	10.2	K2	1	..	41073b	54	4860	18.5	+ 8 48	8.8	9.9	K2	2	..	14693b
5	6076	18.2	-16 5	8.5	9.6	K2	5	..	39413b	55	4868	18.5	+ 0 28	9.0	9.1	A5	5	..	24041b
6	17737	18.2	-28 18	9.9	10.6	Ko	4	..	23813b	56	5902	18.5	-10 11	8.3	9.3	Ko	3	..	40918b
7	14765	18.2	-40 13	9.8	10.5	Go	1	..	20549b	57	6511	18.5	-17 46	9.3	9.6	Fo	4	..	39413b
8	13832	18.2	-49 21	7.43	8.2	Ko	7	..	41899b	58	16114	18.5	-26 42	10.9	10.3	Go	4	..	23813b
9	3664	18.2	-66 10	9.7	10.3	Go	2	..	20543b	59	15887	18.5	-26 53	7.98	7.9	Fo	8	..	23813b
10	1231	18.3	+71 11	7.8	7.9	A2	3	..	38025i	60	17740	18.5	-28 11	11.4	11.4	A2	3	..	23813b
11	2731	18.3	+56 2	8.1	8.1	Ao	5	..	37351i	61	17742	18.5	-28 31	10.9	11.2	G5	2	..	23813b
12	2750	18.3	+55 6	8.41	8.83	F5	2	..	37351i	62	18323	18.5	-29 5	10.6	11.3	F5	2	..	23813b
13	4114	18.3	+44 56	8.2	8.5	Fo	2	R	38844i	63	17060	18.5	-32 44	9.5	10.8	Ko	2	..	39342b
14	4408	18.3	+33 6	7.55	8.05	F8	5	..	38031i	64	15369	18.5	-36 3	9.6	10.5	G5	2	..	39649b
15	5010	18.3	+ 5 58	9.3	9.8	F8	2	..	14693b	65	2070	18.6	+62 38	6.86	6.86	Ao	6	..	37257i
16	4849	18.3	+ 5 9	7.46	7.52	A2	2	0,8	38118b	66	4825	18.6	+36 53	8.8	9.8	Ko	1	..	3857oi
17	4353	18.3	+ 0 7	6.88	6.94	A2	3	1,3-	17420b	67	5011	18.6	+ 6 2	8.2	9.3	K2	4	..	14693b
18	4289	18.3	- 1 31	10.7	10.8	A2	2	..	24041b	68	4354	18.6	+ 0 3	8.2	8.2	Ao	3	..	10174b
19	5765	18.3	- 7 42	6.11	7.11	Ko	10	..	40918b	69	5821	18.6	-11 23	8.5	9.5	Ko	2	..	40918b
20	6174	18.3	-13 38	10.2	10.8	Go	2	..	39463b	70	6210	18.6	-14 59	10.5	11.3	G5	2	..	39463b
21	6209	18.3	-14 48	9.21	10.21	Ko	3	..	39463b	71	16116	18.6	-25 57	10.4	11.2	G5	1	..	23813b
22	6214	18.3	-21 7	8.8	9.5	K2	4	..	39413b	72	18324	18.6	-29 10	8.7	8.4	Fo	7	..	23813b
23	17056	18.3	-31 58	8.6	9.3	K2	4	..	41066b	73	10073	18.6	-54 18	8.8	9.8	F8	2	..	42094b
24	15559	18.3	-34 14	8.6	9.0	F5	6	..	41066b	74	973	18.7	+74 7	9.4	9.4	Ao	1	..	38903i
25	14762	18.3	-37 7	9.8	10.5	Go	2	..	38147b	75	4799	18.7	+40 46	8.6	8.7	A2	2	..	3857oi
26	15899	18.3	-42 37	8.8	10.6	Ko	2	..	20549b	76	4698	18.7	+31 1	8.1	8.2	A2	3	..	38031i
27	13833	18.3	-49 19	7.72	9.0	K2	5	..	41899b	77	4646	18.7	+29 40	9.1	10.1	Ko	1	..	38031i
28	9883	18.3	-56 30	9.2	10.7	Ko	3	..	42494b	78	4724	18.7	+17 9	7.47	8.54	K2	3	..	3886oi
29	7954	18.3	-58 17	5.39	6.2	G5	..	5,10	28,216	79	4743	18.7	+10 37	8.6	9.8	K5	1	..	38114i
30	3237	18.3	-69 4	8.9	9.4	F8	5	..	20543b	80	5012	18.7	+ 5 29	8.6	9.6	Ko	3	..	14693b
31	823	18.4	+75 38	7.77	7.83	A2	6	..	38025i	81	5440	18.7	- 3 16	8.5	9.1	Go	3	..	41073b
32	4750	18.4	+39 9	8.8	8.9	A2	2	..	3857oi	82	6211	18.7	-15 38	9.3	10.1	G5	3	..	39463b
33	4785	18.4	+36 10	6.60	7.60	Ko	7	..	3857oi	83	15908	18.7	-25 48	10.4	11.4	Ko	2	..	23813b
34	4699	18.4	+ 3 21	8.6	9.4	G5	2	..	10174b	84	17062	18.7	-32 30	9.5	10.0	F8	3	..	39342b
35	4502	18.4	+ 2 23	10.0	10.0	Ao	2	..	14184b	85	14697	18.7	-39 38	6.86	6.9	A2p	..	1,R	56,148
36	5438	18.4	- 2 48	7.7	8.2	F8	7	..	41073b	86	15901	18.7	-41 56	6.68	8.8	F5	9	..	20549b
37	5667	18.4	- 4 20	9.3	9.8	F8	3	..	41073b	87	15902	18.7	-41 56	9.4	8.8	F5	7	..	20549b
38	17154	18.4	-24 26	10.4	11.4	G5	2	0,1	45149b	88	14686	18.7	-45 20	9.9	11.2	G5	1	..	45071b
39	17738	18.4	-28 46	10.9	12.0	K2	1	..	23813b	89	14307	18.7	-46 20	9.4	10.0	G5	3	..	41899b
40	19133	18.4	-30 49	9.7	10.8	F5	2	..	39342b	90	6652	18.7	-61 21	9.2	9.3	F8	3	0,2	19898b
41	15368	18.4	-35 53	8.9	9.9	F8	4	..	39649b	91	1759	18.8	+66 12	6.74	7.16	F5	8	R	38902i
42	14695	18.4	-39 18	10.6	9.8	F8	2	..	38147b	92	1759	18.8	+66 12	6.74	7.16	A2	8	R	38902i
43	14184	18.4	-47 26	9.4	10.6	G5	3	..	41899b	93	4670	18.8	+34 30	8.8	9.2	F5	2	3,1	3857oi
44	12020	18.4	-52 15	8.7	9.9	G5	4	..	42094b	94	4363	18.8	+29 2	8.6	8.9	Fo	3	..	38031i
45	10085	18.4	-57 19	9.5	10.7	K5	1	..	42494b	95	5139	18.8	+20 20	6.13	6.55	F5	7	..	38821i
46	7955	18.4	-58 43	9.7	10.5	G5	1	..	42494b	96	5904	18.8	-10 42	7.26	8.26	Ko	8	..	40918b
47	2258	18.4	- 73 36	9.1	9.9	G5	3	..	19967b	97	5822	18.8	-11 41	8.6	9.6	Ko	4	..	39463b
48	734	18.5	+79 24	8.4	8.5	A2	3	..	3859oi	98	6513	18.8	-17 39	10.5	11.0	F8	2	..	39413b
49	785	18.5	+79 11	8.0	9.0	Ko	1	..	3859oi	99	5904	18.8	-22 6	7.42	8.9	K2	7	..	23121b
50										100	19139	18.8	-30 50	9.2	9.9	Go	4	..	39342b

THE HENRY DRAPER CATALOGUE.

212400

22^h 18^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	15565	18.8	-34 42	10.6	10.5	Fo	3	..	39649b	51	15038	19.2	-38 36	11.1	10.8	Go	1	..	38147b
2	15564	18.8	-34 52	9.18	9.3	F5	6	..	39649b	52	15029	19.2	-43 35	8.5	10.9	Ko	3	..	45063b
3	4741	18.9	+17 32	8.8	9.3	F8	1	..	3886oi	53	14204	19.2	-48 4	8.8	9.9	Ko	5	..	41899b
4	5780	18.9	-5 20	5.85	5.85	Ao	7	..	44170b	54	2765	19.3	+56 47	6.19	6.14	B8	10	0,10	3735ii
5	6077	18.9	-15 55	9.1	9.5	F5	4	..	39463b	55	2756	19.3	+54 44	8.4	8.2	B2	4	..	37028i
6	6419	18.9	-20 2	10.6	11.0	Ao	1	..	39413b	56	4850	19.3	+4 34	9.0	10.2	K5	1	..	14184b
7	5905	18.9	-22 45	8.7	8.9	F8	5	..	23121b	57	4870	19.3	+0 41	10.0	11.0	Ko	1	..	24041b
8	16056	18.9	-33 46	7.78	8.1	Go	7	..	41066b	58	5985	19.3	-6 32	8.7	9.5	G5	4	..	40918b
9	15036	18.9	-38 43	8.9	9.4	Ko	6	..	38147b	59	5865	19.3	-8 36	9.2	9.7	F8	3	..	40918b
10	14698	18.9	-39 26	9.6	10.5	F5	3	..	38147b	60	6514	19.3	-17 43	10.9	11.5	Go	2	..	39413b
11	15904	18.9	-41 53	8.3	9.1	Ko	6	..	20549b	61	6115	19.3	-18 28	9.6	10.6	Ko	1	..	40869b
12	3894	18.9	-66 58	9.5	10.1	Go	3	..	20543b	62	6420	19.3	-20 5	9.6	9.8	F8	4	..	39413b
13	1840	19.0	+63 48	8.4	9.4	Ko	2	..	38902i	63	18799	19.3	-31 13	8.9	9.4	F5	6	..	39342b
14	3910	19.0	+46 12	8.1	8.2	A2	3	..	38844i	64	15040	19.3	-38 20	7.32	8.5	Ko	8	..	38147b
15	4647	19.0	+29 27	9.4	9.8	F5	1	..	38597i	65	15907	19.3	-42 16	9.4	10.1	G5	4	..	20549b
16	4745	19.0	+21 36	8.1	9.2	K2	1	..	38821i	66	2737	19.4	+55 28	7.06	8.41	Ma	3	..	3735ii
17	5750	19.0	-2 34	7.7	7.8	A3	7	..	41073b	67	3912	19.4	+45 51	8.0	8.1	A3	2	..	38844i
18	5669	19.0	-4 30	9.3	10.1	G5	1	..	41073b	68	4120	19.4	+44 51	7.22	8.00	G5	4	..	38844i
19	6214	19.0	-15 46	9.8	10.4	Go	2	..	39463b	69	4804	19.4	+40 24	8.6	9.6	Ko	2	..	38570i
20	15893	19.0	-27 21	10.4	10.6	F5	4	..	23813b	70	4703	19.4	+30 46	7.46	8.81	Mb	4	..	3803ii
21	15303	19.0	-35 18	9.0	10.2	Ko	4	..	39649b	71	4727	19.4	+16 31	8.4	9.6	K5	1	..	3886oi
22	14688	19.0	-45 47	9.1	9.5	F2	4	..	45063b	72	4701	19.4	+3 19	8.6	8.9	Fo	2	..	10174b
23	12022	19.0	-51 54	7.4	8.7	G5	6	..	42094b	73	4871	19.4	+0 20	10.0	11.0	Ko	1	..	24041b
24	4477	19.1	+41 34	7.8	7.9	A2	3	..	37978i	74	4290	19.4	-1 41	6.75	7.75	Ko	10	..	24041b
25	4648	19.1	+29 55	8.8	10.0	K5	1	..	38031i	75	5784	19.4	-5 44	9.3	10.1	G5	3	0,2	40918b
26	5015	19.1	+5 42	8.6	9.2	Go	5	..	14693b	76	5907	19.4	-10 6	9.6	10.6	Ko	1	..	40910b
27	5751	19.1	-1 56	8.7	9.2	F8	7	..	24041b	77	6180	19.4	-13 28	8.1	9.1	Ko	5	..	39463b
28	5768	19.1	-7 2	9.6	10.7	K2	1	..	40918b	78	6515	19.4	-17 35	9.1	9.9	G5	4	..	39413b
29	6177	19.1	-13 42	9.6	10.4	G5	3	..	39463b	79	17745	19.4	-28 39	10.2	9.9	F8	5	..	23813b
30	6276	19.1	-14 2	5.92	6.70	G5	9	..	39463b	80	19145	19.4	-30 11	9.1	10.0	K2	5	..	23813b
31	6114	19.1	-18 6	8.1	9.2	K2	6	..	40869b	81	15306	19.4	-35 46	9.6	10.8	K2	2	..	39649b
32	17160	19.1	-23 52	7.24	7.7	B9	5	..	43231b	82	15041	19.4	-38 15	10.9	10.6	Go	2	..	38147b
33	15895	19.1	-27 47	11.1	11.0	F8	3	..	23813b	83	13260	19.4	-51 44	9.7	11.4	Ko	1	..	41899b
34	15377	19.1	-36 10	10.2	10.9	Go	1	..	39649b	84	3895	19.4	-67 37	8.7	9.5	G5	2	..	20543b
35	15906	19.1	-42 32	9.2	9.4	A2	5	..	20549b	85	2865	19.5	+53 49	8.6	8.7	A2	3	..	3735ii
36	14689	19.1	-44 55	8.46	9.7	Ko	5	..	45063b	86	3913	19.5	+45 29	8.1	8.2	A2	1	..	38844i
37	14190	19.1	-47 0	8.7	9.7	G5	6	..	41899b	87	4560	19.5	+38 4	6.20	6.70	F8	7	..	37978i
38	857	19.2	+77 4	8.2	8.3	A2	3	0,2	38025i	88	4672	19.5	+34 37	7.9	7.9	Ao	4	..	38570i
39	1245	19.2	+69 46	7.84	7.84	Ao	2	..	38025i	89	4868	19.5	+7 41	8.4	9.5	K2	2	..	14693b
40	4822	19.2	+40 5	8.67	9.67	Ko	1	..	38570i	90	5908	19.5	-9 56	8.86	9.86	Ko	3	..	40918b
41	4420	19.2	+26 51	8.7	9.3	Go	2	..	38597i	91	6260	19.5	-11 53	8.7	9.0	F2	6	..	39463b
42	4790	19.2	+14 46	6.73	6.73	Ao	8	..	38114i	92	16125	19.5	-25 55	9.7	11.4	F8	3	..	23813b
43	5984	19.2	-6 43	9.2	9.7	F8	4	..	40918b	93	14700	19.5	-39 43	8.83	9.5	G5	4	..	20549b
44	5905	19.2	-10 18	8.3	9.3	Ko	4	..	40918b	94	1298	19.6	+69 9	8.8	8.9	A2	5	..	3858oi
45	5906	19.2	-10 27	9.1	10.1	Ko	1	..	40918b	95	2291	19.6	+61 55	6.01	6.01	Ao	8	..	37257i
46	5823	19.2	-11 39	8.1	9.2	K2	5	..	39463b	96	3358	19.6	+51 44	4.58	5.58	Ko	..	0,9	56,102
47	6178	19.2	-13 41	8.5	9.9	Ma	5	..	39463b	97	3694	19.6	+51 7	7.7	8.9	K5	1	..	37028i
48	15896	19.2	-27 21	7.16	8.1	K2	8	..	23813b	98	4754	19.6	+38 43	9.1	10.5	Ma	..	..	M
49	16061	19.2	-33 4	10.6	10.8	G5	1	..	39342i	99	4490	19.6	+34 6	8.5	8.5	Ao	2	2,2	3803ii
50	15567	19.2	-34 49	9.43	10.0	G5	5	..	39649b	100	4639	19.6	+15 48	7.07	7.41	F2	5	..	38114i

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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	4792	19.6	+14 24	8.5	9.6	K2	1	..	38114i	51	6116	20.0	-17 55	10.0	10.0	Ao	3	..	40869b
2	6182	19.6	-12 53	9.2	10.2	Ko	4	..	39463b	52	5908	20.0	-22 32	9.8	10.2	Go	1	..	24338b
3	17425	19.6	-23 34	10.6	10.2	G5	2	..	23813b	53	15580	20.0	-33 52	8.2	9.0	Ko	4	..	41066b
4	17163	19.6	-24 12	10.4	11.1	F8	3	..	23813b	54	14194	20.0	-47 46	9.9	10.0	F8	3	..	41899b
5	15575	19.6	-34 8	9.2	9.6	Go	3	..	41066b	55	1448	20.0	-78 17	9.5	10.5	Ko	1	..	42794b
6	15311	19.6	-35 23	9.6	10.2	F2	4	..	39649b	56	3711	20.1	+48 19	7.8	7.9	A2	3	..	37028i
7	14774	19.6	-39 59	9.33	10.6	Ko	3	2,I	38147b	57	4689	20.1	+31 58	8.1	9.2	K2	1	..	38031i
8	13671	19.6	-50 20	8.3	10.0	Mb	3	..	41899b	58	4743	20.1	+17 16	8.6	8.9	Fo	4	..	3886oi
9	12023	19.6	-52 19	10.5	11.1	G	1	..	41899b	59	4607	20.1	+1 23	9.29	10.29	Ko	1	..	14184b
10	3359	19.7	+51 58	8.6	8.7	A3	2	..	37028i	60	6081	20.1	-16 6	7.7	8.1	F5	6	..	14183b
11	3695	19.7	+50 42	7.22	7.30	A3	..	1,7-	56,102	61	6271	20.1	-19 11	10.5	10.7	F8	2	..	40869b
12	3787	19.7	+48 9	8.4	8.5	A2	2	..	38844i	62	5910	20.1	-22 6	8.7	9.5	Ko	5	..	23121b
13	4380	19.7	+43 3	8.0	8.0	Ao	3	..	37978i	63	15916	20.1	-25 14	8.9	10.5	K2	2	..	40713b
14	4379	19.7	+42 49	8.6	8.7	A2	1	..	37978i	64	15581	20.1	-34 42	9.5	10.2	G5	4	..	39649b
15	4497	19.7	+33 54	8.7	8.7	Ao	1	..	3857oi	65	14695	20.1	-45 30	8.3	9.1	Ko	6	..	45063b
16	4642	19.7	+15 38	8.97	10.15	K5	..	..	M	66	2520	20.2	+58 2	7.6	7.9	Fo	6	0,5	38803i
17	5040	19.7	+9 19	7.7	8.9	K5	2	..	38114i	67	4315	20.2	+28 11	8.3	9.3	Ko	2	..	38597i
18	4606	19.7	+2 8	9.3	10.4	K2	2	..	14184b	68	4865	20.2	+8 18	9.1	9.6	F8	2	..	14693b
19	5671	19.7	-4 0	9.6	10.6	Ko	1	..	41073b	69	5017	20.2	+6 22	8.8	9.1	F2	4	..	14693b
20	6278	19.7	-14 12	9.8	10.6	G5	2	..	24437b	70	4608	20.2	+1 52	9.3	9.4	A3	3	..	14184b
21	6277	19.7	-14 30	8.9	9.5	Go	5	..	39463b	71	4872	20.2	+0 52	4.64	4.42	B1p	..	R	5164c
22	4789	19.7	-63 2	7.7	8.8	K2	4	..	19899b	72	4356	20.2	-0 30	8.8	8.9	A2	7	..	24041b
23	2930	19.7	-70 12	8.3	8.8	F8	6	..	19967b	73	5776	20.2	-6 56	9.3	10.1	G5	2	..	40918b
24	4562	19.8	+37 44	9.1	9.2	A5	2	..	3857oi	74	6264	20.2	-12 25	8.7	9.0	Fo	7	..	39463b
25	4728	19.8	+16 23	8.5	9.3	G5	3	..	3886oi	75	15387	20.2	-36 10	8.6	8.7	Go	7	..	38147b
26	4863	19.8	+8 15	7.9	8.9	Ko	7	..	14693b	76	14784	20.2	-40 16	10.6	10.6	Go	2	..	38147b
27	4871a	19.8	+0 45	10.7	11.7	Ko	2	..	24041b	77	14782	20.2	-40 38	8.9	9.8	G5	3	..	45063b
28	5753	19.8	-2 28	10.5	11.7	K5	1	..	24041b	78	14316	20.2	-46 38	10.8	10.9	Fo	1	..	41899b
29	5988	19.8	-6 6	9.6	10.0	F5	2	..	40918b	79	14208	20.2	-48 0	10.1	11.1	Go	1	..	41899b
30	5773	19.8	-6 52	9.6	10.1	F8	3	..	40918b	80	4791	20.2	-63 2	9.0	9.8	G5	2	..	19899b
31	6183	19.8	-13 30	9.3	10.1	G5	3	..	39463b	81	4044	20.2	-65 28	4.80	4.78	B9	..	R	28,216
32	6270	19.8	-19 26	9.3	10.9	Ko	2	..	40869b	82	1127	20.3	+71 40	9.2	9.3	A3	2	..	38903i
33	2760	19.9	+54 42	8.9	9.2	Fo	1	..	37351i	83	2521	20.3	+57 16	8.6	9.6	Ko	1	..	38803i
34	..	19.9	+50 28	Neb.	Neb.	Pd	..	R	76,23	84	4813	20.3	+40 48	8.2	8.2	Ao	3	..	37978i
35	6422	19.9	-20 32	9.6	9.8	Ko	4	..	40869b	85	4759	20.3	+38 56	8.1	9.1	Ko	2	..	37978i
36	15914	19.9	-25 51	8.5	9.0	F8	6	..	23813b	86	5829	20.3	-11 40	9.3	9.9	Go	2	..	39463b
37	15044	19.9	-38 4	var.	var.	Md	..	R	M	87	6082	20.3	-15 51	7.9	8.7	G5	6	..	14183b
38	14694	19.9	-45 37	7.5	8.3	Ko	7	..	45063b	88	18336	20.3	-29 14	8.9	9.3	F5	6	..	23813b
39	..	19.9	-48 57	var.	var.	Md	6	R	41899b	89	14704	20.3	-39 22	10.9	10.8	Go	2	..	38147b
40	13673	19.9	-50 4	9.5	10.8	G5	1	..	41899b	90	10296	20.3	-53 11	9.2	11.0	Ko	2	..	42094b
41	13674	19.9	-50 42	9.5	10.0	Go	2	..	41899b	91	2428	20.4	+59 14	7.8	8.8	Ko	3	..	38803i
42	7798	19.9	-59 23	7.9	9.6	K5	3	..	42494b	92	3363	20.4	+52 6	8.6	8.9	F2	2	..	37351i
43	1503	20.0	+66 39	8.4	9.5	K2	1	..	38902i	93	3715	20.4	+48 58	4.64	4.59	B8p	..	3,R	6015c
44	3199	20.0	+52 46	8.6	8.6	Ao	3	..	37351i	94	3688	20.4	+46 50	8.9	8.9	Ao	1	..	38844i
45	4674	20.0	+34 56	7.67	8.85	K5	2	..	3857oi	95	4726	20.4	+26 6	7.8	7.8	Ao	7	..	38597i
46	4652	20.0	+29 55	9.2	9.2	Ao	2	..	38597i	96	4749	20.4	+21 23	8.3	9.4	K2	1	..	38821i
47	4723	20.0	+26 13	8.7	9.3	Go	1	..	38597i	97	4744	20.4	+11 2	8.4	9.0	Go	2	..	38114i
48	4985	20.0	+18 22	8.6	8.7	A2	3	..	38821i	98	4853	20.4	+4 14	8.4	9.0	Go	4	0,2	14184b
49	5826	20.0	-11 41	9.6	10.2	Go	3	..	39463b	99	5974	20.4	-9 0	10.0	11.0	Ko	1	..	40918b
50	6262	20.0	-12 35	9.3	9.8	F8	5	..	39463b	100	6423	20.4	-20 44	6.82	8.0	F8	10	..	40869b

THE HENRY DRAPER CATALOGUE.

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22^h 20^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	6220	20.4	-21 45	10.2	10.1	A2	3	..	23121b	51	2868	20.8	+54 12	9.0	9.0	Ao	2	..	37351i
2	5913	20.4	-22 0	10.0	11.0	K2	1	..	23121b	52	3919	20.8	+45 17	7.92	8.99	K2	2	..	38844i
3	5912	20.4	-22 18	10.0	10.1	F8	1	..	24338b	53	4610	20.8	+ 1 59	9.3	10.5	K5	1	..	14184b
4	14780	20.4	-37 46	9.16	9.6	A3	5	..	38147b	54	6187	20.8	-13 18	8.9	9.3	F5	4	..	39463b
5	14912	20.4	-44 46	9.9	10.9	Go	2	..	45063b	55	6519	20.8	-17 29	10.2	10.8	Go	2	..	40869b
6	9843	20.4	-55 8	8.8	9.8	A5	3	..	42094b	56	6120	20.8	-17 50	9.3	10.4	K2	3	..	40869b
7	10088	20.4	-57 8	8.8	11.0	K5	1	..	42494b	57	6119	20.8	-18 30	8.7	9.3	Go	7	..	40869b
8	4256	20.4	-64 11	9.0	10.0	Ko	1	..	19898b	58	6274	20.8	-19 41	9.6	10.4	K2	3	..	40869b
9	3668	20.4	-66 35	9.7	10.0	F2	3	..	20543b	59	6425	20.8	-19 46	9.6	10.7	Ko	3	..	40869b
10	1449	20.4	-78 43	6.76	8.7	K2	8	..	42794b	60	17759	20.8	-28 52	9.4	10.3	Ko	4	..	23813b
11	4416	20.5	+32 18	6.90	6.96	A2	7	..	38031i	61	7957	20.8	-58 30	7.02	7.4	A2	..	2,8	28,216
12	4428	20.5	+26 44	8.6	9.4	G5	2	..	38597i	62	2259	20.8	-72 58	8.6	9.6	Ko	4	..	19967b
13	5990	20.5	- 5 52	10.7	11.5	G5	2	..	40918b	63	1450	20.8	-78 30	9.5	10.5	Ko	1	..	42794b
14	6424	20.5	-20 44	10.0	9.5	G5	4	..	40869b	64	630	20.9	+84 0	7.49	7.49	Ao	5	..	37281i
15	15910	20.5	-27 4	10.9	11.0	G5	3	..	23813b	65	2869	20.9	+53 54	8.0	9.0	Ko	1	..	37351i
16	15908	20.5	-27 38	8.9	9.6	Ko	5	..	23813b	66	3369	20.9	+51 38	8.5	8.5	B8	3	..	37028i
17	18337	20.5	-29 35	7.95	8.2	F2	9	R	23813b	67	3368	20.9	+51 24	8.6	8.9	Fo	2	..	37028i
18	4257	20.5	-64 8	8.8	9.4	Go	3	..	19898b	68	4197	20.9	+44 2	7.9	7.9	Ao	3	..	38844i
19	1004	20.5	-81 12	9.0	9.6	Go	2	..	15165b	69	4489	20.9	+41 32	7.83	9.01	K5	2	..	37978i
20	825	20.6	+75 39	8.67	9.17	F8	1	..	38936i	70	4746	20.9	+17 57	6.40	7.40	Ko	4	..	38821i
21	2769	20.6	+54 22	8.5	8.5	B9	4	..	37351i	71	4820	20.9	+12 40	8.6	8.9	Fo	1	..	38114i
22	4429	20.6	+27 9	9.2	10.2	Ko	1	..	38597i	72	5790	20.9	- 5 41	7.31	7.59	Fo	4	0,8	44170b
23	4292	20.6	- 1 20	9.0	9.0	Ao	6	..	24041b	73	6269	20.9	-12 33	8.5	9.5	Ko	5	..	39463b
24	5989	20.6	- 6 15	9.6	10.0	F5	3	..	40918b	74	6275	20.9	-19 4	8.1	8.6	F2	8	..	40869b
25	5976	20.6	- 9 28	8.7	9.3	Go	5	..	40918b	75	17085	20.9	-32 38	9.0	10.0	G5	3	..	39342b
26	6268	20.6	-12 42	10.5	11.1	Go	2	..	39463b	76	2870	21.0	+54 13	8.5	8.5	B9	3	..	37351i
27	6221	20.6	-15 27	8.1	8.9	G5	5	..	14183b	77	4829	21.0	+39 39	8.7	8.7	Ao	3	..	38570i
28	17436	20.6	-23 7	9.2	9.8	G5	2	..	24338b	78	..	21.0	+29 58	var.	var.	Md	..	R	M
29	17435	20.6	-23 25	9.1	9.5	F5	3	..	24338b	79	4430	21.0	+27 5	8.9	9.9	Ko	1	..	38597i
30	16135	20.6	-26 5	9.4	9.3	Fo	6	..	23813b	80	4532	21.0	+23 36	9.1	9.7	Go	1	..	38821i
31	16136	20.6	-26 19	11.1	11.9	F5	2	..	23813b	81	5791	21.0	- 5 41	9.8	10.6	G5	4	..	40918b
32	15911	20.6	-27 50	8.7	9.6	Ko	6	..	23813b	82	6283	21.0	-14 37	8.96	10.14	K5	2	..	40869b
33	17758	20.6	-28 31	7.59	8.4	Ko	9	..	23813b	83	6121	21.0	-18 1	9.2	9.8	Go	5	..	40869b
34	14706	20.6	-39 31	10.4	10.8	K2	3	..	38147b	84	19157	21.0	-30 12	10.6	11.1	K2	2	..	39342b
35	4045	20.6	-65 15	9.3	10.1	G5	1	..	20543b	85	14894	21.0	-41 48	8.2	8.8	Go	6	..	20549b
36	3203	20.7	+52 14	8.2	8.2	Ao	4	R	37028i	86	14204	21.0	-47 24	9.5	10.6	Go	1	..	41899b
37	4691	20.7	+32 4	8.8	9.9	K2	1	..	38031i	87	963	21.1	+74 30	8.0	9.0	Ko	4	..	38025i
38	4751	20.7	+22 5	7.56	7.62	A2	4	..	38821i	88	1656	21.1	+64 41	8.6	9.7	K2	1	..	38902i
39	5991	20.7	- 5 57	10.5	11.1	Go	1	..	40918b	89	2771	21.1	+54 38	8.2	8.2	Ao	3	..	37351i
40	6118	20.7	-18 1	8.7	9.2	F8	6	..	40869b	90	3206	21.1	+53 13	8.5	9.0	F8	2	..	37351i
41	6273	20.7	-18 51	8.7	9.2	F8	7	..	40869b	91	3706	21.1	+50 45	6.87	8.22	Ma	5	..	37028i
42	17437	20.7	-23 46	10.2	10.9	G5	1	..	24338b	92	3926	21.1	+45 28	8.0	8.0	Ao	3	..	38844i
43	17171	20.7	-24 11	6.17	6.2	Ao	8	..	43231b	93	4567	21.1	+37 24	8.8	9.8	Ko	2	..	38570i
44	15922	20.7	-24 56	8.80	9.0	A3	6	3,3	23813b	94	5756	21.1	- 2 2	10.0	10.5	F8	4	..	24041b
45	15391	20.7	-36 42	9.8	10.9	K2	1	..	39649b	95	5443	21.1	- 3 17	7.02	7.44	F5	10	..	24041b
46	14784	20.7	-37 4	10.2	10.8	Go	1	..	39649b	96	5916	21.1	-10 30	9.3	10.1	G5	2	..	40918b
47	14787	20.7	-39 53	10.6	10.8	Go	2	..	38147b	97	6520	21.1	-17 15	6.57	7.13	Go	..	R	56,148
48	14317	20.7	-46 7	7.8	8.5	F2	6	..	41899b	98	6521	21.1	-17 15	6.35	6.91	..	..	..	..
49	10297	20.7	-53 28	8.4	9.8	Ko	3	..	42094b	99	6122	21.1	-18 13	9.6	10.6	Ko	3	..	40869b
50	2514	20.8	+59 47	8.6	9.1	F8	3	..	34819i	100	6276	21.1	-19 10	9.8	10.7	K2	2	..	40869b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

212700

22^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	13679	21.1	-50 34	9.4	9.9	Go	3	..	41899b	51	4753	21.5	+11 5	8.7	9.5	G5	1	..	38114i
2	4262	21.1	-64 12	9.4	9.9	F8	2	..	19898b	52	4752	21.5	+10 53	8.6	10.0	Ma	1	..	38114i
3	4703	21.2	+ 4 14	10.0	10.8	G5	1	..	14184b	53	4704	21.5	+ 4 6	10.0	10.8	G5	1	..	14184b
4	18806	21.2	-30 53	9.9	11.1	G5	1	..	39342b	54	4705	21.5	+ 3 53	5.85	6.41	Go	..	5,5-	56,102
5	15050	21.2	-38 19	10.4	11.4	G5	2	..	38147b	55	5759	21.5	- 2 29	10.7	10.8	A5	2	..	24041b
6	14710	21.2	-39 24	10.4	9.7	F5	5	..	38147b	56	5993	21.5	- 6 38	9.8	11.0	K5	1	..	40918b
7	14897	21.2	-41 23	10.9	10.5	Go	1	..	38147b	57	5978	21.5	- 9 0	7.9	8.0	A2	7	..	40918b
8	13852	21.2	-49 51	7.55	7.5	G5	7	..	41899b	58	5834	21.5	-11 8	8.7	9.7	Ko	3	..	40918b
9	7958	21.2	-58 31	8.3	9.0	Ko	5	..	42494b	59	6271	21.5	-11 51	8.5	9.9	Ma	2	..	39463b
10	383	21.3	+85 36	5.38	5.38	Ao	..	0,10	56,102	60	6525	21.5	-17 7	9.1	9.6	F8	3	..	40869b
11	2747	21.3	+55 45	9.5	9.5	A	1	..	37351i	61	6126	21.5	-18 17	9.3	10.3	Ko	1	..	40869b
12	3841	21.3	+49 54	7.22	7.20	B9	6	..	37028i	62	18341	21.5	-28 58	10.6	11.7	K2	1	..	23813b
13	3692	21.3	+46 36	8.4	8.4	Ao	4	..	38844i	63	19161	21.5	-30 18	10.2	10.8	Go	2	..	39342b
14	4501	21.3	+34 8	8.2	8.2	Ao	2	..	38031i	64	15589	21.5	-34 48	9.03	10.0	Ko	5	..	39649b
15	4612	21.3	+ 1 28	8.6	8.9	Fo	2	..	10174b	65	15321	21.5	-35 6	10.6	10.8	A2	2	..	39649b
16	5444	21.3	- 2 53	10.9	12.0	K2	1	..	24041b	66	14792	21.5	-36 56	9.3	10.5	K2	1	..	38147b
17	5873	21.3	- 7 53	6.89	7.17	Fo	8	..	40918b	67	4369	21.6	+28 41	9.4	10.2	G5	1	..	38597i
18	6124	21.3	-18 8	10.2	11.3	K2	1	..	40869b	68	4737	21.6	+16 58	9.0	9.8	G5	1	..	38860i
19	6278	21.3	-19 10	9.3	9.8	F8	4	..	40869b	69	5022	21.6	+ 6 3	8.6	9.0	F5	2	..	14693b
20	6277	21.3	-19 32	10.2	10.2	F8	2	..	40869b	70	6272	21.6	-12 25	9.3	9.8	F8	3	..	39463b
21	15913	21.3	-27 13	10.9	11.4	G5	1	..	23813b	71	6526	21.6	-17 46	7.58	8.36	G5	8	..	40869b
22	18338	21.3	-29 9	10.2	10.8	F2	2	..	23813b	72	6427	21.6	-19 51	8.53	9.3	K2	6	..	40869b
23	15393	21.3	-36 11	8.0	9.3	Ko	6	..	38147b	73	17176	21.6	-24 25	9.9	10.3	Go	1	..	24338b
24	14789	21.3	-37 36	10.2	11.6	G5	1	..	39649b	74	384	21.7	+85 43	6.78	7.78	Ko	5	..	37281i
25	14788	21.3	-37 41	10.9	11.6	Ao	1	..	39649b	75	1234	21.7	+70 49	7.52	7.60	A3	4	..	38025i
26	10092	21.3	-57 10	8.4	9.2	Fo	5	..	42494b	76	2393	21.7	+60 19	7.96	7.96	Ao	4	..	38803i
27	4263	21.3	-64 47	8.42	9.7	K5	2	..	20543b	77	4496	21.7	+41 53	8.7	8.7	Ao	2	..	38844i
28	3493	21.3	-67 59	5.70	5.78	A3	..	R	56,148	78	4359	21.7	+ 0 12	9.33	10.33	Ko	3	..	24041b
29	1557	21.3	-76 9	10.1	10.7	Go	3	..	42794b	79	4358	21.7	- 0 0	10.0	10.5	F8	1	..	24041b
30	2974	21.4	+63 4	7.52	8.52	Ko	4	..	38902i	80	..	21.7	- 1 2	..	..	G5	3	..	24041b
31	3371	21.4	+51 20	9.0	9.0	Ao	2	..	37028i	81	4295	21.7	- 1 20	10.7	11.5	G5	1	..	24041b
32	4762	21.4	+38 18	8.9	8.9	Ao	1	..	38570i	82	5918	21.7	-10 27	8.5	9.3	G5	4	..	40918b
33	4681	21.4	+34 51	8.6	9.7	K2	2	0,2	38570i	83	6226	21.7	-20 49	9.3	9.5	F2	5	..	40869b
34	4730	21.4	+25 24	7.11	7.11	Ao	..	0,8	56,102	84	15915	21.7	-26 58	10.6	11.6	Ko	2	..	23813b
35	4751	21.4	+10 16	8.62	9.40	G5	2	..	38114i	85	17769	21.7	-28 32	9.7	9.1	F5	5	..	23813b
36	4873	21.4	+ 7 24	8.0	8.4	F5	8	..	14693b	86	17092	21.7	-32 17	9.5	9.4	Fo	4	..	39342b
37	4873	21.4	+ 0 51	10.0	10.8	G5	1	..	24041b	87	15054	21.7	-38 10	9.57	9.4	Ao	5	..	38147b
38	4294	21.4	- 1 3	8.4	9.5	K2	6	..	24041b	88	4047	21.7	-65 5	8.9	9.4	F8	4	..	20543b
39	5757	21.4	- 2 38	10.2	11.2	Ko	1	..	24041b	89	3896	21.7	-67 19	9.8	10.9	K2	1	..	20543b
40	5992	21.4	- 5 57	10.7	11.5	G5	1	..	40918b	90	2874	21.8	+53 19	7.44	8.51	K2	3	..	37351i
41	5833	21.4	-11 44	7.02	7.10	A3	5	1,8	44170b	91	3372	21.8	+51 56	8.2	8.2	B8	4	0,4	37028i
42	6279	21.4	-19 31	10.6	11.0	Go	1	..	40869b	92	4502	21.8	+34 3	8.8	8.8	Ao	1	..	38031i
43	5914	21.4	-22 6	10.0	10.7	Go	2	..	24338b	93	4424	21.8	+32 16	8.6	9.6	Ko	1	..	38031i
44	18809	21.4	-31 9	9.7	10.8	Go	2	..	39342b	94	4732	21.8	+25 17	8.46	9.46	Ko	2	..	38597i
45	16076	21.4	-33 3	9.6	9.6	F2	3	..	39342b	95	5678	21.8	- 3 48	10.0	10.4	F5	2	..	24041b
46	14900	21.4	-40 57	8.9	8.9	F8	5	..	20549b	96	6428	21.8	-19 46	9.13	9.8	Go	5	..	40869b
47	13276	21.4	-51 39	8.9	10.8	Ko	1	..	41899b	97	6430	21.8	-19 56	8.9	8.9	A2	7	..	40869b
48	1544	21.4	-77 11	8.1	8.5	F5	8	..	42794b	98	17177	21.8	-24 23	9.4	9.4	Fo	3	..	24338b
49	1659	21.5	+64 20	9.0	9.0	Ao	1	..	38902i	99	19165	21.8	-30 44	9.2	9.9	G5	5	5,2	39342b
50	4317	21.5	+28 2	7.27	8.27	Ko	6	..	38597i	100	17094	21.8	-31 52	7.8	9.3	K2	3	..	40713b

THE HENRY DRAPER CATALOGUE.

212800

22^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	17093	21.8	-32 3	7.60	8.2	G5	6	..	40713b	51	6193	22.1	-12 46	9.2	10.2	Ko	4	..	39463b
2	16080	21.8	-33 41	9.0	10.7	Ko	4	..	39342b	52	15916	22.1	-26 55	7.18	7.6	Fo	10	..	23813b
3	15055	21.8	-38 40	10.0	9.7	F5	4	..	38147b	53	18816	22.1	-31 38	9.9	10.7	F8	3	..	39342b
4	10093	21.8	-57 1	8.6	9.8	G5	4	..	42494b	54	14802	22.1	-37 35	8.9	9.9	Ko	4	..	38147b
5	3495	21.8	-68 34	9.4	10.5	K2	1	..	20543b	55	14704	22.1	-45 12	9.9	10.6	F5	2	..	45063b
6	2932	21.8	-69 56	7.84	9.0	Ko	6	..	19967b	56	1558	22.1	-76 18	10.4	11.0	Go	2	..	42794b
7	1660	21.9	+64 46	8.9	9.7	G5	2	..	38902i	57	689	22.2	+83 2	8.4	9.2	G5	2	..	37281i
8	2740	21.9	+56 1	8.8	9.8	Ko	1	..	37351i	58	4834	22.2	+36 16	7.94	8.44	F8	3	..	38570i
9	2773	21.9	+55 11	8.56	9.34	G5	1	..	38803i	59	4433	22.2	+26 22	9.2	10.2	Ko	1	..	38597i
10	2876	21.9	+53 26	7.37	7.79	F5	6	..	37351i	60	4754	22.2	+10 46	8.5	8.6	A2	3	..	38130i
11	..	21.9	- 0 4	..	..	F8	1	..	24041b	61	4870	22.2	+ 8 25	7.8	8.3	F8	7	..	14693b
12	4296	21.9	- 0 50	10.0	11.1	K2	2	..	24041b	62	5995	22.2	- 6 32	9.3	10.3	Ko	3	..	40918b
13	5760	21.9	- 2 35	8.6	9.2	Go	6	..	24041b	63	5786	22.2	- 7 41	9.6	10.4	G5	2	..	40918b
14	5679	21.9	- 3 46	9.3	9.9	Go	4	..	24041b	64	6194	22.2	-13 34	9.3	10.1	G5	5	..	24437b
15	5680	21.9	- 3 56	9.3	10.3	Ko	2	..	24041b	65	6432	22.2	-20 12	10.5	10.7	F8	2	..	40869b
16	6192	21.9	-12 59	9.3	9.9	Go	3	..	39463b	66	18818	22.2	-31 6	10.2	10.2	Go	4	5,2	39342b
17	6286	21.9	-14 39	9.56	9.62	A2	3	..	40869b	67	17095	22.2	-32 46	9.0	9.9	G5	3	..	39342b
18	6128	21.9	-18 10	9.8	10.6	G5	2	..	40869b	68	14904	22.2	-41 49	10.2	10.3	Go	2	..	45063b
19	6280	21.9	-19 27	9.8	10.1	Go	4	..	40869b	69	13858	22.2	-49 46	10.5	10.8	Go	1	..	41899b
20	6431	21.9	-20 22	10.2	11.0	G5	1	..	40869b	70	12028	22.2	-52 17	7.06	8.7	K5	5	..	42094b
21	16145	21.9	-26 19	10.4	11.1	F5	3	..	23813b	71	3935	22.3	+46 4	7.64	7.64	Ao	5	..	38844i
22	15593	21.9	-34 0	9.2	9.3	F8	4	..	39342b	72	4372	22.3	+28 38	9.1	10.1	Ko	1	..	38597i
23	15327	21.9	-35 23	8.9	10.8	K2	2	..	39649b	73	4801	22.3	+14 38	8.6	9.4	G5	2	..	38860i
24	332	22.0	+87 5	9.2	9.5	F2	2	..	37793i	74	4707	22.3	+ 3 32	10.0	10.1	A2	2	..	14184b
25	1236	22.0	+70 32	7.44	7.52	A3	5	..	38025i	75	5765	22.3	- 2 9	9.3	9.4	A5	5	..	24041b
26	1301	22.0	+69 11	8.9	8.9	Ao	1	..	38580i	76	6085	22.3	-16 18	9.6	10.6	Ko	2	..	40869b
27	2877	22.0	+53 16	8.1	8.2	A2	2	..	37351i	77	17448	22.3	-23 6	8.9	9.5	Go	3	..	24338b
28	4832	22.0	+36 37	8.3	8.6	F2	2	2,3	38570i	78	7567	22.3	-60 33	6.9	8.1	Ko	7	..	19899b
29	4710	22.0	+30 27	8.5	9.5	Ko	1	..	38597i	79	3670	22.3	-66 44	9.2	9.7	F8	3	..	20543b
30	4319	22.0	+27 16	9.1	10.1	Ko	1	..	38597i	80	1546	22.3	-77 37	9.7	10.7	Ko	2	..	42794b
31	4733	22.0	+26 1	8.7	8.8	A2	3	..	38597i	81	1202	22.3	-79 49	9.1	9.6	F8	3	..	42794b
32	4642	22.0	+22 18	7.82	7.88	A2	3	..	38821i	82	2079	22.4	+62 49	7.18	8.53	Mb	4	..	37257i
33	4755	22.0	+21 23	7.90	8.90	Ko	1	..	38821i	83	4835	22.4	+36 57	6.39	6.22	B3	9	..	38570i
34	4740	22.0	+16 40	8.4	8.8	F5	1	..	38860i	84	4875	22.4	+ 0 41	9.7	10.0	Fo	5	..	24041b
35	4874	22.0	+ 0 44	10.7	11.2	F8	1	..	24041b	85	4360	22.4	- 0 4	9.7	10.3	Go	3	..	24041b
36	4297	22.0	- 0 50	9.0	9.5	F8	7	..	24041b	86	5875	22.4	- 8 45	9.1	10.1	Ko	2	..	40918b
37	5761	22.0	- 1 49	6.83	7.39	Go	5	..	17411b	87	6196	22.4	-12 47	10.0	11.1	K2	4	..	24437b
38	5763	22.0	- 2 17	9.6	9.9	Fo	5	..	24041b	88	6529	22.4	-17 24	9.8	10.4	Go	2	..	40869b
39	6528	22.0	-17 21	10.2	11.0	G5	1	..	40869b	89	6129	22.4	-17 47	8.1	8.4	Fo	8	..	40869b
40	17447	22.0	-23 2	8.3	8.9	F5	5	..	24338b	90	5916	22.4	-22 22	8.1	9.3	Mb	4	..	24338b
41	16147	22.0	-26 39	11.4	12.0	F2	2	..	23813b	91	16149	22.4	-25 55	9.7	11.6	K2	2	..	23813b
42	15396	22.0	-36 7	9.8	10.9	F8	1	..	39649b	92	17773	22.4	-28 44	9.5	10.5	G5	4	..	23813b
43	15048	22.0	-43 11	9.5	11.2	G5	3	..	45063b	93	19168	22.4	-30 45	10.4	11.3	Go	1	..	39342b
44	12027	22.0	-51 53	8.5	9.3	Fo	4	..	41899b	94	14806	22.4	-37 15	10.4	10.8	G5	1	..	39649b
45	10299	22.0	-53 15	10.1	10.7	Go	2	..	42094b	95	14719	22.4	-39 36	7.42	9.1	K5	4	..	40940b
46	7959	22.0	-58 12	8.8	9.9	K5	2	..	42494b	96	7802	22.4	-59 44	8.82	8.7	Fo	4	..	42510b
47	791	22.1	+78 22	8.7	8.7	Ao	3	..	38590i	97	2431	22.5	+58 45	8.1	8.4	F	3	..	34819i
48	1237	22.1	+71 10	9.4	9.4	Ao	1	..	38903i	98	2882	22.5	+53 36	7.6	7.6	Ao	4	..	37351i
49	4614	22.1	+ 1 34	9.7	11.1	Ma	1	..	24041b	99	3701	22.5	+47 3	8.4	8.4	Ao	2	..	38844i
50	5784	22.1	- 7 45	9.6	10.4	G5	1	..	40918b	100	4837	22.5	+40 2	8.3	8.3	Ao	2	2,2	37978i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

212900

22^h 22^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	4711	22.5	+30 27	7.61	8.68	K2	3	..	3803ri	51	17783	22.8	-28 43	10.2	11.4	Ko	2	..	23813b
2	4361	22.5	+ 0 10	9.7	10.7	Ko	2	..	24041b	52	18824	22.8	-31 43	9.7	9.9	F8	4	..	39342b
3	5447	22.5	- 3 23	10.2	10.8	Go	2	..	24041b	53	14723	22.8	-39 38	5.48	6.8	Ko	..	5,R	56,148
4	6086	22.5	-16 18	9.8	10.6	G5	2	..	40869b	54	14908	22.8	-41 12	10.4	10.3	Ao	3	0,2	45063b
5	18819	22.5	-31 35	8.1	9.4	Ko	5	..	39342b	55	964	22.9	+74 20	8.0	8.8	G5	2	..	38025i
6	17097	22.5	-32 46	8.9	9.9	Ko	3	..	39342b	56	1662	22.9	+65 1	8.9	9.0	A3	4	..	37257i
7	3496	22.5	-68 39	10.1	10.7	Go	1	..	20543b	57	1661	22.9	+65 0	9.2	9.3	G5	3	..	32312i
8	1130	22.6	+71 32	8.6	8.6	Ao	3	..	38903i	58	4323	22.9	+27 45	8.7	9.5	F2	3	..	38597i
9	3375	22.6	+51 51	8.2	9.2	Ko	2	0,2	37028i	59	4542	22.9	+23 20	8.1	8.4	Ko	2	..	38130i
10	4667	22.6	+30 14	8.51	9.69	K5	1	..	3803ri	60	5048	22.9	+ 9 58	8.6	9.6	Fo	2	..	24041b
11	..	22.6	- 0 28	..	..	G5	1	..	24041b	61	..	22.9	- 1 29	..	..	A2	5	..	23813b
12	5448	22.6	- 3 16	10.6	11.2	Go	2	..	24041b	62	16151	22.9	-25 59	9.5	9.6	Fo	8	..	39342b
13	5796	22.6	- 4 49	9.05	10.40	Mb	2	..	24041b	63	15601	22.9	-34 16	7.8	7.4	G5	1	..	39649b
14	6130	22.6	-18 38	9.3	10.1	G5	4	..	40869b	64	14724	22.9	-39 10	10.4	10.9	Ko	3	..	41899b
15	15920	22.6	-27 43	8.0	8.8	Ko	6	..	23813b	65	14327	22.9	-46 4	8.8	10.3	A2	2	..	3803ri
16	18821	22.6	-31 38	10.4	10.8	Ko	1	..	39342b	66	4430	23.0	+33 2	8.7	8.8	A3	2	..	38597i
17	14219	22.6	-48 35	8.66	9.9	Ko	5	..	41899b	67	4375	23.0	+28 43	9.4	9.5	Ko	2	..	14184b
18	13685	22.6	-50 5	10.3	11.1	Ko	1	..	41899b	68	4508	23.0	+ 2 15	9.3	10.3	F8	2	..	40869b
19	4266	22.6	-63 55	9.2	9.6	F5	4	..	19898b	69	6228	23.0	-15 22	9.3	10.4	F2	1	..	23813b
20	3240	22.6	-69 47	8.94	10.2	K5	2	..	19967b	70	6436	23.0	-20 37	9.6	10.1	F8	3	..	40869b
21	4401	22.7	+42 50	9.2	10.6	Ma	..	..	M	71	16152	23.0	-26 10	10.6	10.9	F2	1	..	39342b
22	4712	22.7	+30 26	9.4	10.4	Ko	1	..	38597i	72	17100	23.0	-32 0	9.5	10.8	G5	1	..	45063b
23	4709	22.7	+ 4 1	9.0	9.5	F8	5	..	14184b	73	15054	23.0	-43 8	10.1	11.5	F8	2	..	20543b
24	4876	22.7	+ 1 8	8.37	8.65	Fo	3	..	10174b	74	3674	23.0	-65 54	9.7	10.2	Fo	4	..	19967b
25	4362	22.7	+ 0 1	10.0	10.8	G5	2	..	24041b	75	2695	23.0	-71 47	9.3	9.6	Ko	3	..	38580i
26	5449	22.7	- 3 6	11.1	11.1	Ao	1	..	24041b	76	1250	23.1	+69 23	8.0	9.0	F8	3	0,2	38844i
27	5996	22.7	- 6 25	8.1	8.9	G5	6	..	40918b	77	4504	23.1	+41 31	7.81	8.31	B3	8	..	38564i
28	5982	22.7	- 9 16	8.9	8.9	Ao	4	..	40918b	78	4841	23.1	+39 19	6.07	5.90	K2	2	..	3803ri
29	17182	22.7	-24 18	10.2	10.8	Go	3	..	23813b	79	4506	23.1	+33 29	8.5	9.6	Go	2	..	24338b
30	18823	22.7	-31 34	10.6	10.7	Go	2	..	39342b	80	6230	23.1	-21 42	10.0	10.9	F5	2	..	40713b
31	15404	22.7	-36 7	10.0	10.9	G5	1	..	39649b	81	18350	23.1	-29 14	10.2	9.6	F8	4	..	39342b
32	15405	22.7	-36 18	8.9	10.0	F5	4	..	39649b	82	18828	23.1	-31 44	8.9	9.9	G5	3	..	39342b
33	14722	22.7	-39 3	10.2	10.9	F8	1	..	39649b	83	15604	23.1	-34 24	9.6	10.2	F8	2	..	41899b
34	14721	22.7	-39 26	10.4	10.5	F2	2	..	39649b	84	12030	23.1	-52 36	8.7	10.0	Ao	3	..	38803i
35	13862	22.7	-49 25	9.9	10.0	Go	2	..	41899b	85	2776	23.2	+56 42	8.7	8.7	B8	7	..	37028i
36	10094	22.7	-57 22	8.9	10.2	F5	3	..	42494b	86	2750	23.2	+55 56	6.42	6.37	A5	2	..	36318i
37	860	22.8	+77 44	6.50	6.48	B9	7	..	38590i	87	4583	23.2	+37 24	9.2	9.3	K2	7	..	3803ri
38	2884	22.8	+54 0	8.6	8.7	A2	3	..	37351i	88	4701	23.2	+31 20	6.26	7.33	Ko	7	..	38130i
39	3732	22.8	+49 12	8.2	8.2	A	3	R	37028i	89	4804	23.2	+11 45	7.19	8.19	K2	3	..	24041b
40	3941	22.8	+45 17	7.27	7.33	A2	7	..	38844i	90	4877	23.2	+ 0 29	9.7	10.8	K2	2	..	24041b
41	4771	22.8	+39 9	8.1	9.2	K2	3	0,1	38570i	91	4364	23.2	- 0 8	9.7	10.8	K2	2	..	24041b
42	4428	22.8	+33 1	7.50	7.78	Fo	4	..	3803ri	92	4298	23.2	- 1 26	10.7	11.8	Ko	2	..	14183b
43	4710	22.8	+ 4 12	4.93	5.93	Ko	..	0,8	56,102	93	6275	23.2	-11 52	9.1	10.1	Ko	3	..	40869b
44	4363	22.8	- 0 17	9.7	10.3	Go	4	..	24041b	94	6088	23.2	-16 10	9.3	10.3	G5	1	..	39649b
45	5766	22.8	- 2 7	10.0	11.1	K2	2	..	24041b	95	15408	23.2	-36 25	11.1	11.1	Go	1	..	45071b
46	5997	22.8	- 6 26	8.8	9.6	G5	5	..	40918b	96	14708	23.2	-45 34	10.1	11.5	Go	5	..	41899b
47	5919	22.8	-10 4	10.0	10.8	G5	1	..	40918b	97	13867	23.2	-49 1	8.67	9.1	Go	1	..	41899b
48	6274	22.8	-12 23	8.7	9.1	F5	6	..	39463b	98	13690	23.2	-49 56	9.70	10.8	K2	3	..	20543b
49	6229	22.8	-20 53	9.3	10.1	Go	4	..	40869b	99	3899	23.2	-66 54	8.77	9.9	Fo	3	..	38025i
50	17183	22.8	-24 38	10.6	11.8	K5	1	..	23813b	100	1036	23.3	+73 6	8.0	8.3	Fo	3	..	38025i

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22^h 23^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	3212	23.3	+52 36	8.9	10.0	K2	1	..	37028i	51	4365	23.7	- 0 32	4.59	4.93	F2	..	R	2940c
2	3800	23.3	+47 19	9.2	9.2	A0	2	R	38844i	52	4365	23.7	- 0 32	4.42	4.76	F2	..	R	2940c
3	6288	23.3	-14 18	9.2	10.0	G5	3	..	24437b	53	4299	23.7	- 1 17	9.0	10.1	K2	4	..	24041b
4	6090	23.3	-16 41	8.7	9.2	F8	5	..	40869b	54	6290	23.7	-14 12	9.1	10.3	K5	3	..	24437b
5	5920	23.3	-22 34	7.30	7.5	F2	8	..	24338b	55	6234	23.7	-20 54	8.5	8.3	A3	6	..	40869b
6	18830	23.3	-31 9	8.1	9.9	K0	4	2,2	39342b	56	6235	23.7	-21 17	10.0	10.7	K2	1	..	24338b
7	18832	23.3	-31 12	10.2	10.7	F8	2	..	39342b	57	15944	23.7	-25 38	10.2	11.4	F8	2	..	45149b
8	14798	23.3	-40 42	10.9	10.8	F8	2	..	39649b	58	14801	23.7	-40 32	9.2	10.5	K2	3	..	39649b
9	14931	23.3	-44 0	4.02	4.80	G5	..	0,2 R	28,216	59	15056	23.7	-43 21	9.4	11.2	K0	2	..	45063b
10	13869	23.3	-49 2	8.2	9.1	Go	5	..	41899b	60	2298	23.8	+62 13	8.2	9.3	K2	1	..	38902i
11	1303	23.4	+68 32	7.7	8.0	F0	6	5,6	37257i	61	4208	23.8	+43 37	6.75	7.93	K5	4	..	37978i
12	4585	23.4	+37 19	7.9	8.0	K0	3	..	38570i	62	4839	23.8	+36 51	7.9	8.4	F8	1	..	38570i
13	4645	23.4	+23 1	8.3	9.3	K0	1	..	38821i	63	4827	23.8	+12 52	8.8	9.8	K0	1	..	38860i
14	4746	23.4	+16 46	7.52	8.52	K0	5	..	38860i	64	4366	23.8	- 0 2	9.7	9.7	A0	3	..	14184b
15	6133	23.4	-18 15	9.6	10.4	G5	2	..	40869b	65	..	23.8	- 1 44	..	..	G5	2	..	24041b
16	17187	23.4	-24 38	8.0	9.0	K0	6	..	24338b	66	5925	23.8	-10 15	7.61	8.17	Go	8	..	40918b
17	19174	23.4	-30 4	9.9	10.2	Go	1	..	40713b	67	5923	23.8	-10 26	8.7	9.3	Go	6	..	40918b
18	15410	23.4	-36 46	10.4	11.6	K0	1	..	39649b	68	6201	23.8	-13 1	10.6	11.6	K0	1	..	24437b
19	14810	23.4	-37 28	7.54	8.7	K0	8	..	38147b	69	6237	23.8	-21 28	10.2	10.7	Go	1	..	24338b
20	2699	23.4	-71 44	8.9	9.3	F5	5	..	19967b	70	6236	23.8	-21 44	10.9	11.0	K5	1	..	24338b
21	965	23.5	+74 19	8.0	9.0	K0	2	..	38025i	71	17458	23.8	-23 33	9.1	9.8	G5	5	..	24338b
22	1240	23.5	+70 16	5.69	6.69	K0	8	0,3	38025i	72	15945	23.8	-25 4	9.1	10.5	K0	4	..	23813b
23	2081	23.5	+63 14	8.5	8.3	B	2	..	38902i	73	15929	23.8	-27 40	9.1	9.3	K2	5	..	23813b
24	4378	23.5	+29 12	8.7	8.8	A2	3	..	38597i	74	18355	23.8	-29 10	7.30	8.1	K0	9	..	23813b
25	4437	23.5	+26 31	6.60	7.60	K0	7	..	38597i	75	18354	23.8	-29 14	8.9	8.7	F5	7	..	23813b
26	4593	23.5	+24 23	7.52	8.52	K0	3	..	32312i	76	15611	23.8	-34 21	7.52	8.7	K0	6	..	39342b
27	4594	23.5	+24 18	6.71	6.69	B9	7	0,7	38597i	77	15342	23.8	-35 42	9.6	10.9	G5	2	0,1	39342b
28	6277	23.5	-12 44	9.6	10.8	K5	3	..	24437b	78	15416	23.8	-36 19	10.4	10.5	F8	3	..	39649b
29	6199	23.5	-13 25	9.3	10.1	G5	4	..	24437b	79	14727	23.8	-39 2	10.2	10.0	F0	3	..	39649b
30	6092	23.5	-16 39	8.5	8.5	A0	5	..	14183b	80	14935	23.8	-44 15	4.31	5.66	Mb	..	R	28,216
31	6281	23.5	-19 14	9.6	10.1	K0	3	..	40869b	81	14711	23.8	-45 15	10.3	11.2	Go	1	..	45071b
32	5921	23.5	-22 7	10.0	11.0	K5	1	..	24338b	82	14331	23.8	-45 58	9.9	10.6	Go	1	..	41899b
33	14799	23.5	-40 47	8.7	9.1	F0	5	0,4	20549b	83	14330	23.8	-46 35	7.4	8.0	G5	8	..	41899b
34	13870	23.5	-48 53	9.4	10.2	K0	3	..	41899b	84	2034	23.8	-74 12	9.6	10.7	K2	2	..	19967b
35	6341	23.5	-62 47	8.0	9.0	K0	5	..	19899b	85	859	23.9	+76 56	7.25	7.33	A3	6	2,4	38025i
36	3381	23.6	+51 28	8.0	8.8	G5	2	..	37028i	86	1665	23.9	+64 57	8.6	9.4	G5	2	..	37257i
37	..	23.6	- 1 35	..	..	Go	2	..	24041b	87	1664	23.9	+64 37	5.66	5.42	Bo	10	0,R	37257i
38	5450	23.6	- 2 56	8.7	9.2	F8	7	..	24041b	88	3213	23.9	+52 28	8.2	8.2	B9	3	..	37028i
39	5800	23.6	- 5 40	9.3	9.8	F8	4	..	40918b	89	3726	23.9	+51 4	7.46	7.46	A0	6	..	37028i
40	5839	23.6	-11 24	9.3	10.3	K0	1	..	24437b	90	3708	23.9	+46 57	8.6	9.4	G5	1	..	38844i
41	6278	23.6	-12 12	9.1	9.4	F0	4	..	14183b	91	4840	23.9	+36 38	7.8	7.8	B9	4	..	38570i
42	19175	23.6	-30 30	7.76	8.2	K2	6	..	40713b	92	4880	23.9	+ 0 48	10.0	10.6	Go	3	..	14184b
43	18836	23.6	-31 49	9.7	10.8	K0	2	..	39342b	93	4300	23.9	- 1 16	10.0	10.3	F2	4	..	24041b
44	15412	23.6	-36 51	9.6	9.3	A0	3	..	40940b	94	18357	23.9	-29 25	10.6	11.4	G5	1	..	45149b
45	13694	23.6	-50 22	7.9	8.7	F0	6	..	41899b	95	18358	23.9	-29 35	9.2	9.4	K2	3	..	40713b
46	3900	23.6	-67 49	8.10	8.4	F2	7	..	20543b	96	15940	23.9	-42 7	9.2	9.7	Go	6	..	45063b
47	775	23.7	+81 26	7.00	7.34	F2	5	..	37281i	97	15058	23.9	-43 3	9.9	11.5	K0	1	..	45063b
48	2297	23.7	+61 25	6.66	7.66	K0	4	..	37257i	98	3241	23.9	-69 11	9.3	9.4	A2	4	..	19967b
49	..	23.7	+55 46	10.95	..	Oa	..	..	76,29	99	1850	24.0	+63 27	7.8	7.8	A0	6	..	37257i
50	3725	23.7	+50 59	7.28	7.28	A0	7	..	37028i	100	4842	24.0	+36 57	8.2	9.2	K0	2	..	38570i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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22^h 24^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	4741	24.0	+26 13	8.7	9.3	Go	4	..	38597i	51	6439	24.3	-20 14	9.3	10.1	F5	3	..	40869b
2	4748	24.0	+16 38	8.7	8.8	A2	3	..	3886oi	52	5924	24.3	-22 40	9.3	10.1	Ko	2	..	24338b
3	4367	24.0	- 0 38	9.5	10.5	Ko	4	..	24041b	53	17792	24.3	-28 21	9.1	9.9	K2	4	..	23813b
4	5801	24.0	- 5 0	9.3	10.3	Ko	2	..	24041b	54	18362	24.3	-29 44	11.1	11.6	G5	1	..	45149b
5	6202	24.0	-12 56	10.2	10.7	F8	2	..	24437b	55	15947	24.3	-42 48	7.10	6.9	Ao	10	..	45063b
6	17790	24.0	-28 5	9.9	10.5	K2	2	..	23813b	56	7961	24.3	-58 46	9.7	10.3	Go	1	..	42510b
7	15418	24.0	-36 4	10.4	10.5	Go	1	..	39649b	57	4056	24.3	-64 59	9.4	9.7	F2	2	..	20543b
8	14813	24.0	-37 15	9.6	9.6	Go	4	..	39649b	58	1548	24.3	-77 36	9.5	10.5	Ko	1	..	42794b
9	15059	24.0	-43 41	10.8	11.2	Go	1	..	45063b	59	3730	24.4	+50 48	7.7	7.7	B9	6	..	37028i
10	14218	24.0	-47 2	8.8	10.6	K5	2	..	41899b	60	4511	24.4	+34 2	8.5	9.3	G5	2	..	38031i
11	14217	24.0	-47 45	9.4	10.3	F8	3	..	41899b	61	4368	24.4	- 0 31	9.3	9.9	Go	2	..	24041b
12	828	24.1	+75 40	8.82	9.16	F2	1	..	38903i	62	4369	24.4	- 0 44	8.6	9.0	F5	7	..	14184b
13	2084	24.1	+62 45	8.2	8.2	Ao	5	..	38902i	63	5767	24.4	- 1 53	9.1	9.7	Go	6	..	24041b
14	2299	24.1	+61 51	9.4	9.4	Ao	1	..	38902i	64	5930	24.4	-10 33	8.9	9.7	G5	4	..	40918b
15	2781	24.1	+57 3	8.0	8.6	Go	4	..	38803i	65	6282	24.4	-12 2	9.3	9.7	F5	5	..	14183b
16	3384	24.1	+51 42	8.7	8.7	Ao	2	..	37028i	66	6230	24.4	-15 20	9.1	10.1	Ko	2	..	40869b
17	4850	24.1	+39 23	8.7	8.7	Ao	2	..	38564i	67	6535	24.4	-17 42	10.0	10.1	A3	2	..	40869b
18	4672	24.1	+29 57	8.7	9.0	Fo	3	..	32312i	68	6440	24.4	-20 25	9.2	10.1	G5	4	..	40869b
19	4874	24.1	+ 8 38	5.82	6.89	K2	8	..	3813oi	69	17192	24.4	-24 21	7.9	8.4	F5	8	..	24338b
20	4301	24.1	- 0 55	8.6	9.0	F5	4	..	14184b	70	15951	24.4	-25 16	9.7	10.2	Go	4	..	23813b
21	..	24.1	- 1 16	..	..	Fo	2	..	24041b	71	18363	24.4	-29 31	10.9	11.3	Ko	2	..	45149b
22	5452	24.1	- 3 44	8.5	9.3	G5	6	..	24041b	72	15422	24.4	-36 35	9.6	10.0	Ko	5	..	39649b
23	5929	24.1	-10 10	8.7	9.7	Ko	3	..	40918b	73	14226	24.4	-48 28	9.1	10.2	Ko	4	..	41899b
24	6281	24.1	-11 55	9.3	9.4	A5	3	..	14183b	74	3677	24.4	-66 27	9.7	10.2	F8	2	..	20543b
25	6530	24.1	-17 18	9.1	9.4	Fo	5	..	40869b	75	737	24.4	-83 42	9.5	10.3	G5	2	..	21397b
26	205	24.2	+87 34	7.37	7.43	A2	6	2,6	37281i	76	3739	24.5	+48 57	7.99	9.06	K2	1	..	38844i
27	2300	24.2	+61 54	9.4	9.4	Ao	1	..	38902i	77	4674	24.5	+29 18	8.1	9.1	Ko	3	..	38597i
28	3385	24.2	+51 24	9.0	9.0	Ao	1	..	37028i	78	4381	24.5	+28 32	7.30	8.30	Ko	5	..	38597i
29	3711	24.2	+46 57	8.6	8.6	B9	2	..	38844i	79	4439	24.5	+26 16	5.96	7.03	K2	8	..	38597i
30	5683	24.2	- 4 42	9.05	10.05	Ko	3	..	24041b	80	4881	24.5	+ 0 47	10.0	11.2	K5	1	..	14184b
31	5792	24.2	- 7 34	8.7	9.7	Ko	3	..	40918b	81	6284	24.5	-12 13	9.1	9.9	G5	4	..	14183b
32	16160	24.2	-26 21	9.4	10.5	G5	4	..	23813b	82	6287	24.5	-18 49	10.0	10.6	Go	2	..	40869b
33	15931	24.2	-27 4	9.1	9.9	G5	5	..	23813b	83	6285	24.5	-19 24	10.5	10.2	Go	2	..	40869b
34	15933	24.2	-27 16	10.9	11.0	F5	2	..	23813b	84	16165	24.5	-25 54	9.7	10.7	Ko	2	2,2	45149b
35	15932	24.2	-27 37	5.95	6.1	Fo	..	..	56,148	85	19181	24.5	-29 54	10.9	11.3	G5	1	..	45149b
36	18838	24.2	-31 32	8.9	9.9	Go	4	..	39342b	86	15424	24.5	-36 0	9.2	9.9	G5	4	..	39342b
37	14814	24.2	-36 58	9.2	10.0	Ko	4	..	39649b	87	1851	24.6	+63 26	8.4	8.5	A3	4	..	37257i
38	14219	24.2	-47 10	10.3	10.6	Go	1	..	41899b	88	3217	24.6	+52 22	7.7	8.9	K5	2	..	37028i
39	12031	24.2	-52 4	8.4	9.9	Ko	3	..	42094b	89	3811	24.6	+47 45	8.0	8.0	Ao	4	..	38844i
40	3501	24.2	-67 58	9.9	10.7	G5	1	..	20543b	90	3953	24.6	+46 8	8.2	8.2	B9	2	..	38844i
41	3809	24.3	+48 3	7.7	8.7	Ko	1	..	38844i	91	4851	24.6	+39 48	var.	var.	Md	2	R	38564i
42	4673	24.3	+30 8	8.81	9.81	Ko	1	..	38597i	92	5054	24.6	+ 9 52	8.6	9.7	K2	1	..	3813oi
43	5166	24.3	+20 52	7.66	7.80	A5	3	..	38821i	93	4880	24.6	+ 7 30	8.2	8.2	Ao	7	..	14693b
44	5027	24.3	+ 7 6	8.6	8.9	Fo	3	..	14693b	94	4860	24.6	+ 5 9	8.66	9.66	Ko	3	..	14184b
45	5453	24.3	- 3 15	10.0	11.1	K2	1	..	24041b	95	4302	24.6	- 1 25	10.7	11.5	G5	2	..	24041b
46	6002	24.3	- 6 28	9.6	10.4	G5	1	..	40918b	96	5454	24.6	- 2 55	11.0	11.8	G5	1	..	24041b
47	5883	24.3	- 8 40	10.2	10.2	Ao	2	..	40918b	97	5987	24.6	- 9 32	9.6	10.8	K5	1	..	40918b
48	6532	24.3	-17 18	9.3	10.3	Ko	1	..	40869b	98	6204	24.6	-13 25	6.21	6.49	Fo	10	..	14183b
49	6282	24.3	-19 32	10.5	10.7	F8	1	..	40869b	99	6536	24.6	-16 58	8.1	8.6	F8	7	..	40869b
50	6284	24.3	-19 32	10.7	10.9	Go	1	..	40869b	100	6289	24.6	-18 55	10.0	10.7	Ko	2	..	40869b

THE HENRY DRAPER CATALOGUE.

213200

22^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	17196	24.6	-24 12	10.6	11.1	Go	1	..	24338b	51	6537	25.0	-16 51	7.19	7.07	G5	8	..	40869b
2	15935	24.6	-27 29	9.9	9.6	F5	5	..	23813b	52	16172	25.0	-26 45	11.1	11.4	Go	2	..	23813b
3	18367	24.6	-29 23	10.4	10.8	G5	1	..	40713b	53	19188	25.0	-30 38	8.9	9.4	Ko	3	..	40713b
4	18846	24.6	-30 57	8.0	8.4	Fo	6	o,8	40713b	54	19189	25.0	-30 42	10.2	11.7	K5	1	..	39342b
5	15425	24.6	-36 31	9.8	10.2	G5	4	..	39649b	55	15953	25.0	-42 11	9.2	9.1	F5	6	..	45063b
6	15079	24.6	-37 54	9.0	9.7	Go	4	..	39649b	56	14230	25.0	-48 41	9.9	10.8	G5	2	..	41899b
7	14804	24.6	-40 25	9.8	10.6	Go	3	..	39649b	57	3678	25.0	-66 40	9.3	9.9	Go	4	..	20543b
8	1037	24.7	+73 4	7.9	7.9	Ao	5	..	38025i	58	4815	25.1	+35 26	7.77	7.85	A3	4	..	3857oi
9	2784	24.7	+57 9	8.5	8.5	B9	3	..	38803i	59	5455	25.1	-2 50	10.5	11.5	Ko	2	..	24041b
10	4440	24.7	+26 55	8.5	8.8	Fo	5	..	38597i	60	5847	25.1	-11 33	9.6	9.9	F2	2	..	14183b
11	4882	24.7	+1 8	10.7	11.5	G5	2	..	24041b	61	6134	25.1	-18 28	10.5	11.5	Ko	1	..	40869b
12	4370	24.7	-0 19	9.7	10.3	Go	3	..	24041b	62	17198	25.1	-24 9	9.7	10.2	G5	3	..	24338b
13	4303	24.7	-1 11	8.6	9.1	F8	4	R	14184b	63	15937	25.1	-27 10	10.6	11.6	Ko	3	..	23813b
14	5804	24.7	-5 36	9.6	10.4	G5	4	..	40918b	64	18850	25.1	-30 59	9.7	10.0	Fo	2	..	39342b
15	5988	24.7	-8 55	8.7	9.3	Go	6	..	40918b	65	17119	25.1	-32 2	8.2	9.6	K2	3	..	40713b
16	5842	24.7	-11 42	8.9	9.7	G5	3	..	14183b	66	14735	25.1	-39 38	10.6	11.4	Ko	1	..	39649b
17	6095	24.7	-15 51	10.2	10.8	Go	2	..	40869b	67	14226	25.1	-47 40	9.5	9.6	Go	5	..	41899b
18	15955	24.7	-25 12	8.9	10.2	Go	3	..	24338b	68	1671	25.2	+64 32	9.2	9.2	Ao	1	..	38902i
19	15350	24.7	-35 3	9.6	10.9	K2	2	..	39342b	69	2397	25.2	+60 57	7.47	8.47	Ko	4	..	38803i
20	14940	24.7	-44 36	7.08	7.2	Ao	10	..	45063b	70	3221	25.2	+52 16	8.6	9.8	K5	1	..	37028i
21	14222	24.7	-47 15	9.1	10.6	K5	1	..	41899b	71	4591	25.2	+37 27	8.8	9.3	F8	1	..	3857oi
22	3243	24.7	-69 37	7.22	7.7	F2	9	..	19967b	72	4700	25.2	+35 13	6.53	6.53	Ao	8	o,8	38564i
23	1549	24.7	-77 39	8.3	9.3	Ko	6	..	42794b	73	4620	25.2	+1 32	8.0	8.5	F8	6	..	14184b
24	2542	24.8	+57 55	8.4	8.4	Ao	2	..	38803i	74	4884	25.2	+0 39	9.3	9.8	F8	2	..	14184b
25	2785	24.8	+56 25	8.0	9.0	Ko	3	o,3	38803i	75	4885	25.2	+0 18	9.53	10.09	Go	3	..	14184b
26	4722	24.8	+31 12	8.3	8.4	A2	3	..	38031i	76	4305	25.2	-1 14	8.4	9.6	K5	4	..	14184b
27	6006	24.8	-6 34	10.2	10.8	Go	2	..	40918b	77	5456	25.2	-2 55	10.7	11.7	Ko	2	..	24041b
28	5885	24.8	-7 55	9.6	10.6	Ko	2	..	40918b	78	5806	25.2	-5 19	7.9	8.7	G5	7	..	24041b
29	14732	24.8	-39 40	10.2	11.4	K5	1	..	39649b	79	6295	25.2	-14 22	9.2	10.2	Ko	2	..	40869b
30	14228	24.8	-48 49	7.6	8.0	A2	8	..	41899b	80	6136	25.2	-18 9	10.0	10.8	G5	1	..	40869b
31	2440	24.9	+58 21	8.0	8.0	B8	2	..	38803i	81	6135	25.2	-18 16	9.1	10.2	K2	3	..	40869b
32	2543	24.9	+58 2	7.9	7.9	Ao	4	..	38803i	82	15354	25.2	-35 33	9.6	10.5	F8	2	..	39342b
33	3733	24.9	+50 27	8.6	9.4	G5	4	..	37028i	83	14810	25.2	-40 9	10.2	10.6	Ko	2	..	39649b
34	4677	24.9	+29 29	7.84	7.92	A3	6	..	38597i	84	14809	25.2	-40 47	9.6	10.8	K2	2	..	39649b
35	4713	24.9	+3 56	5.47	5.89	F5	..	..	56,102	85	13702	25.2	-49 56	9.36	10.8	G5	1	..	41899b
36	6231	24.9	-15 5	6.37	6.37	Ao	7	..	8378b	86	7807	25.2	-58 54	8.2	9.3	K2	3	..	42510b
37	16170	24.9	-26 50	10.9	12.0	Ko	1	..	23813b	87	3904	25.2	-67 34	9.6	10.7	K2	1	..	20543b
38	14941	24.9	-44 44	9.52	10.1	F2	2	..	45063b	88	1751	25.2	-75 18	9.4	10.6	K5	2	..	19967b
39	14224	24.9	-47 48	9.5	10.5	Ko	3	..	41899b	89	1051	25.2	-80 22	9.2	10.2	Ko	2	..	42794b
40	13701	24.9	-49 56	6.86	7.9	Go	8	..	41899b	90	1243	25.3	+70 18	7.74	7.74	Ao	3	..	38025i
41	13301	24.9	-51 54	8.0	8.7	F5	6	..	41899b	91	4747	25.3	+25 25	8.7	9.2	F8	3	..	38597i
42	1852	25.0	+63 34	6.38	7.38	Ko	6	5,6	3858oi	92	5889	25.3	-8 13	9.6	10.4	G5	1	..	40918b
43	3734	25.0	+51 0	7.45	7.53	A3	6	..	37028i	93	5888	25.3	-8 37	7.33	7.61	Fo	9	..	40918b
44	4829	25.0	+40 36	8.7	9.7	Ko	1	..	3857oi	94	6233	25.3	-15 39	9.3	10.4	K2	2	..	40869b
45	4437	25.0	+32 20	7.7	8.9	K5	2	..	38031i	95	17200	25.3	-24 40	7.6	9.0	Ko	7	..	24338b
46	4862	25.0	+4 31	9.3	10.3	Ko	1	..	14184b	96	16175	25.3	-26 35	6.53	7.6	Ko	..	o, R	56,148
47	4371	25.0	-0 22	7.7	7.7	Ao	10	..	14184b	97	18370	25.3	-29 45	10.9	11.3	Go	2	..	39342b
48	5844	25.0	-11 8	9.3	10.1	G5	2	..	24437b	98	18854	25.3	-31 32	7.27	7.6	A3	9	..	40713b
49	6205	25.0	-12 52	10.2	11.2	Ko	2	..	24437b	99	14736	25.3	-38 55	9.2	10.8	K5	1	..	39649b
50	6232	25.0	-15 17	9.3	9.9	Go	3	..	40869b	100	15955	25.3	-42 26	9.7	10.5	Ko	1	..	45063b

213300

22^h 25^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	14337	25.3	-46 48	9.9	10.6	Go	2	..	41899b	51	13882	25.6	-49 41	9.3	10.0	F8	2	..	41899b
2	13877	25.3	-49 35	9.4	9.3	Ao	4	..	41899b	52	1441	25.7	+67 23	8.8	8.9	A2	1	..	3858oi
3	13304	25.3	-51 26	7.4	8.2	G5	8	..	41899b	53	2087	25.7	+62 46	8.2	9.0	G5	2	..	38902i
4	10089	25.3	-53 53	8.3	10.4	K2	3	..	42094b	54	3958	25.7	+45 14	8.17	9.24	K2	2	..	38844i
5	1752	25.3	-75 10	9.3	10.5	K5	2	..	19967b	55	4657	25.7	+15 31	8.2	8.6	F5	3	..	3886oi
6	2548	25.4	+57 54	var.	var.	Go	..	O, R	56,102	56	4816	25.7	+11 23	9.7	10.3	Go	2	..	3813oi
7	2547	25.4	+57 53	7.5	7.5	Ao	..	..	M	57	4764	25.7	+10 40	8.7	9.9	K5	1	..	3813oi
8	3222	25.4	+52 31	8.2	8.5	Fo	3	..	37028i	58	4886	25.7	+ 1 13	9.54	9.96	F5	4	..	24041b
9	3814	25.4	+47 16	8.7	8.7	A	1	..	37028i	59	6293	25.7	-19 1	10.5	10.9	Ko	1	..	40869b
10		25.4	+47 11			Ko				60	15941	25.7	-27 8	11.1	11.9	Go	2	..	23813b
11	3719	25.4	+47 11	4.61	5.61	Ao	8	R	37028i	61	17125	25.7	-32 20	9.6	10.8	G5	1	..	39342b
12	4147	25.4	+44 30	8.0	8.0	Ao	3	..	38844i	62	14341	25.7	-46 29	9.7	10.5	K2	2	..	41899b
13	4415	25.4	+42 36	9.2	9.3	A2	1	..	38844i	63	14229	25.7	-47 5	7.3	7.9	F8	9	..	41899b
14	4707	25.4	+31 40	8.7	9.9	K5	1	..	38031i	64	14234	25.7	-48 40	10.8	10.8	Go	2	..	41899b
15	4770	25.4	+21 58	7.95	8.23	Fo	2	..	38821i	65	4801	25.7	-63 15	9.2	10.2	Ko	3	..	19899b
16	5055	25.4	+10 11	7.97	8.97	Ko	5	..	3813oi	66	3680	25.7	-65 56	8.8	9.6	G5	4	..	20543b
17	4306	25.4	- 1 33	9.0	10.0	Ko	5	..	24041b	67	1204	25.7	-79 42	10.2	10.8	Go	1	..	42794b
18	5769	25.4	- 2 0	10.2	11.0	G5	3	..	24041b	68	1139	25.8	+71 44	8.2	9.3	K2	1	..	38903i
19	5990	25.4	- 9 21	10.2	11.0	G5	1	..	40918b	69	4151	25.8	+44 42	8.1	8.4	Fo	2	..	38844i
20	5850	25.4	-11 11	4.89	4.89	Ao	..	O, R	56,102	70	4417	25.8	+42 21	8.0	8.1	A2	2	..	38844i
21	6296	25.4	-14 3	9.8	10.4	Go	2	..	24437b	71	4594	25.8	+38 10	8.1	8.2	A2	2	..	38564i
22	2897	25.5	+53 44	6.59	6.42	B3	7	..	37028i	72	4331	25.8	+27 56	8.1	8.6	F8	4	..	38597i
23	4708	25.5	+32 4	5.51	5.51	Ao	..	..	56,102	73	4758	25.8	+17 38	8.8	9.9	K2	2	..	3886oi
24	4813	25.5	+11 54	8.6	9.1	F8	3	..	3813oi	74	4307	25.8	- 1 0	8.8	8.9	A2	5	..	14184b
25	4621	25.5	- 1 21	9.3	10.1	G5	2	..	24041b	75	5935	25.8	- 9 59	10.2	11.0	G5	1	..	40918b
26	4372	25.5	- 0 12	9.3	9.8	F8	5	..	24041b	76	5852	25.8	-11 7	8.7	9.8	K2	5	..	14183b
27	6291	25.5	-19 42	9.03	9.3	Go	5	..	40869b	77	6292	25.8	-19 35	9.6	10.1	Go	3	..	40869b
28	5928	25.5	-22 25	10.0	10.7	F8	1	..	24338b	78	6442	25.8	-20 0	9.8	10.7	Ko	1	..	40869b
29	16177	25.5	-26 51	8.9	10.2	Ko	4	..	23813b	79	17470	25.8	-23 31	7.9	8.3	Go	8	..	24338b
30	15940	25.5	-27 52	10.4	10.5	F5	4	..	23813b	80	16180	25.8	-25 53	9.9	10.9	Ko	1	..	45149b
31	18373	25.5	-29 48	9.32	10.2	Ko	3	O, I	39342b	81	15625	25.8	-34 22	8.9	9.6	F8	4	..	39342b
32	15358	25.5	-35 25	9.8	11.3	K5	1	O, I	39342b	82	15361	25.8	-34 53	8.2	9.9	Ko	4	..	39342b
33	15957	25.5	-41 56	8.3	9.4	Ko	5	..	45063b	83	14343	25.8	-45 54	10.1	10.4	Go	1	..	41899b
34	15072	25.5	-43 8	10.3	10.4	Go	3	..	45063b	84	14342	25.8	-46 49	10.3	10.5	F8	2	..	41899b
35	2704	25.5	-71 46	9.8	10.2	F5	1	..	19967b	85	6346	25.8	-62 36	9.2	9.6	F5	3	..	19898b
36	2303	25.6	+61 15	8.1	8.1	Ao	3	..	38803i	86	1560	25.8	-76 34	9.6	11.0	Ma	..	..	M
37	3395	25.6	+51 59	8.0	8.8	G5	3	..	37028i	87	1855	25.9	+64 1	9.2	9.2	Ao	1	..	38902i
38	3394	25.6	+51 52	8.6	9.6	K	2	..	37028i	88	3396	25.9	+51 54	6.60	7.38	G5	7	..	37028i
39	4441	25.6	+32 45	8.3	9.4	K2	4	..	38031i	89	3747	25.9	+48 51	6.52	7.52	Ko	5	..	37028i
40	4726	25.6	+30 42	6.60	6.60	Ao	8	..	38031i	90	4216	25.9	+43 54	8.8	8.8	B9	2	..	38844i
41	4831	25.6	+13 13	8.8	9.8	Ko	1	..	3886oi	91	4835	25.9	+40 28	7.47	7.89	F5	5	O, 4	38564i
42	4716	25.6	+ 3 49	8.0	9.0	Ko	6	..	14184b	92	4759	25.9	+17 28	8.8	9.3	F8	3	..	3886oi
43	4622	25.6	+ 1 21	9.39	10.39	Ko	2	5, I	24041b	93	4883	25.9	+ 7 55	7.9	8.9	Ko	5	O, 3	14693b
44	5687	25.6	- 4 19	9.8	10.8	Ko	2	..	24041b	94	5770	25.9	- 2 7	9.8	10.8	Ko	3	..	24041b
45	5851	25.6	-11 8	8.6	9.7	K2	5	..	14183b	95	5853	25.9	-11 32	9.3	9.6	Fo	4	..	14183b
46	6234	25.6	-15 4	8.1	9.2	K2	5	..	14183b	96	5854	25.9	-11 37	9.6	10.0	F5	3	..	14183b
47	6235	25.6	-15 38	9.6	10.7	K2	2	..	40869b	97	17801	25.9	-28 38	10.4	11.0	Go	1	..	45149b
48	15959	25.6	-25 44	9.7	10.8	K2	1	..	45149b	98	17126	25.9	-32 52	4.36	4.36	Ao	..	R	28,216
49	17124	25.6	-32 38	10.0	10.5	A3	2	..	39342b	99	14816	25.9	-40 29	7.8	9.1	Ko	5	O, 4	20549b
50	14228	25.6	-47 40	10.5	10.7	Go	2	..	41899b	100	9902	25.9	-56 27	9.6	10.2	Go	3	..	42510b

THE HENRY DRAPER CATALOGUE.

213400

22^h 25^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	1205	25.9	-79 7	8.1	8.7	Go	8	..	42794b	51	6541	26.3	-17 32	10.2	10.3	A2	1	..	40869b
2	1206	25.9	-79 17	6.08	7.6	Ko	10	..	42794b	52	5930	26.3	-22 24	9.1	10.1	G5	4	..	24338b
3	796	26.0	+78 17	5.77	5.83	A2	9	..	38590i	53	15967	26.3	-25 12	9.4	10.7	G5	4	..	23813b
4	979	26.0	+73 37	9.4	9.4	Ao	1	..	38903i	54	16182	26.3	-26 32	10.9	11.0	Go	2	0,2	23813b
5	1672	26.0	+64 36	8.4	8.2	Bo	2	..	37257i	55	14827	26.3	-37 1	10.2	10.2	Go	3	..	39649b
6	3960	26.0	+45 55	7.97	9.04	K2	2	..	38844i	56	14817	26.3	-39 56	9.5	10.1	F8	3	..	39649b
7	4332	26.0	+27 38	8.7	9.0	Fo	3	..	38597i	57	15075	26.3	-43 46	6.94	7.6	G5	8	..	40872b
8	5796	26.0	-7 36	10.0	10.6	G	2	..	40918b	58	13707	26.3	-50 26	9.4	11.1	K2	1	..	41899b
9	5936	26.0	-10 11	8.7	9.3	Go	4	..	40918b	59	9906	26.3	-56 30	8.6	10.1	G5	3	..	42510b
10	6297	26.0	-14 2	9.6	10.6	Ko	2	..	24437b	60	1253	26.4	+70 8	8.54	9.10	Go	2	..	38580i
11	18377	26.0	-28 54	10.6	11.3	G5	1	..	45149b	61	2529	26.4	+59 28	8.5	8.9	F5	2	..	34819i
12	15362	26.0	-35 48	6.62	7.7	Ko	8	..	40940b	62	4555	26.4	+23 28	7.84	8.91	K2	2	..	38821i
13	14949	26.0	-44 3	7.8	8.7	Ma	6	..	40872b	63	5773	26.4	-2 41	10.6	11.2	Go	2	..	24041b
14	9903	26.0	-56 7	9.3	9.8	F8	1	..	42094b	64	5855	26.4	-11 25	6.39	6.67	Fo	5	..	44170b
15	7808	26.0	-59 17	9.5	10.3	G5	1	..	42510b	65	5931	26.4	-22 29	9.6	9.5	F2	5	..	24338b
16	3905	26.0	-67 4	9.69	10.8	Ma	1	..	20543b	66	17803	26.4	-28 39	9.9	11.1	G5	1	..	40713b
17	739	26.1	+80 11	6.80	7.80	Ko	5	..	38590i	67	18861	26.4	-31 41	8.2	9.0	G5	4	..	40713b
18	978	26.1	+73 50	9.2	9.5	Fo	2	..	38903i	68	15076	26.4	-43 5	9.9	10.7	Ao	1	..	45063b
19	2790	26.1	+56 16	8.6	8.6	Ao	2	0,2	37028i	69	3906	26.4	-66 58	9.6	10.2	Go	2	..	20543b
20	4420	26.1	+42 36	4.54	4.37	B3	..	..	56,102	70	2794	26.5	+56 43	6.73	6.79	A2p G	6	R	37028i
21	4856	26.1	+39 42	8.1	8.1	Ao	4	..	38564i	71	2794	26.5	+56 43	6.73	6.79	G	6	R	37028i
22	4854	26.1	+37 3	9.4	9.5	A2	1	..	38570i	72	4860	26.5	+40 14	8.17	8.95	G5	2	..	38564i
23	5174	26.1	+20 30	8.1	8.6	F8	1	..	38821i	73	4387	26.5	+29 0	9.2	10.4	K5	1	..	38597i
24	4766	26.1	+10 38	8.8	8.8	Ao	3	..	38130i	74	5932	26.5	-22 34	10.2	10.7	Go	1	..	24338b
25	4880	26.1	+8 48	7.7	8.0	Fo	6	..	38130i	75	19195	26.5	-30 20	10.2	10.8	G5	2	..	39342b
26	5032	26.1	+6 54	9.1	9.2	A5	2	..	24324b	76	15435	26.5	-36 26	8.3	9.9	K5	2	..	40940b
27	5459	26.1	-3 2	10.5	11.5	Ko	3	..	24041b	77	14725	26.5	-45 31	9.4	9.6	F8	4	..	41899b
28	5460	26.1	-3 25	6.29	7.29	Ko	5	..	17411b	78	13709	26.5	-50 45	9.9	10.5	Go	2	..	41899b
29	5797	26.1	-7 4	6.20	6.70	F8	6	..	44170b	79	6656	26.5	-60 57	7.3	8.0	G5	7	..	19899b
30	6288	26.1	-12 40	10.0	10.4	F5	4	..	24437b	80	1307	26.6	+68 55	8.05	9.23	K5	1	..	38580i
31	6099	26.1	-15 56	9.1	10.1	Ko	4	..	40869b	81	1774	26.6	+65 58	8.0	8.0	B8	3	..	38902i
32	6443	26.1	-20 35	9.6	10.1	Go	3	..	40869b	82	2795	26.6	+56 20	8.6	9.4	G5	1	..	38803i
33	17474	26.1	-23 11	8.7	9.3	Go	5	..	24338b	83	3964	26.6	+46 1	8.0	8.0	B9	3	..	38844i
34	17473	26.1	-23 41	9.5	10.1	F8	2	..	24338b	84	4423	26.6	+42 55	8.2	8.2	B9	4	..	38844i
35	15431	26.1	-36 8	10.2	11.2	Go	1	..	39649b	85	4680	26.6	+29 50	9.5	9.6	A5	2	..	38597i
36	15073	26.1	-43 15	8.7	8.7	Ko	4	..	40872b	86	5690	26.6	-4 44	9.45	10.23	G5	4	..	24041b
37	4718	26.2	+3 44	8.5	8.5	Ao	3	..	14184b	87	5933	26.6	-22 7	9.8	10.2	G5	2	..	24338b
38	4374	26.2	-0 16	9.0	9.4	F5	6	..	24041b	88	R	26.6	-22 47	9.5	10.7	Ko	2	..	24338b
39	5772	26.2	-2 44	10.2	11.2	Ko	1	..	24041b	89	19196	26.6	-30 24	10.2	11.1	G5	1	..	39342b
40	6298	26.2	-14 9	10.2	10.8	Go	1	..	24437b	90	15368	26.6	-35 33	7.94	9.3	Ko	6	..	39342b
41	13706	26.2	-50 51	9.1	10.0	G5	4	..	41899b	91	14238	26.6	-48 23	10.8	11.7	K5	1	..	45071b
42	6348	26.2	-62 29	4.92	7.2	Mb	..	R	28,216	92	7968	26.6	-58 22	8.3	9.9	K2	2	..	42510b
43	1207	26.2	-79 0	9.1	10.2	K2	2	..	42794b	93	4273	26.6	-63 59	7.50	9.0	Ko	7	..	20543b
44	409	26.2	-85 55	9.0	10.0	Ko	2	..	15173b	94	863	26.7	+78 3	8.0	8.4	F5	2	..	38590i
45	2902	26.3	+53 54	8.9	8.9	Ao	2	..	37028i	95	3229	26.7	+53 1	7.8	8.1	Fo	5	..	37028i
46	4661	26.3	+15 20	8.49	9.67	K5	1	..	38860i	96	3751	26.7	+48 15	8.1	8.1	Ao	2	..	37028i
47	4811	26.3	+14 57	8.4	9.5	K2	1	..	38860i	97	4752	26.7	+25 45	8.7	9.8	K2	2	..	38597i
48	4883	26.3	+8 28	8.6	9.1	F8	3	..	24324b	98	6300	26.7	-14 28	9.8	10.8	Ko	2	..	40869b
49	6299	26.3	-14 19	9.1	10.1	Ko	4	2,2	40869b	99	6138	26.7	-18 9	9.3	10.4	K2	1	..	40869b
50	6542	26.3	-17 7	9.3	9.9	Go	2	..	40869b	100	6244	26.7	-21 17	10.2	10.1	F8	2	..	24338b

213500

22^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	6657	26.7	-61 19	8.5	8.7	Go	5	..	19899b	51	15957	27.1	-27 13	10.6	11.4	Go	2	5,2	45149b
2	1256	26.8	+69 55	7.24	7.30	A2	2	0,3	37257i	52	15956	27.1	-27 18	10.9	11.4	Go	2	2,1	23813b
3		26.8	+67 42	7.8	8.6	G5				53	17136	27.1	-32 48	9.2	10.0	F8	3	..	39342b
4	1443	26.8	+67 42			Ao	4	R	M	54	2037	27.1	-74 38	9.8	11.0	K5	1	..	19967b
5	2904	26.8	+53 47	8.8	9.6	G5	1	..	37028i	55	738	27.1	-83 20	8.02	8.5	Fo	7	5,4	21397b
6	3872	26.8	+50 1	8.6	8.9	Fo	3	..	37028i	56	832	27.2	+75 43	7.92	9.10	K5	1	..	38025i
7	4336	26.8	+27 29	8.8	9.9	K2	1	..	38597i	57	3741	27.2	+50 22	7.62	7.68	A2	6	..	37028i
8	4769	26.8	+10 16	8.27	8.55	Ao	5	..	38130i	58	3875	27.2	+49 46	3.85	3.85	Ao	..	R	2950c
9	4886	26.8	+7 17	7.9	7.9	Ao	7	..	24324b	59	4523	27.2	+34 10	7.85	8.27	F5	3	0,3	38031i
10	6301	26.8	-14 6	8.3	8.8	F8	8	..	14183b	60	4524	27.2	+33 44	7.85	8.35	F8	2	0,2	38031i
11	18378	26.8	-29 8	9.7	10.7	Ko	4	5,2	23813b	61	5775	27.2	-2 9	10.5	11.5	Ko	1	..	24041b
12	18379	26.8	-29 19	10.9	10.8	Go	1	..	45149b	62	5906	27.2	-8 48	8.8	8.9	A2	3	..	40918b
13	18865	26.8	-31 46	9.7	10.8	Go	2	..	39342b	63	5858	27.2	-11 27	8.7	9.9	K5	3	..	14183b
14	14743	26.8	-39 33	9.8	10.0	G5	3	..	39649b	64	6240	27.2	-15 25	9.1	10.2	K2	4	..	40869b
15	14930	26.8	-41 26	10.6	10.1	Go	2	..	45063b	65	15976	27.2	-25 7	8.1	9.0	Go	7	..	24338b
16	7809	26.8	-59 39	9.6	10.2	Go	1	..	42510b	66	16192	27.2	-26 21	8.3	9.3	F5	5	..	40713b
17	7574	26.8	-60 30	8.1	8.5	G5	5	..	19899b	67	15958	27.2	-26 58	10.2	10.5	Ko	2	..	40713b
18	1561	26.8	-76 4	9.5	10.0	F8	2	..	42794b	68	7969	27.2	-58 43	7.8	8.4	Fo	7	..	42510b
19	4154	26.9	+44 38	7.67	8.45	G5	4	..	38844i	69	4802	27.2	-63 7	9.5	10.5	Ko	2	..	19899b
20	4787	26.9	+38 44	8.7	8.8	A3	4	..	38564i	70	1042	27.3	+72 30	9.4	10.2	G5	1	..	38903i
21	4716	26.9	+31 20	8.3	8.7	F5	3	..	38597i	71	1257	27.3	+69 40	7.16	7.04	B5	5	2,3	38025i
22	4835	26.9	+12 36	7.8	8.1	F2	5	..	38130i	72	4451	27.3	+26 43	8.5	8.8	F2	3	..	38597i
23	4886	26.9	+8 14	9.5	9.8	F2	1	..	24324b	73	4665	27.3	+15 18	7.98	9.16	K5	1	..	38860i
24	5692	26.9	-4 41	9.8	9.9	A2	4	..	24041b	74	4623	27.3	+2 5	7.7	8.8	K2	6	..	14184b
25	6546	26.9	-17 22	9.3	10.1	G5	2	..	40869b	75	5805	27.3	-6 59	6.97	7.53	Go	10	..	40918b
26	17807	26.9	-28 3	10.4	11.2	G5	1	0,1	23813b	76	6241	27.3	-15 31	9.8	9.9	A3	2	..	40869b
27	14932	26.9	-41 38	10.2	10.1	G5	1	..	45063b	77	18383	27.3	-29 16	10.6	10.7	Go	4	0,2	23813b
28	3507	26.9	-68 43	9.7	10.0	Fo	3	..	20543b	78	13321	27.3	-51 30	8.8	10.2	Ko	2	..	41899b
29	410	26.9	-86 2	8.4	9.5	K2	3	..	15173b	79	642	27.3	-84 39	9.0	9.4	F5	4	..	15173b
30	2403	27.0	+61 7	6.87	6.87	Ao	8	2,2	38902i	80	4863	27.4	+36 41	8.7	8.8	A2	2	..	38570i
31	3874	27.0	+49 52	8.0	8.0	B9	4	..	37028i	81	4754	27.4	+26 8	9.1	9.4	F2	3	..	38597i
32	4843	27.0	+40 42	8.1	9.2	K2	1	..	38564i	82	4823	27.4	+11 44	8.6	9.1	F8	3	..	38130i
33	4681	27.0	+30 4	8.91	9.91	Ko	1	..	38597i	83	5776	27.4	-2 2	8.7	9.8	K2	6	..	24041b
34	4389	27.0	+29 2	6.32	6.46	A5	9	..	38597i	84	5695	27.4	-4 38	9.60	10.60	Ko	2	..	24041b
35	4377	27.0	-0 7	9.0	9.4	F5	7	..	24041b	85	5810	27.4	-5 41	8.3	9.4	K2	5	..	40918b
36	5694	27.0	-4 34	8.5	9.7	K5	5	..	24041b	86	15978	27.4	-25 47	11.1	11.6	F8	2	..	45149b
37	6297	27.0	-19 28	10.9	10.9	A2	2	..	40869b	87	16195	27.4	-26 19	9.5	9.1	Ao	5	..	40713b
38	6245	27.0	-21 13	9.8	9.8	F8	3	..	24338b	88	18384	27.4	-29 30	8.2	9.3	K2	4	..	40713b
39	17808	27.0	-28 6	10.4	11.0	G5	3	5,2	23813b	89	15098	27.4	-38 33	9.6	9.7	Go	4	..	39649b
40	17809	27.0	-28 13	8.9	9.6	G5	4	..	40713b	90	7575	27.4	-60 39	8.2	8.1	Ao	6	..	19899b
41	15375	27.0	-35 29	10.2	10.5	F8	1	..	39342b	91	2260	27.4	-73 4	7.4	8.0	Go	7	..	19967b
42	15440	27.0	-36 7	10.6	11.2	G5	1	..	39649b	92	1754	27.4	-75 33	10.0	10.6	Go	2	..	38231b
43	9908	27.0	-56 39	8.4	9.2	F2	3	..	42510b	93	509	27.5	+84 33	7.21	8.21	Ko	4	..	37281i
44	4529	27.1	+41 43	7.68	7.74	A2	4	0,3	38844i	94	2763	27.5	+55 30	8.9	9.0	A3	1	..	38803i
45	4558	27.1	+23 21	8.5	9.0	F8	2	..	38821i	95	3232	27.5	+52 21	8.5	8.5	Ao	3	..	37028i
46	5033	27.1	+6 53	9.0	10.1	K2	2	..	24324b	96	4448	27.5	+32 52	7.9	7.9	Ao	5	0,4	38032i
47	5774	27.1	-2 13	10.0	11.1	K2	3	..	24041b	97	4890	27.5	+1 4	8.04	8.32	Fo	7	..	14184b
48	5857	27.1	-11 18	9.3	10.7	Ma	1	..	24437b	98	4891	27.5	+0 59	9.0	10.0	Ko	1	..	14184b
49	6303	27.1	-14 41	9.46	10.64	K5	2	..	40869b	99	4309	27.5	-1 17	9.0	10.4	Mb	3	..	24041b
50	6101	27.1	-16 14	9.6	10.2	Go	2	..	40869b	100	15380	27.5	-35 39	7.21	8.5	K2	8	..	39342b

THE HENRY DRAPER CATALOGUE.

213600

22^h 27^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	15442	27.5	-36 24	10.4	11.2	Go	1	..	39649b	51	6000	27.9	-9 43	9.16	9.94	G5	2	..	40918b
2	15099	27.5	-38 51	10.0	9.8	Go	4	..	39649b	52	6142	27.9	-18 17	8.3	9.3	Ko	5	..	40869b
3	14750	27.5	-39 15	8.9	9.4	Go	6	..	39649b	53	6448	27.9	-19 46	9.73	10.7	G5	1	..	40869b
4	14242	27.5	-48 47	9.9	10.8	G5	2	..	41899b	54	17817	27.9	-28 1	10.6	12.0	Go	2	0,1	23813b
5	12036	27.5	-51 54	7.8	9.7	Ko	4	..	42094b	55	19208	27.9	-30 10	7.49	8.1	Fo	8	..	40713b
6	3743	27.6	+50 44	8.0	8.0	Ao	7	..	37028i	56	19206	27.9	-30 50	9.4	10.8	Ko	2	..	39342b
7	4730	27.6	+30 37	10.0	10.0	Ao	2	..	38597i	57	15968	27.9	-42 33	9.7	10.0	F5	2	..	45063b
8	4602	27.6	+25 1	8.2	9.3	K2	3	..	38597i	58	14732	27.9	-45 12	6.92	7.8	Ko	9	..	41899b
9	5034	27.6	+6 54	8.2	8.5	Fo	5	R	24324b	59	4870	28.0	+40 6	7.94	7.94	Ao	4	..	38052i
10	4892	27.6	+0 36	8.2	9.2	Ko	6	..	14184b	60	4871	28.0	+39 16	5.80	5.88	A3	10	..	38564i
11	5464	27.6	-3 27	9.6	10.7	K2	5	..	24041b	61	4530	28.0	+33 44	7.65	7.79	A5	4	3,3	38032i
12	6140	27.6	-18 1	7.9	8.7	G5	8	..	40869b	62	4759	28.0	+25 54	8.6	9.0	F5	3	..	38597i
13	17484	27.6	-23 3	10.4	10.9	G5	1	..	24338b	63	5812	28.0	-5 29	9.8	10.6	G5	2	..	40918b
14	15081	27.6	-25 6	10.4	10.8	F8	3	..	23813b	64	5861	28.0	-11 27	10.2	10.7	F8	1	..	24437b
15	739	27.6	-83 46	6.76	6.8	A5	10	0,10	15173b	65	17818	28.0	-28 29	9.5	10.2	Fo	2	..	40713b
16	4869	27.7	+39 17	8.7	9.1	F5	2	..	38564i	66	15641	28.0	-34 23	8.0	8.7	Go	8	..	39342b
17	4949	27.7	+19 43	6.31	6.59	Fo	7	..	38821i	67	15386	28.0	-34 56	9.5	10.2	G5	2	..	39342b
18	5002	27.7	+19 7	7.26	8.44	K5	2	..	38821i	68	14833	28.0	-36 56	9.8	10.8	K5	1	..	39649b
19	4838	27.7	+12 32	6.61	6.95	F2	8	..	38130i	69	10096	28.0	-54 48	7.58	7.6	Ao	8	..	42094b
20	4516	27.7	+2 30	8.0	9.1	K2	5	..	14184b	70	7970	28.0	-57 53	8.8	9.3	F8	2	..	42510b
21	5943	27.7	-9 47	9.66	10.22	Go	2	..	40918b	71	6658	28.0	-61 38	8.8	9.9	G5	1	..	19899b
22	6547	27.7	-16 57	9.8	10.8	Ko	1	..	40869b	72	862	28.1	+77 4	8.2	9.4	K5	2	3,1	38936i
23	6446	27.7	-19 54	8.83	9.3	Ao	6	..	40869b	73	3974	28.1	+46 3	8.4	8.5	A3	1	..	38844i
24	6246	27.7	-21 43	9.8	11.0	G5	1	..	24338b	74	4312	28.1	-1 16	10.7	11.5	G5	2	..	24041b
25	16198	27.7	-26 44	10.6	10.7	Go	3	2,3	45149b	75	4311	28.1	-1 26	8.6	9.0	F5	7	..	14184b
26	18872	27.7	-30 56	9.9	10.5	F8	2	..	39342b	76	5698	28.1	-3 54	10.2	11.0	G5	3	..	24041b
27	17142	27.7	-32 8	9.5	10.7	K2	2	..	39342b	77	6001	28.1	-9 34	8.7	9.3	Go	5	..	40918b
28	15445	27.7	-35 57	7.8	8.1	Go	8	..	39342b	78	6103	28.1	-16 8	10.0	11.1	K2	1	..	40869b
29	15101	27.7	-38 43	10.6	10.8	Go	1	..	39649b	79	6247	28.1	-21 36	10.5	10.2	F8	2	..	24338b
30	13718	27.7	-50 18	9.2	10.0	G5	2	..	41899b	80	18875	28.1	-31 8	9.7	11.6	G5	1	..	39342b
31	2091	27.8	+63 0	8.7	8.7	Ao	2	..	37257i	81	15642	28.1	-33 58	9.5	10.0	F8	2	..	39342b
32	3407	27.8	+52 6	8.8	8.8	B9	2	..	37028i	82	15106	28.1	-38 39	7.90	9.8	K5	4	..	39649b
33	4453	27.8	+26 35	8.7	8.8	A2	4	..	38597i	83	15970	28.1	-42 49	9.7	10.9	Go	1	..	45063b
34	4659	27.8	+22 53	8.6	8.7	A3	3	..	38821i	84	15089	28.1	-43 52	9.1	9.2	F2	5	..	40872b
35	5035	27.8	+7 7	8.7	8.7	Ao	5	..	24324b	85	9857	28.1	-55 50	8.3	9.8	K5	2	..	42510b
36	5696	27.8	-4 40	9.50	10.50	Ko	3	..	24041b	86	4451	28.2	+32 54	8.7	8.8	A5	2	..	38032i
37	6447	27.8	-20 33	9.6	10.1	F2	3	..	40869b	87	4396	28.2	+28 44	8.9	9.0	A5	2	R	32312i
38	17216	27.8	-24 32	10.4	10.8	F8	1	..	24338b	88	4604	28.2	+25 9	8.66	9.66	Ko	1	..	38597i
39	17815	27.8	-28 40	8.5	9.3	Ko	4	..	40713b	89	4380	28.2	-0 16	8.8	8.9	A5	3	..	14184b
40	19205	27.8	-30 14	9.5	9.0	Ao	4	..	40713b	90	4313	28.2	-1 23	8.8	9.4	Go	6	..	24041b
41	15967	27.8	-42 29	8.6	9.7	K5	3	3,3	40872b	91	5778	28.2	-2 7	9.3	10.1	G5	5	..	24041b
42	1857	27.9	+63 18	7.40	8.18	G5	4	..	37257i	92	5809	28.2	-6 50	9.3	10.3	Ko	1	..	40918b
43	4529	27.9	+33 18	7.8	7.8	Ao	4	0,4	38031i	93	6295	28.2	-12 46	10.0	11.2	K5	1	..	24437b
44	4670	27.9	+15 20	6.36	7.36	Ko	8	..	38130i	94	16203	28.2	-26 11	8.7	9.9	F2	3	..	40713b
45	4936	27.9	+13 43	8.4	8.9	F8	4	..	38130i	95	17821	28.2	-27 57	9.7	11.0	Ko	3	2,2	23813b
46	5061	27.9	+9 53	9.3	10.4	K2	1	..	38130i	96	15643	28.2	-34 16	9.2	10.2	Ko	3	..	39342b
47	5029	27.9	+6 5	8.8	9.8	Ko	2	..	24324b	97	14823	28.2	-40 40	9.6	10.5	G5	4	..	39649b
48	4310	27.9	-1 38	10.7	11.3	Go	3	..	24041b	98	14940	28.2	-41 1	10.4	10.8	Go	2	..	39649b
49	5697	27.9	-3 54	10.5	11.0	F8	2	..	24041b	99	15971	28.2	-42 14	8.6	9.5	Ko	5	5,4	45063b
50	5807	27.9	-7 41	9.3	10.5	K5	2	..	40918b	100	13323	28.2	-51 19	8.5	9.6	Ko	4	..	41899b

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22^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	9859	28.2	-55 46	8.9	10.7	K5	1	..	42510b	51	6004	28.6	-8 53	10.5	11.1	Go	1	..	40918b
2	3236	28.3	+53 10	8.8	8.8	Ao	3	..	37028i	52	5946	28.6	-10 36	10.0	10.4	F5	2	..	40918b
3	3410	28.3	+51 25	8.9	9.0	A2	1	..	37028i	53	17827	28.6	-28 10	9.2	10.5	K5	2	..	40713b
4	4624	28.3	+1 35	10.0	10.1	A3	3	..	24041b	54	15392	28.6	-35 32	8.2	9.3	G5	6	..	39342b
5	4314	28.3	-0 49	8.7	9.9	K5	2	..	14184b	55	14247	28.6	-48 6	8.7	9.1	Go	5	..	41899b
6	5779	28.3	-2 14	10.0	10.6	Go	2	..	24041b	56	3683	28.6	-65 56	9.3	9.9	Go	1	..	20543b
7	5944	28.3	-10 12	9.6	10.2	Go	2	..	40918b	57	2536	28.7	+59 49	8.0	7.8	B	3	R	34819i
8	6296	28.3	-12 3	10.0	11.2	K5	2	..	24437b	58	2450	28.7	+58 31	8.0	8.5	F8	2	..	38803i
9	16204	28.3	-26 28	11.1	11.9	Go	2	..	45149b	59	3979	28.7	+45 34	8.0	9.2	K5	3	..	6667m
10	17146	28.3	-32 8	9.6	10.8	A3	2	..	39342b	60	3978	28.7	+45 24	8.57	8.71	A5	4	O,I	6042m
11	16118	28.3	-33 10	9.2	9.4	Ko	4	..	39342b	61	4848	28.7	+40 50	8.26	9.26	Ko	1	..	38564i
12	16119	28.3	-33 22	9.5	10.5	Ko	2	..	39342b	62	4762	28.7	+25 28	8.9	8.9	Ao	3	..	38597i
13	15388	28.3	-35 40	10.9	9.9	G5	3	..	39342b	63	4626	28.7	+1 21	8.29	8.71	F5	7	..	14184b
14	15450	28.3	-36 7	7.7	9.0	K2	3	..	40940b	64	5815	28.7	-5 24	8.0	9.0	Ko	7	..	24041b
15	14756	28.3	-39 22	10.9	10.6	A3	3	..	39649b	65	6005	28.7	-9 38	10.6	10.7	A2	1	..	40918b
16	15973	28.3	-42 47	9.9	10.4	F5	3	..	45063b	66	6299	28.7	-19 12	8.1	8.9	F8	6	..	40869b
17	15092	28.3	-43 35	8.9	9.2	G5	4	..	40872b	67	6450	28.7	-19 52	8.93	9.5	Ko	3	..	40869b
18	2309	28.4	+61 26	8.8	9.6	G5	1	..	38902i	68	17495	28.7	-23 48	8.1	9.8	Ko	5	..	24338b
19	2796	28.4	+54 41	8.2	8.7	F8	2	..	37028i	69	17226	28.7	-24 50	8.65	9.3	Ko	5	..	24338b
20	2910	28.4	+53 31	6.47	7.47	Ko	7	..	37028i	70	15393	28.7	-35 11	6.88	8.0	G5	9	..	39342b
21	4714	28.4	+34 56	7.47	7.47	Ao	5	..	38564i	71	15109	28.7	-38 51	10.4	11.1	F8	1	..	39649b
22	4765	28.4	+17 17	8.0	8.5	F8	6	..	38860i	72	14759	28.7	-39 39	10.4	10.5	G5	2	..	39649b
23	5864	28.4	-11 2	8.5	9.5	Ko	4	..	40918b	73	14826	28.7	-40 43	10.9	11.0	Go	2	..	39649b
24	6214	28.4	-13 40	9.8	10.3	F8	3	..	24437b	74	14739	28.7	-45 9	9.5	9.8	G5	3	..	41899b
25	5938	28.4	-22 37	8.7	9.3	F5	5	..	24338b	75	6352	28.7	-62 9	7.7	8.5	G5	7	..	19899b
26	17825	28.4	-28 40	10.9	11.9	Go	1	..	45149b	76	3763	28.8	+48 52	7.7	8.1	F5	3	..	37028i
27	17824	28.4	-28 50	10.6	10.2	F8	5	2,3	23813b	77	3838	28.8	+47 45	8.6	8.7	A2	2	..	38844i
28	17147	28.4	-32 39	6.65	7.1	B8	..	..	28,216	78	4163	28.8	+44 23	9.2	10.4	K5	1	..	6667m
29	14837	28.4	-37 11	8.3	9.0	Ko	4	..	40940b	79	4227	28.8	+44 11	9.2	9.3	A5	3	..	6667m
30	2449	28.5	+58 59	8.0	8.8	G5	1	..	38803i	80	5947	28.8	-10 7	6.78	7.78	Ko	3	..	44170b
31	3977	28.5	+46 5	9.5	10.7	K5	1	..	6667m	81	6299	28.8	-12 40	9.3	9.3	B9	6	..	14183b
32	3976	28.5	+45 46	10.2	10.2	Ao	3	..	6667m	82	6451	28.8	-20 3	10.2	10.7	F5	1	..	40869b
33	5813	28.5	-5 45	10.2	11.3	K2	1	..	40918b	83	17828	28.8	-28 3	9.5	9.3	Go	4	..	40713b
34	6298	28.5	-12 36	10.5	11.5	Ko	1	..	24437b	84	15976	28.8	-42 16	10.5	11.0	A3	2	..	45063b
35	6215	28.5	-12 54	8.9	9.5	Go	4	..	14183b	85	14356	28.8	-46 18	7.8	8.1	Fo	6	..	41899b
36	6217	28.5	-13 16	9.8	10.8	Ko	1	..	24437b	86	4611	28.9	+37 37	7.64	8.64	Ko	1	..	38564i
37	6216	28.5	-13 29	9.8	10.6	G5	2	..	24437b	87	4608	28.9	+24 35	8.7	9.7	Ko	1	..	38597i
38	15646	28.5	-34 12	8.9	9.9	Go	4	..	39342b	88	4890	28.9	+8 41	8.0	8.3	F2	3	..	38130i
39	15390	28.5	-35 21	8.7	10.0	Ma	3	..	39342b	89	5781	28.9	-2 5	5.92	6.92	Ko	6	..	17411b
40	14250	28.5	-46 56	9.7	10.7	G5	1	..	41899b	90	5780	28.9	-2 18	9.1	9.4	Fo	7	..	24041b
41	2706	28.5	-71 28	7.8	8.8	Ko	8	..	19967b	91	6300	28.9	-19 33	8.1	8.9	F8	6	..	40869b
42	2261	28.5	-73 13	6.68	7.6	Ko	8	..	19967b	92	17496	28.9	-23 7	7.6	8.6	Go	8	..	24338b
43	1009	28.5	-80 56	8.6	9.6	Ko	2	..	15165b	93	17829	28.9	-27 53	8.7	9.0	G5	7	..	40713b
44	3735	28.6	+46 23	9.7	9.8	A2	2	..	6667m	94	14760	28.9	-39 2	10.6	11.0	Fo	2	..	39649b
45	4531	28.6	+33 26	8.3	9.1	G5	2	..	38032i	95	14827	28.9	-40 35	8.2	8.9	K2	3	..	40940b
46	4732	28.6	+30 54	7.9	8.7	G5	3	..	38597i	96	13899	28.9	-49 4	9.9	10.8	Go	1	..	41899b
47	4672	28.6	+15 25	8.8	8.9	A3	3	..	38860i	97	..	28.9	-67 48	var.	var.	Md	..	R	M
48	4894	28.6	+0 41	8.8	10.2	Ma	3	..	14184b	98	801	29.0	+78 19	5.50	5.56	A2	9	R	38590i
49	4315	28.6	-1 5	10.0	11.0	Ko	2	..	24041b	99	4540	29.0	+42 7	8.9	9.0	A2	2	..	38052i
50	5814	28.6	-4 58	8.7	9.1	F5	6	..	24041b	100	4539	29.0	+41 53	8.6	8.6	Ao	2	..	38052i

THE HENRY DRAPER CATALOGUE.

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22^h 29^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	4797	29.0	+39 4	8.1	8.1	Ao	5	..	38564i	51	2701	29.2	-72 8	8.9	9.9	Ko	3	..	19967b
2	4733	29.0	+30 46	7.82	8.38	Go	5	..	38597i	52	643	29.2	-83 59	9.0	10.1	K2	3	..	21397b
3	4398	29.0	+29 4	8.3	9.3	Ko	3	..	38597i	53	863	29.3	+76 29	8.8	9.4	Go	3	5,2	38936i
4	4774	29.0	+10 48	8.8	9.6	G5	2	..	38130i	54	4441	29.3	+42 58	7.8	9.0	K5	1	..	38052i
5	5032	29.0	+ 6 11	9.0	9.4	F5	4	..	24324b	55	4851	29.3	+40 40	8.5	8.6	A2	3	..	38052i
6	4381	29.0	- 0 16	9.7	10.0	Fo	5	..	24041b	56	4837	29.3	+35 22	8.72	9.50	G5	2	..	38032i
7	15969	29.0	-27 41	10.9	10.5	F5	4	3,3	45149b	57	4401	29.3	+29 14	8.1	9.1	Ko	2	..	38597i
8	15111	29.0	-37 56	8.9	9.8	Fo	5	..	39649b	58	4522	29.3	+ 3 13	8.6	9.0	F5	5	..	14184b
9	781	29.1	+81 39	8.6	8.6	Ao	2	..	38590i	59	6007	29.3	- 9 39	9.36	10.36	Ko	1	..	40918b
10	1679	29.1	+64 47	8.05	9.12	K2	1	..	38902i	60	6302	29.3	-11 54	9.6	10.6	Ko	2	..	24437b
11	2914	29.1	+53 38	9.2	9.3	A5	1	..	37028i	61	6107	29.3	-16 19	9.6	10.0	F5	3	..	40869b
12	3981	29.1	+45 36	7.77	7.85	A3	7	1,3	6042m	62	6146	29.3	-18 39	9.1	10.2	K2	4	..	40869b
13	4164	29.1	+44 37	9.2	9.5	F2	2	..	6667m	63	6454	29.3	-20 22	8.7	8.6	Fo	8	..	40869b
14	4343	29.1	+27 50	8.9	9.0	A2	2	..	38597i	64	15997	29.3	-24 54	12.0	11.4	Go	3	..	45149b
15	4892	29.1	+ 8 55	8.0	8.4	F5	2	..	38130i	65	17152	29.3	-32 29	9.2	9.9	Ko	3	..	39342b
16	5703	29.1	- 4 28	9.3	10.1	G5	4	..	24041b	66	16126	29.3	-33 26	9.5	9.9	F8	5	..	39342b
17	5948	29.1	- 9 49	8.66	9.66	Ko	3	..	40918b	67	13725	29.3	-50 32	8.9	9.6	Go	3	..	41899b
18	5867	29.1	-10 46	9.6	10.7	K2	1	..	40918b	68	13724	29.3	-50 40	8.9	10.0	Ko	2	..	41899b
19	6243	29.1	-15 38	8.7	9.2	F8	5	..	14183b	69	7811	29.3	-59 20	8.9	9.3	Go	3	..	42510b
20	6105	29.1	-16 19	10.0	10.0	Ao	2	..	40869b	70	2312	29.4	+61 26	9.0	9.0	Ao	2	..	38902i
21	6549	29.1	-16 58	9.3	9.8	F8	4	..	40869b	71	3983	29.4	+46 3	7.22	7.22	Ao	6	0,9	38844i
22	6145	29.1	-18 1	9.1	10.1	Ko	3	..	40869b	72	4870	29.4	+36 18	7.8	7.9	A3	3	..	38564i
23	5942	29.1	-21 52	9.8	11.0	Ko	1	..	24338b	73	4768	29.4	+16 39	7.8	8.8	Ko	4	..	38860i
24	15991	29.1	-25 18	11.1	11.6	F8	1	..	45149b	74	5705	29.4	- 3 49	7.9	8.2	F2	9	..	24041b
25	17832	29.1	-28 2	10.6	11.4	Ko	2	..	45149b	75	6021	29.4	- 6 14	9.3	9.9	Go	5	..	40918b
26	17830	29.1	-28 29	10.4	10.9	F8	1	..	45149b	76	5869	29.4	-11 28	10.6	11.4	G5	1	..	24437b
27	14944	29.1	-40 54	8.9	9.4	F5	3	..	40940b	77	6303	29.4	-12 35	9.8	10.9	K2	3	..	24437b
28	14251	29.1	-47 53	10.3	11.9	G5	1	..	41899b	78	6147	29.4	-18 27	10.5	11.5	Ko	1	..	40869b
29	13720	29.1	-50 30	8.2	9.7	K2	3	..	41899b	79	15971	29.4	-27 5	11.1	11.6	G5	2	..	45149b
30	9862	29.1	-55 42	7.4	8.5	Ko	5	..	42510b	80	18397	29.4	-29 18	8.9	9.3	G5	4	..	40713b
31	1522	29.2	+67 5	7.80	8.87	K2	4	..	37257i	81	13326	29.4	-51 6	8.6	9.9	Ko	3	..	41899b
32	1778	29.2	+66 9	8.6	9.4	G5	2	..	38902i	82	12042	29.4	-52 7	6.80	8.2	Ko	8	..	42094b
33	3736	29.2	+46 21	8.9	9.0	A2	3	..	6042m	83	10103	29.4	-53 55	9.3	10.4	G5	2	..	42094b
34	4165	29.2	+44 15	10.2	10.2	A	1	..	6667m	84	7971	29.4	-58 24	6.26	6.2	A3	..	0,9	56,148
35	4850	29.2	+40 18	6.80	7.80	Ko	5	..	38052i	85	7577	29.4	-60 22	8.5	8.4	Go	6	..	19899b
36	4399	29.2	+28 37	9.2	9.7	F8	2	..	38597i	86	1755	29.4	-75 43	10.2	10.6	F5	3	..	42794b
37	..	29.2	+24 2	var.	var.	Md	..	R	M	87	1780	29.5	+65 29	8.8	9.8	Ko	1	..	38902i
38	4674	29.2	+15 31	9.3	9.4	A2	2	..	38130i	88	3738	29.5	+46 34	10.2	10.2	A	1	..	6667m
39	4382	29.2	- 0 34	10.0	10.8	G5	3	..	24041b	89	4403	29.5	+28 26	8.8	10.0	K5	1	..	38597i
40	5811	29.2	- 7 6	9.8	9.8	Ao	4	..	40918b	90	4819	29.5	+14 31	8.0	8.5	F8	2	..	38130i
41	5812	29.2	- 7 20	10.0	10.5	F8	2	..	40918b	91	4843	29.5	+12 53	7.72	8.72	Ko	4	..	38130i
42	6300	29.2	-11 48	10.2	10.8	Go	1	..	24437b	92	4730	29.5	+ 3 44	7.8	7.8	Ao	8	..	14184b
43	6308	29.2	-13 57	9.6	10.6	Ko	2	..	24437b	93	4383	29.5	+ 0 6	7.02	8.20	K5	7	0,9	14184b
44	6245	29.2	-15 39	9.6	10.6	Ko	3	..	40869b	94	5782	29.5	- 1 55	9.3	9.4	A3	6	..	24041b
45	6251	29.2	-21 13	5.29	5.71	F5	..	0,8R	56,148	95	5783	29.5	- 2 0	8.5	9.5	Ko	6	..	24041b
46	15399	29.2	-34 54	9.28	9.4	Go	6	..	39342b	96	5706	29.5	- 4 7	8.7	9.3	Go	5	..	24041b
47	14840	29.2	-37 9	10.2	10.5	A2	2	..	39649b	97	6009	29.5	- 9 8	8.8	9.6	G5	3	..	40918b
48	14839	29.2	-37 17	10.0	10.2	Ko	2	..	39649b	98	5949	29.5	-10 37	9.2	9.7	F8	4	..	40918b
49	6661	29.2	-61 35	9.2	9.9	Go	1	..	19899b	99	17498	29.5	-23 47	9.5	10.1	F8	4	..	24338b
50	3684	29.2	-66 37	9.5	9.6	A3	4	..	20543b	100	17834	29.5	-27 58	8.9	9.9	K5	3	..	40713b

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	17833	29.5	-28 4	9.9	9.9	F8	2	..	40713b	51	17836	29.9	-28 2	9.9	11.4	K2	2	..	45149b
2	19215	29.5	-29 56	9.5	10.2	Ko	4	5,I	39342b	52	18398	29.9	-29 48	10.4	10.8	G5	3	..	39342b
3	14833	29.5	-40 19	9.6	10.9	Go	2	..	39649b	53	18886	29.9	-31 15	10.4	11.1	Go	1	..	39342b
4	14834	29.5	-40 45	10.9	10.9	Go	1	..	39649b	54	16133	29.9	-33 17	9.5	9.9	G5	5	..	39342b
5	9865	29.5	-55 34	8.1	9.5	K2	3	..	42510b	55	14836	29.9	-40 2	9.2	9.6	Ko	5	..	39649b
6	7972	29.5	-58 4	9.6	10.2	G	1	..	42510b	56	4070	29.9	-64 54	7.82	9.4	K2	5	..	20543b
7	2038	29.5	-74 4	10.4	10.4	Ao	4	..	19967b	57	3415	30.0	+52 8	9.2	9.2	Ao	2	..	37028i
8	1863	29.6	+63 23	7.8	8.8	Ko	3	5,I	38902i	58	4231	30.0	+44 1	9.4	10.4	Ko	3	..	6667m
9	2767	29.6	+55 25	7.5I	8.69	K5	2	..	37028i	59	4405	30.0	+29 13	8.5	8.8	F2	3	..	38597i
10	5468	29.6	- 3 26	9.6	10.6	Ko	3	..	24041b	60	4878	30.0	+ 5 3	9.12	10.12	Ko	2	..	14184b
11	5814	29.6	- 7 15	9.3	9.9	Go	3	..	40918b	61	..	30.0	- 0 57	..	..	F8	2	..	24041b
12	16212	29.6	-26 10	10.2	11.1	Go	3	..	45149b	62	4321	30.0	- 1 36	9.5	10.3	G5	1	..	24041b
13	16211	29.6	-26 33	10.9	11.4	Go	2	..	45149b	63	5786	30.0	- 1 46	10.5	11.1	Go	1	..	24041b
14	15459	29.6	-36 20	9.0	9.3	Go	5	..	39342b	64	5707	30.0	- 4 28	8.7	9.0	Fo	7	..	24041b
15	15986	29.6	-42 7	9.5	8.7	F5	6	..	45063b	65	6012	30.0	- 8 55	8.9	9.3	F5	5	..	40910b
16	1045	29.7	+72 20	8.6	9.8	K5	1	..	38903i	66	6150	30.0	-18 20	10.0	11.0	Ko	1	..	40869b
17	4543	29.7	+41 23	8.1	8.2	A3	4	..	38052i	67	17837	30.0	-28 15	8.7	9.0	Go	6	..	40713b
18	4801	29.7	+38 49	8.7	8.7	Ao	2	..	38564i	68	18399	30.0	-29 28	10.6	10.8	F8	2	..	45149b
19	4767	29.7	+25 51	8.6	9.1	F8	2	..	38597i	69	16137	30.0	-32 57	9.8	9.9	F5	3	..	39342b
20	4820	29.7	+15 11	7.89	8.89	Ko	3	..	38130i	70	15125	30.0	-37 57	9.5	11.5	K5	2	..	39649b
21	5817	29.7	- 5 34	9.2	9.5	Fo	4	..	24041b	71	15124	30.0	-38 47	9.3	10.4	Ko	3	..	39649b
22	6010	29.7	- 9 24	9.6	10.4	G5	4	..	40918b	72	1047	30.1	+72 40	8.2	8.3	A5	2	..	38025i
23	6303	29.7	-18 56	8.5	8.7	F5	5	..	40869b	73	1262	30.1	+69 24	6.02	6.36	F2	6	R	38580i
24	5944	29.7	-22 36	9.1	9.5	Ao	4	..	24338b	74	..	30.1	+69 24	..	..	A5	..	..	..
25	18885	29.7	-31 8	9.7	11.3	Go	1	..	39342b	75	3894	30.1	+49 51	8.8	8.8	A	2	R	37028i
26	14768	29.7	-38 57	8.6	10.4	Ko	4	..	39649b	76	4854	30.1	+40 16	7.00	6.88	B5	7	..	38052i
27	6353	29.7	-62 19	9.2	9.3	A5	3	..	19899b	77	4873	30.1	+36 35	8.0	9.2	K5	1	..	38564i
28	2039	29.7	-73 57	8.0	8.4	F5	7	..	19967b	78	4458	30.1	+32 56	8.5	8.6	A2	3	..	38032i
29	1781	29.8	+66 8	9.2	9.2	Ao	2	..	38902i	79	4406	30.1	+29 5	9.2	9.7	F8	3	..	32312i
30	2769	29.8	+56 7	5.80	6.80	Ko	8	0,8	37028i	80	4771	30.1	+17 42	9.3	10.1	G5	1	..	38860i
31	3985	29.8	+45 24	8.8	9.6	G5	2	..	6042m	81	4525	30.1	+ 2 18	9.0	10.2	K5	1	..	14184b
32	..	29.8	+43 58	..	..	F2	2	..	6667m	82	4630	30.1	+ 2 8	8.7	9.7	Ko	4	..	14184b
33	4731	29.8	+ 3 21	9.1	9.7	Go	2	..	14184b	83	4629	30.1	+ 1 35	9.3	10.3	Ko	5	2,2	24041b
34	4320	29.8	- 0 50	10.7	11.3	Go	2	..	24041b	84	5818	30.1	- 5 19	9.8	10.8	Ko	1	..	40918b
35	6011	29.8	- 9 46	9.3I	10.09	G5	3	..	40918b	85	6151	30.1	-17 46	var.	var.	B9	5	R	40869b
36	5871	29.8	-11 44	9.3	9.9	Go	5	..	24437b	86	17232	30.1	-24 31	6.04	7.1	Ko	9	..	40713b
37	16001	29.8	-25 24	10.9	11.9	Go	2	..	45149b	87	17838	30.1	-28 39	9.9	12.0	K2	1	..	45149b
38	15974	29.8	-27 28	10.4	11.4	Ko	2	0,2	45149b	88	971	30.2	+74 51	9.4	9.4	Ao	2	..	38903i
39	14846	29.8	-37 41	9.8	10.5	Ko	3	..	39649b	89	1450	30.2	+67 59	7.61	7.69	A3	4	..	37257i
40	14769	29.8	-39 15	8.1	7.8	F2	6	..	40940b	90	2918	30.2	+53 34	7.46	7.52	A2	7	..	37028i
41	9866	29.8	-55 7	7.78	8.3	Go	6	..	42510b	91	3895	30.2	+49 42	8.1	8.1	A	1	R	37028i
42	9867	29.8	-55 42	7.4	8.6	Ko	5	..	42510b	92	4699	30.2	+29 27	7.26	8.33	K2	5	..	38597i
43	412	29.8	-86 0	9.4	10.0	G	1	..	15173b	93	4407	30.2	+28 57	8.8	9.8	Ko	1	..	38597i
44	3743	29.9	+46 33	9.9	9.9	A	2	..	6667m	94	4786	30.2	+21 47	7.92	8.92	Ko	3	..	36870i
45	4230	29.9	+43 38	9.4	10.5	K2	1	..	6667m	95	4830	30.2	+12 1	9.7	10.5	G5	1	..	38130i
46	4445	29.9	+43 10	8.8	8.9	A3	3	0,2	6042m	96	4831	30.2	+11 24	8.7	9.7	Ko	2	..	38130i
47	4768	29.9	+26 5	7.26	8.33	K2	5	..	38597i	97	5036	30.2	+ 5 26	8.4	8.4	Ao	4	..	24324b
48	4732	29.9	+ 3 38	8.5	8.8	F2	6	..	14184b	98	4384	30.2	- 0 38	4.13	4.08	B8	..	R	3076c
49	5785	29.9	- 2 2	8.3	8.7	F5	9	..	24041b	99	5472	30.2	- 2 46	8.5	9.5	Ko	6	..	24041b
50	6149	29.9	-18 20	10.0	10.4	F5	2	..	40869b	100	6152	30.2	-18 19	8.7	9.7	Ko	5	..	40869b

THE HENRY DRAPER CATALOGUE.

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22^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	16216	30.2	25 58	10.2	11.4	K5	1	..	45149b	51	1782	30.6	25 19	7.65	8.65	Ko	4	..	37257i
2	18400	30.2	29 0	9.2	8.8	F5	7	..	40713b	52	3748	30.6	26 42	9.5	9.6	A5	4	..	6667m
3	19221	30.2	30 51	7.73	9.3	Ma	6	..	40713b	53	4236	30.6	27 48	9.4	10.4	Ko	2	..	6667m
4	14839	30.2	40 49	8.7	10.4	Ko	4	..	39649b	54	4237	30.6	28 26	9.9	10.4	F8	2	..	6667m
5	3685	30.2	66 22	8.6	9.0	F5	7	..	20543b	55	4623	30.6	29 25	8.5	8.5	Ao	1	..	38564i
6	197	30.2	88 24	9.08	9.4	Ao	3	..	15173b	56	4771	30.6	30 30	8.7	9.2	F8	1	..	38597i
7	2314	30.3	61 16	6.51	6.57	A2	6	..	37257i	57	5068	30.6	31 50	7.87	8.94	K2	3	..	3813oi
8	4169	30.3	44 29	7.28	7.28	Ao	7	0,8	38844i	58	5037	30.6	32 43	8.4	8.9	F8	4	..	24324b
9	4743	30.3	30 57	8.7	8.8	A2	3	..	38597i	59	4879	30.6	33 51	8.4	9.2	G5	6	..	14184b
10	4944	30.3	14 5	7.68	8.75	K2	3	..	3813oi	60	5817	30.6	34 16	8.7	9.5	G5	3	..	40918b
11	6153	30.3	18 8	8.2	9.2	Ko	6	..	40869b	61	6111	30.6	35 2	10.2	10.8	Go	1	..	40869b
12	18401	30.3	29 4	9.9	9.9	A5	3	..	40713b	62	16008	30.6	36 44	9.9	11.0	K2	1	..	40713b
13	15405	30.3	35 50	8.9	9.3	Go	5	..	39342b	63	16219	30.6	37 51	9.7	9.9	Go	2	..	40713b
14	15465	30.3	36 6	9.8	10.8	G5	2	..	39649b	64	15406	30.6	38 3	9.2	9.9	G5	4	..	39342b
15	14849	30.3	36 54	10.4	10.2	F8	2	..	39649b	65	14264	30.6	39 58	9.1	10.4	Ko	2	..	41899b
16	14954	30.3	41 42	8.6	10.1	G5	5	..	45063b	66	14257	30.6	40 49	6.71	8.4	Ma	7	..	41899b
17	14973	30.3	44 6	10.1	10.4	F8	2	..	45071b	67	7579	30.6	41 4	7.5	8.4	Go	5	..	19899b
18	4281	30.3	64 20	8.6	9.7	K2	2	..	20543b	68	3686	30.6	42 5	8.0	9.0	Ko	7	..	20543b
19	1263	30.4	69 51	6.26	6.26	Ao	8	0,8	3858oi	69	3248	30.6	43 48	8.44	9.0	Fo	6	..	19967b
20	3746	30.4	46 15	9.7	9.7	A	2	..	6667m	70	1452	30.6	44 37	8.5	9.1	Go	6	..	42794b
21	4232	30.4	43 26	9.7	10.1	F5	3	..	6667m	71	982	30.7	45 33	7.20	8.27	K2	4	..	38025i
22	4886	30.4	40 12	8.40	8.40	Ao	3	..	38052i	72	1682	30.7	46 42	7.75	7.73	B9	5	..	38902i
23	4744	30.4	30 17	7.56	8.63	K2	4	..	38597i	73	3755	30.7	47 29	8.7	8.8	A2	2	..	37028i
24	5474	30.4	3 20	10.5	11.3	G5	2	..	24041b	74	4701	30.7	48 25	8.6	8.9	Fo	3	..	38597i
25	5473	30.4	3 27	8.6	9.6	Ko	8	..	24041b	75	4734	30.7	49 46	9.3	10.4	K2	2	..	14184b
26	5819	30.4	5 27	10.0	10.5	F8	2	..	40918b	76	4897	30.7	50 48	10.0	10.8	G5	1	..	24041b
27	6110	30.4	16 12	9.8	10.6	G5	1	..	40869b	77	5788	30.7	51 41	10.6	11.2	Go	2	..	24041b
28	6154	30.4	17 59	6.81	7.99	K5	5	0,9	41989b	78	5902	30.7	52 51	8.3	9.1	G5	5	..	40918b
29	16007	30.4	25 28	9.7	11.0	K2	2	..	45149b	79	6307	30.7	53 7	9.8	11.2	Mb	2	..	24437b
30	16140	30.4	33 24	9.6	10.0	F5	3	..	39342b	80	6554	30.7	54 54	6.69	6.50	B2	6	..	8378b
31	15660	30.4	34 4	9.5	10.0	G5	4	..	39342b	81	6156	30.7	55 0	10.0	10.8	G5	2	..	40869b
32	14851	30.4	37 8	9.8	10.5	K2	1	..	39649b	82	17237	30.7	56 31	8.9	9.3	Ko	7	..	24338b
33	14974	30.4	44 10	9.7	9.8	F5	2	..	40872b	83	16009	30.7	57 38	9.5	10.2	F5	3	..	40713b
34	10316	30.4	53 38	8.5	9.8	Ko	3	..	42094b	84	17841	30.7	58 49	9.7	10.2	Ko	2	..	40713b
35	836	30.5	75 43	5.74	5.74	Ao	10	..	38025i	85	14959	30.7	59 6	6.11	6.8	A2	..	0,10	28,216
36	1264	30.5	69 34	8.2	8.5	Fo	2	..	3858oi	86	14747	30.7	60 45	10.1	10.5	F8	1	..	45071b
37	3766	30.5	48 15	7.6	8.0	F5	2	..	37028i	87	7974	30.7	61 17	8.7	9.9	G5	1	..	42510b
38	3747	30.5	47 0	8.4	8.4	Ao	4	0,8	38844i	88	2562	30.8	62 39	7.49	8.67	K5	2	..	38803i
39	4235	30.5	43 57	9.5	10.6	K2	2	..	6667m	89	4461	30.8	63 20	7.8	8.3	F8	3	..	38032i
40	4856	30.5	41 4	7.8	8.1	F2	4	..	38052i	90	5947	30.8	64 12	9.3	10.0	G5	3	..	24338b
41	4700	30.5	29 41	8.2	8.7	F8	2	..	38597i	91	15981	30.8	65 40	8.9	9.0	A2	5	..	40713b
42	4615	30.5	25 10	8.92	9.34	F5	2	..	38597i	92	16142	30.8	66 20	8.9	10.5	Ko	2	..	39342b
43	4733	30.5	3 44	9.7	10.1	F5	1	..	14184b	93	15409	30.8	67 39	10.2	10.5	Go	1	..	39342b
44	4631	30.5	2 3	8.2	8.8	Go	6	..	14184b	94	14978	30.8	68 59	6.72	7.6	F8	9	..	40872b
45	6222	30.5	13 23	8.7	9.1	F5	7	..	14183b	95	14748	30.8	69 38	9.5	9.8	Go	3	..	45071b
46	6254	30.5	21 27	7.48	8.6	K2	6	..	24338b	96	14371	30.8	70 52	9.4	10.7	Ko	1	..	45071b
47	15975	30.5	27 27	8.7	9.6	Ko	3	..	40713b	97	4172	30.9	71 39	7.10	8.28	K5	3	5,7	38844i
48	15129	30.5	38 7	9.8	11.7	K2	1	..	39649b	98	4447	30.9	72 10	7.9	7.9	B8	6	1,5	6042m
49	15995	30.5	42 18	10.5	10.4	Go	2	..	45063b	99	4617	30.9	73 55	7.96	8.96	Ko	3	..	38597i
50	15996	30.5	42 30	9.7	10.7	Ko	2	..	45063b	100	4323	30.9	74 20	10.0	11.2	K5	1	..	24041b

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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	5708	30.9	- 4 23	10.2	11.2	Ko	2	..	24041b	51	12048	31.2	- 52 26	9.0	9.9	Go	3	..	42094b
2	6026	30.9	- 6 12	9.6	10.0	F5	4	..	40918b	52	7975	31.2	- 58 11	9.2	10.5	G	1	..	42510b
3	5818	30.9	- 7 35	8.9	9.9	Ko	4	..	40918b	53	4449	31.3	+ 42 36	8.7	8.8	A2	1	..	38052i
4	5952	30.9	- 10 29	9.8	10.6	G5	1	..	40918b	54	4726	31.3	+ 34 48	9.4	9.4	A	1	..	38032i
5	6223	30.9	- 13 28	9.8	10.3	F8	3	..	14183b	55	4836	31.3	+ 12 5	9.5	10.0	F8	2	..	38130i
6	6312	30.9	- 14 33	8.6	9.7	K2	3	..	14183b	56	4326	31.3	- 1 13	10.0	10.8	G5	3	..	24041b
7	16222	30.9	- 26 6	9.4	10.5	F8	2	..	40713b	57	6560	31.3	- 17 19	8.1	9.1	Ko	5	..	40869b
8	15410	30.9	- 35 27	10.2	10.9	G5	1	..	39342b	58	16226	31.3	- 26 22	12.0	12.1	A3	1	..	45149b
9	15470	30.9	- 35 58	10.2	9.6	A5	4	..	39342b	59	19230	31.3	- 30 45	9.9	10.7	G5	1	..	39342b
10	14372	30.9	- 45 55	9.5	10.7	Go	1	..	45071b	60	14846	31.3	- 40 3	9.5	10.1	F8	5	..	39649b
11	1866	31.0	+ 63 18	8.2	8.7	F8	4	3,1	38902i	61	14965	31.3	- 41 1	9.6	10.1	Go	4	..	39649b
12	4807	31.0	+ 39 4	8.0	8.3	Fo	7	..	38564i	62	13740	31.3	- 50 13	9.5	11.1	K2	1	..	41899b
13	5009	31.0	+ 19 12	6.8	7.8	Ko	3	..	38821i	63	7976	31.3	- 58 22	8.3	9.3	Fo	4	..	42510b
14	4880	31.0	+ 5 5	9.18	9.74	Go	3	..	14184b	64	7580	31.3	- 60 36	8.6	8.5	F8	5	..	19899b
15	5709	31.0	- 4 9	10.2	11.2	Ko	1	..	24041b	65	2414	31.4	+ 60 18	7.06	7.40	F2	4	..	37257i
16	5710	31.0	- 4 32	8.9	9.4	F8	5	..	24041b	66	4174	31.4	+ 44 55	9.7	9.7	B9	2	..	6042m
17	6308	31.0	- 12 33	10.0	11.0	Ko	3	..	24437b	67	4808	31.4	+ 39 7	6.55	6.43	B5	..	R	56,102
18	6224	31.0	- 13 9	9.1	10.5	Mb	3	..	24437b	68		31.4	+ 39 7	5.83	5.66	B3p	..	R	56,102
19	6557	31.0	- 16 57	8.9	9.0	Ko	1	..	40869b	69	4327	31.4	- 1 6	8.4	9.0	Go	8	..	24041b
20	6556	31.0	- 17 10	9.2	10.2	Ko	3	..	40869b	70	5875	31.4	- 10 48	8.8	9.4	Go	4	..	40918b
21	17162	31.0	- 32 9	7.31	9.0	Ko	3	..	40713b	71	6307	31.4	- 19 31	10.2	10.9	G5	1	..	40869b
22	17161	31.0	- 32 11	5.75	7.3	Ko	..	0,9	28,216	72	6257	31.4	- 21 36	7.9	7.7	Ao	4	0,10	43231b
23	15134	31.0	- 38 31	9.2	9.2	Go	4	..	39649b	73	5953	31.4	- 22 3	9.2	9.7	Go	3	..	24338b
24	14261	31.0	- 48 19	8.6	9.1	F2	3	..	41899b	74	14750	31.4	- 45 11	8.12	9.0	Ko	5	..	41899b
25	7815	31.0	- 59 17	8.3	9.0	G5	1	..	42510b	75	13913	31.4	- 49 12	9.4	10.3	G5	2	..	41899b
26	4840	31.1	+ 35 51	8.5	9.7	K5	1	..	38032i	76	4074	31.4	- 65 9	9.7	10.2	F8	2	..	20543b
27	4462	31.1	+ 32 16	7.31	7.37	A2	8	..	38032i	77	3753	31.5	+ 46 16	8.7	9.7	Ko	3	..	6042m
28	4965	31.1	+ 19 46	6.74	7.74	Ko	4	..	38821i	78	4241	31.5	+ 44 3	9.7	10.5	G5	2	..	6667m
29	4385	31.1	- 0 21	9.3	10.1	G5	3	..	24041b	79	4451	31.5	+ 43 9	9.7	9.7	Ao	4	1,3	6667m
30	5820	31.1	- 5 40	8.9	10.3	Mb	4	..	24041b	80	4843	31.5	+ 35 58	9.2	9.2	A	1	..	38032i
31	6028	31.1	- 6 7	9.1	9.5	F5	7	..	40918b	81	4545	31.5	+ 34 7	9.5	10.6	K2	1	..	38032i
32	5905	31.1	- 8 11	7.14	7.42	Fo	5	0,8	44170b	82	5042	31.5	+ 5 59	7.7	8.7	Ko	7	..	24324b
33	6309	31.1	- 12 19	10.2	11.0	G5	2	..	24437b	83	4387	31.5	- 0 9	8.0	8.3	Fo	7	..	14184b
34	6558	31.1	- 17 15	9.6	10.2	Go	2	..	40869b	84	4328	31.5	- 0 55	9.0	10.1	K2	3	..	24041b
35	6159	31.1	- 18 39	9.1	10.1	Ko	4	..	40869b	85	5476	31.5	- 3 46	10.2	10.5	F2	3	..	24041b
36	5951	31.1	- 22 6	8.8	9.4	F8	4	..	24338b	86	6C15	31.5	- 9 28	9.3	10.3	Ko	2	..	40918b
37	15473	31.1	- 35 58	8.6	9.4	Go	4	..	39342b	87	5953	31.5	- 9 55	9.31	10.31	Ko	1	..	40918b
38	15471	31.1	- 36 0	8.9	9.6	Ko	3	..	39342b	88	5876	31.5	- 11 34	9.8	10.4	Go	3	..	24437b
39	4230	31.2	+ 44 14	8.5	9.7	K5	2	0,1	6042m	89	6225	31.5	- 12 54	10.0	10.6	Go	4	..	24437b
40	4895	31.2	+ 7 45	8.8	9.8	Ko	1	..	24324b	90	6113	31.5	- 16 14	9.8	10.4	Go	2	..	40869b
41	4898	31.2	+ 0 34	9.3	10.1	G5	4	..	24041b	91	6308	31.5	- 19 24	9.8	10.3	G5	2	..	40869b
42	4386	31.2	- 0 43	8.2	8.3	A2	8	..	14184b	92	5954	31.5	- 22 11	9.6	10.9	Ko	1	..	24338b
43	4324	31.2	- 0 55	9.3	9.8	F8	3	..	24041b	93	16228	31.5	- 26 34	8.2	9.4	K5	3	..	40713b
44	4325	31.2	- 1 33	9.3	10.1	G5	3	..	24041b	94	16148	31.5	- 33 45	9.5	11.3	Go	1	..	39342b
45	6306	31.2	- 18 47	8.3	9.3	Ko	6	..	40869b	95	15415	31.5	- 34 58	10.0	10.5	Go	2	..	39342b
46	17509	31.2	- 23 41	10.6	11.5	G5	1	..	24338b	96	7978	31.5	- 58 36	9.0	9.6	Go	1	..	42510b
47	16223	31.2	- 26 23	10.6	10.8	F8	3	..	45149b	97	3420	31.6	+ 52 14	var.	var.	Ao	1	R	37028i
48	15136	31.2	- 38 46	10.6	11.5	A3	1	..	39649b	98	3754	31.6	+ 46 42	9.0	9.4	F5	3	..	6042m
49	14773	31.2	- 39 48	10.4	11.7	F8	1	..	39649b	99	4880	31.6	+ 36 15	7.50	8.68	K5	2	..	38564i
50	14963	31.2	- 41 6	5.75	6.0	A2	..	2,10	28,216	100	4728	31.6	+ 35 4	6.20	7.20	Ko	8	0,8	38032i

THE HENRY DRAPER CATALOGUE.

214200

22^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	4733	31.6	+32 2	8.5	9.5	Ko	1	..	38032i	51	17515	31.8	-23 26	9.9	10.0	Go	4	..	24338b
2	4411	31.6	+29 14	8.1	9.1	Ko	2	..	38597i	52	17249	31.8	-24 40	11.4	11.1	Go	1	..	45149b
3	4781	31.6	+11 11	6.40	6.40	Ao	10	..	38130i	53	16232	31.8	-26 31	11.1	11.7	Go	1	..	45149b
4	4736	31.6	+4 0	8.5	9.5	Ko	3	..	14184b	54	18892	31.8	-30 54	10.9	11.3	Fo	1	..	39342b
5	5790	31.6	-2 46	10.7	11.2	F8	2	..	24041b	55	15417	31.8	-34 53	9.5	10.0	Go	4	..	39342b
6	6016	31.6	-9 6	9.1	9.5	F5	3	..	40918b	56	14859	31.8	-37 2	8.9	10.0	K5	3	..	39649b
7	6314	31.6	-12 44	9.6	10.6	Ko	4	..	24437b	57	4283	31.8	-64 5	9.4	10.2	G5	2	..	19899b
8	6248	31.6	-14 52	9.25	9.81	Go	3	..	14183b	58	1527	31.9	+67 12	9.0	9.0	Ao	4	..	38902i
9	6114	31.6	-16 14	9.3	9.9	Go	3	..	40869b	59	2815	31.9	+56 53	8.6	8.6	Ao	2	..	38803i
10	17513	31.6	-23 32	10.2	11.2	Ko	1	..	24338b	60	3993	31.9	+46 0	8.4	8.4	Ao	5	..	6042m
11	16016	31.6	-24 54	10.6	11.7	K2	1	..	45149b	61	4178	31.9	+44 56	8.8	9.6	G5	1	..	6042m
12	17165	31.6	-32 13	10.2	10.8	Go	2	..	39342b	62	4243	31.9	+43 56	9.9	10.0	A3	2	..	6042m
13	16149	31.6	-33 1	8.9	9.3	Go	5	..	39342b	63	4631	31.9	+37 19	6.75	6.58	B3	7	..	38564i
14	15140	31.6	-38 50	10.4	11.7	K5	1	..	39649b	64	4467	31.9	+32 17	8.8	8.9	A3	1	..	38032i
15	14847	31.6	-40 1	10.4	11.1	F8	1	..	39649b	65	4351	31.9	+27 16	7.10	8.10	Ko	5	..	38597i
16	14753	31.6	-45 5	9.5	9.9	Go	3	..	45071b	66	4782	31.9	+10 53	9.0	10.2	K5	1	..	38130i
17	14263	31.6	-48 20	9.9	11.4	Ko	1	..	41899b	67	4898	31.9	+7 16	7.6	7.9	F2	8	..	24324b
18	13742	31.6	-50 35	8.3	8.7	Fo	5	..	41899b	68	5824	31.9	-5 35	10.2	11.0	G5	2	..	40918b
19	1784	31.7	+65 49	8.2	8.5	F2	4	..	37257i	69	5909	31.9	-7 55	10.2	10.8	Go	1	..	40918b
20	2813	31.7	+56 28	8.8	8.9	A3	3	..	38803i	70	6315	31.9	-14 11	8.1	9.1	Ko	5	..	14183b
21	2924	31.7	+53 41	8.5	9.5	Ko	1	..	37028i	71	6250	31.9	-15 30	9.6	10.6	Ko	3	..	40869b
22	3247	31.7	+52 41	8.4	9.0	Go	2	..	37028i	72	17250	31.9	-24 42	10.6	10.3	Go	3	..	45149b
23	3755	31.7	+47 5	8.6	8.6	B8	4	..	6042m	73	19235	31.9	-30 29	8.9	9.9	K2	1	..	40713b
24	4175	31.7	+44 44	9.5	10.3	G5	2	..	6667m	74	16004	31.9	-42 18	9.7	10.4	Ko	1	..	45063b
25	4811	31.7	+38 50	7.7	8.7	Ko	3	..	38564i	75	15113	31.9	-42 55	9.3	10.7	K5	2	..	40872b
26	4463	31.7	+26 36	7.30	7.58	Fo	6	..	38597i	76	10322	31.9	-53 17	7.8	9.8	K5	3	..	42094b
27	4849	31.7	+12 56	7.8	8.9	K2	2	..	38130i	77	7583	31.9	-60 30	8.6	8.4	Ko	4	..	19899b
28	5791	31.7	-2 0	10.9	11.5	Go	1	..	24041b	78	2040	31.9	-74 28	8.9	9.7	G5	3	..	19967b
29	5820	31.7	-6 58	9.2	10.2	Ko	4	..	40918b	79	2779	32.0	+55 33	6.30	6.36	A2	8	0,8	37278i
30	5954	31.7	-9 54	9.11	10.18	K2	1	..	40918b	80	3994	32.0	+45 32	10.2	10.2	A	1	..	6667m
31	5878	31.7	-11 33	9.8	10.9	K2	1	..	24437b	81	4779	32.0	+45 3	8.8	9.8	Ko	1	..	6042m
32	6249	31.7	-15 9	9.3	10.4	K2	2	..	40869b	82	4244	32.0	+43 31	9.2	10.2	Ko	1	..	6667m
33	17166	31.7	-32 27	8.9	9.9	F2	5	..	39342b	83	4894	32.0	+39 52	8.7	8.8	A2	1	..	38564i
34	15416	31.7	-35 28	8.9	9.6	Ma	4	..	39342b	84	6033	32.0	-5 54	9.8	10.9	K2	1	..	40918b
35	9919	31.7	-55 59	8.3	9.2	K2	3	..	42510b	85	5880	32.0	-10 47	8.8	10.2	Ma	3	..	40918b
36	2946	31.7	-69 52	9.38	10.8	K5	1	..	19967b	86	17516	32.0	-22 55	9.7	10.6	G5	2	..	24338b
37	2712	31.7	-71 46	10.2	10.2	Ao	2	..	19967b	87	18408	32.0	-29 17	9.7	10.8	K2	1	..	40713b
38	2814	31.8	+56 21	7.8	8.4	Go	5	..	38803i	88	18894	32.0	-31 29	8.9	10.5	Ko	3	..	39342b
39	..	31.8	+52 12	Nov.	Nov.	Pec.	4	R	37028i	89	15485	32.0	-36 11	10.4	10.5	Go	2	..	39649b
40	3903	31.8	+49 33	6.20	6.03	B3	7	..	37028i	90	15484	32.0	-36 26	9.8	10.2	F8	2	..	39649b
41	3777	31.8	+49 11	8.6	9.6	Ko	1	..	38565i	91	14850	32.0	-40 22	6.78	7.3	F8	..	0,8	28,216
42	3992	31.8	+45 47	9.4	9.4	Ao	2	..	6042m	92	13915	32.0	-49 16	9.7	10.0	Go	2	..	41899b
43	4892	31.8	+39 35	8.1	8.1	B8	3	..	38564i	93	10110	32.0	-54 28	9.1	10.2	Ko	1	..	42094b
44	4774	31.8	+26 4	8.7	9.7	Ko	1	..	38597i	94	..	32.1	+43 21	..	..	A2	1	..	6667m
45	4850	31.8	+12 39	7.34	8.52	K5	4	..	38130i	95	4882	32.1	+37 12	8.1	8.1	Ao	3	..	38564i
46	5713	31.8	-3 48	10.5	11.1	Go	1	..	24041b	96	4752	32.1	+30 16	7.61	7.61	Ao	7	..	38597i
47	5907	31.8	-8 5	7.7	8.0	Fo	4	0,8	44170b	97	4852	32.1	+12 59	9.3	10.3	Ko	1	..	38130i
48	6315	31.8	-12 15	7.7	8.7	Ko	8	..	14183b	98	4838	32.1	+12 4	6.53	7.71	K5	6	..	38130i
49	6226	31.8	-13 25	8.1	9.2	K2	7	..	14183b	99	4532	32.1	+2 21	9.3	9.4	A3	3	..	14184b
50	6115	31.8	-15 52	10.2	11.2	Ko	2	..	40869b	100	5793	32.1	-2 9	8.9	9.9	Ko	5	..	24041b

214300

22^h 32^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	6034	32.1	— 6 35	7.9	9.0	K2	6	..	40918b	51	4682	32.4	+15 30	8.8	9.2	F5	1	O,IR	38835i
2	6118	32.1	—16 42	9.3	9.9	Go	2	..	40869b	52	4739	32.4	+ 4 3	8.5	9.0	F8	3	..	14184b
3	6563	32.1	—17 21	9.3	10.1	G5	1	..	40869b	53	17252	32.4	—24 32	10.9	11.4	F5	2	..	45149b
4	6261	32.1	—20 53	7.22	7.6	A3	3	1,8	43231b	54	14854	32.4	—40 48	10.6	11.3	Ao	2	..	39649b
5	16235	32.1	—26 22	10.6	10.2	F8	2	..	40713b	55	14274	32.4	—47 18	9.9	10.5	Ko	1	..	41899b
6	18410	32.1	—29 34	7.85	8.4	F5	7	..	40713b	56	13919	32.4	—49 49	9.4	10.0	F5	2	..	41899b
7	16006	32.1	—42 18	9.5	10.9	Ko	1	..	45063b	57	2931	32.5	+53 16	8.6	8.6	Ao	3	..	37028i
8	14273	32.1	—47 13	7.4	7.8	F5	7	..	41899b	58	3758	32.5	+46 32	10.2	10.2	Ao	1	..	6667m
9	1012	32.1	—81 27	9.4	10.4	Ko	1	..	15165b	59	4249	32.5	+43 15	9.4	10.5	K2	2	..	6667m
10	2816	32.2	+54 32	9.2	9.8	G	2	..	37278i	60	5013	32.5	+18 38	9.3	9.4	A5	1	..	3886oi
11	3756	32.2	+46 25	10.2	10.2	Ao	2	..	6667m	61	17522	32.5	—22 52	10.6	10.9	F8	1	..	24338b
12	3995	32.2	+45 48	9.7	9.8	A3	2	..	6667m	62	17523	32.5	—23 10	8.9	8.8	F5	4	..	24338b
13	4729	32.2	+35 8	6.50	7.68	K5	6	0,6	38032i	63	16023	32.5	—25 28	10.2	10.5	Go	3	..	45149b
14	4753	32.2	+30 52	8.3	9.3	Ko	1	..	38597i	64	16024	32.5	—25 31	9.2	10.2	Go	3	..	45149b
15	4634	32.2	+ 1 24	8.4	9.5	K2	6	..	14184b	65	15668	32.5	—34 48	9.72	10.0	Go	4	..	39342b
16	4388	32.2	— 0 37	8.7	9.1	F5	6	..	24041b	66	14991	32.5	—44 16	8.1	8.7	G5	6	..	40872b
17	4389	32.2	— 0 39	9.7	10.3	Go	3	..	24041b	67	13920	32.5	—49 12	7.8	9.3	K2	4	..	41899b
18	6017	32.2	— 9 2	9.2	10.0	G5	4	..	40918b	68	1756	32.5	—75 36	9.6	10.8	K5	2	..	42794b
19	6318	32.2	—11 59	10.2	10.8	Go	2	..	24437b	69	2568	32.6	+57 54	var.	var.	Pec.	..	R	M
20	6317	32.2	—12 33	10.5	11.6	K2	1	..	24437b	70	3856	32.6	+47 22	8.1	8.2	A5	2	..	38844i
21	6564	32.2	—16 53	8.5	9.5	Ko	4	..	40869b	71	4250	32.6	+43 51	9.9	10.4	F8	2	..	6667m
22	5956	32.2	—22 19	8.5	8.0	Go	7	..	24338b	72	4731	32.6	+34 24	8.6	9.6	Ko	1	..	38032i
23	17519	32.2	—23 46	9.7	10.6	Ko	4	..	24338b	73	4394	32.6	— 0 15	10.0	10.6	Go	1	..	24041b
24	16021	32.2	—25 40	9.4	10.5	Ko	2	..	40713b	74	4393	32.6	— 0 31	9.7	10.1	F5	3	..	24041b
25	14863	32.2	—37 38	9.8	10.5	G5	2	..	39649b	75	5794	32.6	— 1 54	10.0	11.0	Ko	3	..	24041b
26	1208	32.2	—79 45	9.4	10.5	K2	3	..	42794b	76	5716	32.6	— 4 45	5.33	6.33	Ko	8	R	44170b
27	1267	32.3	+69 57	9.5	9.6	A2	2	..	3858oi	77	6230	32.6	—13 43	8.9	9.4	F8	4	..	14183b
28	1315	32.3	+68 51	8.7	9.0	Fo	2	..	3858oi	78	6317	32.6	—13 54	8.7	9.7	Ko	3	..	14183b
29	2818	32.3	+54 35	9.0	9.0	A	1	..	37278i	79	6120	32.6	—16 21	10.0	10.4	F5	2	..	40869b
30	4247	32.3	+43 36	9.7	10.5	G5	3	..	6667m	80	6264	32.6	—20 51	9.3	9.4	F8	4	..	40869b
31	4730	32.3	+34 38	8.7	9.8	K2	1	..	38032i	81	6263	32.6	—20 59	10.2	10.6	Go	1	..	24338b
32	4415	32.3	+29 13	8.1	8.9	G5	2	..	38597i	82	17253	32.6	—24 10	9.7	10.3	A3	4	..	24338b
33	4778	32.3	+16 46	7.8	8.2	F5	7	..	3886oi	83	16025	32.6	—25 39	10.2	11.2	Ko	1	..	45149b
34	4955	32.3	+13 18	8.7	9.5	G5	1	..	3813oi	84	15990	32.6	—27 51	9.7	10.2	Go	2	..	40713b
35	4902	32.3	+ 8 17	9.5	9.9	F5	2	..	24324b	85	17861	32.6	—27 58	8.0	8.4	Go	7	..	40913b
36	4738	32.3	+ 3 56	8.5	9.3	G5	1	..	14184b	86	16155	32.6	—33 10	9.8	11.6	Ko	2	..	39342b
37	4390	32.3	— 0 17	10.0	10.8	G5	1	..	24041b	87	15150	32.6	—38 10	9.8	11.0	F8	2	..	39649b
38	4329	32.3	— 1 45	9.82	10.10	Fo	5	..	24041b	88	14754	32.6	—45 7	10.3	10.1	F5	2	..	45071b
39	6035	32.3	— 6 22	10.2	11.2	Ko	1	..	40918b	89	14266	32.6	—48 13	8.5	9.9	K2	3	..	41899b
40	16239	32.3	—26 35	10.6	11.4	G5	1	..	45149b	90	10112	32.6	—54 15	7.5	8.2	Fo	7	..	42094b
41	15667	32.3	—33 59	7.45	7.8	A3	..	3,7	56,148	91	7979	32.6	—58 45	9.0	9.9	K2	1	..	42510b
42	14987	32.3	—44 15	8.3	9.3	Ko	4	..	40872b	92	7821	32.6	—59 19	8.3	8.7	Ko	4	..	42510b
43	3516	32.3	—68 35	7.00	8.1	Ko	9	..	20543b	93	1269	32.7	+69 43	7.25	8.25	Ko	4	..	3858oi
44	1868	32.4	+64 4	8.1	8.1	Ao	2	..	37257i	94	2569	32.7	+58 5	8.9	8.9	Ao	1	..	38803i
45	3996	32.4	+45 43	8.6	9.6	Ko	2	..	6042m	95	3998	32.7	+45 26	9.2	10.2	Ko	1	..	6042m
46	4248	32.4	+43 43	9.7	9.7	Ao	3	..	6667m	96	4456	32.7	+43 3	8.1	9.1	Ko	5	0,6	38052i
47	4453	32.4	+43 2	8.6	10.0	Mb	2	..	6667m	97	4777	32.7	+25 19	8.66	9.08	F5	2	..	38597i
48	4710	32.4	+30 4	8.76	8.82	A2	3	..	38597i	98	4576	32.7	+23 29	6.93	7.01	A3	7	0,8	38597i
49	4356	32.4	+27 52	8.8	8.9	A3	3	..	38597i	99	5072	32.7	+ 9 16	9.3	9.8	F8	1	..	24324b
50	4677	32.4	+22 58	7.14	7.28	A5	6	5,7	38597i	100	4882	32.7	+ 4 40	9.3	9.9	Go	2	..	14184b

THE HENRY DRAPER CATALOGUE.

214400

22^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	4395	32.7	0 42	10.0	10.8	G5	3	..	24041b	51	15994	33.1	-27 47	8.9	9.1	F8	4	..	40713b
2	5479	32.7	3 7	10.0	10.5	F8	3	..	24041b	52	14870	33.1	-37 4	10.2	11.7	Go	2	..	39649b
3	6036	32.7	6 36	9.6	10.6	Ko	2	..	40918b	53	9874	33.1	-55 40	8.6	9.8	Ko	1	..	42510b
4	5958	32.7	9 55	9.26	9.82	Go	3	..	40918b	54	3770	33.2	+51 1	4.83	4.97	A5	..	0,10	2472c
5	16242	32.7	26 10	7.7	8.3	Fo	8	..	40713b	55	4255	33.2	+44 0	8.2	9.2	Ko	3	..	6042m
6	15425	32.7	35 13	8.2	8.7	Ko	7	..	39342b	56	4850	33.2	+36 9	8.5	9.3	G5	1	..	38032i
7	15494	32.7	36 18	10.0	10.5	G5	2	..	39649b	57	4733	33.2	+34 54	8.9	8.9	Ao	3	..	38032i
8	14867	32.7	37 24	9.3	10.8	Ma	1	..	39649b	58	4715	33.2	+29 24	7.38	8.38	Ko	4	..	38597i
9	15117	32.7	43 22	10.1	10.1	A5	2	..	40872b	59	6319	33.2	-14 34	8.9	9.4	F8	4	..	14183b
10	2932	32.8	+53 54	7.30	7.28	B9	7	..	37028i	60	6320	33.2	-14 35	7.61	7.69	A3	9	..	14183b
11	3767	32.8	+50 36	8.0	8.0	Ao	5	..	37028i	61	17529	33.2	-23 33	10.2	10.6	Fo	2	..	24338b
12	4848	32.8	+35 21	9.8	9.9	A2	1	..	38032i	62	18414	33.2	-29 16	6.37	7.8	Ko	9	..	40713b
13	4741	32.8	+3 55	9.1	9.7	G	1	..	14184b	63	19242	33.2	-30 43	9.7	10.7	G5	1	..	40713b
14	6252	32.8	-15 45	9.6	10.4	G5	3	..	40869b	64	15497	33.2	-35 58	9.8	11.7	Ko	2	..	39342b
15	15495	32.8	-36 9	9.6	10.5	Ko	3	..	39342b	65	14784	33.2	-39 0	6.64	7.3	K2	6	..	40940b
16	13750	32.8	-50 32	9.4	10.2	Ko	2	..	41899b	66	14783	33.2	-39 40	7.02	7.5	Ko	6	..	40940b
17	1786	32.9	+65 34	8.2	8.3	A2	2	..	38902i	67	14973	33.2	-41 24	9.8	10.4	G5	3	..	39649b
18	2458	32.9	+59 5	8.0	8.8	G5	2	0,2	38902i	68	9876	33.2	-55 44	8.6	9.2	Fo	4	..	42510b
19	2818	32.9	+56 23	8.92	..	Ob	..	..	76,29	69	646	33.2	-84 16	7.83	8.2	Fo	7	..	15173b
20	4458	32.9	+43 10	9.0	9.1	A3	4	0,2	6042m	70	1049	33.3	+73 7	5.22	5.50	Fo	..	2,R	835c
21	4457	32.9	+42 18	7.08	8.26	K5	5	..	38052i	71	1687	33.3	+64 44	7.70	8.70	Ko	4	..	37257i
22	4466	32.9	+26 54	8.1	8.6	F8	3	..	38597i	72	3762	33.3	+46 49	10.2	10.2	A	1	..	6667m
23	5046	32.9	+5 23	9.01	9.43	F5	3	..	14184b	73	4862	33.3	+12 38	8.2	8.5	Fo	5	..	38130i
24	5796	32.9	-2 37	10.6	11.4	G5	1	..	24041b	74	4535	33.3	+3 4	9.3	10.4	K2	1	..	14184b
25	5481	32.9	-3 25	8.5	9.3	G5	7	..	24041b	75	4396	33.3	+0 10	10.0	10.5	F8	3	..	24041b
26	6231	32.9	-13 18	9.6	10.6	Ko	2	..	24437b	76	4331	33.3	-1 44	10.0	11.0	Ko	2	..	24041b
27	15992	32.9	-27 23	8.1	9.3	Ko	5	..	40713b	77	6038	33.3	-6 24	9.6	10.6	Ko	3	..	40918b
28	17174	32.9	-32 44	8.6	9.9	G5	5	..	39342b	78	6312	33.3	-19 24	9.8	10.9	Go	1	..	40869b
29	3426	33.0	+51 23	8.5	9.5	Ko	1	..	37028i	79	6267	33.3	-21 8	9.3	10.6	Ma	2	..	24338b
30	3760	33.0	+46 33	9.5	10.6	K2	1	..	6667m	80	5960	33.3	-22 10	8.8	10.0	Ko	4	..	24338b
31	3761	33.0	+46 22	9.7	10.2	F8	2	..	6667m	81	15997	33.3	-27 14	11.1	11.1	F8	2	..	45149b
32	4817	33.0	+38 55	8.1	7.9	B3	5	..	38564i	82	15995	33.3	-27 48	11.1	11.1	Go	1	..	45149b
33	4816	33.0	+38 24	8.7	8.8	A2	1	..	38564i	83	17865	33.3	-28 48	9.2	9.3	F5	4	..	40713b
34	4779	33.0	+25 55	8.1	9.1	Ko	4	..	38597i	84	16160	33.3	-33 36	5.60	6.6	Ao	..	..	56,148
35	4834	33.0	+14 29	7.8	8.3	F8	4	..	38130i	85	14872	33.3	-37 33	7.8	8.4	F5	5	..	40940b
36	4858	33.0	+13 2	9.7	10.8	K2	1	..	38130i	86	13342	33.3	-51 12	7.8	9.6	Ma	4	..	41899b
37	4859	33.0	+12 50	9.3	10.3	Ko	1	..	38130i	87	3764	33.4	+46 57	9.9	11.0	K2	1	..	6667m
38	17528	33.0	-23 15	7.7	9.1	K5	5	..	24338b	88	4183	33.4	+44 53	7.89	8.89	Ko	2	0,5	38844i
39	17863	33.0	-28 36	10.4	11.6	Go	1	..	45149b	89	4819	33.4	+38 26	8.3	8.8	F8	4	..	38564i
40	17175	33.0	-32 13	9.2	10.8	Ko	2	..	39342b	90	5075	33.4	+10 5	8.17	9.24	K2	2	..	38130i
41	10326	33.0	-53 12	6.82	7.1	Fo	9	..	42094b	91	4906	33.4	+8 44	7.74	8.81	K2	6	..	24324b
42	1316	33.1	+68 33	8.0	8.1	A3	2	..	38580i	92	5043	33.4	+6 56	8.2	8.3	A5	8	..	24324b
43	3768	33.1	+50 46	8.6	8.6	Ao	3	..	37028i	93	4536	33.4	+2 49	10.7	11.9	K5	1	..	14184b
44	3769	33.1	+50 30	8.6	8.6	A	2	..	37028i	94	4635	33.4	+1 46	8.0	8.6	Go	7	..	14184b
45	4461	33.1	+43 6	9.4	10.4	Ko	3	..	6667m	95	5718	33.4	-4 17	9.6	10.4	G5	4	..	24041b
46	4885	33.1	+4 40	9.3	10.1	G5	1	..	14184b	96	5719	33.4	-4 22	9.3	10.3	Ko	4	..	24041b
47	5717	33.1	-4 13	9.3	9.6	Fo	5	..	24041b	97	6254	33.4	-15 20	10.0	10.5	F8	2	..	40869b
48	5912	33.1	-8 25	6.35	6.91	Go	6	..	44170b	98	17531	33.4	-23 41	9.5	9.7	F2	4	..	24338b
49	6566	33.1	-16 59	8.7	9.5	G5	4	..	40869b	99	17866	33.4	-28 4	9.1	9.9	G5	2	..	40713b
50	6266	33.1	-21 21	8.9	9.5	Fo	4	..	24338b	100	14785	33.4	-39 43	9.28	11.0	Ko	3	..	39649b

214500

22^h 33^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	3252	33.4	-69 14	9.2	10.2	Ko	2	..	20543b	51	16252	33.8	-25 59	8.7	8.8	Fo	6	..	40713b
2	2100	33.5	+63 14	8.2	8.7	F8	3	0,3-	38902i	52	14389	33.8	-46 31	10.5	10.5	G5	1	..	41899b
3	3908	33.5	+50 4	8.42	8.42	Ao	2	..	37028i	53	14289	33.8	-47 12	8.8	9.3	F8	4	..	41899b
4	4473	33.5	+32 43	7.72	7.80	A3	5	..	38032i	54	3253	33.8	-69 4	9.8	10.8	Ko	1	..	20543b
5	4742	33.5	+31 44	7.9	9.1	K5	2	..	38032i	55	1254	33.9	+70 50	8.8	9.8	Ko	3	..	38903i
6	4901	33.5	+ 0 37	9.0	9.8	G5	3	..	14184b	56	4003	33.9	+46 1	9.4	10.4	Ko	1	..	6667m
7	5798	33.5	- 2 38	10.7	11.7	Ko	1	..	24041b	57	4002	33.9	+45 19	7.07	7.57	F8	5	0,8	38844i
8	6313	33.5	-19 30	10.2	10.9	G5	1	..	40869b	58	4185	33.9	+44 40	6.45	6.95	F8	8	0,9	38844i
9	14757	33.5	-45 16	8.9	8.9	A5	5	..	40872b	59	4963	33.9	+13 51	9.3	9.9	Go	2	..	38130i
10	3690	33.5	-66 18	8.6	9.0	F5	6	..	20543b	60	4904	33.9	+ 7 51	8.4	9.0	Go	6	..	24324b
11	1050	33.6	+72 22	7.46	7.88	F5	5	R	38025i	61	4334	33.9	- 1 41	10.0	11.0	Ko	3	..	24041b
12	2459	33.6	+58 59	8.4	8.4	Ao	3	3,3	38902i	62	5484	33.9	- 3 42	10.0	11.0	Ko	2	..	24041b
13	4001	33.6	+45 36	9.5	10.5	Ko	2	..	6667m	63	14271	33.9	-48 16	7.9	9.3	Ko	4	..	41899b
14	4960	33.6	+13 42	8.6	9.6	Ko	2	..	38130i	64	4004	34.0	+46 12	8.0	9.1	K2	3	..	6042m
15	4845	33.6	+11 36	10.0	11.0	Ko	1	..	38130i	65	4869	34.0	+40 52	9.1	9.1	Ao	2	..	38052i
16	5799	33.6	- 1 46	10.5	11.6	K2	2	..	24041b	66	4424	34.0	+29 11	7.9	7.9	Ao	6	..	38597i
17	6040	33.6	- 6 22	10.5	11.5	Ko	1	..	40918b	67	5014	34.0	+19 0	5.80	6.58	G5	7	..	38100i
18	16002	33.6	-27 42	10.4	10.7	Ko	2	..	45149b	68	4783	34.0	+16 35	8.0	8.5	F8	6	..	38860i
19	18905	33.6	-31 0	8.2	10.0	Go	2	..	40713b	69	4905	34.0	+ 7 52	9.3	10.3	Ko	2	..	24324b
20	15121	33.6	-43 47	8.5	9.0	K2	5	..	40872b	70	4335	34.0	- 1 28	10.7	11.7	Ko	1	..	24041b
21	3692	33.6	-66 13	9.0	9.4	F5	4	..	20543b	71	5721	34.0	- 4 8	8.7	9.7	Ko	7	..	24041b
22	2041	33.6	-74 6	9.3	10.1	G5	2	..	19967b	72	5963	34.0	-10 33	7.16	7.72	Go	9	..	40918b
23	3788	33.7	+48 19	8.6	9.6	Ko	1	..	38565i	73	13760	34.0	-50 7	7.30	8.7	Ko	7	..	41899b
24	4866	33.7	+40 36	7.42	7.37	B8	7	..	38052i	74	9878	34.0	-55 50	8.8	10.2	Go	1	..	42094b
25	4422	33.7	+29 11	8.3	8.6	F2	3	..	38597i	75	6358	34.0	-62 4	var.	var.	Md	..	R	M
26	5195	33.7	+20 43	7.85	8.92	K2	3	..	38100i	76	4474	34.1	+33 2	7.7	8.1	F5	3	..	38032i
27	4332	33.7	- 0 48	9.5	9.9	F5	4	..	24041b	77	4336	34.1	- 1 14	8.4	8.8	F5	8	..	24041b
28	6021	33.7	- 9 12	8.8	9.3	F8	5	..	40918b	78	5722	34.1	- 4 2	10.2	11.0	G5	2	..	24041b
29	5961	33.7	-10 37	8.1	8.7	Go	7	..	40918b	79	17538	34.1	-23 17	8.1	9.4	Ko	6	..	24338b
30	6163	33.7	-18 19	8.3	8.3	Ao	7	..	40869b	80	16021	34.1	-42 28	9.7	10.9	Go	2	..	40872b
31	5961	33.7	-22 4	9.8	11.2	G5	1	..	24338b	81	14291	34.1	-46 57	9.9	10.5	Go	1	..	41899b
32	17534	33.7	-23 10	8.1	9.4	Ko	5	..	24338b	82	7981	34.1	-58 21	8.4	9.0	Ao	4	..	42510b
33	16029	33.7	-25 33	9.7	10.8	F8	2	..	45149b	83	1454	34.2	+67 34	8.6	9.6	Ko	1	..	38580i
34	18416	33.7	-29 49	9.7	10.8	F5	3	..	39342b	84	1872	34.2	+63 14	7.06	8.06	Ko	..	0,7-	56,102
35	19244	33.7	-30 52	9.1	10.5	Go	2	..	40713b	85	2574	34.2	+58 8	8.5	9.6	K2	1	..	38803i
36	10114	33.7	-54 39	8.7	9.5	Ao	4	..	42094b	86	3433	34.2	+51 51	9.2	9.3	A2	2	..	37028i
37	4810	33.7	-63 1	9.4	9.7	F2	3	..	19899b	87	3768	34.2	+46 47	8.6	9.2	Go	5	..	6667m
38	3913	33.7	-67 48	9.8	10.2	F5	2	..	20543b	88	4258	34.2	+44 9	7.01	7.01	Ao	7	0,9	38020i
39	3518	33.7	-68 12	7.38	7.4	B5	10	..	20543b	89	4720	34.2	+29 47	8.2	9.4	K5	1	..	38597i
40	56	33.7	-89 15	9.6	10.7	K2	3	..	22980b	90	5050	34.2	+ 5 44	9.0	10.2	K5	1	..	14184b
41	2571	33.8	+58 7	8.1	8.1	B8	2	..	34819i	91	4539	34.2	+ 3 3	8.8	10.0	K5	1	..	14184b
42	4257	33.8	+44 0	9.2	10.3	K2	2	..	6667m	92	5485	34.2	- 2 56	10.5	10.9	F5	2	..	24041b
43	4362	33.8	+28 1	8.6	9.6	Ko	3	..	38597i	93	5832	34.2	- 5 23	10.0	11.1	K2	2	..	24041b
44	4846	33.8	+11 36	10.3	11.3	Ko	1	..	38130i	94	6043	34.2	- 5 52	10.2	10.8	Go	2	..	40918b
45	5077	33.8	+ 9 15	9.3	9.9	Go	2	..	24324b	95	5965	34.2	-10 7	9.6	10.2	Go	2	..	40918b
46	4745	33.8	+ 4 1	6.90	6.98	A3	10	..	14184b	96	6314	34.2	-19 39	9.13	9.4	Go	4	..	40869b
47	4637	33.8	+ 2 0	10.3	10.6	Fo	2	..	24041b	97	6271	34.2	-21 34	9.2	9.4	Fo	4	..	24338b
48	5483	33.8	- 2 47	10.7	11.7	Ko	1	..	24041b	98	17265	34.2	-24 12	9.7	9.6	Go	6	..	24338b
49	5482	33.8	- 3 32	8.6	9.4	G5	8	..	24041b	99	17873	34.2	-28 51	6.33	7.5	Go	9	..	40713b
50	5889	33.8	-11 31	9.6	10.1	F8	3	..	24437b	100	17874	34.2	-28 52	6.84	7.5	F5	8	..	40713b

THE HENRY DRAPER CATALOGUE.

214600

22^h 34^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	16169	34.2	-33 26	9.6	10.5	Go	3	..	39342b	51	4006	34.6	+45 59	9.7	9.8	A2	1	..	6667m
2	14787	34.2	-39 45	10.2	11.0	F5	2	..	39649b	52	4898	34.6	+36 51	6.67	6.50	B3	6	..	38564i
3	9926	34.2	-56 4	9.1	10.2	Go	1	..	42094b	53	4908	34.6	+ 8 12	9.5	10.7	K5	1	..	24324b
4	4285	34.2	-64 16	10.1	10.2	A3	2	..	19899b	54	6257	34.6	-15 3	7.80	8.30	F8	6	..	14183b
5	1319	34.3	+68 41	7.46	7.54	A3	6	I,6R	3858oi	55	6168	34.6	-18 20	8.9	9.9	Ko	3	..	40869b
6	3789	34.3	+68 41	8.0	9.2	G	1	..	38565i	56	6167	34.6	-18 29	9.3	10.3	Ko	1	..	40869b
7	4260	34.3	+43 48	6.93	7.49	K5	5	2,7	3802oi	57	6316	34.6	-19 43	7.27	7.8	F8	8	..	40869b
8	4836	34.3	+14 54	8.8	8.9	Go	3	R	3813oi	58	16263	34.6	-26 41	9.5	9.9	G5	2	..	40713b
9	4965	34.3	+13 45	9.5	10.3	A2	3	..	3813oi	59	16005	34.6	-27 48	9.4	9.3	Go	4	..	40713b
10	5080	34.3	+10 2	9.3	9.8	G5	2	..	3813oi	60	17880	34.6	-28 11	9.7	9.6	F8	2	..	40713b
11	5800	34.3	- 2 16	9.6	10.1	F8	3	..	24324b	61	18421	34.6	-29 50	8.62	9.4	Ko	4	..	40713b
12	5834	34.3	- 5 26	9.8	10.8	F8	3	..	24041b	62	14882	34.6	-37 51	8.9	11.1	F8	2	..	39649b
13	5918	34.3	- 8 7	8.1	9.1	Ko	2	..	24041b	63	3255	34.6	-69 49	8.98	10.2	K2	2	..	19967b
14	6235	34.3	-13 8	8.1	8.9	Ko	7	..	40918b	64	..	34.6	-74 58	..	..	K2	1	..	38231b
15	6272	34.3	-21 1	10.2	10.9	G5	6	..	14183b	65	2821	34.7	+56 17	5.47	6.82	Mb	8	..	38078i
16	5962	34.3	-22 43	9.2	10.9	Go	1	..	24338b	66	3794	34.7	+48 34	8.5	8.5	A	2	R	38565i
17	18419	34.3	-29 22	8.3	9.3	K5	2	..	40713b	67	4556	34.7	+33 22	8.9	9.4	F8	1	..	38032i
18	19246	34.3	-30 16	9.1	10.0	K5	3	..	40713b	68	4476	34.7	+32 21	8.5	8.9	F5	2	..	38032i
19	19247	34.3	-30 26	9.5	9.9	Ko	3	..	40713b	69	4542	34.7	+ 2 44	7.8	9.0	F5	2	..	14184b
20	18912	34.3	-30 58	8.9	10.5	Go	3	..	40713b	70	4904	34.7	+ 0 31	8.6	8.7	K5	2	..	14184b
21	18913	34.3	-31 6	9.7	11.3	Go	1	..	40713b	71	6465	34.7	-20 32	8.7	10.0	A2	5	..	40869b
22	15441	34.3	-35 41	7.23	8.0	Ko	2	5,2	45149b	72	6274	34.7	-21 14	9.3	10.3	K2	4	..	40869b
23	15124	34.3	-43 12	9.9	10.1	G5	7	..	39342b	73	19250	34.7	-30 15	10.4	11.6	G5	3	..	24338b
24	13346	34.3	-51 46	9.5	10.5	F8	2	..	40872b	74	16172	34.7	-33 9	8.2	8.7	G5	2	..	39342b
25	866	34.4	+77 43	8.6	8.6	Ma	1	..	41899b	75	1789	34.8	+65 37	7.25	7.25	Ao	6	..	37257i
26	2552	34.4	+60 7	8.71	8.71	Ao	4	2,3	38903i	76	2421	34.8	+60 15	8.96	8.96	Ao	1	2,1	38902i
27	4005	34.4	+46 1	8.9	9.4	Ao	2	2,2	38902i	77	4465	34.8	+42 28	8.9	9.0	Ao	1	..	38052i
28	4907	34.4	+ 7 22	9.0	9.6	F8	3	..	6042m	78	4571	34.8	+41 40	8.36	8.36	A2	1	..	38052i
29	5825	34.4	- 7 31	9.1	9.9	Go	3	..	24324b	79	4871	34.8	+40 23	8.92	9.99	Ao	4	..	38052i
30	6236	34.4	-12 49	9.3	9.9	G5	4	..	40918b	80	4826	34.8	+38 32	4.91	..	K2	1	..	38052i
31	7984	34.4	-57 56	5.91	7.1	Go	3	..	14183b	81	4739	34.8	+34 54	9.2	9.7	Oe5	..	..	56,102
32	4812	34.4	-63 27	8.3	9.3	Go	3	..	14183b	82	4852	34.8	+11 28	9.5	10.0	F8	1	..	38032i
33	4286	34.4	-64 40	8.9	9.3	Ko	5	..	19899b	83	4748	34.8	+ 3 36	7.7	8.8	F8	1	..	3813oi
34	3695	34.4	-66 3	8.6	9.4	Ko	5	..	19899b	84	4748	34.8	+ 3 36	7.7	8.8	K2	4	..	14184b
35	2711	34.4	-72 3	9.1	10.2	F5	4	..	20543b	85	5804	34.8	- 2 23	10.0	11.0	K2	4	..	24041b
36	1454	34.4	-78 41	9.6	10.7	G5	5	..	20543b	86	5803	34.8	- 2 39	10.7	11.3	Go	2	..	24041b
37	1209	34.4	-79 22	8.8	9.4	K2	3	..	19967b	87	5966	34.8	- 9 53	6.74	7.30	Go	8	..	40918b
38	4428	34.5	+28 54	8.7	9.0	K2	2	..	42794b	88	6127	34.8	-15 48	8.8	9.2	F5	7	..	40869b
39	4849	34.5	+12 12	9.1	9.1	F2	7	..	42794b	89	6125	34.8	-16 28	8.5	8.8	F2	7	..	40869b
40	5045	34.5	+ 6 40	8.7	9.2	Fo	3	..	38597i	90	6275	34.8	-20 48	9.8	11.2	Ko	1	..	24338b
41	5802	34.5	- 1 49	10.2	10.8	Ao	3	..	3813oi	91	18920	34.8	-31 10	5.98	7.8	K2	..	2,10	56,149
42	5801	34.5	- 2 7	10.5	11.0	F8	4	..	24324b	92	2267	34.8	-73 45	8.0	8.8	K2	..	2,10	56,149
43	5723	34.5	- 4 2	9.6	9.9	F8	1	..	24041b	93	865	34.9	+77 5	8.8	10.2	G5	7	..	19967b
44	19248	34.5	-30 28	7.37	8.7	Go	2	..	24041b	94	2827	34.9	+54 23	8.2	8.2	Mb	1	..	38903i
45	14789	34.5	-39 0	10.6	11.3	Fo	5	..	24041b	95	4008	34.9	+45 30	9.2	9.3	Ao	2	E	38078i
46	15002	34.5	-43 58	8.9	9.8	Ko	8	..	40713b	96	4189	34.9	+44 48	8.9	9.0	A2	2	..	6667m
47	10118	34.5	-57 37	9.6	10.4	F5	2	..	39649b	97	4261	34.9	+44 8	9.4	10.6	A2	4	R	6042m
48	840	34.6	+76 14	9.4	9.8	Go	2	..	40872b	98	4906	34.9	+40 5	8.02	9.09	K5	1	..	6042m
49	3257	34.6	+52 21	8.1	9.3	Ko	2	..	4251ob	99	5021	34.9	+19 10	6.14	6.14	K2	3	..	38052i
50						F5	1	..	38903i	100	4905	34.9	+ 0 41	8.4	9.2	Ao	9	..	3810oi
						K5	1	..	37028i		5806	34.9	- 2 46	10.9	11.4	G5	5	..	14184b
																F8	2	..	24041b

214700

22^h 34^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	5486	34.9	- 3 42	10.2	11.0	G5	2	..	24041b	51	14277	35.1	-48 7	8.1	9.0	F8	5	..	41899b
2	17186	34.9	-32 49	9.5	10.3	G5	1	..	39342b	52	6672	35.1	-61 14	8.6	9.0	A2	2	..	19899b
3	15449	34.9	-35 50	10.9	12.5	F8	1	..	39342b	53	4813	35.1	-63 47	9.2	9.7	F8	3	..	19899b
4	14790	34.9	-39 48	9.88	11.0	Go	2	..	39649b	54	2953	35.1	-70 16	9.1	9.9	G5	3	..	19967b
5	14400	34.9	-46 1	7.6	8.7	G5	5	..	41899b	55	4009	35.2	+45 32	8.6	8.6	Ao	4	..	6042m
6	14399	34.9	-46 5	9.5	10.7	K2	1	..	45071b	56	4874	35.2	+40 52	8.4	8.5	A2	3	..	38052i
7	12056	34.9	-51 58	7.8	10.0	Mb	3	..	42094b	57	4685	35.2	+22 21	7.44	8.44	Ko	5	..	38100i
8	10120	34.9	-57 33	7.4	8.7	K5	6	..	42510b	58	5809	35.2	- 2 27	10.2	11.0	G5	4	..	24041b
9	3696	34.9	-66 6	9.8	10.2	F5	1	..	20543b	59	17191	35.2	-32 30	7.49	8.4	Ko	6	..	40713b
10	978	35.0	+74 51	6.06	7.24	K5	8	5,6	38903i	60	10121	35.2	-57 23	9.2	10.1	A2	2	..	42510b
11	..	35.0	+43 2	..	..	Ao	2	..	6667m	61	3519	35.2	-68 21	9.0	9.0	Ao	5	..	20543b
12	4651	35.0	+38 14	6.85	7.13	Fo	6	..	38564i	62	1758	35.2	-75 8	10.5	10.6	A2	2	..	38231b
13	4900	35.0	+37 12	7.77	7.83	A2	3	..	38564i	63	1053	35.2	-80 46	8.5	9.6	K2	2	..	15165b
14	4902	35.0	+37 4	6.14	6.92	G5	6	..	38564i	64	2465	35.3	+58 24	6.88	7.16	Fo	6	..	38078i
15	4903	35.0	+36 52	8.40	9.47	K2	2	..	33749i	65	3774	35.3	+46 58	8.8	8.8	Ao	3	..	6042m
16	4901	35.0	+36 49	6.74	7.74	Ko	4	..	38564i	66	3776	35.3	+46 36	9.2	9.2	Ao	3	..	6042m
17	4899	35.0	+36 24	8.1	8.2	A5	3	..	38032i	67	4573	35.3	+41 40	7.48	7.56	A3	7	..	38052i
18	4912	35.0	+ 9 4	8.4	9.6	K5	2	..	24324b	68	4829	35.3	+38 40	8.8	9.4	Go	2	..	38564i
19	4397	35.0	- 0 39	9.3	9.8	F8	5	..	24041b	69	4889	35.3	+ 4 26	9.3	10.1	G5	1	..	14184b
20	5807	35.0	- 2 35	10.7	11.5	G5	2	..	24041b	70	5725	35.3	- 4 20	10.2	11.2	Ko	1	..	24041b
21	5835	35.0	- 5 16	9.8	10.4	Go	3	..	24041b	71	6046	35.3	- 6 21	10.0	11.0	Ko	1	..	40918b
22	5827	35.0	- 7 3	7.13	7.69	Go	8	..	40918b	72	6571	35.3	-17 18	7.59	8.59	Ko	8	..	40869b
23	6258	35.0	-15 8	8.5	9.5	Ko	4	..	14183b	73	6317	35.3	-19 25	10.0	11.2	Ko	1	..	40869b
24	6277	35.0	-21 36	10.6	11.5	Ko	1	..	24338b	74	16271	35.3	-26 28	9.7	9.9	F5	2	..	40713b
25	5966	35.0	-22 35	10.0	10.9	Go	2	..	24338b	75	14794	35.3	-39 49	9.43	10.1	Go	3	..	39649b
26	19254	35.0	-30 43	9.2	10.7	Ko	3	0,1	45149b	76	14866	35.3	-40 42	10.0	10.4	G5	2	..	39649b
27	15505	35.0	-35 59	8.9	10.3	Go	5	..	39342b	77	12058	35.3	-52 25	9.3	10.0	F8	1	..	42094b
28	14764	35.0	-45 1	9.06	9.2	Fo	6	..	40872b	78	2714	35.3	-72 39	9.4	10.2	G5	2	..	19967b
29	14763	35.0	-45 43	7.9	8.6	F5	6	..	40872b	79	2830	35.4	+54 32	8.0	8.0	Ao	3	..	38078i
30	14767	35.0	-45 45	9.7	9.5	F5	2	..	45071b	80	3780	35.4	+50 38	6.73	7.15	F5	6	..	37028i
31	14401	35.0	-46 43	9.4	10.1	K5	2	..	41899b	81	3777	35.4	+46 32	8.2	9.6	Mb	3	..	6042m
32	3258	35.0	-68 55	8.2	9.3	K2	5	..	20543b	82	4192	35.4	+44 21	9.7	9.7	Ao	2	..	6042m
33	1874	35.1	+63 45	8.9	10.0	K2	1	..	38902i	83	4831	35.4	+39 11	8.7	8.7	Ao	2	..	38564i
34	2102	35.1	+63 4	5.21	5.27	A2	..	2,5	56,102	84	4588	35.4	+23 53	8.3	8.7	F5	3	..	38100i
35	4262	35.1	+44 11	8.9	9.9	Ko	2	..	6042m	85	5052	35.4	+ 5 33	9.0	9.8	G5	1	..	14184b
36	4872	35.1	+40 57	9.1	9.1	Ao	3	..	38052i	86	4751	35.4	+ 4 4	7.03	8.03	Ko	8	..	14184b
37	4873	35.1	+40 51	8.5	8.6	A2	5	..	38052i	87	4543	35.4	+ 2 37	8.4	9.2	G5	4	..	14184b
38	4740	35.1	+34 40	9.5	10.0	F8	1	..	38032i	88	5811	35.4	- 2 16	10.9	11.9	Ko	1	..	24041b
39	4478	35.1	+32 24	8.1	9.1	Ko	1	..	38032i	89	5837	35.4	- 5 27	10.5	10.9	F5	2	..	24041b
40	4761	35.1	+30 38	8.01	9.08	K2	3	..	38597i	90	16029	35.4	-41 56	10.3	11.1	K2	1	..	40872b
41	4586	35.1	+23 16	8.7	8.8	A2	4	..	38100i	91	15009	35.4	-44 22	var.	var.	F5	4	R	40872b
42	4969	35.1	+14 8	8.4	8.7	Fo	3	..	38130i	92	1455	35.4	-78 32	9.5	10.5	Ko	1	..	42794b
43	..	35.1	- 1 24	..	..	Go	1	..	24041b	93	842	35.5	+76 13	8.57	9.57	Ko	1	..	38820i
44	5828	35.1	- 7 19	9.3	10.1	G5	4	..	40918b	94	4193	35.5	+45 4	8.72	9.50	G5	3	0,1	6042m
45	6323	35.1	-12 7	8.5	9.7	K5	3	..	14183b	95	4765	35.5	+30 16	8.71	9.21	F8	2	..	38597i
46	17271	35.1	-24 13	9.9	9.6	F5	6	..	24338b	96	5053	35.5	+ 5 43	8.6	9.7	K2	1	..	14184b
47	16038	35.1	-25 10	9.7	11.9	Ko	1	..	45149b	97	4752	35.5	+ 4 9	8.8	9.9	K2	2	..	14184b
48	16010	35.1	-27 34	4.22	4.17	B8	..	0,5 R	28,216	98	4639	35.5	+ 1 16	10.7	11.2	F8	2	..	24041b
49	19255	35.1	-30 11	7.76	9.0	K2	5	..	40713b	99	4399	35.5	- 0 36	8.1	9.1	Ko	7	..	24041b
50	16175	35.1	-33 1	8.9	9.9	Go	6	..	39342b	100	6572	35.5	-17 3	10.0	10.8	G5	1	..	40869b

214800

22^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	17551	35.5	-23 11	11.1	10.6	Ko	2	..	24338b	51	6049	35.9	- 6 20	10.0	10.8	G5	4	..	40918b
2	17274	35.5	-24 5	9.9	10.7	Go	3	..	24338b	52	16276	35.9	-25 52	7.22	8.1	F5	8	..	40713b
3	15171	35.5	-38 45	9.8	11.1	K2	3	..	39649b	53	16015	35.9	-27 46	8.1	7.6	A2	7	..	40713b
4	4194	35.6	+44 43	9.4	10.6	K5	1	..	6667m	54	18429	35.9	-29 40	11.1	11.1	G5	2	..	39342b
5	4575	35.6	+42 8	8.4	8.4	Ao	4	..	38052i	55	17200	35.9	-32 2	8.9	10.8	Go	3	..	39342b
6	4909	35.6	+40 9	7.07	8.42	Ma	4	..	38052i	56	15690	35.9	-34 20	10.4	12.5	F8	1	..	39342b
7	4905	35.6	+37 1	7.9	8.4	F8	2	..	38564i	57	985	36.0	+73 59	8.4	9.4	Ko	4	..	38025i
8	5023	35.6	+18 57	8.6	8.9	F2	3	..	32264i	58	3917	36.0	+49 46	8.1	8.4	F2	2	..	37028i
9	5054	35.6	+ 6 0	8.6	9.0	F5	3	..	14184b	59	3782	36.0	+46 31	9.4	9.5	A2	3	..	6042m
10	5728	35.6	- 4 4	6.40	6.96	Go	6	..	17411b	60	4726	36.0	+29 28	8.8	9.1	F	2	..	32312i
11	6326	35.6	-14 22	9.3	10.3	Ko	2	..	24437b	61	4400	36.0	- 0 46	10.0	11.1	K2	1	..	24041b
12	17553	35.6	-22 58	9.1	10.0	G5	4	..	24338b	62	5812	36.0	- 1 58	9.6	10.7	K2	3	..	24041b
13	17276	35.6	-22 2	7.01	7.9	F8	7	..	24338b	63	5830	36.0	- 6 46	10.2	10.8	Go	3	..	40918b
14	16047	35.6	-25 18	10.2	11.4	Go	1	..	45149b	64	17555	36.0	-23 4	9.7	9.1	F5	5	..	24338b
15	18425	35.6	-29 48	9.9	10.7	G5	3	..	39342b	65	18431	36.0	-29 19	10.9	11.3	Go	2	..	39342b
16	18927	35.6	-31 24	9.9	10.9	Ko	1	..	39342b	66	15693	36.0	-34 37	10.0	11.5	Go	2	..	39342b
17	14796	35.6	-39 52	9.08	9.8	G5	5	..	39649b	67	14871	36.0	-39 59	9.03	9.6	Go	4	..	39649b
18	14982	35.6	-40 59	10.9	10.4	F8	1	..	39649b	68	4266	36.1	+43 46	4.64	5.64	Ko	..	0,10	56,102
19	4011	35.7	+45 36	9.4	9.5	A2	2	..	6667m	69	5028	36.1	+18 42	9.3	9.8	F8	2	..	38835i
20	4264	35.7	+43 30	10.2	10.2	A	1	..	6667m	70	4338	36.1	- 1 12	10.0	10.5	F8	1	..	24041b
21	4877	35.7	+40 49	7.36	8.36	Ko	4	..	38052i	71	5731	36.1	- 4 23	10.2	10.6	F5	2	..	24041b
22	4742	35.7	+35 3	8.7	9.8	K2	1	..	38032i	72	5730	36.1	- 4 44	9.8	10.9	K2	2	..	24041b
23	4757	35.7	+31 16	8.0	8.6	Go	3	..	38032i	73	6327	36.1	-12 45	6.82	7.89	K2	8	..	14183b
24	4376	35.7	+27 41	8.0	8.3	Fo	5	..	38597i	74	6241	36.1	-13 8	8.9	9.4	F8	3	..	14183b
25	4982	35.7	+19 32	7.22	7.56	F2	4	..	38100i	75	15177	36.1	-38 35	9.3	9.8	Go	5	..	39649b
26	4906	35.7	+ 1 9	9.29	9.79	F8	3	..	24041b	76	14284	36.1	-48 42	8.6	10.0	K2	2	..	41899b
27	6048	35.7	- 6 25	10.5	11.5	Ko	1	..	40918b	77	2716	36.1	-72 7	9.2	9.6	F5	5	..	19967b
28	17277	35.7	-24 45	8.65	8.7	Ao	5	..	24338b	78	2950	36.2	+53 20	6.10	7.10	Ko	7	..	38078i
29	17886	35.7	-28 33	9.7	9.9	Go	3	..	40713b	79	3789	36.2	+51 2	7.8	8.1	Fo	5	..	37028i
30	15173	35.7	-38 33	10.0	11.1	G5	2	..	39649b	80	4195	36.2	+44 21	9.7	10.9	K5	1	..	6042m
31	14984	35.7	-41 37	10.2	10.4	G5	3	..	40872b	81	4758	36.2	+31 16	8.7	9.2	F8	2	..	38032i
32	14983	35.7	-41 46	9.0	9.8	Ko	4	..	40872b	82	4636	36.2	+24 42	7.29	7.57	Fo	8	..	38100i
33	2825	35.8	+56 52	8.6	8.7	A2	2	..	37278i	83	4845	36.2	+14 58	7.72	8.72	Ko	3	..	38130i
34	..	35.8	+43 0	..	..	A3	2	..	6667m	84	4754	36.2	+ 3 45	8.6	9.1	F8	3	..	14184b
35	4577	35.8	+41 43	8.6	9.8	K5	1	..	38052i	85	4401	36.2	- 0 2	10.7	11.3	Go	1	..	24041b
36	4767	35.8	+30 48	8.3	9.4	K2	1	..	38032i	86	..	36.2	- 1 25	..	..	F5	2	..	24041b
37	4589	35.8	+23 36	9.4	9.4	Ao	2	..	38100i	87	6051	36.2	- 6 11	9.2	10.2	Ko	4	..	40918b
38	4983	35.8	+19 35	8.6	8.7	A2	2	..	38100i	88	6052	36.2	- 6 41	8.9	9.5	Go	5	..	40918b
39	5892	35.8	-10 57	9.6	10.2	Go	1	..	24437b	89	5924	36.2	- 8 25	8.9	9.7	G5	3	..	40918b
40	6470	35.8	-20 43	9.6	10.9	Ko	2	..	24338b	90	14872	36.2	-40 28	10.2	11.3	Ko	1	..	39649b
41	18428	35.8	-29 37	10.6	10.8	F8	3	..	39342b	91	2834	36.3	+55 6	8.36	8.42	A2	3	..	38078i
42	17198	35.8	-32 8	8.9	9.3	A5	4	..	40713b	92	4973	36.3	+14 1	9.3	9.9	Go	2	..	38130i
43	14302	35.8	-47 46	10.3	10.5	F8	2	..	45071b	93	4870	36.3	+12 39	9.3	10.3	Ko	2	..	38130i
44	10116	35.8	-54 28	8.7	10.2	Go	2	..	42094b	94	4756	36.3	+ 4 12	8.8	9.4	Go	3	..	14184b
45	10122	35.8	-57 34	8.7	9.8	Ko	2	..	42510b	95	4755	36.3	+ 3 14	8.8	9.6	G5	2	..	14184b
46	889	35.8	-81 54	4.34	4.62	Fo	..	R	28,216	96	4545	36.3	+ 3 5	8.8	10.0	K5	2	..	14184b
47	2787	35.9	+55 38	8.7	9.7	K	1	..	37278i	97	5814	36.3	- 1 57	10.5	11.1	Go	4	..	24041b
48	3788	35.9	+51 5	8.6	9.1	F8	2	..	37028i	98	5813	36.3	- 2 18	10.5	11.6	K2	2	..	24041b
49	4787	35.9	+26 14	8.1	9.5	Ma	2	..	38597i	99	6243	36.3	-13 4	9.8	10.6	G5	2	..	24437b
50	4971	35.9	+14 1	5.81	6.59	G5	8	5,9R	38860i	100	6134	36.3	-16 8	8.3	9.1	G5	6	..	40869b

214900

22^h 36^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	6173	36.3	-18 13	9.6	10.1	F8	2	..	40869b	51	14990	36.7	-41 25	10.6	10.7	Ko	1	..	39649b
2	19263	36.3	-30 33	7.76	9.4	G5	5	..	40713b	52	14308	36.7	-47 24	2.24	3.59	Mb	..	R	28,216
3	14989	36.3	-41 51	9.6	10.1	F5	4	..	40872b	53	14307	36.7	-47 43	6.26	7.3	Go	..	0,9	56,149
4	2104	36.4	+63 3	8.2	8.2	Ao	2	..	37257i	54	4082	36.7	-65 20	8.2	9.0	G5	5	..	20543b
5	3785	36.4	+46 46	8.9	9.9	Ko	2	..	6042m	55	867	36.8	+78 0	8.9	9.5	Go	2	..	3803i
6	4474	36.4	+42 58	8.0	9.2	K5	1	..	3802oi	56	2836	36.8	+54 29	8.8	8.8	Ao	2	..	37278i
7	4796	36.4	+10 59	9.7	10.3	Go	1	..	3813oi	57	4268	36.8	+44 6	9.5	9.6	A5	2	..	6042m
8	4402	36.4	+ 0 8	10.0	10.4	F5	3	..	24041b	58	4485	36.8	+32 57	8.9	9.0	A2	1	..	38032i
9	5487	36.4	- 3 4	8.7	9.5	G5	7	..	24041b	59	4859	36.8	+12 4	8.1	9.3	K5	2	..	3813oi
10	6244	36.4	-13 24	9.1	9.6	F8	4	..	24437b	60	4911	36.8	+ 7 21	9.1	9.9	G5	2	..	24324b
11	6318	36.4	-19 5	8.7	9.2	F2	4	..	40869b	61	4893	36.8	+ 4 28	8.6	9.7	K2	2	..	14184b
12	15697	36.4	-34 6	8.9	11.2	Ko	4	..	39342b	62	5488	36.8	- 3 22	9.6	10.8	K5	2	..	24041b
13	14893	36.4	-37 40	9.2	10.6	G5	4	..	39649b	63	5973	36.8	-10 39	8.1	8.2	A5	7	..	14183b
14	15180	36.4	-38 36	9.8	10.7	Ko	3	..	39649b	64	6328	36.8	-12 6	10.0	10.0	Ao	4	..	24437b
15	14800	36.4	-39 36	9.2	10.4	Ko	4	..	39649b	65	17892	36.8	-27 54	7.7	9.0	K5	4	..	40713b
16	6362	36.4	-62 35	8.9	9.9	Ko	3	..	19899b	66	19267	36.8	-29 53	6.44	7.9	Ma	..	5,9	56,149
17	1759	36.4	-75 20	7.8	8.2	F5	7	0,7	38231b	67	18933	36.8	-31 10	8.5	9.9	Go	3	..	40713b
18	4013	36.5	+45 59	8.8	8.8	Ao	2	..	6042m	68	18932	36.8	-31 12	8.9	9.9	G5	1	..	40713b
19	4663	36.5	+38 9	8.6	9.6	Ko	1	..	38564i	69	17209	36.8	-32 45	8.9	11.2	Go	4	..	39342b
20	4909	36.5	+36 33	7.7	8.1	F5	3	..	38564i	70	15703	36.8	-33 54	9.8	12.0	Go	2	..	39342b
21	4691	36.5	+22 20	8.00	8.06	A2	4	..	38100i	71	15702	36.8	-34 35	10.4	12.5	Ko	1	..	39342b
22	4690	36.5	+15 37	8.6	9.1	F8	2	..	38835i	72	14896	36.8	-37 2	10.4	12.0	F8	1	..	39649b
23	4797	36.5	+10 19	3.61	3.56	B8	..	R	2307c	73	16042	36.8	-41 59	8.9	10.4	K5	3	..	40872b
24	4403	36.5	- 0 24	9.3	10.4	K2	4	..	24041b	74	1535	36.9	+66 37	8.4	8.4	A	2	..	38902i
25	6283	36.5	-21 18	9.3	10.6	Ko	3	..	24338b	75	2829	36.9	+56 19	var.	var.	F5	1	R	38078i
26	19265	36.5	-30 3	9.7	10.2	A3	4	..	40713b	76	3444	36.9	+51 14	6.80	7.87	K2	4	..	37028i
27	4014	36.6	+45 41	8.8	9.6	G5	2	..	6042m	77	4882	36.9	+40 31	9.2	9.3	A2	1	..	38052i
28	4580	36.6	+42 5	8.2	9.4	K5	1	..	38052i	78	4844	36.9	+38 17	8.9	10.1	K5	1	..	38564i
29	4864	36.6	+35 45	7.07	8.25	K5	4	..	38564i	79	4771	36.9	+30 26	6.48	7.66	K5	5	0,5	38032i
30	4592	36.6	+23 19	7.30	7.13	B3	7	..	38100i	80	4734	36.9	+29 15	9.2	10.0	G5	1	..	38597i
31	4798	36.6	+10 57	9.0	10.2	K5	1	..	3813oi	81	4916	36.9	+ 8 36	8.7	8.7	Ao	4	..	24324b
32	4892	36.6	+ 4 16	10.0	10.6	G	1	..	14184b	82	5733	36.9	- 4 0	7.7	7.7	Ao	6	..	17411b
33	5832	36.6	- 7 5	9.6	10.2	Go	3	..	40918b	83	5843	36.9	- 5 37	7.04	8.39	Ma	4	..	44170b
34	6246	36.6	-12 55	9.6	10.2	Go	4	..	24437b	84	6330	36.9	-12 2	10.0	11.0	Ko	1	..	24437b
35	6135	36.6	-16 10	8.9	9.9	Ko	3	..	40869b	85	6286	36.9	-21 9	10.5	10.6	Ao	2	..	24338b
36	6319	36.6	-18 58	8.8	9.8	Ko	3	..	40869b	86	15137	36.9	-43 42	8.6	9.3	Go	4	..	40872b
37	17562	36.6	-23 40	9.9	11.2	Ko	1	..	24338b	87	15017	36.9	-44 46	6.29	7.6	Ko	9	0,10	40872b
38	16019	36.6	-27 22	9.4	9.9	Go	3	..	40713b	88	13770	36.9	-50 25	10.8	11.4	Go	1	..	41899b
39	16020	36.6	-27 32	10.4	11.0	Go	1	..	45149b	89	13359	36.9	-51 52	8.5	9.6	A3	2	..	41899b
40	16189	36.6	-32 58	9.6	11.7	Go	2	..	39342b	90	4084	36.9	-65 10	8.7	9.0	Fo	5	..	20543b
41	15701	36.6	-34 48	8.18	8.5	G5	5	5,7	40733b	91	747	37.0	+79 24	8.9	9.9	Ko	1	..	3859oi
42	14802	36.6	-39 24	9.2	9.2	F2	4	..	40940b	92	4478	37.0	+43 7	10.2	10.3	A2	2	..	6667m
43	15015	36.6	-44 36	9.3	10.2	Ko	2	..	40872b	93	4912	37.0	+39 43	5.18	4.99	B2	..	..	56,102
44	4017	36.7	+46 7	9.0	9.1	A3	2	..	6042m	94	4436	37.0	+28 48	4.85	4.85	Ao	..	R	1646c
45	4015	36.7	+45 39	9.4	9.4	Ao	2	..	6042m	95	4974	37.0	+14 0	6.14	7.14	Ko	7	..	3813oi
46	4197	36.7	+44 29	7.12	7.26	A5	5	3,8	3802oi	96	4912	37.0	+ 8 3	9.3	9.7	F5	2	..	24324b
47	4483	36.7	+32 16	8.1	9.2	K2	1	..	38032i	97	5734	37.0	- 4 34	9.3	9.7	F5	3	..	24041b
48	4760	36.7	+31 41	8.5	9.3	G5	2	..	38032i	98	6056	37.0	- 6 15	9.8	10.9	K2	1	..	19959b
49	5090	36.7	+10 0	9.0	10.1	K2	2	0,1	24324b	99	6035	37.0	- 8 58	9.3	9.8	F8	4	..	40918b
50	5976	36.7	-22 18	9.3	10.3	Ko	3	..	24338b	100	18934	37.0	-31 8	9.7	10.5	G5	2	..	39342b

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	17210	37.0	-31 59	9.2	II.6	Go	3	..	39342b	51	15185	37.3	-38 11	8.3	9.2	K2	4	..	40940b
2	15518	37.0	-35 53	8.6	9.4	Fo	5	..	39342b	52	14879	37.3	-39 53	10.4	II.1	A3	1	..	39649b
3	15516	37.0	-36 20	8.7	9.7	Go	4	..	39342b	53	2957	37.3	-70 18	9.0	10.2	K5	2	..	19967b
4	14898	37.0	-37 23	9.8	II.5	G5	2	..	39649b	54	4568	37.4	+33 29	8.7	9.7	Ko	1	..	38032i
5	14897	37.0	-37 52	8.3	8.6	Ko	4	..	40940b	55	4863	37.4	+11 50	9.5	9.8	F2	1	..	38130i
6	14878	37.0	-40 9	9.5	9.6	F5	5	..	39649b	56	4550	37.4	+ 2 22	8.8	9.1	Fo	5	..	14184b
7	1258	37.1	+71 11	8.4	9.6	K5	1	..	38580i	57	5816	37.4	- 2 34	9.2	10.2	Ko	6	..	24041b
8	1457	37.1	+67 59	8.1	9.1	Ko	1	..	38580i	58	6174	37.4	-17 54	8.9	9.5	Go	4	..	40869b
9	2328	37.1	+61 32	8.4	8.4	Ao	2	..	38803i	59	6288	37.4	-21 42	var.	var.	K5	4	R	23122b
10	4018	37.1	+45 47	8.1	9.3	K5	2	..	6042m	60	5980	37.4	-22 17	10.5	10.9	F8	1	..	24338b
11	4488	37.1	+32 57	8.7	9.8	K2	2	..	38032i	61	16290	37.4	-26 11	10.4	10.2	G5	2	..	40713b
12	4812	37.1	+21 52	7.29	7.29	Ao	7	..	38100i	62	19270	37.4	-30 48	8.9	10.5	Ko	3	..	40713b
13	5208	37.1	+20 54	8.3	8.9	Go	3	..	38100i	63	15708	37.4	-34 0	9.6	12.2	Ko	1	..	39342b
14	4851	37.1	+14 42	8.21	8.71	F8	3	..	38130i	64	14998	37.4	-41 48	10.6	10.4	K5	2	..	40872b
15	4800	37.1	+10 34	7.58	7.92	F2	7	..	38130i	65	1796	37.5	+65 59	7.46	8.24	G5	4	..	37257i
16	5815	37.1	- 2 42	9.6	10.0	F5	4	..	24041b	66	2958	37.5	+53 52	8.0	8.0	B9	5	..	38078i
17	5899	37.1	-10 53	9.3	9.9	Go	4	..	24437b	67	4021	37.5	+45 32	9.5	10.3	G5	1	..	6667m
18	17291	37.1	-24 14	9.9	10.5	Ko	2	..	24338b	68	4774	37.5	+31 11	8.9	9.9	Ko	1	..	38032i
19	16287	37.1	-26 46	9.4	10.2	Go	2	..	40713b	69	5901	37.5	-11 40	10.0	10.6	Go	2	..	24437b
20	16021	37.1	-27 25	10.4	10.8	Go	1	..	45149b	70	6332	37.5	-12 20	9.6	10.6	Ko	4	..	24437b
21	15182	37.1	-38 33	10.4	II.5	K5	1	..	39649b	71	18438	37.5	-29 9	9.2	9.3	F5	3	..	40713b
22	14289	37.1	-48 16	8.7	9.7	F8	3	..	41899b	72	16045	37.5	-42 4	8.7	10.1	K5	4	..	40872b
23	3262	37.1	-69 49	9.38	9.9	F8	2	..	19967b	73	4916	37.6	+36 44	8.8	9.3	F8	2	..	33749i
24	1698	37.2	+64 44	8.6	8.4	B3	2	0.3-	37257i	74	4491	37.6	+32 43	7.9	9.1	K5	2	..	38032i
25	3919	37.2	+49 34	7.76	7.76	Ao	5	..	37028i	75	4895	37.6	+ 5 10	8.96	10.03	K2	2	..	14184b
26	4019	37.2	+45 56	8.8	8.8	Ao	3	..	6042m	76	4761	37.6	+ 3 58	8.8	9.6	G5	4	..	14184b
27	4200	37.2	+44 40	8.8	10.0	K5	1	..	6042m	77	4405	37.6	- 0 27	7.01	7.29	Fo	6	0.9	9782b
28	4269	37.2	+43 55	8.2	9.0	G5	3	5.7	38020i	78	5738	37.6	- 3 48	9.6	10.6	Ko	5	..	24041b
29	4582	37.2	+41 54	8.50	9.57	K2	1	..	38052i	79	5737	37.6	- 4 3	10.0	II.1	K2	1	..	24041b
30	4885	37.2	+41 3	6.07	7.07	Ko	6	0.6	38564i	80	6175	37.6	-18 35	10.0	II.0	Ko	1	..	40869b
31	4913	37.2	+ 7 33	7.8	8.6	G5	6	..	24324b	81	5982	37.6	-22 11	7.28	7.7	Ko	10	..	24338b
32	5833	37.2	- 7 24	8.7	9.3	Go	4	..	40918b	82	17897	37.6	-28 41	8.2	8.0	F5	6	..	40713b
33	6287	37.2	-21 28	8.8	10.0	K2	4	..	24338b	83	17212	37.6	-32 28	9.0	9.6	Go	1	..	39342b
34	17565	37.2	-23 43	9.7	10.9	Ko	1	..	24338b	84	16198	37.6	-33 17	9.8	10.8	Ko	2	..	39342b
35	15706	37.2	-33 57	10.2	II.0	G5	1	..	39342b	85	14881	37.6	-40 32	7.8	8.7	Ko	6	..	40872b
36	14804	37.2	-39 18	10.4	II.1	Go	1	..	39649b	86	3794	37.7	+47 2	9.4	10.4	Ko	3	..	6667m
37	6675	37.2	-61 14	7.3	8.0	Fo	7	..	19899b	87	4272	37.7	+43 18	9.5	9.9	F5	2	..	6667m
38	980	37.3	+75 8	8.00	8.00	Aop	5	0.4R	38903i	88	4481	37.7	+43 6	9.2	9.3	A2	3	..	6667m
39	3789	37.3	+46 30	8.9	8.9	Ao	3	..	6042m	89	4583	37.7	+41 53	8.00	9.00	Ko	3	..	38052i
40	4270	37.3	+43 29	9.2	10.4	K5	2	..	6667m	90	4753	37.7	+34 35	8.5	8.6	A2	2	..	38032i
41	4813	37.3	+21 34	7.42	8.42	Ko	5	..	38100i	91	4765	37.7	+31 24	8.5	9.5	Ko	1	..	38032i
42	4975	37.3	+14 10	9.3	9.7	F5	1	..	38130i	92	4977	37.7	+13 31	8.0	8.4	F5	5	..	38130i
43	4894	37.3	+ 4 39	7.53	7.61	A3	9	..	14184b	93	4406	37.7	- 0 17	6.91	7.19	Fo	7	0.10	9782b
44	4911	37.3	+ 0 15	8.48	9.48	Ko	3	..	14184b	94	5490	37.7	- 2 59	8.9	9.0	A5	8	..	24041b
45	4339	37.3	- 1 18	8.4	8.8	F5	5	..	24041b	95	5847	37.7	- 5 12	8.5	9.3	G5	5	..	24041b
46	5974	37.3	-10 26	8.3	8.4	A5	5	..	14183b	96	6060	37.7	- 6 44	9.6	10.6	Ko	2	..	19959b
47	6247	37.3	-13 5	7.7	7.7	Ao	4	1.9	44015b	97	5975	37.7	-10 37	7.20	8.20	Ko	9	..	14183b
48	R	37.3	-22 49	9.2	10.3	G5	4	..	24338b	98	6333	37.7	-11 58	9.8	10.8	Ko	2	..	14183b
49	17894	37.3	-28 24	8.1	9.0	G5	5	..	40713b	99	6250	37.7	-12 51	9.2	9.8	Go	5	..	14183b
50	17211	37.3	-32 8	7.8	8.1	F8	5	..	40713b	100	6249	37.7	-12 52	9.3	10.1	G5	2	..	14183b

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	19273	37.7	-30 11	8.5	10.2	Ko	3	..	40713b	51	4853	38.1	+14 14	8.2	8.7	F8	3	..	3813oi
2	15709	37.7	-34 40	10.4	11.5	F8	2	..	39342b	52	5839	38.1	-6 55	8.3	9.3	Ko	6	..	19959b
3	15524	37.7	-36 29	8.6	10.6	G5	2	..	39342b	53	6322	38.1	-19 34	10.2	10.9	Ko	1	..	40751b
4	16049	37.7	-41 56	4.89	6.8	Ko	..	R	28,216	54	6473	38.1	-19 52	8.88	9.1	F8	5	..	40751b
5	14782	37.7	-45 5	9.9	10.5	G5	1	..	45071b	55	19274	38.1	-30 13	9.5	10.8	Go	2	..	40713b
6	3795	37.8	+46 32	8.1	8.1	Ao	4	1,4-	3802oi	56	15024	38.1	-44 38	8.8	9.2	F2	4	..	40872b
7	5031	37.8	+18 15	8.2	9.2	Ko	2	..	38835i	57	14296	38.1	-48 31	9.9	9.1	Ao	3	..	41899b
8	4803	37.8	+10 22	9.27	9.77	F8	1	..	3813oi	58	4814	38.1	-63 4	6.75	8.5	Ko	8	..	19899b
9	5059	37.8	+6 8	8.5	9.9	Ma	3	..	24324b	59	2960	38.2	+53 23	6.26	7.33	K2	5	..	38078i
10	4407	37.8	-0 6	8.0	8.8	G5	4	0,8	9782b	60	4028	38.2	+45 19	9.7	10.3	Go	1	..	6667m
11	5492	37.8	-3 3	10.6	11.2	Go	1	..	24041b	61	4276	38.2	+43 30	8.9	9.5	Go	3	0,2	6042m
12	5491	37.8	-3 12	8.3	8.3	B9	9	..	24041b	62	4389	38.2	+27 38	8.8	10.2	Mc	..	..	M
13	5740	37.8	-3 57	9.6	10.7	K2	3	..	24041b	63	4388	38.2	+27 28	7.9	7.9	B9	7	..	38597i
14	6038	37.8	-8 50	6.49	6.55	A2	4	2,7	44015b	64	4792	38.2	+17 59	8.7	9.5	G5	3	..	38835i
15	6037	37.8	-9 40	8.61	9.61	Ko	4	0,3	40844b	65	6039	38.2	-8 56	9.2	9.7	F8	6	..	19959b
16	6176	37.8	-18 22	8.7	9.7	Ko	3	..	40869b	66	6142	38.2	-16 40	8.1	8.6	F8	6	..	40869b
17	16294	37.8	-26 11	8.1	8.4	F5	7	..	40713b	67	6324	38.2	-19 21	4.88	6.8	K5	..	R	56,102
18	18939	37.8	-31 0	8.2	10.5	Mb	1	0,1	40713b	68	16032	38.2	-27 23	8.9	8.8	F8	5	..	40713b
19	15478	37.8	-35 1	8.42	9.7	K2	5	..	39342b	69	18941	38.2	-31 14	9.9	10.9	Ko	1	..	39342b
20	14882	37.8	-40 39	7.4	9.5	Mb	6	..	40872b	70	9942	38.2	-56 49	8.5	9.2	A3	5	..	42510b
21	6676	37.8	-61 1	6.44	7.6	F5	9	..	19899b	71	7594	38.2	-60 38	8.3	9.0	G5	6	..	19899b
22	3525	37.8	-68 9	9.9	11.0	K2	1	..	20543b	72	1212	38.2	-79 26	9.4	10.5	K2	2	..	42794b
23	3269	37.9	+52 19	9.0	9.1	A2	2	..	37028i	73	329	38.2	-87 34	9.6	10.2	Go	3	..	22980b
24	4274	37.9	+43 16	9.5	10.3	G5	3	..	6667m	74	1156	38.3	+71 56	9.2	10.2	Ko	1	..	38903i
25	4755	37.9	+35 9	8.92	9.92	Ko	1	..	38032i	75	1325	38.3	+68 51	9.2	9.2	Ao	1	..	3858oi
26	4439	37.9	+29 11	8.9	9.7	G5	1	..	38597i	76	2561	38.3	+59 24	8.0	8.0	Ao	3	0,3	38803i
27	5051	37.9	+7 2	9.7	10.2	F8	1	..	24324b	77	2792	38.3	+55 47	8.8	8.9	A2	2	..	37278i
28	4896	37.9	+4 27	7.30	8.37	K2	7	..	14184b	78	2961	38.3	+53 43	7.36	7.34	B9	6	..	38078i
29	4912	37.9	+0 41	6.90	6.98	A3	10	..	14184b	79	3449	38.3	+51 40	8.4	9.4	Ko	1	..	37028i
30	5742	37.9	-4 15	10.2	11.2	Ko	1	..	24041b	80	4030	38.3	+45 30	10.2	10.3	A2	1	..	6042m
31	4293	37.9	-64 28	7.08	7.2	Ao	10	..	20543b	81	4920	38.3	+36 55	7.28	7.34	A2	6	..	38564i
32	2043	37.9	-74 29	9.6	10.6	Ko	1	..	19967b	82	4741	38.3	+29 42	3.10	3.66	Go	..	R	1646c
33	1760	37.9	-75 18	8.8	9.2	F5	4	3,4	19967b	83	4698	38.3	+22 29	7.8	8.9	K2	4	..	3810oi
34	987	38.0	+73 52	8.8	9.8	Ko	3	..	38903i	84	18442	38.3	-29 44	10.6	11.7	K2	1	..	45149b
35	3447	38.0	+52 2	8.6	9.8	K5	1	..	37028i	85	14808	38.3	-39 18	10.6	11.4	Ao	1	..	39649b
36	4202	38.0	+45 0	9.7	9.7	B9	1	..	6042m	86	3704	38.3	-66 40	9.0	9.3	Fo	3	..	20543b
37	4275	38.0	+43 16	9.4	9.9	F8	3	..	6667m	87	1157	38.4	+72 1	9.5	10.3	G5	1	..	38903i
38	4875	38.0	+12 19	9.1	10.3	K5	1	..	3813oi	88	2836	38.4	+57 5	7.9	7.9	Ao	3	..	37278i
39	4915	38.0	+7 15	8.8	9.2	F5	4	..	24324b	89	2838	38.4	+56 55	8.6	8.6	Ao	2	..	37278i
40	5060	38.0	+6 5	9.1	8.9	G5	1	..	24324b	90	4204	38.4	+44 50	10.2	10.8	Go	1	..	6667m
41	4408	38.0	-0 10	9.3	10.5	K5	2	..	24041b	91	4670	38.4	+37 17	6.22	6.05	B3	8	..	38564i
42	5743	38.0	-3 58	10.0	10.5	F8	3	..	24041b	92	4802	38.4	+16 44	7.9	8.2	F2	4	..	3886oi
43	5838	38.0	-7 29	6.30	6.28	B9	7	..	44170b	93	4695	38.4	+15 45	8.6	9.7	K2	1	..	38835i
44	5837	38.0	-7 45	8.1	8.9	G5	6	..	40918b	94	5063	38.4	+5 22	8.56	9.56	Ko	3	..	14184b
45	6140	38.0	-16 25	8.5	8.6	A3	6	..	40869b	95	6063	38.4	-5 48	9.6	10.4	G5	2	..	19959b
46	16071	38.0	-24 54	9.10	9.4	Ko	5	..	24338b	96	6178	38.4	-18 8	8.5	9.1	Go	4	..	40869b
47	10340	38.0	-52 56	8.5	9.5	A2	4	..	42094b	97	6179	38.4	-18 39	9.8	10.9	K2	2	..	40869b
48	3271	38.1	+52 17	8.0	8.0	B9	6	..	37028i	98	6325	38.4	-19 15	9.8	10.9	Ko	1	..	40751b
49	3809	38.1	+48 44	7.8	7.9	A2	3	..	37028i	99	16033	38.4	-27 28	9.9	10.7	G5	3	..	45149b
50	4203	38.1	+44 35	9.5	10.6	K2	1	..	6042m	100	16034	38.4	-27 43	8.7	9.3	G5	5	..	40713b

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	17217	38.4	-32 12	9.5	11.6	Go	2	..	39342b	51	1701	38.8	+64 21	7.35	7.85	F8	4	..	37257i
2	16200	38.4	-33 38	10.2	11.6	F2	2	..	39342b	52	2963	38.8	+54 14	7.36	8.43	K2	3	..	38078i
3	15713	38.4	-33 59	8.2	10.3	Ko	5	..	39342b	53	4209	38.8	+45 1	8.4	9.5	K2	4	3,2	6042m
4	15144	38.4	-43 0	9.7	10.1	F8	3	..	40872b	54	4589	38.8	+41 51	var.	var.	Md	..	R	M
5	9944	38.4	-56 41	8.8	10.4	Ko	2	..	42510b	55	4867	38.8	+35 16	9.17	9.45	Fo	2	..	33749i
6	7993	38.4	-57 59	7.4	8.5	Ko	4	..	42510b	56	4784	38.8	+31 8	8.9	9.0	A3	2	..	38032i
7	7824	38.4	-58 59	8.2	8.7	Ko	2	..	42510b	57	4763	38.8	+3 21	7.53	8.03	F8	8	..	14184b
8	1564	38.4	-75 57	7.36	7.3	A2	10	..	42794b	58	..	38.8	-0 45	..	..	Ao	3	..	24041b
9	2587	38.5	+58 0	7.8	7.8	Ao	3	..	38078i	59	5820	38.8	-2 10	10.2	10.8	Go	3	..	24041b
10	3925	38.5	+49 37	8.0	8.1	A3	4	..	37028i	60	6041	38.8	-8 59	9.3	9.8	F8	2	..	19959b
11	4849	38.5	+38 14	8.7	8.7	Ao	3	..	38564i	61	6257	38.8	-13 13	9.3	10.3	Ko	5	0,3	39701b
12	4922	38.5	+36 26	9.2	9.2	Ao	1	..	38032i	62	6334	38.8	-14 11	9.6	10.1	F8	2	..	39701b
13	4757	38.5	+34 48	8.1	8.1	B9	4	..	38032i	63	6181	38.8	-18 39	10.5	11.5	Ko	1	..	40869b
14	4817	38.5	+21 53	9.2	9.6	F5	1	..	38100i	64	6475	38.8	-19 52	8.08	8.5	G5	7	..	40751b
15	4793	38.5	+17 49	8.8	9.6	G5	2	..	38835i	65	16080	38.8	-25 0	9.95	10.7	Go	2	..	45146b
16	4913	38.5	+0 17	10.0	10.5	F8	3	..	24041b	66	13782	38.8	-50 18	9.7	11.1	K2	1	..	41899b
17	5848	38.5	-5 44	9.1	10.2	K2	1	..	19959b	67	3706	38.8	-66 37	8.0	9.0	Ko	5	..	20543b
18	6334	38.5	-12 17	10.0	10.6	Go	3	..	24437b	68	2796	38.9	+56 8	8.8	8.8	A	2	..	37278i
19	6180	38.5	-18 3	9.2	10.0	G5	2	..	40869b	69	4210	38.9	+45 13	9.37	10.15	G5	2	..	6042m
20	18446	38.5	-29 27	9.4	9.4	Go	4	..	40713b	70	4211	38.9	+44 42	9.9	9.9	A	4	..	6667m
21	14906	38.5	-37 25	9.6	12.2	Ko	1	..	39649b	71	4282	38.9	+43 14	10.2	10.2	Ao	3	..	6667m
22	3916	38.5	-67 40	9.4	10.0	Go	2	..	20543b	72	4887	38.9	+41 10	9.2	9.5	Fo	1	..	38052i
23	1158	38.6	+72 12	8.0	8.1	A3	3	..	38903i	73	4785	38.9	+30 42	8.8	9.8	Ko	1	..	38032i
24	3797	38.6	+50 31	8.9	9.0	A2	2	..	37028i	74	4742	38.9	+29 34	8.3	9.1	G5	3	..	38597i
25	3801	38.6	+46 37	9.5	9.5	A	2	..	6667m	75	4606	38.9	+16 2	8.6	9.8	K5	2	..	38860i
26	4205	38.6	+44 45	9.4	10.2	G5	1	..	6667m	76	4764	38.9	+3 47	8.6	9.6	Ko	1	..	14184b
27	4279	38.6	+44 12	8.7	8.5	Bo	4	..	6042m	77	5496	38.9	-3 3	9.3	10.3	Ko	5	..	24041b
28	4497	38.6	+32 46	8.5	9.6	K2	2	..	38032i	78	5745	38.9	-3 50	10.5	11.3	G5	1	..	24041b
29	5819	38.6	-2 3	10.6	11.1	F8	2	..	24041b	79	6338	38.9	-12 39	10.0	11.0	Ko	2	..	24437b
30	5494	38.6	-2 53	10.5	11.1	Go	1	..	24041b	80	6264	38.9	-15 8	7.60	8.38	G5	6	..	39701b
31	6064	38.6	-5 58	9.6	10.6	Ko	2	..	19959b	81	16081	38.9	-25 11	10.2	10.8	F8	2	..	45146b
32	5842	38.6	-6 56	9.6	10.4	G5	1	..	19959b	82	18447	38.9	-29 24	9.9	10.7	F8	4	..	45149b
33	6336	38.6	-12 1	8.9	9.5	Go	3	..	14183b	83	18945	38.9	-31 39	7.7	9.0	Go	5	..	39342b
34	6326	38.6	-18 48	9.1	9.2	A3	6	..	40869b	84	14810	38.9	-39 20	9.2	10.1	G5	2	..	39649b
35	6474	38.6	-20 24	10.5	12.0	G5	1	..	24338b	85	13372	38.9	-51 43	9.5	10.8	G5	1	..	41899b
36	6291	38.6	-21 16	9.3	9.5	F8	5	..	24338b	86	2588	39.0	+57 54	8.0	8.0	B9	3	..	38078i
37	17576	38.6	-23 39	9.1	9.1	Go	6	..	24338b	87	3804	39.0	+46 43	9.7	9.8	A2	2	..	6667m
38	14886	38.6	-40 15	8.6	9.2	G5	5	..	39649b	88	4284	39.0	+43 42	10.2	10.2	Ao	3	..	6667m
39	10134	38.6	-57 21	7.12	8.3	Ko	6	..	42510b	89	4283	39.0	+43 38	10.2	10.2	Ao	3	..	6667m
40	4295	38.6	-63 59	8.2	9.3	K2	4	..	19899b	90	4500	39.0	+32 19	7.34	8.52	K5	3	..	38032i
41	3798	38.7	+50 15	8.22	8.30	A3	3	..	37028i	91	4771	39.0	+31 43	8.5	9.7	K5	1	..	38032i
42	3803	38.7	+46 38	6.42	6.40	B9	7	1,10	38844i	92	4920	39.0	+9 7	9.3	10.3	Ko	1	..	19027b
43	4805	38.7	+10 26	6.43	6.85	F5	8	..	38130i	93	5497	39.0	-3 16	10.2	11.2	Ko	2	..	24041b
44	5495	38.7	-2 54	10.5	11.0	F8	3	..	24041b	94	6043	39.0	-9 33	9.3	9.9	Go	4	..	19959b
45	16078	38.7	-25 38	10.6	11.1	G5	2	..	45146b	95	6044	39.0	-9 35	9.8	10.4	Go	3	..	19959b
46	14809	38.7	-39 5	8.6	8.6	G5	4	..	40940b	96	6265	39.0	-15 12	7.22	8.22	Ko	5	..	39701b
47	10136	38.7	-57 13	8.4	9.2	Go	5	..	42510b	97	6293	39.0	-20 51	10.6	10.9	Go	1	..	24338b
48	10135	38.7	-57 37	8.3	9.2	Ko	4	..	42510b	98	17303	39.0	-24 18	7.9	8.3	Ao	8	..	24338b
49	3528	38.7	-68 47	8.2	8.5	Fo	6	..	20543b	99	16301	39.0	-26 29	10.4	10.3	Ko	3	2,2	45149b
50	1055	38.8	+72 44	7.68	7.68	Ao	6	0,8	38025i	100	16302	39.0	-26 49	9.2	9.9	Ko	3	..	40713b

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	16038	39.0	-27 1	10.6	11.0	G5	2	..	45149b	51	5746	39.4	-4 7	10.0	10.6	Go	1	..	24041b
2	15488	39.0	-35 4	10.6	12.0	Ko	1	..	39342b	52	5932	39.4	-8 8	8.5	8.6	A5	7	..	19959b
3	868	39.1	+77 30	8.1	8.1	Ao	7	0,3	38903i	53	17307	39.4	-24 1	9.9	9.9	Ao	4	..	24338b
4	4852	39.1	+39 8	9.2	9.2	Ao	1	..	38052i	54	14892	39.4	-40 22	10.0	10.1	Ao	2	..	39649b
5	4442	39.1	+29 4	8.3	8.7	F5	3	..	38597i	55	14421	39.4	-46 4	8.5	9.2	Go	3	..	40872b
6	4488	39.1	+27 10	8.1	8.5	F5	4	..	38597i	56	4035	39.5	+45 23	9.32	9.32	Ao	3	..	6042m
7	4799	39.1	+26 8	8.9	9.9	Ko	1	..	38100i	57	4290	39.5	+43 50	9.5	9.6	A2	2	..	6042m
8	4917	39.1	+7 31	9.0	10.0	Ko	1	..	19027b	58	4593	39.5	+41 48	9.24	10.02	G5	1	..	38052i
9	5065	39.1	+6 13	7.70	8.12	F5	8	..	24324b	59	4855	39.5	+38 57	6.12	7.30	K5	7	..	38052i
10	4766	39.1	+3 30	9.1	9.2	A5	3	..	14184b	60	4444	39.5	+29 5	8.8	10.2	Ma	2	..	38597i
11	4341	39.1	-1 4	8.6	8.9	Fo	6	..	24041b	61	5217	39.5	+20 24	7.73	8.73	Ko	4	..	38100i
12	4340	39.1	-1 29	8.4	8.5	A3	8	..	24041b	62	4983	39.5	+13 46	7.58	8.58	Ko	5	..	38130i
13	6258	39.1	-13 40	10.2	11.2	Ko	1	..	39701b	63	4879	39.5	+13 10	8.2	9.2	Ko	3	..	38130i
14	6335	39.1	-13 58	9.8	10.4	Go	1	..	39701b	64	4900	39.5	+4 21	8.8	9.6	G5	3	..	14184b
15	6328	39.1	-19 37	9.43	10.0	Go	2	..	40751b	65	5822	39.5	-1 59	10.5	11.0	F8	4	..	24041b
16	6294	39.1	-21 28	10.0	10.6	Ko	2	..	24338b	66	5933	39.5	-8 21	9.6	10.2	Go	3	..	19959b
17	15006	39.1	-41 17	7.20	7.8	K2	8	..	40872b	67	6330	39.5	-19 21	8.6	9.1	Go	6	..	40751b
18	731	39.2	+80 52	6.90	7.40	F8	4	R	38590i	68	5988	39.5	-22 21	9.3	10.9	Ko	2	..	24338b
19	847	39.2	+80 52	6.90	7.40	A5	4	R	38590i	69	10123	39.5	-54 1	4.86	5.86	Ko	..	R	28,216
20	847	39.2	+76 10	9.27	9.27	Ao	2	..	38903i	70	1457	39.5	-77 59	9.3	10.3	Ko	3	..	42794b
21	1702	39.2	+65 9	7.80	7.80	Ao	4	..	37257i	71	1704	39.6	+64 48	6.76	6.57	B2	6	..	37257i
22	2797	39.2	+55 53	6.86	7.14	Fo	7	..	38078i	72	2843	39.6	+54 49	8.8	8.8	A	1	..	38078i
23	3452	39.2	+51 42	8.8	8.8	Ao	1	..	37028i	73	4594	39.6	+41 18	5.24	6.24	Ko	9	..	38020i
24	4032	39.2	+45 30	7.42	7.84	F5	6	3,7	38020i	74	5747	39.6	-4 30	10.5	11.3	G5	4	R	24041b
25	4287	39.2	+44 13	9.2	10.3	K2	3	..	6667m	75	6336	39.6	-14 7	9.3	10.1	G5	2	..	39701b
26	4487	39.2	+42 26	8.9	10.0	K2	1	..	38052i	76	6269	39.6	-15 20	9.6	10.6	Ko	1	..	39701b
27	4923	39.2	+37 10	8.3	8.4	A2	2	..	38564i	77	17583	39.6	-23 31	8.5	9.1	G5	6	..	24338b
28	4443	39.2	+28 45	8.1	8.1	B9	5	..	38597i	78	16039	39.6	-27 49	9.1	10.2	Ko	2	..	40713b
29	4982	39.2	+14 1	8.6	9.7	K2	2	..	38130i	79	15493	39.6	-35 5	10.2	12.5	K2	1	..	39342b
30	4917	39.2	+0 38	8.8	10.0	K5	3	..	24041b	80	14915	39.6	-36 53	10.2	12.5	Ko	1	..	39649b
31	5498	39.2	-2 47	10.2	11.2	Ko	2	..	24041b	81	16059	39.6	-41 53	9.4	9.8	Fo	4	..	40872b
32	6477	39.2	-19 49	9.18	10.0	Go	3	..	40751b	82	12066	39.6	-52 0	9.1	10.0	A2	2	..	41899b
33	5987	39.2	-22 32	9.6	10.9	G5	2	..	24338b	83	2336	39.7	+62 9	6.89	7.67	G5	7	0,2	38902i
34	19281	39.2	-30 46	9.1	10.7	Go	4	0,2	39342b	84	3821	39.7	+48 59	8.6	8.7	A2	1	..	38565i
35	4288	39.3	+44 0	7.34	8.34	Ko	3	0,6	38020i	85	4820	39.7	+21 25	7.9	9.1	K5	2	..	38100i
36	4573	39.3	+33 24	8.7	9.9	K5	2	..	38032i	86	4984	39.7	+13 20	8.5	8.9	F5	3	..	38130i
37	5821	39.3	-2 9	11.1	11.7	Go	2	..	24041b	87	4342	39.7	-1 1	9.0	9.8	G5	7	..	24041b
38	5499	39.3	-3 36	10.2	11.2	Ko	2	..	24041b	88	5855	39.7	-5 26	8.7	8.8	A3	4	..	19959b
39	5931	39.3	-8 39	10.5	11.1	Go	1	..	19959b	89	5847	39.7	-7 26	8.7	9.0	Fo	6	..	19959b
40	6260	39.3	-13 35	10.5	11.5	Ko	1	..	39701b	90	5934	39.7	-7 49	10.0	10.5	F8	2	..	19959b
41	6146	39.3	-16 28	9.3	10.1	G5	1	..	40751b	91	6338	39.7	-14 8	9.6	10.1	F8	3	..	39701b
42	14420	39.3	-46 6	8.3	9.2	F8	3	..	40872b	92	6337	39.7	-14 10	8.9	9.9	K	3	..	39701b
43	3918	39.3	-67 43	10.2	10.2	Ao	2	..	20543b	93	6295	39.7	-20 53	9.6	10.3	F8	2	..	24338b
44	3805	39.4	+46 53	6.97	7.97	Ko	3	0,8-	38844i	94	5989	39.7	-22 42	10.0	11.5	Ko	1	..	24338b
45	3806	39.4	+46 38	9.5	10.5	Ko	1	..	6667m	95	17585	39.7	-23 38	9.1	9.1	Go	6	..	24338b
46	4289	39.4	+43 20	8.5	9.7	K5	2	5,3	38052i	96	15721	39.7	-33 53	8.2	9.4	A2	6	..	39342b
47	4488	39.4	+42 22	8.6	8.7	A3	2	..	23970i	97	749	39.8	+79 41	8.9	9.0	A2	2	..	38590i
48	4489	39.4	+27 2	8.3	9.4	K2	2	..	38597i	98	870	39.8	+77 5	7.18	7.24	A2	6	0,8-	38025i
49	4918	39.4	+1 10	8.84	9.12	Fo	5	..	24041b	99	4037	39.8	+46 6	8.2	8.5	Fo	4	R	6042m
50	5500	39.4	-2 49	10.0	10.8	G5	3	..	24041b	100	4890	39.8	+41 0	8.7	8.8	A2	3	..	38052i

215400

22^h 39^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	4880	39.8	+12 48	8.8	9.8	Ko	1	..	3813oi	51	6149	40.1	-16 6	7.18	8.36	K5	6	R	40751b
2	4343	39.8	- 1 14	7.83	8.25	F5	10	..	24041b	52	16087	40.1	-25 46	6.85	6.9	Ao	6	o,I	43231b
3	5840	39.8	- 6 52	10.6	11.1	F8	2	..	40844b	53	15547	40.1	-36 26	9.3	11.7	Ko	2	..	39649b
4	18450	39.8	-29 10	10.2	11.4	F8	3	..	45149b	54	16061	40.1	-42 20	9.7	10.7	G5	2	o,I	45071b
5	14320	39.8	-47 4	5.42	7.6	Ko	..	0,9	56,149	55	14323	40.1	-47 44	9.9	9.8	Go	3	..	41899b
6	13952	39.8	-49 48	10.1	11.4	G5	1	..	41899b	56	13955	40.1	-49 30	6.80	7.7	Go	8	..	41899b
7	7997	39.8	-58 29	8.7	9.3	Ko	1	..	42510b	57	4039	40.2	+45 41	9.7	10.0	F2	2	..	6667m
8	2960	39.8	-70 3	7.84	9.0	K2	5	..	19967b	58	4216	40.2	+44 41	10.2	10.3	A2	2	..	6042m
9	3808	39.9	+46 47	10.2	10.3	A2	2	..	6667m	59	4811	40.2	+11 10	7.9	8.2	F2	7	..	3813oi
10	3807	39.9	+46 35	9.9	11.0	K2	1	..	6667m	60	5069	40.2	+ 5 52	8.4	8.7	Fo	3	E	9782b
11	4038	39.9	+45 50	9.5	9.6	A3	3	R	6667m	61	5068	40.2	+ 5 26	8.8	9.6	G5	2	E	9782b
12	4215	39.9	+44 29	9.4	9.4	Ao	3	..	6042m	62	4345	40.2	- 1 42	8.07	8.49	F5	9	..	24041b
13	4409	39.9	- 0 16	10.7	10.8	A2	2	..	24041b	63	5751	40.2	- 4 22	9.8	10.8	Ko	3	..	24041b
14	4344	39.9	- 0 53	10.0	10.6	Go	2	..	24041b	64	6262	40.2	-13 32	8.3	8.8	F8	7	o,8-	39701b
15	5501	39.9	- 3 11	8.7	9.2	F8	7	..	24041b	65	6586	40.2	-17 6	8.8	9.8	Ko	2	..	40751b
16	5850	39.9	- 7 11	10.5	11.7	K5	1	..	40844b	66	16044	40.2	-27 30	7.90	9.5	K2	5	..	40713b
17	5935	39.9	- 8 6	8.8	9.1	Fo	5	..	19959b	67	15148	40.2	-42 57	9.7	10.4	G5	2	..	40872b
18	6583	39.9	-16 49	9.3	9.9	Go	2	..	40751b	68	14428	40.2	-46 22	7.7	8.3	F5	6	..	41899b
19	6584	39.9	-17 7	8.7	9.1	F5	4	..	40751b	69	14324	40.2	-46 53	9.9	9.9	Go	2	..	41899b
20	6296	39.9	-21 24	9.3	10.0	F8	5	..	24338b	70	849	40.3	+75 37	9.02	9.10	A3	2	..	38903i
21	18452	39.9	-29 41	9.9	11.2	Go	3	..	45149b	71	3280	40.3	+53 14	7.44	8.51	K2	4	..	37028i
22	15545	39.9	-36 8	10.2	11.2	F8	3	..	39649b	72	4295	40.3	+44 0	9.7	10.7	Ko	3	..	6667m
23	14918	39.9	-37 38	9.2	10.3	F2	3	..	40858b	73	4858	40.3	+38 41	6.59	7.77	K5	4	..	38052i
24	9891	39.9	-55 35	6.60	7.8	Ko	7	..	42510b	74	5058	40.3	+ 7 12	9.5	10.1	Go	2	..	19027b
25	6681	39.9	-61 0	8.9	9.3	F8	2	..	19899b	75	4555	40.3	+ 3 10	8.0	9.1	K2	6	..	14184b
26	198	39.9	-88 45	9.9	10.7	G5	2	..	22980b	76	4921	40.3	+ 1 14	7.44	8.44	Ko	7	..	14184b
27	3823	40.0	+48 53	7.25	8.43	K5	2	..	38565i	77	4920	40.3	+ 0 49	8.8	9.1	Fo	6	..	24041b
28	4800	40.0	+17 31	8.6	9.2	Go	3	..	38835i	78	5851	40.3	- 7 24	10.5	11.1	Go	2	..	40844b
29	4986	40.0	+13 32	8.5	9.7	K5	1	..	3813oi	79	6297	40.3	-21 12	9.3	10.3	Ko	3	..	24338b
30	6340	40.0	-14 44	9.11	9.17	A2	4	..	39701b	80	17312	40.3	-24 22	9.7	10.2	G5	3	..	45146b
31	6147	40.0	-16 15	9.3	9.8	F8	4	..	40751b	81	16309	40.3	-26 34	10.6	10.8	F2	1	..	45146b
32	5991	40.0	-21 55	10.5	11.5	Go	2	..	24338b	82	15725	40.3	-34 20	8.9	10.6	Ko	5	o,I	39342b
33	5990	40.0	-22 5	10.5	11.5	Go	2	..	24338b	83	10138	40.3	-57 4	10.0	10.4	F5	1	..	42510b
34	17588	40.0	-23 9	8.9	9.4	Go	4	..	24338b	84	2432	40.4	+61 12	9.0	..	Nb	..	..	M
35	18955	40.0	-30 59	8.9	9.9	Ao	3	..	40713b	85	2430	40.4	+60 59	7.77	8.84	K2	2	..	38803i
36	17229	40.0	-32 38	7.8	9.9	K2	4	3,I	39342b	86	4040	40.4	+45 56	9.4	9.5	A2	3	..	6667m
37	15197	40.0	-38 37	9.0	9.2	F2	5	..	40858b	87	4041	40.4	+45 38	8.5	9.6	K2	2	..	6042m
38	2045	40.0	-74 23	9.6	10.1	F8	2	..	19967b	88	4296	40.4	+43 51	9.7	10.5	G5	2	..	6667m
39	989	40.1	+73 48	7.90	8.24	F2	5	..	38025i	89	4809	40.4	+16 30	8.6	9.0	F5	3	..	38835i
40	1539	40.1	+67 13	8.4	8.5	A2	3	..	38580i	90	4921	40.4	+ 7 26	9.3	10.3	Ko	1	..	19027b
41	2846	40.1	+55 4	8.6	8.6	Aop	2	R	37278i	91	5823	40.4	- 2 34	10.2	11.2	Ko	2	..	24041b
42	3809	40.1	+50 55	7.30	7.80	F8	5	..	37028i	92	6263	40.4	-13 1	10.6	11.4	G5	1	..	39701b
43	4293	40.1	+43 31	9.2	10.2	Ko	2	..	6042m	93	14922	40.4	-37 8	9.2	11.2	G5	3	..	39649b
44	4597	40.1	+41 33	8.6	9.4	G5	2	..	38052i	94	14304	40.4	-48 8	8.9	10.8	Ko	2	..	41899b
45	4600	40.1	+23 51	7.30	8.30	Ko	6	..	38100i	95	13956	40.4	-48 55	8.8	10.0	K2	3	..	41899b
46	4410	40.1	- 0 8	9.3	10.3	Ko	4	..	24041b	96	10345	40.4	-53 29	8.4	10.1	K5	2	..	42094b
47	5503	40.1	- 2 47	9.2	9.7	F8	6	..	24041b	97	10139	40.4	-57 7	8.9	10.2	Ko	2	..	42510b
48	5750	40.1	- 4 11	10.0	10.8	G5	2	..	24041b	98	2720	40.4	-72 10	9.6	10.2	Go	3	..	19967b
49	5982	40.1	-10 10	7.28	7.42	A5	9	..	14183b	99	1056	40.5	+73 15	8.9	9.0	A3	2	..	38903i
50	6341	40.1	-14 6	8.9	10.3	A5	6	..	39701b	100	1882	40.5	+64 3	7.8	8.4	Go	6	..	37257i

215500

22^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	2800	40.5	+55 20	8.11	8.19	A3	3	..	38078i	51	6067	40.9	- 5 57	9.6	10.2	Go	2	..	40844b
2	4681	40.5	+38 9	8.5	8.5	Ao	2	..	38564i	52	5940	40.9	- 8 3	10.0	11.0	Ko	2	..	40844b
3	5993	40.5	-22 44	9.3	10.3	Ko	4	..	24338b	53	5912	40.9	-11 41	6.68	8.03	Ma	8	0,8	39701b
4	13788	40.5	-50 12	6.52	7.9	Ko	8	..	41899b	54	6342	40.9	-12 4	8.5	9.5	Ko	5	2,3-	39701b
5	2961	40.5	-70 0	6.94	7.2	Fo	9	..	19967b	55	6343	40.9	-12 41	8.7	9.7	Ko	5	5,7	14183b
6	3281	40.6	+52 46	8.22	9.40	K5	..	..	M	56	6266	40.9	-13 27	10.5	11.1	Go	1	..	39701b
7	4042	40.6	+45 42	9.5	9.5	Ao	2	..	6042m	57	6344	40.9	-14 3	9.1	9.7	Go	3	..	39701b
8	4297	40.6	+43 18	9.9	10.0	A2	1	..	6042m	58	18960	40.9	-31 2	8.9	10.5	F8	4	2,2	39342b
9	4874	40.6	+35 49	8.2	9.3	K2	1	..	38032i	59	15038	40.9	-44 48	9.40	9.2	A2	5	..	40872b
10	5046	40.6	+18 51	6.45	7.45	Ko	8	..	38100i	60	14306	40.9	-48 50	8.0	9.0	Ko	5	..	41899b
11	4769	40.6	+ 4 0	8.5	8.8	Fo	5	..	14184b	61	9896	40.9	-54 56	8.38	8.6	F5	4	..	42510b
12	4557	40.6	+ 3 6	8.4	8.4	B9	8	..	14184b	62	3709	40.9	-66 5	6.52	8.1	Ko	9	..	20543b
13	6150	40.6	-16 7	9.3	10.1	G5	1	..	40751b	63	2849	41.0	+54 26	9.2	9.2	Ao	1	..	37278i
14	6298	40.6	-21 22	10.2	12.1	K5	1	..	24338b	64	4044	41.0	+45 16	9.9	10.7	G5	1	..	6042m
15	17924	40.6	-27 54	9.9	11.4	G5	2	..	45149b	65	4219	41.0	+44 20	9.0	9.0	Ao	4	..	6042m
16	16214	40.6	-33 19	8.2	9.3	Ko	5	..	39342b	66	4298	41.0	+44 14	7.04	7.02	B9	7	1,9	38020i
17	13379	40.6	-51 34	7.7	9.3	Mb	4	..	41899b	67	4446	41.0	+28 51	8.9	9.9	Ko	1	..	38597i
18	3460	40.7	+51 59	6.66	7.73	K2	4	..	38078i	68	4883	41.0	+12 15	9.7	9.8	A2	1	..	38130i
19	4217	40.7	+44 18	8.6	9.1	F8	3	..	6042m	69	15551	41.0	-36 26	9.8	11.2	F8	2	..	39649b
20	4491	40.7	+43 9	9.5	10.3	G5	2	..	6042m	70	14821	41.0	-39 50	10.9	10.7	F5	1	..	39649b
21	4580	40.7	+33 48	8.2	9.4	K5	2	..	38032i	71	14800	41.0	-45 34	8.3	8.3	F2	6	..	40872b
22	4601	40.7	+23 47	8.8	9.8	Ko	1	..	38100i	72	14438	41.0	-46 36	8.3	9.0	F2	3	..	41899b
23	4821	40.7	+21 48	8.7	8.8	A2	3	..	38100i	73	1055	41.0	-80 39	5.52	5.40	B5	..	R	56,149
24	4346	40.7	- 1 28	7.8	8.8	Ko	7	..	24041b	74	741	41.0	-83 45	9.8	9.8	A	3	..	15173b
25	6051	40.7	- 8 47	9.8	10.6	G5	1	..	19959b	75	2433	41.1	+60 18	8.11	8.06	B8	4	..	38803i
26	6264	40.7	-13 11	10.0	10.6	Go	2	..	39701b	76	4299	41.1	+43 49	8.9	10.0	K2	2	..	6042m
27	6187	40.7	-17 49	9.8	10.6	G5	1	..	40751b	77	4495	41.1	+43 7	9.9	10.5	Go	3	..	6667m
28	6186	40.7	-18 38	9.8	10.4	Go	3	..	40751b	78	5048	41.1	+18 43	8.0	9.0	Ko	4	..	38100i
29	6299	40.7	-21 36	10.2	10.4	Go	2	..	24338b	79	4416	41.1	- 0 1	10.3	10.6	Fo	2	..	24041b
30	15500	40.7	-35 30	8.9	10.6	F2	3	..	39342b	80	4414	41.1	- 0 23	9.3	9.6	Fo	5	..	24041b
31	15550	40.7	-36 40	8.6	10.6	G5	3	..	39342b	81	4415	41.1	- 0 25	9.7	10.3	Go	2	..	24041b
32	7600	40.7	-60 36	7.9	8.7	Go	5	..	19899b	82	5986	41.1	-10 14	8.1	9.1	Ko	3	..	14183b
33	2338	40.8	+61 40	8.0	9.1	K2	1	..	38803i	83	6336	41.1	-18 49	8.1	8.9	G5	8	..	40751b
34	4043	40.8	+46 10	9.5	9.6	A3	2	3,3	6042m	84	14822	41.1	-39 0	10.9	11.5	Go	1	..	39649b
35	4218	40.8	+45 10	9.4	10.2	G5	1	..	6042m	85	15152	41.1	-43 3	7.8	8.9	Ko	5	..	40872b
36	4707	40.8	+22 34	8.9	9.3	F5	1	..	38100i	86	3919	41.1	-67 19	8.8	9.3	F8	2	..	20543b
37	4822	40.8	+22 4	9.1	10.2	K2	1	..	38100i	87	742	41.1	-83 14	8.5	9.5	Ko	3	..	15165b
38	5219	40.8	+20 30	9.4	9.9	F8	2	..	33745i	88	2595	41.2	+57 37	6.51	6.93	F5	8	..	38078i
39	4412	40.8	- 0 45	10.7	11.3	Go	1	..	24041b	89	2973	41.2	+54 11	8.5	9.5	Ko	1	..	37278i
40	6340	40.8	-12 42	10.0	10.6	Go	2	..	39701b	90	3817	41.2	+50 58	8.0	8.0	B9	4	..	37028i
41	6343	40.8	-14 22	8.3	9.3	Ko	4	..	39701b	91	3910	41.2	+47 38	7.8	7.8	Ao	2	..	38844i
42	6272	40.8	-15 4	9.2	10.0	G5	2	..	39701b	92	4603	41.2	+41 22	8.0	8.0	Ao	3	..	38020i
43	16313	40.8	-26 17	10.4	10.7	G5	3	..	45146b	93	4901	41.2	+40 41	8.8	9.8	Ko	2	..	23970i
44	15037	40.8	-44 24	8.8	9.9	G5	2	..	40872b	94	4508	41.2	+32 20	8.5	9.3	G5	2	..	38032i
45	14331	40.8	-47 28	6.84	7.7	A5	..	5,9	56,149	95	5220	41.2	+21 10	8.7	9.2	F8	2	..	38100i
46	850	40.9	+76 5	9.4	9.5	A3	1	..	38903i	96	5942	41.2	- 8 21	9.3	9.7	F5	4	..	19959b
47	3815	40.9	+46 41	7.7	9.1	Mb	4	5,1	6042m	97	6054	41.2	- 8 55	8.3	9.3	Ko	6	..	19959b
48	4493	40.9	+42 59	8.8	8.9	A2	3	1,2-	6042m	98	6268	41.2	-13 25	9.8	10.6	G5	2	..	39701b
49	4753	40.9	+29 55	6.52	7.52	Ko	5	..	38597i	99	6590	41.2	-17 34	9.2	10.0	G5	3	..	40751b
50	4815	40.9	+10 40	7.48	8.26	G5	6	..	38130i	100	6301	41.2	-20 47	8.7	10.0	K2	4	..	40751b

THE HENRY DRAPER CATALOGUE.

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22^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	17234	41.2	<i>m.</i> -32 24	7.8	8.5	Go	5	0,4	39342b	51	5825	41.6	<i>o</i> - 2 35	10.5	11.1	Go	2	..	24041b
2	15208	41.2	-38 1	9.6	10.7	G5	1	..	40858b	52	6068	41.6	- 6 28	9.1	9.4	Fo	3	..	19959b
3	14903	41.2	-39 53	10.9	11.5	Ko	1	..	39649b	53	6591	41.6	-16 56	8.1	8.1	Ao	8	..	40751b
4	1213	41.2	-79 43	9.3	10.5	K5	3	..	38135b	54	6485	41.6	-19 51	9.8	10.3	Go	3	..	40751b
5	2597	41.3	+57 20	9.5	9.3	B	2	..	M	55	18963	41.6	-31 19	9.7	11.4	F5	2	..	39342b
6	2851	41.3	+56 37	7.9	8.0	A2	3	..	38078i	56	15507	41.6	-35 9	10.2	11.5	Go	2	..	39342b
7	3286	41.3	+52 51	7.54	8.61	K2	2	R	37028i	57	14803	41.6	-45 29	7.50	7.8	Go	10	..	40872b
8	3817	41.3	+46 38	8.1	8.2	A2	5	..	6042m	58	9899	41.6	-55 1	8.34	8.7	Go	4	..	42510b
9	4045	41.3	+45 45	9.9	9.9	Ao	1	..	6042m	59	10143	41.6	-57 37	8.7	9.5	Go	2	..	42510b
10	4220	41.3	+44 38	10.2	10.2	A	1	..	6042m	60	7830	41.6	-59 13	7.0	8.4	K2	5	..	19899b
11	4928	41.3	+36 40	8.1	8.2	A5	2	..	33749i	61	1463	41.7	+67 36	8.6	8.7	A2	3	..	38580i
12	4417	41.3	- 0 2	10.3	10.8	F8	2	..	24041b	62	3462	41.7	+52 0	9.2	9.2	B9	1	..	37028i
13	6269	41.3	-13 25	10.2	10.8	Go	1	..	39701b	63	4046	41.7	+45 52	10.2	11.0	G5	1	..	6667m
14	16315	41.3	-25 56	8.2	9.3	G5	5	..	45146b	64	4300	41.7	+44 1	5.84	6.12	Fo	9	2,10	38020i
15	16316	41.3	-26 42	11.1	10.4	Go	2	..	45146b	65	4709	41.7	+23 2	4.14	5.14	Ko	..	R	2117c
16	16217	41.3	-33 42	6.78	7.4	G5	7	..	40733b	66	4874	41.7	+12 10	9.1	10.1	Ko	1	..	38130i
17	2723	41.3	-71 28	7.9	9.1	K5	5	..	19967b	67	4903	41.7	+ 4 23	8.0	8.1	A5	7	..	14184b
18	3818	41.4	+50 47	7.8	9.0	K5	1	..	38565i	68	18966	41.7	-31 46	9.7	10.5	G5	1	..	39342b
19	4766	41.4	+35 9	7.62	8.04	F5	4	..	38564i	69	15735	41.7	-34 41	6.37	7.5	Ko	8	2,8	40733b
20	4499	41.4	+26 18	8.3	8.4	A2	3	..	38100i	70	2725	41.7	-71 47	9.7	10.8	K2	1	..	19967b
21	4603	41.4	+23 43	8.9	9.9	Ko	2	..	23945i	71	1555	41.7	-76 53	8.9	9.4	F8	5	..	42794b
22	4604	41.4	+23 39	8.9	9.5	Go	2	..	23945i	72	1214	41.7	-79 12	9.7	10.5	G5	3	..	42794b
23	4819	41.4	+11 12	9.3	10.1	G5	1	..	38130i	73	..	41.8	+54 33	..	..	R5	..	..	M
24	6345	41.4	-14 5	10.5	10.6	A2	1	..	39701b	74	4228	41.8	+44 58	9.4	9.9	F8	2	..	6042m
25	6303	41.4	-21 19	8.0	8.4	F8	8	..	24338b	75	4497	41.8	+42 20	7.6	8.7	K2	1	..	38020i
26	16317	41.4	-26 39	10.9	11.3	F5	1	..	45146b	76	4866	41.8	+14 28	7.83	8.83	Ko	4	..	38130i
27	16071	41.4	-42 13	7.4	8.2	Ko	..	0,8	28,216	77	5988	41.8	- 9 50	10.0	11.2	K5	1	..	19959b
28	15043	41.4	-44 8	8.8	9.2	Go	6	..	40872b	78	15509	41.8	-35 21	7.21	8.1	Ko	6	2,5	40733b
29	15041	41.4	-44 25	8.7	9.3	K2	4	..	40872b	79	15214	41.8	-37 59	9.8	10.4	Go	2	..	40858b
30	3531	41.4	-68 48	9.1	9.7	Go	2	..	20543b	80	13385	41.8	-50 53	9.7	11.4	Ko	1	..	41899b
31	1554	41.4	-77 35	6.68	6.6	A2	10	..	42794b	81	8000	41.8	-58 48	9.1	9.4	K2	1	..	42510b
32	2975	41.5	+53 49	8.6	8.6	Ao	2	0,2	37028i	82	6369	41.8	-62 13	6.34	7.6	Ko	9	..	19899b
33	3288	41.5	+52 21	7.01	8.01	Ko	4	..	38078i	83	3711	41.8	-66 49	9.2	9.7	F8	1	..	20543b
34	3828	41.5	+48 25	8.4	8.4	Ao	2	..	38565i	84	3464	41.9	+51 34	8.0	8.3	Fo	7	..	37028i
35	4686	41.5	+37 58	7.9	9.0	K2	2	..	38564i	85	4220	41.9	+45 11	10.2	10.2	A	1	..	6042m
36	4928	41.5	+ 8 56	9.0	9.3	Fo	3	..	19027b	86	4302	41.9	+43 20	8.0	8.3	F2	4	0,4	38020i
37	4924	41.5	+ 7 20	8.8	9.6	G5	3	..	19027b	87	4499	41.9	+42 49	8.4	8.5	A5	2	..	23970i
38	5060	41.5	+ 7 4	6.84	7.18	F2	9	..	24324b	88	4688	41.9	+37 53	8.1	9.2	K2	3	..	38564i
39	6483	41.5	-20 26	9.1	10.0	G5	4	..	40751b	89	4809	41.9	+25 29	8.26	9.33	K2	1	..	38100i
40	16319	41.5	-26 50	8.1	9.5	G5	5	5,4	45146b	90	4810	41.9	+25 17	7.86	7.86	Ao	7	..	38100i
41	16219	41.5	-33 12	7.44	8.0	G5	8	..	39342b	91	4654	41.9	+25 5	9.11	9.67	Go	4	..	33745i
42	15506	41.5	-35 52	9.2	11.2	G5	3	..	39342b	92	4867	41.9	+14 41	9.0	9.8	G5	2	..	38835i
43	14905	41.5	-39 59	7.93	8.9	G5	6	..	40858b	93	4929	41.9	+ 8 25	9.1	10.1	Ko	2	..	19027b
44	10142	41.5	-57 39	8.7	9.2	F5	2	..	42510b	94	4927	41.9	+ 7 27	9.7	10.3	Go	1	..	19027b
45	..	41.5	-75 3	..	..	K2	1	..	38231b	95	5945	41.9	- 8 42	9.3	10.4	K2	3	..	19959b
46	4224	41.6	+45 5	8.92	8.92	Ao	4	2,1	6042m	96	6152	41.9	-16 40	7.36	7.92	Go	8	..	40751b
47	4925	41.6	+39 47	8.8	8.8	Ao	2	..	38052i	97	6190	41.9	-18 22	9.8	10.4	Go	2	..	40751b
48	4875	41.6	+11 40	4.31	4.73	F5	..	R	1370c	98	5997	41.9	-22 23	9.6	11.2	Ko	2	..	24338b
49	5061	41.6	+ 7 7	9.0	10.1	K2	2	..	19027b	99	17933	41.9	-27 54	8.2	9.0	Ko	4	..	40713b
50	4648	41.6	+ 1 25	9.0	10.2	K5	4	..	24041b	100	15556	41.9	-36 3	8.6	10.3	G5	3	..	39342b

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22^h 41^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	15159	41.9	-43 25	9.7	10.1	F8	2	..	40872b	51	5947	42.3	- 7 58	9.3	9.7	F5	3	..	19959b
2	3270	41.9	-69 20	8.8	9.3	F8	4	..	20543b	52	5999	42.3	-22 41	9.1	9.7	A3	4	..	24338b
3	991	42.0	+73 55	8.06	9.24	K5	1	..	38025i	53	5998	42.3	-22 44	9.1	10.0	Go	2	..	24338b
4	3937	42.0	+49 41	7.98	8.98	Ko	2	..	37028i	54	17605	42.3	-23 12	9.5	10.6	F5	2	..	45146b
5	4047	42.0	+45 41	6.80	7.98	K5	5	3,7	38020i	55	16056	42.3	-27 32	10.4	11.5	K2	2	..	45149b
6	5073	42.0	+ 6 1	8.2	9.4	K5	1	..	9782b	56	15049	42.3	-44 47	9.78	10.7	K2	1	..	45071b
7	4772	42.0	+ 3 38	8.6	9.1	F8	4	..	14184b	57	2856	42.4	+54 21	6.78	6.78	Ao	7	..	38078i
8	5505	42.0	- 3 15	7.52	7.94	F5	9	..	24041b	58	3824	42.4	+46 36	9.4	9.4	B9	2	..	6042m
9	6192	42.0	-18 5	6.85	7.27	F5	10	..	40751b	59	4231	42.4	+45 13	9.7	9.7	Ao	3	..	6042m
10	6305	42.0	-21 35	8.7	9.7	Ko	4	..	24338b	60	4864	42.4	+38 53	7.44	7.94	F8	4	..	38052i
11	12071	42.0	-52 2	7.5	7.9	Ko	6	..	41899b	61	5225	42.4	+20 56	9.4	9.7	F	2	..	33745i
12	1761	42.0	-75 22	9.8	10.6	G5	2	..	38231b	62	4989	42.4	+13 38	7.08	8.15	K2	7	..	38130i
13	1215	42.0	-79 41	9.1	9.7	Go	7	..	38135b	63	4562	42.4	+ 2 22	8.0	8.6	Go	6	..	14184b
14	2601	42.1	+57 33	8.0	8.5	F8	4	..	38078i	64	5863	42.4	- 4 50	9.25	10.43	K5	1	..	9783b
15	4405	42.1	+27 59	8.8	8.9	A2	3	..	38597i	65	6057	42.4	- 8 53	10.0	10.8	G5	1	..	19959b
16	4828	42.1	+22 9	8.5	9.7	K5	2	..	38100i	66	6346	42.4	-14 35	5.70	5.68	B9	..	1,7	56,102
17	4868	42.1	+14 21	8.4	9.6	K5	2	..	38130i	67	17332	42.4	-24 39	8.5	10.7	Ko	3	..	45146b
18	5858	42.1	- 7 16	8.2	8.5	Fo	8	..	19959b	68	15219	42.4	-38 16	7.8	8.3	Go	6	2,9	40940b
19	6193	42.1	-18 7	9.1	10.1	Ko	1	..	40751b	69	4300	42.4	-64 15	6.72	6.1	B9	7	..	44236b
20	6337	42.1	-19 42	8.38	8.8	Fo	7	..	40751b	70	1713	42.5	+64 46	7.55	8.33	G5	2	..	37257i
21	6486	42.1	-20 8	5.43	6.7	G5	..	..	56,149	71	2605	42.5	+58 11	8.7	9.7	Ko	1	..	38803i
22	16105	42.1	-25 5	9.7	12.2	Ko	1	..	45146b	72	3825	42.5	+46 39	8.2	8.6	F5	4	..	6042m
23	17935	42.1	-27 53	10.2	11.8	Ko	2	..	45149b	73	..	42.5	+46 11	..	..	K2	1	..	6667m
24	15217	42.1	-38 45	6.70	7.8	Go	..	5,8-	56,149	74	4606	42.5	+23 28	8.1	8.4	Fo	3	..	38100i
25	16076	42.1	-42 5	9.7	9.2	F8	5	..	40872b	75	4809	42.5	+17 18	8.6	9.6	Ko	3	..	38835i
26	15160	42.1	-43 13	9.3	10.2	K5	2	..	40872b	76	5103	42.5	+ 9 54	9.7	10.5	G5	2	..	19027b
27	15047	42.1	-43 54	9.4	10.1	K2	2	..	40872b	77	5064	42.5	+ 7 11	7.6	7.7	A5	8	..	19027b
28	8001	42.1	-58 27	8.7	9.0	A3	2	..	42510b	78	5077	42.5	+ 5 22	7.61	8.11	F8	7	..	9782b
29	2726	42.1	-70 52	6.38	6.3	A2	7	..	36171b	79	6272	42.5	-13 2	8.7	9.0	Fo	5	..	39701b
30	871	42.2	+77 58	7.26	7.26	Ao	4	..	38590i	80	6273	42.5	-13 7	9.3	10.1	G5	2	..	39701b
31	4770	42.2	+34 54	8.5	8.6	A5	2	..	38032i	81	6195	42.5	-18 40	9.2	10.2	Ko	2	..	40751b
32	4763	42.2	+29 22	8.3	9.4	K2	2	..	38597i	82	16324	42.5	-26 26	6.48	6.4	G5	9	..	45146b
33	4814	42.2	+16 43	7.7	7.5	B2	6	R	38835i	83	16058	42.5	-26 56	10.2	11.6	Go	3	..	45149b
34	6274	42.2	-15 40	8.5	8.8	Fo	4	..	40751b	84	18461	42.5	-29 3	8.5	9.4	Ko	3	..	40713b
35	6592	42.2	-17 35	9.3	10.1	G5	3	..	40751b	85	17244	42.5	-32 18	9.0	9.9	Go	3	..	39342b
36	6194	42.2	-18 37	8.5	9.3	G5	5	..	40751b	86	17243	42.5	-32 22	8.9	10.2	G5	3	..	39342b
37	17604	42.2	-23 42	8.7	8.8	Go	6	..	45146b	87	15220	42.5	-38 35	9.2	10.9	K2	1	..	40858b
38	16055	42.2	-27 48	9.9	11.2	F8	2	..	45149b	88	14806	42.5	-45 46	8.8	8.7	F5	4	..	40872b
39	18968	42.2	-31 49	9.1	11.4	F8	2	..	39342b	89	13389	42.5	-51 51	3.69	3.75	A2	..	R	28,216
40	15560	42.2	-36 45	9.8	11.7	Ko	1	..	39649b	90	2983	42.6	+53 19	8.4	8.4	A	1	..	37278i
41	4299	42.2	-64 5	8.9	9.9	Ko	2	..	19899b	91	4232	42.6	+44 15	8.0	8.0	Ao	2	1,5	38020i
42	4087	42.2	-64 59	8.62	9.7	K2	2	..	19899b	92	4609	42.6	+41 17	9.2	10.2	Ko	1	..	38052i
43	335	42.3	+86 46	8.07	8.07	Ao	4	..	37281i	93	4803	42.6	+30 31	7.91	7.97	A2	5	..	38032i
44	4048	42.3	+45 50	10.2	10.3	A2	1	..	6042m	94	5507	42.6	- 3 22	9.3	9.4	A5	3	..	9783b
45	4905	42.3	+40 46	9.5	9.5	Ao	1	..	38052i	95	5508	42.6	- 3 34	9.8	11.0	K5	1	..	9783b
46	4824	42.3	+11 3	9.1	9.7	Go	2	..	38130i	96	5949	42.6	- 7 54	10.6	11.2	Go	3	..	40844b
47	4649	42.3	+ 1 16	9.14	10.14	Ko	3	..	24041b	97	6001	42.6	-22 10	8.5	9.7	G5	5	..	24338b
48	4923	42.3	+ 0 37	8.8	9.8	Ko	4	..	24041b	98	16325	42.6	-26 48	10.9	11.8	Go	1	..	45149b
49	5826	42.3	- 2 19	7.58	8.65	K2	4	..	9782b	99	18462	42.6	-29 29	10.4	11.2	Go	2	..	45149b
50	5506	42.3	- 3 53	10.0	10.4	F5	4	..	24041b	100	14807	42.6	-45 2	8.94	9.5	Ko	3	..	40872b

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22^h 42^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	14447	42.6	-46 35	10.1	10.4	F8	1	..	45071b	51	4926	43.0	+ 0 49	8.6	9.6	Ko	4	..	24041b
2	14318	42.6	-48 5	9.5	10.8	G5	2	..	41899b	52	17943	43.0	-28 5	6.94	8.1	Go	8	..	40713b
3	9904	42.6	-54 53	9.28	10.9	K2	1	..	42094b	53	15752	43.0	-34 45	10.9	11.7	F8	2	..	39342b
4	2727	42.6	-71 43	9.4	10.0	Go	3	..	19967b	54	12073	43.0	-52 27	8.7	10.0	K5	2	..	42094b
5	983	42.7	+74 25	9.0	9.0	Ao	3	..	38903i	55	994	43.1	+74 2	7.66	8.84	K5	2	..	38025i
6	2606	42.7	+57 46	0.4	9.2	B	3	..	M	56	4051	43.1	+45 41	7.97	7.95	B9	4	0.7	38020i
7	2985	42.7	+53 25	8.7	9.1	F5	2	..	37278i	57	4306	43.1	+44 2	9.4	9.9	F8	2	..	6042m
8	2984	42.7	+53 16	8.1	8.7	G	1	..	37278i	58	4771	43.1	+35 9	9.12	9.90	G5	1	..	38032i
9	5104	42.7	+ 9 49	8.4	9.4	Ko	5	0.3	19027b	59	4889	43.1	+12 29	8.5	9.3	G5	4	5.3	38130i
10	5510	42.7	- 3 6	9.3	10.3	Ko	3	..	24041b	60	5079	43.1	+ 5 20	7.81	8.23	F5	5	..	9782b
11	5509	42.7	- 3 25	9.3	10.5	K5	1	..	9783b	61	4774	43.1	+ 3 27	8.23	9.23	Ko	4	..	14184b
12	5757	42.7	- 4 45	6.75	7.31	Go	8	..	9783b	62	6074	43.1	- 6 18	8.7	9.8	K2	3	..	19959b
13	5759	42.7	- 4 46	8.67	9.09	F5	4	..	9783b	63	15519	43.1	-35 18	7.45	7.7	Ao	8	..	40733b
14	6071	42.7	- 5 56	9.8	9.9	A3	2	..	19959b	64	14937	43.1	-37 24	9.6	11.2	K2	1	..	40858b
15	6276	42.7	-13 7	10.2	10.8	Go	1	..	39701b	65	14347	43.1	-46 57	10.1	10.4	Go	2	..	45071b
16	6593	42.7	-17 5	8.8	9.8	Ko	2	..	40751b	66	789	43.2	+81 58	7.97	8.97	Ko	2	..	38964i
17	17335	42.7	-24 38	9.9	10.4	Go	1	..	45146b	67	750	43.2	+79 55	7.11	8.11	Ko	4	..	38590i
18	15051	42.7	-43 58	7.1	7.8	G5	9	..	40872b	68	2859	43.2	+57 4	8.6	8.6	B9	4	..	38078i
19	14320	42.7	-48 38	10.3	10.5	Go	2	..	41899b	69	3295	43.2	+52 51	6.71	6.77	A2	7	..	38078i
20	2966	42.7	-70 41	9.4	10.0	Go	2	..	19967b	70	3826	43.2	+47 7	8.0	9.1	K2	2	..	6042m
21	2858	42.8	+56 18	8.0	8.0	Ao	3	..	38078i	71	4910	43.2	+40 33	8.7	9.3	Go	1	..	38052i
22	3292	42.8	+52 34	8.8	8.8	Ao	1	..	37028i	72	6075	43.2	- 5 50	8.9	9.9	Ko	3	..	19959b
23	4050	42.8	+45 29	9.0	9.8	G5	1	..	6042m	73	5952	43.2	- 8 38	8.1	9.2	K2	7	..	19959b
24	4563	42.8	+ 2 42	10.0	10.1	A3	2	..	9782b	74	5923	43.2	-11 5	6.15	6.43	Fo	5	..	44015b
25	4924	42.8	+ 0 37	9.0	9.5	F8	4	..	24041b	75	6196	43.2	-17 47	8.1	8.1	Ao	8	..	40751b
26	6072	42.8	- 6 36	10.5	11.1	Go	2	..	40844b	76	15520	43.2	-35 39	9.6	10.6	Go	3	..	39342b
27	5861	42.8	- 7 5	9.3	9.6	F2	2	..	19959b	77	14810	43.2	-45 8	8.9	8.7	Go	6	..	40872b
28	5950	42.8	- 8 1	9.6	10.4	G5	2	..	19959b	78	390	43.3	+86 8	8.8	9.6	G5	2	..	37281i
29	6351	42.8	-12 22	9.8	11.0	K5	2	..	39701b	79	2862	43.3	+56 41	9.4	9.4	Ao	2	..	37278i
30	6155	42.8	-16 16	9.3	10.1	G5	2	..	40751b	80	4054	43.3	+46 13	8.2	9.0	G5	3	..	6042m
31	6340	42.8	-19 33	9.3	10.0	F8	4	..	40751b	81	4771	43.3	+30 6	8.16	9.34	K5	1	..	38032i
32	1556	42.8	-77 19	8.7	9.7	Ko	4	..	42794b	82	4815	43.3	+25 23	8.46	8.80	F2	3	..	38100i
33	788	42.9	+81 22	7.70	8.70	Ko	2	..	38590i	83	4610	43.3	+23 28	8.7	9.7	Ko	1	..	38100i
34	874	42.9	+76 41	8.6	8.7	A2	6	0.2	38903i	84	4827	43.3	+10 21	9.02	9.80	G5	2	0.1	19027b
35	2607	42.9	+57 33	8.6	8.4	B	5	..	M	85	4929	43.3	+ 7 36	9.5	10.0	F8	1	..	19027b
36	2809	42.9	+55 54	9.2	9.0	B	3	..	M	86	5866	43.3	- 5 6	8.3	9.3	Ko	6	..	19959b
37	3293	42.9	+53 13	8.2	8.2	Ao	3	0.3	37278i	87	6076	43.3	- 6 8	9.3	9.9	Go	2	..	19959b
38	4832	42.9	+21 14	9.1	9.6	F8	3	..	33745i	88	18468	43.3	-29 11	9.2	10.7	G5	3	..	45149b
39	4888	42.9	+12 26	9.0	9.8	G5	2	..	38130i	89	15756	43.3	-34 10	10.2	11.5	Go	4	..	39342b
40	4925	42.9	+ 0 20	9.63	10.41	G5	3	..	24041b	90	15757	43.3	-34 51	9.82	11.5	Go	4	..	39342b
41	6059	42.9	- 8 54	9.6	9.7	A5	4	..	19959b	91	14913	43.3	-40 23	7.6	9.5	Ko	5	..	40858b
42	6487	42.9	-20 14	8.7	9.4	Ko	4	..	40751b	92	15054	43.3	-43 59	9.7	10.1	G5	2	..	40872b
43	18975	42.9	-30 54	9.2	10.2	Ko	2	..	39342b	93	10350	43.3	-53 24	9.3	10.0	Go	1	..	42094b
44	15749	42.9	-34 42	9.6	11.7	K2	3	..	39342b	94	10137	43.3	-54 28	8.3	8.5	F8	4	..	42094b
45	14346	42.9	-47 19	9.9	10.1	Go	2	..	41899b	95	1330	43.4	+68 55	8.6	8.6	Ao	1	..	38580i
46	13798	42.9	-50 49	9.9	10.8	F5	1	..	41899b	96	3924	43.4	+47 17	7.7	7.7	Ao	2	..	38020i
47	2568	43.0	+60 6	8.76	8.82	A2	2	..	38902i	97	4501	43.4	+43 7	9.4	10.2	G5	2	..	6667m
48	2987	43.0	+54 13	7.6	7.6	B8	4	2,3R	37278i	98	4502	43.4	+43 3	9.4	10.5	K2	2	..	6667m
49	4767	43.0	+29 36	8.3	8.4	A5	4	..	38597i	99	4349	43.4	- 1 45	9.77	10.77	Ko	1	R	24041b
50	5106	43.0	+10 2	8.8	10.0	K5	1	5,2	38130i	100	6341	43.4	-19 37	9.34	10.6	Ko	2	..	40751b

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22^h 43^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	16120	43.4	-25 39	9.9	11.3	Fo	2	..	45146b	51	13974	43.7	-49 6	9.3	10.5	G5	1	..	41899b
2	16064	43.4	-27 4	8.9	10.1	G5	4	..	45146b	52	876	43.8	+76 49	8.8	8.8	Ao	3	o,I	38903i
3	15758	43.4	-34 29	10.0	11.7	K2	2	..	39342b	53	3844	43.8	+49 3	7.16	8.51	Ma	3	..	37028i
4	9906	43.4	-55 19	8.7	9.7	F5	2	..	42094b	54	4058	43.8	+45 43	9.0	9.0	Ao	3	..	6042m
5	7834	43.4	-59 27	7.2	8.4	K2	4	..	14899b	55	4809	43.8	+30 34	7.26	7.24	B9	7	..	38032i
6	3713	43.4	-66 35	8.0	8.4	F5	8	..	20543b	56	4414	43.8	+28 12	8.7	9.3	Go	2	..	38597i
7	2612	43.5	+57 57	6.29	6.29	Ao	10	..	38078i	57	4993	43.8	+13 46	9.3	10.4	K2	3	..	37245i
8	3840	43.5	+48 39	8.0	9.0	Ko	2	..	38565i	58	4651	43.8	+1 22	8.59	9.59	Ko	3	E	9783b
9	4234	43.5	+44 52	8.2	9.3	K2	3	..	6042m	59	5764	43.8	-3 55	8.7	9.2	F8	6	..	9783b
10	4867	43.5	+38 44	8.1	8.2	A5	3	..	38052i	60	5958	43.8	-8 46	10.6	11.4	G5	2	..	40844b
11	4991	43.5	+13 20	9.3	9.7	F5	2	..	38130i	61	6064	43.8	-9 24	9.8	11.0	K5	1	..	19959b
12	4937	43.5	+8 18	9.1	10.2	K2	2	..	19027b	62	6158	43.8	-16 13	9.3	9.9	Go	4	..	40751b
13	5828	43.5	-2 41	9.8	9.8	Ao	5	..	24041b	63	6308	43.8	-20 48	9.6	10.0	G5	3	5,2	45146b
14	5954	43.5	-7 59	10.0	10.6	Go	3	..	40844b	64	6309	43.8	-21 30	9.6	10.3	Go	3	..	45146b
15	6353	43.5	-12 22	9.2	9.5	Fo	5	..	39701b	65	18983	43.8	-30 58	8.5	10.7	G5	4	o,2	39342b
16	6598	43.5	-17 31	7.9	9.1	K5	5	..	40751b	66	15529	43.8	-35 30	8.0	7.7	B9	8	..	40733b
17	6342	43.5	-19 8	9.1	9.1	A5	6	..	40751b	67	14840	43.8	-39 36	10.9	11.7	Ko	2	..	39649b
18	19308	43.5	-30 24	9.2	10.2	Ko	2	..	40739b	68	13976	43.8	-49 46	9.48	10.8	G5	1	..	41899b
19	18978	43.5	-31 22	8.9	11.2	F5	2	..	39342b	69	3274	43.8	-69 30	8.4	9.4	Ko	4	..	20543b
20	15759	43.5	-34 33	10.6	11.5	Go	2	..	39342b	70	2272	43.8	-73 15	9.8	10.8	Ko	1	..	19967b
21	10351	43.5	-53 50	8.1	9.7	Ko	5	..	39663b	71	700	43.9	+82 45	7.46	7.41	B8	5	..	37281i
22	2613	43.6	+58 1	9.5	9.5	A	1	R	37278i	72	4308	43.9	+43 27	9.7	9.8	A3	1	..	6042m
23	2865	43.6	+57 7	8.7	8.8	A3	3	..	38078i	73	4693	43.9	+37 31	8.3	9.5	K5	1	..	38564i
24	2863	43.6	+54 38	var.	var.	Ma	..	R	M	74	4818	43.9	+25 27	8.1	8.9	G5	2	..	38100i
25	3842	43.6	+48 20	8.07	8.49	F5	2	..	38565i	75	5109	43.9	+10 0	8.2	9.0	G5	4	..	38101i
26	4057	43.6	+45 55	8.0	8.0	Ao	3	I,5	38020i	76	5108	43.9	+9 53	9.3	10.3	Ko	2	..	19027b
27	4517	43.6	+32 29	8.7	9.9	K5	1	..	38032i	77	4776	43.9	+3 46	7.41	7.83	F5	8	..	9782b
28	4808	43.6	+31 5	8.6	9.1	F8	2	..	38032i	78	4564	43.9	+3 0	9.0	9.6	Go	2	..	9782b
29	4709	43.6	+15 58	8.7	9.7	Ko	1	..	38835i	79	5866	43.9	-7 3	9.3	10.4	K2	2	..	19959b
30	4930	43.6	+8 11	9.3	9.4	A5	3	..	19027b	80	6343	43.9	-18 56	9.3	11.2	K5	1	..	40751b
31	5829	43.6	-2 10	10.5	11.3	G5	1	..	24041b	81	17621	43.9	-23 37	7.00	8.0	K2	8	..	45146b
32	6348	43.6	-14 24	10.2	10.8	Go	1	..	39701b	82	19311	43.9	-30 23	8.5	9.4	Ko	4	..	40739b
33	6278	43.6	-14 58	10.2	10.7	F8	2	..	39701b	83	16240	43.9	-33 5	9.6	9.3	Ao	2	..	40733b
34	17614	43.6	-23 11	8.7	9.4	G5	5	..	45146b	84	15530	43.9	-34 53	9.58	10.9	G5	4	..	39342b
35	16123	43.6	-25 26	7.9	8.6	Fo	7	..	45146b	85	9907	43.9	-55 46	7.1	8.5	Ma	5	..	42510b
36	16236	43.6	-33 16	8.9	9.0	Go	2	..	40733b	86	7604	43.9	-60 0	9.27	9.9	G5	1	..	19899b
37	15760	43.6	-34 24	10.2	12.0	Go	3	..	39342b	87	1762	43.9	-75 47	9.5	10.5	Ko	3	..	38231b
38	2271	43.6	-73 50	9.0	10.0	Ko	2	..	19967b	88	4060	44.0	+46 8	9.4	9.5	A2	2	..	6042m
39	2482	43.7	+59 11	8.2	8.3	A2	3	..	38078i	89	4059	44.0	+45 44	9.9	9.9	A	1	..	6042m
40	3471	43.7	+51 26	7.8	7.9	A3	7	..	37028i	90	4913	44.0	+41 4	9.4	9.8	F5	1	..	38052i
41	4236	43.7	+44 36	9.7	10.3	Go	2	..	6667m	91	4519	44.0	+32 56	7.92	8.99	K2	1	..	38032i
42	4912	43.7	+41 0	8.1	8.9	G5	2	..	38020i	92	5054	44.0	+18 21	8.2	8.2	Ao	3	..	38100i
43	4934	43.7	+36 52	6.00	7.00	Ko	8	..	38564i	93	4886	44.0	+11 17	10.0	10.6	Go	1	..	38130i
44	4413	43.7	+27 36	8.2	8.8	Go	2	..	38597i	94	4932	44.0	+8 1	8.8	10.0	K5	2	..	19027b
45	4931	43.7	+7 19	7.8	8.8	Ko	6	..	19027b	95	5082	44.0	+5 58	8.8	9.9	K2	1	..	9782b
46	5956	43.7	-7 47	10.5	11.5	Ko	2	..	40844b	96	5865	44.0	-7 40	10.0	11.1	K2	2	..	40844b
47	6063	43.7	-9 28	9.6	10.6	Ko	3	..	19959b	97	5959	44.0	-8 12	9.6	10.8	K5	2	..	40844b
48	18473	43.7	-29 43	8.52	9.6	K5	4	..	40739b	98	6689	44.0	-61 50	9.0	8.8	Ao	4	..	19899b
49	19309	43.7	-30 4	8.3	9.9	K2	5	..	40739b	99	2967	44.0	-70 27	9.4	9.9	F8	3	..	19967b
50	18982	43.7	-31 44	7.90	8.1	Ao	7	..	40733b	100	2723	44.0	-71 57	8.1	8.7	Go	7	..	19967b

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	2483	44.1	+58 34	8.5	8.5	Ao	3	..	38078i	51	R	44.5	-11 36	9.2	9.6	A3	4	..	39701b
2	4061	44.1	+45 33	9.4	9.5	A2	1	..	6042m	52	6310	44.5	-20 49	7.32	7.6	A2	9	..	45146b
3	4240	44.1	+44 52	8.0	8.0	Ao	7	0,3	6042m	53	16067	44.5	-27 2	8.7	10.1	F5	4	..	45146b
4	4932	44.1	+40 10	7.92	8.99	K2	1	..	38020i	54	16092	44.5	-42 1	8.1	8.4	G5	7	..	40872b
5	4521	44.1	+32 39	8.2	8.2	Ao	3	..	38032i	55	14359	44.5	-47 23	9.7	10.5	G5	1	..	41899b
6	5830	44.1	- 2 37	10.5	11.6	K2	2	..	24041b	56	9908	44.5	-55 45	8.1	8.0	Ao	7	..	42510b
7	6344	44.1	-19 21	9.8	10.9	Ko	1	..	40751b	57	2993	44.6	+53 53	6.08	6.03	B8	9	..	38078i
8	15232	44.1	-38 22	8.2	8.0	Go	7	..	40858b	58	3834	44.6	+46 46	9.7	10.7	Ko	2	..	6667m
9	14819	44.1	-44 57	8.12	8.3	Ao	9	..	40872b	59	4242	44.6	+44 32	8.7	9.2	F8	4	0,3-	6042m
10	14455	44.1	-46 17	9.7	10.2	Go	2	..	45071b	60	4819	44.6	+16 15	9.0	10.0	Ko	1	..	38835i
11	9905	44.1	-56 26	7.6	9.4	K2	3	..	42510b	61	5515	44.6	- 2 54	9.2	10.2	Ko	4	..	24041b
12	6690	44.1	-61 35	8.7	9.0	F5	4	..	19899b	62	6358	44.6	-12 0	10.0	10.5	F8	2	..	39701b
13	3714	44.1	-66 15	8.5	9.3	G5	4	..	20543b	63	17351	44.6	-24 48	9.9	11.2	Ao	2	..	45146b
14	1717	44.2	+64 32	6.83	6.66	B3	6	R	37257i	64	851	44.7	+76 9	8.42	9.42	Ko	2	..	38903i
15	..	44.2	+45 31	..	..	Ao	2	..	6667m	65	3848	44.7	+49 2	7.66	7.72	A2	5	..	37028i
16	4310	44.2	+44 9	9.2	10.2	Ko	1	..	6042m	66	3835	44.7	+46 15	10.2	10.2	A	1	..	6667m
17	4699	44.2	+38 0	8.1	9.5	Ma	1	..	38564i	67	4312	44.7	+43 42	10.2	11.2	Ko	1	..	6667m
18	6357	44.2	-11 53	7.9	8.0	A5	9	..	39701b	68	4788	44.7	+32 0	7.9	7.9	Ao	4	..	38032i
19	6353	44.2	-13 49	9.3	9.9	Go	3	..	39701b	69	4942	44.7	+ 8 51	10.0	10.6	Go	1	..	19027b
20	6351	44.2	-14 7	9.8	10.9	K2	1	..	39701b	70	4423	44.7	- 0 40	8.7	9.9	K5	2	..	24041b
21	6352	44.2	-14 24	9.3	10.1	G5	2	..	39701b	71	5516	44.7	- 3 0	9.6	10.2	Go	2	..	9783b
22	17624	44.2	-22 55	9.9	11.2	K2	1	..	45146b	72	5870	44.7	- 4 53	9.41	10.48	K2	3	0,1	40844b
23	13806	44.2	-50 22	10.1	11.1	G5	1	..	41899b	73	6199	44.7	-18 34	9.6	10.4	G5	3	..	40751b
24	7605	44.2	-60 3	7.47	7.9	Fo	7	..	19899b	74	17628	44.7	-23 15	9.7	10.0	G5	2	..	45146b
25	3537	44.2	-67 55	9.6	10.0	F5	1	..	20543b	75	17265	44.7	-32 21	8.2	9.0	F8	4	..	40733b
26	4507	44.3	+26 50	var.	var.	Mb	..	R	M	76	15588	44.7	-36 50	8.6	9.7	G5	4	..	40858b
27	4876	44.3	+14 44	8.4	9.2	G5	3	..	38130i	77	4825	44.7	-63 23	8.5	9.0	F8	4	..	19899b
28	4887	44.3	+12 5	9.1	10.2	K2	1	..	38130i	78	3476	44.8	+51 25	8.7	9.7	Ko	1	..	37028i
29	4652	44.3	+ 2 4	8.8	9.2	F5	4	..	9782b	79	3836	44.8	+46 49	9.5	9.8	F2	3	..	6667m
30	5766	44.3	- 4 10	9.8	10.8	Ko	1	..	9783b	80	4314	44.8	+43 19	9.7	9.7	Ao	2	..	6042m
31	5960	44.3	- 8 10	10.5	11.3	G5	3	..	40844b	81	4615	44.8	+41 26	8.6	9.6	Ko	1	..	38052i
32	6354	44.3	-14 7	4.21	5.39	K5	..	0,5 R	56,102	82	4613	44.8	+23 49	8.7	9.8	K2	2	..	38100i
33	6280	44.3	-15 34	10.2	10.7	F8	1	..	40751b	83	5517	44.8	- 3 21	8.5	9.1	Go	5	..	9783b
34	9967	44.3	-56 21	8.6	9.1	Go	3	..	42510b	84	6078	44.8	- 6 6	9.8	10.8	Ko	2	..	40844b
35	1272	44.4	+71 1	7.8	8.1	Fo	2	..	38580i	85	6603	44.8	-16 50	8.3	8.6	F2	7	..	40751b
36	1546	44.4	+66 24	8.0	8.3	Fo	4	..	37257i	86	6604	44.8	-17 39	9.8	10.8	Ko	1	..	40751b
37	4062	44.4	+45 50	8.6	8.6	Ao	3	2,1	6042m	87	15769	44.8	-34 10	10.2	11.5	F8	3	..	39342b
38	4934	44.4	+39 18	8.9	10.1	K5	1	..	38052i	88	15589	44.8	-36 31	8.4	9.4	Go	6	..	40858b
39	4820	44.4	+25 58	8.10	8.16	A2	4	..	38100i	89	15235	44.8	-37 58	8.6	9.5	F2	6	..	40858b
40	5930	44.4	-11 31	8.9	9.4	F8	4	..	39701b	90	15061	44.8	-44 34	11.8	10.5	Ao	1	..	45071b
41	6270	44.4	-12 53	10.5	11.3	G5	1	..	39701b	91	2575	44.9	+59 50	8.6	8.6	Ao	2	..	38078i
42	16244	44.4	-33 20	6.35	6.6	A5	..	5,10	28,216	92	3931	44.9	+47 24	8.1	8.0	B5	4	..	38020i
43	4824	44.4	-63 21	7.76	8.7	Go	6	..	19899b	93	3837	44.9	+46 28	10.2	11.4	K5	1	..	6667m
44	2865	44.5	+54 36	8.6	8.4	B2	2	..	37278i	94	5932	44.9	-10 48	9.2	10.3	K2	2	..	39701b
45	3929	44.5	+47 53	8.1	8.2	A2	2	..	38565i	95	5933	44.9	-10 56	8.3	9.3	Ko	5	..	39701b
46	4612	44.5	+23 22	7.8	8.9	K2	4	..	38100i	96	6281	44.9	-15 0	9.8	10.6	G5	1	..	39701b
47	4710	44.5	+15 50	8.6	8.7	A2	4	..	38130i	97	15236	44.9	-38 25	9.6	10.4	K2	1	..	40858b
48	5111	44.5	+ 9 58	6.46	6.74	Fo	8	5,9 R	38130i	98	15063	44.9	-44 8	9.3	9.8	F8	3	..	40872b
49	4422	44.5	- 0 12	9.3	10.3	Ko	2	..	24041b	99	7835	44.9	-59 38	7.32	7.4	Fo	7	..	19899b
50	5931	44.5	-11 36	9.2	9.6	F5	4	R	39701b	100	2725	44.9	-72 13	10.1	10.7	Go	1	..	19967b

216100

22^h 44^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	1459	44.9	-78 4	8.4	9.4	Ko	5	..	42794b	51	4920	45.4	+40 30	var.	var.	Mc	..	R	M
2	2115	45.0	+62 24	6.16	7.16	Ko	7	5,3	38902i	52	4879	45.4	+39 9	8.5	8.8	Fo	3	..	38052i
3	2441	45.0	+60 37	8.11	9.11	Ko	3	..	38803i	53	5113	45.4	+10 0	10.0	10.6	Go	2	..	19027b
4	2872	45.0	+56 18	8.6	8.7	A2	2	0,2	37278i	54	16073	45.4	-27 49	9.4	10.1	Go	2	..	40739b
5	2817	45.0	+55 54	var.	var.	G5	1	R	38803i	55	14830	45.4	-45 16	8.7	9.2	Go	5	..	40872b
6	3836	45.0	+50 27	6.76	7.32	Go	8	..	37028i	56	1811	45.5	+65 28	8.4	8.4	Ao	2	..	38902i
7	4065	45.0	+45 22	8.42	8.42	Ao	2	1,6	38020i	57	4069	45.5	+45 48	9.9	10.9	Ko	1	..	6042m
8	4315	45.0	+43 19	8.0	8.0	Ao	4	1,6	38020i	58	4246	45.5	+44 53	8.2	8.3	A2	2	2,6	38020i
9	4816	45.0	+30 46	7.98	8.26	Fo	3	..	38032i	59	4245	45.5	+44 36	9.9	10.4	F8	1	..	6667m
10	4461	45.0	+28 25	7.9	8.3	F5	4	5,3	38032i	60	4247	45.5	+44 26	9.7	9.8	A2	1	..	6042m
11	5112	45.0	+9 17	9.7	10.1	F5	2	..	19027b	61	4506	45.5	+43 3	9.5	10.5	Ko	1	..	6667m
12	6079	45.0	-6 8	9.1	10.1	Ko	2	..	19959b	62	4424	45.5	-0 39	9.5	10.5	Ko	1	..	24041b
13	16249	45.0	-32 57	9.2	9.3	Ao	3	..	40733b	63	5877	45.5	-7 30	9.6	10.1	F8	5	..	19959b
14	10153	45.0	-57 0	7.5	8.4	Ko	6	..	42510b	64	5962	45.5	-8 1	10.2	11.0	G5	3	..	40844b
15	8007	45.0	-58 30	8.2	9.0	Ko	2	..	42510b	65	5963	45.5	-8 30	9.8	10.3	F8	1	..	19959b
16	2726	45.0	-72 25	9.3	9.3	B8	5	..	19967b	66	6203	45.5	-18 21	9.1	9.2	A2	5	..	40751b
17	4066	45.1	+45 15	9.62	9.68	A2	2	..	6042m	67	6346	45.5	-19 16	8.7	9.1	Go	6	..	40751b
18	4243	45.1	+44 49	10.2	10.2	Ao	1	..	6667m	68	14928	45.5	-40 25	9.2	10.1	Fo	4	..	40858b
19	4505	45.1	+43 0	9.4	9.9	F8	3	..	6667m	69	7610	45.5	-60 25	6.40	7.6	Ko	8	..	19899b
20	4619	45.1	+42 6	7.13	7.19	A2	7	..	38020i	70	4089	45.5	-65 2	8.47	9.0	F8	4	..	20543b
21	4618	45.1	+41 31	9.2	10.4	K5	1	..	38052i	71	996	45.6	+74 8	8.43	8.49	A2	3	..	38025i
22	4937	45.1	+39 59	7.51	8.01	F8	3	..	38020i	72	1468	45.6	+68 2	6.39	6.81	F5	8	..	37257i
23	5231	45.1	+20 25	8.5	9.3	G5	2	..	38100i	73	2117	45.6	+63 11	8.6	8.7	A3	2	..	37257i
24	5518	45.1	-2 58	9.1	10.2	K2	4	..	24041b	74	2820	45.6	+55 22	5.56	6.56	Ko	8	..	38078i
25	5961	45.1	-7 59	8.7	8.8	A3	8	..	19959b	75	3952	45.6	+49 29	8.0	8.8	G5	3	..	37028i
26	6281	45.1	-13 41	10.2	10.7	F8	1	..	39701b	76	4507	45.6	+42 59	9.2	9.2	Ao	2	..	6042m
27	6356	45.1	-14 5	9.8	10.3	F8	1	..	39701b	77	4935	45.6	+7 54	10.0	10.6	Go	1	..	19027b
28	6355	45.1	-14 36	7.96	8.24	Fo	8	..	39701b	78	4782	45.6	+3 32	7.24	8.24	Ko	7	..	9782b
29	7609	45.1	-59 53	8.12	9.0	Ko	3	..	19899b	79	4656	45.6	+1 20	9.09	9.65	G	1	..	9782b
30	650	45.1	-83 53	7.9	8.3	F5	6	..	15173b	80	4351	45.6	-1 6	7.32	7.38	A2	7	1,8	9782b
31	4615	45.2	+24 4	3.67	4.67	Ko	..	R	1362c	81	5878	45.6	-7 29	10.0	10.3	F2	2	..	19959b
32	5833	45.2	-2 27	9.8	10.4	Go	5	..	24041b	82	5964	45.6	-7 50	7.29	8.29	Ko	8	..	19959b
33	5871	45.2	-7 38	10.2	11.4	K5	1	..	40844b	83	6284	45.6	-13 38	9.1	9.5	F5	4	..	39701b
34	6282	45.2	-12 58	9.1	10.1	Ko	4	..	39701b	84	16075	45.6	-26 58	9.4	10.1	Ko	3	..	45146b
35	6357	45.2	-13 50	9.8	9.8	Ao	4	..	39701b	85	14957	45.6	-37 38	8.9	11.2	K5	1	..	40858b
36	15773	45.2	-33 52	9.6	12.0	G5	2	..	39342b	86	16098	45.6	-42 7	8.1	9.2	K5	5	..	40872b
37	15239	45.2	-38 4	9.6	10.9	K2	1	..	40858b	87	4826	45.6	-63 43	6.08	7.6	Ko	..	0,10	56,149
38	8008	45.2	-58 5	8.6	9.0	F8	2	..	42510b	88	1275	45.7	+70 32	9.2	9.2	Ao	2	..	38903i
39	4244	45.3	+45 4	9.9	10.7	G5	1	..	6042m	89	2867	45.7	+54 18	8.0	8.0	B8	5	..	38078i
40	4462	45.3	+28 45	8.9	9.0	A2	2	..	38032i	90	3000	45.7	+53 30	8.1	8.9	G5	2	..	37028i
41	4894	45.3	+12 16	9.1	9.7	Go	2	0,1	38130i	91	4893	45.7	+36 10	7.9	9.0	K2	1	..	38564i
42	5090	45.3	+6 2	8.8	9.9	K2	3	..	19027b	92	4775	45.7	+34 33	8.02	8.10	A3	4	..	38032i
43	5873	45.3	-7 27	8.3	9.1	G5	6	..	19959b	93	5093	45.7	+6 2	9.0	9.5	F8	3	..	19027b
44	6283	45.3	-13 13	8.5	9.5	Ko	5	..	39701b	94	6286	45.7	-12 56	10.2	11.0	G5	2	..	39701b
45	6282	45.3	-15 16	8.8	9.2	F5	6	..	40751b	95	16256	45.7	-33 30	9.2	10.8	G5	5	..	39342b
46	17630	45.3	-23 14	8.7	9.7	K2	3	..	45146b	96	15174	45.7	-43 37	9.4	10.1	A5	3	..	40872b
47	18481	45.3	-29 50	9.52	9.9	A5	3	..	40739b	97	3841	45.8	+47 1	9.2	9.6	F5	1	..	6042m
48	16253	45.3	-33 1	8.9	10.5	Ko	1	..	40733b	98	3842	45.8	+46 49	9.7	9.7	Ao	2	..	6667m
49	14848	45.3	-39 41	5.39	7.5	K2	..	0,10	56,149	99	..	45.8	+44 49	..	..	F5	1	..	6667m
50	3718	45.3	-66 28	8.4	9.4	Ko	3	..	20543b	100	4623	45.8	+41 26	5.84	5.72	B5	8	0,9R	37564i

THE HENRY DRAPER CATALOGUE.

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22^h 45^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	5059	45.8	+18 36	6.50	7.50	Ko	7	..	38100i	51	4914	46.3	+ 4 15	8.8	9.9	K2	2	..	9782b
2	5936	45.8	-11 1	10.0	10.8	G5	2	..	39701b	52	5938	46.3	-11 8	9.3	10.1	G5	3	..	39701b
3	6161	45.8	-16 1	9.3	9.9	Go	3	..	40751b	53	6287	46.3	-12 51	10.0	10.8	G5	3	..	39701b
4	14930	45.8	-40 32	10.4	11.3	F8	1	..	40858b	54	14959	46.3	-37 44	9.6	10.6	Go	2	..	40858b
5	1763	45.8	-75 10	9.8	10.6	G5	2	..	38231b	55	3846	46.4	+50 35	8.4	8.4	Ao	3	..	37028i
6	3954	45.9	+50 9	6.43	7.43	Ko	8	..	37028i	56	4250	46.4	+44 36	8.9	9.0	A5	4	..	6042m
7	4793	45.9	+31 56	8.1	8.1	Ao	3	..	38032i	57	4251	46.4	+44 24	8.0	9.0	Ko	4	5,I	6042m
8	5874	45.9	- 5 2	10.2	10.2	Ao	3	..	40844b	58	4318	46.4	+43 55	9.5	10.0	F8	2	..	6667m
9	17362	45.9	-24 18	7.58	8.3	Ko	7	..	45146b	59	5006	46.4	+13 27	8.0	9.0	Ko	2	..	38101i
10	19324	45.9	-30 4	6.03	7.2	Ko	..	0,10	56,149	60	4915	46.4	+ 4 29	8.0	9.0	Ko	2	..	9782b
11	17276	45.9	-32 30	8.7	9.4	K5	1	..	40733b	61	5840	46.4	- 2 21	7.9	7.9	Ao	5	2,7	9782b
12	16257	45.9	-33 23	9.3	10.5	F5	4	..	39342b	62	5880	46.4	- 7 30	10.5	11.1	Go	2	..	19959b
13	14834	45.9	-45 32	9.2	10.1	K5	2	..	40872b	63	5939	46.4	-11 13	10.2	11.0	G5	1	..	39701b
14	12079	45.9	-52 25	8.9	10.0	F2	3	..	39663b	64	6364	46.4	-12 34	9.3	10.1	G5	4	..	39701b
15	10354	45.9	-53 47	9.0	10.9	Ko	2	..	39663b	65	6288	46.4	-13 26	10.2	10.8	Go	1	..	39701b
16	3938	46.0	+47 49	8.1	8.2	A2	2	..	38565i	66	6359	46.4	-14 24	8.1	8.6	F8	6	..	39701b
17	4526	46.0	+33 12	8.7	10.1	Ma	..	..	M	67	6285	46.4	-15 45	9.1	9.5	F5	3	..	40751b
18	4673	46.0	+24 56	9.4	10.5	K2	2	..	38100i	68	6347	46.4	-18 48	9.8	9.9	A2	4	..	40751b
19	4818	46.0	+17 28	7.38	8.16	G5	5	..	38835i	69	6495	46.4	-20 0	8.5	9.7	G5	4	..	40751b
20	5116	46.0	+ 9 51	10.0	10.1	A2	1	..	19027b	70	14854	46.4	-39 29	7.32	8.9	Ko	6	..	40858b
21	5836	46.0	- 1 59	8.7	9.2	F8	4	..	9783b	71	12081	46.4	-52 40	10.1	11.1	Ko	2	..	39663b
22	6002	46.0	- 9 52	8.66	9.73	K2	5	..	19959b	72	4828	46.4	-63 21	7.7	8.5	G5	6	..	19899b
23	14835	46.0	-45 19	8.7	8.9	G5	5	..	40872b	73	1058	46.4	-79 58	9.19	10.5	K2	4	..	38135b
24	14371	46.0	-47 18	8.9	9.8	Go	3	..	41899b	74	986	46.5	+75 2	9.2	9.3	A5	3	..	38003i
25	12080	46.0	-52 11	9.3	10.0	A5	3	..	39663b	75	3485	46.5	+51 31	7.10	7.66	Go	6	..	37028i
26	1217	46.0	-79 42	9.7	10.7	Ko	3	..	38135b	76	4599	46.5	+33 50	7.16	7.50	F2	7	..	38032i
27	1813	46.1	+66 0	6.97	6.95	B9	4	..	37257i	77	4468	46.5	+28 43	8.7	8.7	Ao	3	..	38032i
28	1814	46.1	+65 40	3.68	4.68	Ko	..	R	1392c	78	5094	46.5	+ 6 5	8.8	10.2	Ma	2	..	19027b
29	3844	46.1	+46 46	9.2	9.7	F8	2	..	6667m	79	5095	46.5	+ 5 15	8.76	9.94	K5	1	..	9782b
30	4569	46.1	+ 2 20	8.6	9.6	Ko	2	..	9782b	80	5967	46.5	- 7 49	10.2	10.8	Go	1	..	19959b
31	5837	46.1	- 2 11	9.2	9.6	F5	3	..	9783b	81	14344	46.5	-48 6	7.64	7.4	F5	7	..	41899b
32	6073	46.1	- 8 50	9.3	10.3	Ko	2	..	19959b	82	3847	46.6	+51 5	7.6	8.8	K5	2	0,2	37028i
33	6074	46.1	- 9 12	9.8	10.6	G5	2	..	19959b	83	4321	46.6	+43 32	9.2	9.2	Ao	3	2,I	6042m
34	6003	46.1	-10 5	9.6	10.6	Ko	1	..	19959b	84	4514	46.6	+42 43	7.7	8.7	Ko	3	..	38020i
35	6361	46.1	-11 53	10.2	10.8	Go	2	..	39701b	85	4828	46.6	+25 51	6.71	6.79	A3	7	..	38100i
36	6162	46.1	-16 41	9.3	9.9	Go	3	..	40751b	86	5236	46.6	+20 44	9.1	10.3	K5	1	..	33745i
37	15602	46.1	-36 25	7.34	8.0	A3	9	..	40858b	87	4657	46.6	+ 1 15	8.74	9.16	F5	3	..	9783b
38	3925	46.1	-67 15	8.8	9.9	K2	2	..	20543b	88	6075	46.6	- 9 5	9.6	10.8	K5	1	..	19959b
39	1057	46.1	-80 15	8.35	9.3	K2	7	..	38135b	89	17370	46.6	-24 33	9.7	10.1	Go	2	..	45146b
40	4624	46.2	+41 28	8.0	8.4	F5	3	..	38052i	90	15546	46.6	-35 10	7.78	7.7	A2	7	..	40733b
41	4598	46.2	+33 56	8.7	8.8	A2	2	..	38032i	91	14461	46.6	-46 31	7.4	8.6	Ko	6	..	41899b
42	5775	46.2	- 3 46	9.1	10.3	K5	1	..	9783b	92	14345	46.6	-48 31	7.7	8.3	Ko	5	..	41899b
43	5966	46.2	- 7 47	9.8	10.8	Ko	1	..	19959b	93	12082	46.6	-52 45	8.1	8.4	F5	7	..	39663b
44	5937	46.2	-11 40	9.3	9.9	Go	3	..	39701b	94	3308	46.7	+52 31	8.7	9.0	F2	1	..	37028i
45	6314	46.2	-21 29	8.7	9.4	Fo	4	..	45146b	95	3943	46.7	+48 6	8.5	8.5	Ao	2	..	38020i
46	4000	46.2	-65 26	8.2	9.3	K2	4	..	20543b	96	4916	46.7	+ 4 15	7.17	7.45	Fo	8	..	9782b
47	1890	46.3	+63 28	8.7	9.5	G5	1	..	38902i	97	6360	46.7	-14 18	9.8	10.3	F8	2	..	39701b
48	2625	46.3	+58 8	9.9	9.7	B	2	..	M	98	6611	46.7	-17 13	9.6	10.2	Go	2	..	40751b
49	4249	46.3	+44 58	8.8	9.8	Ko	3	..	6042m	99	6348	46.7	-18 48	10.5	11.6	K2	1	..	40751b
50	4317	46.3	+43 23	9.9	10.4	F8	1	..	6042m	100	16142	46.7	-25 49	10.9	12.3	Mc	..	R	M

ANNALS OF HARVARD COLLEGE OBSERVATORY.

22^h 46^m.7

216300

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	14858	46.7	-39 50	7.90	9.2	Ko	5	..	40858b	51	1893	47.2	+64 2	8.7	8.7	Ao	3	..	38902i
2	15180	46.7	-43 19	8.1	8.2	A2	8	..	40872b	52	4255	47.2	+45 10	9.7	10.7	Ko	2	..	6667m
3	10147	46.7	-54 32	9.3	10.3	G5	2	..	39663b	53	4925	47.2	+40 49	8.5	8.5	Ao	2	..	38020i
4	2047	46.7	-73 56	8.1	8.9	G5	4	..	19967b	54	4884	47.2	+39 11	8.7	8.8	A2	2	..	38052i
5	1059	46.7	-79 53	9.7	10.8	K2	3	..	38135b	55	5882	47.2	-7 29	8.9	9.7	G5	4	..	19959b
6	3486	46.8	+51 44	7.25	7.53	Fo	7	..	37028i	56	6165	47.2	-16 34	9.1	9.7	Go	2	..	40751b
7	4517	46.8	+43 5	9.2	10.2	Ko	2	..	6667m	57	6351	47.2	-19 34	6.91	7.8	F8	10	..	40751b
8	4879	46.8	+14 34	6.89	6.89	Ao	8	..	38101i	58	6497	47.2	-20 36	8.9	10.3	Go	3	..	40751b
9	6289	46.8	-13 29	var.	var.	A2	5	R	39701b	59	16151	47.2	-25 37	9.2	10.4	F8	3	..	45146b
10	6286	46.8	-14 58	9.3	9.9	Go	2	..	39701b	60	16363	47.2	-26 41	9.5	10.4	Fo	3	..	45146b
11	6349	46.8	-19 19	8.9	9.5	Go	4	..	40751b	61	18485	47.2	-29 43	7.64	8.1	G5	6	..	40739b
12	6350	46.8	-19 29	9.8	10.9	K5	1	..	40751b	62	17285	47.2	-32 34	9.6	11.6	F8	2	..	39342b
13	17970	46.8	-28 42	9.5	10.9	Ko	1	..	40739b	63	15063	47.2	-41 32	8.6	8.6	F2	7	..	40872b
14	15789	46.8	-34 43	9.2	10.3	A5	3	..	39342b	64	13818	47.2	-50 5	9.7	10.0	G5	2	..	39678b
15	14841	46.8	-45 30	9.3	9.6	Ko	2	..	40872b	65	12084	47.2	-51 54	10.3	11.4	Ko	1	..	39663b
16	4302	46.8	-64 18	7.5	8.0	F8	7	..	19899b	66	10357	47.2	-53 37	9.6	10.6	Ko	3	..	39663b
17	1018	46.8	-81 45	9.4	9.9	F8	1	..	15165b	67	988	47.3	+74 38	7.8	7.8	Ao	5	..	38025i
18	1469	46.9	+67 51	8.7	8.7	B9	4	..	38580i	68	1166	47.3	+72 4	8.2	8.8	Go	2	..	38580i
19	1552	46.9	+66 38	8.6	8.6	Ao	2	..	37257i	69	4926	47.3	+40 47	6.84	6.84	Ao	7	..	38020i
20	3008	46.9	+53 36	9.0	10.0	Ko	1	o,I	37028i	70	5017	47.3	+19 31	8.4	9.4	Ko	1	..	38100i
21	3944	46.9	+48 12	6.88	6.86	B9	7	..	38020i	71	4839	47.3	+11 7	9.7	10.5	G5	2	o,I	19027b
22	4900	46.9	+35 59	8.1	8.2	A5	2	..	38032i	72	5121	47.3	+9 46	9.3	10.3	Ko	1	..	19027b
23	4529	46.9	+32 18	7.11	7.17	A2	5	..	38032i	73	6006	47.3	-10 5	8.9	10.0	K2	5	..	19957b
24	4949	46.9	+9 8	9.3	9.7	F5	2	..	19027b	74	6167	47.3	-15 51	9.3	9.9	Go	3	..	40751b
25	17282	46.9	-32 22	7.8	9.4	Ma	1	..	40733b	75	19333	47.3	-30 25	9.5	9.3	A5	4	..	40739b
26	1764	46.9	-75 24	7.5	7.8	F2	8	..	19967b	76	15607	47.3	-36 37	9.2	10.6	G5	3	..	40858b
27	1165	47.0	+71 37	8.0	8.1	A2	3	..	38580i	77	14844	47.3	-45 23	8.5	8.9	Ko	5	..	40872b
28	3009	47.0	+53 23	8.6	8.6	Ao	3	..	37028i	78	12085	47.3	-52 40	9.3	10.5	Go	3	..	39663b
29	3849	47.0	+47 0	9.4	9.4	Ao	2	..	6042m	79	2730	47.3	-72 43	9.1	10.2	K2	3	..	19967b
30	4944	47.0	+36 17	8.6	8.9	Fo	2	..	33749i	80	2450	47.4	+61 10	5.80	6.36	Go	8	o,10	37257i
31	4786	47.0	+29 30	7.9	8.9	Ko	2	..	38032i	81	4257	47.4	+45 14	9.5	9.5	Ao	2	..	6042m
32	5940	47.0	-11 29	8.7	9.2	F8	6	..	39701b	82	5018	47.4	+19 56	8.7	9.7	Ko	1	..	38100i
33	6315	47.0	-21 43	8.5	9.1	Fo	5	..	45146b	83	4719	47.4	+15 21	7.04	8.11	K2	4	..	38101i
34	6011	47.0	-22 14	8.1	8.4	Fo	7	..	45146b	84	5123	47.4	+9 52	6.74	7.16	F5	7	..	38101i
35	17972	47.0	-27 55	9.5	9.8	A5	4	..	40739b	85	5122	47.4	+9 18	5.30	5.72	F5	10	R	38101i
36	16270	47.0	-33 24	4.52	4.52	Ao	..	R	28,216	86	5968	47.4	-8 7	3.84	5.19	Ma	..	o,7R	3070c
37	12083	47.0	-52 12	9.2	10.2	G5	3	..	39663b	87	6288	47.4	-14 58	10.2	10.7	F8	1	..	39701b
38	10149	47.0	-54 28	8.9	10.3	G5	3	..	39663b	88	6168	47.4	-16 5	10.0	11.1	K2	1	..	40751b
39	4253	47.1	+44 58	8.4	8.4	Ao	5	..	6042m	89	6207	47.4	-18 34	10.7	11.5	G5	1	..	40751b
40	4254	47.1	+44 57	8.6	8.6	Ao	5	..	6042m	90	17646	47.4	-23 28	10.4	10.3	Fo	2	..	45146b
41	4924	47.1	+40 46	9.2	9.2	Ao	1	..	38020i	91	16364	47.4	-26 3	8.2	8.3	F5	6	..	45146b
42	4710	47.1	+38 9	8.9	10.0	K2	1	..	38564i	92	19336	47.4	-30 45	8.9	9.0	K2	3	..	40739b
43	6365	47.1	-11 47	10.0	10.6	Go	3	..	39701b	93	13413	47.4	-50 52	9.9	12.0	K5	1	..	39663b
44	6291	47.1	-13 5	9.2	10.2	Ko	2	..	39701b	94	3311	47.5	+52 30	7.14	7.14	Ao	5	..	38078i
45	6290	47.1	-13 34	10.2	11.0	G5	1	..	39701b	95	3851	47.5	+46 50	9.9	9.9	A	1	..	6667m
46	6615	47.1	-17 12	8.1	9.1	Ko	6	..	40751b	96	4074	47.5	+46 12	7.32	8.32	Ko	4	5,7	38020i
47	16149	47.1	-25 5	8.5	10.4	K5	2	..	45146b	97	4521	47.5	+42 47	5.17	6.35	K5	9	..	38020i
48	16362	47.1	-26 7	10.2	11.2	Ko	1	..	45146b	98	4778	47.5	+35 1	8.3	8.3	Ao	3	..	38032i
49	8009	47.1	-58 23	7.5	8.7	K2	5	..	42510b	99	4726	47.5	+22 20	8.6	9.8	K5	1	..	38100i
50	1817	47.2	+66 12	7.30	8.37	K2	4	..	37257i	100	4573	47.5	+3 1	6.86	6.86	Ao	10	..	9782b

THE HENRY DRAPER CATALOGUE.

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22^h 47^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	5521	47.5	- 3 9	7.9	8.7	G5	7	..	9783b	51	4781	47.9	+34 48	7.07	7.13	A2	5	..	38564i
2	6008	47.5	-10 35	6.76	7.26	F8	4	..	44015b	52	4787	47.9	+ 3 31	8.8	10.0	K5	1	..	9782b
3	16153	47.5	-25 45	7.9	9.0	Ko	5	..	45146b	53	5943	47.9	-11 13	9.6	10.6	Ko	3	..	39701b
4	16273	47.5	-32 58	9.6	11.2	G5	3	..	39342b	54	6370	47.9	-12 19	10.0	10.8	G5	1	..	39701b
5	15260	47.5	-38 22	9.8	10.7	Ko	2	..	40858b	55	6616	47.9	-17 42	8.5	9.1	Go	6	..	40751b
6	14847	47.5	-45 41	7.3	7.9	Ko	7	..	40872b	56	6209	47.9	-18 24	9.6	10.2	Go	3	..	40751b
7	14380	47.5	-46 54	9.3	9.2	F8	3	..	41899b	57	6353	47.9	-19 8	11.1	10.9	Go	1	..	40751b
8	12087	47.5	-52 33	11.1	12.2	K2	1	..	39663b	58	17652	47.9	-23 10	9.1	9.4	Go	4	..	45146b
9	3282	47.5	-69 11	9.0	10.0	Ko	3	..	38368b	59	13417	47.9	-51 8	10.1	10.0	F5	3	..	39663b
10	1765	47.5	-75 0	10.1	10.9	G5	2	..	38231b	60	9914	47.9	-55 15	8.4	8.8	Ao	5	..	42510b
11	2492	47.6	+58 28	7.16	6.92	Bo	4	R	38803i	61	4304	47.9	-64 28	9.6	10.2	Go	1	..	19899b
12	2493	47.6	+58 21	8.9	8.9	A	1	..	37278i	62	3541	47.9	-68 8	7.6	7.9	Fo	8	..	20543b
13	3312	47.6	+52 39	7.9	8.0	A5	3	..	37278i	63	2274	47.9	-73 36	8.8	9.8	Ko	3	..	19967b
14	4929	47.6	+40 19	8.87	9.94	K2	1	..	38052i	64	1020	47.9	-81 38	9.0	9.4	F5	2	..	15165b
15	4792	47.6	+29 34	8.5	9.5	Ko	1	..	38032i	65	4475	48.0	+28 54	9.1	9.7	Go	2	E	38607i
16	4727	47.6	+22 32	8.5	9.6	K2	2	..	38100i	66	5021	48.0	+19 36	8.7	9.5	G5	2	..	38100i
17	5125	47.6	+ 9 41	7.26	7.68	F5	5	..	38101i	67	6085	48.0	- 5 53	9.3	10.3	Ko	3	..	40844b
18	4953	47.6	+ 8 27	9.1	9.7	Go	4	..	19027b	68	5944	48.0	-11 35	9.1	9.9	G5	4	..	39701b
19	5078	47.6	+ 7 8	7.9	8.2	F2	9	..	19027b	69	6500	48.0	-20 36	9.3	10.3	Go	2	..	40751b
20	5096	47.6	+ 5 29	8.4	8.8	F5	6	..	19027b	70	17380	48.0	-24 28	8.1	7.8	F5	6	..	45146b
21	5843	47.6	- 1 53	9.3	10.3	Ko	1	..	9783b	71	18490	48.0	-28 57	7.66	8.7	Ko	6	..	40739b
22	6367	47.6	-12 11	9.6	10.6	Ko	4	..	39701b	72	17292	48.0	-32 12	9.5	10.5	F8	2	..	39342b
23	6292	47.6	-13 38	8.3	9.3	Ko	6	..	39701b	73	17291	48.0	-32 43	8.9	10.5	Go	3	..	39342b
24	6169	47.6	-15 58	10.2	11.0	G5	1	..	40751b	74	15262	48.0	-38 6	9.3	10.1	Go	3	..	40858b
25	2121	47.7	+62 26	6.84	7.62	G5	6	5,2	38902i	75	3283	48.0	-69 18	9.9	10.5	Go	3	..	38368b
26	2629	47.7	+57 40	8.7	8.7	Ao	2	..	38078i	76	1218	48.0	-79 45	9.6	10.2	Go	4	..	38135b
27	4076	47.7	+45 16	9.12	10.12	Ko	2	..	6042m	77	1821	48.1	+65 28	8.7	8.8	A2	1	..	38902b
28	4953	47.7	+39 44	8.1	9.3	K5	2	..	38052i	78	3857	48.1	+46 27	9.2	10.2	Ko	1	..	6042m
29	4713	47.7	+38 13	8.3	8.3	Ao	3	..	38564i	79	4626	48.1	+42 2	9.2	9.2	Ao	2	..	38052i
30	5969	47.7	- 8 45	9.8	10.9	K2	1	..	19959b	80	4803	48.1	+32 0	8.7	9.5	G5	1	..	38032i
31	6369	47.7	-12 21	9.8	9.9	A2	5	..	39701b	81	4789	48.1	+ 4 8	9.1	9.9	G5	1	..	9782b
32	16156	47.7	-25 40	7.6	8.3	F8	7	..	45146b	82	5524	48.1	- 3 1	9.8	10.4	Go	2	..	9783b
33	15609	47.7	-36 21	9.5	10.3	Fo	3	..	40858b	83	15611	48.1	-36 31	10.0	10.6	G5	2	..	40858b
34	15185	47.7	-43 28	9.7	10.5	Ko	2	..	39473b	84	14854	48.1	-45 39	10.1	10.7	F2	2	..	39473b
35	13988	47.7	-49 8	6.32	6.7	G5	..	5,R	56,149	85	13822	48.1	-50 4	9.4	9.1	Ao	5	..	39678b
36	4094	47.7	-65 36	8.5	9.3	G5	3	..	20543b	86	879	48.2	+76 32	8.6	8.7	A3	3	..	38903i
37	2971	47.7	-70 36	6.14	6.9	Go	8	R	38368b	87	3858	48.2	+47 14	7.8	7.9	A2	3	..	38020i
38	3315	47.8	+53 11	8.4	8.2	B2	3	..	37278i	88	4326	48.2	+43 15	8.0	8.3	Fo	2	5,4	38020i
39	3856	47.8	+47 2	8.5	8.5	Ao	5	..	6042m	89	4831	48.2	+16 19	5.72	6.72	Ko	8	0,9	38617i
40	5972	47.8	- 8 40	9.3	10.4	K2	1	..	19959b	90	4722	48.2	+15 59	8.0	8.5	F8	3	0,2	38835i
41	5941	47.8	-10 58	9.2	9.7	F8	5	..	39701b	91	5847	48.2	- 2 37	10.0	10.1	A2	1	..	9783b
42	6362	47.8	-14 35	9.8	10.6	G5	1	..	39701b	92	6086	48.2	- 5 53	9.3	9.9	Go	2	..	19959b
43	14944	47.8	-39 57	7.28	8.4	Ko	6	..	40858b	93	6077	48.2	- 9 38	9.51	10.69	K5	1	..	19959b
44	14851	47.8	-45 24	8.7	8.9	F8	5	..	40872b	94	6371	48.2	-12 9	5.89	5.87	B9	..	0,6	56,102
45	10360	47.8	-53 21	10.6	12.0	Mb	..	..	M	95	17383	48.2	-24 42	9.1	10.9	K5	1	..	45146b
46	703	47.9	+82 37	4.97	5.97	Ko	..	0,8	56,102	96	16095	48.2	-27 30	9.1	9.5	A2	4	..	40739b
47	1276	47.9	+70 41	8.6	9.4	G5	2	..	38903i	97	3285	48.2	-69 38	7.48	8.5	F2	8	..	38368b
48	2890	47.9	+57 11	7.8	8.8	Ko	2	..	38078i	98	880	48.3	+76 42	8.0	8.1	A2	6	0,2	38903i
49	2827	47.9	+56 8	8.2	8.2	Ao	2	..	38078i	99	2874	48.3	+55 9	8.41	8.41	Ao	2	..	38078i
50	4325	47.9	+43 45	8.0	8.1	A2	5	0,2	6042m	100	3959	48.3	+50 11	7.37	8.72	Ma	2	..	38565i

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	3860	48.3 ^{m.}	+46 16 ^o	10.2	11.0	G5	2	..	6667m	51	4940	48.7 ^{m.}	+7 24 ^o	9.1	9.7	Go	1	..	19027b
2	4524	48.3	+26 28	7.8	8.8	Ko	2	..	38607i	52	6292	48.7	-15 23	9.8	10.8	Ko	1	..	40751b
3	6087	48.3	-6 31	6.80	6.86	A2	10	..	19959b	53	6357	48.7	-19 42	6.56	8.4	K5	7	..	40751b
4	6078	48.3	-9 28	10.5	11.5	Ko	2	..	40844b	54	6019	48.7	-21 52	8.5	12.1	K5	1	..	45146b
5	6617	48.3	-16 47	8.7	9.2	F8	5	..	40751b	55	6021	48.7	-22 43	9.3	10.6	Ko	3	..	45146b
6	6355	48.3	-18 48	10.5	11.1	Go	2	..	40751b	56	19021	48.7	-31 5	7.9	9.3	Ko	5	..	40739b
7	3286	48.3	-68 57	9.5	9.9	F5	4	..	38368b	57	3720	48.7	-66 15	9.1	10.2	K2	1	..	20543b
8	756	48.4	+79 50	7.26	8.26	Ko	3	..	38590i	58	1558	48.7	-77 20	9.9	10.5	Go	3	..	42794b
9	2830	48.4	+56 10	7.31	7.87	Go	5	..	38078i	59	3864	48.8	+46 50	8.4	9.4	Ko	3	..	6042m
10	2831	48.4	+55 59	7.7	8.0	K5	1	..	37278i	60	4263	48.8	+45 9	8.02	9.02	Ko	6	2,1	6042m
11	4078	48.4	+46 1	6.70	6.68	B9	8	0,9	38020i	61	4958	48.8	+39 48	8.7	9.0	F2	5	..	38052i
12	4714	48.4	+38 5	7.12	8.47	Ma	3	..	38564i	62	4797	48.8	+30 14	7.46	7.52	A2	4	..	38032i
13	4354	48.4	-1 5	9.3	9.7	F5	2	..	9783b	63	4904	48.8	+13 3	9.3	10.1	G5	1	..	38101i
14	5526	48.4	-2 50	8.5	9.1	Go	4	..	9783b	64	4941	48.8	+7 51	10.7	11.7	Ko	1	..	19027b
15	6088	48.4	-6 39	8.9	9.9	Ko	4	..	19959b	65	4662	48.8	+1 17	7.04	8.22	K5	5	..	9782b
16	6170	48.4	-16 9	8.6	9.2	Go	5	..	40751b	66	5975	48.8	-8 35	9.6	10.6	Ko	1	..	19959b
17	19347	48.4	-30 16	9.7	9.0	A2	5	..	40730b	67	6374	48.8	-12 43	7.18	8.18	Ko	8	..	39701b
18	4095	48.4	-65 52	8.1	9.3	K5	3	..	20543b	68	16122	48.8	-42 22	8.2	8.3	F5	7	..	40872b
19	1766	48.4	-75 32	7.9	8.9	Ko	5	..	19967b	69	14858	48.8	-45 30	9.9	10.5	K2	2	..	39473b
20	704	48.5	+83 10	7.56	8.63	K2	3	..	37281i	70	2733	48.8	-72 30	9.2	10.2	Ko	3	..	19967b
21	795	48.5	+81 25	9.0	9.1	A3	2	..	38590i	71	1219	48.8	-79 18	9.6	10.2	Go	3	..	38135b
22	1168	48.5	+71 16	9.2	9.5	Fo	2	..	38903i	72	2453	48.9	+60 22	7.56	7.56	Ao	4	..	38902i
23	3962	48.5	+49 53	6.44	6.42	B9	8	..	38565i	73	2499	48.9	+59 13	8.9	9.9	Ko	1	..	38078i
24	4328	48.5	+43 39	10.2	10.2	Ao	2	..	6667m	74	4959	48.9	+39 44	8.9	9.2	Fo	3	..	38052i
25	4939	48.5	+7 54	9.1	10.1	Ko	1	..	19027b	75	4716	48.9	+37 55	8.1	8.4	Fo	5	..	38564i
26	5974	48.5	-7 56	9.3	10.3	Ko	5	..	19959b	76	6090	48.9	-6 2	9.3	10.3	Ko	4	..	40844b
27	6364	48.5	-14 23	9.8	10.9	K2	1	..	39701b	77	6079	48.9	-9 44	10.5	11.3	G5	2	..	40844b
28	6212	48.5	-17 49	9.3	9.9	Go	4	..	40751b	78	6015	48.9	-9 56	9.8	11.0	K5	3	..	40844b
29	6018	48.5	-22 28	9.6	10.6	A3	2	..	45146b	79	17661	48.9	-23 0	8.9	10.9	K5	2	..	45146b
30	15190	48.5	-43 32	10.3	10.7	Ko	1	..	39473b	80	16166	48.9	-25 31	7.24	8.1	Ko	7	..	45146b
31	14470	48.5	-46 25	8.2	8.7	Go	5	..	41899b	81	14390	48.9	-46 57	9.5	9.8	G5	3	..	39678b
32	2356	48.6	+61 54	8.0	7.8	B3	3	..	38902i	82	1471	49.0	+67 28	7.7	8.1	F5	4	..	37257i
33	2497	48.6	+58 17	7.9	7.9	Aop	4	0,4R	37278i	83	3865	49.0	+46 52	9.9	10.3	F5	1	..	6042m
34	3965	48.6	+49 20	8.0	7.9	B5	3	R	33750i	84	4264	49.0	+45 4	10.2	10.2	Ao	2	..	6667m
35	4261	48.6	+44 54	9.9	10.0	A2	2	..	6042m	85	4960	49.0	+39 22	8.5	8.8	F2	4	..	38052i
36	4329	48.6	+43 56	8.6	9.6	Ko	1	..	6042m	86	4434	49.0	+28 6	7.58	8.65	K2	4	..	38032i
37	4524	48.6	+42 30	8.4	8.4	B9	3	..	38052i	87	4957	49.0	+8 34	10.0	10.6	Go	2	..	19027b
38	4957	48.6	+39 37	6.24	6.19	B8	8	0,8	38564i	88	5101	49.0	+5 56	9.3	10.3	Ko	1	..	19027b
39	4791	48.6	+3 43	8.6	8.7	A3	5	..	9782b	89	5881	49.0	-4 58	9.2	10.3	K2	2	..	40844b
40	5880	48.6	-5 11	7.64	8.64	Ko	7	..	19959b	90	6080	49.0	-9 18	10.7	11.5	G5	2	..	40844b
41	6171	48.6	-16 23	9.3	10.1	G5	2	..	40751b	91	6298	49.0	-13 17	8.9	9.5	Go	6	..	39701b
42	6213	48.6	-18 35	8.9	9.9	Ko	4	..	40751b	92	6618	49.0	-17 34	9.1	9.7	Go	3	..	40751b
43	6317	48.6	-20 54	9.2	10.6	G5	2	..	40751b	93	15565	49.0	-35 6	8.9	10.3	G5	4	0,3	42810b
44	19020	48.6	-31 27	8.5	9.9	G5	2	..	40733b	94	9974	49.0	-56 13	8.7	9.4	A5	4	..	42510b
45	15615	48.6	-36 49	9.8	10.9	F8	2	..	40858b	95	2595	49.1	+59 34	6.32	7.39	K2	5	..	38078i
46	9915	48.6	-55 15	8.7	9.7	A3	3	..	42510b	96	3497	49.1	+52 11	8.8	8.8	Ao	2	0,2	38565i
47	3863	48.7	+46 15	9.5	9.5	Ao	2	..	6042m	97	4527	49.1	+43 7	8.6	10.0	Ma	1	..	6042m
48	4262	48.7	+44 30	9.5	10.5	Ko	1	..	6667m	98	4717	49.1	+37 23	var.	var.	G5	3	R	33749i
49	4536	48.7	+32 14	8.5	8.6	A2	1	..	38032i	99	4432	49.1	-0 6	8.6	9.8	K5	1	..	9783b
50	4729	48.7	+22 52	7.9	8.9	Ko	2	..	38100i	100	5527	49.1	-3 23	8.7	9.3	Go	5	..	9783b

THE HENRY DRAPER CATALOGUE.

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22^h 49^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	6294	49.1	-15 33	8.3	8.8	F8	6	..	40751b	51	17987	49.5	-28 23	9.4	10.9	Ko	3	..	41896b
2	6172	49.1	-15 55	9.2	10.0	G5	2	..	40751b	52	14980	49.5	-37 15	9.8	10.9	G5	1	..	40858b
3	6359	49.1	-19 35	9.8	10.3	Go	3	..	40751b	53	15272	49.5	-38 46	10.0	10.9	Ko	1	..	40858b
4	6318	49.1	-21 24	9.6	10.6	Go	3	..	40751b	54	15090	49.5	-43 59	10.5	10.7	Go	2	..	39473b
5	16168	49.1	-25 51	8.7	10.1	K5	2	..	45146b	55	13996	49.5	-49 0	6.98	7.0	Go	8	..	39678b
6	1475	49.2	+67 26	6.94	7.28	F2	6	..	37257i	56	13997	49.5	-49 2	6.66	7.5	F5	10	R	39678b
7	3861	49.2	+50 59	8.0	9.1	K2	2	..	38565i	57	2275	49.5	-73 1	8.1	8.9	G5	5	..	19967b
8	4331	49.2	+44 13	5.62	5.62	Ao	9	0,10	38020i	58	2363	49.6	+61 36	8.6	8.4	B	3	..	M
9	4330	49.2	+43 47	9.7	9.7	Ao	2	..	6667m	59	3870	49.6	+46 59	8.2	9.2	Ko	3	..	6042m
10	5065	49.2	+19 4	8.1	9.3	K5	3	..	38100i	60	4081	49.6	+45 44	9.2	9.6	F5	2	..	6042m
11	5018	49.2	+13 50	8.6	9.7	K2	2	3,1	38835i	61	4333	49.6	+44 1	8.8	8.8	B9	3	3,3	6042m
12	4905	49.2	+13 8	8.7	9.8	K2	1	..	38101i	62	5976	49.6	-8 33	9.3	9.3	Ao	3	..	19959b
13	4918	49.2	+5 3	8.70	9.48	G5	5	..	19027b	63	6504	49.6	-19 51	8.59	9.4	Fo	5	..	40751b
14	4355	49.2	-1 35	8.44	9.22	G5	4	..	9783b	64	17665	49.6	-22 54	6.72	7.6	F5	10	..	45146b
15	6295	49.2	-15 22	8.7	9.7	Ko	3	..	40751b	65	19025	49.6	-31 22	8.9	10.5	Go	2	..	40733b
16	6023	49.2	-21 53	10.2	10.9	A3	2	..	45146b	66	14981	49.6	-36 55	6.38	7.7	Ko	9	..	40858b
17	16100	49.2	-27 28	8.1	9.0	Ko	4	..	40739b	67	15197	49.6	-43 25	8.5	8.9	F8	6	..	40872b
18	18494	49.2	-29 51	9.42	11.2	K2	1	..	40739b	68	3289	49.6	-69 19	8.4	8.4	Ao	8	..	38368b
19	14354	49.2	-48 1	8.8	9.7	A3	5	..	39678b	69	1565	49.6	-76 16	9.7	10.8	K2	2	..	38231b
20	4096	49.2	-64 54	9.37	9.6	G5	3	..	19899b	70	4266	49.7	+44 39	9.9	9.9	A	1	..	6042m
21	2975	49.2	-70 10	8.7	8.8	A2	6	..	38368b	71	5030	49.7	+19 48	8.5	9.3	G5	3	..	38100i
22	1826	49.3	+66 5	8.0	8.1	A2	4	..	37257i	72	4833	49.7	+16 24	6.48	7.83	Mb	6	0,4	38617i
23	3499	49.3	+52 9	8.6	8.6	B8	3	..	37278i	73	4845	49.7	+10 57	8.0	9.0	Ko	2	..	38101i
24	4848	49.3	+22 5	9.1	10.2	K2	1	..	38100i	74	4844	49.7	+10 21	8.38	8.72	F2	2	..	38101i
25	5028	49.3	+19 20	7.10	7.60	F8	8	..	38100i	75	5787	49.7	-3 48	9.6	10.4	G5	1	..	9783b
26	5946	49.3	-10 50	8.3	9.3	Ko	7	..	39701b	76	6016	49.7	-9 55	var.	var.	Mb	2	R	19957b
27	6173	49.3	-16 21	3.51	3.57	A2	..	0,4 R	3067c	77	6366	49.7	-14 35	9.1	9.9	G5	3	..	39701b
28	1169	49.4	+72 4	8.7	9.7	Ko	2	..	38903i	78	15273	49.7	-38 34	8.9	10.4	Ko	3	..	40858b
29	2361	49.4	+61 36	9.2	9.0	B	2	..	M	79	14474	49.7	-46 52	7.5	7.9	F2	9	..	39678b
30	3962	49.4	+48 2	8.0	8.1	A2	3	..	38565i	80	12089	49.7	-52 2	9.2	10.3	A3	3	..	39663b
31	4607	49.4	+33 40	7.40	7.90	F8	4	..	38032i	81	10164	49.7	-54 33	9.3	10.6	G5	3	..	39663b
32	4436	49.4	+27 29	7.8	8.4	Go	3	..	38607i	82	3871	49.8	+46 24	9.9	9.9	Ao	2	..	6042m
33	4850	49.4	+21 52	8.5	9.7	K5	2	..	38100i	83	4082	49.8	+45 36	8.8	9.3	F8	1	..	6042m
34	4849	49.4	+21 26	9.1	9.7	Go	2	..	33745i	84	4529	49.8	+43 0	7.8	7.7	B5	4	0,5	38020i
35	4827	49.4	+17 16	6.69	7.69	Ko	6	..	38617i	85	4479	49.8	+28 50	8.9	9.5	G	1	..	38607i
36	5103	49.4	+5 27	9.7	10.2	F8	2	..	19027b	86	4728	49.8	+15 46	8.6	8.6	Ao	3	0,2	38130i
37	5886	49.4	-7 44	6.33	7.33	Ko	5	0,9	44324b	87	4958	49.8	+9 2	9.0	9.3	Fo	1	..	19027b
38	6377	49.4	-12 2	10.6	11.2	Go	1	..	39701b	88	5083	49.8	+6 44	7.8	8.9	K2	7	..	19027b
39	6300	49.4	-13 43	9.8	10.1	Fo	2	..	39701b	89	4357	49.8	-1 18	8.4	9.0	Go	4	..	9783b
40	6619	49.4	-16 48	5.66	6.66	Ko	..	2,4	56,149	90	6297	49.8	-14 57	10.2	11.0	G5	1	..	39701b
41	15079	49.4	-41 28	9.2	8.2	F2	6	..	40872b	91	17397	49.8	-24 30	8.1	9.5	K2	4	..	45146b
42	15195	49.4	-43 25	10.8	10.7	G5	1	..	40872b	92	19355	49.8	-30 9	var.	var.	Mb	2	R	40739b
43	14392	49.4	-47 12	7.4	8.7	Ko	7	..	39678b	93	16133	49.8	-42 26	9.2	10.4	Ko	4	..	39473b
44	10161	49.4	-54 24	8.9	9.5	A2	6	..	39663b	94	15091	49.8	-44 11	8.9	9.6	F8	5	..	39473b
45	4631	49.5	+41 29	8.5	9.7	K5	1	..	38052i	95	4334	49.9	+43 59	9.7	10.5	G5	1	..	6667m
46	4964	49.5	+39 51	5.94	7.01	K2	6	0,7	38564i	96	4633	49.9	+23 52	7.92	9.27	Mb	4	..	38100i
47	5129	49.5	+9 47	9.3	10.5	K5	1	..	19027b	97	4894	49.9	+14 49	9.0	9.1	A2	4	..	38101i
48	5883	49.5	-4 52	10.0	10.8	G5	2	..	40844b	98	4893	49.9	+14 34	8.6	8.7	A3	3	..	38101i
49	..	49.5	-7 30	Ro	1	..	40844b	99	5130	49.9	+9 47	9.3	9.8	F8	3	..	19027b
50	17664	49.5	-23 38	8.9	10.6	Ko	3	..	45146b	100	5105	49.9	+5 37	9.0	9.4	F5	4	..	19027b

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22^h 49^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	4939	49.9	+ 0 32	6.05	6.13	A3	10	..	9783b	51	15093	50.3	-44 9	10.1	10.7	A5	2	..	39473b
2	4358	49.9	- 1 35	9.0	9.6	Go	2	..	9783b	52	14004	50.3	-49 11	10.8	11.5	Go	1	..	39678b
3	5888	49.9	- 7 46	10.2	11.3	K2	1	..	40844b	53	8018	50.3	-58 19	8.5	9.0	Ko	2	..	42510b
4	5979	49.9	- 8 4	8.7	9.7	Ko	7	..	19959b	54	3868	50.4	+50 25	8.7	8.7	Ao	2	..	38565i
5	6298	49.9	-15 32	9.3	9.8	F8	2	..	40751b	55	4635	50.4	+41 57	8.6	9.6	Ko	1	..	38052i
6	6217	49.9	-17 47	9.1	10.1	Ko	2	..	40751b	56	4956	50.4	+36 33	6.00	6.34	F2	8	..	38564i
7	6321	49.9	-21 44	9.6	12.1	Ko	1	..	45146b	57	4737	50.4	+22 27	8.7	9.2	F8	2	..	38100i
8	13999	49.9	-49 35	9.3	10.0	F8	2	..	39678b	58	5132	50.4	+10 6	9.07	9.35	Fo	3	..	19027b
9	2976	49.9	-69 59	9.08	9.9	Go	3	..	38368b	59	4921	50.4	+ 4 17	8.6	9.8	K5	2	..	9782b
10	1901	50.0	+63 54	8.8	9.6	G5	2	..	38902i	60	6177	50.4	-16 2	8.7	9.5	G5	4	..	40751b
11	2364	50.0	+62 4	9.4	9.2	B	3	..	M	61	17312	50.4	-32 10	6.13	7.4	Ko	7	..	40733b
12	2500	50.0	+58 22	8.0	9.0	Ko	1	..	37278i	62	17313	50.4	-32 27	9.0	11.1	G	3	E	42810b
13	3872	50.0	+46 51	8.9	9.0	A3	3	..	6042m	63	16303	50.4	-33 4	4.33	5.33	Ko	..	R	28,216
14	4965	50.0	+39 27	8.9	10.0	K2	2	..	38052i	64	14878	50.4	-39 12	8.2	10.1	Ko	3	..	40858b
15	4543	50.0	+33 0	8.5	9.5	Ko	1	..	38032i	65	1729	50.5	+64 50	8.7	8.7	Ao	2	..	38902i
16	4835	50.0	+30 56	7.41	7.41	Ao	5	..	38032i	66	4336	50.5	+43 55	8.7	8.8	A2	3	0,2	6042m
17	4836	50.0	+30 30	8.1	8.2	A2	1	..	38032i	67	5530	50.5	- 3 23	8.5	9.6	K2	3	..	9783b
18	5885	50.0	- 5 31	5.87	6.65	G5	6	0,10	44324b	68	6085	50.5	- 9 20	9.8	11.0	K5	2	..	40844b
19	14002	50.0	-49 14	8.1	8.5	K2	6	..	39678b	69	6325	50.5	-21 4	8.57	9.3	Ko	4	..	40751b
20	513	50.1	+84 15	7.09	8.09	Ko	4	..	37281i	70	16109	50.5	-27 10	8.2	8.7	G5	7	..	40739b
21	2456	50.1	+60 19	8.56	8.64	A3	2	..	38902i	71	15277	50.5	-38 37	7.66	8.7	K2	5	..	40858b
22	4908	50.1	+35 27	7.62	8.62	Ko	2	..	38564i	72	1904	50.6	+63 35	8.2	8.8	Go	4	..	37257i
23	4442	50.1	+27 28	7.30	8.08	G5	3	..	38607i	73	3871	50.6	+50 27	8.9	8.9	Ao	2	..	38565i
24	5067	50.1	+19 1	7.90	9.25	Mb	3	..	38100i	74	4833	50.6	+17 39	7.8	7.9	A5	5	..	38617i
25	6096	50.1	- 6 14	7.7	8.9	K5	6	..	19959b	75	4832	50.6	+17 16	8.0	8.1	A3	4	..	38617i
26	6367	50.1	-14 17	8.5	9.3	G5	5	..	39701b	76	5891	50.6	- 7 2	9.1	9.6	F8	5	..	19959b
27	6507	50.1	-20 40	6.61	7.9	K2	10	..	40751b	77	5980	50.6	- 8 21	8.9	9.7	G5	8	..	19959b
28	6322	50.1	-21 18	10.0	11.1	Ao	2	..	40751b	78	6021	50.6	-10 4	10.5	11.1	Go	3	..	40844b
29	17309	50.1	-32 18	9.6	11.2	Ko	3	..	42810b	79	5950	50.6	-11 44	10.6	11.4	G5	1	..	39701b
30	2837	50.2	+55 48	7.01	7.79	G5	5	..	38078i	80	17994	50.6	-28 33	8.7	8.1	A2	8	..	40739b
31	3874	50.2	+46 45	8.0	9.2	K5	3	..	6042m	81	14992	50.6	-37 13	8.6	8.5	F5	6	..	40858b
32	4271	50.2	+44 15	10.2	10.2	Ao	1	..	6667m	82	16137	50.6	-42 42	9.9	11.3	K2	2	..	39473b
33	4634	50.2	+41 58	8.0	8.1	A2	5	1,2	38052i	83	3879	50.7	+48 56	8.1	8.7	Go	4	..	38565i
34	4960	50.2	+ 8 56	8.0	9.1	K2	2	..	38101i	84	4273	50.7	+45 3	8.2	8.3	A2	6	0,2	6042m
35	4961	50.2	+ 8 17	4.95	4.95	Ao	..	0,R	56,102	85	4968	50.7	+39 24	8.9	9.4	F8	3	..	38052i
36	5085	50.2	+ 6 55	8.8	8.9	A2	7	..	19027b	86	5069	50.7	+18 20	8.1	9.5	Ma	2	..	38617i
37	5853	50.2	- 1 53	9.1	9.6	F8	3	..	9783b	87	5981	50.7	- 7 55	10.0	10.6	Go	2	..	19959b
38	6018	50.2	-10 39	8.9	9.7	G5	3	..	39701b	88	6368	50.7	-14 17	8.9	9.5	Go	6	..	39701b
39	6302	50.2	-14 54	10.2	11.0	G5	1	..	39701b	89	6303	50.7	-15 12	9.3	10.7	Mb	3	..	39701b
40	18502	50.2	-29 34	9.2	9.0	F8	4	..	40739b	90	6178	50.7	-16 1	9.3	10.1	G5	3	..	40751b
41	15627	50.2	-36 42	10.2	10.6	Go	3	..	40858b	91	17319	50.7	-32 17	9.2	10.8	Go	3	..	42810b
42	15082	50.2	-41 38	6.82	8.0	Ko	9	..	40872b	92	15824	50.7	-34 25	8.6	10.0	F8	3	..	40733b
43	15198	50.2	-43 5	7.2	7.7	A2	9	..	40872b	93	15205	50.7	-43 50	9.9	10.7	K2	2	..	39473b
44	15199	50.2	-43 18	10.1	10.7	Go	2	..	39473b	94	14363	50.7	-47 55	10.5	11.5	Fo	2	..	39678b
45	14003	50.2	-49 0	10.1	10.9	Go	1	..	39678b	95	3983	50.8	+49 26	8.6	8.7	A2	2	..	38565i
46	3875	50.3	+47 2	8.7	9.5	G5	2	..	6042m	96	4086	50.8	+45 56	8.8	9.6	G5	1	..	6042m
47	6098	50.3	- 6 7	9.3	9.6	F2	4	..	19959b	97	4088	50.8	+45 50	7.8	7.8	Ao	3	1,7	38020i
48	6019	50.3	-10 12	9.1	9.7	Go	3	..	19959b	98	4912	50.8	+35 37	8.1	9.2	K2	2	..	38032i
49	17671	50.3	-23 18	8.9	9.7	F8	5	..	45146b	99	5135	50.8	+ 9 15	9.7	10.7	Ko	1	..	19027b
50	15200	50.3	-43 41	8.6	8.9	F8	5	..	40872b	100	4664	50.8	+ 1 24	8.8	8.9	A5	4	..	9783b

THE HENRY DRAPER CATALOGUE.

216800

22^h 50^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	5887	50.8	- 5 41	9.8	10.4	Go	3	..	40844b	51	4538	51.3	+43 2	7.68	7.56	B5	4	3,5 R	6042m
2	6366	50.8	-18 54	9.6	10.9	G5	1	..	40751b	52	4539	51.3	+42 40	8.6	8.7	A2	1	R	3802oi
3	17321	50.8	-32 6	6.46	7.4	K5	7	..	40733b	53	4637	51.3	+41 25	8.8	9.9	K2	2	..	38052i
4	2736	50.8	-72 15	8.6	8.7	A3	7	..	19967b	54	4942	51.3	+40 49	8.1	8.5	F5	4	..	3802oi
5	4338	50.9	+43 53	10.2	10.3	A3	1	..	6667m	55	5137	51.3	+10 9	9.32	10.50	K5	2	..	19027b
6	5952	50.9	-11 36	8.9	9.2	F2	4	..	39701b	56	5086	51.3	+ 7 7	9.7	10.3	Go	2	..	19027b
7	6381	50.9	-12 41	9.6	9.6	A0	4	..	39701b	57	5110	51.3	+ 5 17	9.01	9.51	F8	2	..	9782b
8	6303	50.9	-12 56	9.3	9.9	Go	3	..	39701b	58	6305	51.3	-13 9	10.0	11.1	K2	1	..	39701b
9	6370	50.9	-14 6	8.3	9.4	K2	5	..	39701b	59	16385	51.3	-26 47	10.4	9.8	Go	2	..	40739b
10	17406	50.9	-24 23	8.9	9.0	F0	4	..	45146b	60	9919	51.3	-55 28	8.7	9.7	Ko	4	..	39663b
11	17405	50.9	-24 40	8.5	8.6	F0	5	..	45146b	61	4279	51.4	+45 1	9.4	9.9	F8	2	..	6042m
12	10168	50.9	-54 24	10.1	11.2	K2	1	..	39663b	62	4278	51.4	+44 32	9.9	9.9	A	2	..	6042m
13	2735	50.9	-71 8	8.3	9.3	Ko	7	..	38368b	63	4838	51.4	+16 55	8.8	9.8	Ko	4	0,2	6445m
14	1282	51.0	+71 14	9.2	9.3	A2	2	..	38903i	64	4914	51.4	+12 30	7.8	8.6	G5	4	..	38101i
15	4536	51.0	+42 45	8.1	8.2	A2	2	..	3802oi	65	15827	51.4	-33 58	9.3	11.7	K5	2	..	4281ob
16	4810	51.0	+30 6	8.28	9.28	Ko	2	..	38032i	66	14874	51.4	-45 16	8.6	9.2	Ko	6	..	39473b
17	5136	51.0	+ 9 31	9.3	10.4	K2	1	..	19027b	67	6378	51.4	-62 24	8.1	9.3	K5	1	..	19899b
18	5109	51.0	+ 5 48	10.0	11.1	K2	1	..	19027b	68	992	51.5	+75 3	8.9	9.7	G5	1	..	38903i
19	6304	51.0	-13 17	9.3	9.8	F8	5	..	39701b	69	2900	51.5	+56 21	9.2	9.2	A	1	..	38078i
20	6220	51.0	-18 28	10.2	11.2	Ko	1	..	40751b	70	4797	51.5	+35 9	7.87	9.05	K5	1	..	38564i
21	18504	51.0	-29 8	8.1	8.1	F0	8	..	40739b	71	4965	51.5	+ 8 24	9.5	10.1	Go	2	..	19027b
22	15577	51.0	-35 19	8.7	10.6	K2	2	..	40858b	72	5088	51.5	+ 6 16	7.6	8.1	F8	8	..	19027b
23	14364	51.0	-48 30	5.90	5.98	A3	..	I, R	56,149	73	5791	51.5	- 4 4	8.5	9.0	F8	7	..	9783b
24	8021	51.0	-57 56	7.4	8.7	Mc	6	..	4251ob	74	6090	51.5	- 9 28	9.8	10.4	Go	4	..	40844b
25	2981	51.0	-69 59	8.78	9.4	G5	5	..	38368b	75	6384	51.5	-11 52	10.0	10.6	Go	1	..	39701b
26	2982	51.0	-70 2	8.6	9.4	G5	5	..	38368b	76	3933	51.5	-66 52	8.3	9.4	K2	6	..	38368b
27	2458	51.1	+61 4	8.5	8.6	A5	2	..	38902i	77	1283	51.6	+70 49	8.1	8.2	A3	2	..	3858oi
28	3503	51.1	+52 6	8.0	8.4	F5	3	..	38078i	78	4093	51.6	+46 9	8.0	8.8	G5	5	5,1	6042m
29	3875	51.1	+51 3	9.0	9.0	A0	2	..	38565i	79	4742	51.6	+22 24	7.37	7.65	F0	7	..	3810oi
30	4089	51.1	+46 7	8.6	9.6	Ko	2	..	6042m	80	5034	51.6	+19 18	9.1	10.1	Ko	1	..	38617i
31	4917	51.1	+35 50	5.63	5.61	B9	10	0,10	38564i	81	4946	51.6	+ 0 55	9.0	9.1	A2	2	..	9783b
32	4849	51.1	+10 32	10.3	10.8	F8	3	..	19027b	82	5953	51.6	-10 48	8.2	8.2	A0	8	..	19959b
33	6100	51.1	- 5 47	9.1	9.4	F2	3	..	19959b	83	6625	51.6	-16 49	9.1	9.9	G5	3	..	40751b
34	5892	51.1	- 7 5	8.5	9.3	G5	7	..	19959b	84	15102	51.6	-44 47	10.3	11.3	K5	1	..	39473b
35	6022	51.1	-10 27	9.6	10.4	G5	2	..	19959b	85	813	51.7	+78 22	7.7	8.9	K5	2	..	3882oi
36	6304	51.1	-14 56	10.2	11.0	G5	1	..	39701b	86	858	51.7	+75 48	7.37	7.45	A3	6	0,5	38903i
37	16310	51.1	-33 37	9.3	10.5	K5	2	..	4281ob	87	1284	51.7	+71 1	8.0	9.0	Ko	1	..	3858oi
38	2049	51.1	-74 18	7.8	8.8	Ko	4	..	19967b	88	3032	51.7	+53 43	8.0	9.0	Ko	1	..	37278i
39	4277	51.2	+44 18	8.4	9.2	G5	4	5,2	6042m	89	4094	51.7	+45 15	8.52	9.02	F8	5	0,2-	6042m
40	5020	51.2	+13 22	8.6	9.4	G5	2	..	37245i	90	4541	51.7	+43 10	9.0	9.1	A2	1	..	38052i
41	4912	51.2	+12 51	9.0	10.0	Ko	2	..	37245i	91	4916	51.7	+13 8	9.0	10.0	Ko	3	0,1	6445m
42	4797	51.2	+ 3 40	8.8	9.6	G5	2	..	9782b	92	4948	51.7	+ 7 48	10.3	11.1	G5	1	..	19027b
43	6023	51.2	-10 30	10.2	11.2	Ko	2	..	40844b	93	4947	51.7	+ 0 21	8.48	9.48	Ko	3	..	9782b
44	6382	51.2	-12 30	10.7	11.3	Go	1	..	39701b	94	5954	51.7	-10 56	9.1	10.2	K2	4	..	40844b
45	6305	51.2	-15 31	8.1	9.1	Ko	5	..	40751b	95	6306	51.7	-13 41	9.2	9.7	F8	4	..	39701b
46	16193	51.2	-25 15	9.9	11.8	Ko	1	..	45146b	96	18003	51.7	-28 18	10.2	10.7	Go	3	..	41896b
47	10166	51.2	-57 55	6.9	7.1	A2	9	..	4251ob	97	814	51.8	+78 32	8.6	8.6	A0	2	..	3859oi
48	998	51.3	+74 4	7.58	8.00	F5	5	0,5-	38903i	98	2370	51.8	+61 46	8.0	7.8	B2	5	..	M
49	2899	51.3	+56 50	8.8	8.8	A0	2	..	37278i	99	4733	51.8	+16 2	8.6	10.0	Ma	3	5,1	6445m
50	4341	51.3	+43 46	6.84	7.84	Ko	6	5,6	3802oi	100	4904	51.8	+11 19	6.46	6.54	A3	8	..	38101i

216900

22^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	4949	51.8 + 8 0	9.3	10.1	G5	2	..		19027b	51	4966	52.1 + 8 43	8.8	9.4	Go	3	..	19027b	
2	5111	51.8 + 5 34	9.0	9.6	Go	3	..		9782b	52	5857	52.1 - 1 57	9.6	10.8	K5	1	..	9783b	
3	4948	51.8 + 1 4	8.64	9.14	F8	3	..		9783b	53	5894	52.1 - 5 21	6.37	7.15	G5	9	..	19959b	
4	4359	51.8 - 1 3	8.6	9.2	Go	2	..		9783b	54	6333	52.1 - 21 12	8.70	9.9	K5	3	..	40751b	
5	5895	51.8 - 7 22	9.6	10.6	Ko	1	..		19959b	55	16122	52.1 - 27 20	9.9	10.4	G5	2	..	40739b	
6	6511	51.8 - 20 5	8.10	9.0	Ko	6	..		40751b	56	19370	52.1 - 30 9	1.29	1.37	A3	..	R	28,216	
7	6330	51.8 - 20 53	var.	var.	Md	..	R	M		57	15581	52.1 - 35 13	9.6	10.6	Ko	1	..	40858b	
8	6331	51.8 - 21 42	9.3	11.1	G5	2	..		45146b	58	2909	52.2 + 56 20	8.5	8.6	A3	2	..	38078i	
9	16389	51.8 - 26 44	8.2	9.2	Ko	5	..		40739b	59	3979	52.2 + 47 34	7.8	8.9	K2	1	..	38565i	
10	7842	51.8 - 59 37	6.72	7.4	Fo	10	..		19899b	60	3882	52.2 + 46 50	7.8	8.8	Ko	6	0,1	6042m	
11	1461	51.8 - 78 16	9.8	9.9	A3	3	..		42794b	61	4345	52.2 + 43 21	9.2	9.3	A3	1	..	38052i	
12	2644	51.9 + 57 40	6.96	6.96	Ao	7	..		38078i	62	4976	52.2 + 39 41	9.2	9.3	A3	2	..	2397oi	
13	3033	51.9 + 53 41	9.4	..	Nb	..	..	M		63	4640	52.2 + 24 9	8.1	9.1	Ko	3	..	38100i
14	3991	51.9 + 50 0	8.2	8.2	Ao	2	..		38565i	64	5073	52.2 + 18 54	9.5	9.8	F	1	..	38835i	
15	4545	51.9 + 42 28	8.0	8.0	Ao	1	..		38020i	65	4902	52.2 + 14 53	8.0	8.3	Fo	3	5,6	38101i	
16	4949	51.9 + 41 4	5.54	5.37	B3	..	0,10		56,102	66	6307	52.2 - 15 13	10.0	11.2	K5	1	..	39701b	
17	4638	51.9 + 23 20	8.2	9.3	K2	3	..		38100i	67	6628	52.2 - 17 30	9.1	9.9	G5	1	..	40751b	
18	4841	51.9 + 17 5	10.0	11.0	K	1	..		6445m	68	6334	52.2 - 20 49	7.59	8.7	Ko	7	..	40751b	
19	4917	51.9 + 12 19	9.1	10.3	K5	2	..		37245i	69	16394	52.2 - 25 59	8.5	9.0	F5	5	..	45146b	
20	5534	51.9 - 3 22	9.3	9.8	F8	3	..		9783b	70	16318	52.2 - 33 45	10.9	8.1	Go	4	..	42810b	
21	6373	51.9 - 14 31	10.0	10.6	Go	1	..		39701b	71	15832	52.2 - 33 52	10.4	11.7	K5	1	..	42810b	
22	18516	51.9 - 29 47	10.2	11.2	Ko	1	..		41896b	72	15004	52.2 - 37 5	9.5	10.3	A3	3	..	40858b	
23	14410	51.9 - 47 48	9.7	9.6	Ao	5	..		39678b	73	14412	52.2 - 47 36	9.7	9.6	F5	4	..	39678b	
24	3724	51.9 - 65 54	8.0	8.4	F5	6	..		20543b	74	9921	52.2 - 55 22	9.9	10.9	Ko	1	..	39663b	
25	1288	52.0 + 69 46	7.64	7.78	A5	2	5,7		37257i	75	7619	52.2 - 59 57	8.4	9.3	Ko	2	..	19899b	
26	2134	52.0 + 62 55	8.7	8.7	Ao	2	..		38902i	76	2739	52.2 - 72 22	7.6	9.0	Ma	5	..	19967b	
27	2511	52.0 + 58 22	8.0	7.8	B	2	..		16256m	77	877	52.3 + 77 18	8.0	9.0	Ko	2	2,2	38964i	
28	2850	52.0 + 55 54	7.06	7.04	B9	6	..		38078i	78	1172	52.3 + 72 4	8.0	8.4	F5	5	5,2	38903i	
29	4615	52.0 + 33 49	7.88	7.88	Ao	4	..		38032i	79	4642	52.3 + 23 44	8.5	9.3	G5	3	..	38100i	
30	5024	52.0 + 13 53	7.95	9.30	Ma	2	0,4		38101i	80	4842	52.3 + 16 59	8.4	9.4	Ko	4	0,7	38617i	
31	5793	52.0 - 3 47	6.58	6.58	Ao	9	..		9783b	81	4903	52.3 + 14 45	9.5	9.6	A3	2	..	6445m	
32	5985	52.0 - 8 7	9.6	10.6	Ko	2	..		19959b	82	5089	52.3 + 7 6	9.0	9.8	G5	2	..	19027b	
33	6306	52.0 - 15 22	9.3	9.4	A5	4	..		39701b	83	5536	52.3 - 3 41	7.78	8.28	F8	8	..	9783b	
34	17414	52.0 - 24 22	8.3	9.5	Ko	4	..		45146b	84	6630	52.3 - 17 4	8.7	9.3	Go	5	..	40751b	
35	15831	52.0 - 34 27	8.2	9.7	K2	3	..		40733b	85	18006	52.3 - 28 31	7.7	8.3	Ko	7	..	40739b	
36	15644	52.0 - 36 17	9.5	10.6	F5	2	..		40858b	86	16319	52.3 - 33 44	8.1	8.1	F2	7	..	40733b	
37	15212	52.0 - 43 22	11.2	10.7	A2	1	..		39473b	87	15584	52.3 - 35 32	8.3	10.6	Ko	2	..	40858b	
38	14877	52.0 - 45 38	8.9	9.3	F8	6	..		39473b	88	15288	52.3 - 38 28	7.30	7.8	Ko	8	..	40858b	
39	14011	52.0 - 48 58	9.5	10.0	F2	2	..		39678b	89	14879	52.3 - 45 42	8.0	7.9	Fo	9	..	39473b	
40	12092	52.0 - 51 58	9.2	10.1	Go	4	..		39663b	90	3545	52.3 - 67 56	9.8	10.8	Ko	2	..	38368b	
41	4101	52.0 - 65 30	9.8	9.9	A2	3	..		19899b	91	758	52.4 + 79 42	7.8	8.9	K2	2	..	38590i	
42	3725	52.0 - 66 3	9.1	9.9	G5	2	..		20543b	92	1482	52.4 + 67 42	7.96	7.91	B8	4	..	37257i	
43	2737	52.0 - 72 5	9.9	10.7	G5	1	..		19967b	93	1833	52.4 + 66 11	8.0	8.0	Ao	4	..	37257i	
44	1481	52.1 + 68 5	8.0	8.6	Go	4	..		37257i	94	2514	52.4 + 58 33	8.2	8.2	Ao	3	..	38078i	
45	2371	52.1 + 61 54	7.06	8.24	K5	4	..		37257i	95	3982	52.4 + 47 27	8.41	9.41	Ko	1	..	38565i	
46	3887	52.1 + 49 12	5.10	6.10	Ko	..	5,8		56,102	96	4547	52.4 + 42 44	9.4	9.4	A	1	..	38052i	
47	4641	52.1 + 41 23	9.0	9.1	A2	2	..		38052i	97	4926	52.4 + 35 57	7.9	8.0	A2	2	..	38032i	
48	4924	52.1 + 35 28	8.15	8.21	A2	2	..		38564i	98	4800	52.4 + 34 22	7.7	8.1	F5	3	..	38032i	
49	5025	52.1 + 13 29	7.78	8.06	Fo	5	2,6		38101i	99	5074	52.4 + 18 48	9.3	9.3	Ao	3	..	38617i	
50	4853	52.1 + 10 39	8.8	9.2	F5	2	..		38101i	100	5538	52.4 - 3 43	9.2	10.0	G5	4	..	9783b	

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	6631	52.4	-17 38	9.6	10.8	K5	1	..	40751b	51	5076	52.7	+18 28	8.6	9.6	Ko	2	..	38617i
2	17682	52.4	-23 9	8.7	9.7	G5	5	..	45146b	52	5795	52.7	-4 12	8.1	8.2	A2	6	..	9783b
3	17418	52.4	-24 6	9.9	11.3	G5	1	..	45146b	53	6108	52.7	-6 5	9.3	10.3	Ko	1	..	19959b
4	16395	52.4	-26 38	7.27	7.6	Go	9	..	40739b	54	6224	52.7	-18 2	9.8	10.3	F8	1	..	40751b
5	16396	52.4	-26 42	8.5	10.4	Mb	2	..	40739b	55	6375	52.7	-19 14	8.9	8.6	F2	5	..	40751b
6	14490	52.4	-46 33	8.7	8.9	A3	5	..	39678b	56	6374	52.7	-19 31	8.33	9.7	K5	4	..	40751b
7	10372	52.4	-53 39	10.2	11.2	Ko	1	..	39663b	57	16202	52.7	-25 32	10.9	11.2	Ko	2	..	45146b
8	3546	52.4	-68 35	9.9	10.0	A2	3	..	38368b	58	10373	52.7	-53 20	10.6	10.6	Ao	3	..	39663b
9	1767	52.4	-75 39	9.8	10.8	Ko	3	..	38231b	59	10170	52.7	-57 18	8.3	8.8	F2	5	..	42510b
10	743	52.4	-83 14	7.78	8.6	G5	5	..	15165b	60	6705	52.7	-61 34	8.8	8.8	Go	3	..	19899b
11	885	52.5	+76 58	8.4	8.5	A2	4	2,1	38903i	61	2372	52.8	+62 5	8.4	8.2	B	3	..	M
12	4953	52.5	+40 22	8.72	9.79	K2	1	..	38052i	62	2607	52.8	+59 25	7.07	7.05	B9	6	..	38078i
13	4816	52.5	+31 40	7.9	9.0	K2	1	..	38032i	63	2515	52.8	+59 9	8.1	8.1	Ao	3	..	38078i
14	5036	52.5	+20 14	5.59	6.15	Go	10	..	38100i	64	2516	52.8	+58 25	8.0	8.0	Ao	2	..	38078i
15	5035	52.5	+19 26	8.4	9.6	K5	2	..	33745i	65	6378	52.8	-14 10	10.0	11.2	K5	1	..	39701b
16	4845	52.5	+17 8	9.0	10.0	Ko	1	2,1-	37245i	66	6225	52.8	-18 14	8.2	8.3	A2	7	..	40751b
17	4844	52.5	+16 39	9.0	9.8	G5	2	..	6445m	67	18009	52.8	-28 32	10.9	11.3	Go	1	..	41896b
18	4929	52.5	+4 22	8.8	9.4	G	1	..	9782b	68	16324	52.8	-33 48	9.5	11.6	K5	4	..	42810b
19	4799	52.5	+3 15	6.43	7.50	K2	9	..	9782b	69	15840	52.8	-34 8	9.0	10.3	Go	1	..	40733b
20	5897	52.5	-7 8	8.9	9.3	F5	6	..	19959b	70	16153	52.8	-42 49	10.3	11.3	F8	2	..	39473b
21	6376	52.5	-14 16	10.0	10.6	Go	1	..	39701b	71	2855	52.9	+55 57	7.34	7.62	Fo	4	..	38078i
22	6308	52.5	-14 59	8.9	10.0	K2	3	..	39701b	72	2884	52.9	+55 9	8.81	8.81	A	2	..	37278i
23	17686	52.5	-23 22	9.2	11.7	K5	2	R	45146b	73	4548	52.9	+42 28	6.90	8.08	K5	2	..	38020i
24	16126	52.5	-27 15	9.7	10.4	G5	1	..	40739b	74	4734	52.9	+15 18	8.99	9.49	F8	4	..	6445m
25	16150	52.5	-42 23	8.7	9.5	G5	5	..	39473b	75	4919	52.9	+13 5	7.8	8.1	F2	7	0,7	38101i
26	15108	52.5	-44 1	9.9	11.3	K2	1	..	39473b	76	6110	52.9	-6 14	8.7	9.0	Fo	7	..	19959b
27	14881	52.5	-45 1	10.5	10.7	Ko	1	..	39473b	77	5961	52.9	-11 40	8.9	9.3	F5	6	..	39701b
28	14491	52.5	-46 33	9.3	9.9	Go	2	..	39678b	78	6389	52.9	-12 42	10.0	11.0	Ko	1	..	39701b
29	13437	52.5	-51 20	8.9	9.1	F2	5	..	39663b	79	6308	52.9	-13 4	9.8	10.4	Go	3	..	39701b
30	3547	52.5	-68 5	8.5	9.3	G5	5	..	38368b	80	6184	52.9	-16 27	8.3	9.1	G5	3	..	40751b
31	3548	52.5	-68 45	9.2	10.2	Ko	4	..	38368b	81	6632	52.9	-16 52	10.5	11.5	Ko	1	..	40751b
32	2050	52.5	-74 0	8.8	10.0	K5	2	..	19967b	82	6376	52.9	-18 56	8.8	8.4	F5	5	..	40751b
33	1567	52.5	-76 26	9.5	10.0	F8	2	..	38231b	83	17687	52.9	-22 56	8.7	12.1	K5	1	..	45146b
34	1173	52.6	+71 29	8.1	9.3	K5	1	..	38903i	84	14497	52.9	-46 4	7.7	8.3	G5	7	..	39678b
35	2136	52.6	+62 19	7.76	7.64	B5	3	..	38902i	85	1076	53.0	+72 18	7.23	7.29	A2	7	1,4	38903i
36	4854	52.6	+10 48	9.5	10.5	Ko	1	..	19027b	86	2373	53.0	+62 12	7.70	7.65	Bo	5	R	M
37	5139	52.6	+9 44	9.0	9.5	F8	3	..	38101i	87	3995	53.0	+50 11	8.67	8.75	A3	1	..	38565i
38	4587	52.6	+2 42	9.0	9.6	Go	1	..	9782b	88	3889	53.0	+46 28	7.9	8.0	A2	3	..	38020i
39	6107	52.6	-6 25	10.2	10.8	Go	2	..	40844b	89	3888	53.0	+46 16	7.6	8.4	G5	2	..	38020i
40	6310	52.6	-14 50	8.76	9.76	Ko	5	..	39701b	90	4903	53.0	+38 51	7.7	8.8	K2	3	..	38564i
41	6309	52.6	-15 12	9.6	10.1	F8	3	..	39701b	91	4970	53.0	+36 51	8.10	9.28	K5	1	..	38564i
42	6373	52.6	-18 54	9.1	10.0	Ko	2	..	40751b	92	4744	53.0	+23 7	8.1	8.2	A2	6	..	38100i
43	6513	52.6	-20 22	8.7	9.1	G5	5	..	40751b	93	4904	53.0	+14 29	9.3	9.8	F8	4	..	6445m
44	6034	52.6	-22 34	8.7	10.2	K5	3	..	45146b	94	6309	53.0	-13 44	10.6	11.2	Go	1	..	39701b
45	14892	52.6	-39 39	8.6	9.6	Ko	4	..	40858b	95	6338	53.0	-21 44	9.6	10.7	K2	1	..	45146b
46	14493	52.6	-46 28	9.9	10.4	Go	2	..	39678b	96	15650	53.0	-36 3	6.28	7.2	F8	7	3,10	41749b
47	13438	52.6	-51 40	7.5	8.5	G5	7	..	39663b	97	14414	53.0	-47 43	9.7	11.3	K5	1	..	39678b
48	9982	52.6	-56 21	10.0	11.1	K2	2	..	39663b	98	4306	53.0	-64 43	8.22	9.6	Ma	4	..	19899b
49	1073	52.7	+72 18	8.6	8.6	Ao	6	0,3-	38903i	99	2139	53.1	+62 28	8.6	9.6	Ko	1	..	38902i
50	3985	52.7	+48 9	5.20	5.03	B3	56,102	100	3886	53.1	+51 7	8.8	8.9	A5	1	..	38565i

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22^h 53^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	4904	53.1	+38 48	6.07	5.90	B3	7	..	38564i	51	19061	53.4	-31 0	9.1	10.8	Go	1	..	40733b
2	4645	53.1	+23 34	8.3	9.1	G5	3	..	38100i	52	10176	53.4	-53 54	9.1	10.9	Ko	2	..	39663b
3	4735	53.1	+15 22	9.5	9.9	F5	1	..	6445m	53	9925	53.4	-54 53	9.1	10.9	Ma	1	..	39663b
4	4905	53.1	+14 44	8.8	9.8	Ko	4	..	6445m	54	6710	53.4	-61 13	8.3	8.3	F5	7	..	19899b
5	5027	53.1	+14 10	9.7	10.2	F8	3	..	6445m	55	4833	53.4	-63 18	7.25	7.7	F5	9	..	19899b
6	4951	53.1	+ 8 2	9.5	10.1	Go	3	..	19027b	56	3551	53.4	-68 46	10.4	11.2	G5	1	..	38368b
7	5539	53.1	- 2 56	6.21	6.99	G5	6	0,10	38163i	57	517	53.5	+84 50	6.18	7.36	K5	6	..	37281i
8	15843	53.1	-33 59	8.6	10.0	F8	2	..	40733b	58	516	53.5	+84 31	7.60	8.95	Mb	3	..	37281i
9	14979	53.1	-40 28	8.2	10.1	Ko	4	..	39473b	59	801	53.5	+81 24	7.63	8.63	Ko	3	..	38590i
10	7621	53.1	-60 42	7.4	8.3	K2	7	..	19899b	60	2858	53.5	+55 27	8.2	8.7	F8	2	..	38078i
11	1220	53.1	-79 25	8.5	9.0	F8	6	..	38135b	61	4650	53.5	+41 23	8.6	8.7	A2	2	..	38020i
12	1565	53.2	+66 47	8.4	8.8	F5	2	..	37257i	62	4863	53.5	+21 59	8.7	9.9	K5	1	..	38101i
13	3038	53.2	+53 31	8.6	8.6	A	1	..	37278i	63	4910	53.5	+11 31	9.1	9.4	F2	3	..	38101i
14	4552	53.2	+33 11	8.1	8.9	G5	1	..	38032i	64	4911	53.5	+11 30	9.0	9.3	F2	2	..	38101i
15	5252	53.2	+20 59	7.7	9.1	Mb	4	..	38100i	65	5140	53.5	+ 9 17	7.7	8.3	Go	4	..	38101i
16	5039	53.2	+20 11	8.20	9.20	Ko	2	..	38100i	66	4973	53.5	+ 8 50	6.50	7.06	Go	7	..	38101i
17	5078	53.2	+19 2	8.7	9.2	F8	1	..	38617i	67	5796	53.5	- 4 18	8.8	9.9	K2	2	..	9783b
18	5028	53.2	+14 10	8.0	9.2	K5	3	3.5	38101i	68	6635	53.5	-17 13	9.3	10.4	K2	1	..	40751b
19	4920	53.2	+12 44	9.7	10.8	K2	1	..	38130i	69	6341	53.5	-21 26	8.86	9.3	Go	5	..	45146b
20	4362	53.2	- 1 8	9.0	9.3	F2	3	..	9783b	70	17429	53.5	-23 58	8.5	9.0	F8	6	..	45146b
21	5989	53.2	- 8 17	9.1	10.3	K5	2	..	19959b	71	15022	53.5	-37 49	8.9	10.9	K5	1	..	40858b
22	5963	53.2	-10 48	9.8	10.8	Ko	3	..	40844b	72	14885	53.5	-45 43	7.38	7.2	Ao	9	..	39678b
23	18011	53.2	-28 41	8.1	8.6	F5	7	..	40739b	73	3936	53.5	-67 22	8.6	9.6	Ko	4	..	38368b
24	18010	53.2	-28 51	8.5	9.8	Ko	3	5,2	41896b	74	2374	53.6	+61 49	8.0	8.1	A2	2	..	38902i
25	14017	53.2	-49 42	9.62	10.6	F8	2	..	39678b	75	3039	53.6	+54 6	8.4	8.8	F5	2	..	37278i
26	3292	53.2	-68 57	10.1	11.1	Ko	1	..	38368b	76	4930	53.6	+35 39	8.07	9.07	Ko	2	..	38032i
27	2915	53.3	+56 28	7.7	7.7	Ao	3	..	38078i	77	5029	53.6	+13 31	9.0	9.8	G5	3	5,1	6445m
28	3990	53.3	+47 35	8.1	8.2	A2	1	..	38565i	78	4974	53.6	+ 8 15	8.5	8.5	B9	6	..	19027b
29	4846	53.3	+16 48	8.8	9.9	K2	2	..	6445m	79	6186	53.6	-16 44	10.0	10.6	Go	1	..	40751b
30	4856	53.3	+10 44	8.6	9.0	F5	4	..	38101i	80	6636	53.6	-17 5	8.7	9.5	G5	6	..	40751b
31	5858	53.3	- 1 57	6.40	6.74	F2	7	2,10	38163i	81	4307	53.6	-64 14	8.7	9.9	K5	3	..	19899b
32	5897	53.3	- 5 2	8.5	9.7	K5	1	..	19959b	82	1836	53.7	+65 31	8.6	9.2	Go	1	..	38902i
33	5898	53.3	- 7 0	9.3	9.6	F2	2	..	19959b	83	4807	53.7	+34 45	7.02	8.20	K5	3	..	38564i
34	6311	53.3	-12 55	10.5	11.5	Ko	1	..	39701b	84	4842	53.7	+17 50	8.6	9.4	G5	1	..	38617i
35	17426	53.3	-24 14	8.5	9.5	G5	5	..	45146b	85	4921	53.7	+13 7	9.5	10.5	Ko	2	2,1	6445m
36	16206	53.3	-25 13	9.7	11.3	K2	2	..	45146b	86	5092	53.7	+ 6 48	6.28	6.28	Ao	9	..	9782b
37	19060	53.3	-31 10	8.3	11.1	G5	1	..	40733b	87	4932	53.7	+ 4 48	7.90	8.68	G5	7	..	9782b
38	15112	53.3	-44 28	8.7	9.6	F5	5	..	39473b	88	4364	53.7	- 0 52	7.33	8.33	Ko	4	..	9782b
39	14499	53.3	-46 0	8.2	8.2	Fo	6	..	39678b	89	6030	53.7	-10 34	10.2	10.8	Go	4	..	40844b
40	6381	53.3	-62 31	9.0	9.0	Ao	5	..	19899b	90	14020	53.7	-49 37	9.7	10.0	Go	3	..	39678b
41	3934	53.3	-66 58	9.0	9.6	Go	3	..	38368b	91	12095	53.7	-52 20	8.9	9.8	Go	3	..	39663b
42	862	53.4	+75 24	8.32	9.10	G5	3	5,1	38903i	92	6711	53.7	-61 22	8.1	8.4	G5	5	..	19899b
43	5091	53.4	+ 7 6	8.1	9.2	K2	4	..	19027b	93	1568	53.7	-76 1	9.7	10.8	K2	1	..	38231b
44	4588	53.4	+ 2 55	8.5	9.6	K2	1	..	9782b	94	5991	53.8	- 8 46	8.7	8.7	Ao	8	..	19959b
45	6112	53.4	- 6 13	9.1	10.3	K5	2	..	19959b	95	6095	53.8	- 9 38	10.2	11.0	G5	3	..	40844b
46	6113	53.4	- 6 26	10.0	10.6	G	2	R	19959b	96	6031	53.8	- 9 51	10.2	10.8	Go	4	..	40844b
47	6093	53.4	- 9 0	9.1	9.6	F8	4	..	19959b	97	5965	53.8	-11 15	9.2	10.2	Ko	3	..	39701b
48	6378	53.4	-19 9	10.0	10.0	Go	2	..	40751b	98	5964	53.8	-11 33	8.7	9.7	Ko	5	..	39701b
49	6039	53.4	-22 3	9.8	12.1	G5	1	..	45146b	99	6637	53.8	-17 26	9.3	10.3	Ko	1	..	40751b
50	17428	53.4	-24 0	7.9	8.7	G5	7	..	45146b	100	739	53.9	+80 45	8.17	8.23	A2	3	..	38590i

THE HENRY DRAPER CATALOGUE.

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22^h 53^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	4496	53.9	+28 26	8.5	9.0	F8	1	..	38607i	51	6318	54.3	-13 36	6.27	7.34	K2	5	0,3	17412b
2	4847	53.9	+16 31	8.7	9.3	Go	5	2,I	6445m	52	6314	54.3	-14 46	9.01	9.09	A3	5	..	39701b
3	4737	53.9	+15 14	9.04	9.82	G5	4	..	6445m	53	6188	54.3	-16 39	8.3	8.8	F8	5	..	40751b
4	6638	53.9	-17 42	8.3	8.4	A5	7	..	40751b	54	17694	54.3	-22 55	9.9	11.1	Go	1	..	45146b
5	19067	53.9	-31 13	8.9	9.9	Go	2	..	40733b	55	19072	54.3	-31 40	7.94	9.9	Ma	2	..	40733b
6	13845	53.9	-50 23	10.3	11.2	G5	1	..	39663b	56	17344	54.3	-31 56	9.3	11.2	Go	1	..	40733b
7	3553	53.9	-68 3	9.8	10.2	F5	3	..	38368b	57	15602	54.3	-35 34	8.6	10.6	Ma	1	..	40858b
8	201	53.9	-88 30	8.48	10.0	K5	2	..	15173b	58	14887	54.3	-45 6	10.8	10.8	A3	2	..	39473b
9	4981	54.0	+39 16	7.9	8.0	A5	4	..	38052i	59	14422	54.3	-47 2	8.1	8.0	F2	8	..	39678b
10	5143	54.0	+9 16	9.1	9.6	F8	4	..	19027b	60	12096	54.3	-52 14	7.46	7.5	A5	9	..	39663b
11	4365	54.0	-1 43	8.47	8.97	F8	5	0,2	9783b	61	863	54.4	+75 22	9.32	9.32	Ao	2	..	38903i
12	6096	54.0	-9 2	10.2	11.0	G5	1	..	19959b	62	4104	54.4	+45 49	8.0	8.0	Ao	3	..	3802oi
13	6390	54.0	-12 24	10.0	11.0	Ko	1	..	39701b	63	4650	54.4	+23 30	8.3	8.9	Go	3	..	3810oi
14	6342	54.0	-21 9	10.0	10.8	F5	2	..	45146b	64	4950	54.4	+0 26	5.59	6.59	Ko	10	..	9782b
15	17691	54.0	-23 22	8.9	9.3	G5	4	..	45146b	65	5996	54.4	-7 56	8.9	9.3	F5	5	3,5	19959b
16	10172	54.0	-57 12	8.8	9.7	F2	3	..	42510b	66	6231	54.4	-17 55	10.9	12.0	K2	1	..	40866b
17	5115	54.1	+5 36	8.2	8.6	F5	7	..	9782b	67	6379	54.4	-19 28	9.6	10.8	G5	1	..	40751b
18	5993	54.1	-8 35	9.6	10.6	Ko	1	..	19959b	68	17345	54.4	-32 13	8.1	9.0	Go	5	..	40733b
19	6040	54.1	-22 42	9.2	10.2	G5	2	..	45146b	69	15224	54.4	-43 13	9.5	11.0	Go	2	..	39473b
20	16132	54.1	-27 38	10.6	11.3	Ko	1	..	41896b	70	15117	54.4	-44 4	9.5	10.8	G5	2	..	39473b
21	19069	54.1	-31 30	8.5	9.9	G5	1	..	40733b	71	14889	54.4	-45 28	9.9	9.3	A2	6	..	39473b
22	15600	54.1	-35 15	10.2	11.7	Ko	2	..	42810b	72	10377	54.4	-53 21	9.3	10.3	G5	3	..	39663b
23	2051	54.1	-74 3	69.8	10.8	Ko	3	..	38231b	73	7846	54.4	-59 42	8.4	9.0	Go	3	..	19899b
24	1485	54.2	+67 52	7.8	7.8	B8	2	..	38580i	74	5903	54.5	-4 54	8.10	8.52	F5	8	..	9783b
25	3894	54.2	+51 4	8.0	8.0	Ao	4	..	38565i	75	6315	54.5	-14 48	8.86	9.86	Ko	3	..	39701b
26	4003	54.2	+50 10	7.57	8.75	K5	2	..	38565i	76	6640	54.5	-16 56	8.0	8.6	Go	7	..	40751b
27	4355	54.2	+43 18	7.02	6.85	B3	7	..	3802oi	77	6641	54.5	-17 44	10.2	10.8	Go	3	..	40866b
28	4736	54.2	+37 36	8.7	8.8	A2	1	..	38564i	78	15604	54.5	-35 14	10.4	10.6	F8	3	..	42810b
29	4540	54.2	+27 12	7.8	8.2	F5	3	..	38607i	79	10179	54.5	-54 11	10.5	11.5	Ko	1	..	39663b
30	4539	54.2	+26 57	8.1	9.1	Ko	2	..	38607i	80	10178	54.5	-54 18	10.1	10.6	F8	2	..	39663b
31	4913	54.2	+11 40	8.6	9.2	Go	3	..	3810oi	81	10180	54.5	-54 41	10.3	10.9	Go	1	..	39663b
32	4859	54.2	+11 12	5.79	6.07	Fo	9	0,9	3810oi	82	3897	54.6	+50 52	8.0	8.1	A3	3	..	38565i
33	5797	54.2	-4 0	9.3	10.3	Ko	1	..	9783b	83	5084	54.6	+18 18	9.3	9.8	F8	1	..	38617i
34	6097	54.2	-9 6	9.6	10.2	Go	3	..	19959b	84	4740	54.6	+16 0	9.3	9.9	Go	3	..	6445m
35	17434	54.2	-24 38	9.1	9.8	Go	3	..	45146b	85	4924	54.6	+13 7	9.1	10.1	Ko	2	0,1	6445m
36	19383	54.2	-30 0	5.54	6.3	A5	..	..	56,149	86	5545	54.6	-2 59	7.9	8.3	F5	8	0,3	9783b
37	17342	54.2	-32 34	8.9	9.9	F2	2	..	40733b	87	6116	54.6	-6 21	9.2	10.0	G5	3	..	19959b
38	14378	54.2	-48 49	10.5	11.7	G5	1	..	39678b	88	5903	54.6	-6 56	9.8	10.6	G5	2	..	40844b
39	10177	54.2	-54 38	9.2	10.0	Go	4	..	39663b	89	5968	54.6	-11 26	8.6	9.2	Go	5	..	39701b
40	3732	54.2	-66 12	8.9	9.0	A5	4	..	19899b	90	6380	54.6	-19 39	9.6	10.8	Ko	1	..	40751b
41	4621	54.3	+33 32	7.51	7.51	Ao	5	..	38032i	91	16338	54.6	-33 41	9.6	11.1	F8	4	..	42810b
42	4745	54.3	+22 42	8.2	9.2	Ko	3	..	3810oi	92	14379	54.6	-48 14	9.5	10.3	F8	3	..	39678b
43	5082	54.3	+18 36	8.2	8.7	F8	4	..	38617i	93	1768	54.6	-75 15	8.8	9.2	F5	3	..	19967b
44	5083	54.3	+18 18	9.3	10.5	K5	1	..	38617i	94	879	54.7	+77 58	7.68	8.46	G5	2	..	38590i
45	4844	54.3	+17 24	9.3	9.4	A2	1	..	38617i	95	1079	54.7	+72 36	6.64	7.64	Ko	6	0,7	38593i
46	4953	54.3	+7 34	10.7	11.5	G5	1	..	19027b	96	1569	54.7	+66 33	8.0	8.6	Go	2	..	37257i
47	4805	54.3	+3 50	7.30	7.72	F5	9	..	9782b	97	2146	54.7	+63 10	7.36	7.24	B5	6	..	37257i
48	5544	54.3	-3 25	8.3	9.5	K2	5	..	9783b	98	4691	54.7	+24 34	8.5	9.5	Ko	2	..	3810oi
49	5902	54.3	-7 9	8.8	8.9	A2	7	..	19959b	99	4925	54.7	+12 51	8.8	9.8	Ko	2	..	3813oi
50	6317	54.3	-13 18	9.6	10.2	Go	3	..	39701b	100	6382	54.7	-14 24	9.6	10.4	G5	1	..	39701b

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	17695	54.7	-23 10	9.1	11.4	K5	2	..	45146b	51	4830	55.0	+29 32	8.3	8.4	A2	2	..	38607i
2	16221	54.7	-25 5	9.7	10.1	F5	4	..	45146b	52	4935	55.0	+4 36	7.02	8.02	Ko	8	..	9782b
3	16220	54.7	-25 42	5.85	7.2	Ko	..	0,9	56,149	53	5549	55.0	-2 49	9.8	10.6	G5	2	..	9783b
4	16136	54.7	-27 46	10.9	11.2	G5	2	..	41896b	54	6119	55.0	-5 56	10.5	10.9	F5	2	..	40844b
5	15606	54.7	-35 12	10.0	10.6	F5	5	..	42810b	55	6394	55.0	-12 31	10.5	11.0	F8	1	..	39701b
6	14905	54.7	-39 42	9.0	9.6	Fo	5	..	40858b	56	6043	55.0	-22 10	9.3	11.1	F8	2	..	45146b
7	15105	54.7	-41 41	7.08	7.8	Ko	9	..	39473b	57	17699	55.0	-23 4	7.6	9.1	Ma	4	R	45146b
8	14425	54.7	-46 59	10.3	10.3	A3	2	..	39678b	58	16419	55.0	-26 10	6.44	7.8	Ko	..	2,8	56,149
9	12098	54.7	-52 48	10.2	11.2	Ko	1	..	39663b	59	16418	55.0	-26 40	8.9	8.9	F8	6	..	40739b
10	10380	54.7	-52 58	10.5	11.5	Ko	1	..	39663b	60	17348	55.0	-32 8	8.2	9.3	Ko	3	..	40733b
11	9932	54.7	-55 4	9.9	10.9	Ko	1	..	39663b	61	15854	55.0	-34 22	9.6	10.6	Go	3	..	42810b
12	2147	54.8	+62 32	7.7	7.7	B8	4	..	38902i	62	16163	55.0	-42 3	9.7	11.8	Mb	2	..	39473b
13	3042	54.8	+53 59	8.5	8.6	A3	2	..	38078i	63	13851	55.0	-49 59	7.29	7.3	A3	9	..	39663b
14	3514	54.8	+52 6	6.41	7.48	K2	6	0,6	38078i	64	10382	55.0	-53 17	4.18	4.96	G5	..	R	28,216
15	3515	54.8	+51 47	6.90	6.88	B9	7	..	38078i	65	10181	55.0	-54 45	9.9	10.9	Ko	1	..	39663b
16	4958	54.8	+40 21	8.32	9.50	K5	1	..	38052i	66	1221	55.0	-79 49	9.6	10.4	G5	4	..	38135b
17	5041	54.8	+20 5	9.15	9.43	Fo	2	..	33745i	67	3900	55.1	+50 58	8.2	8.2	Ao	3	..	38565i
18	5032	54.8	+13 50	9.5	10.6	K2	2	..	6445m	68	4362	55.1	+44 5	8.1	9.2	K2	1	..	38020i
19	5095	54.8	+6 49	8.6	9.7	K2	5	..	19027b	69	4625	55.1	+33 19	8.3	9.3	Ko	1	..	38032i
20	5546	54.8	-3 24	9.6	10.6	Ko	1	..	9783b	70	4848	55.1	+16 51	9.3	10.3	Ko	1	..	6445m
21	6383	54.8	-14 13	9.8	10.4	Go	2	..	39701b	71	4862	55.1	+10 35	10.0	10.8	G5	2	..	19027b
22	6381	54.8	-19 2	9.6	10.2	Go	2	..	40751b	72	5096	55.1	+6 51	8.6	8.7	A2	9	..	19027b
23	16222	54.8	-25 35	8.9	9.8	K2	3	..	45146b	73	4671	55.1	+1 52	9.0	9.0	Ao	3	..	9782b
24	16139	54.8	-27 12	8.5	9.2	F8	5	..	40739b	74	5861	55.1	-2 44	9.3	10.1	G5	2	..	9783b
25	16140	54.8	-27 20	8.9	10.4	K5	1	..	40739b	75	5800	55.1	-3 52	10.0	10.6	G	1	..	9783b
26	16141	54.8	-27 38	7.6	9.5	K2	5	..	40739b	76	6100	55.1	-9 25	6.86	7.20	F2	10	..	19959b
27	18031	54.8	-28 27	8.7	8.6	F5	5	..	40739b	77	6519	55.1	-20 10	9.3	10.0	Go	3	..	45146b
28	19075	54.8	-31 35	8.9	9.3	Go	2	..	40733b	78	17700	55.1	-23 25	9.9	10.5	F8	2	..	45146b
29	19076	54.8	-31 39	8.1	9.3	G5	2	..	40733b	79	16420	55.1	-26 51	10.6	11.6	K5	1	..	41896b
30	15226	54.8	-43 21	9.5	10.8	G5	4	..	39473b	80	14026	55.1	-49 29	7.6	9.1	K2	6	..	39678b
31	13850	54.8	-50 47	9.9	11.2	Ko	1	..	39663b	81	12099	55.1	-52 28	10.4	11.2	G5	1	..	39663b
32	10174	54.8	-57 41	8.7	9.7	F8	2	..	42510b	82	640	55.2	+83 49	4.96	6.14	K5	8	..	37281i
33	7622	54.8	-59 57	9.1	9.6	F8	1	..	19899b	83	3517	55.2	+51 52	8.8	8.8	Ao	1	..	38565i
34	2660	54.9	+58 2	8.1	8.1	Ao	1	..	38078i	84	4656	55.2	+41 17	8.6	9.0	F5	2	..	38052i
35	4359	54.9	+43 22	7.7	8.8	K2	2	..	38020i	85	5254	55.2	+20 42	8.1	8.4	F2	6	..	38100i
36	4560	54.9	+33 0	8.1	9.1	Ko	3	..	38032i	86	5034	55.2	+13 24	7.7	8.8	K2	3	2,6	38101i
37	4694	54.9	+25 6	8.36	8.50	A5	3	..	38100i	87	4914	55.2	+11 42	9.3	10.3	Ko	1	..	38101i
38	4655	54.9	+23 24	9.2	10.2	Ko	2	..	38100i	88	6521	55.2	-20 27	9.6	10.8	F5	3	..	45146b
39	5033	54.9	+13 19	7.7	8.0	Fo	5	0,7	38101i	89	6348	55.2	-21 22	9.1	10.5	Ko	3	..	45146b
40	6118	54.9	-6 37	10.2	10.8	Go	2	..	40844b	90	18035	55.2	-28 24	9.9	10.9	F8	2	..	41896b
41	5972	54.9	-11 30	8.7	9.2	F8	6	..	39701b	91	18533	55.2	-29 37	10.9	11.4	F8	2	..	41896b
42	6232	54.9	-18 9	10.5	11.6	K2	1	..	40866b	92	16346	55.2	-33 5	8.9	9.0	A2	6	1,8	40733b
43	16415	54.9	-26 41	7.39	8.1	Go	8	..	40739b	93	15609	55.2	-35 19	8.6	10.9	Ma	3	..	42810b
44	15853	54.9	-34 17	8.6	9.4	G5	3	..	40733b	94	15666	55.2	-36 0	10.0	10.9	K2	1	..	40858b
45	15608	54.9	-35 36	8.9	10.3	A3	4	..	40858b	95	14992	55.2	-40 26	8.6	9.5	Go	7	..	39473b
46	7847	54.9	-58 58	7.14	7.4	A3	9	..	19899b	96	14895	55.2	-45 10	9.5	10.2	G5	4	..	39473b
47	995	55.0	+74 36	9.2	9.8	Go	2	..	38903i	97	10182	55.2	-53 59	9.9	10.9	Ko	1	..	39663b
48	2615	55.0	+59 16	6.38	6.36	B9	9	..	38078i	98	4741	55.3	+38 5	8.8	8.8	Ao	1	..	38564i
49	3339	55.0	+53 10	8.7	9.8	K2	1	..	37278i	99	5035	55.3	+14 6	9.3	10.3	Ko	2	..	6445m
50	4974	55.0	+36 35	8.3	8.4	A2	1	..	38564i	100	5036	55.3	+13 46	9.3	10.4	K2	1	..	6445m

THE HENRY DRAPER CATALOGUE.

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22^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	5037	55.3	+13 29	8.0	8.1	A2p	6	0,3R	6445m	51	14910	55.6	-39 23	8.3	9.5	Ko	4	..	40858b
2	15857	55.3	-34 1	9.2	11.7	K5	1	..	4281ob	52	14430	55.6	-47 16	9.9	9.9	F8	4	..	39678b
3	13446	55.3	-51 29	5.63	7.2	K2	..	2,9	56,149	53	4835	55.6	-63 37	7.09	8.3	K2	8	..	19899b
4	3937	55.3	-67 25	9.3	9.3	Ao	5	..	38368b	54	4817	55.7	+35 14	8.12	9.19	K2	2	..	38032i
5	2738	55.3	-71 10	8.3	9.4	K2	6	..	38368b	55	5147	55.7	+9 45	8.6	8.9	Fo	3	..	38101i
6	1559	55.3	-77 21	9.2	10.0	G5	4	0,4	38135b	56	4959	55.7	+7 26	9.1	10.2	K2	2	..	19027b
7	4751	55.4	+22 52	9.1	9.5	F5	2	..	38100i	57	5101	55.7	+6 52	9.5	10.3	G5	2	..	19027b
8	4863	55.4	+10 26	10.7	11.9	K5	1	..	19027b	58	4595	55.7	+2 49	8.6	9.2	Go	3	..	9782b
9	5550	55.4	-3 1	10.0	10.6	Go	2	..	9783b	59	4594	55.7	+2 29	5.96	6.96	Ko	9	..	9782b
10	5905	55.4	-5 6	8.7	9.5	G5	4	..	9783b	60	16350	55.7	-33 4	10.4	10.8	F5	1	..	4281ob
11	5906	55.4	-7 36	9.8	10.6	G5	2	..	19959b	61	15858	55.7	-34 22	9.8	11.7	K2	1	..	4281ob
12	5907	55.4	-7 45	10.2	11.2	Ko	1	0,1	19959b	62	15316	55.7	-38 11	8.4	10.2	K5	3	..	40858b
13	6395	55.4	-12 39	10.2	10.8	Go	1	..	39701b	63	2152	55.8	+62 14	8.9	8.7	B2	2	..	M
14	6320	55.4	-13 0	9.8	10.6	G5	2	..	39701b	64	4964	55.8	+41 14	8.8	8.8	Ao	1	..	38020i
15	6320	55.4	-14 59	9.3	9.8	F8	3	..	39701b	65	4965	55.8	+40 36	8.5	9.6	K2	1	..	38052i
16	16227	55.4	-25 31	8.7	8.9	Go	5	..	45146b	66	4911	55.8	+15 3	9.0	9.1	A3	3	..	6445m
17	15312	55.4	-37 54	7.7	9.2	A2	8	..	40858b	67	6121	55.8	-6 14	9.1	10.2	K2	2	..	19959b
18	14897	55.4	-45 44	7.7	8.2	K2	7	..	39678b	68	16428	55.8	-26 32	10.2	9.8	Go	3	..	40739b
19	14428	55.4	-47 25	11.2	9.6	F5	5	..	39678b	69	15614	55.8	-35 38	8.9	10.3	G5	3	..	40858b
20	9935	55.4	-55 23	9.8	10.6	G5	1	..	39663b	70	15229	55.8	-42 59	8.9	9.3	F8	7	..	39473b
21	2984	55.4	-70 13	9.2	10.2	Ko	2	..	38368b	71	12101	55.8	-52 38	8.3	9.8	Ko	4	..	39663b
22	2743	55.4	-72 33	9.0	10.0	Ko	4	..	19967b	72	4308	55.8	-64 15	9.9	10.5	Go	1	..	19899b
23	4742	55.5	+37 50	8.5	8.8	Fo	1	..	38564i	73	2986	55.8	-70 6	9.7	10.7	Ko	2	..	38368b
24	4657	55.5	+24 7	9.8	9.9	A2	1	..	38100i	74	2987	55.8	-70 19	9.9	10.5	Go	1	..	38368b
25	4744	55.5	+16 5	10.7	11.3	Go	2	..	6445m	75	2663	55.9	+57 14	7.30	7.58	Fo	3	..	38078i
26	4910	55.5	+14 24	9.3	10.3	Ko	2	..	6445m	76	2923	55.9	+56 24	5.48	6.04	Gop	8	0,8R	37278i
27	4928	55.5	+12 55	7.7	8.8	K2	5	..	38101i	77	4859	55.9	+30 33	6.52	6.52	Ao	7	1,8	38607i
28	4443	55.5	-0 21	6.40	7.40	Ko	8	..	9782b	78	5257	55.9	+20 50	7.52	8.52	Ko	4	..	38100i
29	6321	55.5	-14 48	8.36	8.92	Go	6	..	39701b	79	4912	55.9	+15 7	8.09	9.16	K2	5	0,1	6445m
30	6522	55.5	-20 34	10.0	11.1	Go	2	..	45146b	80	5038	55.9	+13 50	10.7	11.2	F8	2	..	6445m
31	R	55.5	-22 48	8.9	9.7	G5	4	..	45146b	81	4917	55.9	+11 18	9.7	10.7	K	1	..	38101i
32	16228	55.5	-25 11	8.9	9.8	Ko	4	..	45146b	82	6387	55.9	-13 55	9.6	10.4	G5	2	..	39701b
33	17353	55.5	-32 39	9.6	10.4	G5	1	..	4281ob	83	6383	55.9	-19 44	9.18	11.4	G5	1	..	40751b
34	15313	55.5	-38 31	9.6	10.7	Go	2	..	40858b	84	18537	55.9	-29 23	5.72	6.6	Ko	..	2,10	56,149
35	10177	55.5	-57 50	8.3	9.5	K2	3	..	4251ob	85	14900	55.9	-45 12	10.1	10.3	Go	4	..	39473b
36	3736	55.5	-66 33	8.4	9.4	Ko	5	0,3	38368b	86	14899	55.9	-45 32	9.5	9.9	K2	3	..	39678b
37	3294	55.5	-69 2	10.1	10.5	F5	2	..	38368b	87	12102	55.9	-52 0	8.2	8.9	G5	5	..	39663b
38	1292	55.6	+70 13	8.54	8.60	A2	3	..	38580i	88	4309	55.9	-64 50	7.62	7.7	Fo	8	..	19899b
39	3519	55.6	+51 51	8.9	8.9	A	1	..	38565i	89	890	56.0	+77 3	8.8	9.1	F2	2	..	38903i
40	3903	55.6	+48 54	8.5	8.6	A2	1	..	38565i	90	2521	56.0	+59 5	8.6	8.4	B	1	..	16256m
41	4978	55.6	+36 48	8.5	8.6	A2	1	..	38564i	91	4302	56.0	+44 50	6.44	6.50	A2	8	..	38020i
42	4939	55.6	+35 22	8.62	9.97	Ma	1	..	38032i	92	4860	56.0	+25 58	8.7	9.2	F8	2	..	38100i
43	4958	55.6	+8 13	8.5	9.1	Go	3	..	38101i	93	5039	56.0	+14 9	9.3	9.8	F8	5	..	6445m
44	4592	55.6	+2 39	9.3	9.6	Fo	4	..	9782b	94	4918	56.0	+11 28	8.5	9.0	F8	3	..	38101i
45	6120	55.6	-6 6	9.3	9.8	F8	4	..	40844b	95	4937	56.0	+5 2	8.65	9.65	Ko	3	..	9782b
46	6646	55.6	-17 26	8.0	8.8	G5	5	..	40751b	96	6038	56.0	-10 6	8.26	9.26	Ko	7	..	19959b
47	6523	55.6	-19 53	7.63	8.4	G5	7	..	40751b	97	6322	56.0	-13 21	9.1	10.2	K2	4	..	39701b
48	17702	55.6	-22 56	10.4	10.8	F5	3	..	45146b	98	17706	56.0	-23 20	6.32	6.9	A2	7	..	41985b
49	18040	55.6	-27 58	10.6	11.3	F8	1	..	41896b	99	16231	56.0	-25 10	9.9	10.4	Go	2	..	45146b
50	15314	55.6	-38 18	10.9	10.9	Go	2	..	40858b	100	18043	56.0	-28 33	8.9	9.5	G5	4	..	40739b

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	18538	56.0	-29 40	8.9	9.3	Ko	3	..	40739b	51	10185	56.3	-54 33	8.3	9.5	G5	6	..	39663b
2	15041	56.0	-37 17	8.6	10.3	K5	3	..	40858b	52	1769	56.3	-75 6	9.7	10.8	K2	3	..	38231b
3	15123	56.0	-44 6	9.9	10.8	Go	2	..	39473b	53	1002	56.4	+73 58	9.2	9.3	A3	3	..	38903i
4	9937	56.0	-55 48	9.1	9.7	F2	5	..	39663b	54	2895	56.4	+54 40	8.4	9.2	G5	2	..	38078i
5	7623	56.0	-60 0	8.97	8.4	B8	5	..	19899b	55	3904	56.4	+50 28	8.2	9.4	K5	1	..	38565i
6	1222	56.0	-79 29	9.5	10.9	Mb	3	..	38135b	56	4757	56.4	+22 49	8.5	9.3	G5	2	..	38100i
7	2521	56.1	+59 5	8.6	7.4	B	1	..	16256m	57	5259	56.4	+20 41	9.4	10.5	K2	1	..	38100i
8	2871	56.1	+55 29	8.6	8.6	A	2	..	37278i	58	4746	56.4	+15 52	9.0	9.8	G5	4	..	6445m
9	3346	56.1	+52 20	9.0	9.0	A	2	..	38078i	59	4916	56.4	+14 20	7.15	8.15	Ko	5	0,8	38101i
10	4865	56.1	+22 7	8.02	8.10	A3	5	..	38100i	60	5149	56.4	+10 15	9.06	10.06	Ko	1	..	38101i
11	4866	56.1	+21 50	7.52	7.94	F5	6	..	38100i	61	5867	56.4	-2 37	9.1	10.1	Ko	2	..	9783b
12	5908	56.1	-6 59	10.2	10.8	Go	2	..	40844b	62	5552	56.4	-3 12	9.1	9.6	F8	4	..	9783b
13	5977	56.1	-11 6	10.0	10.6	Go	2	..	39701b	63	5910	56.4	-5 15	6.17	7.17	Ko	8	0,9	17391b
14	6396	56.1	-11 46	9.3	9.8	F8	5	..	39701b	64	6324	56.4	-13 37	10.2	11.0	G5	1	..	39701b
15	6384	56.1	-18 51	9.2	9.5	F2	3	..	40751b	65	6237	56.4	-18 46	9.8	10.4	Go	2	..	40751b
16	17709	56.1	-22 57	7.34	7.8	F8	8	..	45146b	66	15001	56.4	-40 18	8.2	8.4	F5	8	..	39473b
17	16233	56.1	-25 37	9.2	9.5	F8	4	..	45146b	67	15125	56.4	-44 49	9.18	9.6	F2	7	..	39473b
18	19393	56.1	-30 0	9.5	9.3	Go	3	..	41896b	68	3052	56.5	+53 46	7.7	8.8	K2	3	..	38078i
19	19392	56.1	-30 2	9.7	10.5	Ko	2	..	41896b	69	4747	56.5	+16 10	10.0	11.0	K	1	..	6445m
20	15672	56.1	-36 37	9.3	10.6	Go	3	..	40858b	70	4673	56.5	+1 19	9.14	9.70	Go	2	..	38163i
21	15318	56.1	-38 48	10.2	11.0	G5	1	..	40858b	71	6126	56.5	-5 52	9.6	10.8	K5	2	..	40844b
22	14901	56.1	-45 23	7.70	7.5	A5	8	..	39678b	72	5911	56.5	-7 30	8.7	9.7	Ko	6	..	19959b
23	1177	56.2	+72 11	7.8	8.2	F5	5	3,2	38903i	73	6525	56.5	-20 45	9.6	11.5	Ko	2	..	45146b
24	1294	56.2	+70 54	8.9	9.5	Go	2	..	38903i	74	15002	56.5	-40 45	9.2	10.4	K2	3	..	39473b
25	1490	56.2	+67 25	8.6	8.6	Ao	3	1,3	38902i	75	4630	56.6	+33 59	8.7	9.0	F2	2	..	38032i
26	3908	56.2	+48 51	7.8	7.9	A3	2	..	38565i	76	4471	56.6	+28 10	8.3	9.3	Ko	2	..	38607i
27	4660	56.2	+23 28	8.8	9.3	F8	3	..	38100i	77	5089	56.6	+18 44	8.0	8.6	Go	4	..	38617i
28	4960	56.2	+7 27	8.6	9.0	F5	7	..	19027b	78	4814	56.6	+3 54	7.13	7.69	Go	7	..	9782b
29	4955	56.2	+0 32	8.6	10.0	Ma	1	..	38163i	79	4813	56.6	+3 37	9.1	9.7	G	1	..	9782b
30	5909	56.2	-4 55	9.50	10.00	F8	2	..	9783b	80	5804	56.6	-4 23	7.60	8.60	Ko	7	..	9783b
31	5910	56.2	-7 36	6.40	7.47	K2	9	..	19959b	81	6648	56.6	-17 5	9.3	10.1	G5	3	..	40866b
32	5978	56.2	-11 42	9.8	10.8	Ko	2	..	39701b	82	6350	56.6	-21 25	9.6	11.5	Ko	1	..	45146b
33	6325	56.2	-14 49	7.42	8.42	Ko	7	..	39701b	83	18542	56.6	-29 47	9.17	11.4	Ko	2	..	41896b
34	6193	56.2	-15 55	8.7	9.5	G5	4	..	40866b	84	13856	56.6	-50 24	9.7	10.9	K2	2	..	39663b
35	6236	56.2	-18 18	9.8	10.8	Ko	1	..	40751b	85	707	56.7	+82 31	8.6	9.6	Ko	1	..	38590i
36	19394	56.2	-30 20	9.7	9.0	F5	4	..	40739b	86	4372	56.7	+43 57	8.8	8.9	A3	1	..	38020i
37	15000	56.2	-40 29	10.4	10.7	Go	2	..	39473b	87	4371	56.7	+43 39	7.25	7.33	A3	5	..	38020i
38	12104	56.2	-52 50	8.1	9.1	Go	6	..	39663b	88	4760	56.7	+22 31	7.82	8.24	F5	6	..	38100i
39	6385	56.2	-62 44	9.1	9.7	Go	2	..	19899b	89	4918	56.7	+14 51	10.7	11.8	K2	1	..	6445m
40	1001	56.3	+73 23	8.9	9.9	Ko	2	..	38903i	90	4597	56.7	+3 0	6.51	7.29	G5	8	..	9782b
41	4015	56.3	+49 25	7.7	7.8	A3	4	..	38565i	91	6127	56.7	-6 30	8.8	9.6	G5	6	..	19959b
42	4117	56.3	+45 58	8.9	10.3	Mc	2	..	31294i	92	6328	56.7	-15 10	9.8	10.3	F8	1	..	39701b
43	4744	56.3	+38 10	6.39	6.22	B3	7	0,7	38052i	93	6045	56.7	-22 23	9.2	10.0	Go	2	..	45146b
44	4861	56.3	+26 13	7.9	8.0	A5	3	..	38607i	94	17364	56.7	-32 48	8.9	11.4	F5	3	..	42810b
45	4445	56.3	-0 26	8.4	8.4	Ao	5	..	9782b	95	14905	56.7	-45 50	7.24	7.3	F2	8	..	39678b
46	6125	56.3	-6 4	8.7	9.8	K2	3	..	19959b	96	14518	56.7	-46 37	9.9	10.2	Go	3	..	39678b
47	6398	56.3	-12 38	9.3	9.9	Go	5	..	39701b	97	13857	56.7	-50 14	7.7	8.5	G5	7	..	39663b
48	6389	56.3	-14 31	9.3	10.3	Ko	2	..	39701b	98	10186	56.7	-54 23	9.0	10.3	Ko	3	..	39663b
49	14433	56.3	-47 14	9.1	9.3	Ko	5	..	39678b	99	2897	56.8	+54 26	8.9	9.0	A5	2	..	38078i
50	13452	56.3	-51 39	9.3	9.4	Fo	5	..	39663b	100	4826	56.8	+32 4	7.72	9.07	Mb	3	..	38032i

THE HENRY DRAPER CATALOGUE.

217600

22^h 56^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	5090	56.8	+19 3	8.4	9.2	G5	2	..	38617i	51	5093	57.1	+18 16	8.6	9.7	K2	2	..	38617i
2	4748	56.8	+15 25	8.4	8.4	A0	6	0,4R	6445m	52	4853	57.1	+16 45	9.1	9.6	F8	3	..	6445m
3	5041	56.8	+14 10	8.6	9.8	K5	5	..	6445m	53	6353	57.1	-21 5	9.28	11.1	K2	2	..	45146b
4	4979	56.8	+ 8 36	8.6	8.9	F0	3	..	19027b	54	17456	57.1	-24 40	9.7	11.2	G5	2	..	45146b
5	5553	56.8	- 3 14	7.9	9.1	K5	4	..	9783b	55	15004	57.1	-40 18	8.2	9.0	F5	7	..	39473b
6	5554	56.8	- 3 32	10.0	11.1	K2	1	..	9783b	56	14037	57.1	-49 36	9.4	10.1	K2	3	..	39678b
7	6239	56.8	-18 29	9.8	10.4	G0	2	..	40866b	57	2156	57.2	+62 24	8.2	8.2	B8	3	..	38902i
8	6386	56.8	-19 1	8.9	9.3	F8	3	..	40751b	58	3055	57.2	+54 6	8.6	9.6	K0	1	..	37278i
9	6526	56.8	-19 59	8.8	10.0	G5	3	..	40751b	59	4911	57.2	+38 33	8.7	8.7	A0	4	..	38052i
10	18052	56.8	-27 54	9.7	9.8	A3	4	..	41896b	60	5050	57.2	+19 49	8.2	9.3	K2	1	..	38100i
11	15621	56.8	-35 13	10.0	11.7	G5	2	..	42810b	61	4852	57.2	+17 59	8.0	9.1	K2	2	..	38617i
12	15241	56.8	-43 19	9.9	10.8	F5	2	..	39473b	62	4854	57.2	+17 8	8.6	9.7	K2	1	..	38617i
13	15240	56.8	-43 36	9.9	11.1	G0	1	..	39473b	63	4749	57.2	+15 58	10.0	10.4	F5	1	..	6445m
14	10389	56.8	-53 30	6.9	8.0	G5	8	..	39663b	64	4957	57.2	+ 0 43	9.0	9.3	F	2	..	9782b
15	10188	56.8	-54 19	7.5	9.1	G5	7	..	39663b	65	5912	57.2	- 5 30	10.0	11.2	K5	2	0,1	40844b
16	1296	56.9	+70 51	9.5	9.5	A0	1	..	38903i	66	6402	57.2	-11 51	8.7	9.1	F5	6	..	39701b
17	2526	56.9	+58 56	8.8	8.9	A2	2	..	38078i	67	6527	57.2	-20 16	9.8	10.8	G0	2	..	40751b
18	4988	56.9	+36 26	7.64	8.64	K0	3	..	38564i	68	17457	57.2	-24 8	8.2	8.6	F5	5	..	45146b
19	5091	56.9	+18 57	9.5	10.3	G5	1	..	38617i	69	17367	57.2	-31 52	9.6	11.6	G5	2	..	42810b
20	4919	56.9	+14 53	9.3	10.3	K0	2	..	6445m	70	14393	57.2	-48 23	6.72	7.0	B8	..	1,10	56,149
21	4961	56.9	+ 8 7	8.6	8.9	F0	7	..	19027b	71	10391	57.2	-53 11	9.1	9.7	G0	6	..	39663b
22	4448	56.9	- 0 9	9.0	9.0	A0	3	..	9782b	72	2668	57.3	+57 43	8.0	8.0	B8	3	4,2	16256m
23	4376	56.9	- 1 45	9.32	10.10	G5	1	..	14660b	73	2927	57.3	+56 34	6.50	7.57	K2	5	..	38078i
24	5808	56.9	- 4 23	9.3	10.3	K0	3	..	9783b	74	4374	57.3	+43 35	8.6	9.2	G0	3	..	23970i
25	5911	56.9	- 5 30	9.8	10.3	F8	5	..	40844b	75	4664	57.3	+41 47	3.63	3.51	B5	..	R	2901c
26	6003	56.9	- 8 16	8.7	9.0	F0	6	..	19959b	76	4664	57.3	+41 47	3.63	3.51	A2p	..	R	2901c
27	6330	56.9	-15 31	8.1	9.5	Ma	5	..	40866b	77	4921	57.3	+14 50	9.5	10.6	K2	2	..	6445m
28	6351	56.9	-21 3	9.8	11.1	G5	1	..	45146b	78	4922	57.3	+14 39	10.0	11.1	K2	1	..	6445m
29	16240	56.9	-25 38	8.5	9.2	F5	5	..	45146b	79	4449	57.3	- 0 6	7.53	8.03	F8	6	..	9782b
30	15243	56.9	-43 2	9.9	10.8	K0	2	..	39473b	80	4379	57.3	- 1 9	8.2	9.4	K5	2	..	38163i
31	14906	56.9	-45 49	9.7	10.5	K5	2	..	39678b	81	6404	57.3	-11 49	8.1	9.1	K0	6	..	39701b
32	1560	56.9	-77 40	10.1	10.7	G	3	..	38135b	82	6394	57.3	-14 24	9.8	10.4	G0	2	..	39701b
33	1294	57.0	+69 15	8.4	8.5	A2	2	..	38580i	83	6331	57.3	-15 24	9.6	10.1	F8	2	..	39701b
34	3911	57.0	+46 17	7.7	8.0	F0	3	..	38020i	84	6388	57.3	-19 5	6.62	7.7	A0	10	..	40751b
35	4307	57.0	+44 58	7.92	8.92	K0	2	..	38020i	85	15627	57.3	-34 54	9.53	9.7	F8	2	..	40733b
36	5048	57.0	+19 17	7.20	8.27	K2	4	..	38100i	86	9940	57.3	-55 42	7.6	8.0	F2	7	..	39699b
37	4920	57.0	+14 15	9.7	10.7	K0	2	..	6445m	87	10182	57.3	-57 23	8.3	9.7	Ma	4	..	39699b
38	4962	57.0	+ 8 9	10.0	11.2	K5	1	..	19027b	88	4311	57.3	-64 31	9.6	10.2	G	2	..	19899b
39	6326	57.0	-12 57	9.3	9.9	G0	3	..	39701b	89	1561	57.3	-77 28	8.8	9.9	K2	6	2,5	38135b
40	6387	57.0	-19 30	8.7	8.6	A5	6	..	40751b	90	550	57.3	-85 25	9.3	10.3	K	1	..	15173b
41	17365	57.0	-32 28	8.6	11.4	K5	3	..	42810b	91	759	57.4	+79 48	7.26	8.33	K2	3	..	38590i
42	15047	57.0	-36 57	6.50	7.5	K0	10	..	40858b	92	2469	57.4	+61 1	9.2	10.6	Mb	1	..	16265m
43	14036	57.0	-49 22	11.8	11.7	G0	1	..	39678b	93	3354	57.4	+52 18	8.1	9.2	K2	3	..	38078i
44	13859	57.0	-50 3	10.8	11.7	K0	1	..	39678b	94	3911	57.4	+50 18	7.42	8.60	K5	3	..	38565i
45	6718	57.0	-60 59	9.1	9.9	K5	1	..	19899b	95	4015	57.4	+47 24	7.50	7.50	A0	5	..	38020i
46	4837	57.0	-62 55	7.9	7.9	A0	8	..	19899b	96	4990	57.4	+36 56	8.2	8.7	F8	3	..	38564i
47	3296	57.0	-69 35	10.0	10.0	A0	4	..	38368b	97	5094	57.4	+19 8	8.1	8.4	F0	2	..	38100i
48	3910	57.1	+48 30	7.7	8.9	K5	1	..	38565i	98	5044	57.4	+13 24	10.3	10.9	G0	2	..	6445m
49	4632	57.1	+34 4	6.71	6.99	F0	7	..	38032i	99	4598	57.4	+ 2 15	8.8	9.4	G	1	..	9782b
50	4827	57.1	+32 9	7.9	8.3	F5	3	..	38032i	100	6129	57.4	- 6 16	9.3	9.6	F2	5	..	19959b

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	5913	57.4	- 7 7	6.46	7.81	Ma	5	5,10	44324b	51	998	57.8	+74 21	9.2	9.3	A3	3	..	38139i
2	5981	57.4	-10 47	9.1	9.5	F5	4	3,4	39701b	52	4971	57.8	+40 31	8.9	8.9	A	1	..	38052i
3	6354	57.4	-21 24	6.19	7.4	G5	6	..	41985b	53	4634	57.8	+34 4	8.3	8.7	F5	2	..	38032i
4	16152	57.4	-27 27	10.9	10.7	A5	2	..	41896b	54	4829	57.8	+31 14	6.46	6.74	Fo	7	..	38032i
5	17368	57.4	-31 52	8.9	11.9	Ko	3	..	42810b	55	4855	57.8	+16 26	9.0	10.0	Ko	3	5,1	6445m
6	15049	57.4	-37 1	8.9	9.7	Ko	5	..	40858b	56	5121	57.8	+ 5 42	8.6	9.0	F5	3	..	9782b
7	15116	57.4	-41 24	12.0	11.0	Go	2	..	39473b	57	4674	57.8	+ 1 41	9.3	9.4	A3	2	..	9782b
8	14396	57.4	-48 26	8.9	9.5	F5	6	..	39678b	58	5811	57.8	- 4 22	9.3	10.4	K2	1	..	9783b
9	14397	57.4	-48 37	8.1	10.3	Ko	4	..	39678b	59	6133	57.8	- 6 23	9.8	10.4	Go	4	..	40844b
10	1225	57.4	-79 6	10.1	10.5	F5	4	..	38135b	60	5918	57.8	- 6 55	10.2	11.2	Ko	2	..	40844b
11	2625	57.5	+59 39	7.48	8.55	K2	2	..	38078i	61	6335	57.8	-15 40	8.7	9.2	F8	6	..	40866b
12	4017	57.5	+47 27	7.79	7.79	Ao	3	..	38020i	62	6195	57.8	-16 36	10.2	10.8	Go	2	..	40866b
13	3913	57.5	+46 28	8.0	8.1	A2	3	..	38020i	63	6392	57.8	-18 58	9.6	10.0	Ko	2	..	40751b
14	4506	57.5	+28 52	8.3	9.3	Ko	1	..	38607i	64	16364	57.8	-32 58	10.6	11.7	K2	1	..	42810b
15	4762	57.5	+22 46	6.73	6.73	Ao	9	..	38100i	65	16363	57.8	-33 8	9.5	10.2	F5	5	..	42810b
16	4853	57.5	+18 6	8.4	9.2	G5	3	..	38617i	66	15249	57.8	-43 37	7.6	8.3	F8	9	..	39473b
17	4750	57.5	+15 18	9.04	9.46	F5	3	..	6445m	67	7627	57.8	-60 3	8.4	9.0	Go	4	..	19899b
18	4980	57.5	+ 9 2	8.7	9.3	Go	2	..	38101i	68	3059	57.9	+53 16	7.69	7.83	A5	5	..	38078i
19	6405	57.5	-11 47	9.6	10.1	F8	3	..	39701b	69	3917	57.9	+51 2	8.8	9.2	F5	2	..	38565i
20	6395	57.5	-13 53	9.2	9.5	F2	4	..	39701b	70	4855	57.9	+17 24	8.6	9.4	G5	4	..	38617i
21	6332	57.5	-14 48	8.26	9.26	Ko	5	..	39701b	71	4924	57.9	+14 44	9.3	9.8	F8	3	..	6445m
22	6530	57.5	-19 55	8.88	9.9	Ko	2	..	40751b	72	5107	57.9	+ 7 6	8.2	9.3	K2	5	..	19027b
23	17716	57.5	-23 10	8.9	9.6	F2	5	..	45146b	73	6134	57.9	- 6 17	10.2	10.3	A2	4	..	40844b
24	19405	57.5	-30 24	9.7	9.9	Ko	2	..	41896b	74	5920	57.9	- 7 39	10.6	11.6	Ko	2	..	40844b
25	15051	57.5	-37 39	8.4	9.7	K2	5	..	40858b	75	6045	57.9	-10 8	9.2	9.3	A5	5	0,3 R	40844b
26	14436	57.5	-47 47	7.79	7.7	F5	8	..	39678b	76	6245	57.9	-17 56	10.7	11.5	G5	1	..	40866b
27	10183	57.5	-57 2	7.4	7.7	F5	8	..	39699b	77	14921	57.9	-38 58	7.19	8.7	K5	6	..	40858b
28	3299	57.5	-68 53	9.2	10.2	Ko	4	..	38368b	78	14438	57.9	-47 14	10.3	10.8	Go	2	..	39678b
29	1226	57.5	-79 10	9.6	10.7	K2	2	..	38135b	79	10192	57.9	-54 38	8.7	9.7	F8	4	..	39663b
30	2157	57.6	+62 44	7.31	8.38	K2	4	..	37257i	80	8036	57.9	-57 57	8.9	9.3	G5	4	..	39699b
31	4375	57.6	+44 2	6.51	7.51	Ko	6	..	38020i	81	1493	58.0	+67 15	7.9	8.4	F8	2	..	37257i
32	4751	57.6	+15 42	6.74	7.74	Ko	6	0,10	38101i	82	4665	58.0	+42 13	5.08	5.14	A2	..	2,10	2481c
33	5557	57.6	- 3 0	9.3	10.3	Ko	2	..	9783b	83	4763	58.0	+22 37	7.20	7.62	F5	7	..	38100i
34	6327	57.6	-13 25	8.7	9.7	Ko	4	..	39701b	84	5097	58.0	+18 17	8.4	9.4	Ko	4	..	38617i
35	6396	57.6	-13 52	8.8	9.1	F2	5	..	39701b	85	4752	58.0	+15 55	7.8	7.9	A2	7	2,10	38101i
36	6391	57.6	-19 11	9.6	9.6	Go	3	..	40751b	86	4382	58.0	- 0 58	7.7	8.5	G5	5	..	38163i
37	15873	57.6	-34 2	8.2	10.2	F5	3	..	40733b	87	5984	58.0	-11 34	9.6	10.2	Go	3	..	39701b
38	9990	57.6	-56 50	10.3	10.9	G	2	R	39699b	88	5985	58.0	-11 37	10.2	10.8	Go	2	..	39701b
39	9991	57.6	-56 50	10.3	10.9	G	2	..	39699b	89	6409	58.0	-12 12	10.2	11.0	G5	2	..	39701b
40	10184	57.6	-57 38	10.1	10.9	G5	2	..	39699b	90	6246	58.0	-18 4	10.7	11.3	Go	1	..	40866b
41	5096	57.7	+18 18	8.4	9.5	K2	3	..	38617i	91	6532	58.0	-20 39	9.2	10.2	Ko	3	0,2	40866b
42	5047	57.7	+13 16	10.7	11.3	Go	1	..	6445m	92	15630	58.0	-35 17	5.13	5.41	Fo	..	0, R	56,149
43	6407	57.7	-12 26	10.5	11.3	G5	1	..	39701b	93	15056	58.0	-37 17	9.0	10.6	K2	2	..	40858b
44	6243	57.7	-17 52	9.1	9.7	Go	3	..	40751b	94	13459	58.0	-50 59	9.2	10.0	K2	3	..	39663b
45	19086	57.7	-31 42	7.6	8.1	Fo	8	..	40733b	95	9992	58.0	-56 14	7.6	8.0	A2	7	..	39699b
46	16175	57.7	-42 34	10.3	11.0	F5	2	..	39473b	96	2384	58.1	+61 58	8.0	8.1	A5	2	..	37257i
47	14912	57.7	-45 20	8.7	9.0	F5	6	..	39678b	97	2877	58.1	+55 48	8.6	9.6	Ko	1	..	38078i
48	10392	57.7	-53 28	10.3	10.9	Go	2	..	39663b	98	4377	58.1	+44 2	9.0	9.3	Fo	1	..	38020i
49	2747	57.7	-71 55	9.4	9.9	F8	2	..	19967b	99	4973	58.1	+40 43	8.1	8.9	G5	2	..	38020i
50	1569	57.7	-76 18	9.0	9.8	G5	3	..	38231b	100	4995	58.1	+39 20	8.6	9.0	F5	3	..	38052i

THE HENRY DRAPER CATALOGUE.

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22^h 58^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	4952	58.1	+ 4 24	8.4	9.0	Go	3	..	9782b	51	2879	58.5	+55 17	8.31	8.31	Ao	3	..	38078i
2	6533	58.1	-19 51	8.48	8.7	F ₂	6	..	40751b	52	4866	58.5	+31 7	7.49	7.83	F ₂	4	..	38032i
3	6534	58.1	-20 1	9.6	9.7	Ao	3	..	40751b	53	4702	58.5	+24 59	8.8	10.0	K ₅	2	..	33745i
4	6535	58.1	-20 20	9.8	11.7	Ko	1	..	40866b	54	5049	58.5	+14 8	9.3	9.9	Go	2	..	6445m
5	6356	58.1	-21 9	8.7	9.7	K ₂	4	..	40866b	55	4984	58.5	+ 8 25	8.2	8.5	Fo	7	2,3	19027b
6	6048	58.1	-22 10	9.6	11.9	F ₈	1	..	2453ob	56	19093	58.5	-31 42	9.7	11.2	G ₅	3	..	4281ob
7	15121	58.1	-41 21	6.68	8.4	Ma	8	..	39473b	57	4843	58.5	-63 52	9.0	9.3	F ₂	4	..	19899b
8	14913	58.1	-45 8	9.9	9.9	Go	5	..	39473b	58	4313	58.5	-64 26	10.1	10.5	F ₅	2	..	19899b
9	3300	58.1	-68 55	9.4	10.2	G ₅	3	..	38368b	59	1297	58.6	+69 41	8.9	9.0	A ₂	1	..	3858oi
10	867	58.2	+75 35	7.52	8.30	G ₅	4	..	38139i	60	2533	58.6	+59 5	7.15	7.29	A ₅	6	..	38078i
11	4378	58.2	+43 31	6.32	6.15	B ₃	8	2,8	3802oi	61	2901	58.6	+54 58	8.8	8.8	A	1	..	37278i
12	4974	58.2	+40 40	8.5	8.6	A ₂	1	..	3802oi	62	3922	58.6	+51 14	8.8	9.2	F ₅	1	..	38565i
13	5264	58.2	+20 23	6.66	7.22	Go	8	..	3810oi	63	3915	58.6	+48 17	7.8	9.0	K ₅	1	..	38565i
14	4063	58.2	+ 8 7	8.7	9.3	Go	4	..	19027b	64	4752	58.6	+37 45	7.18	8.18	Ko	4	..	38564i
15	6050	58.2	-22 14	9.6	11.1	Ko	2	..	2453ob	65	5122	58.6	+ 5 30	10.0	10.8	G ₅	1	..	9782b
16	14529	58.2	-46 42	8.0	8.2	F ₈	7	..	39678b	66	16255	58.6	-25 35	8.9	9.8	Go	3	..	45146b
17	2629	58.3	+59 18	6.87	6.70	B ₃	..	0,7	1668c	67	16453	58.6	-26 18	8.0	9.0	Ko	4	..	40739b
18	4635	58.3	+34 4	8.1	8.1	Ao	4	..	38032i	68	16165	58.6	-27 27	10.9	11.3	Go	1	..	41896b
19	4753	58.3	+15 31	8.6	9.7	K ₂	3	..	6445m	69	18059	58.6	-28 2	9.7	11.0	F ₈	2	..	41896b
20	6410	58.3	-12 27	10.2	11.2	Ko	1	..	39701b	70	15880	58.6	-34 38	9.2	11.4	Go	4	..	4281ob
21	6397	58.3	-13 54	9.3	9.9	Go	3	..	39701b	71	16178	58.6	-41 58	9.7	10.4	Fo	5	..	39473b
22	6247	58.3	-18 35	10.2	11.0	G ₅	2	..	40866b	72	2160	58.7	+62 47	7.00	8.00	Ko	4	..	37257i
23	6393	58.3	-19 28	9.8	11.8	Ko	1	..	40751b	73	3923	58.7	+50 44	9.2	9.3	A ₂	1	..	38565i
24	16449	58.3	-25 59	9.2	10.9	G ₅	2	..	41896b	74	4767	58.7	+22 50	7.62	7.68	A ₂	7	..	3810oi
25	16160	58.3	-27 21	6.91	8.6	Ma	7	..	40739b	75	5109	58.7	+ 6 47	9.3	9.8	F ₈	5	..	19027b
26	19089	58.3	-30 59	6.86	7.6	G ₅	9	..	40733b	76	4675	58.7	+ 2 4	8.6	9.7	K ₂	3	..	9782b
27	14530	58.3	-45 55	9.5	10.0	G ₅	4	..	39678b	77	5917	58.7	- 5 20	6.65	7.21	Go	4	2,8	44324b
28	10393	58.3	-53 26	9.7	10.0	Fo	3	..	39663b	78	6138	58.7	- 5 59	9.6	10.0	F ₅	1	..	17391b
29	9943	58.3	-55 34	8.1	8.8	F ₅	5	..	39699b	79	6009	58.7	- 8 36	8.5	9.5	Ko	5	..	19959b
30	3555	58.3	-68 26	9.4	10.0	Go	4	..	38368b	80	6331	58.7	-12 50	9.1	9.9	G ₅	5	..	39701b
31	3301	58.3	-69 22	5.64	5.92	Fo	..	..	56,149	81	6398	58.7	-14 33	9.2	10.0	G ₅	2	..	39701b
32	892	58.4	+76 20	7.72	7.78	A ₂	5	..	38139i	82	17723	58.7	-23 15	7.72	9.0	Ko	5	..	45146b
33	2900	58.4	+54 42	6.47	6.45	B ₉	8	0,9	37278i	83	17466	58.7	-24 20	8.9	9.5	Ao	4	..	45146b
34	3062	58.4	+53 55	8.4	9.4	Ko	1	..	37278i	84	18060	58.7	-28 46	8.3	9.8	K ₅	2	..	40739b
35	3357	58.4	+52 42	8.0	9.1	K ₂	2	..	38078i	85	19095	58.7	-30 58	8.9	9.9	Ko	2	..	40733b
36	4765	58.4	+22 44	8.8	9.8	Ko	1	..	3810oi	86	15882	58.7	-34 20	9.0	11.1	A ₅	5	..	4281ob
37	5559	58.4	- 3 6	9.3	9.6	Fo	2	..	1466ob	87	3556	58.7	-67 59	9.6	10.0	F ₅	4	..	38368b
38	6652	58.4	-17 7	10.0	11.1	K ₂	1	..	40866b	88	4867	58.8	+30 32	8.1	8.2	A ₂	2	..	38607i
39	17375	58.4	-32 39	8.05	9.0	K ₅	3	..	40733b	89	4926	58.8	+11 20	8.2	8.6	F ₅	4	..	38101i
40	15633	58.4	-35 11	9.6	11.1	G ₅	5	..	4281ob	90	4817	58.8	+ 3 36	8.6	9.4	G ₅	2	..	9782b
41	15124	58.4	-41 22	9.2	10.1	Ko	5	..	39473b	91	4818	58.8	+ 3 17	4.58	4.46	B ₅ P	..	R	56,102
42	16177	58.4	-42 1	5.76	7.0	Ko	..	..	56,149	92	4602	58.8	+ 2 17	8.6	9.7	K ₂	3	..	9782b
43	15251	58.4	-43 31	9.9	11.0	Ko	2	..	39473b	93	4454	58.8	+ 0 6	8.98	9.48	F ₈	2	..	38163i
44	14531	58.4	-46 32	8.1	8.4	F ₈	8	..	39678b	94	R	58.8	-22 46	7.52	8.6	Ko	7	..	45146b
45	14042	58.4	-49 48	11.2	12.0	Ko	1	..	39678b	95	16257	58.8	-24 58	9.7	11.0	G ₅	2	..	45146b
46	13868	58.4	-50 48	8.6	9.4	G ₅	5	..	39663b	96	16370	58.8	-33 35	8.2	9.3	K ₂	5	..	40733b
47	3941	58.4	-67 40	9.0	10.0	Ko	5	..	38368b	97	15639	58.8	-34 57	9.6	11.9	Ko	2	..	4281ob
48	1917	58.5	+63 40	8.16	8.94	G ₅	3	..	38902i	98	15638	58.8	-35 20	10.9	11.9	G ₅	2	..	4281ob
49	2534	58.5	+59 2	8.0	9.1	K ₂	4	..	16265m	99	16179	58.8	-42 37	9.2	10.7	K ₂	4	..	39473b
50	2532	58.5	+58 19	8.6	9.6	Ko	2	..	37278i	100	14404	58.8	-48 40	10.3	11.2	G ₅	2	..	39678b

217900

22^h 58^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	12107	58.8	-52 19	8.4	9.7	Ko	4	..	39663b	51	5925	59.2	-7 14	8.1	9.1	Ko	7	..	19959b
2	10197	58.8	-54 30	5.26	7.3	K5	..	3,9R	56,149	52	6051	59.2	-10 46	9.8	10.8	Ko	3	5,3	24584b
3	1181	58.9	+72 12	7.8	7.8	Ao	5	..	38903i	53	6412	59.2	-12 35	9.8	10.4	Go	3	..	39701b
4	4572	58.9	+43 11	8.4	9.6	K5	2	..	38052i	54	6399	59.2	-14 41	8.86	9.86	Ko	3	..	39701b
5	4978	58.9	+40 50	8.8	8.9	A2	1	..	38020i	55	6202	59.2	-15 48	9.3	10.3	Ko	3	..	40866b
6	4480	58.9	+27 32	2.61	3.96	Ma	..	0,R	2228c	56	6394	59.2	-18 48	10.2	10.8	Go	2	..	40866b
7	4769	58.9	+22 37	9.2	10.0	G5	1	..	38100i	57	6052	59.2	-22 4	9.8	11.1	Fo	2	..	24530b
8	4860	58.9	+17 44	9.0	9.5	F8	1	..	38617i	58	16458	59.2	-26 14	8.1	8.3	G5	6	..	40739b
9	..	58.9	+16 3	..	..	G5	1	..	6445m	59	16374	59.2	-33 21	8.2	8.4	F5	7	..	40733b
10	4756	58.9	+15 18	9.34	10.41	K2	1	..	6445m	60	15643	59.2	-35 40	10.2	11.4	Go	3	..	42810b
11	4873	58.9	+10 33	8.7	9.9	K5	1	..	19027b	61	15130	59.2	-40 55	10.6	10.7	F8	4	..	39473b
12	6200	58.9	-16 35	9.6	10.4	G5	1	..	40751b	62	12108	59.2	-51 54	8.7	9.1	G5	3	..	39663b
13	18560	58.9	-29 8	10.6	11.6	Go	1	..	41896b	63	4846	59.2	-62 56	8.1	8.1	Ao	8	..	19899b
14	19416	58.9	-30 50	8.7	10.8	K5	2	..	40733b	64	4845	59.2	-63 48	9.1	9.7	Go	3	..	19899b
15	7854	58.9	-59 18	9.0	9.6	Ko	1	..	39699b	65	1082	59.3	+72 49	9.2	10.3	K2	1	..	38903i
16	7855	58.9	-59 19	8.7	8.4	Ao	5	1,7	19899b	66	2385	59.3	+62 6	7.8	7.8	Ao	4	..	38902i
17	1770	58.9	-75 18	8.6	8.6	Ao	4	..	19967b	67	4981	59.3	+40 20	8.97	9.11	A5	1	..	38052i
18	1920	59.0	+63 41	9.0	9.0	Ao	3	..	38902i	68	5099	59.3	+18 25	9.1	9.9	G5	1	..	38617i
19	2161	59.0	+63 10	7.8	7.6	B	2	..	38902i	69	6140	59.3	-6 44	9.1	10.1	Ko	3	..	19959b
20	3360	59.0	+52 45	7.65	8.65	Ko	3	..	38078i	70	6012	59.3	-8 17	9.3	9.6	Fo	2	..	19959b
21	4754	59.0	+37 17	9.2	10.6	Mc	..	..	M	71	6413	59.3	-12 43	8.7	9.7	Ko	6	..	39701b
22	4950	59.0	+35 28	9.4	9.4	A	3	..	38032i	72	6251	59.3	-18 27	10.0	10.1	A2	3	..	40751b
23	4846	59.0	+29 22	8.7	9.1	F5	3	..	38607i	73	6053	59.3	-21 47	9.8	11.5	Go	1	..	24530b
24	5267	59.0	+21 3	7.30	7.86	Go	6	..	38100i	74	16459	59.3	-26 44	8.5	9.2	F5	4	..	40739b
25	5098	59.0	+18 29	9.3	9.8	F8	1	..	38617i	75	16169	59.3	-27 17	10.4	11.0	Go	1	..	41896b
26	5123	59.0	+6 4	6.34	6.68	F2	9	..	9782b	76	15692	59.3	-36 12	9.2	10.5	G5	3	..	40858b
27	4603	59.0	+2 45	7.7	8.0	F2	7	..	9782b	77	14536	59.3	-46 38	10.3	10.5	Go	1	..	39678b
28	6139	59.0	-6 19	8.9	9.3	F5	5	..	19959b	78	1022	59.3	-81 48	9.4	10.4	Ko	1	..	15165b
29	5924	59.0	-6 52	9.3	10.4	K2	1	..	19959b	79	2162	59.4	+63 1	8.4	8.2	B3	3	..	13697i
30	6411	59.0	-12 42	10.5	11.1	Go	2	..	39701b	80	2473	59.4	+60 56	8.0	8.0	Ao	4	..	38902i
31	6333	59.0	-13 20	8.7	9.0	Fo	5	..	39701b	81	4861	59.4	+17 21	8.4	8.5	A5	3	..	38617i
32	6201	59.0	-16 33	9.6	11.0	Ma	1	..	40751b	82	4874	59.4	+10 38	7.83	8.83	Ko	5	..	38101i
33	17471	59.0	-24 39	9.2	8.7	Ao	5	..	45146b	83	4967	59.4	+7 38	9.0	10.1	K2	4	..	19027b
34	15885	59.0	-34 44	10.6	11.9	Go	2	..	42810b	84	4961	59.4	+1 4	8.2	9.2	Ko	3	..	9782b
35	15641	59.0	-35 20	8.9	10.5	Ko	2	..	40733b	85	6141	59.4	-6 3	9.8	10.9	K2	1	..	17391b
36	8037	59.0	-58 43	9.1	9.3	K2	3	..	39699b	86	18067	59.4	-28 50	9.5	11.6	G5	1	..	41896b
37	4704	59.1	+24 37	8.9	10.0	K2	1	..	38100i	87	15693	59.4	-36 26	7.44	9.0	Map	6	0,4R	40858b
38	4932	59.1	+12 17	8.7	8.8	A3	3	..	38101i	88	15255	59.4	-43 34	7.5	8.7	Ko	8	..	39473b
39	4986	59.1	+8 43	9.1	9.6	F8	2	..	19027b	89	10199	59.4	-54 16	7.9	9.7	Ko	5	..	39663b
40	5876	59.1	-2 27	9.1	9.7	Go	2	..	14660b	90	7857	59.4	-59 26	7.6	7.9	A5	8	2,8-	42510b
41	6250	59.1	-17 50	9.6	10.4	G5	1	..	40866b	91	2278	59.4	-73 31	8.7	8.8	A2	5	..	19967b
42	893	59.2	+76 23	8.32	8.32	Ao	5	0,3	38903i	92	761	59.5	+80 14	6.68	6.76	A3	6	..	37281i
43	2631	59.2	+59 54	6.57	6.45	B5	8	..	38078i	93	5051	59.5	+13 55	9.3	9.8	F8	4	..	6445m
44	2676	59.2	+58 1	6.50	7.28	G5	7	..	38078i	94	4987	59.5	+8 23	10.0	10.5	F8	1	..	19027b
45	4129	59.2	+45 47	8.5	8.6	A3	2	..	38020i	95	4969	59.5	+7 38	9.7	10.8	K2	1	..	19027b
46	4836	59.2	+31 35	8.1	9.2	K2	3	..	38032i	96	5815	59.5	-4 2	9.2	9.8	Go	1	..	14660b
47	4874	59.2	+21 51	8.9	9.3	F5	4	..	38100i	97	6400	59.5	-14 25	9.8	10.8	Ko	1	..	39701b
48	4859	59.2	+16 42	9.0	9.6	Go	4	..	6445m	98	6339	59.5	-15 8	8.9	9.5	Go	4	..	40866b
49	4925	59.2	+14 46	var.	var.	Md	..	R	M	99	6204	59.5	-16 16	9.2	10.0	G5	4	..	40866b
50	4604	59.2	+2 59	8.8	10.0	K5	1	..	9782b	100	6203	59.5	-16 42	10.2	11.0	G5	1	..	40866b

THE HENRY DRAPER CATALOGUE.

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22^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	6538	59.5	-20 10	10.5	11.5	F8	1	..	40866b	51	9996	59.8	-56 22	10.1	10.9	G5	1	..	39699b
2	17728	59.5	-23 42	8.9	9.7	F5	3	..	45146b	52	4134	59.9	+45 47	8.6	8.6	Ao	1	..	38020i
3	16172	59.5	-27 41	6.82	6.8	A3	10	..	40739b	53	5101	59.9	+19 13	8.8	9.1	Fo	3	..	38617i
4	19418	59.5	-30 4	10.4	12.4	Ko	1	..	41896b	54	5154	59.9	+9 43	8.63	9.63	Ko	2	..	38101i
5	19100	59.5	-31 36	9.2	11.4	F8	3	..	42810b	55	4971	59.9	+7 20	8.6	9.1	F8	7	..	19027b
6	15070	59.5	-37 27	9.2	11.1	Ko	1	..	40858b	56	5128	59.9	+5 58	8.6	8.6	Ao	6	..	9782b
7	7629	59.5	-60 37	8.4	8.7	F8	4	..	19899b	57	4955	59.9	+4 38	8.4	8.8	F5	2	..	9782b
8	4847	59.5	-62 55	9.2	9.6	F5	3	..	19899b	58	4821	59.9	+4 3	7.7	8.8	K2	3	..	9782b
9	2747	59.5	-71 2	9.4	10.5	K2	3	..	38368b	59	4822	59.9	+3 40	8.0	8.5	F8	8	..	9782b
10	2881	59.6	+56 13	8.0	8.3	Fo	3	..	38078i	60	6018	59.9	-8 14	5.56	5.84	Fo	8	R	44324b
11	4642	59.6	+33 39	8.5	9.5	Ko	1	..	38032i	61	6661	59.9	-17 37	6.34	7.34	Ko	8	..	40751b
12	4862	59.6	+16 42	9.7	10.3	Go	2	..	6445m	62	6397	59.9	-18 55	9.8	10.8	G5	2	..	40866b
13	4820	59.6	+3 33	8.6	9.8	K5	1	..	9782b	63	14539	59.9	-46 16	9.4	10.2	Ko	3	..	39678b
14	5921	59.6	-5 42	8.9	10.1	K5	1	..	17391b	64	3942	59.9	-66 57	9.9	10.5	G	1	..	38368b
15	5926	59.6	-7 10	10.0	10.8	G5	2	..	40844b	65	1227	59.9	-79 12	8.8	9.1	F2	6	..	38135b
16	6659	59.6	-17 45	9.6	10.4	G5	1	..	40866b	66	2163	0.0	+62 51	7.8	7.7	B5	4	..	13697i
17	6395	59.6	-19 38	9.03	9.3	Ko	3	..	40751b	67	2540	0.0	+59 9	8.6	8.7	A3	2	..	38078i
18	6054	59.6	-22 37	10.0	11.5	Go	2	..	24530b	68	4935	0.0	+13 5	9.7	10.7	Ko	1	..	6445m
19	17478	59.6	-24 33	8.5	9.0	Fo	4	..	45146b	69	5879	0.0	-2 11	10.1	10.7	Go	2	..	9783b
20	15341	59.6	-38 38	8.9	9.8	F8	4	..	40858b	70	6142	0.0	-5 48	9.4	9.8	F5	2	..	17391b
21	14927	59.6	-39 26	9.6	10.7	K5	2	..	40858b	71	6663	0.0	-17 26	7.01	7.79	G5	8	..	40751b
22	16183	59.6	-42 12	9.4	10.1	Go	5	..	39473b	72	6359	0.0	-21 11	8.7	10.0	G5	4	..	40866b
23	15140	59.6	-44 44	9.9	10.3	Go	4	..	39473b	73	6059	0.0	-22 18	9.7	10.2	F8	2	..	45146b
24	10396	59.6	-53 24	9.1	9.7	F5	5	..	39663b	74	17733	0.0	-23 2	7.72	9.3	Mb	5	..	45146b
25	9947	59.6	-55 4	10.5	10.9	F5	1	..	39663b	75	14051	0.0	-49 46	9.72	11.5	K2	2	..	39678b
26	3741	59.6	-65 53	8.7	9.9	K5	1	..	19899b	76	6723	0.0	-61 7	9.0	9.0	Ao	3	..	19899b
27	1463	59.6	-78 51	9.1	9.9	G5	5	..	38135b	77	892	0.0	-82 5	8.9	9.9	Ko	1	..	15165b
28	869	59.7	+75 58	8.8	9.6	G5	2	..	38903i	78	5271	0.1	+20 20	8.40	8.96	Go	3	..	38100i
29	1575	59.7	+66 40	5.50	6.50	Ko	10	0,9	37257i	79	4863	0.1	+18 5	7.7	8.0	Fo	8	..	38617i
30	1923	59.7	+64 13	8.7	8.8	A2	2	..	38902i	80	4865	0.1	+16 47	8.1	9.3	K5	4	0,2	6445m
31	4028	59.7	+49 30	4.91	5.91	Ko	..	0,10	56,102	81	6019	0.1	-8 18	7.55	8.55	Ko	8	..	19959b
32	4320	59.7	+44 55	8.9	9.3	F5	1	..	38020i	82	6335	0.1	-13 16	9.7	10.3	Go	3	..	39701b
33	4988	59.7	+8 19	8.1	9.3	K5	3	..	38101i	83	17484	0.1	-24 51	9.20	10.1	Go	3	..	45146b
34	4677	59.7	+2 0	10.7	11.3	Go	1	..	38163i	84	19104	0.1	-31 21	7.8	9.9	K5	3	..	40733b
35	5817	59.7	-4 18	9.6	9.9	F2	2	..	14660b	85	16382	0.1	-33 11	9.3	10.2	F8	6	..	42810b
36	18565	59.7	-29 0	9.5	11.4	Go	2	..	41896b	86	15134	0.1	-41 8	9.3	10.2	K2	4	..	39473b
37	15073	59.7	-37 29	8.9	9.9	F5	4	..	40858b	87	15260	0.1	-43 37	7.27	8.4	Ko	9	..	39473b
38	14928	59.7	-39 28	9.6	10.1	G5	5	..	40858b	88	14922	0.1	-45 0	10.8	11.0	Go	1	..	39473b
39	10200	59.7	-54 49	8.78	9.5	F8	5	..	39663b	89	10400	0.1	-53 6	10.0	10.6	Go	2	..	39663b
40	6722	59.7	-61 44	7.6	9.0	K5	5	..	19899b	90	7858	0.1	-59 14	8.2	8.1	A5	7	3,7	39699b
41	3557	59.7	-68 35	10.1	10.2	A3	3	..	38368b	91	2886	0.2	+55 55	7.7	9.1	Ma	..	..	M
42	4982	59.8	+40 44	7.62	7.62	Ao	4	..	38020i	92	2887	0.2	+55 48	8.1	8.1	A	2	..	38078i
43	4869	59.8	+30 45	6.78	7.12	F2	6	..	38607i	93	3067	0.2	+53 28	8.4	9.2	G5	1	..	37278i
44	4863	59.8	+16 23	8.8	9.3	F8	5	2,2	6445m	94	3536	0.2	+51 54	8.9	8.9	A	1	..	37278i
45	4926	59.8	+14 40	2.57	2.57	Ao	..	R	6030c	95	3924	0.2	+48 47	7.9	8.0	A2	5	..	38565i
46	4990	59.8	+8 32	8.5	8.6	A3	3	..	38101i	96	4136	0.2	+45 28	8.5	9.7	K5	1	..	38020i
47	6052	59.8	-10 8	9.1	9.4	Fo	3	..	17391b	97	4575	0.2	+32 50	7.28	7.28	Ao	6	..	38032i
48	16269	59.8	-24 53	7.05	8.3	Ko	7	..	45146b	98	4706	0.2	+24 52	8.8	9.8	Ko	2	..	38100i
49	14921	59.8	-45 12	9.9	10.5	Ko	3	..	39473b	99	4673	0.2	+24 0	7.12	7.54	F5	5	..	38607i
50	14408	59.8	-48 24	8.7	9.5	G5	6	..	39678b	100	4864	0.2	+18 9	9.7	10.1	F5	3	..	38617i

218100

23^h 0^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	4760	m. 0.2	o 16 2	6.45	7.45	Ko	7	0,9	38101i	51	2889	m. 0.6	o 56 10	6.71	6.71	Ao	7	..	38078i
2	4759	0.2	+15 56	9.3	10.3	Ko	3	..	6445m	52	3929	0.6	+48 31	7.8	8.4	Go	2	..	38565i
3	4963	0.2	+ 0 46	6.38	7.38	Ko	8	..	9782b	53	4870	0.6	+25 29	7.86	8.86	Ko	2	..	38607i
4	5931	0.2	- 7 43	9.2	10.2	Ko	4	..	19959b	54	4675	0.6	+24 7	7.01	7.01	Ao	6	..	38607i
5	6205	0.2	-15 58	8.5	9.3	G5	7	..	40866b	55	4929	0.6	+14 25	6.81	6.81	Ao	9	..	38101i
6	14540	0.2	-46 26	9.5	9.6	Fo	5	..	39678b	56	4881	0.6	+10 44	9.0	9.4	F5	2	5,2	19027b
7	1771	0.2	-75 33	9.1	9.2	A2	5	..	38231b	57	6116	0.6	- 9 26	9.2	9.8	Go	3	5,2	40844b
8	1064	0.2	-80 1	6.20	6.0	A2	..	1,10	56,149	58	5996	0.6	-11 26	8.1	8.2	A3	3	..	17412b
9	1063	0.2	-80 45	9.5	10.5	Ko	4	..	38135b	59	6208	0.6	-16 0	8.1	8.5	F5	9	..	40866b
10	3366	0.3	+52 29	8.5	8.5	A	1	..	37278i	60	6207	0.6	-16 20	9.7	10.0	F2	2	..	40866b
11	4986	0.3	+40 53	8.2	9.2	Ko	1	..	38020i	61	6665	0.6	-17 6	10.6	11.4	G5	1	..	40866b
12	4643	0.3	+33 33	8.0	8.4	F5	4	..	38032i	62	17736	0.6	-23 37	10.0	12.1	K2	2	..	45146b
13	4487	0.3	+27 40	8.6	9.7	K2	2	..	38607i	63	17487	0.6	-23 53	10.3	9.8	A3	3	..	45146b
14	5112	0.3	+ 6 53	9.1	10.1	Ko	2	..	14198b	64	19112	0.6	-30 53	9.3	11.1	Go	4	..	42810b
15	4964	0.3	+ 1 14	8.49	8.99	F8	2	..	9782b	65	14928	0.6	-45 6	8.7	9.3	Go	7	..	39473b
16	4965	0.3	+ 0 36	9.5	10.3	G5	1	..	38163i	66	14412	0.6	-48 19	7.9	8.8	Ko	7	..	39678b
17	5923	0.3	- 4 47	8.85	9.13	Fo	4	..	17391b	67	2053	0.6	-74 34	10.0	10.8	G5	3	..	38231b
18	6020	0.3	- 8 39	9.2	10.0	G5	3	..	40844b	68	1007	0.7	+73 57	8.0	8.8	G5	4	..	38139i
19	6419	0.3	-11 58	9.9	10.9	Ko	1	..	39701b	69	1303	0.7	+70 6	8.24	8.80	Go	3	..	38580i
20	6342	0.3	-14 57	8.7	9.5	G5	5	..	40866b	70	4518	0.7	+28 29	7.41	8.59	Ko	3	..	38607i
21	6341	0.3	-15 36	8.7	9.3	Go	6	..	40866b	71	4773	0.7	+22 56	9.5	10.5	K5	1	..	38100i
22	16385	0.3	-33 35	9.0	9.9	G5	5	..	42810b	72	5057	0.7	+19 43	7.20	7.62	F5	5	..	38100i
23	15262	0.3	-43 29	9.7	10.2	F8	3	..	39473b	73	6021	0.7	- 8 29	6.85	6.85	Ao	6	..	44324b
24	13464	0.3	-51 30	9.9	10.0	Go	2	..	39663b	74	5997	0.7	-10 59	7.08	7.14	A2	6	..	17412b
25	10203	0.3	-54 7	9.3	10.0	G5	4	..	39663b	75	6343	0.7	-14 59	8.1	8.9	G5	7	..	40866b
26	8038	0.3	-57 57	8.5	8.4	F2	6	..	39699b	76	6399	0.7	-19 12	10.3	11.5	Ko	1	..	40866b
27	7859	0.3	-59 19	8.7	9.0	Ko	5	0,2	39699b	77	6539	0.7	-20 26	10.1	11.7	F8	1	..	40866b
28	3943	0.3	-66 59	9.0	10.2	Fo	2	..	38368b	78	14932	0.7	-39 21	9.6	10.4	K5	3	..	40858b
29	3303	0.3	-69 48	9.0	10.5	Go	3	..	38368b	79	1925	0.8	+63 34	7.60	7.88	Fo	2	..	37257i
30	2909	0.4	+55 10	8.11	8.45	F2	3	..	38078i	80	4926	0.8	+38 32	8.8	9.3	F8	2	..	38574i
31	4488	0.4	+27 48	9.2	10.0	G5	1	..	38607i	81	4882	0.8	+10 45	10.7	11.0	Fo	1	..	19027b
32	4761	0.4	+15 40	8.6	9.6	Ko	2	..	6445m	82	6344	0.8	-15 28	10.1	10.4	F2	3	..	40866b
33	5053	0.4	+13 54	8.1	8.7	Go	7	5,9	38101i	83	6345	0.8	-15 33	10.1	10.1	Ao	4	..	40866b
34	4824	0.4	+ 3 35	9.7	10.5	G5	1	..	9782b	84	17489	0.8	-24 23	9.6	11.2	K2	2	..	45146b
35	6398	0.4	-18 55	8.9	9.3	F5	5	..	40866b	85	16177	0.8	-27 18	10.0	10.1	Go	2	..	41896b
36	15022	0.4	-39 58	8.03	8.7	Ko	8	..	39473b	86	14054	0.8	-49 46	9.68	10.0	F8	3	..	39678b
37	12112	0.4	-52 50	10.6	11.2	Go	1	..	39663b	87	2688	0.9	+58 12	7.15	8.15	Ko	4	..	38078i
38	9999	0.4	-56 30	8.3	9.4	Ko	4	..	39699b	88	4774	0.9	+22 20	9.3	10.3	Ko	1	..	38100i
39	2165	0.5	+62 42	6.78	7.78	Ko	3	..	37257i	89	4993	0.9	+ 8 22	8.2	9.6	Ma	2	..	38101i
40	4560	0.5	+26 26	8.8	9.1	Fo	2	..	38607i	90	5998	0.9	-10 55	9.7	10.8	K2	1	..	24584b
41	5054	0.5	+14 10	9.7	10.9	K5	1	..	6445m	91	6061	0.9	-22 28	8.9	10.5	Ko	2	..	45146b
42	5156	0.5	+ 9 54	7.42	7.70	Fo	7	..	38101i	92	14414	0.9	-48 27	9.2	9.1	A2	6	..	39678b
43	15263	0.5	-43 5	10.5	11.3	Ko	1	..	39473b	93	7861	0.9	-58 53	8.7	9.3	Go	2	..	39699b
44	14457	0.5	-47 4	9.5	10.5	G5	2	..	39678b	94	2748	0.9	-71 18	9.9	10.5	Go	2	..	38368b
45	14411	0.5	-48 44	9.5	11.7	G5	1	..	39678b	95	2689	1.0	+57 43	8.1	7.9	B3	2	R	37278i
46	13880	0.5	-50 31	11.2	11.2	A3	1	..	39663b	96	4138	1.0	+46 10	8.0	8.0	Ao	3	..	38020i
47	12113	0.5	-52 13	10.6	11.2	Go	1	..	39663b	97	4577	1.0	+42 43	8.0	8.1	A2	1	..	38020i
48	8039	0.5	-58 3	9.4	10.0	Go	1	..	39699b	98	4838	1.0	+34 44	8.06	9.06	Ko	1	..	38574i
49	2992	0.5	-70 14	9.3	9.6	Fo	5	..	38368b	99	4855	1.0	+30 11	8.26	9.26	Ko	1	..	38607i
50	2684	0.6	+58 12	8.7	8.7	Ao	2	..	38078i	100	4865	1.0	+17 33	8.0	8.3	Fo	5	..	38617i

THE HENRY DRAPER CATALOGUE.

218200

23^h 1^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	4826	1.0	+ 4 9	9.1	9.9	G5	1	..	9782b	51	6346	1.4	-15 24	9.2	10.0	G5	5	..	40866b
2	6056	1.0	- 9 55	9.4	9.8	F5	3	..	24584b	52	6670	1.4	-17 11	9.4	10.5	K2	2	..	40866b
3	17739	1.0	-23 43	10.3	11.9	G5	1	..	45146b	53	17744	1.4	-23 19	9.3	9.3	F5	4	..	24530b
4	15026	1.0	-40 50	8.7	9.8	F8	7	..	39473b	54	14547	1.4	-46 14	10.3	11.1	Ko	1	..	39678b
5	15146	1.0	-44 3	7.9	7.8	Go	8	..	39473b	55	13885	1.4	-50 9	6.32	7.7	Ko	9	..	39663b
6	12114	1.0	-52 41	8.7	10.6	Ko	2	..	39663b	56	13884	1.4	-50 23	10.5	11.2	K2	1	..	39663b
7	8040	1.0	-57 52	8.7	9.6	K2	4	..	39699b	57		1.5	+41 16			G5			
8	4316	1.0	-64 20	9.2	10.0	G5	2	..	19899b	58	4676	1.5	+41 16	7.6	8.4	A3	4	R	38574i
9	1498	1.1	+67 53	7.50	8.06	Go	4	0,3	37257i	59	5003	1.5	+36 17	6.73	7.73	Ko	6	..	38032i
10	6058	1.1	-10 8	7.36	8.36	Ko	7	..	17391b	60	4856	1.5	+29 21	8.9	9.4	F8	1	..	38607i
11	5999	1.1	-10 57	9.7	10.1	F5	4	3,3	24584b	61	5058	1.5	+19 22	6.42	6.92	F8	7	3,7	38617i
12	6423	1.1	-12 6	9.9	10.3	F5	2	..	39701b	62	5822	1.5	- 4 44	8.85	9.19	F2	4	..	17391b
13	6338	1.1	-13 30	9.4	10.0	Go	2	..	39701b	63	6343	1.5	-13 5	10.3	11.1	G5	2	..	39701b
14	6406	1.1	-14 12	9.1	9.6	F8	3	..	39701b	64	6348	1.5	-15 30	9.4	10.4	Ko	3	..	40866b
15	R	1.1	-22 49	9.8	10.8	Go	3	..	24530b	65	6210	1.5	-16 10	9.9	11.0	K2	2	..	40866b
16	15659	1.1	-35 48	9.7	10.8	Ao	5	..	42810b	66	14548	1.5	-46 23	7.7	9.0	Ko	8	..	39678b
17	10404	1.1	-53 19	7.8	9.1	Ko	5	..	39663b	67	13886	1.5	-50 20	9.4	10.0	Ko	4	..	39663b
18	10000	1.1	-56 30	8.3	9.4	Ko	4	..	39699b	68	13470	1.5	-51 14	6.79	6.7	F5	..	3,R	56,149
19	1001	1.2	+74 59	8.6	8.6	Ao	6	..	38139i	69	13471	1.5	-51 14	6.12	6.7	F5	..	3,R	56,149
20	4388	1.2	+43 21	7.6	8.8	K5	1	..	38020i	70	10405	1.5	-53 9	7.4	8.4	G5	8	..	39663b
21	5932	1.2	- 7 22	9.4	10.5	K2	2	..	40844b	71	10002	1.5	-56 29	8.6	8.8	F8	5	..	39699b
22	6117	1.2	- 9 17	9.2	10.0	G5	4	..	17391b	72	7632	1.5	-60 11	8.12	8.3	Fo	5	0,7	19899b
23	6339	1.2	-13 1	9.4	9.9	F8	4	..	39701b	73	806	1.6	+81 19	8.6	9.7	K2	1	..	38964i
24	16477	1.2	-26 43	9.5	9.8	Go	4	..	41896b	74	5056	1.6	+13 55	10.7	11.5	G5	2	..	6445m
25	14935	1.2	-39 20	9.9	9.5	Fo	7	..	40858b	75	6001	1.6	-11 32	10.6	11.2	Go	2	..	24584b
26	16196	1.2	-42 20	9.5	11.0	Ko	3	..	39473b	76	6211	1.6	-16 9	9.7	10.5	G5	4	..	40866b
27	15149	1.2	-44 4	4.35	4.77	F5	..	R	28,216	77	6401	1.6	-19 6	9.9	11.1	G5	2	..	40866b
28	10001	1.2	-56 5	8.7	9.7	Ko	3	..	39699b	78	6543	1.6	-20 24	8.5	9.1	F8	6	..	40866b
29	2388	1.3	+61 50	8.0	8.0	A	1	..	37257i	79	6064	1.6	-21 59	8.7	9.7	Ko	5	..	24530b
30	4522	1.3	+28 25	8.6	9.6	Ko	1	..	38607i	80	R	1.6	-22 45	8.3	9.1	F8	6	..	24530b
31	4712	1.3	+24 34	9.4	10.6	K5	1	..	38100i	81	17498	1.6	-24 41	10.0	10.7	F8	2	..	24530b
32	4879	1.3	+22 4	9.3	9.7	F5	3	..	38100i	82	16182	1.6	-27 2	9.8	12.2	K2	1	R	41896b
33	5275	1.3	+20 33	9.4	9.9	F8	3	..	38100i	83	19434	1.6	-30 35	6.60	6.7	F2	7	..	12003b
34	5105	1.3	+18 27	7.55	8.55	Ko	5	..	38617i	84	19120	1.6	-30 59	9.0	9.7	Fo	7	..	42810b
35	4866	1.3	+17 59	6.14	6.48	F2	9	..	38617i	85	15662	1.6	-35 32	9.9	11.4	Ko	3	..	42810b
36	6118	1.3	- 9 10	8.5	9.0	F8	5	..	17391b	86	15713	1.6	-36 50	9.7	10.2	F8	2	..	40858b
37	6059	1.3	-10 35	10.1	10.6	F8	4	..	24584b	87	16201	1.6	-42 46	10.1	11.5	G5	1	..	39473b
38	6407	1.3	-14 17	8.8	10.2	Ma	1	..	39701b	88	2054	1.6	-74 8	6.09	7.8	Ko	..	0,7	56,149
39	6541	1.3	-19 59	8.53	9.0	F8	7	..	40866b	89	4765	1.7	+38 2	7.9	8.0	Ko	3	..	38574i
40	17497	1.3	-24 17	4.77	5.55	G5	..	5,6 R	28,216	90	4713	1.7	+24 36	9.3	9.9	Go	2	..	38100i
41	19118	1.3	-31 9	8.2	9.6	Ko	4	..	40733b	91	4762	1.7	+15 54	9.3	10.4	K2	1	..	6445m
42	14936	1.3	-39 26	5.59	6.2	Ao	..	R	56,149	92	5158	1.7	+10 1	var.	var.	Md	4	R	38101i
43	6724	1.3	-61 25	8.8	8.4	F5	7	..	19899b	93	6361	1.7	-21 0	9.2	11.9	Ko	2	..	24530b
44	3944	1.3	-67 12	8.9	9.9	Ko	5	..	38368b	94	17748	1.7	-23 42	10.0	12.1	K5	2	0,I	24530b
45	2993	1.3	-70 35	8.7	9.3	Go	7	..	38368b	95	14549	1.7	-46 2	9.5	10.2	G5	3	..	39678b
46	2169	1.4	+63 11	8.6	8.7	A3	2	..	38902i	96	8041	1.7	-58 5	9.0	9.3	F5	3	..	39699b
47	4581	1.4	+32 45	8.2	9.2	Ko	3	..	38032i	97	7862	1.7	-59 39	8.1	9.6	K2	3	0,I	39699b
48	5106	1.4	+18 43	8.8	9.8	Ko	1	..	38617i	98	6391	1.7	-62 20	8.7	9.0	Fo	1	..	19899b
49	4461	1.4	- 0 44	9.0	10.0	Ko	2	..	9783b	99	4391	1.8	+43 55	7.8	7.8	Ao	3	..	38020i
50	6347	1.4	-15 9	9.4	10.4	Ko	2	..	40866b	100	4875	1.8	+30 29	8.4	9.4	Ko	1	..	38607i

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	4858	1.8	+30 5	8.01	8.20	Fo	4	..	38607i	51	15718	2.1	-36 36	8.3	9.9	Ma	3	..	40858b
2	4881	1.8	+21 17	8.9	9.9	Ko	2	..	38100i	52	12116	2.1	-51 57	10.7	11.2	F8	1	..	39663b
3	4959	1.8	+4 31	7.8	9.0	K5	3	..	9782b	53	1301	2.2	+70 26	9.5	9.5	Ao	1	..	38903i
4	6344	1.8	-13 15	8.5	9.0	F8	6	..	39701b	54	4769	2.2	+37 42	8.17	8.95	G5	3	..	38574i
5	6402	1.8	-19 43	10.6	11.4	G5	1	..	40866b	55	4768	2.2	+37 29	7.9	8.7	G5	3	..	33749i
6	15664	1.8	-35 24	7.8	10.2	K2	5	..	40858b	56	4716	2.2	+24 56	4.98	5.98	Ko	..	0,10	56,102
7	15358	1.8	-38 39	9.9	10.9	Ko	2	..	40858b	57	6002	2.2	-11 35	10.3	11.3	Ko	2	..	24584b
8	15270	1.8	-43 31	8.6	9.6	Ma	3	..	39473b	58	6426	2.2	-12 20	7.9	8.0	A2	4	..	17412b
9	12115	1.8	-52 3	10.1	10.6	F8	2	..	39663b	59	18582	2.2	-29 8	9.2	10.8	Go	3	..	41896b
10	10206	1.8	-54 10	9.3	10.6	K2	2	..	39663b	60	15091	2.2	-37 1	8.5	9.0	F5	7	..	40858b
11	10199	1.8	-57 32	8.8	10.0	Ao	3	..	39699b	61	10200	2.2	-57 40	9.3	11.2	K	1	..	39699b
12	8043	1.8	-58 51	8.6	9.0	Ko	3	..	39699b	62	202	2.2	-88 6	8.53	8.8	Go	4	..	15173b
13	3539	1.9	+51 37	8.0	8.0	Ao	2	..	38565i	63	1753	2.3	+64 20	8.6	8.6	Ao	2	..	38902i
14	4677	1.9	+42 5	7.78	8.96	K5	1	..	38020i	64	4394	2.3	+43 46	8.0	8.0	Ao	2	..	38020i
15	4992	1.9	+40 57	7.88	8.88	Ko	1	..	38020i	65	4847	2.3	+35 6	6.54	7.54	Ko	7	..	38032i
16	4931	1.9	+14 26	9.7	10.5	G5	3	..	6445m	66	4844	2.3	+34 31	7.36	7.36	Ao	7	..	38032i
17	5119	1.9	+6 48	9.7	10.9	K5	1	..	14198b	67	4932	2.3	+14 44	10.44	11.51	K2	2	..	6445m
18	17393	1.9	-32 48	8.3	8.7	Go	5	..	40733b	68	6062	2.3	-10 43	10.3	11.1	G5	3	..	24584b
19	15717	1.9	-36 49	9.7	10.8	Go	1	..	40858b	69	19438	2.3	-30 47	8.6	9.6	F8	7	..	42810b
20	15151	1.9	-43 53	10.8	11.3	Ko	1	..	39473b	70	19125	2.3	-31 7	9.3	11.9	K5	2	..	42810b
21	15152	1.9	-44 28	9.2	9.6	Go	6	..	39473b	71	19126	2.3	-31 32	9.2	10.8	Ko	2	..	42810b
22	10004	1.9	-56 41	7.8	9.5	Ma	4	..	39699b	72	15364	2.3	-37 53	8.5	9.8	Ko	4	..	40858b
23	1928	2.0	+63 46	7.8	7.6	B	3	..	38902i	73	9955	2.3	-55 30	9.1	10.6	Ma	3	..	39699b
24	3933	2.0	+46 24	8.0	8.0	B9	1	..	38020i	74	1228	2.3	-79 18	8.8	9.9	K2	5	..	38135b
25	3931	2.0	+46 23	8.0	7.8	B3	5	..	38020i	75	2479	2.4	+60 55	6.74	7.16	F5	4	..	37257i
26	4680	2.0	+42 9	7.74	7.72	B9	4	..	38020i	76	2545	2.4	+58 53	4.93	4.71	B1	..	..	1668c
27	4860	2.0	+30 8	8.81	8.87	A2	1	..	38607i	77	4765	2.4	+16 2	9.3	10.4	K2	1	..	6445m
28	4714	2.0	+24 29	9.0	9.5	F8	2	..	38100i	78	13476	2.4	-51 51	11.2	10.8	G5	1	..	39663b
29	4997	2.0	+8 52	4.69	6.04	Ma	..	0,10	56,102	79	4321	2.4	-64 24	7.2	7.8	Go	9	..	19899b
30	4609	2.0	+2 32	8.2	9.2	Ko	5	..	9782b	80	4582	2.5	+42 24	8.6	8.6	Ao	1	..	38020i
31	6025	2.0	-8 14	7.35	7.35	Ao	4	..	44324b	81	5060	2.5	+20 3	6.74	7.74	Ko	5	..	38100i
32	6123	2.0	-9 21	8.1	9.2	K2	5	..	17391b	82	4938	2.5	+11 16	8.7	9.2	F8	2	..	38101i
33	6425	2.0	-12 23	9.7	10.7	Ko	1	..	39701b	83	5886	2.5	-2 38	9.2	10.2	Ko	1	..	9783b
34	6254	2.0	-18 43	10.7	11.5	G5	1	..	40866b	84	6063	2.5	-10 5	9.7	10.3	Go	3	..	24584b
35	6362	2.0	-21 24	10.6	11.2	Go	2	..	24530b	85	6352	2.5	-15 13	10.3	11.3	Ko	1	..	40866b
36	16481	2.0	-25 55	10.0	11.6	K2	2	..	41896b	86	6363	2.5	-21 14	10.8	11.9	F8	2	..	24530b
37	15902	2.0	-34 45	7.58	8.1	A5	7	0,7	23754b	87	17754	2.5	-23 37	10.5	11.4	F8	2	..	24530b
38	15089	2.0	-37 36	8.7	9.9	K2	3	..	40858b	88	19129	2.5	-30 56	9.3	10.2	F8	4	..	42810b
39	10207	2.0	-54 37	8.08	8.4	A2	8	..	39663b	89	16203	2.5	-42 12	10.3	11.5	Go	2	..	39473b
40	4319	2.0	-64 10	8.7	9.3	Go	6	..	19899b	90	14422	2.5	-48 23	9.9	10.3	G5	3	..	39678b
41	1572	2.0	-76 26	8.6	9.2	Go	6	..	38231b	91	12117	2.5	-52 17	8.7	9.5	A2	4	..	39663b
42	2170	2.1	+62 41	7.46	7.34	B5	2	..	37257i	92	7635	2.5	-60 16	7.1	7.7	F2	8	..	19899b
43	2946	2.1	+57 1	9.4	10.8	Ma	1	..	16265m	93	4045	2.6	+49 40	6.85	6.99	A5p	..	R	18198c
44	3946	2.1	+50 33	7.17	7.05	B5	6	..	38565i	94	5007	2.6	+40 1	7.82	8.10	Fo	5	..	38052i
45	4868	2.1	+17 26	8.2	8.7	F8	2	..	38617i	95	4587	2.6	+32 18	5.97	6.03	A2	10	..	38032i
46	4763	2.1	+15 58	9.3	9.7	F5	3	..	6445m	96	5278	2.6	+20 37	5.93	6.07	A5	9	..	38100i
47	4764	2.1	+15 44	9.3	9.7	F5	4	..	6445m	97	4613	2.6	+3 13	8.8	9.6	G5	2	..	9782b
48	16483	2.1	-26 8	9.0	10.9	Mb	3	..	41896b	98	5931	2.6	-5 38	9.2	9.5	Fo	5	..	17391b
49	16484	2.1	-26 45	10.3	11.2	F8	2	..	41896b	99	6147	2.6	-6 14	8.9	9.9	Ko	4	..	17391b
50	17395	2.1	-32 20	8.3	8.3	Ao	6	..	40733b	100	6064	2.6	-10 12	8.8	9.1	Fo	6	..	17391b

THE HENRY DRAPER CATALOGUE.

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23^h 2^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	19131	2.6	-31 46	9.3	11.6	F5	2	..	4281ob	51	2915	3.1	+54 19	8.7	9.3	Go	1	..	38078i
2	14943	2.6	-39 36	9.6	10.1	G5	2	..	40858b	52	4149	3.1	+45 51	5.56	6.74	K5	8	..	38020i
3	15151	2.6	-40 58	9.9	10.1	F5	5	..	39473b	53	5008	3.1	+39 15	7.47	7.81	F2	4	..	38052i
4	3745	2.6	-66 45	8.4	9.6	K5	3	..	38368b	54	4863	3.1	+29 54	7.46	8.64	K5	3	..	38607i
5	1464	2.6	-78 7	9.0	10.2	F2	5	..	38135b	55	4529	3.1	+29 10	8.0	9.1	K2	1	..	38607i
6	3941	2.7	+49 0	8.0	8.1	A2	2	..	38565i	56	5109	3.1	+18 25	9.1	10.1	Ko	1	..	38617i
7	4147	2.7	+45 33	6.56	6.44	B5	7	0,7	38020i	57	4964	3.1	+4 30	8.8	9.8	Ko	1	..	38163i
8	5135	2.7	+6 4	8.2	9.0	G5	2	..	38163i	58	6029	3.1	-8 35	10.1	11.2	K2	1	..	24584b
9	4393	2.7	-0 50	7.39	8.39	Ko	6	..	38163i	59	6429	3.1	-12 8	8.7	9.2	F8	6	..	24584b
10	5932	2.7	-5 18	9.1	9.6	F8	4	..	17391b	60	6256	3.1	-18 37	10.6	11.6	Ko	1	..	40866b
11	6410	2.7	-14 5	10.1	10.7	Go	1	..	39701b	61	6546	3.1	-20 37	10.3	10.2	F8	2	..	24530b
12	6404	2.7	-19 44	8.78	9.7	G5	5	..	40866b	62	15369	3.1	-38 23	9.9	9.8	A3	4	..	40858b
13	6364	2.7	-21 7	9.4	11.4	K2	3	..	24530b	63	15274	3.1	-43 41	10.1	10.2	F5	3	..	39473b
14	15725	2.7	-36 10	9.7	11.4	Mb	2	..	4281ob	64	13480	3.1	-51 40	8.7	9.7	Ko	6	..	39663b
15	15365	2.7	-38 36	10.1	11.0	Ko	1	..	40858b	65	1772	3.1	-75 9	9.3	10.1	G5	4	..	38231b
16	3371	2.8	+52 17	6.26	7.26	Ko	7	..	38078i	66	1002	3.2	+75 3	6.70	6.68	B9	7	..	38139i
17	4584	2.8	+42 51	7.8	7.8	Ao	3	..	38020i	67	1302	3.2	+70 26	9.5	9.5	Ao	1	..	38903i
18	4958	2.8	+35 47	8.8	9.3	F8	1	..	38574i	68	2547	3.2	+58 29	7.35	8.35	Ko	3	..	38078i
19	4871	2.8	+16 50	9.3	10.5	K5	1	..	6445m	69	2693	3.2	+57 53	8.4	8.4	Ao	2	..	37278i
20	6148	2.8	-5 45	9.7	10.3	Go	3	..	17391b	70	3944	3.2	+48 45	5.83	6.11	Fo	..	5,7	56,102
21	6345	2.8	-13 37	9.9	10.4	F8	2	..	39701b	71	4960	3.2	+36 6	8.8	8.8	A	2	..	33749i
22	16291	2.8	-25 17	10.0	12.6	K5	1	..	24530b	72	4881	3.2	+30 55	7.28	7.34	A2	4	..	38607i
23	19133	2.8	-31 25	9.0	9.1	A2	7	..	4281ob	73	4874	3.2	+16 18	8.4	9.0	Go	5	0,3-	6445m
24	15272	2.8	-43 41	10.5	10.8	F8	2	..	39473b	74	4684	3.2	+1 27	9.3	9.8	F8	3	..	38163i
25	14938	2.8	-45 3	10.5	11.0	Ko	3	..	39473b	75	6030	3.2	-7 48	8.5	8.8	Fo	6	..	17391b
26	14061	2.8	-49 20	9.5	11.2	K2	2	..	39678b	76	6128	3.2	-9 33	8.7	9.0	K5	4	..	17391b
27	3943	2.9	+48 31	8.0	8.3	Fo	2	..	38565i	77	6129	3.2	-9 41	10.3	10.8	F8	2	..	24584b
28	4862	2.9	+29 31	7.25	7.23	B9	6	..	38607i	78	6004	3.2	-11 39	10.7	11.3	Go	2	..	24584b
29	4873	2.9	+16 27	9.1	10.3	K5	1	..	6445m	79	6406	3.2	-18 46	10.1	11.1	Ko	1	..	40866b
30	4940	2.9	+12 9	7.8	8.1	Fo	6	..	38101i	80	17406	3.2	-32 7	9.7	11.6	Ko	2	..	4281ob
31	6680	2.9	-16 53	9.4	10.0	Go	4	..	40866b	81	15038	3.2	-40 13	9.6	10.4	F8	3	..	39473b
32	6073	2.9	-22 8	8.9	9.7	Go	5	..	24530b	82	16209	3.2	-42 22	9.9	11.0	G5	2	..	39473b
33	6072	2.9	-22 14	9.9	10.9	Ko	1	..	24530b	83	15275	3.2	-42 59	8.8	9.6	Ko	6	..	39473b
34	18588	2.9	-29 22	5.85	7.1	Ko	..	..	56,149	84	12118	3.2	-52 28	8.3	8.4	F8	7	..	39663b
35	16206	2.9	-42 23	9.4	10.9	K5	2	..	39473b	85	3947	3.2	-67 4	8.9	9.9	Ko	2	..	38368b
36	15158	2.9	-44 16	10.1	11.0	F8	2	..	39473b	86	4884	3.3	+21 35	8.8	9.8	Ko	1	..	38100i
37	14062	2.9	-49 32	9.2	10.6	K2	3	..	39678b	87	4875	3.3	+16 57	9.7	10.5	G5	2	..	6445m
38	7864	2.9	-58 58	8.9	9.9	Ko	1	..	39699b	88	4394	3.3	-1 2	7.34	7.76	F5	6	..	38163i
39	2482	3.0	+60 18	7.61	7.67	A2	4	E	38078i	89	6365	3.3	-21 3	9.7	11.9	K2	2	..	24530b
40	2546	3.0	+59 13	6.28	6.11	B3	..	..	1668c	90	17758	3.3	-23 41	10.0	11.4	Ko	2	..	24530b
41	4963	3.0	+4 20	7.8	8.9	K2	3	..	9782b	91	15040	3.3	-40 11	9.6	10.2	Go	3	..	39473b
42	4614	3.0	+3 3	8.2	9.3	K2	3	..	9782b	92	15039	3.3	-40 48	9.1	10.1	K2	5	..	39473b
43	6065	3.0	-10 42	10.7	11.7	Ko	1	..	24584b	93	13894	3.3	-50 48	10.3	11.2	Go	2	..	39678b
44	6682	3.0	-17 17	7.9	8.9	Ko	6	..	40866b	94	8046	3.3	-58 26	9.5	10.5	K	1	..	39699b
45	6681	3.0	-17 36	8.5	9.1	Go	5	..	40866b	95	4322	3.3	-64 12	9.2	9.3	A2	4	..	19899b
46	15273	3.0	-43 33	9.9	11.4	K5	2	..	39473b	96	3948	3.3	-67 1	8.0	8.1	A3	8	..	38368b
47	15159	3.0	-44 45	9.22	10.5	Ko	4	..	39473b	97	3560	3.3	-68 25	6.62	6.6	F2	6	..	44236b
48	13479	3.0	-51 44	11.2	10.6	G5	1	..	39663b	98	2749	3.3	-71 15	9.5	10.0	F8	4	..	38368b
49	1011	3.1	+73 32	9.2	9.2	Ao	2	..	38903i	99	4940	3.4	+13 11	8.5	8.6	A5	5	3,7	38101i
50	2394	3.1	+62 8	8.6	8.6	A	1	..	37257i	100	5164	3.4	+10 3	8.59	9.66	K2	1	..	38101i

218500

23^h 3^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	6067	3.4	-10 40	10.8	11.8	Ko	2	..	24584b	51	4966	3.8	+ 4 49	8.6	9.6	Ko	2	..	38163i
2	6355	3.4	-15 34	8.5	8.9	F5	7	..	40866b	52	4468	3.8	+ 0 2	9.3	9.9	Go	1	..	38163b
3	6684	3.4	-16 55	9.7	10.7	Ko	1	..	40866b	53	6152	3.8	- 5 53	8.7	9.7	Ko	4	..	17391b
4	6408	3.4	-19 17	8.1	8.2	Go	8	..	40866b	54	6412	3.8	-14 15	9.1	9.7	Go	3	..	39701b
5	6407	3.4	-19 40	10.1	11.5	Go	1	..	40866b	55	6079	3.8	-22 33	9.7	11.7	G5	2	..	24530b
6	14949	3.4	-39 26	10.3	10.7	A3	2	..	40858b	56	17510	3.8	-24 30	9.5	10.1	F8	3	..	24530b
7	14553	3.4	-46 3	7.6	8.7	Ko	7	..	39678b	57	15731	3.8	-35 58	9.4	10.8	G5	3	..	42810b
8	14472	3.4	-47 16	9.4	10.5	K5	2	..	39678b	58	3949	3.8	-67 24	6.48	7.7	G5	10	..	38368b
9	13895	3.4	-50 2	11.2	11.5	F8	1	..	39678b	59	1024	3.8	-81 27	6.48	8.0	K2	7	..	15165b
10	7865	3.4	-59 33	8.6	8.7	Go	7	0.3	39699b	60	1931	3.9	+63 41	6.41	7.41	Ko	7	5,6	38937i
11	3561	3.4	-68 16	8.7	9.9	K5	5	..	38368b	61	4047	3.9	+47 20	8.16	8.16	Ao	1	..	38565i
12	1465	3.4	-78 10	10.4	10.7	F2	2	..	38135b	62	4569	3.9	+27 13	8.8	9.8	Ko	1	..	38607i
13	5003	3.5	+ 8 35	9.0	10.1	K2	3	..	14198b	63	4719	3.9	+24 32	8.9	9.4	F8	2	..	38100i
14	4979	3.5	+ 7 20	9.3	9.6	Fo	3	..	14198b	64	5112	3.9	+18 59	8.6	9.0	F5	3	..	38617i
15	4828	3.5	+ 4 9	8.1	8.1	Ao	7	..	9782b	65	4936	3.9	+15 0	9.1	9.7	Go	4	..	6445m
16	5935	3.5	- 5 19	9.2	9.3	A5	4	..	17391b	66	5577	3.9	- 2 47	8.3	9.4	K2	3	..	14660b
17	6130	3.5	- 8 53	9.4	10.4	Ko	4	..	24584b	67	5576	3.9	- 2 59	8.1	8.5	F5	5	..	38163i
18	6006	3.5	-11 25	10.6	11.1	F8	3	..	24584b	68	5575	3.9	- 3 5	9.7	10.3	Go	1	..	14660b
19	6347	3.5	-13 45	10.3	10.9	Go	1	..	39701b	69	17408	3.9	-32 43	8.3	9.6	Ko	3	..	40733b
20	6409	3.5	-19 35	9.1	9.3	F5	5	..	40866b	70	10213	3.9	-53 54	8.5	9.7	F5	5	..	39663b
21	6076	3.5	-21 51	9.7	10.8	F8	3	..	24530b	71	9960	3.9	-55 12	8.9	9.7	G5	4	..	39699b
22	16495	3.5	-26 22	6.78	7.5	F5	10	..	41896b	72	3306	3.9	-69 23	8.6	9.6	Ko	6	..	38368b
23	15157	3.5	-41 14	10.7	10.4	F8	2	..	39473b	73	2952	4.0	+56 39	7.75	8.31	Go	2	..	38078i
24	1563	3.5	-77 0	8.0	9.4	Mb	6	..	38135b	74	4885	4.0	+21 56	8.8	8.9	A3	4	..	38100i
25	4399	3.6	+44 1	6.36	6.36	Ao	8	..	38020i	75	4980	4.0	+ 7 24	9.0	10.2	K5	1	..	14198b
26	4849	3.6	+34 31	8.1	9.1	Ko	1	..	38574i	76	6034	4.0	- 7 51	8.2	9.3	K2	5	..	17391b
27	4686	3.6	+ 1 35	5.56	6.34	G5	8	5,9 R	38163i	77	6011	4.0	-11 13	8.9	9.3	F5	5	..	24584b
28	6131	3.6	- 9 20	9.2	10.0	G5	3	..	17391b	78	16199	4.0	-27 12	10.7	11.6	F8	1	..	41896b
29	6007	3.6	-11 13	10.7	11.5	G5	1	..	24584b	79	16200	4.0	-27 38	9.0	10.1	Ko	2	..	41896b
30	6257	3.6	-17 58	8.7	9.2	F8	3	..	40866b	80	18597	4.0	-29 34	11.0	11.6	G5	2	..	41896b
31	6366	3.6	-21 23	9.4	10.8	Ko	4	..	24530b	81	14479	4.0	-47 35	9.5	9.3	F8	5	..	39678b
32	16195	3.6	-27 42	8.2	9.8	Go	4	..	41896b	82	1012	4.1	+74 12	7.8	8.8	Ko	3	..	38139i
33	14940	3.6	-45 11	10.3	11.1	Ko	2	..	39473b	83	1304	4.1	+70 24	8.84	9.91	K2	1	..	38903i
34	1564	3.6	-77 23	9.8	10.2	F5	3	..	38135b	84	4052	4.1	+49 31	8.2	8.7	F8	1	..	38565i
35	1307	3.7	+70 9	7.64	8.64	Ko	3	..	38580i	85	4050	4.1	+48 15	8.05	8.47	F5	1	..	38565i
36	1758	3.7	+65 5	6.83	6.89	A2	5	0.3	37909i	86	4939	4.1	+38 39	7.51	8.69	K5	2	..	38052i
37	2171	3.7	+63 6	6.19	6.02	B3	4	0.4	37257i	87	4878	4.1	+16 37	9.7	10.3	Go	2	..	6445m
38	4533	3.7	+28 39	7.50	7.56	A2	5	..	38607i	88	5830	4.1	- 4 28	9.4	9.9	F8	1	..	14660b
39	4935	3.7	+15 1	9.7	10.3	Go	3	..	6445m	89	6133	4.1	- 9 43	8.76	9.32	Go	4	..	24584b
40	6008	3.7	-11 2	10.6	11.1	F8	2	..	24584b	90	6069	4.1	-10 5	9.9	10.5	Go	3	..	24584b
41	19448	3.7	-30 41	var.	var.	Mb	7	R	42810b	91	6012	4.1	-11 16	10.6	11.1	F8	2	..	24584b
42	17407	3.7	-32 8	9.3	10.5	Fo	4	..	42810b	92	6220	4.1	-15 45	9.9	10.7	G5	1	..	40866b
43	16407	3.7	-33 20	9.3	10.5	F5	3	..	42810b	93	6410	4.1	-19 10	8.8	9.3	F8	3	..	40866b
44	15159	3.7	-41 33	9.0	9.5	G5	7	..	39473b	94	6368	4.1	-21 43	3.80	4.80	Ko	..	5, R	28, 216
45	14432	3.7	-48 18	8.1	8.9	F5	8	..	39678b	95	16298	4.1	-25 36	9.5	10.1	F8	2	..	41896b
46	3955	3.8	+50 40	8.1	8.1	Ao	2	..	38565i	96	12120	4.1	-52 9	10.6	10.6	Ao	3	..	39663b
47	4588	3.8	+42 59	8.4	8.4	Ao	2	..	38020i	97	9961	4.1	-55 10	9.6	9.7	A5	4	..	39699b
48	5279	3.8	+21 5	9.5	10.3	G5	2	..	38617i	98	8048	4.1	-58 35	9.1	9.4	G5	1	..	39699b
49	4877	3.8	+16 41	10.0	10.4	F5	1	..	6445m	99	2751	4.1	-71 23	10.4	11.4	Ko	1	..	38368b
50	4887	3.8	+10 25	7.51	7.93	F5	5	..	38101i	100	2953	4.2	+56 23	8.7	9.5	G5	1	..	38078i

THE HENRY DRAPER CATALOGUE.

218600

23^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.
1	4885	<i>m.</i> 4.2	<i>o</i> + 25 47	8.2	8.3	A2	2	..	38607i	51	17772	<i>m.</i> 4.6	<i>o</i> - 23 39	8.4	8.6	Fo	5	..	24530b
2	4874	4.2	+ 17 53	8.6	9.4	G5	3	..	38617i	52	15920	4.6	- 34 1	9.3	11.9	Go	1	..	42810b
3	6134	4.2	- 9 22	9.2	10.0	G5	2	..	17391b	53	15380	4.6	- 38 20	9.6	11.0	Ko	1	..	40858b
4	6013	4.2	- 10 53	10.1	10.7	Go	3	..	24584b	54	15050	4.6	- 40 1	9.9	10.9	Ko	2	..	39473b
5	10217	4.2	- 54 42	9.64	10.0	Go	4	..	39663b	55	15163	4.6	- 41 8	6.04	7.5	Mb	..	0,10	56,149
6	7639	4.2	- 59 55	7.47	8.3	Ko	5	0,8	19899b	56	2279	4.6	- 73 4	8.2	8.6	F5	8	..	38385b
7	891	4.3	+ 77 22	8.6	9.4	G5	1	0,2-	38820i	57	1466	4.6	- 78 20	9.7	10.8	K2	2	..	38135b
8	4054	4.3	+ 48 10	8.28	9.35	K2	1	..	38565i	58	1006	4.7	+ 74 51	4.56	5.34	G5	..	R	56,102
9	4940	4.3	+ 38 24	7.20	7.20	Ao	6	..	38052i	59	4692	4.7	+ 42 10	8.1	8.4	F2	2	..	38020i
10	4570	4.3	+ 26 23	7.65	8.65	Ko	2	..	38607i	60	4536	4.7	+ 29 8	6.75	7.75	Ko	5	..	38607i
11	4945	4.3	+ 11 27	8.8	9.6	G5	1	..	38101i	61	4683	4.7	+ 23 43	8.7	8.8	A3	3	..	38100i
12	4687	4.3	+ 1 37	8.0	9.1	K2	4	..	9782b	62	4786	4.7	+ 23 3	7.9	8.0	A2	6	..	38100i
13	4469	4.3	- 0 4	10.3	11.1	G5	1	..	38163i	63	5115	4.7	+ 19 4	9.3	10.4	K2	1	..	38617i
14	6351	4.3	- 13 9	8.7	9.3	Go	4	..	39701b	64	4937	4.7	+ 14 40	9.31	10.09	G5	4	..	6445m
15	6359	4.3	- 15 31	9.7	10.2	F8	2	..	40866b	65	15921	4.7	- 34 27	8.2	10.5	K5	2	..	23754b
16	6080	4.3	- 21 54	10.6	11.7	F8	1	..	24530b	66	15683	4.7	- 34 57	9.33	10.5	Go	4	..	42810b
17	17767	4.3	- 23 39	8.8	9.6	Ko	3	..	24530b	67	14952	4.7	- 39 52	9.58	10.1	F8	4	..	39473b
18	16201	4.3	- 27 2	9.8	11.0	K5	1	..	41896b	68	16216	4.7	- 42 7	9.7	10.2	Go	3	..	39473b
19	18099	4.3	- 28 38	6.06	7.6	Ko	..	..	56,149	69	15284	4.7	- 43 18	7.6	8.2	G5	7	..	39473b
20	19145	4.3	- 31 28	9.0	11.1	G5	2	..	42810b	70	14947	4.7	- 45 47	4.10	5.10	Ko	..	R	28,216
21	15680	4.3	- 35 23	8.3	11.0	Ma	3	..	42810b	71	14483	4.7	- 47 26	9.9	10.5	Ko	2	..	39678b
22	15682	4.3	- 35 25	9.7	11.4	G5	2	..	42810b	72	2174	4.8	+ 62 23	7.15	8.22	K2	5	0,8-	38937i
23	15047	4.3	- 40 37	10.3	9.8	F8	3	..	39473b	73	2173	4.8	+ 62 17	7.60	8.67	K2	2	3,6	37257i
24	4875	4.4	+ 18 12	6.61	6.59	B9	10	..	38617i	74	3950	4.8	+ 49 7	6.53	6.36	B3	..	2,5	56,102
25	5833	4.4	- 4 30	8.7	9.0	Fo	7	..	17391b	75	4879	4.8	+ 16 23	10.0	10.6	Go	2	..	6445m
26	6014	4.4	- 11 43	9.1	9.5	F5	3	..	24584b	76	6015	4.8	- 11 3	8.1	8.7	Go	7	..	24584b
27	6411	4.4	- 19 41	9.73	11.9	K5	1	..	40866b	77	6223	4.8	- 16 17	9.9	10.9	Ko	2	..	40866b
28	6547	4.4	- 20 36	10.3	12.1	F8	1	..	24530b	78	6224	4.8	- 16 43	8.7	8.8	A2	6	..	40866b
29	6370	4.4	- 21 30	9.7	11.5	Go	2	..	24530b	79	6259	4.8	- 17 59	8.8	9.9	K2	2	..	40866b
30	15281	4.4	- 43 24	5.78	7.0	F8	..	..	28,216	80	6412	4.8	- 19 14	8.9	10.5	K5	2	..	40866b
31	6727	4.4	- 61 6	6.72	7.4	A2	9	..	19899b	81	16503	4.8	- 26 30	10.0	11.2	K5	1	..	41896b
32	3308	4.4	- 69 34	8.6	9.4	G5	6	..	38368b	82	18601	4.8	- 29 29	8.0	8.7	Ko	7	..	41896b
33	4855	4.5	+ 31 19	8.8	9.6	G5	2	..	38607i	83	15740	4.8	- 35 57	7.9	9.6	K5	4	..	23754b
34	4981	4.5	+ 8 8	5.41	6.76	Mb	..	0,8	56,102	84	15054	4.8	- 40 35	7.3	8.3	Ko	..	5,9	56,149
35	4618	4.5	+ 3 15	8.8	9.8	Ko	1	..	38163i	85	15285	4.8	- 42 54	9.1	9.6	Go	5	..	39473b
36	4619	4.5	+ 2 42	8.6	9.6	Ko	3	..	38163i	86	4888	4.9	+ 21 57	9.4	9.9	F8	3	..	38617i
37	4688	4.5	+ 1 24	8.09	8.65	Go	4	..	9782b	87	5059	4.9	+ 13 54	7.7	8.3	Go	8	2,10	38101i
38	6433	4.5	- 12 35	9.4	10.2	G5	1	..	39701b	88	6037	4.9	- 8 36	9.1	9.4	Fo	3	..	17391b
39	6360	4.5	- 15 3	6.23	6.23	Ao	7	..	17412b	89	6038	4.9	- 8 41	9.7	10.2	F8	2	..	17391b
40		4.5	- 23 0			Go	..	..	28,216	90	6225	4.9	- 16 41	9.2	9.8	Go	3	..	40866b
41	17771	4.5	- 23 0	4.94	5.36	A2	..	R	28,216	91	16203	4.9	- 27 50	8.4	9.2	G5	5	..	41896b
42	15049	4.5	- 40 33	10.5	10.7	G5	4	..	39473b	92	15056	4.9	- 40 12	9.7	10.2	Fo	3	..	39473b
43	15282	4.5	- 43 43	10.3	11.0	G5	2	..	39473b	93	14560	4.9	- 46 0	9.4	10.2	Ko	2	..	39678b
44	13898	4.5	- 50 49	10.5	11.2	Go	1	..	39678b	94	1850	5.0	+ 65 32	7.90	7.98	A3	3	3,1	37909i
45	7866	4.5	- 59 40	8.4	9.0	F5	6	0,3	39699b	95	1761	5.0	+ 64 39	8.9	8.9	A	1	..	37257i
46	4876	4.6	+ 17 50	9.3	10.4	K2	1	..	38617i	96	1938	5.0	+ 63 28	7.8	7.8	Ao	4	2,5	37257i
47	5943	4.6	- 7 38	8.7	9.3	Go	5	..	17391b	97	3084	5.0	+ 53 53	8.6	8.7	A5	1	..	38078i
48	6435	4.6	- 12 37	9.4	10.2	G5	3	..	39701b	98	4501	5.0	+ 27 28	8.6	8.9	F	2	..	23138i
49	6361	4.6	- 15 35	9.2	9.7	F8	5	..	40866b	99	4891	5.0	+ 11 13	8.7	9.7	Ko	1	..	38101i
50	6258	4.6	- 18 5	8.7	9.5	G5	2	..	40866b	100	5170	5.0	+ 9 17	5.34	5.29	B8	..	1,10	56,102

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	4621	5.0	+ 2 25	9.1	10.1	Ko	1	..	38163i	51	1013	5.4	+73 54	8.9	9.9	Ko	1	..	38139i
2	6436	5.0	-12 13	9.9	10.7	G5	5	..	24584b	52	1307	5.4	+70 48	9.2	9.2	Ao	2	..	38903i
3	6437	5.0	-12 13	10.1	10.9	G5	2	..	24584b	53	2552	5.4	+58 47	5.63	5.71	A3	..	3,10	1668c
4	6362	5.0	-15 21	9.9	10.7	G5	3	..	40866b	54	4591	5.4	+42 18	9.0	9.0	Ao	1	..	38020i
5	..	5.0	-16 53	..	..	Go	1	..	40866b	55	4690	5.4	+ 1 47	8.8	9.3	F8	2	..	38163i
6	6260	5.0	-18 11	8.9	9.4	F8	4	..	40866b	56	5939	5.4	- 5 31	9.2	9.6	F5	3	..	17391b
7	6549	5.0	-20 0	9.9	11.1	Go	3	..	40866b	57	6439	5.4	-12 15	10.6	11.2	Go	2	..	24584b
8	17522	5.0	-24 48	8.95	9.8	Ko	3	..	41896b	58	6262	5.4	-18 6	8.7	9.2	F8	5	..	40866b
9	14074	5.0	-49 44	10.3	11.2	F5	3	..	39678b	59	19460	5.4	-30 4	6.49	7.2	Fo	..	..	56,149
10	10219	5.0	-54 31	10.5	11.5	Ko	1	..	39663b	60	19459	5.4	-30 28	9.0	9.9	Ko	4	..	41896b
11	4857	5.0	-63 44	7.6	8.7	K2	7	..	19899b	61	15124	5.4	-37 48	9.3	9.9	F5	4	..	40858b
12	2055	5.0	-74 28	9.9	10.9	Ko	2	..	38231b	62	15170	5.4	-44 12	9.9	10.3	F8	3	..	39473b
13	3085	5.1	+54 4	8.1	8.1	A	3	..	38078i	63	10213	5.4	-57 1	10.0	10.6	G	1	..	39699b
14	5010	5.1	+37 9	7.70	8.04	F2	4	..	38574i	64	2280	5.4	-72 58	9.2	10.0	G5	5	..	38385b
15	4880	5.1	+17 1	9.1	9.7	Go	3	..	6445m	65	769	5.5	+80 2	7.19	7.25	A2	5	..	38590i
16	4773	5.1	+16 0	9.3	10.3	Ko	2	..	6445m	66	4059	5.5	+49 27	7.41	8.41	Ko	5	..	38598i
17	5124	5.1	+ 6 50	7.20	7.18	B9	6	..	38163i	67	4859	5.5	+31 57	6.89	6.87	B9	7	..	38607i
18	6413	5.1	-14 10	7.21	8.28	K2	10	..	24584b	68	4894	5.5	+10 17	7.73	8.73	Ko	4	..	38101i
19	6227	5.1	-16 9	9.7	10.3	Go	3	..	40866b	69	6157	5.5	- 6 30	7.01	6.96	B8	5	..	44324b
20	16507	5.1	-26 16	10.3	10.6	G5	1	..	41896b	70	6416	5.5	-13 55	9.1	10.3	K5	4	..	24584b
21	16206	5.1	-26 55	9.6	10.4	Ao	1	..	41896b	71	6372	5.5	-21 33	8.5	9.3	G5	5	..	40866b
22	15119	5.1	-37 18	9.1	9.6	F8	5	..	40858b	72	16314	5.5	-25 16	9.8	10.4	Go	2	..	41896b
23	1764	5.2	+64 41	6.62	6.50	B5	8	2,3	37909i	73	18104	5.5	-28 34	8.6	9.2	Go	3	..	41896b
24	2491	5.2	+61 7	8.4	8.4	A	1	..	37257i	74	17421	5.5	-32 32	9.0	9.7	F8	5	..	42810b
25	4945	5.2	+38 55	6.51	6.51	Ao	7	0,8	38020i	75	15927	5.5	-34 10	7.81	9.0	Ko	5	..	23754b
26	5011	5.2	+36 20	8.2	9.3	K2	2	..	38574i	76	15288	5.5	-43 47	9.9	11.1	Ko	1	..	39473b
27	5116	5.2	+18 27	10.7	11.5	G5	1	..	38617i	77	14435	5.5	-48 10	9.9	11.2	Ko	1	..	39678b
28	4877	5.2	+18 0	9.7	10.8	K2	1	..	38617i	78	1774	5.5	-75 27	10.0	10.8	G5	2	..	38231b
29	4881	5.2	+16 44	9.1	9.9	G5	2	..	6445m	79	1503	5.6	+67 54	7.9	7.9	B9	2	..	37909i
30	6040	5.2	- 8 21	7.7	8.3	Go	8	..	17391b	80	2553	5.6	+58 46	8.4	8.4	A	2	..	38078i
31	6438	5.2	-12 1	9.4	10.4	Ko	4	..	24584b	81	4685	5.6	+23 52	9.2	9.3	A2	1	..	38617i
32	6415	5.2	-13 51	8.9	10.0	K2	4	..	24584b	82	5284	5.6	+20 24	10.1	11.2	K2	1	..	38617i
33	18604	5.2	-28 59	8.4	8.7	F8	7	..	41896b	83	5837	5.6	- 4 3	9.2	10.3	K2	1	..	14660b
34	17416	5.2	-32 19	9.0	11.9	K2	2	..	42810b	84	6042	5.6	- 8 20	9.9	11.1	K5	1	..	24584b
35	9964	5.2	-55 5	9.4	10.0	Go	3	..	39699b	85	6414	5.6	-19 27	9.4	10.5	Ko	2	..	40866b
36	1773	5.2	-75 42	10.8	10.8	Ao	2	..	38231b	86	6373	5.6	-21 21	9.7	11.5	G5	2	..	40866b
37	768	5.3	+80 6	7.71	7.69	B9	4	..	38590i	87	6083	5.6	-22 8	9.4	11.1	Ko	3	..	24530b
38	4058	5.3	+47 25	8.6	9.4	G5	4	..	23300i	88	14565	5.6	-46 19	9.9	10.8	K2	1	..	39678b
39	4059	5.3	+47 25	6.64	7.42	G5	6	0,7	38598i	89	2956	5.7	+56 19	8.6	9.6	Ko	1	..	37278i
40	4339	5.3	+44 20	8.0	8.0	Ao	3	..	38020i	90	3952	5.7	+48 28	7.22	7.78	Go	5	..	38598i
41	5012	5.3	+36 19	7.74	8.81	K2	3	..	38574i	91	5285	5.7	+20 39	9.4	10.5	K2	2	..	38617i
42	4596	5.3	+33 14	6.91	8.26	Mb	5	..	38032i	92	4882	5.7	+17 3	5.94	7.12	K5	8	5,10	38617i
43	4830	5.3	+ 3 39	9.1	10.1	Ko	1	..	38163i	93	5011	5.7	+ 9 15	8.6	9.1	F8	2	..	38101i
44	4622	5.3	+ 2 59	8.6	8.7	A2	5	..	38163i	94	5012	5.7	+ 8 24	9.3	10.3	Ko	1	..	14198b
45	6363	5.3	-15 5	10.3	11.1	G5	2	..	40866b	95	6138	5.7	- 9 10	8.9	9.4	F8	3	..	17391b
46	6228	5.3	-16 16	9.7	10.7	Ko	3	..	40866b	96	6017	5.7	-10 57	10.3	10.8	F8	2	..	24584b
47	16311	5.3	-25 27	10.0	10.6	F8	1	..	41896b	97	6415	5.7	-19 16	10.3	11.1	G	1	..	40866b
48	17418	5.3	-32 44	7.8	8.7	Fo	9	..	42810b	98	16513	5.7	-26 50	9.8	9.9	Go	2	..	41896b
49	14564	5.3	-46 12	9.4	10.5	K2	2	..	39678b	99	15929	5.7	-34 42	10.3	11.9	Ko	1	..	42810b
50	13489	5.3	-51 30	9.2	10.0	Ko	3	..	39663b	100	14567	5.7	-46 10	8.9	9.6	G5	5	..	39678b

THE HENRY DRAPER CATALOGUE.

218800

23^h 5^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	2996	m. 5.7	° 70 39	8.8	8.8	B9	7	..	38368b	51	..	m. 6.2	° 45 46	..	..	Ro	1	..	23300i
2	2752	5.7	-71 25	10.5	11.5	K	1	..	38368b	52	4896	6.2	+30 37	7.56	8.56	Ko	3	..	38607i
3	2958	5.8	+56 55	7.10	7.88	G5	5	..	38078i	53	4975	6.2	+ 4 28	6.86	8.21	Mb	6	..	38163i
4	4592	5.8	+43 0	5.85	6.27	F5	8	0,8	38020i	54	6355	6.2	-13 14	8.9	9.0	A5	8	..	24584b
5	5006	5.8	+40 46	8.2	8.6	F5	4	..	38020i	55	6356	6.2	-13 18	10.1	11.1	Ko	1	..	24584b
6	4890	5.8	+26 0	7.15	7.21	A2	7	..	38607i	56	6418	6.2	-14 1	10.1	11.3	K5	1	..	24584b
7	5118	5.8	+18 22	8.4	9.2	G5	4	..	38617i	57	6692	6.2	-16 47	8.7	9.3	Go	4	..	40866b
8	5062	5.8	+13 39	10.0	10.6	Go	1	..	6445m	58	15294	6.2	-43 40	10.5	11.1	Ko	1	..	39473b
9	6416	5.8	-19 11	8.9	9.9	Ko	4	..	40866b	59	14956	6.2	-45 16	8.7	8.2	F8	8	..	39678b
10	19462	5.8	-30 32	8.6	9.0	F5	6	..	41896b	60	14955	6.2	-45 41	9.1	9.6	G5	6	..	39678b
11	15170	5.8	-41 43	9.4	10.1	Ko	3	..	39473b	61	6403	6.2	-61 53	7.6	8.4	G5	4	..	19899b
12	15290	5.8	-43 32	8.3	9.9	Mb	5	..	39473b	62	6402	6.2	-62 2	7.6	8.0	F5	7	..	19899b
13	10019	5.8	-56 50	10.8	10.9	A5	1	..	39699b	63	2753	6.2	-71 24	9.7	10.2	F8	3	..	38368b
14	10214	5.8	-57 20	8.3	9.7	A3	4	..	39699b	64	1230	6.2	-78 58	9.5	10.5	Ko	3	..	38135b
15	4891	5.9	+25 50	8.2	8.5	Fo	2	..	38607i	65	1358	6.3	+68 17	7.8	9.0	K5	2	0,1	23698i
16	4883	5.9	+16 21	9.1	9.9	G5	1	..	6445m	66	1941	6.3	+64 0	7.12	7.62	F8	5	3,2	37909i
17	6045	5.9	- 8 44	10.1	10.7	Go	2	..	24584b	67	3973	6.3	+50 57	8.8	8.9	A3	2	..	38598i
18	6139	5.9	- 9 45	9.31	10.49	K5	2	..	24584b	68	4347	6.3	+44 59	7.12	8.12	Ko	5	..	38020i
19	6020	5.9	-11 12	10.1	10.4	Fo	3	..	24584b	69	4505	6.3	+28 1	8.2	8.2	B9	3	..	38607i
20	6019	5.9	-11 32	10.3	10.8	F8	2	..	24584b	70	6021	6.3	-11 3	8.8	9.1	Fo	5	..	24584b
21	6417	5.9	-14 26	9.4	10.4	Ko	3	0,3	24584b	71	6443	6.3	-12 23	10.8	11.3	F8	2	..	24584b
22	6231	5.9	-16 32	9.2	9.8	Go	5	..	40866b	72	6357	6.3	-13 15	9.7	10.7	Ko	2	..	24584b
23	6375	5.9	-21 4	10.1	11.3	K5	1	..	40866b	73	6693	6.3	-16 51	10.1	11.1	Ko	1	..	40866b
24	16210	5.9	-27 26	8.8	9.0	Go	3	..	41896b	74	6551	6.3	-20 35	10.1	11.7	Go	2	..	40866b
25	16209	5.9	-27 27	8.4	8.2	Go	6	..	41896b	75	6376	6.3	-21 32	9.4	10.8	Ro	3	..	40866b
26	14568	5.9	-46 22	8.5	9.3	Ko	5	..	39678b	76	15760	6.3	-36 19	9.7	11.4	Ko	2	..	42810b
27	1229	5.9	-78 53	8.4	9.0	Go	6	..	38135b	77	15063	6.3	-40 38	9.9	10.7	K5	2	..	39473b
28	1015	6.0	+73 15	9.5	9.5	Ao	3	..	38903i	78	4594	6.4	+43 8	7.26	7.26	Ao	4	..	38020i
29	1587	6.0	+66 42	6.68	6.68	Ao	9	0,10	37909i	79	4876	6.4	+30 1	8.6	9.7	K2	2	..	38607i
30	3379	6.0	+53 7	8.9	8.9	Ao	2	..	37278i	80	4877	6.4	+29 31	6.94	7.94	Ko	4	..	38607i
31	4687	6.0	+23 47	8.6	8.6	Ao	3	..	38617i	81	4575	6.4	+26 15	8.9	9.2	F2	2	..	38607i
32	4884	6.0	+16 17	9.0	9.6	Go	4	0,2-	6445m	82	4879	6.4	+18 5	9.3	9.9	Go	2	..	38617i
33	4940	6.0	+14 27	9.5	10.3	G5	2	..	6445m	83	5584	6.4	- 3 38	8.5	9.6	K2	4	..	17391b
34	5898	6.0	- 1 48	9.4	9.5	A3	2	..	14660b	84	6232	6.4	-15 48	9.9	10.4	F8	3	..	40866b
35	5944	6.0	- 4 51	8.95	9.23	Fo	5	..	17391b	85	6694	6.4	-17 26	8.8	9.4	Go	5	..	40866b
36	6365	6.0	-15 43	8.6	9.6	Ko	6	..	40866b	86	6417	6.4	-18 50	9.9	10.7	G5	2	..	40866b
37	6691	6.0	-17 2	9.4	10.4	Ko	1	..	40866b	87	6086	6.4	-22 16	8.7	10.8	K2	4	..	24530b
38	17527	6.0	-24 14	10.3	10.7	A2	3	..	24530b	88	R	6.4	-22 45	10.3	11.5	Ko	2	..	24530b
39	15175	6.0	-44 51	10.5	10.5	Go	3	..	39473b	89	15761	6.4	-36 20	10.7	11.4	G5	1	..	42810b
40	14439	6.0	-48 51	9.7	10.6	F5	3	..	39678b	90	15177	6.4	-44 32	7.30	8.2	Ko	..	0,7	56,149
41	..	6.0	-76 12	..	..	K2	1	..	38231b	91	1775	6.4	-74 52	10.2	10.8	Go	2	..	38231b
42	1565	6.0	-77 49	9.5	10.5	Ko	3	..	38135b	92	2705	6.5	+57 35	8.9	8.9	A	2	..	37278i
43	1504	6.1	+68 6	7.9	7.9	Ao	4	0,3	23698i	93	4704	6.5	+41 20	8.4	9.6	K5	2	..	38020i
44	4161	6.1	+45 50	7.8	7.8	Ao	3	..	38020i	94	4782	6.5	+37 21	8.6	9.7	K2	1	..	38574i
45	4624	6.1	+ 2 37	8.6	8.7	A2	6	..	38163i	95	4893	6.5	+21 20	10.6	11.8	K5	1	..	38617i
46	5945	6.1	- 5 38	8.7	9.7	Ko	2	..	17391b	96	4692	6.5	+ 1 23	9.47	10.25	G5	1	..	38163i
47	6366	6.1	-14 55	10.1	10.6	F8	2	..	40866b	97	6075	6.5	-10 1	10.3	10.9	Go	2	..	24584b
48	19464	6.1	-30 42	9.6	11.4	Go	2	..	41896b	98	6419	6.5	-14 32	9.4	9.9	F8	4	..	40866b
49	14569	6.1	-46 27	9.5	10.3	F2	3	..	39678b	99	6235	6.5	-15 55	9.7	10.7	Ko	3	..	40866b
50	13498	6.1	-51 25	10.8	10.9	A2	2	..	39663b	100	6236	6.5	-16 42	8.9	9.7	G5	4	..	40866b

218900

23^h 6^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	17787	6.5	-23 7	11.0	11.4	F5	1	..	2453ob	51	5146	7.1	+ 6 4	8.5	9.6	K2	2	..	38163i
2	16521	6.5	-26 4	10.5	10.2	Ao	2	..	41896b	52	4628	7.1	+ 2 29	10.0	11.0	Ko	1	..	38163i
3	19163	6.5	-31 2	9.3	11.6	K2	1	..	41896b	53	5904	7.1	- 2 35	8.9	9.0	A3	4	..	1466ob
4	15762	6.5	-36 27	10.1	11.0	Ko	2	..	4281ob	54	6696	7.1	-17 13	10.3	10.9	Go	1	..	40866b
5	10021	6.5	-56 2	9.5	10.1	Go	2	..	39663b	55	6698	7.1	-17 39	9.4	10.0	Go	2	..	40866b
6	3310	6.5	-69 28	9.9	10.5	Go	3	..	38368b	56	6267	7.1	-17 54	9.2	10.2	Ko	1	..	40866b
7	4476	6.6	- 0 19	8.6	9.1	F8	3	..	38163i	57	17535	7.1	-24 22	7.88	8.3	F5	8	..	2453ob
8	6077	6.6	-10 8	10.6	11.7	K2	1	..	24584b	58	15176	7.1	-41 17	10.3	10.9	Ko	2	..	39473b
9	19167	6.6	-31 34	9.8	12.1	Go	1	..	4281ob	59	14574	7.1	-46 1	8.5	9.9	Ko	5	..	39678b
10	15935	6.6	-33 56	9.0	11.9	K5	2	..	4281ob	60	12124	7.1	-52 14	8.6	9.7	G5	5	..	39663b
11	15295	6.6	-43 28	10.1	11.4	Ko	2	..	39473b	61	10416	7.1	-53 13	9.1	10.0	G5	3	..	39663b
12	10024	6.6	-56 18	..	10.0	F5	1	..	39699b	62	4113	7.1	-64 57	8.8	10.0	K5	1	..	19899b
13	7871	6.6	-59 13	9.0	9.3	Go	3	..	39699b	63	1567	7.1	-77 13	10.0	10.8	G5	2	..	38135i
14	4328	6.6	-64 26	8.6	10.0	Ma	2	..	19899b	64	3979	7.2	+50 39	9.5	9.5	Ao	1	..	38598i
15	3383	6.7	+52 31	7.06	6.82	Bo	6	0,6	37278i	65	4867	7.2	+32 9	7.38	8.38	Ko	2	..	38607i
16	3975	6.7	+51 2	8.4	9.5	K2	1	..	38598i	66	4943	7.2	+14 37	9.7	10.2	F8	2	..	6445m
17	4785	6.7	+37 41	7.70	8.12	F5	4	..	38574i	67	4693	7.2	+ 1 29	8.8	9.6	G5	3	..	38163i
18	4991	6.7	+ 8 11	5.15	5.23	A3	..	1,10	56,102	68	6145	7.2	- 8 49	9.4	10.2	G5	2	..	17391b
19	4834	6.7	+ 4 11	9.0	9.6	Go	2	..	38163i	69	6080	7.2	-10 23	10.1	10.2	A5	2	..	24584b
20	6142	6.7	- 9 33	8.5	9.0	F8	5	..	24584b	70	6378	7.2	-21 39	9.4	9.1	B8	4	..	2453ob
21	6266	6.7	-18 35	10.1	10.6	F8	2	..	40866b	71	17794	7.2	-23 10	10.5	11.1	Go	2	..	2453ob
22	6420	6.7	-19 2	10.3	10.8	Go	2	..	40866b	72	17793	7.2	-23 33	9.3	10.0	F2	4	..	2453ob
23	10219	6.7	-57 36	8.8	10.3	K2	3	..	39699b	73	17432	7.2	-32 39	9.0	10.8	Ko	3	..	4281ob
24	6406	6.7	-62 21	8.7	9.3	Go	1	..	19899b	74	14962	7.2	-45 18	10.3	10.8	Go	2	..	39473b
25	4065	6.8	+50 14	6.80	7.30	F8	7	..	38598i	75	14576	7.2	-46 36	10.5	10.8	Go	1	..	39678b
26	5014	6.8	+ 8 16	9.7	10.5	G5	2	..	14198b	76	10225	7.2	-54 44	7.88	7.7	B9	8	..	39699b
27	5127	6.8	+ 6 29	9.3	10.1	G5	2	..	14198b	77	10025	7.2	-56 7	9.2	9.7	F8	2	..	39699b
28	6444	6.8	-12 29	7.04	8.04	Ko	4	..	17412b	78	4861	7.2	-63 27	8.9	10.0	K2	2	..	19899b
29	6361	6.8	-13 24	10.3	10.8	F8	2	..	24584b	79	1467	7.2	-78 50	9.8	10.4	Go	3	..	38135b
30	6237	6.8	-16 13	9.7	10.5	G5	2	..	40866b	80	523	7.3	+85 11	8.38	8.66	F	3	..	37281i
31	6695	6.8	-17 25	9.9	10.5	Go	1	..	40866b	81	2962	7.3	+56 34	9.2	9.2	B8	2	..	37278i
32	16523	6.8	-25 57	9.2	9.2	A5	4	..	41896b	82	2914	7.3	+55 37	8.4	8.5	A3	2	..	38078i
33	18112	6.8	-28 13	9.8	11.0	Ko	1	..	41896b	83	4412	7.3	+43 48	7.8	7.8	Ao	3	..	38020i
34	5020	6.9	+36 15	8.2	9.3	K2	1	..	38574i	84	5069	7.3	+13 58	10.3	11.3	Ko	1	..	6445m
35	4580	6.9	+26 18	6.40	7.40	Ko	8	..	38607i	85	6363	7.3	-13 9	10.3	11.5	K5	1	..	24584b
36	5066	6.9	+13 33	9.7	10.5	G5	2	..	6445m	86	6268	7.3	-17 52	9.4	10.6	K5	1	..	40866b
37	14061	6.9	-44 58	9.7	10.8	G5	3	..	39473b	87	6552	7.3	-20 5	10.1	11.1	Ko	1	..	40866b
38	14493	6.9	-47 0	10.3	11.1	Go	1	..	39678b	88	17797	7.3	-23 11	11.2	12.2	Ko	1	..	2453ob
39	8051	6.9	-58 26	9.3	9.7	K2	2	..	39699b	89	15069	7.3	-40 2	8.7	10.2	K2	3	..	39473b
40	7872	6.9	-59 7	9.1	10.7	Ko	1	..	39699b	90	14964	7.3	-45 0	10.1	10.5	Go	3	..	39473b
41	2664	7.0	+60 3	10.2	10.0	B	1	..	M	91	14495	7.3	-47 27	9.4	10.2	G5	3	..	39678b
42	3386	7.0	+52 21	var.	var.	Mc	..	R	M	92	10226	7.3	-54 50	8.48	9.5	Ko	4	..	39699b
43	4894	7.0	+25 30	9.4	9.5	A2	2	..	38607i	93	9968	7.3	-55 39	7.5	8.2	A2	8	..	39699b
44	4777	7.0	+15 15	9.5	10.5	Ko	2	..	6445m	94	6731	7.3	-61 8	8.2	8.1	A3	6	..	19899b
45	5841	7.0	- 4 28	8.5	9.5	Ko	3	..	17391b	95	6407	7.3	-62 21	9.3	9.6	F	1	..	19899b
46	6362	7.0	-13 35	10.1	10.6	F8	2	..	24584b	96	1018	7.4	+73 41	8.8	8.8	Ao	3	..	38139i
47	6238	7.0	-16 23	8.9	9.7	G5	5	..	40866b	97	2560	7.4	+59 8	var.	var.	Md	..	R	M
48	1566	7.0	-77 28	9.7	10.5	G5	3	..	38135b	98	3980	7.4	+51 10	9.2	9.2	A	1	..	38598i
49	3964	7.1	+46 34	7.14	7.92	G5	4	..	38598i	99	3961	7.4	+48 41	7.48	7.48	Ao	6	..	38598i
50	4942	7.1	+14 49	9.3	10.3	Ko	4	..	6445m	100	4887	7.4	+16 45	10.0	10.6	G	2	..	6445m

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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	4951	<i>m.</i> 7.4	<i>°</i> + 11 19	8.7	9.7	Ko	2	..	38101i	51	4976	<i>m.</i> 7.8	<i>°</i> + 0 31	9.5	10.1	Go	1	..	38163i
2	5018	7.4	+ 8 30	8.6	8.9	Fo	3	..	38101i	52	6082	7.8	- 10 7	7.00	8.00	Ko	8	..	24584b
3	6081	7.4	- 10 43	9.9	11.0	K2	2	..	24584b	53	6700	7.8	- 16 48	9.7	10.3	Go	3	..	40866b
4	6023	7.4	- 10 53	9.4	10.0	Go	4	..	24584b	54	16530	7.8	- 26 6	9.3	10.2	K2	2	..	41896b
5	6421	7.4	- 19 18	10.1	11.1	K2	2	..	40866b	55	16222	7.8	- 26 57	8.6	9.5	Ko	4	..	41896b
6	6381	7.4	- 21 6	9.4	9.9	F5	3	..	40866b	56	19476	7.8	- 30 7	10.5	10.5	G5	3	..	41896b
7	16527	7.4	- 26 24	10.0	10.1	Go	2	..	41896b	57	19180	7.8	- 31 0	8.4	10.8	Go	3	..	42810b
8	14959	7.4	- 39 48	9.6	10.2	F8	2	..	39473b	58	15697	7.8	- 35 6	9.7	11.4	G5	1	..	42810b
9	15071	7.4	- 40 20	9.0	9.6	Go	5	..	39473b	59	15300	7.8	- 43 20	8.8	9.6	Ko	6	..	39473b
10	15179	7.4	- 44 36	8.3	9.6	K2	4	..	39678b	60	10028	7.8	- 56 38	8.5	9.5	Ko	5	..	39699b
11	6732	7.4	- 60 59	8.2	9.3	Go	3	..	19899b	61	8053	7.8	- 58 10	9.4	10.8	Ma	1	..	39699b
12	2281	7.4	- 73 42	9.1	10.1	Ko	6	..	38385b	62	2282	7.8	- 73 52	9.5	10.5	Ko	4	..	38385b
13	1231	7.4	- 78 53	9.4	10.5	K2	2	..	38135b	63	1949	7.9	+ 64 11	7.22	7.10	B5	7	3,2	37909i
14	810	7.5	+ 82 2	8.1	9.2	K2	3	..	37281i	64	4980	7.9	+ 4 35	9.3	10.1	G5	1	..	38163i
15	3962	7.5	+ 48 42	8.0	9.0	Ko	1	..	38598i	65	4838	7.9	+ 4 14	9.3	10.1	G5	1	..	38163i
16	4787	7.5	+ 38 15	9.0	9.1	A5	1	..	38574i	66	4483	7.9	- 0 30	7.7	8.5	G5	4	..	38163i
17	5070	7.5	+ 14 8	9.7	10.8	K2	1	..	6445m	67	4406	7.9	- 0 59	8.8	9.8	Ko	2	..	38163i
18	4694	7.5	+ 2 9	8.2	9.0	G5	5	..	38163i	68	6083	7.9	- 10 19	10.3	10.6	Fo	3	..	24584b
19	6088	7.5	- 22 29	8.1	9.3	Go	7	..	24530b	69	19477	7.9	- 30 36	7.7	9.1	Ko	8	..	42810b
20	16220	7.5	- 27 18	9.8	9.6	G5	2	..	41896b	70	15944	7.9	- 34 40	9.4	11.0	Go	3	..	42810b
21	15695	7.5	- 35 48	10.3	11.6	G5	1	..	42810b	71	14968	7.9	- 45 37	10.1	10.5	F8	2	..	39678b
22	15181	7.5	- 43 54	10.1	11.3	K2	1	..	39473b	72	14581	7.9	- 46 11	8.8	9.6	K2	5	..	39678b
23	13915	7.5	- 50 10	6.61	7.8	G5	8	..	39663b	73	14497	7.9	- 47 21	9.9	10.5	G5	2	..	39678b
24	7642	7.5	- 59 57	8.9	9.0	Fo	4	..	39699b	74	14089	7.9	- 49 21	8.1	9.4	Ko	6	..	39663b
25	3563	7.5	- 68 50	8.3	9.3	Ko	9	..	38368b	75	14090	7.9	- 49 41	8.38	9.5	K2	5	R	39663b
26	2754	7.5	- 71 46	8.3	9.3	Ko	8	..	38368b	76	6409	7.9	- 62 22	9.1	9.1	Ao	5	..	19899b
27	871	7.6	+ 75 29	8.32	9.32	Ko	2	..	38139i	77	4862	7.9	- 63 14	6.24	7.2	Go	10	..	19899b
28	5021	7.6	+ 36 26	6.84	7.84	Ko	7	..	38574i	78	2755	7.9	- 70 53	9.2	10.2	Ko	3	..	38368b
29	4899	7.6	+ 10 25	7.91	8.69	G5	3	..	38101i	79	2752	7.9	- 71 54	9.4	10.2	G5	4	..	38368b
30	6446	7.6	- 12 41	10.6	11.8	K5	2	..	24584b	80	3964	8.0	+ 48 51	4.62	4.90	Fo	..	..	2923c
31	6365	7.6	- 13 8	8.9	9.5	Go	6	..	24584b	81	5020	8.0	+ 8 25	7.7	8.1	Mb	..	0,3	56,103
32	6364	7.6	- 13 22	8.9	10.0	K2	5	..	24584b	82	6052	8.0	- 8 43	10.1	11.1	Ko	2	..	24584b
33	6369	7.6	- 15 33	9.4	10.4	Ko	3	..	40866b	83	6367	8.0	- 13 12	9.2	9.7	F8	5	..	24584b
34	17434	7.6	- 32 52	7.51	8.1	Ko	10	..	42810b	84	6239	8.0	- 16 1	10.1	11.3	K5	1	..	40866b
35	10225	7.6	- 57 41	9.2	10.0	Go	3	..	39699b	85	6425	8.0	- 18 55	7.66	8.0	F5	8	..	40866b
36	7873	7.6	- 59 19	9.1	10.2	Ko	2	..	39699b	86	6089	8.0	- 21 56	9.7	10.8	F5	3	..	24530b
37	3093	7.7	+ 54 0	8.5	8.5	B9	2	..	38078i	87	18619	8.0	- 28 58	8.3	7.7	F5	7	..	41896b
38	3390	7.7	+ 52 17	8.2	8.2	Ao	2	..	37278i	88	15185	8.0	- 41 29	8.3	7.9	Fo	8	..	39473b
39	3556	7.7	+ 51 25	8.6	8.6	Ao	3	..	38598i	89	3564	8.0	- 68 18	10.5	11.5	K	1	..	38368b
40	4350	7.7	+ 44 17	8.2	8.3	A2	2	..	38020i	90	1026	8.0	- 81 18	8.9	9.9	Ko	4	..	38135b
41	6049	7.7	- 8 41	9.9	11.0	K2	2	..	24584b	91	3559	8.1	+ 51 21	8.0	8.1	A2	5	..	38598i
42	6366	7.7	- 13 41	10.1	11.3	K5	1	..	24584b	92	5181	8.1	+ 10 8	9.07	9.21	A5	2	..	38101i
43	6554	7.7	- 19 49	9.9	10.8	G5	3	..	40866b	93	6054	8.1	- 8 32	8.3	8.9	Go	6	..	17391b
44	17542	7.7	- 24 39	8.30	8.2	F2	8	..	24530b	94	6024	8.1	- 11 25	10.3	10.8	F8	2	..	24584b
45	18117	7.7	- 28 34	9.2	10.7	Ko	1	..	41896b	95	16223	8.1	- 27 5	8.1	9.0	Ko	5	..	41896b
46	10229	7.7	- 54 24	9.9	10.9	Ko	1	..	39663b	96	10030	8.1	- 55 54	9.2	9.7	F5	2	..	39699b
47	3754	7.7	- 66 12	9.2	10.0	G5	2	..	38368b	97	10029	8.1	- 56 12	9.9	10.3	F5	1	..	39699b
48	2999	7.7	- 70 36	7.0	7.6	Go	10	..	38368b	98	..	8.1	- 58 55	..	..	K	1	..	39699b
49	3558	7.8	+ 51 41	7.45	7.73	Fo	5	2,5	37278i	99	5067	8.2	+ 19 27	8.6	9.0	F5	3	..	38617i
50	4731	7.8	+ 25 2	8.4	8.8	F5	2	E	38617i	100	4957	8.2	+ 11 25	8.5	9.6	K2	2	..	38101i

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	4982	8.2	+ 5 12	8.66	9.16	F8	3	..	38163i	51	6424	8.6	-13 56	7.26	8.33	K2	9	..	24584b
2	6146	8.2	- 9 27	8.2	8.5	Fo	7	..	17391b	52	6092	8.6	-22 3	10.7	11.8	K2	1	..	24530b
3	6084	8.2	-10 28	8.8	9.8	Ko	4	..	24584b	53	15706	8.6	-35 32	8.7	10.5	Ko	4	..	42810b
4	19482	8.2	-30 11	8.6	8.5	Ao	6	..	41896b	54	15153	8.6	-36 52	10.1	10.5	F8	2	..	42810b
5	15074	8.2	-40 16	9.4	9.8	Go	5	..	39473b	55	16236	8.6	-42 16	9.2	10.1	Ko	4	..	39473b
6	14501	8.2	-47 44	7.7	8.7	Ko	7	..	39678b	56	14970	8.6	-45 23	10.5	11.4	Ko	1	..	39473b
7	8054	8.2	-58 39	8.7	9.9	F2	4	..	39699b	57	13922	8.6	-50 53	9.9	11.7	Go	3	R	39663b
8	2917	8.3	+56 0	8.2	8.2	B9	3	..	38078i	58	13923	8.6	-50 54	9.9	11.7	Go	3	R	39663b
9	4714	8.3	+41 31	6.69	6.75	A2	8	..	38020i	59	10228	8.6	-57 47	7.8	9.1	K5	6	..	39699b
10	4548	8.3	+28 54	6.34	7.34	Ko	7	..	38607i	60	1776	8.6	-75 4	8.9	9.4	F8	5	..	38135b
11	4900	8.3	+21 32	8.8	9.1	F2	6	..	38617i	61	1508	8.7	+68 7	8.5	9.1	Go	2	o,1	23698i
12	4983	8.3	+ 4 56	9.3	10.1	G5	1	..	38163i	62	2969	8.7	+56 55	8.0	8.1	A2	3	..	37278i
13	4695	8.3	+ 2 8	8.2	9.0	G5	5	..	38163i	63	4951	8.7	+12 39	9.0	10.0	Ko	2	..	38101i
14	4978	8.3	+ 0 24	7.33	7.61	Fo	6	..	38163i	64	6028	8.7	-11 2	10.6	11.0	F5	1	..	24584b
15	6448	8.3	-11 53	10.6	11.1	F8	3	..	24584b	65	17802	8.7	-23 43	9.2	9.3	F5	5	..	24530b
16	6271	8.3	-17 54	8.8	9.8	Ko	3	..	40866b	66	10229	8.7	-57 43	9.3	9.5	Go	4	..	39699b
17	6091	8.3	-22 2	10.7	11.9	Ko	1	..	24530b	67	3758	8.7	-66 8	8.3	9.3	Ko	6	..	38368b
18	17800	8.3	-23 0	11.0	11.9	Go	1	..	24530b	68	752	8.8	+80 28	9.2	9.2	Ao	2	..	38964i
19	16225	8.3	-27 51	9.8	10.2	Ko	2	..	41896b	69	1595	8.8	+66 54	8.6	9.2	G	2	..	23698i
20	13919	8.3	-50 34	11.2	11.5	A2	2	..	39678b	70	4956	8.8	+38 42	8.7	8.8	A3	3	..	38574i
21	13505	8.3	-51 26	11.2	11.2	G5	2	..	39663b	71	4549	8.8	+28 46	8.8	9.8	Ko	1	..	38607i
22	12127	8.3	-52 34	8.4	9.7	Go	5	..	39663b	72	4952	8.8	+14 50	7.59	8.15	Go	5	2,4-	38101i
23	10231	8.3	-54 30	8.4	9.7	G5	6	..	39663b	73	4984	8.8	+ 4 45	8.8	9.8	Ko	1	..	38163i
24	1468	8.3	-78 26	8.3	9.3	Ko	5	..	38135b	74	4633	8.8	+ 3 3	9.3	10.1	G5	1	..	38163i
25	1027	8.3	-81 4	8.15	8.5	F5	5	..	15165b	75	6149	8.8	- 9 28	8.3	8.9	Go	7	R	17391b
26	1773	8.4	+64 15	7.27	7.27	Ao	7	2,2	37909i	76	6030	8.8	-11 2	9.7	10.2	F8	4	..	24584b
27	5033	8.4	+39 28	7.40	7.48	A3	7	1,4	38574i	77	6029	8.8	-11 31	9.7	10.2	F8	6	..	24584b
28	4793	8.4	+22 48	8.2	9.4	K5	2	..	38617i	78	6556	8.8	-19 48	10.3	11.1	Ko	2	..	40866b
29	6027	8.4	-10 51	8.1	8.6	F8	8	..	24584b	79	6557	8.8	-20 14	7.50	7.4	A2	6	o,9	41985b
30	6025	8.4	-11 9	9.4	10.6	K5	4	..	24584b	80	16443	8.8	-33 36	9.0	11.1	Go	3	..	42810b
31	6449	8.4	-12 17	9.7	10.9	K5	3	..	24584b	81	16238	8.8	-42 44	9.9	10.7	F8	3	..	39473b
32	6703	8.4	-17 28	9.1	9.5	F5	4	..	40866b	82	14093	8.8	-49 6	9.5	10.9	G5	3	..	39678b
33	2057	8.4	-74 44	9.5	10.5	Ko	2	o,2	38385b	83	9974	8.8	-55 28	9.9	10.9	Ko	2	..	39663b
34	2966	8.5	+56 37	5.65	6.72	K2	9	R	38078i	84	3969	8.9	+48 43	8.6	8.6	Ao	2	..	38598i
35	2919	8.5	+56 0	7.6	8.4	G5	3	..	38078i	85	4701	8.9	+23 36	8.12	9.19	K2	2	..	38617i
36	5017	8.5	+40 57	7.79	8.97	K5	1	..	38020i	86	5124	8.9	+18 43	10.0	11.0	Ko	1	..	38617i
37	4779	8.5	+15 49	9.0	9.6	Go	3	5,2	6445m	87	4903	8.9	+11 0	8.5	9.5	Ko	1	..	38101i
38	4948	8.5	+14 39	10.3	11.1	G5	2	..	6445m	88	4985	8.9	+ 4 27	6.93	6.74	B2	5	..	38163i
39	4902	8.5	+10 31	5.94	6.94	Ko	8	..	38101i	89	4634	8.9	+ 2 55	9.0	9.8	G5	1	..	38163i
40	5130	8.5	+ 6 39	8.6	9.6	Ko	1	..	38163i	90	6151	8.9	- 8 56	8.7	9.5	G5	5	..	17391b
41	6147	8.5	- 9 20	9.1	10.1	Ko	2	..	17391b	91	6450	8.9	-12 10	9.9	10.4	F8	5	..	24584b
42	6240	8.5	-16 44	9.7	10.5	G5	2	..	40866b	92	15190	8.9	-41 44	9.7	9.8	F8	5	..	39473b
43	6704	8.5	-16 52	10.3	10.9	Go	1	..	40866b	93	2753	8.9	-72 38	9.8	10.8	Ko	2	..	38385b
44	15779	8.5	-36 45	9.6	10.2	Ko	3	..	42810b	94	812	9.0	+81 16	8.4	8.7	F2	2	..	38590i
45	10420	8.5	-53 14	8.6	9.7	F2	4	..	39663b	95	5035	9.0	+40 3	9.5	10.0	F8	1	..	38574i
46	9972	8.5	-55 5	10.0	10.6	Go	2	..	39663b	96	5125	9.0	+19 5	6.58	7.65	K2	6	..	38617i
47	7875	8.5	-59 4	8.1	10.2	Ko	4	..	39699b	97	4996	9.0	+ 7 36	8.8	8.9	A5	4	..	14198b
48	3757	8.5	-66 46	8.4	8.7	Fo	6	..	38368b	98	4635	9.0	+ 2 46	8.6	9.4	G5	1	..	38163i
49	4949	8.6	+14 49	9.3	9.7	F5	6	5,2	6445m	99	4636	9.0	+ 2 20	9.1	9.2	A2	2	..	38163i
50	4696	8.6	+ 1 39	8.0	8.3	F2	7	..	38163i	100	5592	9.0	- 3 11	7.19	7.25	A2	6	o,9	38163i

THE HENRY DRAPER CATALOGUE.

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23^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	6152	9.0	9 29	9.7	10.5	G5	3	..	17391b	51	3952	9.3	9 57	9.8	10.2	F5	2	..	38368b
2	6705	9.0	17 27	7.9	8.9	Ko	7	..	40866b	52	3566	9.3	67 56	10.2	11.4	K5	3	..	38368b
3	17804	9.0	22 55	9.2	9.3	F8	4	..	24530b	53	3565	9.3	68 4	10.4	11.0	Go	2	..	38368b
4	16232	9.0	27 36	9.2	9.6	Ko	3	..	41896b	54	6171	9.4	6 39	9.4	10.4	Ko	1	..	17391b
5	14096	9.0	49 8	8.2	8.8	F8	7	..	39678b	55	6063	9.4	8 38	9.7	10.5	G5	2	..	17391b
6	9975	9.0	55 3	9.1	10.6	K2	1	E	39699b	56	6086	9.4	10 14	7.46	7.54	A3	7	..	17391b
7	3311	9.0	69 42	10.2	10.8	Go	2	..	38368b	57	6451	9.4	12 15	10.6	11.4	G5	2	..	24584b
8	754	9.1	+80 49	9.2	9.3	A2	1	..	38964i	58	17557	9.4	24 23	9.3	9.0	F5	4	..	24530b
9	1596	9.1	+66 33	8.0	9.4	Ma	2	..	23698i	59	16547	9.4	26 6	8.0	9.0	Ko	5	..	41896b
10	2563	9.1	+58 25	8.0	8.1	A2	3	..	38078i	60	15955	9.4	34 34	8.7	10.2	Go	6	..	42810b
11	4733	9.1	+24 55	8.4	8.4	B9	4	I,4	38607i	61	14968	9.4	39 43	8.23	9.2	K2	7	..	39473b
12	4702	9.1	+23 43	7.9	7.9	Ao	4	..	38607i	62	15079	9.4	40 31	10.1	9.8	Fo	5	..	39473b
13	4781	9.1	+16 2	9.0	9.8	G5	1	..	38617i	63	15197	9.4	41 39	5.76	7.5	Ko	..	0,10	56,150
14	4637	9.1	+2 56	10.0	10.8	G5	1	..	38163i	64	15305	9.4	43 17	9.1	9.0	F2	7	..	39473b
15	6170	9.1	-6 35	4.40	5.75	Ma	..	0,7 R	56,103	65	15306	9.4	43 51	9.3	10.3	Ko	3	..	39473b
16	6059	9.1	-8 13	9.4	10.0	Go	2	..	17391b	66	14507	9.4	47 28	8.5	10.2	K5	3	..	39678b
17	6274	9.1	-17 55	9.4	10.4	Ko	2	..	40866b	67	14459	9.4	47 59	9.9	10.9	Ko	2	..	39678b
18	15194	9.1	-40 59	9.1	9.2	G5	7	..	39473b	68	13928	9.4	50 3	10.5	11.5	Ko	1	..	39663b
19	15191	9.1	-44 17	9.3	9.6	F8	5	..	39473b	69	13514	9.4	51 24	10.3	10.9	Go	1	..	39663b
20	14098	9.1	-49 21	9.3	11.5	Mb	2	..	39663b	70	13515	9.4	51 48	11.2	11.5	G5	1	..	39663b
21	14097	9.1	-49 33	8.48	9.1	F2	7	..	39663b	71	10425	9.4	53 26	9.9	10.9	Ko	1	..	39663b
22	2756	9.1	-71 22	8.2	9.0	G5	8	..	38368b	72	3953	9.4	67 26	8.4	9.0	Go	6	..	38368b
23	2058	9.1	-74 25	8.6	9.4	G5	7	..	38385b	73	4175	9.5	+45 35	8.0	8.3	Fo	2	..	38020i
24	4416	9.2	+44 3	7.8	8.2	F5	3	R	38020i	74	4873	9.5	+31 58	8.44	9.44	Ko	1	..	38620i
25	5023	9.2	+40 16	7.87	8.94	K2	2	..	38574i	75	4953	9.5	+14 41	8.7	9.2	F8	2	..	38101i
26	18624	9.2	-29 0	8.4	8.7	G5	5	..	41896b	76	5913	9.5	-2 37	9.2	9.5	F2	1	..	14660b
27	19185	9.2	-31 13	9.3	11.4	F8	2	..	42810b	77	6064	9.5	-8 38	9.9	11.1	K5	2	..	24584b
28	15195	9.2	-41 22	10.5	10.1	F8	3	..	39473b	78	6153	9.5	-9 3	10.1	10.6	F8	4	..	24584b
29	13512	9.2	-50 56	11.2	11.2	Go	1	..	39663b	79	6032	9.5	-11 14	6.35	7.53	K5	10	..	24584b
30	13510	9.2	-51 15	10.1	10.9	Ko	2	..	39663b	80	6374	9.5	-14 59	8.5	9.5	Ko	5	0,4	40866b
31	13511	9.2	-51 32	10.1	10.9	A5	2	..	39663b	81	6094	9.5	-22 41	9.9	11.1	K2	1	..	24530b
32	10237	9.2	-54 48	9.5	10.0	F8	2	..	39699b	82	16350	9.5	-25 46	9.0	9.6	F8	4	..	41896b
33	10230	9.2	-57 46	10.1	11.5	Ma	..	..	M	83	3954	9.5	-67 43	8.6	9.6	Ko	7	..	38368b
34	4116	9.2	-65 11	9.2	9.6	F5	3	..	19899b	84	824	9.6	+78 29	8.9	9.2	F2	1	..	38964i
35	823	9.3	+79 6	8.6	9.0	F5	3	3,2	38964i	85	894	9.6	+77 31	8.4	8.9	F8	2	7,1 R	38964i
36	4906	9.3	+30 46	8.6	9.2	Go	1	..	38620i	86	2673	9.6	+59 16	8.6	8.4	B	2	..	16256m
37	4794	9.3	+22 38	8.6	9.8	K5	1	..	38617i	87	2565	9.6	+58 51	8.5	8.3	B	1	..	16265m
38	5126	9.3	+19 14	7.75	7.75	Ao	6	..	38617i	88	2712	9.6	+57 18	8.0	8.0	Ao	2	..	38078i
39	4784	9.3	+15 49	8.6	9.2	Go	3	..	38618i	89	3103	9.6	+53 15	8.1	8.1	Ao	2	..	38078i
40	6031	9.3	-11 0	8.7	9.0	F2	7	..	24584b	90	4071	9.6	+50 5	6.25	6.25	Ao	9	..	38598i
41	6427	9.3	-13 47	9.7	10.9	K5	1	..	24584b	91	4555	9.6	+29 13	6.42	6.84	F5	8	..	38607i
42	6426	9.3	-19 25	8.7	8.8	F2	7	..	40866b	92	5073	9.6	+19 53	7.15	8.22	K2	6	..	38617i
43	6560	9.3	-20 33	8.3	8.7	Ko	6	..	40866b	93	5128	9.6	+18 44	8.2	8.7	F8	3	..	38617i
44	6093	9.3	-22 8	9.1	10.5	Ko	4	..	24530b	94	4962	9.6	+12 12	8.5	8.8	F2	3	..	38101i
45	18122	9.3	-28 8	10.0	10.7	G5	1	..	41896b	95	6065	9.6	-8 14	8.1	9.5	Ma	6	..	17391b
46	19484	9.3	-30 15	9.8	11.4	Ko	2	..	41896b	96	6428	9.6	-14 10	9.7	10.3	Go	4	0,3	24584b
47	19187	9.3	-31 42	8.6	11.4	Ko	2	..	42810b	97	6095	9.6	-22 40	9.7	10.7	Ko	2	..	24530b
48	13513	9.3	-51 48	10.3	11.2	K2	1	..	39663b	98	16244	9.6	-42 20	9.9	10.9	Ko	2	..	39473b
49	10232	9.3	-57 17	7.8	8.5	Go	8	..	39699b	99	14973	9.6	-45 28	10.5	11.0	K2	2	..	39473b
50	6410	9.3	-62 49	9.2	10.0	G5	1	..	19899b	100	9978	9.6	-55 35	9.9	10.9	Ko	1	..	39663b

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23^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	10234	9.6	- 57 14	6.66	6.7	Fo	10	..	39699b	51	6387	10.0	-21 3	9.9	10.8	G5	2	..	40866b
2	7644	9.6	-60 14	6.9	8.7	K2	6	2,8	19899b	52	6388	10.0	-21 9	10.3	10.8	Ko	1	..	40866b
3	1568	9.6	-77 40	10.1	10.5	F5	2	..	38135b	53	17809	10.0	-23 1	10.0	11.0	K2	2	..	24530b
4	1028	9.6	-80 56	8.88	10.2	K2	3	..	38135b	54	15083	10.0	-40 9	9.7	10.1	Fo	5	..	39473b
5	2199	9.7	+62 42	8.5	8.5	Ao	2	..	38937i	55	2754	10.0	-72 41	9.7	10.8	K2	3	..	38385b
6	4608	9.7	+43 10	7.50	7.92	F5	4	..	38020i	56	2060	10.0	-74 41	10.0	10.5	F8	2	..	38385b
7	4607	9.7	+42 56	7.9	8.2	F2	3	..	38020i	57	1569	10.0	-77 29	9.5	10.5	Ko	3	..	38135b
8	4875	9.7	+34 28	7.73	8.80	K2	1	..	38574i	58	1029	10.0	-80 58	8.25	7.8	A2	5	..	15165b
9	4887	9.7	+29 47	9.2	10.0	G5	1	..	38620i	59	2936	10.1	+54 55	9.0	9.0	A	1	..	38078i
10	4704	9.7	+23 34	6.49	7.49	Ko	5	..	38607i	60	3564	10.1	+51 35	8.9	9.0	A2	2	..	38598i
11	5293	9.7	+20 21	8.80	9.80	Ko	3	..	38617i	61	4517	10.1	+27 32	6.95	6.95	Ao	7	..	38607i
12	4954	9.7	+13 11	8.5	9.3	G5	3	..	38101i	62	5029	10.1	+ 8 15	8.8	9.8	Ko	1	..	14198b
13	4409	9.7	- 1 36	8.87	9.65	G5	2	..	38163i	63	6453	10.1	-12 7	7.48	7.54	A2	3	..	17412b
14	6710	9.7	-16 46	7.68	8.68	Ko	7	..	40866b	64	6429	10.1	-14 33	7.56	8.56	Ko	6	0,6	40866b
15	6562	9.7	-19 53	10.6	10.8	G5	2	..	40866b	65	6713	10.1	-17 13	9.4	9.9	F8	2	..	40866b
16	R	9.7	-22 28	11.0	11.4	G5	1	..	24530b	66	17810	10.1	-23 10	10.7	11.4	Go	2	..	24530b
17	15081	9.7	-40 36	10.3	10.1	A2	5	..	39473b	67	18128	10.1	-28 2	10.0	10.6	G5	1	..	41896b
18	16245	9.7	-42 30	8.9	10.1	K2	5	..	39473b	68	15716	10.1	-35 46	8.2	9.0	F5	6	..	23754b
19	15308	9.7	-43 49	9.3	9.6	F5	4	..	39473b	69	15312	10.1	-43 14	9.9	10.5	F8	2	..	39473b
20	14509	9.7	-47 37	10.3	10.5	G5	2	..	39678b	70	4865	10.1	-63 22	9.4	9.9	F8	3	..	19899b
21	10037	9.7	-56 34	8.9	9.7	Go	4	..	39699b	71	1021	10.2	+74 1	8.0	9.0	Ko	3	..	38139i
22	4118	9.7	-65 48	9.0	9.6	Go	3	..	38368b	72	4986	10.2	+35 23	8.42	8.92	F8	2	..	38574i
23	3956	9.7	-67 40	9.5	9.6	A3	7	..	38368b	73	5074	10.2	+19 45	9.1	10.1	Ko	2	..	38617i
24	3312	9.7	-69 3	9.7	10.2	F8	4	..	38368b	74	5075	10.2	+19 30	9.3	9.6	F	1	..	38617i
25	1092	9.8	+72 41	8.7	9.3	Go	3	..	38903i	75	5957	10.2	- 5 4	8.3	8.6	F2	6	..	17391b
26	2405	9.8	+61 40	8.4	8.4	A	1	..	37257i	76	6154	10.2	- 9 19	9.9	11.0	K2	3	..	24584b
27	4787	9.8	+15 50	8.6	9.1	F8	2	..	38618i	77	6431	10.2	-13 54	9.4	10.6	K5	3	..	24584b
28	6376	9.8	-15 41	9.1	9.9	G5	3	..	40866b	78	6714	10.2	-16 59	10.1	11.1	Ko	1	..	40866b
29	16240	9.8	-27 12	9.8	9.0	F8	4	..	41896b	79	16243	10.2	-27 18	10.7	10.7	A3	1	..	41896b
30	3000	9.8	-70 27	8.4	8.7	Fo	8	..	38368b	80	15314	10.2	-43 8	8.9	10.2	Ko	3	..	39473b
31	1575	9.8	-76 5	8.9	9.4	F8	4	0,3	38135b	81	3001	10.2	-70 48	8.2	9.6	Mc	6	..	38368b
32	1065	9.8	-79 59	7.77	8.1	A5	7	3,4	38135b	82	1011	10.3	+74 43	9.4	9.4	Ao	3	..	38139i
33	3992	9.9	+50 58	8.8	8.9	A2	2	..	38598i	83	3107	10.3	+53 24	8.6	8.6	A	1	..	37278i
34	5025	9.9	+40 44	8.2	8.3	A2	2	..	38020i	84	5028	10.3	+40 37	7.72	8.79	K2	2	..	38020i
35	4640	9.9	+ 2 20	9.0	10.0	Ko	2	..	38163i	85	4909	10.3	+30 30	8.8	9.2	F5	1	..	38607i
36	6068	9.9	- 7 47	9.9	10.9	Ko	3	..	24584b	86	4966	10.3	+11 54	7.7	8.0	Fo	6	..	38101i
37	6067	9.9	- 8 31	10.3	10.9	Go	3	..	24584b	87	6371	10.3	-12 55	9.4	9.7	Fo	6	..	24584b
38	6563	9.9	-20 42	9.1	9.3	F5	4	..	40866b	88	6380	10.3	-15 5	8.7	8.8	A2	6	2,7	40866b
39	16354	9.9	-25 24	7.14	7.8	A3	7	..	45144b	89	6246	10.3	-16 24	9.4	10.5	K2	2	..	40866b
40	15785	9.9	-36 16	9.7	9.9	G5	3	..	23754b	90	R	10.3	-22 49	9.0	8.8	F5	6	..	24530b
41	15160	9.9	-37 1	11.0	11.1	Ao	1	..	42810b	91	16244	10.3	-27 44	8.8	8.6	Ao	5	..	41896b
42	15194	9.9	-44 9	7.9	8.8	F8	6	..	41078b	92	12131	10.3	-52 25	7.0	8.8	K5	7	..	39663b
43	14100	9.9	-49 6	8.7	10.0	Ko	5	..	39678b	93	10427	10.3	-53 52	9.1	9.7	F8	5	..	39663b
44	8056	9.9	-58 31	9.3	10.2	F8	3	..	39699b	94	8058	10.3	-58 35	8.5	9.6	F5	4	..	39699b
45	8057	9.9	-58 38	8.1	9.0	G5	8	..	39699b	95	7645	10.3	-60 20	7.8	8.1	F5	7	0,8	19899b
46	5026	10.0	+40 15	var.	var.	Md	..	R	M	96	814	10.4	+81 51	7.53	8.09	Go	4	..	37281i
47	4987	10.0	+ 4 58	8.4	8.7	F2	3	..	38163i	97	4179	10.4	+46 0	6.98	6.98	Ao	7	..	38598i
48	4699	10.0	+ 1 37	9.0	9.1	A2	1	..	38163i	98	4615	10.4	+42 46	8.6	8.6	B9	4	..	38020i
49	6174	10.0	- 6 40	8.3	9.1	G5	8	..	17391b	99	4710	10.4	+23 20	8.03	8.31	Fo	5	..	38617i
50	6033	10.0	-11 28	9.2	9.7	F8	5	..	24584b	100	5076	10.4	+19 18	10.3	11.1	G5	1	..	38617i

THE HENRY DRAPER CATALOGUE.

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23^h 10^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	5150	10.4	+ 5 39	8.01	9.01	Ko	4	5,3	38163i	51	6455	10.7	-12 29	10.8	11.2	F5	2	..	24584b
2	5852	10.4	- 4 3	5.55	5.61	A2	..	0,8	56,103	52	6372	10.7	-13 43	7.25	7.53	Fo	4	..	17412b
3	6034	10.4	-11 22	10.3	11.1	G5	2	..	24584b	53	6433	10.7	-13 57	9.9	10.8	G5	3	..	24584b
4	6454	10.4	-12 11	8.0	9.2	K5	7	..	24584b	54	6566	10.7	-20 16	9.7	10.0	G5	3	..	40866b
5	6715	10.4	-17 25	8.9	9.4	F8	2	..	40866b	55	6392	10.7	-20 50	9.1	9.3	A2	4	..	40866b
6	6100	10.4	-21 52	9.1	8.4	A3	7	..	2453ob	56	15793	10.7	-36 14	7.89	9.3	K2	5	..	23754b
7	6099	10.4	-22 23	9.4	9.7	Go	4	..	2453ob	57	15172	10.7	-37 40	8.1	8.1	F8	7	..	23754b
8	18129	10.4	-28 22	10.0	10.1	Go	2	..	41896b	58	10040	10.7	-56 5	6.97	7.2	F5	10	..	39699b
9	19491	10.4	-30 24	6.60	7.7	G5	9	..	41896b	59	1779	10.8	+64 53	7.10	7.44	F2	5	0,2	37909i
10	13936	10.4	-50 24	10.1	10.6	Ao	4	..	39663b	60	2683	10.8	+59 55	9.2	..	Oa	..	..	76,29
11	13519	10.4	-51 5	10.3	11.2	G5	1	..	39663b	61	5914	10.8	- 1 58	7.14	8.14	Ko	6	..	38163i
12	10236	10.4	-56 57	9.1	10.0	F8	3	..	39699b	62	6247	10.8	-16 26	9.7	10.3	Go	2	..	40866b
13	1570	10.4	-77 50	10.1	10.9	G5	2	..	38135b	63	17574	10.8	-23 54	10.7	11.0	F2	1	..	2453ob
14	755	10.5	+81 14	8.6	8.7	A2	1	..	38590i	64	17573	10.8	-24 1	10.5	10.7	G5	2	..	2453ob
15	2926	10.5	+56 12	8.6	9.6	K	1	..	38078i	65	16557	10.8	-25 55	10.3	10.4	G5	1	..	41896b
16	2925	10.5	+55 42	8.6	8.6	Ao	2	..	38078i	66	18636	10.8	-28 56	10.5	9.9	Go	3	..	41896b
17	2938	10.5	+54 24	8.6	8.6	Ao	2	..	38078i	67	17452	10.8	-32 4	9.0	11.6	K5	1	..	4281ob
18	4737	10.5	+25 8	6.74	7.74	Ko	5	..	38607i	68	15201	10.8	-41 13	9.0	9.5	Ko	7	..	39473b
19	4884	10.5	+18 5	8.4	8.7	Fo	5	..	38617i	69	15202	10.8	-41 30	9.6	10.1	K2	5	..	39473b
20	4982	10.5	+ 0 46	6.77	7.19	F5	8	..	38163i	70	14597	10.8	-46 25	8.8	9.6	G5	5	..	39678b
21	5853	10.5	- 4 15	9.4	10.0	Go	3	..	17391b	71	7646	10.8	-60 49	9.7	10.7	K	1	..	39699b
22	6177	10.5	- 6 14	9.4	9.8	F5	3	..	17391b	72	6411	10.8	-62 24	8.9	9.9	Ko	2	..	19899b
23	6101	10.5	-21 50	10.3	10.8	G5	2	..	2453ob	73	3762	10.8	-66 16	9.3	9.6	Fo	7	..	38368b
24	15964	10.5	-34 27	9.7	11.0	F8	3	..	4281ob	74	3313	10.8	-69 23	10.2	10.8	Go	2	..	38368b
25	15792	10.5	-36 16	8.3	9.3	F8	5	..	23754b	75	3982	10.9	+48 29	9.2	9.2	Ao	1	..	38598i
26	15200	10.5	-40 55	9.9	9.8	A5	6	..	39473b	76	4912	10.9	+31 8	7.52	8.02	F8	3	..	38607i
27	6733	10.5	-61 4	8.7	9.6	F5	2	3,4	4251ob	77	4521	10.9	+27 42	6.50	7.28	G5	6	..	38607i
28	3566	10.6	+51 49	8.2	8.8	Go	4	..	38598i	78	4588	10.9	+27 7	8.0	8.1	A2	3	..	38607i
29	4088	10.6	+47 41	8.8	9.6	G5	1	..	38598i	79	5129	10.9	+18 57	9.3	10.5	K5	1	..	38617i
30	6155	10.6	- 9 37	10.3	11.3	K	..	..	34973i	80	6434	10.9	-13 56	9.7	10.5	G5	4	..	24584b
31	6037	10.6	-11 7	10.8	11.4	Go	1	..	24584b	81	14598	10.9	-45 55	9.4	9.9	F5	4	..	39678b
32	6035	10.6	-11 21	9.7	10.3	Go	4	..	24584b	82	6412	10.9	-62 33	5.69	6.3	Go	..	..	56,149
33	6036	10.6	-11 35	9.1	9.6	F8	6	..	24584b	83	3763	10.9	-66 46	9.6	10.0	F5	3	..	38368b
34	16555	10.6	-26 28	9.2	10.2	Ko	2	..	41896b	84	3958	10.9	-67 23	9.0	9.6	Go	4	..	38368b
35	16455	10.6	-33 42	8.3	8.7	A3	7	..	4281ob	85	1023	11.0	+73 41	5.74	5.74	Ao	9	..	38139i
36	14977	10.6	-39 49	8.20	8.2	Ao	8	..	39473b	86	2204	11.0	+62 21	8.6	8.7	A2	2	..	38937i
37	14980	10.6	-45 6	9.7	10.2	K2	3	..	39678b	87	4712	11.0	+24 15	6.52	6.86	F2	7	..	38607i
38	14595	10.6	-46 35	9.2	9.6	Ko	5	..	39678b	88	4967	11.0	+12 11	9.3	9.6	F	1	..	37360i
39	14514	10.6	-46 59	10.8	10.5	Go	2	..	39678b	89	5600	11.0	- 3 41	9.4	10.0	Go	1	..	14660b
40	14515	10.6	-47 10	8.8	9.6	K2	5	..	39678b	90	6276	11.0	-18 17	9.2	9.6	F5	3	..	40866b
41	7876	10.6	-59 34	9.9	10.2	F2	2	..	39699b	91	16558	11.0	-26 1	9.8	10.7	Ko	1	..	41896b
42	2061	10.6	-74 9	10.0	10.8	G5	2	..	38385b	92	16248	11.0	-26 55	9.5	10.4	Ko	2	..	41896b
43	772	10.7	+79 22	8.8	8.9	A3	2	E	38590i	93	15966	11.0	-34 13	9.0	11.1	Ko	3	..	4281ob
44	3109	10.7	+53 49	8.6	9.8	K5	1	..	37278i	94	16259	11.0	-42 45	9.4	11.0	K5	2	..	39473b
45	3567	10.7	+51 36	8.8	8.8	Ao	2	..	38598i	95	3959	11.0	-67 28	9.2	10.2	Ko	3	..	38368b
46	4711	10.7	+23 54	7.93	8.93	Ko	4	..	38617i	96	1780	11.1	+64 28	7.67	8.09	F5	4	..	37909i
47	4643	10.7	+ 2 28	9.0	10.1	K2	1	..	38163i	97	4674	11.1	+34 9	8.0	8.6	Go	5	..	38620i
48	5973	10.7	- 7 26	8.9	9.9	Ko	3	..	17391b	98	4903	11.1	+21 38	9.3	10.1	G5	2	..	38617i
49	6156	10.7	- 9 38	4.46	5.46	Ko	..	5,7R	56,103	99	4887	11.1	+17 43	7.7	8.8	K2	5	..	38617i
50	6038	10.7	-10 54	9.1	10.3	K5	3	..	24584b	100	4968	11.1	+11 17	9.0	9.1	A3	3	..	34275i

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23^h 11^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	6157	II.1	— 9 29	10.6	11.2	Go	2	..	24584b	51	6074	II.5	— 8 44	9.9	10.7	G5	3	..	24584b
2	6088	II.1	— 10 5	9.1	9.2	A3	6	2,4	24584b	52	6457	II.5	— 12 31	9.9	11.3	Ma	2	..	24584b
3	6456	II.1	— 12 24	9.7	10.2	F8	4	..	24584b	53	6397	II.5	— 21 44	7.9	8.4	Ko	3	0,8	41985b
4	17821	II.1	— 23 46	7.10	7.4	A5	4	5,10	41985b	54	19500	II.5	— 30 27	8.8	8.7	F2	7	..	42810b
5	16249	II.1	— 27 38	7.31	9.0	K5	5	..	41896b	55	19499	II.5	— 30 52	9.5	10.5	F8	3	..	42810b
6	15416	II.1	— 38 5	9.3	10.2	Go	3	0,1	42810b	56	14601	II.5	— 46 13	9.1	9.9	G5	5	..	39678b
7	14982	II.1	— 45 2	5.87	7.7	Ko	..	0,9	56,149	57	8061	II.5	— 58 3	9.9	10.5	Go	1	..	39699b
8	9986	II.1	— 55 15	9.5	10.9	Ma	2	..	39699b	58	4334	II.5	— 64 5	9.1	9.6	F8	3	..	19899b
9	3960	II.1	— 67 27	8.9	9.9	Ko	4	..	38368b	59	3314	II.5	— 69 18	9.5	10.5	Ko	5	..	38368b
10	2283	II.1	— 73 12	10.1	10.9	G5	2	..	38385b	60	3002	II.5	— 69 55	9.08	10.5	Ko	4	..	38368b
11	4073	II.2	+ 50 12	8.57	8.57	Ao	4	..	38598i	61	5036	II.6	+ 41 2	8.7	8.7	Ao	3	..	38020i
12	4883	II.2	+ 34 52	6.86	7.14	Fop	7	R	38574i	62	4965	II.6	+ 38 25	8.7	9.8	K2	1	..	38574i
13	4612	II.2	+ 32 31	8.2	8.7	F8	2	..	38620i	63	4971	II.6	+ 12 9	9.1	9.7	G	1	..	38101i
14	4523	II.2	+ 27 40	8.4	9.4	Ko	1	..	38607i	64	5918	II.6	— 2 22	8.0	9.0	Ko	3	..	38163i
15	6073	II.2	— 8 42	8.7	9.2	F8	4	..	17391b	65	5959	II.6	— 4 46	9.20	9.70	F8	3	..	17391b
16	6040	II.2	— 10 45	8.1	8.6	F8	8	..	24584b	66	6075	II.6	— 8 7	9.4	10.5	K2	3	..	24584b
17	6039	II.2	— 11 20	10.6	11.4	G5	2	..	24584b	67	6252	II.6	— 16 5	10.1	10.7	Go	1	..	40866b
18	16368	II.2	— 25 9	8.6	8.7	A5	4	..	45144b	68	6279	II.6	— 17 49	8.1	9.2	K2	4	..	40866b
19	18640	II.2	— 29 14	7.24	8.0	K2	8	..	41896b	69	18642	II.6	— 29 51	9.37	9.9	F5	3	..	41896b
20	15723	II.2	— 34 56	9.7	11.1	F5	1	..	42810b	70	9987	II.6	— 55 29	8.3	9.1	F5	6	..	39699b
21	12133	II.2	— 52 25	8.5	10.0	Ma	3	..	39663b	71	8062	II.6	— 58 47	4.10	4.44	F2	..	R	28,216
22	895	II.3	+ 77 24	8.5	9.1	Go	2	5,2	38964i	72	1067	II.6	— 80 1	6.29	7.1	Ko	..	5,8-	56,149
23	1955	II.3	+ 63 44	7.07	6.95	B5	8	3,3	37909i	73	3115	II.7	+ 53 52	8.5	9.3	G5	2	..	37278i
24	4075	II.3	+ 49 55	8.2	8.2	Ao	3	..	38598i	74	4076	II.7	+ 49 29	8.9	8.9	Ao	1	..	38598i
25	5297	II.3	+ 20 30	8.8	10.0	K5	2	..	38617i	75	4740	II.7	+ 25 0	9.0	9.5	F8	2	0,3-	38607i
26	4889	II.3	+ 17 18	8.0	8.5	F8	4	..	38617i	76	6076	II.7	— 8 16	5.14	6.49	Mb	..	0,5R	56,149
27	6374	II.3	— 13 28	10.3	11.1	G5	2	..	24584b	77	6077	II.7	— 8 37	8.7	9.7	Ko	3	..	17391b
28	6383	II.3	— 15 2	9.2	10.4	K5	2	0,2	40866b	78	6429	II.7	— 19 25	7.05	8.1	Ko	8	..	40866b
29	6396	II.3	— 21 43	8.5	9.3	Ko	6	..	24530b	79	17580	II.7	— 24 31	9.0	10.2	K2	3	..	24530b
30	15794	II.3	— 35 55	9.3	9.9	Go	3	..	23754b	80	18644	II.7	— 28 59	6.74	7.9	Ma	9	..	41896b
31	15205	II.3	— 41 45	6.47	7.6	Ko	..	0,10	56,149	81	15973	II.7	— 33 58	9.3	11.4	Go	3	..	42810b
32	14517	II.3	— 47 45	9.5	9.6	Go	4	..	39678b	82	15727	II.7	— 35 16	10.5	11.6	F8	1	..	42810b
33	13522	II.3	— 51 52	7.9	8.8	Go	8	..	39663b	83	14983	II.7	— 39 12	9.0	9.5	Ao	4	..	23754b
34	10244	II.3	— 53 52	10.5	10.9	F5	2	..	39663b	84	15207	II.7	— 41 28	11.2	11.3	Ko	1	..	39473b
35	10041	II.3	— 56 6	9.6	10.6	Ko	1	..	39699b	85	1777	II.7	— 75 4	7.96	8.3	F8	7	..	38135b
36	4868	II.3	— 63 20	7.6	8.7	K2	6	..	19899b	86	1311	II.8	+ 70 20	5.62	5.70	A3	8	..	37909i
37	2929	II.4	+ 56 8	7.6	7.6	Ao	4	..	38078i	87	1781	II.8	+ 64 16	8.2	8.2	Ao	2	..	37909i
38	4890	II.4	+ 30 7	8.06	9.06	Ko	2	..	38607i	88	4077	II.8	+ 49 57	7.57	7.57	Ao	7	..	38598i
39	4890	II.4	+ 17 0	9.0	9.8	G5	1	..	38618i	89	4678	II.8	+ 33 21	8.8	10.0	K5	1	..	38620i
40	5001	II.4	+ 7 30	8.6	9.7	K2	1	..	14198b	90	5191	II.8	+ 10 4	8.33	9.68	Mc	..	R	M
41	5153	II.4	+ 6 1	9.3	10.1	G5	1	..	38163i	91	4844	II.8	+ 3 25	9.0	10.0	Ko	2	..	38163i
42	5917	II.4	— 2 7	7.7	8.5	G5	5	..	38163i	92	5975	II.8	— 7 43	6.68	6.96	Fo	..	5,4	56,149
43	5974	II.4	— 7 33	9.4	9.9	F8	4	..	17391b	93	6042	II.8	— 10 55	8.5	9.3	G5	7	..	24584b
44	6250	II.4	— 16 6	8.5	9.1	Go	4	..	40866b	94	6376	II.8	— 13 7	9.9	10.5	Go	3	..	24584b
45	6568	II.4	— 20 30	8.8	8.7	Ao	6	..	40866b	95	16463	II.8	— 33 2	9.7	10.8	Go	3	..	42810b
46	4891	II.5	+ 30 12	8.96	8.96	A	2	..	23138i	96	15208	II.8	— 41 8	10.7	10.2	G5	4	..	39473b
47	5137	II.5	+ 7 3	8.1	9.1	Ko	2	..	38163i	97	14106	II.8	— 49 2	9.4	10.8	K2	3	..	39678b
48	4647	II.5	+ 2 21	9.0	9.4	F5	3	..	38163i	98	893	II.8	— 82 27	10.1	10.5	F5	1	..	15165b
49	6179	II.5	— 6 15	10.3	10.6	Fo	1	..	17391b	99	4078	II.9	+ 50 7	7.77	8.95	K5	3	..	38598i
50	6178	II.5	— 6 31	9.4	10.2	G5	1	..	17391b	100	4590	II.9	+ 27 9	8.2	8.7	F8	3	..	38607i

THE HENRY DRAPER CATALOGUE.

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23^h 11^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	4845	11.9	+ 3 55	8.7	9.7	Ko	2	..	38163i	51	2978	12.4	+ 57 7	7.35	7.35	Ao	6	..	38078i
2	6090	11.9	-10 3	10.1	10.7	Go	2	..	24584b	52	4431	12.4	+ 43 22	8.6	8.6	Ao	1	E	38140i
3	6459	11.9	-12 17	10.3	10.9	Go	3	..	24584b	53	4917	12.4	+ 31 11	8.7	9.9	K5	1	..	38607i
4	6280	11.9	-18 42	7.9	8.9	Ko	7	..	40866b	54	4895	12.4	+ 29 20	7.9	9.1	K5	2	..	38607i
5	6398	11.9	-21 13	7.9	8.0	Fo	4	2,7	41985b	55	4526	12.4	+ 28 5	8.2	9.3	K2	1	..	38607i
6	16377	11.9	-24 58	9.8	11.0	K5	1	..	45144b	56	5086	12.4	+ 14 9	8.2	9.2	Ko	1	..	38101i
7	16258	11.9	-27 31	9.6	9.8	F2	3	..	41896b	57	5920	12.4	- 2 3	8.2	9.0	G5	4	..	38163i
8	15209	11.9	-41 9	10.5	11.0	Ko	1	..	39473b	58	6081	12.4	- 8 29	9.1	10.1	Ko	1	..	17391b
9	16262	11.9	-42 38	10.3	11.0	F8	1	..	39473b	59	6461	12.4	-12 16	6.36	6.36	Ao	7	..	17412b
10	14984	11.9	-45 47	7.9	8.4	Go	8	..	39678b	60	6431	12.4	-19 17	9.7	9.6	F8	2	..	40866b
11	10248	11.9	-54 49	9.48	9.7	F2	3	..	39663b	61	6105	12.4	-22 44	10.1	11.4	G5	1	..	24530b
12	2941	12.0	+ 54 39	7.9	8.2	Fo	3	..	38078i	62	16571	12.4	-26 0	9.3	9.6	F8	3	..	41896b
13	4887	12.0	+ 34 25	8.6	9.7	K2	1	..	38620i	63	18143	12.4	-28 48	9.6	9.9	Go	2	..	41896b
14	5303	12.0	+ 20 52	8.8	9.4	G	3	R	38617i	64	15976	12.4	-33 59	9.0	10.8	K2	3	..	42810b
15	4648	12.0	+ 2 44	3.85	4.85	Ko	..	R	1635c	65	14466	12.4	-48 40	7.29	7.7	F2	9	..	39678b
16	4984	12.0	+ 0 42	9.0	10.0	Ko	2	..	38163i	66	10240	12.4	-57 27	10.0	10.6	Go	2	..	39699b
17	6437	12.0	-14 21	8.3	8.8	F8	6	R	24584b	67	904	12.5	+ 76 1	57.32	8.32	Ko	5	..	38139i
18	6430	12.0	-19 18	9.7	11.0	K2	1	..	40866b	68	4368	12.5	+ 44 37	6.55	7.62	K2	4	2,4	38020i
19	15093	12.0	-40 26	8.5	9.2	Fo	7	..	39473b	69	4896	12.5	+ 16 19	8.0	8.4	F5	2	5,2	38617i
20	10430	12.0	-53 23	8.7	10.0	G5	4	..	39663b	70	4794	12.5	+ 16 10	8.0	9.0	Ko	2	..	38618i
21	6734	12.0	-61 33	8.6	8.4	A3	7	..	19899b	71	5002	12.5	+ 7 40	9.1	10.2	K2	1	..	14198b
22	2755	12.0	-72 37	10.2	10.8	G	1	..	38385b	72	6159	12.5	- 8 53	9.2	10.0	G5	4	..	17391b
23	3410	12.1	+ 52 40	5.65	6.15	F8	9	0,9	38078i	73	19504	12.5	-30 12	10.5	11.6	K2	1	..	42810b
24	3993	12.1	+ 46 16	8.4	8.4	B9	3	..	38598i	74	3117	12.6	+ 54 2	9.2	9.2	A	1	..	37278i
25	5037	12.1	+ 40 26	8.8	9.9	K2	1	..	38574i	75	4891	12.6	+ 17 45	6.71	6.99	Fo	8	..	38617i
26	4801	12.1	+ 37 25	7.8	9.0	K5	1	..	38574i	76	6184	12.6	- 6 6	9.1	9.6	F8	4	..	17391b
27	4893	12.1	+ 29 50	7.71	7.77	A2	4	..	38607i	77	6082	12.6	- 8 5	8.3	9.4	K2	5	..	17391b
28	5961	12.1	- 4 59	7.95	8.02	K2	6	..	17391b	78	6462	12.6	-11 48	8.7	9.2	F8	7	..	24584b
29	17828	12.1	-23 22	8.2	8.4	F5	7	..	24530b	79	6377	12.6	-13 20	8.5	9.5	Ko	6	..	24584b
30	16263	12.1	-42 44	10.3	11.8	K5	1	..	39473b	80	16381	12.6	-25 9	9.3	9.9	F5	2	..	45144b
31	6735	12.1	-61 33	6.74	8.1	G5	8	..	19899b	81	15806	12.6	-36 42	10.5	11.0	Ko	1	..	42810b
32	1312	12.2	+ 70 16	8.09	8.09	Ao	3	..	38903i	82	4121	12.6	-65 51	8.0	9.0	Ko	7	..	38368b
33	1960	12.2	+ 63 35	7.52	7.80	Fo	6	5,2	37909i	83	3315	12.6	-69 1	10.6	11.4	G5	1	..	38368b
34	2413	12.2	+ 61 25	6.49	6.44	B8	6	..	38937i	84	825	12.7	+ 78 42	7.74	7.74	Ao	4	..	38590i
35	4000	12.2	+ 50 28	9.2	9.3	A2	2	..	38598i	85	4796	12.7	+ 16 1	8.0	9.1	K2	2	..	38618i
36	5082	12.2	+ 19 26	8.8	9.4	Go	3	..	38617i	86	5963	12.7	- 5 4	8.7	9.0	Fo	5	..	17391b
37	4895	12.2	+ 16 55	8.6	9.6	Ko	1	..	38618i	87	6185	12.7	- 6 3	9.2	9.6	F5	4	..	17391b
38	4847	12.2	+ 3 55	8.6	9.2	Go	2	..	38163i	88	6160	12.7	- 9 44	4.56	4.44	B5	..	0,9R	56,103
39	6254	12.2	-16 43	6.57	6.52	B8	7	..	17412b	89	6043	12.7	-11 20	10.3	11.4	K2	1	..	24584b
40	16260	12.2	-27 22	10.5	11.6	K2	1	..	41896b	90	6440	12.7	-13 46	8.9	10.0	K2	5	..	24584b
41	16466	12.2	-32 59	9.7	11.4	F5	3	..	42810b	91	16383	12.7	-25 13	9.0	10.2	G5	2	..	45144b
42	12135	12.2	-52 6	8.8	9.4	F8	6	..	39663b	92	16470	12.7	-32 57	9.0	10.2	Go	4	..	42810b
43	9989	12.2	-55 2	9.4	9.7	F2	4	..	39663b	93	15211	12.7	-41 22	5.55	6.1	Fo	..	R	56,149
44	3567	12.2	-68 1	6.04	7.6	Ko	4	..	44236b	94	14606	12.7	-46 8	10.1	10.8	Ko	1	..	39667b
45	5036	12.3	+ 37 13	8.2	9.4	K5	2	..	38574i	95	9991	12.7	-55 12	8.4	9.7	K2	4	..	39699b
46	6438	12.3	-14 11	7.78	8.56	G5	7	..	24584b	96	7878	12.7	-59 30	10.2	10.5	F2	1	..	39699b
47	17829	12.3	-23 10	10.0	9.6	F5	4	..	24530b	97	7648	12.7	-60 33	7.1	9.1	Ko	5	0,8	19899b
48	15803	12.3	-36 36	9.3	9.9	G5	2	..	23754b	98	4618	12.8	+ 32 43	8.4	8.4	Ao	2	..	38620i
49	10249	12.3	-54 8	9.8	10.9	K2	1	..	39663b	99	4918	12.8	+ 30 29	7.16	7.44	Fo	6	..	38607i
50	1469	12.3	-78 9	9.6	9.7	A2	4	..	38135b	100	5609	12.8	- 3 14	9.4	9.8	F5	4	..	14660b

219700

23^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	5607	12.8	- 3 34	8.9	9.4	F8	4	..	1466ob	51	5089	13.2	+14 10	8.4	8.9	F8	2	..	3810ri
2	6441	12.8	-14 20	6.82	7.82	Ko	..	2,8	56,149	52	4498	13.2	- 0 1	8.8	9.2	F5	2	..	1466ob
3	6719	12.8	-16 53	8.7	9.2	F8	3	..	40866b	53	4497	13.2	- 0 34	9.3	9.4	A5	2	..	1466ob
4	18649	12.8	-29 2	10.5	9.9	Fo	4	..	41896b	54	6186	13.2	- 5 56	9.7	10.3	Go	2	..	17391b
5	17465	12.8	-32 37	8.7	10.2	K5	3	..	4281ob	55	6046	13.2	-11 19	10.3	11.1	G5	1	..	24584b
6	15187	12.8	-36 56	9.9	10.8	Ko	1	..	4281ob	56	6443	13.2	-14 26	9.1	9.9	G5	3	..	24584b
7	14989	12.8	-45 12	10.5	10.8	A2	1	..	39473b	57	6721	13.2	-17 31	9.7	10.9	K5	1	..	40866b
8	10253	12.8	-54 1	9.0	10.0	G5	3	..	39663b	58	6433	13.2	-19 23	6.97	7.9	K5	4	..	41985b
9	8064	12.8	-58 51	8.6	8.4	Go	9	5,3	39699b	59	15980	13.2	-34 15	9.7	11.4	G5	1	..	4281ob
10	4001	12.9	+50 17	8.22	9.40	K5	2	..	38598i	60	15099	13.2	-40 27	10.1	10.7	Ko	3	..	39473b
11	4741	12.9	+42 3	8.2	8.2	A	1	E	3814oi	61	14472	13.2	-47 59	6.70	6.8	Ao	10	..	39667b
12	4682	12.9	+33 31	6.97	7.39	F5	6	..	3862oi	62	13529	13.2	-50 54	9.5	10.6	Go	3	..	39663b
13	4892	12.9	+18 9	8.8	9.8	Ko	1	..	38617i	63	12138	13.2	-52 37	9.2	10.6	F5	4	..	39663b
14	5196	12.9	+10 0	9.3	9.9	G	1	E	3810ii	64	6736	13.2	-61 4	8.5	10.2	K2	3	2,2	39699b
15	5037	12.9	+ 8 33	9.1	9.9	G5	2	..	14198b	65	204	13.2	-88 2	5.56	7.0	Ko	..	2,7 ^R	56,149
16	6083	12.9	- 7 51	8.9	9.3	F5	6	..	17391b	66	896	13.3	+77 37	7.40	7.54	A5	6	..	38139i
17	6463	12.9	-12 17	10.6	11.4	G5	2	..	24584b	67	5134	13.3	+19 11	9.7	10.3	Go	1	..	38617i
18	6379	12.9	-13 30	10.3	11.3	Ko	1	..	24584b	68	4901	13.3	+17 10	8.4	9.4	Ko	2	..	38618i
19	6390	12.9	-15 39	9.7	10.2	F8	2	..	40866b	69	4900	13.3	+16 27	7.8	7.9	A5	5	..	38618i
20	14469	12.9	-48 51	10.5	11.7	G5	1	..	39667b	70	5004	13.3	+ 7 18	8.18	8.74	Go	3	..	3736oi
21	14108	12.9	-48 58	9.9	10.6	Go	1	..	39667b	71	5925	13.3	- 2 26	8.7	9.3	Go	2	..	38163i
22	14109	12.9	-49 31	9.9	10.9	F8	2	..	39667b	72	6722	13.3	-17 27	9.9	10.4	F8	2	..	40866b
23	2944	13.0	+54 33	8.9	8.9	B9	3	..	38078i	73	6434	13.3	-18 56	8.7	9.3	F5	4	..	40866b
24	4683	13.0	+33 27	9.3	9.4	A2	1	..	3862oi	74	15100	13.3	-40 37	10.3	11.3	K2	2	..	39473b
25	4910	13.0	+21 47	9.2	9.5	F2	3	..	38617i	75	14609	13.3	-46 43	9.1	10.0	Ko	4	..	39678b
26	4893	13.0	+18 11	8.8	9.4	Go	2	..	38617i	76	10047	13.3	-55 58	9.9	10.9	Ko	1	..	39663b
27	4898	13.0	+16 41	8.4	8.7	F2	2	..	38617i	77	7880	13.3	-59 4	9.1	10.8	F8	1	..	39699b
28	5039	13.0	+ 8 58	7.67	8.67	Ko	5	..	3736oi	78	2284	13.3	-72 57	9.4	9.8	F5	5	..	38385b
29	6084	13.0	- 7 55	9.4	10.4	Ko	1	..	17391b	79	4596	13.4	+27 3	7.40	7.82	F5	5	..	38607i
30	17587	13.0	-24 20	9.8	11.0	Go	2	..	2453ob	80	5135	13.4	+18 27	8.0	8.8	G5	3	..	38617i
31	16386	13.0	-25 33	8.6	8.9	F8	5	..	41896b	81	4977	13.4	+11 35	8.8	9.6	G5	3	..	3810ii
32	9993	13.0	-55 43	9.3	10.6	K2	2	..	39699b	82	6381	13.4	-13 3	10.8	11.9	K2	1	..	24584b
33	7879	13.0	-59 11	8.6	10.2	K2	4	..	39699b	83	16579	13.4	-26 47	9.5	9.3	F2	4	..	41896b
34	3991	13.1	+48 28	4.99	6.34	Ma	9	..	38598i	84	16476	13.4	-33 5	4.51	6.3	Ko	..	R	28,216
35	4627	13.1	+43 1	8.0	8.3	Fo	3	0,3	3802oi	85	14610	13.4	-46 9	10.5	11.1	Go	1	..	39667b
36	4899	13.1	+29 54	7.21	8.21	Ko	4	..	38607i	86	4619	13.5	+32 59	8.8	10.0	K5	1	..	3862oi
37	4746	13.1	+24 21	8.8	9.3	F8	2	..	38617i	87	5040	13.5	+ 8 27	9.38	10.16	G5	1	..	14198b
38	4967	13.1	+15 4	8.2	8.7	F8	3	..	38618i	88	5926	13.5	- 2 28	9.2	9.5	F2	2	..	38163i
39	5923	13.1	- 2 25	8.6	9.4	G5	2	..	38163i	89	6187	13.5	- 6 10	9.2	9.5	F2	5	..	17391b
40	6085	13.1	- 7 59	8.5	9.7	K5	5	..	17391b	90	6446	13.5	-14 23	10.3	10.9	Go	1	..	24584b
41	6161	13.1	- 8 55	10.1	10.9	G5	3	..	24584b	91	6108	13.5	-22 41	8.5	9.3	F8	5	..	2453ob
42	6391	13.1	-15 37	8.8	9.4	Go	4	..	40866b	92	17846	13.5	-23 16	10.7	11.4	Fo	2	..	2453ob
43	18650	13.1	-29 2	8.0	9.6	Ko	5	..	41896b	93	16580	13.5	-26 29	8.0	9.0	K2	5	..	41896b
44	15213	13.1	-41 21	10.5	10.1	A3	5	..	39473b	94	18652	13.5	-29 18	8.3	8.1	Ao	8	..	41896b
45	8065	13.1	-58 18	9.3	10.3	Ko	2	..	39699b	95	19506	13.5	-30 0	10.0	11.1	G5	1	..	41896b
46	2757	13.1	-70 52	8.8	9.4	Go	6	..	38368b	96	15334	13.5	-43 44	9.9	10.5	F8	3	..	39473b
47	2758	13.1	-71 33	9.0	10.0	Ko	4	..	38368b	97	3316	13.5	-69 14	9.8	10.2	F5	5	..	38368b
48	647	13.2	+83 42	7.76	7.74	B9	5	..	3728ii	98	1966	13.6	+63 32	8.0	8.0	Ao	2	..	38937i
49	4373	13.2	+44 57	6.32	6.30	B9p	7	0,7 ^R	3802oi	99	4620	13.6	+33 8	9.0	9.5	F8	2	..	3862oi
50	4801	13.2	+22 15	8.4	9.4	Ko	3	..	38617i	100	4599	13.6	+27 4	7.10	8.10	Ko	5	..	38607i

THE HENRY DRAPER CATALOGUE.

219800

23^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	4720	13.6	+23 45	8.3	9.3	Ko	3	..	38617i	51	14613	13.9	-46 32	10.3	11.1	Ko	1	..	39667b
2	6465	13.6	-12 41	10.1	10.9	G5	3	..	24584b	52	3766	13.9	-66 41	8.9	9.9	Ko	4	..	38368b
3	18653	13.6	-29 40	9.8	11.4	Ko	1	..	41896b	53	1576	13.9	-76 11	7.1	7.4	F2	9	..	38135b
4	19218	13.6	-31 6	6.94	8.5	Ko	..	5,9	56,149	54	2572	14.0	+58 56	8.0	8.0	A	1	..	38078i
5	15219	13.6	-40 57	9.7	9.6	A5	5	..	39473b	55	2719	14.0	+57 38	8.0	8.0	Ao	2	..	38078i
6	15220	13.6	-41 2	10.3	9.8	A3	4	..	39473b	56	5958	14.0	+39 54	8.8	9.4	Go	2	..	38574i
7	13945	13.6	-50 32	9.5	9.8	A3	5	..	39663b	57	5865	14.0	-4 10	9.7	10.5	G5	1	..	14660b
8	13531	13.6	-51 38	9.9	10.6	A3	3	..	39663b	58	6394	14.0	-14 47	9.16	9.58	F5	5	..	24584b
9	..	13.6	-58 58	..	..	Ko	1	..	39699b	59	15822	14.0	-36 41	7.9	8.4	Ko	7	..	23754b
10	6414	13.6	-62 17	9.5	9.6	A2	2	..	19899b	60	14994	14.0	-39 42	7.11	7.0	A2	10	..	23754b
11	1365	13.7	+69 6	7.8	9.0	K5	1	..	23698i	61	10049	14.0	-56 0	10.4	10.4	Ao	2	..	39699b
12	2937	13.7	+55 43	8.6	9.6	K	1	..	38078i	62	3568	14.0	-67 53	8.4	8.5	A2	8	..	38368b
13	4000	13.7	+46 43	7.7	7.7	B9	4	..	38598i	63	2063	14.0	-74 0	10.4	10.5	A3	4	..	38385b
14	4189	13.7	+46 15	8.5	8.5	B9	2	..	38598i	64	5059	14.1	+39 23	9.2	9.3	A3	1	..	38574i
15	5043	13.7	+41 13	5.90	5.98	A3	8	0,8	38020i	65	4807	14.1	+22 31	8.7	9.7	Ko	1	..	38617i
16	5040	13.7	+37 9	8.9	9.7	G5	2	..	38574i	66	5007	14.1	+7 42	9.0	9.6	Go	3	..	14898b
17	4650	13.7	+2 43	8.8	10.0	K5	3	..	38163i	67	6088	14.1	-8 43	10.1	10.9	G5	3	..	24584b
18	5965	13.7	-5 39	8.9	9.9	Ko	2	..	17391b	68	6167	14.1	-8 50	10.3	11.3	Ko	3	..	24584b
19	6466	13.7	-12 21	9.2	9.7	F8	5	..	24584b	69	6166	14.1	-9 25	10.3	10.8	F8	3	..	24584b
20	6447	13.7	-14 24	9.1	10.1	Ko	4	..	24584b	70	19512	14.1	-30 36	9.3	10.8	Ko	2	..	42810b
21	17847	13.7	-23 40	10.7	11.1	F8	1	..	24530b	71	16481	14.1	-33 35	8.3	8.4	Ao	7	R	42810b
22	16583	13.7	-26 2	9.0	9.0	Fo	4	..	41896b	72	14531	14.1	-46 52	7.8	9.0	G5	7	..	39678b
23	18654	13.7	-28 56	6.75	8.4	K5	7	..	41896b	73	10000	14.1	-55 16	9.1	9.7	G5	3	..	39699b
24	15737	13.7	-35 14	9.0	11.4	Ko	1	..	42810b	74	4003	14.2	+46 50	8.2	8.7	F8	2	..	38598i
25	10257	13.7	-53 58	7.6	9.1	K5	5	..	39663b	75	5305	14.2	+20 44	10.6	11.7	K2	1	..	38617i
26	4621	13.8	+32 30	8.2	8.5	Fo	4	..	38620i	76	5084	14.2	+19 43	9.7	10.5	G5	1	..	38617i
27	4749	13.8	+24 41	8.9	9.3	F5	2	..	38617i	77	5966	14.2	-5 40	5.70	6.04	F2	7	..	44324b
28	4896	13.8	+18 6	8.0	8.6	Go	5	..	38617i	78	6257	14.2	-15 45	9.7	10.8	K2	1	..	40866b
29	4994	13.8	+4 52	8.6	9.6	Ko	4	5,4	14198b	79	6283	14.2	-18 37	6.08	7.08	Ko	6	..	41985b
30	5982	13.8	-7 16	9.4	9.9	F8	4	..	17391b	80	6439	14.2	-19 0	9.7	10.0	F5	3	..	40866b
31	6164	13.8	-9 37	9.91	9.97	A2	1	..	17391b	81	6438	14.2	-19 6	8.8	8.4	Fo	7	..	40866b
32	6094	13.8	-10 9	5.16	5.16	Ao	..	0,8R	56,103	82	16271	14.2	-27 0	9.2	9.9	K2	3	..	41896b
33	6468	13.8	-12 43	7.12	7.12	Ao	5	..	17412b	83	15201	14.2	-37 13	9.3	9.6	F5	2	..	23754b
34	6448	13.8	-14 0	5.27	6.05	G5	..	0,8	56,149	84	15223	14.2	-40 54	11.0	11.0	K2	1	..	39473b
35	6436	13.8	-18 46	10.1	10.2	A3	2	..	40866b	85	15222	14.2	-41 38	7.7	7.8	A5	..	2,10	56,150
36	17593	13.8	-24 50	9.20	9.6	Go	2	..	45144b	86	10246	14.2	-57 31	9.2	10.3	Go	3	..	39699b
37	15197	13.8	-37 25	8.8	8.8	F5	4	..	23754b	87	555	14.2	-85 4	10.0	10.0	A	2	..	15173b
38	14529	13.8	-47 19	9.5	10.5	G5	3	2,2-	39667b	88	776	14.3	+79 36	8.6	9.8	K5	1	..	38820i
39	14528	13.8	-47 47	10.5	11.0	Ko	1	..	39678b	89	1096	14.3	+73 9	7.28	8.28	Ko	4	..	38139i
40	8066	13.8	-58 40	8.1	9.6	K2	4	..	39699b	90	4107	14.3	+47 57	7.45	7.59	A5	6	..	38598i
41	1016	13.9	+74 46	6.44	6.50	A2	..	0,9	56,103	91	4378	14.3	+44 36	6.47	6.53	A2	7	..	38140i
42	4190	13.9	+46 13	8.5	8.5	B9	4	..	38598i	92	5141	14.3	+6 41	7.7	8.7	Ko	5	..	37360i
43	5001	13.9	+35 33	7.27	7.55	Fo	4	..	38574i	93	6090	14.3	-8 11	11.0	11.1	A2	2	..	24584b
44	4622	13.9	+33 11	7.28	8.46	K5	4	..	38620i	94	6395	14.3	-15 20	9.4	9.7	F2	2	..	24584b
45	4804	13.9	+22 19	8.8	9.8	Ko	2	..	38617i	95	6403	14.3	-21 15	8.7	9.9	Ko	3	..	40866b
46	4904	13.9	+16 27	8.6	9.7	K2	1	..	38618i	96	16400	14.3	-25 44	9.8	9.6	G5	2	..	41896b
47	5041	13.9	+8 53	8.95	9.45	F8	2	..	37360i	97	18658	14.3	-29 18	10.5	10.5	F2	3	..	41896b
48	6382	13.9	-13 38	9.4	10.4	Ko	4	..	24584b	98	16483	14.3	-33 46	8.8	10.5	Go	4	..	42810b
49	6437	13.9	-19 14	9.7	9.9	Go	2	..	40866b	99	16277	14.3	-42 31	8.3	8.3	Go	6	..	41078b
50	15221	13.9	-40 55	9.7	9.8	Go	4	..	39473b	100	14532	14.3	-47 43	9.9	10.3	F8	2	..	39678b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

219900

23^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	3130	14.4	+54 0	7.7	8.8	K ₂	2	..	38078i	51	3998	14.9	+48 52	9.2	9.2	A	1	..	38598i
2	3417	14.4	+52 43	8.4	8.4	A ₀	3	..	38078i	52	4980	14.9	+38 45	8.2	9.3	K ₂	3	..	38574i
3	3993	14.4	+48 19	8.5	8.6	A ₂	3	..	38598i	53	4562	14.9	+28 20	8.8	9.8	K	1	..	38620i
4	4634	14.4	+42 35	7.65	7.65	A ₀	4	..	38140i	54	5087	14.9	+19 26	8.6	8.7	A ₂	4	..	38617i
5	5157	14.4	+ 5 21	8.26	9.44	K ₅	2	..	14898b	55	6404	14.9	-21 37	10.1	11.1	Go	1	..	24530b
6	6095	14.4	-10 13	8.7	9.5	G ₅	4	..	24584b	56	6111	14.9	-22 1	10.6	11.9	Ko	1	..	24530b
7	6469	14.4	-12 38	10.3	11.1	G ₅	1	..	24584b	57	15744	14.9	-35 9	9.0	10.5	G ₅	3	..	42818b
8	6450	14.4	-14 36	8.26	9.33	K ₂	7	..	24584b	58	15443	14.9	-37 52	8.8	9.8	Go	3	..	23754b
9	17852	14.4	-23 46	8.3	9.6	K ₂	7	..	24530b	59	15340	14.9	-43 42	8.0	8.4	Ko	6	..	41078b
10	17470	14.4	-31 54	8.3	11.4	K ₂	3	..	42810b	60	2939	15.0	+55 22	9.9	11.3	Ma	..	..	M
11	17471	14.4	-32 36	9.7	11.4	Go	2	..	42810b	61	4115	15.0	+48 7	9.5	10.9	Mb	3	..	23300i
12	15985	14.4	-34 15	6.42	7.6	K ₀	5	..	41749b	62	4114	15.0	+47 51	6.35	7.35	Ko	7	..	38598i
13	14996	14.4	-39 0	8.4	9.2	K ₂	4	..	23754b	63	4530	15.0	+28 11	8.8	9.3	F8	2	..	38607i
14	14474	14.4	-48 5	6.76	7.5	K ₀	8	..	39678b	64	5139	15.0	+18 46	7.9	8.9	Ko	3	..	38617i
15	12140	14.4	-52 27	8.7	10.3	K ₅	3	..	39663b	65	5201	15.0	+ 9 26	8.8	9.4	Go	3	..	37360i
16	1514	14.5	+67 34	4.90	5.68	G ₅	..	R	56,103	66	4710	15.0	+ 1 32	9.0	9.6	Go	2	..	38163i
17	3995	14.5	+48 22	7.7	7.8	A ₂	8	..	38598i	67	6576	15.0	-20 7	9.9	11.0	Ko	1	..	40866b
18	5061	14.5	+39 34	8.2	8.3	A ₃	3	..	38574i	68	6405	15.0	-21 29	9.4	9.7	Go	4	..	24530b
19	4917	14.5	+25 57	8.2	8.3	A ₂	4	..	38607i	69	17603	15.0	-23 56	11.0	11.0	G ₅	2	..	24530b
20	6259	14.5	-16 19	7.44	8.22	G ₅	7	..	40866b	70	16409	15.0	-25 16	9.6	10.7	K ₂	1	..	45144b
21	16404	14.5	-25 3	10.3	10.4	Go	1	..	45144b	71	19515	15.0	-30 38	8.8	10.8	K ₂	3	..	42810b
22	10001	14.5	-55 1	9.59	10.3	Ko	3	..	39663b	72	16494	15.0	-33 9	9.3	10.5	Ko	3	..	42810b
23	4125	14.5	-65 15	9.3	9.4	A ₃	6	..	38368b	73	16495	15.0	-33 40	8.7	10.3	K ₅	3	..	42810b
24	3767	14.5	-66 27	9.6	10.2	Go	3	..	38368b	74	15111	15.0	-40 32	8.3	8.0	A ₂	8	..	39473b
25	3996	14.6	+48 41	8.2	9.0	G ₅	1	..	38598i	75	13538	15.0	-50 58	9.3	10.0	Go	4	..	39663b
26	5007	14.6	+35 17	6.56	6.54	B ₉	9	..	38574i	76	10250	15.0	-56 54	9.8	10.6	G ₅	1	..	39663b
27	4899	14.6	+34 15	6.14	6.12	B ₉	9	0,10	38574i	77	777	15.1	+79 21	7.8	7.9	A ₂	6	..	38590i
28	5086	14.6	+19 36	10.3	10.6	F	1	..	36911i	78	2423	15.1	+62 11	7.12	8.30	K ₅	2	..	38937i
29	5199	14.6	+ 9 17	9.5	10.1	G	1	..	37360i	79	4014	15.1	+51 8	9.2	9.3	A ₂	3	..	38598i
30	4652	14.6	+ 2 33	9.0	10.0	Ko	1	..	10158b	80	4640	15.1	+42 25	7.45	7.45	A ₀	5	..	38140i
31	6728	14.6	-17 15	9.7	10.3	Go	3	..	40866b	81	4752	15.1	+41 31	5.98	7.05	K ₂	6	..	38140i
32	16489	14.6	-33 8	10.1	11.9	K ₅	1	..	42810b	82	4690	15.1	+34 11	8.6	9.2	Go	2	..	38620i
33	12142	14.6	-52 10	9.2	10.0	F ₅	6	..	39663b	83	5868	15.1	- 4 28	6.60	6.94	F ₂	5	..	44324b
34	10248	14.6	-56 58	10.0	10.4	F ₅	2	..	39699b	84	6400	15.1	-14 56	8.1	9.2	K ₂	6	..	24584b
35	4341	14.6	-64 6	8.9	9.9	Ko	2	..	19899b	85	6262	15.1	-16 5	10.1	10.7	Go	1	..	40866b
36	4604	14.7	+26 58	8.2	8.7	F8	4	..	38607i	86	17857	15.1	-23 26	11.0	11.9	G ₅	1	..	24530b
37	4723	14.7	+23 17	7.8	7.8	A ₀	5	..	38607i	87	7881	15.1	-59 38	10.3	10.8	F8	1	..	39699b
38	5619	14.7	- 3 38	9.4	10.5	K ₂	1	..	14660b	88	4128	15.1	-65 45	9.2	10.2	K	1	..	38368b
39	6730	14.7	-17 11	9.7	10.8	K ₂	2	..	40866b	89	5049	15.2	+41 12	7.23	7.23	A ₀	5	..	38140i
40	17854	14.7	-23 22	8.0	8.1	A ₅	10	..	24530b	90	5062	15.2	+39 46	9.3	9.4	A ₂	1	..	38574i
41	15743	14.7	-35 11	9.7	11.0	F ₅	1	..	42810b	91	4752	15.2	+24 54	8.2	8.2	A ₀	2	..	38607i
42	8067	14.7	-58 42	9.1	10.8	Go	2	..	39699b	92	4808	15.2	+22 32	6.84	7.91	K ₂	7	..	38617i
43	3317	14.7	-69 49	8.88	10.0	Ko	5	..	38368b	93	5620	15.2	- 3 27	9.2	9.6	F ₅	3	..	14660b
44	1313	14.8	+70 47	7.8	8.9	K ₂	1	..	38903i	94	6051	15.2	-11 22	9.1	9.6	F8	4	..	24584b
45	4110	14.8	+48 4	5.42	6.42	Ko	9	..	38598i	95	6287	15.2	-17 46	10.6	10.6	A	1	..	40866b
46	4919a	14.8	+25 44	var.	var.	Md	..	R	M	96	6578	15.2	-20 34	8.6	9.3	K ₂	5	..	40866b
47	5308	14.8	+20 43	9.4	9.8	F ₅	2	..	36911i	97	6406	15.2	-21 24	10.3	11.1	F8	2	..	24530b
48	4906	14.8	+17 7	8.6	9.2	Go	2	..	38618i	98	16595	15.2	-26 24	10.5	10.2	A ₀	1	..	41896b
49	5009	14.8	+ 7 27	7.08	8.08	Ko	7	..	37360i	99	15001	15.2	-39 2	8.5	8.4	F ₅	8	..	23754b
50	16280	14.8	-42 20	9.5	10.1	A ₅	2	..	41078b	100	15216	15.2	-44 24	9.7	10.3	Go	2	..	39473b

THE HENRY DRAPER CATALOGUE.

220000

23^h 15^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	14536	15.2	-47 3	8.0	10.2	Ko	3	..	39678b	51	15991	15.6	-34 26	10.5	11.4	Ko	1	..	42810b
2	13947	15.2	-50 51	8.87	8.95	A ₃	8	R	39663b	52	15449	15.6	-38 14	8.2	9.6	F8	3	..	23754b
3	13948	15.2	-50 51	6.20	6.62	F ₅	3	..	39663b	53	14624	15.6	-46 40	10.1	10.8	Go	2	..	39667b
4	10251	15.2	-57 21	9.3	10.4	G ₅	3	..	39699b	54	3003	15.6	-70 15	10.2	11.0	G ₅	2	..	38368b
5	6737	15.2	-61 4	6.8	10.8	Ko	1	..	39699b	55	1571	15.6	-77 51	9.7	10.5	G ₅	3	..	38135b
6	2756	15.2	-72 8	8.6	9.6	Ko	8	..	38385b	56	2424	15.7	+61 36	8.0	8.6	Go	2	..	38937i
7	2985	15.3	+56 42	7.15	8.22	K ₂	3	3.3	38078i	57	2521	15.7	+60 36	6.82	6.70	B ₅	7	3,7	38078i
8	5143	15.3	+6 19	7.8	8.6	G ₅	3	..	37360i	58	2942	15.7	+55 15	8.51	8.27	B	2	..	37278i
9	4997	15.3	+4 50	5.18	6.18	Ko	10	R	37360i	59	4003	15.7	+49 11	8.8	8.8	Ao	4	..	38598i
10	5870	15.3	-3 54	9.4	10.0	Go	2	..	14660b	60	4533	15.7	+27 54	9.0	10.0	Ko	1	..	38620i
11	6169	15.3	-8 47	10.3	11.1	G ₅	2	..	24584b	61	4810	15.7	+23 12	4.65	4.79	A ₅	..	3,R	56,103
12	6264	15.3	-16 13	10.3	11.3	Ko	1	..	40866b	62	4712	15.7	+1 55	7.8	8.2	F ₅	5	..	38163i
13	6263	15.3	-16 23	11.0	11.6	Go	1	..	40866b	63	6053	15.7	-11 5	7.80	8.58	G ₅	6	..	24584b
14	14120	15.3	-48 58	9.4	11.2	G ₅	3	..	39667b	64	6289	15.7	-18 8	8.7	9.8	K ₂	4	..	40866b
15	12144	15.3	-52 5	11.0	11.5	F ₈	2	..	39663b	65	6445	15.7	-19 5	7.03	8.0	G ₅	8	..	40866b
16	2577	15.4	+59 5	8.0	8.0	B ₉	4	..	38078i	66	6444	15.7	-19 32	7.84	8.4	Go	7	..	40866b
17	4914	15.4	+21 37	8.3	8.9	Go	3	..	38617i	67	16418	15.7	-25 48	8.3	8.0	A ₃	6	..	41896b
18	5989	15.4	-7 0	8.9	10.1	K ₅	1	..	17391b	68	18161	15.7	-28 42	9.8	10.2	Go	2	..	41896b
19	6170	15.4	-9 6	9.7	10.3	Go	2	..	17391b	69	19234	15.7	-31 16	9.8	11.6	F ₈	2	..	42810b
20	6171	15.4	-9 28	8.1	8.1	Ao	8	..	17391b	70	15116	15.7	-40 40	10.3	10.9	F ₅	2	..	39473b
21	6096	15.4	-10 13	9.9	10.4	F ₈	2	..	24584b	71	10007	15.7	-55 29	10.5	10.9	F ₅	1	..	39663b
22	R	15.4	-22 51	9.8	10.5	Go	3	..	24530b	72	1787	15.8	+64 17	7.17	7.45	Fo	7	0,2	37909i
23	16415	15.4	-25 42	9.6	8.9	Ao	4	..	41896b	73	2426	15.8	+62 5	7.62	8.04	F ₅	5	..	38937i
24	18666	15.4	-29 12	10.0	10.2	F ₈	3	..	41896b	74	2427	15.8	+61 26	6.62	7.80	K ₅	5	0,5	38937i
25	15990	15.4	-34 27	9.0	10.2	K ₂	5	..	42810b	75	4922	15.8	+26 12	9.2	9.3	A ₃	2	..	23138i
26	15228	15.4	-41 30	8.4	9.5	K ₅	5	..	41078b	76	4916	15.8	+21 25	7.8	8.1	Fo	6	..	38617i
27	10052	15.4	-56 51	8.9	10.3	F ₅	3	..	39699b	77	4809	15.8	+16 11	8.4	9.2	G ₅	2	..	38618i
28	3962	15.4	-67 0	9.0	10.2	F	1	..	38368b	78	4974	15.8	+14 31	7.55	7.61	A ₂	5	..	38618i
29	2064	15.4	-74 15	8.5	8.8	F ₂	4	..	38135b	79	6172	15.8	-9 2	9.7	10.7	Ko	3	..	24584b
30	1232	15.4	-78 55	10.8	10.8	A	2	..	38135b	80	19236	15.8	-31 47	9.3	11.9	K ₂	1	..	42810b
31	1877	15.5	+65 53	7.8	7.8	B ₉	3	..	37909i	81	10440	15.8	-52 52	8.9	10.6	G ₅	2	..	39663b
32	4642	15.5	+42 38	8.2	8.2	B ₈	3	..	38140i	82	10441	15.8	-53 44	9.6	10.4	G ₅	2	..	39663b
33	5047a	15.5	+8 23	var.	var.	Md	2	R	37360i	83	7882	15.8	-59 23	10.3	11.1	G ₅	1	..	39699b
34	4504	15.5	+0 10	9.5	9.6	A ₃	1	..	38163i	84	6416	15.8	-62 22	9.3	9.9	Go	2	..	19899b
35	6191	15.5	-6 27	6.30	7.08	G ₅	9	..	17391b	85	1028	15.9	+73 47	8.8	8.8	Ao	3	..	38139i
36	5990	15.5	-7 10	8.3	8.4	A ₃	7	..	17391b	86	1027	15.9	+73 23	7.8	8.1	Fo	5	..	38139i
37	18159	15.5	-28 13	8.8	9.6	G ₅	4	..	41896b	87	2954	15.9	+54 59	8.9	8.9	A	2	..	37278i
38	17480	15.5	-32 18	9.3	11.4	G ₅	2	..	42810b	88	4908	15.9	+29 52	5.78	6.96	K ₅	7	..	38607i
39	2065	15.5	-74 43	9.06	10.0	Ko	3	..	38135b	89	4566	15.9	+28 42	9.5	9.8	F	1	..	38620i
40	1470	15.5	-78 8	10.4	10.4	B ₉	3	..	38135b	90	4568	15.9	+28 18	8.8	9.4	G	1	..	38620i
41	816	15.6	+81 46	8.1	9.1	Ko	3	..	37281i	91	4912	15.9	+16 43	6.55	6.83	Fo	7	..	38618i
42	4691	15.6	+33 30	8.3	8.8	F ₈	2	..	38620i	92	5206	15.9	+9 48	8.4	9.4	Ko	3	..	37360i
43	5312	15.6	+20 39	7.15	8.22	K ₂	7	..	38617i	93	5205	15.9	+9 39	8.74	10.09	Ma	2	..	37360i
44	5089	15.6	+19 18	7.10	7.18	A ₃	8	..	38617i	94	5972	15.9	-5 19	8.8	9.3	F ₈	4	..	17391b
45	5140	15.6	+19 0	9.3	9.9	G	1	..	36911i	95	6265	15.9	-15 45	9.4	9.9	F ₈	2	..	40866b
46	6097	15.6	-10 17	10.6	11.2	G ₅	1	..	24582b	96	16284	15.9	-27 32	5.81	7.3	G ₅	..	..	56,150
47	6288	15.6	-18 4	10.1	11.1	Ko	1	..	40866b	97	18162	15.9	-28 22	10.0	10.6	K ₅	1	..	41896b
48	6580	15.6	-19 47	9.38	10.7	K ₂	2	..	40866b	98	19238	15.9	-31 1	9.8	10.8	F ₈	3	..	42810b
49	16598	15.6	-26 21	9.2	10.2	Ko	1	..	41896b	99	19237	15.9	-31 8	8.2	9.4	F ₈	6	..	42810b
50	16282	15.6	-27 28	11.2	11.0	Ko	1	..	41896b	100	10442	15.9	-52 58	9.1	10.3	G ₅	3	..	39663b

220100

23^h 15^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	7650	15.9	-60 38	8.4	9.9	F8	4	..	39699b	51	5090	16.4	+19 35	9.5	9.6	A5	2	..	38617i
2	2701	16.0	+59 44	6.66	7.00	F2	6	..	38078i	52	5942	16.4	-2 10	8.7	9.2	F8	3	..	14660b
3	4017	16.0	+50 57	9.2	10.2	Ko	1	..	38598i	53	6456	16.4	-14 34	8.6	9.7	K2	5	..	24584b
4	4439	16.0	+44 2	7.9	9.0	K2	2	..	38140i	54	17613	16.4	-24 34	9.5	10.7	K5	1	..	45144b
5	4440	16.0	+43 35	6.14	6.22	A3	8	..	38140i	55	17485	16.4	-32 0	8.7	9.9	F8	4	..	42810b
6	4534	16.0	+27 32	9.2	9.8	G	1	..	38620i	56	15350	16.4	-43 23	9.4	9.6	Fo	3	..	41078b
7	5096	16.0	+13 46	8.6	9.7	K2	1	..	38618i	57	15217	16.4	-44 45	9.16	9.9	F8	5	..	39667b
8	5048	16.0	+9 6	8.7	8.8	A5	3	..	37360i	58	4133	16.4	-65 49	7.8	8.1	Fo	8	..	38368b
9	6173	16.0	-9 13	7.38	7.44	A2	8	..	17391b	59	908	16.5	+76 22	8.22	9.22	Ko	2	..	38139i
10	16421	16.0	-25 25	8.8	8.6	G5	4	5,4	41896b	60	6095	16.5	-8 38	8.8	9.1	Fo	4	..	17391b
11	15755	16.0	-35 14	10.5	11.6	Ko	1	..	42810b	61	6054	16.5	-11 25	8.8	9.4	Go	5	..	24584b
12	15004	16.0	-45 28	7.6	8.8	K2	6	2,7	39678b	62	15996	16.5	-34 48	9.7	11.4	F8	1	..	42810b
13	7883	16.0	-59 46	9.3	10.8	G5	2	..	39699b	63	15123	16.5	-40 43	10.5	10.7	F8	3	..	39473b
14	1779	16.0	-74 56	10.4	10.8	F5	2	..	38135b	64	14543	16.5	-47 26	8.2	8.7	F5	7	..	39678b
15	1788	16.1	+64 48	9.2	9.5	Fo	2	..	37909i	65	6738	16.5	-61 51	8.1	9.9	G5	3	..	19899b
16	5724	16.1	+57 43	8.8	10.0	B	3	..	16265m	66	1314	16.6	+70 47	9.5	9.6	A3	2	..	38903i
17	4817	16.1	+37 38	5.75	6.17	F5	9	..	38574i	67	2703	16.6	+59 55	7.36	8.36	Ko	3	..	38078i
18	4926	16.1	+30 38	9.4	10.0	Go	2	..	38620i	68	5012	16.6	+35 57	7.67	8.74	K2	3	..	38574i
19	4714	16.1	+1 39	8.0	9.0	Ko	4	..	38163i	69	4693	16.6	+33 26	9.2	9.3	A2	1	..	38620i
20	6193	16.1	-6 44	8.2	9.2	Ko	6	..	17391b	70	4757	16.6	+24 23	8.8	8.8	A	2	E	38617i
21	5993	16.1	-7 34	8.1	8.4	Fo	8	..	17391b	71	4654	16.6	+2 32	8.6	9.6	Ko	4	..	38163i
22	6386	16.1	-13 22	8.3	9.3	Ko	5	..	24584b	72	6098	16.6	-10 18	7.54	7.37	B3	..	5,10	56,150
23	6453	16.1	-13 49	7.29	8.36	K2	7	..	24584b	73	19243	16.6	-31 31	9.8	10.8	F2	2	..	42810b
24	6291	16.1	-18 3	9.1	9.7	Go	5	..	40866b	74	17486	16.6	-32 50	9.3	10.8	F5	3	..	42810b
25	6408	16.1	-21 24	8.7	10.0	G5	4	..	24530b	75	15231	16.6	-41 45	9.9	9.8	Ao	3	..	41078b
26	14123	16.1	-49 35	10.1	11.7	G5	1	..	39667b	76	10275	16.6	-54 44	10.1	10.9	G5	1	..	39663b
27	13953	16.1	-50 2	11.8	11.7	Go	1	..	39667b	77	7884	16.6	-59 30	10.1	11.1	Ko	1	..	39699b
28	1577	16.1	-76 10	9.9	10.9	Ko	2	..	38135b	78	1472	16.6	-78 43	9.5	9.6	A5	4	..	38135b
29	1471	16.1	-78 20	8.1	8.4	F2	6	2,4-	38231b	79	1029	16.7	+73 31	8.6	9.4	G5	2	..	38139i
30	2428	16.2	+61 40	6.43	7.61	K5	5	0,4	38937i	80	2433	16.7	+61 28	8.22	9.22	Ko	1	..	38937i
31	4092	16.2	+49 34	9.2	9.2	Ao	2	..	38598i	81	2958	16.7	+54 40	9.0	9.0	A	1	..	38078i
32	4569	16.2	+28 42	9.3	9.9	G	1	..	38620i	82	4445	16.7	+43 32	7.55	8.33	G5	3	..	38140i
33	5145	16.2	+6 27	9.1	9.9	G5	1	..	14898b	83	4573	16.7	+29 9	9.0	9.5	F8	2	..	38620i
34	5973	16.2	-5 13	6.70	6.70	Ao	4	..	44324b	84	4974	16.7	+12 39	8.8	8.8	Ao	4	E	37360i
35	6194	16.2	-6 30	9.7	10.7	Ko	2	..	17391b	85	5994	16.7	-7 1	9.2	9.5	Fo	5	..	17391b
36	6174	16.2	-9 26	10.8	11.3	F8	2	..	24584b	86	6055	16.7	-11 23	9.9	10.7	G5	3	..	24584b
37	6455	16.2	-14 12	8.5	8.8	F2	6	..	24584b	87	6056	16.7	-11 44	10.6	10.6	A	1	..	24584b
38	15839	16.2	-36 32	8.2	9.9	Ko	3	0,2	40743b	88	6390	16.7	-12 49	10.1	10.9	G5	3	..	24584b
39	15230	16.2	-41 42	8.7	9.5	G5	6	..	41078b	89	6391	16.7	-12 59	7.9	8.9	Ko	7	..	24584b
40	826	16.3	+78 27	7.7	8.5	G5	2	E	38590i	90	6736	16.7	-16 51	9.4	10.0	Go	5	..	40866b
41	4570	16.3	+28 46	8.9	9.9	Ko	1	..	38620i	91	6737	16.7	-17 15	9.4	10.0	Go	3	..	40866b
42	6175	16.3	-9 24	11.0	12.1	K2	1	..	24584b	92	13955	16.7	-50 16	9.7	10.8	K2	2	..	39667b
43	6733	16.3	-17 14	7.96	8.38	F5	7	..	40866b	93	7651	16.7	-60 32	8.8	9.9	Ko	4	..	39699b
44	6734	16.3	-17 25	8.5	8.6	A2	5	..	40866b	94	4879	16.7	-63 8	8.2	9.0	G5	4	..	19899b
45	6409	16.3	-20 50	8.7	9.1	Go	4	..	40866b	95	2757	16.7	-72 42	10.4	10.8	F5	2	..	38385b
46	15994	16.3	-34 12	8.3	10.5	Ko	5	..	42810b	96	4009	16.8	+48 40	9.2	10.2	Ko	2	..	38598i
47	2430	16.4	+61 52	7.6	7.6	Ao	4	..	38937i	97	4813	16.8	+16 6	8.8	9.6	G5	2	..	38618i
48	4820	16.4	+38 3	7.44	8.44	Ko	3	..	38574i	98	5146	16.8	+6 41	8.6	8.9	Fo	2	..	14898b
49	4904	16.4	+34 54	8.6	9.8	K5	1	..	38620i	99	6058	16.8	-11 21	10.6	11.4	G5	1	..	24584b
50	4628	16.4	+32 28	8.2	8.6	F5	3	..	38620i	100	6457	16.8	-14 33	9.7	10.5	G5	1	..	24584b

THE HENRY DRAPER CATALOGUE.

220200

23^h 16^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	17868	16.8	-23 49	11.0	11.1	F5	2	..	24530b	51	7885	17.1	-58 58	8.6	9.6	F8	5	..	39699b
2	19526	16.8	-30 9	9.8	11.6	K2	1	..	42802b	52	3318	17.1	-69 47	10.3	10.8	F8	2	..	38368b
3	15233	16.8	-41 4	9.3	9.8	K2	2	..	41078b	53	2218	17.2	+62 17	7.8	8.8	Ko	1	..	38937i
4	15352	16.8	-43 44	7.7	7.9	Ko	8	..	41078b	54	4538	17.2	+28 9	6.62	6.96	F2	7	..	38607i
5	7652	16.8	-59 54	9.6	9.9	F2	4	..	39699b	55	5141	17.2	+18 53	8.2	8.8	Go	5	..	38617i
6	894	16.8	-82 11	9.4	10.0	G	1	..	15165b	56	4420	17.2	-0 56	8.8	9.8	Ko	2	..	14660b
7	1030	16.9	+73 20	8.7	9.9	K5	2	..	38903i	57	5998	17.2	-7 21	8.7	9.3	Go	4	..	17391b
8	1974	16.9	+64 12	7.17	7.15	B9	7	..	37909i	58	5997	17.2	-7 31	9.7	10.5	G5	2	..	17391b
9	4010	16.9	+48 18	8.6	8.7	A2	2	..	38598i	59	6394	17.2	-13 31	9.1	10.1	Ko	4	..	24584b
10	4019	16.9	+46 48	8.25	8.23	B9	4	..	38598i	60	16290	17.2	-27 2	9.5	10.2	Ko	2	..	41896b
11	5091	16.9	+20 6	7.40	8.75	Ma	3	..	38617i	61	16294	17.2	-42 0	8.9	10.2	K5	1	..	41078b
12	5147	16.9	+7 5	8.4	9.4	Ko	3	..	37360i	62	8068	17.2	-58 10	7.6	8.1	G5	8	..	39699b
13	5943	16.9	-2 22	8.9	9.5	Go	4	..	14660b	63	7654	17.2	-60 36	6.08	8.1	Ma	9	0,10	19899b
14	6177	16.9	-8 47	10.3	11.3	Ko	1	..	24584b	64	4135	17.2	-65 26	7.7	8.7	Ko	7	..	38368b
15	19527	16.9	-30 15	9.8	10.8	Go	1	..	42802b	65	4816	17.3	+23 1	7.32	8.32	Ko	5	..	38617i
16	14547	16.9	-47 8	9.5	10.2	G5	5	..	39667b	66	5161	17.3	+6 7	8.8	9.9	K2	1	..	14898b
17	10257	16.9	-57 43	8.9	9.7	Ko	4	..	39699b	67	4657	17.3	+3 3	9.3	10.3	Ko	2	..	38163i
18	6417	16.9	-61 59	8.0	8.8	G5	5	..	19899b	68	6475	17.3	-11 59	10.6	10.9	F2	1	..	24584b
19	3768	16.9	-66 42	9.1	9.9	G5	3	..	38368b	69	18172	17.3	-28 1	10.0	10.4	F5	1	..	41896b
20	2960	17.0	+55 9	8.26	8.60	F2	2	..	38078i	70	15850	17.3	-36 36	9.1	10.5	K5	1	..	40743b
21	4389	17.0	+44 38	8.1	9.2	K2	2	..	38140i	71	15129	17.3	-40 34	8.8	9.2	F5	6	..	39473b
22	4897	17.0	+31 16	5.37	5.32	B8	9	1,10	16935i	72	13959	17.3	-50 44	8.7	9.7	K2	5	..	39663b
23	4921	17.0	+22 7	9.4	10.5	K2	1	..	38617i	73	6418	17.3	-62 11	8.9	9.9	Ko	3	..	19899b
24	4920	17.0	+21 44	9.7	10.0	F	2	..	36911i	74	4013	17.4	+48 15	7.45	8.45	Ko	5	..	38598i
25	4998	17.0	+4 57	9.3	10.1	G5	3	5,2-	10158b	75	6101	17.4	-9 59	10.3	10.9	Go	1	..	24584b
26	6096	17.0	-8 36	9.2	10.2	Ko	4	..	24584b	76	6395	17.4	-13 20	8.7	9.1	F5	4	..	24584b
27	6393	17.0	-12 46	10.7	11.5	G5	1	..	24584b	77	6460	17.4	-14 26	8.7	9.2	F8	4	..	24584b
28	6392	17.0	-13 14	10.6	11.1	F8	1	..	24584b	78	6406	17.4	-15 35	5.30	5.38	A3	..	1,10	56,103
29	6458	17.0	-14 7	10.6	11.0	F5	1	..	24584b	79	14632	17.4	-46 31	10.3	11.1	G5	1	..	39667b
30	17617	17.0	-24 48	8.45	8.9	Go	4	..	45144b	80	14485	17.4	-48 17	10.1	10.9	G5	2	..	39667b
31	15846	17.0	-36 12	10.3	11.1	G5	1	..	42810b	81	10012	17.4	-55 32	9.6	10.6	Ko	1	..	39699b
32	15216	17.0	-37 22	8.3	8.7	F5	5	..	23754b	82	4346	17.4	-64 25	9.2	9.6	F5	2	..	38368b
33	15218	17.0	-43 55	9.9	10.3	F5	1	..	41078b	83	2285	17.4	-73 1	9.8	11.0	K5	2	..	38385b
34	14482	17.0	-48 4	8.9	10.0	Ma	4	..	39667b	84	4014	17.5	+49 0	8.5	9.3	G5	5	..	38598i
35	10010	17.0	-55 19	10.0	10.6	Go	1	..	39699b	85	5057	17.5	+40 46	8.2	8.6	F5	2	..	38140i
36	655	17.0	-84 6	9.1	9.9	G5	1	..	15165b	86	4575	17.5	+28 53	8.6	9.4	G5	2	..	38620i
37	911	17.1	+76 31	8.0	8.3	F2	5	..	38139i	87	4540	17.5	+27 35	8.8	9.8	Ko	2	..	38620i
38	1017	17.1	+75 2	9.9	10.7	G5	1	..	38903i	88	4927	17.5	+25 22	6.55	7.62	K2	4	..	38607i
39	1975	17.1	+63 37	8.4	8.4	Ao	2	..	38937i	89	5210	17.5	+9 49	9.5	10.5	K	1	..	37360i
40	2961	17.1	+54 17	8.0	8.1	A5	3	..	38078i	90	5148	17.5	+6 58	8.4	9.2	G5	4	..	37360i
41	4023	17.1	+50 44	8.0	9.2	K5	2	..	38598i	91	4423	17.5	-1 42	9.02	10.20	K5	1	..	14660b
42	4924	17.1	+26 5	6.64	6.98	F2	7	..	38607i	92	6062	17.5	-11 22	var.	var.	Mb	1	R	24584b
43	6059	17.1	-10 54	10.1	10.7	Go	2	..	24584b	93	6585	17.5	-20 14	8.5	9.3	G5	4	..	40866b
44	6739	17.1	-17 38	9.4	10.4	Ko	2	..	40866b	94	R	17.5	-22 49	10.5	11.1	G5	1	..	24530b
45	6582	17.1	-20 28	9.9	11.0	K2	1	..	40866b	95	17620	17.5	-24 0	7.28	7.6	Fo	7	..	45144b
46	15849	17.1	-35 57	10.3	11.4	K2	1	..	42810b	96	15220	17.5	-44 42	9.22	10.5	Ma	2	..	39667b
47	14549	17.1	-47 11	9.7	11.1	Ko	1	..	39667b	97	10059	17.5	-56 26	9.6	10.4	G5	1	..	39699b
48	14483	17.1	-48 38	9.9	10.3	Go	5	..	39667b	98	7655	17.5	-60 27	9.7	10.3	Go	2	..	39699b
49	13957	17.1	-49 54	9.02	9.7	F5	7	..	39667b	99	..	17.5	-76 28	Ko	1	..	38135b
50	10444	17.1	-53 36	8.4	9.1	F8	4	..	39663b	100	2946	17.6	+55 49	7.8	7.8	B8	4	R	37278i

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23^h 17^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.
		<i>m.</i>	<i>o</i>									<i>m.</i>	<i>o</i>						
1	2947	17.6	+55 32	8.0	8.0	Ao	2	..	3724ii	51	16008	17.9	-34 7	8.7	10.5	Ko	3	..	4281ob
2	4926	17.6	+10 39	8.8	9.3	F8	4	..	3736oi	52	15467	17.9	-38 37	10.3	10.4	Fo	1	..	40743b
3	5944	17.6	- 2 1	9.4	9.9	F8	2	..	1466ob	53	16300	17.9	-42 9	7.18	7.5	Fo	9	..	41078b
4	6103	17.6	-10 11	9.7	10.7	Ko	2	..	24584b	54	14559	17.9	-47 30	9.9	10.5	Go	3	..	39667b
5	6476	17.6	-12 11	10.7	11.3	Go	1	..	24584b	55	14133	17.9	-48 58	9.1	10.6	G5	3	..	39667b
6	6741	17.6	-17 43	9.4	10.2	G5	3	..	40866b	56	12148	17.9	-52 22	10.6	11.1	F8	2	..	39663b
7	17871	17.6	-23 35	8.6	9.3	Ko	6	..	2453ob	57	10062	17.9	-56 39	8.9	10.3	K2	3	..	39699b
8	17624	17.6	-24 35	10.5	11.0	G5	1	..	39389b	58	6741	17.9	-61 34	7.5	8.3	Ao	6	..	19899b
9	19256	17.6	-31 9	8.2	9.4	Ko	6	..	4281ob	59	2066	17.9	-73 55	9.1	9.2	A2	5	..	38385b
10	10259	17.6	-57 4	8.7	9.5	F5	4	..	39699b	60	1032	17.9	-81 4	9.0	9.8	G5	4	..	38135b
11	8069	17.6	-58 17	8.1	9.9	G5	1	..	39699b	61	818	18.0	+81 18	8.6	9.1	F8	2	o,i	3882oi
12	4347	17.6	-64 5	8.0	9.0	Ko	4	..	42519b	62	4102	18.0	+49 41	8.4	8.4	Ao	4	..	38598i
13	2758	17.6	-72 26	10.9	11.0	A3	2	..	38385b	63	4993	18.0	+11 46	5.28	6.28	Ko	9	..	3736oi
14	1978	17.7	+63 58	7.92	7.92	Ao	5	..	37909i	64	6742	18.0	-17 5	8.9	8.9	Ao	5	..	40866b
15	2435	17.7	+62 0	8.6	8.6	A	2	..	38937i	65	16297	18.0	-26 56	9.0	9.6	Go	4	..	41896b
16	5020	17.7	+35 56	8.2	8.2	A	2	..	32383i	66	10447	18.0	-53 6	9.3	10.4	Ko	3	..	39663b
17	4761	17.7	+24 24	9.2	9.2	A	1	E	38617i	67	2759	18.0	-72 43	6.9	7.4	F8	6	..	36171b
18	5317	17.7	+20 16	6.22	6.22	Ao	10	..	38617i	68	1070	18.0	-80 29	10.4	11.4	Ko	3	..	38135b
19	4658	17.7	+ 3 13	8.0	8.4	F5	6	..	38163i	69	2710	18.1	+59 35	5.93	7.11	K5	6	o,5	38078i
20	5978	17.7	- 5 35	9.2	9.5	F2	3	..	17391b	70	3149	18.1	+53 41	7.9	9.0	K2	2	..	38078i
21	6587	17.7	-20 39	4.20	5.20	Ko	..	R	28,217	71	4019	18.1	+48 27	9.2	9.3	A2	1	..	38598i
22	6114	17.7	-22 4	8.9	9.7	F8	5	..	2453ob	72	4699	18.1	+33 50	8.6	9.0	F5	2	..	3862oi
23	19257	17.7	-30 54	8.8	9.9	F5	5	..	4281ob	73	4815	18.1	+15 31	8.6	9.4	G5	2	..	38618i
24	19259	17.7	-30 58	9.5	9.9	A2	5	..	4281ob	74	6179	18.1	- 9 1	9.9	10.4	F8	6	..	24584b
25	15132	17.7	-40 28	8.8	9.5	G5	6	..	39473b	75	6180	18.1	- 9 3	10.1	10.6	F8	4	..	24584b
26	15358	17.7	-43 24	9.5	9.6	A2	4	..	41078b	76	6105	18.1	- 9 56	7.78	8.20	F5	8	..	24584b
27	15221	17.7	-44 40	9.9	9.9	Go	4	..	39667b	77	6414	18.1	-21 5	10.1	10.7	F8	1	..	2453ob
28	14633	17.7	-46 10	9.7	11.3	Ko	1	..	39667b	78	18675	18.1	-29 14	8.4	8.4	F5	6	..	41896b
29	14556	17.7	-47 5	9.7	10.0	Go	4	..	39667b	79	15769	18.1	-35 48	10.3	10.2	F8	2	..	23754b
30	10061	17.7	-56 6	6.51	7.8	Ko	4	5,9	41858b	80	15223	18.1	-44 11	8.8	9.9	K2	3	..	39667b
31	7886	17.7	-59 12	9.3	10.2	Go	2	..	39699b	81	2760	18.1	-71 19	10.2	11.4	K5	2	..	38368b
32	7656	17.7	-59 57	10.8	11.1	F2	2	..	39699b	82	1018	18.2	+75 15	7.97	8.97	Ko	4	..	38139i
33	1315	17.8	+70 59	9.5	9.8	F2	3	..	38139i	83	4025	18.2	+50 30	7.72	8.79	K2	4	..	38598i
34	5093	17.8	+20 1	6.58	7.14	Go	7	..	38617i	84	4426	18.2	- 1 29	8.4	9.4	Ko	2	..	38163i
35	4979	17.8	+14 51	8.6	9.2	Go	2	..	38618i	85	5879	18.2	- 3 45	8.5	9.6	K2	4	..	14660b
36	5018	17.8	+ 7 32	9.3	10.1	G5	2	o,2	14898b	86	6181	18.2	- 9 26	8.7	9.3	Go	5	..	24584b
37	4660	17.8	+ 2 16	6.92	6.92	Ao	7	..	38163i	87	6743	18.2	-17 4	9.7	10.5	G5	2	..	40866b
38	6001	17.8	- 7 9	8.9	9.9	Ko	3	..	17391b	88	18676	18.2	-29 34	8.8	9.6	F5	4	..	41896b
39	6064	17.8	-11 19	8.1	9.1	Ko	5	5,8	20146b	89	16010	18.2	-34 51	9.0	10.5	Go	3	..	4281ob
40	6461	17.8	-14 2	9.4	10.4	Ko	3	..	24584b	90	14134	18.2	-49 48	10.8	11.7	Ko	1	..	39667b
41	17626	17.8	-23 56	8.6	9.0	G5	4	..	45144b	91	10280	18.2	-54 22	7.37	7.2	A5	..	R	56,150
42	19260	17.8	-31 41	9.2	11.1	Go	2	..	4281ob	92	10281	18.2	-54 22	6.48	6.7	A5	..	..	..
43	16006	17.8	-34 1	9.3	10.5	Go	4	..	4281ob	93	1603	18.3	+66 31	8.6	8.9	F	1	..	37909i
44	15766	17.8	-35 6	8.3	9.3	K2	3	..	23754b	94	4026	18.3	+50 29	9.2	9.2	Ao	2	..	38598i
45	15466	17.8	-38 3	10.3	10.9	K2	1	..	40743b	95	4396	18.3	+44 27	8.6	8.6	Ao	3	..	38140i
46	4617	17.9	+27 2	8.8	9.4	G	2	..	3862oi	96	4700	18.3	+33 26	9.2	10.0	G5	1	..	3862oi
47	4906	17.9	+18 3	8.5	9.1	Go	4	..	38617i	97	5003	18.3	+ 4 43	8.4	9.4	Ko	3	..	3736oi
48	5162	17.9	+ 5 59	9.0	9.6	G	1	..	14898b	98	6065	18.3	-11 21	9.7	10.5	G5	4	..	24584b
49	6116	17.9	-21 51	9.1	9.7	F5	5	..	2453ob	99	6478	18.3	-12 2	10.3	10.8	F8	2	..	24584b
50	16435	17.9	-25 10	8.00	8.6	Go	4	..	45144b	100	19267	18.3	-31 40	7.62	9.4	Ma	6	..	4281ob

THE HENRY DRAPER CATALOGUE.

220400

23^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	15360	18.3	-43 41	6.06	7.7	Ko	10	..	41078b	51	6067	18.7	-10 57	10.3	11.1	G5	2	..	24584b
2	7657	18.3	-60 4	8.1	9.9	Ko	4	..	39699b	52	6480	18.7	-12 28	10.6	11.6	Ko	1	..	24584b
3	3569	18.3	-68 12	10.5	11.5	Ko	2	..	38368b	53	6295	18.7	-18 20	7.9	8.4	F8	8	..	40866b
4	3427	18.4	+52 15	8.9	8.9	Ao	3	..	38598i	54	17881	18.7	-22 53	9.2	9.3	G5	5	..	24530b
5	4915	18.4	+30 9	8.91	9.19	Fo	2	..	38620i	55	16305	18.7	-27 50	7.7	7.9	B9	7	..	45144b
6	4509	18.4	-0 16	6.53	7.60	K2	5	..	38163i	56	16015	18.7	-34 51	8.68	9.3	G5	5	..	23754b
7	6066	18.4	-11 40	10.8	11.8	Ko	1	..	24584b	57	15013	18.7	-38 56	9.3	10.1	G5	1	..	40743b
8	6118	18.4	-22 17	10.1	10.8	F8	2	..	24530b	58	2286	18.7	-73 50	8.0	8.8	G5	6	..	38135b
9	17877	18.4	-23 10	8.8	9.3	G5	7	..	24530b	59	3429	18.8	+52 20	8.1	8.2	A5	4	..	38598i
10	17631	18.4	-24 11	11.0	10.7	Go	1	..	39389b	60	4901	18.8	+31 58	6.53	6.95	F5	7	0,7	38620i
11	16303	18.4	-27 4	10.5	11.0	Ko	1	..	45144b	61	4822	18.8	+23 4	9.0	9.0	Ao	2	..	38617i
12	16302	18.4	-27 25	11.2	10.7	G5	1	..	45144b	62	5097	18.8	+19 32	8.4	8.4	Ao	4	..	38617i
13	18680	18.4	-29 8	8.6	8.5	A2	8	..	41896b	63	4511	18.8	-0 15	9.3	9.9	Go	2	..	14660b
14	19533	18.4	-30 12	9.2	10.8	G5	2	..	42802b	64	6481	18.8	-12 7	11.0	12.2	K5	1	..	24584b
15	15775	18.4	-35 9	8.2	10.2	K5	3	..	42810b	65	6450	18.8	-19 15	6.32	7.5	G5	7	0,10	41985b
16	14489	18.4	-48 22	9.4	10.4	Ko	4	..	39667b	66	6119	18.8	-22 19	6.54	7.5	F5	6	..	41985b
17	14490	18.4	-48 31	9.3	11.2	Ma	2	..	39667b	67	19272	18.8	-31 32	9.8	11.6	Ko	1	..	42810b
18	3320	18.4	-68 57	10.1	11.1	Ko	3	..	38368b	68	17501	18.8	-31 52	9.0	9.6	F5	6	..	42810b
19	3319	18.4	-69 18	9.9	10.2	F2	4	..	38368b	69	16522	18.8	-33 28	8.3	10.5	Go	4	..	42810b
20	1578	18.4	-76 5	10.1	10.9	G5	2	..	38135b	70	15858	18.8	-36 16	9.9	11.1	K5	1	..	42810b
21	2439	18.5	+62 5	8.5	8.5	Ao	3	..	38937i	71	13551	18.8	-51 50	9.7	10.3	F5	3	..	39663b
22	5319	18.5	+21 15	9.4	10.2	G5	2	..	38617i	72	10282	18.8	-54 35	9.8	10.6	G5	1	..	39663b
23	6412	18.5	-15 2	8.7	9.7	Ko	5	..	24575b	73	4024	18.9	+48 44	8.8	8.8	Ao	3	..	38598i
24	6448	18.5	-19 39	8.06	9.1	Ko	6	..	40866b	74	4208	18.9	+45 49	8.1	9.2	K2	1	..	38140i
25	16521	18.5	-33 21	9.7	11.6	G5	2	..	42810b	75	5321	18.9	+20 47	8.2	9.2	Ko	5	..	38617i
26	16014	18.5	-33 56	7.9	9.0	F8	6	..	42810b	76	6103	18.9	-8 5	7.9	8.7	G5	7	..	17391b
27	15361	18.5	-43 7	9.5	9.6	Go	2	..	41078b	77	6297	18.9	-18 15	8.9	9.9	Ko	4	..	40866b
28	15225	18.5	-44 9	7.8	8.7	Ko	8	..	39667b	78	17885	18.9	-23 50	11.0	11.9	Go	1	..	39389b
29	10448	18.5	-52 52	8.6	9.1	Ko	5	..	39663b	79	16618	18.9	-26 25	9.6	9.9	Go	2	..	45144b
30	4885	18.5	-63 17	8.9	9.9	Ko	3	..	19899b	80	16018	18.9	-34 1	9.9	11.4	Go	2	..	42810b
31	1579	18.5	-76 39	9.2	10.6	Ma	5	..	38135b	81	15235	18.9	-37 16	10.3	10.2	F5	2	..	40743b
32	4701	18.6	+33 46	8.7	9.8	K2	1	..	38620i	82	13967	18.9	-49 54	8.9	10.3	Ko	4	..	39667b
33	4917	18.6	+29 51	9.2	10.2	Ko	2	..	38620i	83	13553	18.9	-51 8	9.9	11.2	K2	1	..	39663b
34	5145	18.6	+18 54	9.0	9.6	Go	3	..	38617i	84	2966	19.0	+55 5	8.8	8.8	Ao	3	..	38078i
35	4427	18.6	-1 25	8.5	9.3	G5	3	..	14660b	85	3151	19.0	+53 29	6.81	6.87	A2	7	..	37241i
36	6183	18.6	-9 1	6.81	7.81	Ko	8	..	17391b	86	3599	19.0	+51 31	8.5	9.6	K2	1	..	38598i
37	..	18.6	-12 36	..	..	K5	1	..	24584b	87	5004	19.0	+4 23	8.4	8.7	Fo	5	..	37360i
38	6276	18.6	-16 25	9.4	9.8	F5	3	..	17041b	88	6201	19.0	-6 17	9.7	10.5	G5	2	..	19957b
39	6294	18.6	-18 3	9.9	10.7	G5	2	..	40866b	89	6398	19.0	-13 19	9.1	10.3	K5	3	..	24584b
40	12150	18.6	-52 27	5.70	7.5	K5	..	5,5	56,150	90	17886	19.0	-23 44	11.0	11.1	F8	1	..	39389b
41	10451	18.6	-52 57	9.3	9.5	F5	4	..	39663b	91	16443	19.0	-25 47	9.6	10.7	K5	1	..	45144b
42	10449	18.6	-53 23	9.6	10.4	G5	2	..	39663b	92	15019	19.0	-45 42	8.5	9.6	G5	5	..	39667b
43	2760	18.6	-72 11	8.3	9.3	Ko	8	..	38385b	93	14493	19.0	-48 6	10.3	11.5	F8	1	..	39667b
44	3598	18.7	+51 33	8.0	9.0	Ko	6	..	38598i	94	10452	19.0	-53 24	9.4	10.4	Ko	2	..	39663b
45	4399	18.7	+45 15	8.52	9.52	Ko	2	..	38140i	95	8070	19.0	-58 3	8.8	9.4	Go	3	..	39699b
46	5062	18.7	+41 6	9.0	9.0	A	1	..	38140i	96	7658	19.0	-60 11	8.8	9.6	Go	4	..	39699b
47	5073	18.7	+39 41	8.8	10.2	Ma	..	..	M	97	398	19.1	+85 31	8.6	9.7	K2	2	..	37281i
48	4918	18.7	+30 7	8.56	9.56	Ko	2	..	38620i	98	3600	19.1	+52 10	8.1	8.6	F8	4	..	38598i
49	4764	18.7	+24 45	8.6	9.0	F5	2	E	38617i	99	4138	19.1	+48 4	8.6	8.7	A2	2	..	38598i
50	6101	18.7	-8 19	10.1	10.2	A5	3	..	24584b	100	5060	19.1	+36 52	8.8	9.4	Go	2	..	38574i

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23^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	4577	19.1	+29 8	7.02	7.02	Ao	7	..	38607i	51	4210	19.5	+45 26	8.5	8.5	Ao	2	..	38140i
2	6107	19.1	-10 17	10.6	11.8	K5	1	..	24584b	52	4664	19.5	+3 11	9.3	10.7	Ma	2	..	38163i
3	6747	19.1	-17 36	10.3	11.1	G5	2	..	40866b	53	4723	19.5	+2 4	9.0	9.8	G5	2	..	38163i
4	18184	19.1	-28 47	10.5	10.4	K2	1	..	41896b	54	5951	19.5	-2 17	7.9	8.7	G5	4	..	38163i
5	19275	19.1	-31 24	9.8	11.9	K2	1	..	42810b	55	6202	19.5	-5 57	10.1	10.7	Go	1	..	19957b
6	15237	19.1	-37 45	7.35	7.0	Ao	10	..	23754b	56	6203	19.5	-6 33	10.1	10.2	A2	2	..	19957b
7	10453	19.1	-53 15	7.8	7.8	Go	8	..	39663b	57	16623	19.5	-26 34	9.5	10.2	G5	1	..	45144b
8	10283	19.1	-54 18	9.0	10.0	K2	2	..	39663b	58	16527	19.5	-33 0	9.6	9.9	F5	3	..	42810b
9	3321	19.1	-69 6	9.8	10.8	Ko	4	..	38368b	59	15478	19.5	-38 43	9.0	10.1	Go	2	..	40743b
10	2223	19.2	+62 16	8.2	8.8	Go	2	..	38937i	60	10019	19.5	-55 10	8.6	9.5	Ko	5	..	39699b
11	4544	19.2	+27 48	8.2	8.5	F2	4	..	38620i	61	831	19.6	+79 2	8.9	10.1	K5	1	..	38964i
12	4663	19.2	+3 9	6.65	7.72	K2	6	..	38163i	62	2999	19.6	+56 59	6.76	6.64	B5	6	..	37241i
13	6106	19.2	-8 44	9.1	10.1	Ko	6	..	24584b	63	4108	19.6	+49 29	8.0	8.0	B9	7	..	38598i
14	6278	19.2	-16 43	9.1	10.1	Ko	3	..	40866b	64	4920	19.6	+30 9	7.21	7.55	F2	6	..	38607i
15	6299	19.2	-17 52	var.	var.	Mc	2	R	40866b	65	5985	19.6	-5 35	9.2	10.2	Ko	2	..	19957b
16	6415	19.2	-21 35	8.7	9.3	Ko	4	..	24530b	66	6070	19.6	-11 24	9.9	10.3	F5	4	..	24584b
17	16621	19.2	-25 56	9.6	11.0	Ma	1	..	39389b	67	6417	19.6	-20 49	9.4	9.9	Ko	3	..	24530b
18	17507	19.2	-31 59	10.3	12.4	Ko	1	..	42810b	68	6121	19.6	-21 59	8.3	8.7	Ko	8	..	24530b
19	16309	19.2	-42 48	9.3	10.1	F5	2	..	41078b	69	15782	19.6	-35 23	9.7	11.1	Go	1	..	42810b
20	2761	19.2	-71 28	7.8	8.8	Ko	7	..	38368b	70	15023	19.6	-45 39	9.1	10.0	F8	4	..	39667b
21	1233	19.2	-79 33	9.7	10.5	G5	4	..	38135b	71	10020	19.6	-55 21	9.7	10.0	Fo	3	..	39699b
22	418	19.2	-86 16	7.60	8.7	Ko	7	..	15173b	72	10268	19.6	-57 24	5.61	7.0	Ko	..	0,6-	56,150
23	4140	19.3	+47 54	8.0	8.0	Ao	6	..	38598i	73	2067	19.6	-74 26	10.1	10.5	F5	2	..	38135b
24	5065	19.3	+41 5	6.68	8.03	Ma	4	..	38140i	74	1883	19.7	+66 12	8.1	8.1	A	1	..	37909i
25	4739	19.3	+23 27	8.8	9.6	G5	4	..	38617i	75	5068	19.7	+40 34	6.48	6.48	Ao	7	..	38140i
26	5324	19.3	+20 51	8.2	8.6	F5	6	..	38617i	76	6110	19.7	-10 30	11.0	11.6	Go	1	..	24584b
27	5147	19.3	+18 26	8.0	9.1	K2	2	..	38617i	77	6466	19.7	-14 1	9.2	10.3	K2	3	..	24584b
28	5022	19.3	+7 34	9.1	9.1	A	2	..	14898b	78	6418	19.7	-21 24	10.1	10.8	Ko	1	..	24530b
29	5165	19.3	+5 39	7.14	7.14	Ao	8	..	37360i	79	17889	19.7	-23 3	7.72	9.1	Ko	6	..	45144b
30	5983	19.3	-5 45	9.4	10.0	Go	2	..	19957b	80	16624	19.7	-25 59	10.3	11.0	Ko	1	..	39389b
31	6004	19.3	-7 31	8.9	9.9	Ko	3	..	24584b	81	4639	19.8	+33 4	8.7	9.3	Go	3	..	38620i
32	6108	19.3	-10 11	9.9	10.9	Ko	3	..	24584b	82	4770	19.8	+24 57	7.21	7.19	B9	6	..	38607i
33	6300	19.3	-18 10	8.7	9.7	Ko	5	..	40866b	83	4829	19.8	+22 56	8.0	9.1	K2	2	..	38617i
34	18185	19.3	-28 16	9.0	10.6	Ko	2	0,2	41896b	84	5215	19.8	+9 59	9.1	9.7	G	1	..	37360i
35	16023	19.3	-34 0	9.0	10.5	Ko	3	..	42810b	85	5025	19.8	+7 20	8.8	9.6	G5	1	..	14898b
36	15245	19.3	-40 58	9.3	9.5	F8	4	..	41078b	86	6204	19.8	-5 45	9.2	10.2	Ko	3	..	19957b
37	4916	19.4	+34 47	7.77	8.77	Ko	4	..	38620i	87	6482	19.8	-12 24	9.7	10.7	Ko	3	..	24584b
38	4919	19.4	+30 12	8.11	9.18	K2	2	..	38620i	88	17641	19.8	-23 58	9.5	9.6	Ko	2	..	45144b
39	4827	19.4	+23 13	7.22	8.22	Ko	6	0,5	38617i	89	18191	19.8	-28 16	10.0	10.7	Ko	1	5,1	41896b
40	4927	19.4	+21 43	9.3	10.3	K	1	..	38617i	90	18691	19.8	-29 18	9.3	11.4	Go	1	..	42802b
41	5105	19.4	+13 56	8.0	8.5	F8	4	..	38618i	91	15368	19.8	-43 46	9.9	10.6	F8	1	..	41078b
42	6184	19.4	-9 27	9.1	9.6	F8	3	..	24584b	92	15232	19.8	-44 25	8.5	10.0	K2	4	..	39667b
43	6282	19.4	-15 50	8.9	9.4	F8	3	..	24575b	93	14568	19.8	-47 23	10.5	11.1	Fo	2	..	39667b
44	6589	19.4	-19 52	9.98	10.8	Ko	1	..	24530b	94	10071	19.8	-56 0	8.4	9.4	Fo	5	..	39699b
45	6416	19.4	-20 56	8.7	9.7	Ko	5	..	24530b	95	7887	19.8	-59 44	10.2	10.8	Go	1	..	39699b
46	6120	19.4	-22 32	8.1	9.3	Ko	6	..	24530b	96	3433	19.9	+52 51	9.7	11.1	Mb	1	..	21192i
47	18186	19.4	-27 54	8.2	8.2	F8	7	..	45144b	97	4456	19.9	+43 45	8.6	8.6	Ao	2	..	38140i
48	15017	19.4	-39 35	9.9	10.1	A5	1	..	40743b	98	5024	19.9	+35 49	6.82	6.65	B3	7	..	38574i
49	13555	19.4	-51 11	9.9	10.4	F8	2	..	39663b	99	4904	19.9	+31 50	5.46	5.46	Ao	8	0,10	16935i
50	1799	19.5	+64 48	7.35	7.69	F2	8	..	37909i	100	4903	19.9	+31 35	9.2	10.2	Ko	1	..	38620i

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	5099	19.9	+20 4	9.7	10.1	F5	2	..	38617i	51	1234	20.3	-79 24	9.6	10.1	F8	5	..	38135b
2	5216	19.9	+10 5	8.72	9.28	G0	2	..	37360i	52	2444	20.4	+61 44	5.20	6.38	K5	8	0,8	38937i
3	5153	19.9	+6 29	8.6	9.7	K2	2	..	37360i	53	2956	20.4	+55 35	7.61	8.61	K0	3	..	37241i
4	6008	19.9	-7 32	9.7	10.8	K2	1	..	24584b	54	4041	20.4	+46 39	8.6	9.6	A0	1	..	38598i
5	6304	19.9	-18 10	8.5	9.6	K2	4	..	40866b	55	4905	20.4	+31 54	9.3	10.4	K2	1	..	38620i
6	15866	19.9	-36 44	7.8	7.9	A2	9	..	23754b	56	4547	20.4	+27 39	8.9	9.9	K0	2	..	38620i
7	14645	19.9	-45 58	9.5	10.5	K0	3	..	39667b	57	4833	20.4	+22 51	4.57	5.13	G0	..	R	56,103
8	14498	19.9	-48 45	9.7	9.4	G0	6	..	39667b	58	4926	20.4	+17 6	8.2	9.3	K2	2	..	38618i
9	14140	19.9	-49 27	9.7	10.3	A0	4	..	39667b	59	4990	20.4	+15 9	8.14	8.22	A3	4	..	38618i
10	1034	19.9	-80 52	9.3	10.1	G5	4	..	38135b	60	6206	20.4	-6 33	9.7	10.0	F2	2	..	19957b
11	6305	20.0	-18 38	8.6	8.7	A5	6	..	40866b	61	6186	20.4	-9 6	9.9	10.9	K0	4	..	24584b
12	6305	20.0	-18 38	8.6	8.7	A5	6	..	40866b	62	17645	20.4	-24 30	10.0	10.8	G5	1	..	39389b
13	6124	20.0	-22 35	9.9	10.3	G0	1	..	39389b	63	17517	20.4	-32 48	8.7	9.9	G0	5	..	42810b
14	14647	20.0	-46 39	10.5	10.8	G0	3	..	39667b	64	15144	20.4	-40 4	10.1	10.4	A3	1	..	40743b
15	914	20.1	+76 32	8.8	8.9	A5	3	..	38139i	65	10272	20.4	-57 46	10.2	11.2	K0	1	..	39699b
16	3435	20.1	+52 52	7.8	7.8	A0	4	..	38598i	66	1581	20.4	-76 12	10.8	10.8	A	2	..	38135b
17	4831	20.1	+22 31	8.3	8.4	A2	3	3,3	38617i	67	4036	20.5	+50 54	9.2	9.3	A3	2	..	38598i
18	5167	20.1	+5 32	9.3	9.6	F2	1	..	14898b	68	5025	20.5	+35 37	7.62	7.62	A0	4	..	38574i
19	5006	20.1	+4 23	8.8	9.8	K0	2	..	38163i	69	4514	20.5	-0 1	8.8	9.4	G0	2	..	38163i
20	6111	20.1	-10 36	10.3	10.7	F5	2	..	24584b	70	6111	20.5	-8 23	9.1	10.2	K2	2	..	24584b
21	19543	20.1	-30 34	7.90	9.0	K2	6	..	42802b	71	17894	20.5	-23 45	10.0	11.4	K0	2	..	24530b
22	15141	20.1	-39 59	9.0	10.4	G5	1	..	40743b	72	18698	20.5	-29 30	9.6	10.8	G0	2	..	42802b
23	10284	20.1	-54 35	9.3	10.0	G5	2	..	39663b	73	17518	20.5	-32 35	9.0	9.7	F8	6	..	42810b
24	4768	20.2	+41 41	7.80	8.22	F5	3	..	38140i	74	15246	20.5	-37 6	9.1	9.9	K0	2	..	40743b
25	4625	20.2	+26 33	9.2	9.2	A	1	..	38620i	75	14142	20.5	-49 28	10.5	11.2	G0	1	..	39667b
26	4832	20.2	+22 59	8.8	9.1	F0	2	..	36911i	76	10023	20.5	-55 37	10.1	10.4	F2	1	..	39699b
27	4665	20.2	+2 41	9.7	10.7	K0	1	..	38163i	77	10073	20.5	-56 29	9.1	9.5	F0	4	..	39699b
28	6402	20.2	-13 4	8.7	9.0	F0	3	..	20146b	78	7888	20.5	-59 50	9.43	10.2	G5	2	..	39699b
29	6467	20.2	-14 33	8.11	9.11	K0	3	E	20146b	79	2068	20.5	-74 23	7.8	8.6	G5	8	..	38135b
30	6306	20.2	-17 49	9.7	10.3	G0	3	..	17041b	80	1887	20.6	+65 39	8.4	8.7	F0	2	..	37909i
31	17892	20.2	-23 42	10.3	11.4	K0	1	..	24530b	81	1989	20.6	+64 0	8.4	8.4	A0	2	..	37909i
32	17642	20.2	-24 34	10.3	10.4	G0	1	..	39389b	82	3002	20.6	+56 18	8.7	9.0	F2	2	..	37278i
33	15369	20.2	-43 27	8.6	8.6	F5	6	..	41078b	83	4036	20.6	+49 6	8.25	8.23	B9	5	..	38598i
34	10022	20.2	-55 38	9.9	10.3	F5	1	..	39699b	84	4934	20.6	+25 39	8.36	9.36	K0	1	..	38620i
35	2761	20.2	-72 19	9.7	10.5	G5	3	..	38385b	85	5989	20.6	-5 39	9.7	10.3	G0	3	..	19957b
36	915	20.3	+76 58	7.9	8.3	F5	5	R	38139i	86	6071	20.6	-11 42	8.5	9.9	Ma	3	..	20146b
37	1088	20.3	+63 18	6.76	7.76	A2	5	..	37909i	87	6485	20.6	-12 10	9.7	9.8	A2	2	..	20146b
38	2969	20.3	+54 33	7.55	8.33	G5	3	..	37241i	88	6750	20.6	-17 11	10.1	10.7	G0	1	..	17041b
39	4929	20.3	+21 39	9.5	10.1	G0	2	..	38617i	89	6419	20.6	-21 9	8.3	8.8	G0	4	..	41985b
40	5028	20.3	+8 1	9.7	10.1	F5	2	..	37360i	90	..	20.6	-69 31	..	..	K0	2	..	38368b
41	5168	20.3	+5 30	8.8	9.8	K0	2	..	14898b	91	2762	20.6	-71 0	9.4	10.2	G5	4	..	38368b
42	4431	20.3	-0 45	9.3	9.4	A2	2	..	14175b	92	4037	20.7	+48 46	8.0	8.0	A0	3	..	38598i
43	6125	20.3	-22 12	8.7	9.3	F0	5	..	24530b	93	4413	20.7	+44 24	8.6	8.6	A0	2	..	38140i
44	16626	20.3	-26 29	9.3	11.0	K0	1	..	45144b	94	4773	20.7	+24 25	6.78	6.86	A3	7	..	38123i
45	19544	20.3	-30 6	9.2	9.9	G5	4	..	42802b	95	5102	20.7	+19 53	10.0	10.0	A	1	..	38617i
46	15482	20.3	-38 19	9.0	9.8	A3	3	..	40743b	96	6470	20.7	-14 42	9.11	9.61	F8	6	..	24575b
47	13559	20.3	-51 33	10.1	10.0	F2	3	..	39663b	97	17897	20.7	-23 4	9.5	9.3	F5	4	..	45144b
48	3570	20.3	-68 35	9.4	9.9	F8	6	..	38368b	98	18699	20.7	-29 46	10.0	11.1	G0	1	..	42802b
49	1573	20.3	-77 20	9.6	10.0	F5	4	..	38135b	99	10025	20.7	-55 32	10.5	10.6	A5	2	..	39663b
50	1573	20.3	-77 20	9.6	10.0	F5	4	..	38135b	100	4888	20.7	-63 48	7.2	7.3	A3	7	..	42519b

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23^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.
I	3571	20.7	-68 46	9.7	10.5	G5	4	..	38368b	51	4550	21.2	+28 15	8.8	9.4	G	I	..	3862oi
2	4150	20.8	+47 18	8.2	9.4	K5	I	..	38598i	52	6751	21.2	-17 22	9.9	10.5	Go	I	..	17041b
3	6285	20.8	-16 41	8.7	9.3	Go	4	..	40866b	53	15149	21.2	-40 34	8.4	9.5	K5	4	..	41078b
4	6420	20.8	-21 12	4.52	6.6	K5	..	3,9R	28,217	54	14503	21.2	-48 45	8.5	8.8	F5	7	..	39667b
5	17523	20.8	-32 25	9.0	11.4	K5	2	..	42810b	55	12152	21.2	-51 55	9.2	10.3	Go	3	..	39663b
6	15789	20.8	-35 43	10.5	11.1	Ko	I	..	42810b	56	10275	21.2	-57 6	10.0	10.6	Go	2	..	39699b
7	15877	20.8	-35 56	10.5	10.8	A3	I	..	42810b	57	7889	21.2	-58 58	8.1	8.5	Ko	8	2,2	39699b
8	15876	20.8	-36 23	10.3	10.2	F5	2	..	40743b	58	7660	21.2	-60 12	7.79	8.1	F5	9	..	39699b
9	14654	20.8	-46 9	10.1	11.2	Go	2	..	39667b	59	3964	21.2	-67 8	6.46	8.1	Ko	9	..	38368b
10	14576	20.8	-47 29	10.8	10.9	Go	I	..	39667b	60	2591	21.3	+59 7	8.1	8.1	A	2	E	38078i
11	2970	20.9	+54 53	8.06	9.13	K2	2	..	37278i	61	5149	21.3	+19 2	9.0	9.6	Go	2	..	38617i
12	4859	20.9	+3 25	9.7	10.7	Ko	I	..	38163i	62	4860	21.3	+3 49	8.4	8.5	A3	3	..	10158b
13	6011	20.9	-7 41	9.2	10.0	G5	3	..	24584b	63	6112	21.3	-8 19	9.7	10.5	G5	2	..	24584b
14	6286	20.9	-15 46	8.7	9.5	G5	3	..	24575b	64	6405	21.3	-13 5	9.7	10.3	Go	3	..	24584b
15	6592	20.9	-19 55	8.83	9.1	F5	7	..	24530b	65	6421	21.3	-21 44	8.9	9.6	Ko	6	..	24530b
16	16313	20.9	-27 3	9.6	9.9	Go	3	..	45144b	66	6128	21.3	-22 18	6.63	7.6	Ko	4	0,10	41985b
17	18199	20.9	-27 59	6.70	7.8	Ko	..	0,7	56,150	67	15253	21.3	-41 1	9.7	10.2	K2	I	..	41078b
18	2287	20.9	-73 26	8.0	8.6	Go	5	..	38135b	68	12153	21.3	-52 44	9.1	10.9	K2	2	..	39663b
19	3440	21.0	+52 27	6.94	8.29	Ma	5	R	37241i	69	1607	21.4	+66 22	7.60	7.60	Ao	6	..	37909i
20	4041	21.0	+49 1	8.1	9.2	K2	I	..	38598i	70	2539	21.4	+60 53	8.2	8.6	F5	3	..	38937i
21	4414	21.0	+44 47	7.92	8.48	Go	3	..	38140i	71	2972	21.4	+54 34	8.9	8.9	Ao	2	..	37241i
22	4906	21.0	+31 27	9.4	10.5	K2	I	..	3862oi	72	3444	21.4	+52 38	8.4	8.4	Ao	4	..	37241i
23	4628	21.0	+27 10	7.8	8.3	F8	4	R	38607i	73	5030	21.4	+8 7	7.06	7.62	Go	5	..	3736oi
24	4627	21.0	+27 8	8.23	8.31	A3	3	..	23138i	74	6012	21.4	-7 9	7.26	8.33	K2	7	..	17391b
25	4434	21.0	-1 2	8.8	9.4	G	I	..	14175b	75	6114	21.4	-10 35	8.5	8.8	Fo	4	..	20146b
26	6127	21.0	-21 58	9.1	9.3	Go	6	..	24530b	76	6752	21.4	-16 49	9.1	10.3	K5	3	..	40866b
27	17898	21.0	-23 37	8.4	9.3	Ko	4	..	45144b	77	6593	21.4	-20 20	9.9	10.7	G5	2	..	24530b
28	14655	21.0	-46 42	9.7	10.0	F8	5	..	39667b	78	17530	21.4	-32 19	10.3	11.1	Go	2	..	42810b
29	10461	21.0	-53 17	5.54	5.82	Fo	..	2,R	56,150	79	8072	21.4	-57 52	8.3	8.8	Ko	5	..	39699b
30	1582	21.0	-76 34	9.0	9.5	F8	5	..	38135b	80	4889	21.4	-63 17	6.66	8.7	Ko	6	..	42519b
31	1574	21.0	-77 45	9.9	10.4	F8	4	..	38135b	81	1376	21.5	+68 25	7.02	8.02	Ko	5	..	37909i
32	3441	21.1	+53 3	9.0	9.0	Ao	2	..	38598i	82	4928	21.5	+16 58	7.8	8.9	K2	I	..	38618i
33	4773	21.1	+41 59	Neb.	Neb.	Pe	..	R	76,23	83	5008	21.5	+4 57	9.0	10.0	Ko	I	..	38163i
34	4774	21.1	+25 8	8.11	8.11	Ao	3	..	38607i	84	5993	21.5	-5 33	9.4	10.4	Ko	I	..	19957b
35	4834	21.1	+23 11	9.0	9.1	A3	2	E	38123i	85	6213	21.5	-5 47	8.3	8.8	F8	7	..	19957b
36	4930	21.1	+21 27	9.2	9.7	F8	2	..	38617i	86	6075	21.5	-10 57	10.1	11.1	Ko	2	..	24584b
37	5058	21.1	+8 23	7.66	8.66	Ko	4	..	3736oi	87	6076	21.5	-11 35	8.3	8.3	B8	6	..	20146b
38	6074	21.1	-11 13	8.7	9.8	K2	3	..	20146b	88	15256	21.5	-37 32	9.3	9.9	F8	2	..	40743b
39	6404	21.1	-13 30	7.70	7.76	A2	8	..	20146b	89	15376	21.5	-43 22	9.5	9.7	A2	4	..	41078b
40	6419	21.1	-15 16	9.1	9.9	G5	5	..	24575b	90	7890	21.5	-59 2	5.62	6.9	Ko	..	0,8-	56,150
41	17899	21.1	-23 18	9.5	10.2	Ko	3	..	24530b	91	1575	21.5	-77 31	9.5	10.1	Go	4	..	38135b
42	16040	21.1	-34 51	9.23	9.9	Ko	5	..	42810b	92	4046	21.6	+48 31	9.2	9.3	A2	I	..	38598i
43	14502	21.1	-48 41	9.7	10.0	Go	4	..	39667b	93	4945	21.6	+31 13	7.9	7.9	Ao	5	0,4	3862oi
44	14147	21.1	-48 54	9.3	10.3	F8	4	..	39667b	94	4835	21.6	+23 9	8.9	9.0	A5	2	..	35762i
45	2763	21.1	-70 56	8.7	9.0	Fo	8	..	38368b	95	5061	21.6	+9 12	8.5	9.3	G5	2	..	3736oi
46	1583	21.1	-76 58	8.5	8.9	F5	6	..	38135b	96	4724	21.6	+1 56	6.82	7.82	Ko	5	..	38163i
47	3442	21.2	+52 50	7.9	9.1	K5	4	..	37241i	97	6490	21.6	-12 5	9.7	10.5	G5	3	..	24584b
48	4417	21.2	+44 49	7.77	8.55	G5	2	..	38140i	98	6488	21.6	-12 16	10.6	11.4	G5	2	..	24584b
49	4418	21.2	+44 29	9.2	10.3	K2	I	..	38140i	99	6489	21.6	-12 25	10.6	11.6	Ko	2	..	24584b
50	4999	21.2	+38 48	6.78	6.78	Ao	6	..	38140i	100	16639	21.6	-26 14	9.3	10.1	G5	2	..	45144b

THE HENRY DRAPER CATALOGUE.

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23^h 21^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	14579	21.6	-47 39	10.5	11.5	Ko	1	..	39667b	51	6132	22.0	-22 39	10.3	10.8	F8	2	..	24530b
2	13976	21.6	-50 43	6.34	6.7	B8	..	..	56,150	52	18204	22.0	-28 36	8.6	9.0	Ko	4	..	45144b
3	13977	21.6	-50 50	8.3	9.2	K2	7	..	39663b	53	15886	22.0	-36 44	9.9	10.5	Ko	1	..	40743b
4	6745	21.6	-61 15	8.4	10.2	K2	2	..	19899b	54	10286	22.0	-54 25	9.3	10.0	F5	2	..	39663b
5	3322	21.6	-69 26	10.2	11.0	G5	3	..	38368b	55	1201	22.1	+72 4	8.6	8.7	A2	3	..	38139i
6	3446	21.7	+52 37	7.8	9.0	K5	3	..	38598i	56	4908	22.1	+31 58	8.1	8.4	Fo	6	..	38620i
7	5085	21.7	+39 50	6.72	7.50	G5	6	..	38140i	57	5009	22.1	+4 58	8.6	9.6	Ko	1	..	38163i
8	4582	21.7	+28 29	9.0	9.8	G5	2	..	38620i	58	4999	22.1	+0 34	6.44	7.44	Ko	7	0,8	38163i
9	5103	21.7	+19 17	8.5	9.3	G5	2	..	38617i	59	5639	22.1	-3 11	7.59	8.59	Ko	4	..	14175b
10	6077	21.7	-11 29	9.4	10.6	K5	3	..	24584b	60	6493	22.1	-12 45	10.6	11.6	Ko	2	..	24584b
11	6291	21.7	-15 48	6.89	6.97	A3	..	..	56,150	61	6425	22.1	-15 23	9.4	10.4	Ko	1	..	24575b
12	17904	21.7	-23 17	7.32	8.4	Ko	6	..	45144b	62	17666	22.1	-24 16	9.8	10.4	Go	1	..	45144b
13	17532	21.7	-32 18	9.7	10.8	Go	3	..	42810b	63	17535	22.1	-32 11	9.0	9.7	F8	6	3,5	42810b
14	15797	21.7	-35 43	10.3	10.8	Go	1	..	42810b	64	3966	22.1	-67 28	8.9	9.9	Ko	6	..	38368b
15	13978	21.7	-50 50	9.1	10.3	K2	1	..	39663b	65	1584	22.1	-75 56	10.1	10.5	F5	3	..	38135b
16	7661	21.7	-60 13	9.4	9.9	F8	2	..	39699b	66	896	22.1	-82 29	9.0	10.0	Ko	1	..	15165b
17	6747	21.7	-61 26	8.5	8.7	A5	4	..	19899b	67	749	22.1	-83 5	8.9	9.9	Ko	2	..	15165b
18	6746	21.7	-61 44	8.1	8.4	F8	6	..	19899b	68	1993	22.2	+63 45	7.90	7.98	A3	4	..	37909i
19	2540	21.8	+60 32	6.68	6.76	A3	7	0,7	37909i	69	3158	22.2	+54 1	8.6	8.6	Ao	2	..	38598i
20	4047	21.8	+46 45	8.0	8.0	Ao	4	..	38598i	70	4051	22.2	+48 58	9.7	..	Nb	..	..	M
21	4419	21.8	+44 47	7.40	7.96	Go	5	..	38140i	71	4783	22.2	+41 39	7.8	8.6	G5	2	..	38140i
22	4780	21.8	+42 1	7.8	8.3	F8	3	..	38140i	72	5153	22.2	+18 40	8.4	8.9	F8	3	..	38618i
23	5077	21.8	+40 53	8.70	8.78	A3	2	..	38140i	73	6115	22.2	-9 57	9.4	10.4	Ko	1	..	24575b
24	5332	21.8	+21 9	9.4	9.5	A3	2	..	38617i	74	6116	22.2	-10 20	9.4	10.4	Ko	3	..	24575b
25	4998	21.8	+0 42	4.94	5.00	A2p	..	R	56,103	75	6494	22.2	-12 43	11.0	11.5	F8	1	..	24584b
26	6491	21.8	-12 1	10.7	10.7	Ao	1	..	24584b	76	6407	22.2	-13 29	7.50	8.85	Ma	6	..	20146b
27	6131	21.8	-21 46	9.2	10.2	K2	3	..	24530b	77	6310	22.2	-18 8	9.4	10.2	G5	1	..	17041b
28	6130	21.8	-22 37	9.1	9.6	F8	4	0,3	24530b	78	16463	22.2	-25 2	8.65	9.3	G5	3	..	45144b
29	12154	21.8	-52 51	8.5	9.5	G5	5	..	39663b	79	16646	22.2	-26 31	9.3	10.7	Ko	1	..	45144b
30	10463	21.8	-53 14	9.8	10.3	F8	3	..	39663b	80	16321	22.2	-27 4	10.0	10.2	F2	1	..	45144b
31	3774	21.8	-66 7	8.6	9.6	Ko	1	..	42519b	81	16320	22.2	-27 50	7.34	8.0	Fo	7	..	45144b
32	2593	21.9	+58 45	8.75	8.75	A	1	E	38078i	82	15154	22.2	-40 48	8.4	9.0	G5	6	..	41078b
33	4781	21.9	+41 22	8.0	8.1	A2	3	..	38140i	83	2288	22.2	-73 50	9.1	9.2	A3	5	..	38135b
34	5078	21.9	+40 29	7.62	7.76	A5	5	..	38140i	84	..	22.3	+62 59	..	..	Ao	1	..	38937i
35	5333	21.9	+20 59	10.6	11.2	G	1	..	38617i	85	4672	22.3	+42 21	5.65	5.63	B9	8	..	38140i
36	6193	21.9	-9 33	10.1	10.6	F8	2	..	24575b	86	4784	22.3	+41 28	8.4	8.4	Ao	3	..	38140i
37	17661	21.9	-24 8	11.0	11.0	F8	1	..	39389b	87	5030	22.3	+35 26	8.7	8.8	A5	2	5,2-	38574i
38	16319	21.9	-27 32	10.0	10.7	G5	1	..	45144b	88	5032	22.3	+7 31	7.7	8.7	Ko	6	..	37360i
39	16045	21.9	-34 15	10.3	11.4	G5	1	..	42810b	89	4862	22.3	+3 54	8.7	9.3	Go	3	..	10158b
40	4890	21.9	-62 54	9.5	9.6	A2	2	..	19899b	90	4516	22.3	+0 10	9.13	10.13	Ko	1	..	14175b
41	1331	22.0	+70 8	6.74	6.80	A2	7	0,5	38139b	91	17670	22.3	-24 22	9.6	11.0	Go	1	..	39389b
42	3009	22.0	+56 20	8.0	8.5	F8	3	..	37278i	92	17669	22.3	-24 48	9.3	9.9	G5	2	..	45144b
43	4160	22.0	+48 0	8.0	8.0	Ao	5	..	38598i	93	19296	22.3	-31 49	9.3	9.9	Fo	3	..	42802b
44	4782	22.0	+41 38	8.9	8.9	Ao	1	..	38140i	94	16047	22.3	-34 11	7.38	8.0	F8	4	..	41749b
45	5028	22.0	+35 33	8.2	9.0	G5	2	..	38615i	95	14508	22.3	-48 24	9.9	10.9	Ko	3	..	39667b
46	4776	22.0	+24 51	7.46	7.60	A5	4	..	38123i	96	13570	22.3	-50 54	7.4	8.6	G5	..	0,3	56,150
47	4747	22.0	+23 54	8.9	9.3	F5	2	..	35762i	97	7662	22.3	-60 19	9.2	10.2	Ko	2	..	39699b
48	4986	22.0	+12 34	8.6	9.4	G5	1	..	38618i	98	4930	22.4	+29 21	8.8	10.0	K5	1	..	38620i
49	6457	22.0	-19 23	9.9	10.2	G5	2	..	17041b	99	4777	22.4	+24 55	8.3	8.9	Go	2	..	38607i
50	6422	22.0	-21 17	9.2	9.3	F5	5	..	24530b	100	5106	22.4	+19 27	8.8	8.8	A	1	..	38617i

220900

23^h 22^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	6018	22.4	- 7 31	9.7	10.9	K5	1	..	19957b	51	4649	22.9	+ 32 26	7.40	7.54	A5	6	..	3862oi
2	16324	22.4	-27 14	8.3	8.7	F5	4	..	45144b	52	4838	22.9	+ 23 3	8.7	9.5	G5	3	..	38123i
3	19559	22.4	-30 4	8.2	9.9	K2	3	..	42802b	53	4938	22.9	+ 10 35	8.47	9.03	Go	4	..	3736oi
4	15892	22.4	-36 10	10.1	9.6	F5	2	..	23754b	54	5173	22.9	+ 5 50	4.45	5.23	G5	..	R	56,103
5	3323	22.4	-68 59	10.9	11.0	A2	2	..	38368b	55	5965	22.9	- 2 1	8.9	8.9	Ao	4	..	14175b
6	1525	22.5	+67 19	8.0	8.1	A5	4	..	37909i	56	5642	22.9	- 3 0	9.1	9.7	Go	2	..	14175b
7	1995	22.5	+63 41	8.6	8.6	Ao	2	..	37909i	57	6496	22.9	-12 0	6.48	7.04	Go	10	..	20146b
8	2976	22.5	+54 19	7.9	8.4	F8	6	..	37241i	58	6408	22.9	-12 46	7.7	9.1	Ma	4	..	20146b
9	4421	22.5	+44 49	7.67	7.67	Ao	4	..	3814oi	59	16470	22.9	-25 3	9.8	10.7	F8	1	..	45144b
10	4462	22.5	+43 19	8.0	9.2	K5	2	..	25982i	60	17538	22.9	-32 34	9.7	11.4	Go	3	..	42810b
11	4912	22.5	+32 0	9.4	9.8	F5	2	..	3862oi	61	15897	22.9	-36 27	9.7	10.5	G5	2	..	40743b
12	5334	22.5	+20 51	9.4	10.2	G5	2	..	38617i	62	917	23.0	+76 20	8.82	9.38	G	2	..	38139i
13	6597	22.5	-20 26	10.1	10.2	Go	3	..	39389b	63	1998	23.0	+63 22	7.40	8.40	Ko	3	..	37909i
14	16550	22.5	-32 53	9.7	9.8	A2	2	..	42810b	64	5336	23.0	+20 49	8.4	9.0	Go	3	..	38617i
15	16551	22.5	-33 6	9.3	11.4	Go	2	..	42810b	65	5933	23.0	+ 8 5	7.9	9.0	K2	3	..	3736oi
16	16334	22.5	-42 8	9.2	10.1	F8	3	..	41078b	66	5643	23.0	- 3 0	8.8	9.1	F2	6	..	14175b
17	15248	22.5	-44 15	8.8	9.4	Ao	6	..	39667b	67	5995	23.0	- 5 41	9.7	10.2	F8	2	..	19957b
18	10277	22.5	-56 59	7.46	7.6	F2	4	0,9	41858b	68	6019	23.0	- 6 53	10.6	10.6	Ao	1	..	19957b
19	1996	22.6	+64 4	8.4	8.4	Ao	3	..	37909i	69	6080	23.0	-10 53	9.9	10.2	Fo	3	..	24575b
20	4586	22.6	+28 42	8.8	9.9	K2	1	..	3862oi	70	6600	23.0	-20 43	10.7	11.0	Go	2	..	39389b
21	5107	22.6	+19 39	9.3	9.3	A	2	..	38617i	71	17911	23.0	-23 4	10.5	10.8	G5	1	..	45144b
22	4826	22.6	+16 5	9.3	9.9	Go	2	..	38618i	72	1585	23.0	-76 30	9.5	10.3	G5	4	..	38135b
23	4827	22.6	+16 5	8.2	8.8	Go	3	..	38618i	73	781	23.1	+79 37	9.9	9.9	Ko	3	5,3-	12216i
24	4725	22.6	+ 1 20	7.39	7.81	F5	4	..	38163i	74	1332	23.1	+69 49	5.63	5.69	A2	10	0,9	38139i
25	6458	22.6	-19 36	9.9	10.2	Ko	2	..	17041b	75	4056	23.1	+48 32	9.0	9.0	Ao	2	..	38598i
26	17910	22.6	-23 23	9.8	10.7	Ko	1	..	45144b	76	4989	23.1	+12 53	8.6	9.6	Ko	1	..	38618i
27	16468	22.6	-25 7	10.3	11.0	G5	1	..	39389b	77	6218	23.1	- 6 22	8.7	9.2	F8	6	..	19957b
28	16325	22.6	-27 0	8.0	8.3	F8	4	..	45144b	78	16654	23.1	-25 58	6.89	7.5	A3	8	..	45144b
29	15895	22.6	-36 6	6.35	7.7	K2	9	..	23754b	79	17539	23.1	-31 57	9.3	11.9	Mb	..	..	M
30	12157	22.6	-52 20	10.5	11.1	Go	1	..	39663b	80	15804	23.1	-35 49	8.8	10.5	K2	3	..	40743b
31	4125	22.7	+49 29	9.2	9.3	A2	2	..	38598i	81	15502	23.1	-38 19	8.4	10.3	G5	3	..	40743b
32	5080	22.7	+40 39	9.4	9.4	Ao	1	..	3814oi	82	15037	23.1	-39 12	8.1	9.0	G5	7	..	40743b
33	4778	22.7	+24 37	5.87	5.87	Ao	9	..	38607i	83	15039	23.1	-45 8	10.3	11.3	K5	1	..	39667b
34	5013	22.7	+ 5 11	8.31	8.73	F5	2	..	3736oi	84	14585	23.1	-47 16	8.3	8.6	Fo	7	..	39667b
35	6293	22.7	-15 51	6.86	8.04	K5	6	..	20146b	85	10079	23.1	-56 24	8.9	10.0	G5	3	..	39699b
36	6598	22.7	-19 56	10.1	10.2	G5	3	..	39389b	86	7663	23.1	-59 59	7.04	8.7	Ko	8	..	39699b
37	6599	22.7	-20 15	8.9	10.0	Ko	4	..	2453ob	87	4650	23.2	+33 1	9.4	9.5	A5	2	..	3862oi
38	19298	22.7	-31 24	7.8	9.4	Ko	3	..	42802b	88	5337	23.2	+20 44	8.8	9.1	Fo	2	..	38617i
39	8074	22.7	-58 11	8.8	9.9	Ko	2	..	39699b	89	4917	23.2	+17 59	7.8	8.1	Fo	6	0,4	38618i
40	1810	22.8	+65 5	7.00	8.00	Ko	6	..	37909i	90	5175	23.2	+ 5 32	8.2	8.5	F2	5	..	3736oi
41	4711	22.8	+33 54	8.2	8.3	A5	3	..	3862oi	91	6601	23.2	-20 42	9.4	10.2	K2	3	..	2453ob
42	4948	22.8	+30 48	9.2	10.0	G5	2	..	3862oi	92	15040	23.2	-38 53	9.0	9.9	F8	4	..	40743b
43	6216	22.8	- 6 2	10.1	10.5	F5	1	..	19957b	93	15250	23.2	-44 14	9.1	10.0	G5	2	..	41078b
44	6115	22.8	- 8 44	9.4	10.5	K2	3	..	24584b	94	12160	23.2	-51 59	9.1	10.6	K2	2	..	39663b
45	15036	22.8	-45 0	9.16	10.0	Ko	3	..	41078b	95	12159	23.2	-52 47	9.8	10.4	Go	2	..	39663b
46	3776	22.8	-66 38	8.6	9.6	Ko	3	..	38368b	96	10279	23.2	-57 26	8.2	8.8	F8	5	..	39699b
47	2764	22.8	-70 54	10.5	11.5	Ko	1	..	38368b	97	4140	23.2	-65 19	9.1	10.5	Mc	..	..	M
48	4127	22.9	+49 49	8.42	9.49	K2	3	..	38598i	98	2289	23.2	-73 13	9.3	10.5	K5	4	..	38385b
49	4465	22.9	+44 14	7.45	8.23	G5	3	..	3814oi	99	2595	23.3	+59 8	7.45	7.45	Ao	3	..	37241i
50	4676	22.9	+42 37	8.1	8.4	Fo	2	..	3814oi	100	4589	23.3	+28 59	9.0	10.2	K5	1	..	3862oi

THE HENRY DRAPER CATALOGUE.

221000

23^h 23^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	5644	23.3	— 3 12	8.5	9.7	K5	2	..	14175b	51	15043	23.6	—45 3	6.48	7.6	Ko	9	..	41078b
2	6411	23.3	—13 33	8.7	9.1	F5	4	..	20146b	52	14588	23.6	—47 15	9.7	10.6	Go	2	..	39667b
3	6423	23.3	—21 1	9.2	9.7	F8	5	..	24530b	53	14589	23.6	—47 17	9.1	10.3	G5	2	..	39667b
4	15900	23.3	—36 17	9.9	11.0	G5	1	..	40743b	54	13578	23.6	—51 35	8.1	8.8	F8	8	..	39663b
5	7664	23.3	—60 7	9.9	10.7	G5	3	..	39699b	55	10281	23.6	—57 2	9.5	10.0	F8	2	..	39699b
6	4891	23.3	—63 40	5.74	5.74	Aop	..	R	56,150	56	1782	23.6	—75 39	9.8	10.8	Ko	2	..	38135b
7	1577	23.3	—76 53	8.5	8.8	F2	5	0,7	14357b	57	4424	23.7	+45 9	7.87	8.87	Ko	2	..	38140i
8	2596	23.4	+58 47	8.00	9.35	Ma	2	..	16265m	58	4992	23.7	+13 6	9.0	10.0	Ko	1	..	38618i
9	4057	23.4	+48 29	9.0	9.3	F2	1	..	38598i	59	4939	23.7	+10 57	8.6	9.4	G5	2	..	37360i
10	4915	23.4	+31 43	8.8	9.8	Ko	3	..	38620i	60	6119	23.7	—10 39	8.7	9.7	Ko	4	..	24575b
11	5111	23.4	+19 21	6.66	6.94	Fo	7	0,7	38123i	61	6433	23.7	—14 51	9.55	10.55	Ko	4	..	24575b
12	4920	23.4	+18 9	9.5	9.8	F	2	E	38617i	62	6432	23.7	—15 41	9.7	10.1	F5	2	..	17041b
13	5176	23.4	+ 5 15	8.56	9.56	Ko	1	..	37360i	63	17684	23.7	—23 54	10.5	10.7	Ko	2	..	39389b
14	4669	23.4	+ 3 1	9.3	10.1	G5	1	..	38163i	64	16475	23.7	—24 54	9.8	9.9	A5	2	..	45144b
15	6021	23.4	— 7 33	9.9	11.1	K5	1	..	19957b	65	16328	23.7	—27 16	10.5	10.7	F5	1	..	45144b
16	6197	23.4	— 9 4	8.5	8.9	F5	5	..	24575b	66	17541	23.7	—32 44	9.6	11.4	Go	1	..	42810b
17	6757	23.4	—17 33	10.3	10.8	F8	2	..	17041b	67	13990	23.7	—50 13	10.3	10.9	Go	1	..	39667b
18	13985	23.4	—50 13	10.3	11.2	K2	1	..	39667b	68	12162	23.7	—52 8	8.8	9.5	Go	6	..	39663b
19	10029	23.4	—55 2	9.84	10.9	Ma	..	..	M	69	10031	23.7	—55 3	6.55	7.7	Ko	..	0,4-	56,150
20	3967	23.4	—67 46	8.8	9.6	G5	6	..	38368b	70	6751	23.7	—61 18	7.2	8.3	F5	5	..	19899b
21	766	23.5	+81 8	8.8	9.6	G5	1	..	38964i	71	1035	23.8	+73 34	7.17	7.45	Fo	7	..	38903i
22	3452	23.5	+52 21	9.5	9.6	A2	1	..	38598i	72	2234	23.8	+62 51	7.9	8.3	F5	1	..	37909i
23	4048	23.5	+50 49	7.7	8.7	Ko	4	..	38598i	73	4051	23.8	+50 31	8.9	9.7	G5	1	..	38598i
24	4053	23.5	+46 44	8.0	9.2	K5	1	..	38598i	74	4169	23.8	+48 6	7.7	8.0	Fo	6	..	38598i
25	4847	23.5	+38 13	8.8	8.9	A2	2	..	38574i	75	5012	23.8	+39 4	8.2	8.6	F5	2	..	38140i
26	5066	23.5	+ 8 53	7.8	8.2	F5	6	..	37360i	76	4714	23.8	+34 2	8.8	9.8	Ko	1	..	38620i
27	6475	23.5	—14 35	8.91	9.33	F5	1	..	20146b	77	5221	23.8	+ 9 20	9.5	9.9	F5	2	..	37360i
28	6135	23.5	—22 1	8.9	9.9	Ko	5	..	24530b	78	5003	23.8	+ 0 43	9.0	10.0	Ko	2	..	14175b
29	17540	23.5	—31 56	7.9	9.4	Ko	5	..	42802b	79	6025	23.8	— 7 11	10.1	10.6	F8	2	..	19957b
30	15265	23.5	—37 22	9.3	9.9	A5	2	..	40743b	80	6118	23.8	— 7 57	8.1	8.9	G5	4	..	19957b
31	15260	23.5	—41 37	9.4	10.2	G5	3	..	41078b	81	6120	23.8	— 9 49	6.46	7.46	Ko	8	..	20146b
32	15251	23.5	—44 20	8.9	10.0	F8	4	..	41078b	82	6434	23.8	—15 6	9.4	10.4	Ko	2	..	24575b
33	1235	23.5	—79 8	9.4	10.4	Ko	3	..	38135b	83	18220	23.8	—28 50	7.7	7.9	F5	7	..	45144b
34	1320	23.6	+71 15	8.8	8.8	B9	4	0,3	38903i	84	14517	23.8	—48 5	9.7	11.1	Ko	1	..	39667b
35	1811	23.6	+64 50	8.8	8.8	Ao	3	..	37909i	85	3778	23.8	—66 28	9.5	10.5	Ko	1	..	38368b
36	2233	23.6	+62 28	8.0	8.8	G5	1	..	37909i	86	2762	23.8	—72 13	9.2	10.2	Ko	4	..	38385b
37	2454	23.6	+61 22	7.9	7.9	Ao	4	0,3	38937i	87	834	23.9	+79 1	8.0	8.1	A2	4	..	38964i
38	2550	23.6	+60 55	7.9	8.0	A3	4	..	38937i	88	2988	23.9	+54 22	9.2	9.2	A	2	..	37241i
39	2729	23.6	+59 31	7.6	8.6	Ko	3	..	38078i	89	2986	23.9	+54 17	9.7	11.1	Mc	..	..	M
40	5092	23.6	+39 27	9.2	9.2	Ao	1	..	38140i	90	4918	23.9	+31 15	8.0	8.4	F5	5	..	38620i
41	5007	23.6	+11 24	9.1	10.1	K	1	..	37360i	91	5971	23.9	— 2 1	8.9	10.0	K2	1	..	14175b
42	5160	23.6	+ 6 49	8.7	9.3	Go	3	..	37360i	92	6121	23.9	—10 41	9.9	10.3	F5	2	..	24575b
43	4440	23.6	— 1 22	7.54	8.04	F8	6	..	14175b	93	6316	23.9	—18 39	9.9	10.4	F8	2	..	17041b
44	6220	23.6	— 5 56	7.11	8.18	K2	7	..	19957b	94	6463	23.9	—19 20	10.3	11.2	K2	1	..	17041b
45	6083	23.6	—11 44	9.7	10.1	F5	4	..	24575b	95	17919	23.9	—23 48	9.3	9.9	F8	3	..	45144b
46	6497	23.6	—12 17	10.3	11.3	Ko	1	..	24575b	96	16329	23.9	—27 39	9.2	9.2	Fo	4	..	45144b
47	6296	23.6	—15 47	9.1	9.7	Go	3	..	17041b	97	18714	23.9	—29 26	10.0	10.2	K2	3	..	42802b
48	6603	23.6	—19 55	9.4	10.2	Ko	2	..	39389b	98	14161	23.9	—48 57	7.8	8.2	Ao	8	..	39667b
49	6604	23.6	—20 43	10.1	10.3	Fo	3	..	39389b	99	10467	23.9	—53 14	7.0	7.5	G5	8	0,3	39675b
50	16662	23.6	—26 3	9.8	10.2	Ko	2	..	45144b	100	835	24.0	+79 15	7.48	7.54	A2	2	E	38590i

221100

23^h 24^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	4053	24.0	+50 26	9.0	9.3	Fo	1	..	38598i	51	6201	24.4	-9 34	10.3	10.3	Ao	3	..	24575b
2	4791	24.0	+41 52	7.65	7.65	Ao	4	..	38140i	52	6759	24.4	-17 18	8.7	9.5	G5	2	..	17041b
3	4934	24.0	+29 36	9.2	10.2	Ko	1	..	38620i	53	17691	24.4	-24 25	11.2	10.4	Go	2	..	39389b
4	5338	24.0	+21 14	9.0	9.1	A2	3	E	38617i	54	15910	24.4	-36 23	9.3	10.4	Go	2	0,2	40743b
5	6605	24.0	-20 6	10.1	10.8	F8	1	..	39389b	55	15173	24.4	-40 46	9.4	10.3	G5	2	..	41078b
6	6136	24.0	-22 42	8.1	8.4	F2	4	..	45144b	56	14673	24.4	-46 27	8.1	8.0	F5	8	..	39667b
7	18221	24.0	-28 9	9.0	8.7	F5	5	..	45144b	57	10033	24.4	-54 52	10.1	10.9	G5	2	..	39675b
8	19569	24.0	-30 22	10.0	11.1	F8	1	..	42802b	58	2455	24.5	+62 2	8.5	8.8	Fo	2	..	38937i
9	19303	24.0	-31 18	9.0	9.9	Go	3	..	42802b	59	3455	24.5	+52 51	8.5	8.5	B9	2	..	37241i
10	7892	24.0	-59 29	10.5	11.1	Go	1	..	39699b	60	4796	24.5	+41 49	7.65	7.63	B9	5	..	38140i
11	3453	24.1	+52 33	8.6	8.6	Ao	3	..	38598i	61	5178	24.5	+5 32	8.4	8.9	F8	3	..	37360i
12	4427	24.1	+44 43	8.70	8.70	Ao	2	..	38140i	62	6028	24.5	-6 51	8.9	9.9	Ko	4	..	19957b
13	4844	24.1	+22 31	6.45	7.45	Ko	..	0,7	56,103	63	6086	24.5	-11 19	9.4	10.4	Ko	3	..	24575b
14	4830	24.1	+15 28	6.98	7.04	A2	7	..	38618i	64	6499	24.5	-12 27	10.3	11.3	Ko	1	..	24575b
15	5009	24.1	+12 13	4.67	5.67	Ko	..	5,10	56,103	65	6501	24.5	-12 30	10.6	11.8	K5	1	..	24575b
16	6424	24.1	-20 53	10.3	10.7	F8	2	..	39389b	66	16667	24.5	-26 35	9.8	10.2	A2	1	..	45144b
17	17687	24.1	-24 35	8.0	8.2	A2	7	..	45144b	67	1203	24.6	+71 41	8.0	8.6	Go	5	..	38139i
18	15167	24.1	-39 58	8.84	10.2	Ko	3	..	40743b	68	2991	24.6	+54 36	7.8	8.8	Ko	2	..	37241i
19	15168	24.1	-40 4	10.1	10.8	F	1	..	40743b	69	4241	24.6	+45 55	6.67	6.73	A2	6	..	38140i
20	10294	24.1	-53 58	8.6	8.9	Ao	6	..	39663b	70	4940	24.6	+29 53	8.2	9.2	Ko	3	..	38620i
21	10282	24.1	-57 49	9.4	10.0	Go	3	..	39699b	71	6123	24.6	-9 48	10.1	10.9	G5	3	..	24575b
22	1587	24.1	-76 33	10.4	11.4	Ko	1	..	38135b	72	6464	24.6	-19 4	9.1	9.9	Ko	3	..	17041b
23	720	24.2	+83 13	9.5	9.9	F5	1	..	37281i	73	6426	24.6	-20 51	9.2	10.3	K5	3	0,2	39389b
24	3454	24.2	+53 7	7.10	8.10	Ko	5	..	37241i	74	6427	24.6	-20 52	10.6	11.0	Go	1	..	39389b
25	4957	24.2	+31 9	8.3	9.4	K2	2	..	38620i	75	16349	24.6	-42 21	9.7	10.5	F5	2	..	41078b
26	5890	24.2	-4 9	8.7	8.7	Ao	4	..	14175b	76	1021	24.7	+74 21	9.2	9.5	F	2	..	36282i
27	17924	24.2	-23 37	10.0	9.6	F8	4	..	45144b	77	3456	24.7	+52 36	8.8	8.8	Ao	6	..	38598i
28	16567	24.2	-33 7	9.0	11.4	Ko	3	..	42810b	78	3623	24.7	+52 7	8.6	8.6	Ao	3	..	38598i
29	15510	24.2	-38 42	9.0	10.2	F5	2	..	40743b	79	5010	24.7	+11 28	8.8	9.4	Go	4	..	37360i
30	1036	24.3	+74 1	8.6	8.6	Ao	4	..	38903i	80	6419	24.7	-13 25	8.5	8.8	Fo	5	..	20146b
31	1322	24.3	+70 33	8.4	9.0	Go	4	..	38903i	81	6317	24.7	-17 49	9.2	9.8	Go	3	..	17041b
32	4919	24.3	+32 7	8.2	8.3	A3	3	..	38620i	82	6465	24.7	-19 9	10.3	11.1	Ko	1	..	17041b
33	4945	24.3	+25 16	7.91	8.98	K2	2	..	38123i	83	6428	24.7	-21 7	8.6	8.7	F5	4	..	45144b
34	6119	24.3	-8 21	9.1	9.6	F8	2	..	19957b	84	7894	24.7	-58 59	8.3	9.6	A5	4	..	39699b
35	6137	24.3	-22 43	9.2	9.7	Go	2	..	45144b	85	1037	24.8	+73 45	8.0	8.1	A2	3	0,3	38139i
36	16057	24.3	-34 20	10.3	11.3	Go	1	..	42810b	86	1038	24.8	+73 26	8.6	9.2	Go	2	..	38903i
37	15814	24.3	-35 27	9.3	10.7	Go	2	..	42810b	87	4056	24.8	+51 8	8.0	9.4	Ma	3	..	38598i
38	15172	24.3	-40 34	8.3	9.3	G5	4	..	41078b	88	4177	24.8	+47 50	7.72	7.72	Ao	7	..	38598i
39	14671	24.3	-46 13	9.9	10.9	F8	3	..	39667b	89	4852	24.8	+38 5	8.1	9.5	Ma	2	..	38574i
40	7893	24.3	-59 27	10.3	11.1	G5	1	..	39699b	90	4959	24.8	+31 10	8.6	8.7	A3	3	..	38620i
41	3005	24.3	-70 19	10.3	11.5	K5	2	..	38368b	91	4593	24.8	+28 21	8.9	10.0	K2	1	..	38620i
42	399	24.4	+85 52	6.61	6.89	Fo	8	..	37281i	92	5120	24.8	+13 21	8.8	9.9	K2	1	..	38618i
43	2555	24.4	+60 53	8.8	8.9	A2	2	..	38937i	93	4942	24.8	+11 8	8.6	8.9	F2	4	..	37360i
44	5095	24.4	+40 9	8.52	9.02	F8	2	..	38140i	94	5008	24.8	+0 37	8.6	9.4	G5	3	..	37350i
45	4932	24.4	+16 17	8.4	9.5	K2	1	..	38618i	95	6029	24.8	-6 49	9.4	10.4	Ko	3	..	19957b
46	4443	24.4	-1 35	7.10	7.66	Go	8	..	14175b	96	6124	24.8	-9 57	10.1	10.5	F5	2	..	24575b
47	5973	24.4	-2 21	6.59	7.59	Ko	8	..	14175b	97	6502	24.8	-12 27	9.9	10.5	Go	4	..	24575b
48	5999	24.4	-5 5	6.40	7.47	K2	5	2,10	44324b	98	6466	24.8	-19 15	10.1	9.9	F5	2	..	17041b
49	6027	24.4	-7 23	8.3	8.9	Go	5	..	19957b	99	17927	24.8	-23 13	8.4	8.4	Fo	6	..	45144b
50	6202	24.4	-9 13	8.9	9.5	Go	2	..	20146b	100	15277	24.8	-36 56	9.7	10.7	F8	1	..	40743b

THE HENRY DRAPER CATALOGUE.

221200

23^h 24^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	15175	24.8	-40 51	9.3	9.7	Go	3	..	41078b	51	16354	25.3	-42 9	9.2	10.8	K2	2	..	41078b
2	2071	24.8	-74 41	8.20	8.8	Go	8	..	38135b	52	8076	25.3	-58 40	7.8	9.0	Go	5	..	39699b
3	4066	24.9	+48 34	8.0	9.0	Ko	4	..	38598i	53	2748	25.4	+58 0	4.89	4.72	B3	..	2,10	6906c
4	4752	24.9	+24 13	7.27	8.27	Ko	4	..	38123i	54	4473	25.4	+43 52	8.0	8.5	F8	2	..	38140i
5	5224	24.9	+9 43	8.6	9.6	Ko	2	..	14898b	55	6467	25.4	-19 15	8.8	9.3	G5	5	..	17041b
6	6606	24.9	-20 43	8.9	9.9	K5	3	o,1	39389b	56	R	25.4	-22 49	9.8	10.8	Go	2	..	39389b
7	19576	24.9	-30 40	8.1	9.6	G5	3	..	42802b	57	17702	25.4	-24 45	7.50	7.9	Go	6	..	45144b
8	19312	24.9	-31 15	9.3	11.4	K2	1	..	42802b	58	16482	25.4	-25 17	10.5	11.0	Go	1	..	39389b
9	15914	24.9	-35 54	9.1	10.7	K2	2	..	40743b	59	19579	25.4	-30 7	9.3	10.3	Go	3	..	42802b
10	14523	24.9	-48 48	8.5	9.4	K2	6	..	39667b	60	14527	25.4	-47 58	9.5	10.9	Ko	1	..	39667b
11	13995	24.9	-50 41	9.7	11.2	G5	2	..	39667b	61	14526	25.4	-48 42	10.8	10.9	Go	1	..	39667b
12	10085	24.9	-56 46	9.7	10.3	Go	2	..	39699b	62	7665	25.4	-60 39	8.8	9.1	Ao	7	..	39699b
13	10285	24.9	-57 41	10.2	11.2	K	1	..	39699b	63	2602	25.5	+58 52	8.5	9.9	Ma	..	..	M
14	1036	24.9	-81 23	7.39	9.2	Ko	7	..	15165b	64	4963	25.5	+30 18	7.26	7.68	F5	7	..	38620i
15	1022	25.0	+74 41	6.54	6.54	Ao	8	o,8	38139i	65	6479	25.5	-13 51	8.9	9.3	F5	2	..	20146b
16	4687	25.0	+42 19	8.5	9.3	G5	1	..	38140i	66	17934	25.5	-23 36	9.8	10.5	F8	2	..	45144b
17	4938	25.0	+34 27	7.90	9.08	K5	2	..	38620i	67	16339	25.5	-27 51	8.8	9.0	Go	4	..	45144b
18	5342	25.0	+21 1	7.12	7.10	B9	8	..	38123i	68	19581	25.5	-30 25	9.8	10.2	Go	2	..	42802b
19	5891	25.0	-3 52	9.4	10.2	G5	1	..	14175b	69	4143	25.5	-64 56	7.85	8.1	F8	5	..	42519b
20	6001	25.0	-5 23	9.4	9.7	F2	2	..	19957b	70	1814	25.6	+65 8	8.80	9.36	Go	2	..	38737i
21	6225	25.0	-5 51	9.7	10.3	Go	1	..	19957b	71	4833	25.6	+16 1	7.30	8.08	G5	5	..	38618i
22	6088	25.0	-11 0	8.7	9.1	F5	3	..	20146b	72	5019	25.6	+4 41	7.12	7.20	A3	7	..	37350i
23	6478	25.0	-14 31	8.8	9.4	Go	1	..	20146b	73	5009	25.6	+0 19	7.53	8.60	K2	4	..	37350i
24	6319	25.0	-17 50	9.9	10.7	G5	1	..	17041b	74	19582	25.6	-30 38	10.3	11.4	F8	2	..	42802b
25	6430	25.0	-21 43	10.6	11.0	G5	2	..	39389b	75	15821	25.6	-35 40	8.07	9.2	Ko	5	..	40743b
26	6138	25.0	-22 26	7.46	7.9	F2	6	..	45144b	76	14528	25.6	-48 24	10.1	10.9	F8	1	..	39667b
27	17929	25.0	-23 3	9.5	9.7	Go	3	..	45144b	77	12165	25.6	-52 15	8.7	9.7	G5	4	..	39675b
28	16334	25.0	-27 46	10.3	10.7	F8	1	..	45144b	78	4075	25.7	+48 47	9.0	9.0	Ao	1	..	38598i
29	14524	25.0	-48 8	8.9	9.7	G5	4	..	39667b	79	4945	25.7	+21 29	7.57	7.85	Fo	5	..	38123i
30	7896	25.0	-59 12	8.1	9.0	Ao	5	..	37699b	80	5226	25.7	+9 48	8.4	9.4	Ko	4	..	37360i
31	3325	25.0	-69 38	7.20	7.1	Go	10	R	38368b	81	6125	25.7	-10 42	8.7	9.0	Fo	3	..	20146b
32	4137	25.1	+50 13	8.57	9.35	G5	2	..	38598i	82	6303	25.7	-16 32	7.80	8.30	F8	7	..	17041b
33	4430	25.1	+44 55	8.60	8.60	Ao	2	..	38140i	83	16575	25.7	-33 51	8.3	9.3	F8	5	..	42810b
34	4471	25.1	+43 24	7.8	7.8	Ao	3	..	38140i	84	13589	25.7	-51 19	10.5	10.9	F5	1	..	39667b
35	5016	25.1	+4 28	7.32	8.32	Ko	5	..	37350i	85	10301	25.7	-54 33	8.9	9.7	G5	4	..	39675b
36	6422	25.1	-62 46	8.3	9.3	Ko	4	..	42519b	86	10287	25.7	-57 0	9.9	10.3	F5	1	..	39699b
37	2747	25.2	+58 1	7.06	7.06	Ao	4	..	37241i	87	8077	25.7	-58 46	7.4	8.1	F8	7	..	39699b
38	3015	25.2	+56 15	8.0	8.0	Ao	5	..	37241i	88	3780	25.7	-66 50	9.5	10.5	K	1	..	38368b
39	4961	25.2	+31 10	8.7	9.7	Ko	2	..	38620i	89	3007	25.7	-69 54	9.58	10.8	Go	4	..	38368b
40	15280	25.2	-37 31	7.66	7.9	A5	8	..	23754b	90	1040	25.8	+73 19	9.2	9.5	Fo	2	..	38903i
41	16353	25.2	-42 33	6.76	7.9	Ko	8	..	41078b	91	3172	25.8	+53 43	8.6	8.7	A2	2	..	38598i
42	14168	25.2	-49 5	9.1	9.7	F5	4	..	39667b	92	4138	25.8	+49 19	8.6	8.6	B9	3	..	38598i
43	13996	25.2	-50 43	9.7	11.1	G5	1	..	39667b	93	4856	25.8	+38 6	6.21	7.21	Ko	4	..	38140i
44	3006	25.2	-70 48	10.4	11.5	K2	1	..	38368b	94	5040	25.8	+7 27	8.1	8.9	G5	4	..	37360i
45	880	25.3	+76 5	8.57	8.99	F5	3	..	38139i	95	5166	25.8	+7 11	8.7	9.3	Go	3	..	14898b
46	4070	25.3	+48 36	6.38	7.45	K2	8	..	38598i	96	6003	25.8	-5 36	8.1	9.1	Ko	4	..	19957b
47	4962	25.3	+30 49	8.2	8.5	F2	6	..	38620i	97	6304	25.8	-15 48	9.4	10.2	G5	1	..	17041b
48	5183	25.3	+5 53	7.8	7.8	Ao	4	..	37350i	98	6321	25.8	-18 30	9.2	9.5	Fo	4	..	17041b
49	6139	25.3	-22 33	8.5	9.3	K2	3	..	45144b	99	6608	25.8	-20 2	8.8	9.3	F2	5	..	39389b
50	15054	25.3	-38 53	8.3	9.3	Go	5	..	40743b	100	16487	25.8	-24 57	9.8	10.4	G5	1	..	45144b

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	10302	25.8	-54 27	10.0	10.3	Fo	2	..	39663b	51	17552	26.3	-31 53	8.3	8.4	A5	7	..	42802b
2	1528	25.9	+67 42	7.8	8.8	Ko	1	..	37909i	52	15056	26.3	-45 23	10.5	10.9	F8	2	..	39667b
3	4475	25.9	+43 25	8.1	9.1	Ko	1	..	38140i	53	10307	26.3	-54 24	9.9	10.9	K	1	..	39675b
4	4721	25.9	+33 17	7.35	8.42	K2	5	..	38620i	54	2605	26.4	+58 37	6.85	7.85	Ko	6	5,2 R	37241i
5	5071	25.9	+8 56	8.2	8.7	F8	4	..	37360i	55	4837	26.4	+15 40	7.79	8.29	F8	5	..	38618i
6	5020	25.9	+5 5	8.82	8.96	A5	3	..	37350i	56	5896	26.4	-4 38	6.50	7.00	F8	10	..	19957b
7	4446	25.9	-1 9	8.2	9.3	K2	2	..	14175b	57	6141	26.4	-21 56	6.24	7.1	Fo	8	..	45144b
8	6036	25.9	-6 51	6.39	7.39	Ko	9	0,9	19957b	58	16494	26.4	-25 7	9.2	9.4	Go	3	..	45144b
9	6322	25.9	-17 57	9.9	10.5	Go	1	..	17041b	59	10089	26.4	-56 50	8.7	9.1	F2	6	..	39699b
10	17937	25.9	-23 22	10.5	10.7	F8	1	..	45144b	60	7897	26.4	-59 34	7.87	9.1	Ko	8	..	39699b
11	18227	25.9	-27 55	9.6	9.1	Go	3	..	45144b	61	1236	26.4	-79 30	9.5	9.6	A2	5	..	38135b
12	17549	25.9	-32 2	8.2	7.9	F8	7	..	42802b	62	3175	26.5	+53 45	8.5	9.5	Ko	2	..	38598i
13	16576	25.9	-33 38	9.4	10.8	Ko	1	..	42810b	63	4802	26.5	+41 31	8.8	8.8	Ao	2	..	38140i
14	10303	25.9	-53 55	10.0	10.4	F5	2	..	39675b	64	5466	26.5	+28 7	6.68	7.68	Ko	8	..	38620i
15	10088	25.9	-56 42	7.22	8.5	Ko	5	5,8	41858b	65	5188	26.5	+6 12	9.5	10.1	Go	2	..	14898b
16	751	25.9	-83 5	9.1	9.1	Ao	4	..	15165b	66	6444	26.5	-15 21	8.0	9.1	K2	3	..	20146b
17	4063	26.0	+50 34	9.2	9.2	B9	1	..	38598i	67	16496	26.5	-25 34	10.3	11.3	Go	2	..	39389b
18	4731	26.0	+1 49	7.06	7.48	F5	5	..	37350i	68	18732	26.5	-29 24	10.5	10.3	Go	2	..	42802b
19	6481	26.0	-13 57	9.2	10.0	G5	4	..	24575b	69	15286	26.5	-37 20	10.1	10.4	Go	1	..	40743b
20	6480	26.0	-14 10	10.6	10.9	F2	2	..	24575b	70	16367	26.5	-42 19	6.75	7.7	Ko	9	..	41078b
21	6306	26.0	-16 5	9.2	9.5	Fo	2	..	17041b	71	15057	26.5	-45 0	9.46	11.2	K2	2	..	39667b
22	19320	26.0	-31 40	8.2	8.8	F8	5	..	42802b	72	14683	26.5	-46 4	8.5	8.4	F2	8	..	39667b
23	15055	26.0	-45 24	5.93	7.1	Ko	..	0,10	28,217	73	14600	26.5	-47 17	7.8	8.2	F2	8	..	39667b
24	3572	26.0	-68 29	10.5	11.1	Go	2	..	38368b	74	14532	26.5	-48 32	8.9	9.7	K2	4	..	39667b
25	2004	26.1	+63 51	7.26	7.40	A5	7	..	37909i	75	2074	26.5	-74 45	8.3	9.7	Mb	5	..	38135b
26	2995	26.1	+54 46	8.7	8.7	Ao	2	..	38598i	76	3461	26.6	+52 20	9.2	9.3	A2	1	..	38598i
27	4931	26.1	+18 14	7.40	7.48	A3	5	1,3	38618i	77	3630	26.6	+51 52	7.33	7.75	F5	4	..	37241i
28	6505	26.1	-12 45	8.5	8.8	Fo	6	..	20146b	78	4082	26.6	+48 58	7.47	8.47	Ko	4	..	38598i
29	16493	26.1	-25 14	11.0	11.0	Go	1	..	39389b	79	4692	26.6	+42 49	8.0	8.0	Ao	3	..	38140i
30	16363	26.1	-42 43	8.7	9.0	F8	6	..	41078b	80	4655	26.6	+33 8	7.9	8.0	A2	7	..	38620i
31	1038	26.1	-81 17	9.4	10.4	Ko	1	..	15165b	81	5074	26.6	+8 46	8.6	9.4	G5	3	..	14898b
32	782	26.2	+79 23	9.2	9.7	F8	1	..	38964i	82	5012	26.6	+0 41	9.3	9.6	F2	3	..	37350i
33	2006	26.2	+63 47	7.9	8.0	A3	3	..	37909i	83	6206	26.6	-8 53	8.7	9.2	F8	4	..	19957b
34	2462	26.2	+61 45	8.2	8.2	Ao	5	E	37909i	84	6090	26.6	-11 25	8.8	10.0	K5	3	..	24575b
35	2752	26.2	+57 51	8.2	8.3	A2	2	..	37241i	85	6142	26.6	-21 48	7.25	7.9	Fo	7	..	45144b
36	4849	26.2	+23 2	8.8	9.8	K	1	..	38123i	86	16498	26.6	-25 37	10.3	11.4	Go	1	..	39389b
37	6005	26.2	-4 48	8.60	8.68	A3	4	1,4	19957b	87	16683	26.6	-26 18	6.69	7.4	Ko	7	5,8	45144b
38	6443	26.2	-15 15	8.5	9.5	Ko	4	..	24575b	88	16682	26.6	-26 23	10.0	10.0	G	3	..	42802b
39	6468	26.2	-19 31	10.6	10.7	F8	2	..	17041b	89	14686	26.6	-46 43	9.3	10.0	F5	5	..	39667b
40	16680	26.2	-26 45	10.0	11.4	Ko	1	..	45144b	90	10288	26.6	-57 52	9.2	10.0	F8	3	..	39699b
41	18729	26.2	-29 30	8.6	11.1	K5	2	..	42802b	91	1041	26.7	+73 55	8.6	9.7	K2	1	..	38903i
42	15924	26.2	-36 50	8.4	9.2	G5	4	..	40743b	92	2466	26.7	+61 33	8.0	9.0	Ko	3	0,3	38937i
43	10305	26.2	-54 19	7.8	8.5	G5	6	..	39675b	93	2607	26.7	+58 53	7.55	8.73	K5	1	..	38078i
44	400	26.3	+85 27	7.76	8.54	G5	4	..	37281i	94	4568	26.7	+27 51	6.23	6.23	Ao	5	1,10	16935i
45	5023	26.3	+38 42	5.34	6.34	Ko	7	..	38140i	95	4757	26.7	+23 34	7.9	8.9	Ko	4	..	38123i
46	4565	26.3	+27 23	9.7	10.1	F5	2	..	38620i	96	5129	26.7	+13 47	8.8	9.3	F8	2	..	38618i
47	4945	26.3	+10 21	8.12	9.30	K5	3	..	37360i	97	6092	26.7	-11 33	8.8	9.6	G5	2	..	20146b
48	5072	26.3	+9 12	7.9	9.0	K2	4	..	37360i	98	6508	26.7	-12 30	7.88	8.88	Ko	6	..	20146b
49	6037	26.3	-7 11	9.4	9.4	Ao	3	..	19957b	99	6446	26.7	-15 29	7.9	9.0	K2	3	..	20146b
50	17709	26.3	-24 48	9.60	11.3	Ko	1	..	45144b	100	16684	26.7	-26 10	9.8	11.3	K2	1	..	42802b

THE HENRY DRAPER CATALOGUE.

221400

23^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	16345	26.7	-27 42	9.8	10.0	Ko	2	..	45144b	51	6484	27.1	-14 10	9.1	9.9	G5	4	..	20146b
2	15270	26.7	-44 9	8.1	8.5	Go	6	..	41078b	52	6486	27.1	-14 12	9.7	10.3	Go	3	..	24575b
3	14174	26.7	-49 1	9.3	10.9	Go	2	..	39667b	53	6766	27.1	-17 44	10.1	10.6	F8	1	..	17041b
4	3008	26.7	-70 28	10.7	11.5	G5	1	..	38368b	54	17558	27.1	-32 48	8.7	9.6	K2	4	..	42802b
5	908	26.8	+77 20	7.04	7.04	Ao	7	..	38139i	55	14000	27.1	-50 40	7.6	8.1	A2	9	..	39667b
6	2567	26.8	+60 55	8.6	8.6	Ao	2	..	38937i	56	10477	27.1	-53 8	9.2	10.3	Ko	2	..	39675b
7	4145	26.8	+50 7	8.72	8.70	B9	4	..	38598i	57	10038	27.1	-55 32	10.1	10.4	F2	1	..	39675b
8	4674	26.8	+2 53	9.0	9.6	Go	2	..	37350i	58	3466	27.2	+52 34	9.2	9.2	Ao	1	..	38598i
9	4450	26.8	-1 39	6.46	7.46	Ko	7	0,7	14175b	59	4252	27.2	+45 21	7.62	8.69	K2	2	..	38140i
10	4354	26.8	-64 13	7.4	8.4	Ko	5	..	42519b	60	4482	27.2	+43 16	8.1	8.1	Ao	2	..	38140i
11	3018	26.9	+56 55	8.6	8.6	Ao	3	..	37241i	61	6470	27.2	-19 36	9.13	9.7	K2	4	..	24027b
12	3178	26.9	+53 36	7.72	7.67	B8	6	..	37241i	62	16507	27.2	-25 29	9.5	10.3	Go	2	..	45144b
13	3464	26.9	+52 37	9.2	10.0	G5	1	..	38598i	63	19592	27.2	-30 27	10.5	11.1	Go	1	..	42802b
14	6509	26.9	-12 31	9.4	10.2	G5	4	..	24575b	64	17559	27.2	-32 29	9.7	11.1	G5	1	..	42802b
15	6483	26.9	-14 30	9.2	10.2	Ko	2	..	24575b	65	14689	27.2	-45 53	8.8	9.1	F2	7	..	39667b
16	6143	26.9	-22 21	8.3	9.1	G5	5	..	45144b	66	10040	27.2	-55 33	9.3	10.6	Ko	1	..	39675b
17	16346	26.9	-27 17	9.6	11.2	Ko	1	..	45144b	67	1784	27.2	-75 25	8.4	8.8	F5	6	..	38135b
18	14687	26.9	-46 10	9.5	10.3	F8	4	..	39667b	68	770	27.3	+80 27	8.2	8.2	Ao	6	..	38964i
19	14175	26.9	-49 46	9.32	9.5	A5	6	..	39667b	69	4955	27.3	+26 0	8.11	8.89	G5	3	..	38620i
20	1473	26.9	-77 57	5.78	6.8	Ko	..	..	56,150	70	4948	27.3	+10 38	8.4	9.4	Ko	2	..	14898b
21	1206	27.0	+71 26	8.0	8.5	F8	2	..	38139i	71	4867	27.3	+3 30	8.6	9.0	F5	3	..	37350i
22	4481	27.0	+43 31	7.10	8.17	K2	4	..	38140i	72	6098	27.3	-11 33	6.73	7.51	G5	9	..	20146b
23	4969	27.0	+30 41	9.3	10.5	K5	1	..	38620i	73	15059	27.3	-45 41	7.01	7.0	A2	..	2,10	28,217
24	5023	27.0	+4 44	9.3	10.5	K5	1	..	14898b	74	14607	27.3	-47 21	9.9	10.6	F8	3	..	39667b
25	5651	27.0	-3 35	8.7	9.2	F8	2	..	14175b	75	7666	27.3	-60 11	9.3	10.3	G5	2	..	39699b
26	6094	27.0	-10 47	9.4	10.0	Go	3	..	24575b	76	..	27.3	-67 41	..	..	Go	1	..	38368b
27	6510	27.0	-12 6	6.80	7.98	K5	8	..	20146b	77	4947	27.4	+34 47	8.07	8.57	F8	3	..	38620i
28	6610	27.0	-20 28	10.6	11.9	Ko	1	..	39389b	78	4957	27.4	+25 58	8.10	8.88	G5	2	..	38620i
29	17718	27.0	-24 12	10.3	10.6	F8	2	..	45144b	79	4944	27.4	+16 52	7.10	7.44	F2	6	0,5	38618i
30	16504	27.0	-25 24	9.6	11.2	Ko	1	..	45144b	80	5231	27.4	+9 17	9.3	9.9	Go	2	..	14898b
31	16071	27.0	-34 13	7.9	9.2	A5	8	..	42810b	81	4676	27.4	+2 29	9.0	9.4	F5	2	..	37350i
32	15273	27.0	-44 10	8.9	10.0	K2	2	..	41078b	82	6229	27.4	-6 41	8.8	9.9	K2	2	..	19957b
33	14688	27.0	-46 32	var.	var.	Md	4	R	39667b	83	6513	27.4	-11 53	9.4	10.0	Go	2	..	20146b
34	12168	27.0	-52 30	9.3	10.3	Go	2	..	39663b	84	6328	27.4	-18 10	7.9	8.9	Ko	6	..	24027b
35	7898	27.0	-59 3	8.9	10.8	G5	1	..	39699b	85	6145	27.4	-22 42	9.4	10.7	Ko	2	..	45144b
36	924	27.1	+77 0	8.6	9.0	F5	2	..	38139i	86	15064	27.4	-39 40	9.7	9.6	Fo	2	..	40743b
37	1818	27.1	+65 5	8.60	9.38	G5	2	..	38937i	87	14690	27.4	-46 6	9.4	9.4	A5	6	..	39667b
38	2740	27.1	+59 59	9.2	9.3	A5	2	..	38937i	88	401	27.5	+86 0	7.25	7.67	F5	6	..	37281i
39	2609	27.1	+58 33	7.69	8.76	K2	2	..	38078i	89	3635	27.5	+51 22	9.2	9.2	Ao	2	..	38598i
40	4251	27.1	+46 14	7.8	7.8	Ao	3	..	38140i	90	5047	27.5	+35 27	8.4	8.7	Fo	3	5,2-	32383i
41	5099	27.1	+40 14	8.12	9.12	Ko	2	..	38140i	91	4048	27.5	+34 25	6.55	6.55	Ao	9	1,10	38615i
42	4861	27.1	+37 45	7.55	8.62	K2	3	..	38615i	92	4971	27.5	+30 54	8.6	9.1	F8	5	..	38620i
43	4841	27.1	+16 4	8.7	9.7	Ko	1	..	38618i	93	4759	27.5	+23 18	6.61	7.79	K5	5	..	38123i
44	4947	27.1	+10 58	8.4	9.4	Ko	2	..	37360i	94	4949	27.5	+10 26	7.72	7.80	A3	5	..	37360i
45	5168	27.1	+6 33	6.84	7.26	F5	7	0,8	37360i	95	6330	27.5	-18 21	8.3	9.1	G5	6	..	24927b
46	6127	27.1	-10 26	9.7	10.0	F2	3	..	24575b	96	14176	27.5	-49 37	10.3	11.1	Ko	1	..	39667b
47	6095	27.1	-11 35	9.9	11.1	K5	1	..	24575b	97	881	27.6	+75 26	9.16	9.58	F5	1	..	38139i
48	6096	27.1	-11 43	9.7	10.8	K2	3	..	24575b	98	4658	27.6	+33 11	8.2	8.6	F5	5	..	38620i
49	6512	27.1	-12 15	10.3	11.1	G5	2	..	24575b	99	4927	27.6	+32 7	9.5	9.6	A2	1	..	38620i
50	6485	27.1	-13 51	8.8	9.8	Ko	2	..	20146b	100	5045	27.6	+7 35	8.8	9.8	Ko	2	..	14898b

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	4451	27.6	- 1 23	8.8	9.3	F8	2	..	14175b	51	10292	27.9	- 57 35	7.9	8.4	F8	7	..	39699b
2	6130	27.6	- 8 35	9.2	9.8	Go	2	..	19957b	52	10293	27.9	- 57 37	7.5	8.0	Fo	7	2,5	41858b
3	6769	27.6	-17 23	8.6	9.8	K5	5	E	24027b	53	7667	27.9	-60 28	8.6	9.1	G5	7	..	39699b
4	6146	27.6	-22 15	8.1	9.0	G5	5	..	45144b	54	4357	27.9	-64 7	9.1	9.9	G5	2	..	42519b
5	18739	27.6	-28 54	9.6	10.3	Go	3	..	42802b	55	3326	27.9	-69 48	10.0	10.5	F8	3	..	38368b
6	19326	27.6	-31 47	9.5	11.4	Ko	1	..	42802b	56	2469	28.0	+61 43	8.9	8.9	Ao	2	..	38937i
7	15527	27.6	-38 22	4.46	4.44	B9	..	R	28,217	57	3003	28.0	+55 13	8.31	8.29	B9	3	..	37241i
8	14534	27.6	-48 18	8.9	10.3	Ma	4	..	39667b	58	3638	28.0	+51 20	8.5	8.5	B9	3	..	38598i
9	4901	27.6	-63 51	8.8	9.6	G5	3	..	42519b	59	5190	28.0	+ 5 22	9.28	9.84	Go	2	..	14898b
10	1071	27.6	-80 39	9.2	9.5	F2	5	..	38135b	60	4868	28.0	+ 3 16	9.3	10.1	G5	1	..	37350i
11	752	27.6	-82 54	8.8	9.6	G5	2	..	15165b	61	6046	28.0	- 6 57	7.7	8.2	F8	7	..	19957b
12	1819	27.7	+65 11	6.62	6.90	Fo	8	..	37909i	62	6131	28.0	-10 1	9.1	9.6	F8	3	..	20146b
13	3467	27.7	+52 45	7.9	7.9	Ao	4	..	37241i	63	6427	28.0	-12 56	10.3	11.1	G5	2	..	24575b
14	4146	27.7	+49 56	8.5	9.7	K5	1	..	38598i	64	6428	28.0	-13 10	7.02	7.02	Ao	9	..	20146b
15	4186	27.7	+47 49	8.0	8.0	B9	3	..	38598i	65	6437	28.0	-21 28	4.76	4.76	Ao	..	R	28,217
16	4697	27.7	+42 39	8.2	9.2	Ko	2	..	38140i	66	15937	28.0	-36 20	9.6	10.1	F8	2	..	40743b
17	4732	27.7	+33 46	8.4	9.4	Ko	1	..	38620i	67	13599	28.0	-51 36	8.8	10.0	Ko	4	..	39675b
18	5024	27.7	+ 4 54	9.3	9.6	F	1	..	14898b	68	2758	28.1	+57 21	8.0	8.0	Ao	5	..	37241i
19	6210	27.7	- 9 43	8.31	9.31	Ko	4	..	20146b	69	3189	28.1	+53 41	8.4	8.4	B9	3	..	37241i
20	6331	27.7	-18 36	8.7	9.7	Ko	7	..	24027b	70	3471	28.1	+53 15	8.6	8.6	Ao	1	..	38598i
21	6436	27.7	-21 44	9.7	10.2	F8	1	..	45144b	71	3472	28.1	+52 33	9.7	11.1	Ma	3	..	21192i
22	17564	27.7	-32 10	9.7	10.5	Go	2	..	42802b	72	4189	28.1	+47 26	9.0	9.0	Ao	1	..	38598i
23	3009	27.7	-70 12	10.2	10.5	F2	3	..	38368b	73	4074	28.1	+46 28	7.86	8.64	G5	3	..	38140i
24	1592	27.7	-76 9	9.5	10.3	G5	4	..	38135b	74	4869	28.1	+ 3 48	8.1	9.1	Ko	4	..	37350i
25	344	27.8	+86 45	5.62	5.90	Fo	10	..	37281i	75	6429	28.1	+13 13	8.9	9.9	Ko	2	..	20146b
26	4072	27.8	+50 27	8.5	9.6	K2	1	..	38598i	76	6487	28.1	-14 42	9.16	9.22	A2	2	..	20146b
27	4680	27.8	+ 2 50	8.4	9.8	Ma	2	..	37350i	77	6333	28.1	-18 11	9.2	9.6	F5	4	..	24027b
28	4524	27.8	- 0 5	9.3	9.7	F5	1	..	14175b	78	19333	28.1	-31 51	7.22	8.4	Ko	7	..	42802b
29	4523	27.8	- 0 22	9.0	10.0	Ko	1	..	14175b	79	10483	28.1	-53 18	10.1	10.6	F8	1	..	39675b
30	5655	27.8	- 3 34	6.99	6.99	Ao	10	..	19957b	80	10311	28.1	-54 13	8.7	9.7	G5	4	..	39675b
31	6514	27.8	-12 32	8.8	9.2	F5	6	..	20146b	81	10294	28.1	-57 22	8.7	9.5	G5	4	..	39699b
32	6612	27.8	-20 15	9.1	9.6	Go	5	..	24027b	82	7900	28.1	-59 38	10.5	11.1	Go	1	..	39699b
33	14179	27.8	-49 15	10.3	10.3	Go	3	..	39667b	83	1208	28.2	+71 27	6.64	6.70	A2	8	..	38139i
34	..	27.8	-67 46	..	..	G	1	..	38368b	84	2245	28.2	+62 44	8.0	8.6	Go	1	..	38937i
35	2766	27.8	-72 39	9.1	9.4	Fo	7	..	38385b	85	2244	28.2	+62 36	7.40	8.18	G5	3	5,3	38937i
36	2075	27.8	-74 18	8.3	9.1	G5	6	..	38135b	86	3639	28.2	+51 30	8.2	8.3	A3	2	..	38598i
37	909	27.9	+77 15	7.08	7.08	Ao	8	..	38139i	87	4149	28.2	+49 48	8.0	9.0	Ko	2	..	38598i
38	3469	27.9	+53 8	7.02	8.02	Ko	6	..	37241i	88	4259	28.2	+45 35	6.86	8.21	Ma	4	..	38140i
39	4148	27.9	+49 45	8.6	9.6	Ko	1	..	38598i	89	4951	28.2	+35 0	8.4	9.5	K2	2	..	38620i
40	4484	27.9	+44 6	8.0	8.1	A5	2	..	38140i	90	16516	28.2	-25 4	9.5	11.2	K5	1	..	45144b
41	4950	27.9	+10 58	9.0	9.5	F8	3	..	37360i	91	16355	28.2	-26 53	9.8	11.2	Go	1	..	45144b
42	6130	27.9	- 9 55	8.7	9.7	Ko	2	..	20146b	92	14536	28.2	-48 25	8.7	9.2	Ko	7	..	39667b
43	6099	27.9	-10 49	10.1	11.2	K2	1	..	24575b	93	12169	28.2	-52 17	8.6	9.5	G5	5	..	39675b
44	6451	27.9	-15 32	9.2	10.0	G5	2	..	17041b	94	6427	28.2	-62 12	8.2	8.8	Go	6	..	42519b
45	6332	27.9	-18 28	9.9	10.9	Ko	3	..	24027b	95	2471	28.3	+61 20	8.4	9.6	K5	1	..	38937i
46	6613	27.9	-20 38	8.1	8.4	F8	8	..	24027b	96	3474	28.3	+52 31	9.2	9.2	Ao	2	..	38598i
47	18741	27.9	-29 14	9.0	9.9	F5	4	..	42802b	97	4699	28.3	+42 32	8.8	8.8	A	1	..	38140i
48	19594	27.9	-29 52	9.6	11.6	Go	1	..	42802b	98	4862	28.3	+38 7	8.6	8.9	Fo	3	..	38615i
49	15271	27.9	-41 24	9.0	9.6	Ko	3	..	41078b	99	4870	28.3	+ 4 6	8.0	9.2	K5	5	..	37350i
50	14611	27.9	-47 51	9.5	9.7	Go	5	..	39667b	100	6011	28.3	- 4 57	7.05	7.47	F5	9	..	19957b

THE HENRY DRAPER CATALOGUE.

221600

23^h 28^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	6472	28.3	-19 42	8.93	10.0	Ma	4	..	24027b	51	5191	28.8	+ 5 25	9.16	9.72	Go	2	..	14898b
2	7668	28.3	-60 3	9.5	9.9	F5	3	..	39699b	52	6490	28.8	-14 3	9.7	10.7	Ko	2	..	24575b
3	1786	28.3	-75 7	9.5	10.3	G5	4	..	38135b	53	6454	28.8	-15 35	9.4	9.7	F2	2	..	17041b
4	4090	28.4	+48 24	8.9	9.4	F8	1	..	38598i	54	17739	28.8	-24 19	11.0	11.4	Go	1	..	39389b
5	4764	28.4	+23 48	6.87	7.01	A5	7	..	38123i	55	16519	28.8	-25 39	9.3	9.4	F8	2	..	45144b
6	6473	28.4	-18 56	9.9	10.5	F5	3	..	24027b	56	19603	28.8	-30 26	10.5	11.1	G5	1	..	42802b
7	6616	28.4	-20 40	9.1	10.0	F8	4	..	24027b	57	13602	28.8	-51 6	9.4	10.0	Ko	3	..	39675b
8	15941	28.4	-36 4	8.3	9.2	F2	6	..	40743b	58	6755	28.8	-61 24	8.4	9.9	Ko	2	..	42519b
9	15940	28.4	-36 49	7.32	7.6	Fo	9	..	40743b	59	3190	28.8	+53 58	8.0	8.0	Ao	4	..	37241i
10	15278	28.4	-44 32	8.3	9.4	G5	7	..	39667b	60	3642	28.9	+52 9	9.0	10.1	K2	1	..	38598i
11	2246	28.5	+62 35	8.0	8.8	G5	2	..	38937i	61	4441	28.9	+44 31	6.28	7.06	G5	5	..	38140i
12	2976	28.5	+55 54	8.6	8.6	Ao	2	..	37241i	62	5352	28.9	+20 18	6.29	7.64	Ma	5	..	38123i
13	4700	28.5	+42 17	7.25	7.81	Go	4	..	38140i	63	5027	28.9	+ 4 35	9.0	9.6	Go	2	..	14898b
14	4734	28.5	+34 9	9.0	9.4	F5	2	..	38620i	64	4872	28.9	+ 3 39	9.0	9.3	F2	2	..	10158b
15	4952	28.5	+21 57	5.51	6.86	Mb	8	..	38123i	65	6455	28.9	-14 46	8.06	9.06	Ko	5	..	20146b
16	6132	28.5	-10 34	10.6	11.8	K5	1	..	24575b	66	17740	28.9	-24 33	10.5	10.9	G5	2	..	39389b
17	6517	28.5	-12 32	11.0	11.0	Ao	2	..	24575b	67	16697	28.9	-26 48	10.0	10.9	Go	1	..	45144b
18	6489	28.5	-14 7	9.9	10.9	Ko	1	..	24575b	68	6756	28.9	-61 26	7.2	9.1	Ko	5	..	42519b
19	17950	28.5	-23 15	10.0	10.8	G5	1	..	45144b	69	3011	28.9	-70 37	8.2	8.7	F8	8	..	38385b
20	15832	28.5	-35 4	8.13	9.2	F2	5	..	40743b	70	2746	29.0	+59 54	7.41	8.41	Ko	2	..	38078i
21	15067	28.5	-45 36	9.7	10.9	Mc	3	..	39667b	71	2745	29.0	+59 29	7.41	7.41	Ao	5	1,5	38937i
22	14693	28.5	-46 12	8.5	9.4	Go	7	..	39667b	72	4262	29.0	+46 8	6.82	7.82	Ko	4	..	38140i
23	14180	28.5	-49 23	10.5	10.9	Go	1	..	39667b	73	4978	29.0	+30 46	5.21	6.28	K2	8	3,9	38847i
24	1238	28.5	-79 38	9.6	9.9	Fo	5	..	38135b	74	4456	29.0	- 0 58	8.8	9.9	K2	1	..	14175b
25	3025	28.6	+56 52	7.40	8.18	G5	4	..	37241i	75	5986	29.0	- 1 48	5.98	6.04	A2	10	E	37350i
26	4953	28.6	+21 46	8.2	8.3	A2	4	..	38123i	76	6234	29.0	- 6 3	9.9	11.1	K5	1	..	19957b
27	4938	28.6	+17 16	6.68	7.24	Go	6	..	38618i	77	6492	29.0	-14 8	8.11	9.18	K2	3	..	20146b
28	5026	28.6	+ 5 1	9.00	9.50	F8	2	..	14898b	78	6337	29.0	-18 27	9.2	10.2	Ko	3	..	24027b
29	5661	28.6	- 2 47	7.7	7.8	A2	8	..	14175b	79	15273	29.0	-41 31	9.7	10.8	K2	1	..	41078b
30	6012	28.6	- 5 41	9.4	10.2	G5	3	..	19957b	80	1825	29.1	+64 39	8.6	8.7	A2	3	..	37909i
31	6774	28.6	-16 52	8.7	8.8	A3	6	..	17041b	81	4489	29.1	+43 21	6.87	6.85	B9	6	..	38140i
32	16694	28.6	-26 19	8.6	9.1	Go	3	..	45144b	82	5354	29.1	+20 58	9.4	10.4	K	1	..	38123i
33	16081	28.6	-34 13	8.11	9.2	K2	7	..	42810b	83	4953	29.1	+10 38	8.4	8.5	A3	3	..	37360i
34	15281	28.6	-44 9	9.5	9.7	F5	2	..	41078b	84	4736	29.1	+ 1 45	9.3	10.1	G5	1	..	37350i
35	14181	28.6	-49 4	8.7	9.4	F8	7	..	39667b	85	6134	29.1	-10 15	8.1	8.4	F2	4	..	20146b
36	7901	28.6	-59 0	8.6	9.6	A5	5	..	39699b	86	6474	29.1	-18 57	9.9	10.8	Ko	2	..	24027b
37	3573	28.6	-67 54	10.7	11.1	F5	4	..	38368b	87	17955	29.1	-23 31	10.7	11.9	K5	1	..	45144b
38	2765	28.6	-71 31	7.6	8.1	F8	6	..	38385b	88	17744	29.1	-24 31	10.7	10.9	G5	1	..	39389b
39	2744	28.7	+59 52	7.31	8.31	Ko	3	0,3	38937i	89	16521	29.1	-24 59	9.8	10.3	Go	2	..	45144b
40	3477	28.7	+52 33	9.7	9.7	Ao	1	..	38598i	90	13604	29.1	-51 24	10.1	10.6	G5	1	..	39675b
41	3640	28.7	+51 37	8.2	8.2	Ao	3	..	38598i	91	2292	29.1	-73 44	9.8	10.6	G5	4	..	38385b
42	5103	28.7	+41 5	7.12	7.90	G5	4	..	38140i	92	3028	29.2	+56 41	8.6	8.6	B9	4	..	37241i
43	4977	28.7	+30 28	8.4	9.6	K5	4	..	38620i	93	4097	29.2	+48 46	9.2	10.3	K2	1	..	38598i
44	4956	28.7	+29 19	7.8	8.2	F5	7	..	38620i	94	5055	29.2	+ 8 10	8.6	9.1	F8	4	..	37360i
45	6520	28.7	-12 5	9.9	11.0	K2	3	..	24575b	95	6135	29.2	-10 36	9.4	10.4	Ko	3	..	24575b
46	17951	28.7	-23 30	8.3	9.7	K5	3	..	45144b	96	6775	29.2	-17 40	10.1	10.5	F5	3	..	24027b
47	16517	28.7	-25 25	7.48	8.3	F8	6	..	45144b	97	1042	29.3	+73 40	8.0	9.0	Ko	2	..	38133i
48	7902	28.7	-59 22	10.3	10.8	F8	2	..	39699b	98	5020	29.3	+11 48	8.2	9.2	Ko	3	..	37360i
49	7903	28.7	-59 38	8.7	10.2	Ko	3	..	39699b	99	5243	29.3	+10 7	9.37	9.93	G	1	..	37360i
50	4093	28.8	+48 16	var.	var.	Pec.	..	R	76,29	100	5056	29.3	+ 7 22	var.	var.	A2	2	R	14898b

221700

23^h 29^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	5029	29.3	+ 4 55	6.80	7.14	F2	7	..	3735oi	51	13605	29.6	- 51 33	9.4	9.5	Go	4	..	39675b
2	4737	29.3	+ 1 27	8.6	9.6	Ko	2	..	3735oi	52	10100	29.6	- 56 34	8.4	9.1	Ko	4	..	39699b
3	4457	29.3	- 0 53	8.7	9.9	K5	1	..	14175b	53	7904	29.6	- 58 53	8.9	10.5	Go	2	..	39699b
4	6051	29.3	- 7 2	9.4	10.4	Ko	1	..	19957b	54	4904	29.6	- 63 44	9.0	10.0	Ko	1	..	42519b
5	6103	29.3	- 10 54	10.6	11.4	G5	1	..	24575b	55	4099	29.7	+ 49 12	8.4	9.6	K5	1	..	38598i
6	6776	29.3	- 17 33	8.1	8.7	Go	7	..	24027b	56	5114	29.7	+ 39 41	5.50	5.50	Ao	8	..	3814oi
7	17957	29.3	- 23 46	10.5	11.9	Go	1	..	45144b	57	5082	29.7	+ 37 14	7.25	7.75	F8	7	..	38615i
8	15545	29.3	- 38 49	8.8	9.6	G5	4	..	40904b	58	4667	29.7	+ 32 57	5.74	6.74	Ko	9	..	3862oi
9	14620	29.3	- 47 14	8.6	9.7	G5	5	..	39667b	59	5022	29.7	+ 11 59	8.7	9.0	Fo	5	..	3736oi
10	14184	29.3	- 49 17	9.7	10.0	Go	3	..	39667b	60	15420	29.7	- 43 10	4.80	4.86	Azp	..	R	28,217
11	3006	29.4	+ 54 56	7.41	7.24	B3	6	5,3	37241i	61	7905	29.7	- 59 30	9.3	10.2	Ko	3	..	39699b
12	3193	29.4	+ 53 31	8.4	9.4	Ko	1	..	38598i	62	3783	29.7	- 66 23	9.2	9.6	F5	3	..	38368b
13	4574	29.4	+ 27 25	8.6	9.0	F5	3	..	3862oi	63	339	29.7	- 86 57	7.87	7.9	Fo	8	..	15173b
14	4967	29.4	+ 26 10	8.9	9.2	Fo	2	..	3862oi	64	3646	29.8	+ 51 32	8.9	8.9	Ao	3	..	38598i
15	4684	29.4	+ 2 44	8.6	9.1	F8	3	..	3735oi	65	4084	29.8	+ 50 49	8.2	8.2	Ao	5	..	38598i
16	5015	29.4	+ 0 40	9.3	10.1	G5	2	..	3735oi	66	5054	29.8	+ 35 39	7.52	8.52	Ko	3	..	3862oi
17	6431	29.4	- 12 52	8.9	9.9	Ko	2	..	20146b	67	4963	29.8	+ 29 29	8.9	9.0	A2	1	..	3862oi
18	6617	29.4	- 20 43	9.1	10.0	G5	4	..	24027b	68	5194	29.8	+ 5 56	9.0	9.3	Fo	2	..	14898b
19	6439	29.4	- 21 39	9.9	10.8	G5	2	..	39389b	69	6108	29.8	- 11 8	10.1	10.5	F5	3	..	24575b
20	14543	29.4	- 48 37	8.8	9.7	K2	5	..	39667b	70	6151	29.8	- 22 20	9.4	10.5	G5	2	..	45144b
21	10046	29.4	- 55 44	9.1	10.4	K5	3	..	39675b	71	6152	29.8	- 22 25	9.4	10.5	Ko	2	..	45144b
22	656	29.4	- 84 24	8.6	8.7	A2	5	..	15173b	72	14703	29.8	- 46 22	10.5	11.3	Ko	1	..	39667b
23	773	29.5	+ 80 31	8.6	9.8	K5	1	..	38964i	73	8080	29.8	- 58 3	7.3	7.7	F2	8	2,3	39699b
24	882	29.5	+ 76 3	8.77	9.27	F8	2	..	38139i	74	1109	29.9	+ 72 23	7.24	7.30	A2	5	2,5	38139i
25	1615	29.5	+ 67 5	8.0	8.1	A3	3	..	37909i	75	4101	29.9	+ 48 30	9.0	9.0	B9	3	..	38598i
26	3480	29.5	+ 52 21	9.2	9.2	Ao	1	..	38598i	76	4866	29.9	+ 37 29	6.34	7.52	K5	6	..	38615i
27	4081	29.5	+ 51 4	8.4	8.4	Ao	6	..	38598i	77	6141	29.9	- 8 14	7.42	8.60	K5	5	..	20146b
28	4156	29.5	+ 49 39	9.0	9.0	B9	2	..	38598i	78	6216	29.9	- 8 56	9.4	10.2	G5	1	..	19957b
29	4797	29.5	+ 24 43	8.8	9.1	F2	3	..	38123i	79	15080	29.9	- 39 3	9.7	9.7	Go	2	..	40904b
30	6105	29.5	- 10 55	9.4	9.9	F8	5	..	24575b	80	2294	29.9	- 73 30	9.9	10.3	F5	4	..	38385b
31	6104	29.5	- 11 23	9.9	10.4	F8	4	..	24575b	81	3647	30.0	+ 52 3	7.9	7.9	B9	6	..	38598i
32	6777	29.5	- 17 23	9.7	10.3	Go	2	..	17041b	82	3648	30.0	+ 51 28	9.0	9.0	A	2	R	38598i
33	18249	29.5	- 27 58	10.5	10.5	Go	2	..	45144b	83	3648	30.0	+ 51 28	9.0	9.0	G	2	R	38598i
34	19606	29.5	- 30 45	9.3	11.1	G5	1	..	42802b	84	4706	30.0	+ 42 40	7.31	7.31	Ao	5	..	3814oi
35	16383	29.5	- 42 39	9.5	10.3	Ko	1	..	41078b	85	4932	30.0	+ 31 17	7.9	8.0	A2	7	..	3862oi
36	15419	29.5	- 43 14	6.86	6.6	A2	9	..	41078b	86	4767	30.0	+ 23 53	6.70	7.70	Ko	6	..	38123i
37	14186	29.5	- 49 11	9.2	9.7	Go	5	..	39667b	87	5138	30.0	+ 13 54	8.6	9.2	Go	2	..	38618i
38	10297	29.5	- 57 23	6.88	7.3	F2	10	2,7	39699b	88	4532	30.0	- 0 21	9.3	9.7	F5	2	..	3735oi
39	6428	29.5	- 62 1	8.9	9.9	Ko	1	..	42519b	89	6523	30.0	- 12 8	8.1	8.2	A3	7	..	20146b
40	4148	29.5	- 65 15	7.4	7.7	Fo	7	..	42519b	90	6476	30.0	- 19 7	8.7	8.8	G5	8	..	24027b
41	2578	29.6	+ 60 53	8.6	8.7	A2	2	..	38937i	91	16703	30.0	- 26 6	9.8	11.4	K5	1	..	39389b
42	4738	29.6	+ 33 49	7.30	8.30	Ko	4	..	3862oi	92	18753	30.0	- 29 39	10.5	10.8	Ko	1	..	42802b
43	6106	29.6	- 11 8	9.2	10.0	G5	4	5,2	24575b	93	15278	30.0	- 41 51	9.9	10.5	Ao	2	..	41078b
44	6107	29.6	- 11 9	9.7	10.5	G5	4	..	24575b	94	14626	30.0	- 47 17	9.9	10.6	Ko	2	..	39667b
45	6314	29.6	- 15 48	6.15	7.15	Ko	8	..	20146b	95	14545	30.0	- 48 17	9.4	10.3	K2	3	..	39667b
46	6339	29.6	- 18 16	9.1	9.5	F5	5	..	24027b	96	14008	30.0	- 50 46	10.3	11.1	Go	1	..	39667b
47	16526	29.6	- 25 30	9.8	10.9	K2	1	..	45144b	97	10049	30.0	- 55 49	9.3	10.3	Ko	2	..	39675b
48	16366	29.6	- 27 28	9.3	9.7	Go	3	..	45144b	98	8084	30.0	- 58 40	8.9	9.9	G5	4	..	39699b
49	18250	29.6	- 28 16	8.4	8.5	F8	4	..	45144b	99	3649	30.1	+ 52 8	8.6	8.6	Ao	4	..	38598i
50	15843	29.6	- 35 38	7.11	7.8	Ko	8	..	40743b	100	4850	30.1	+ 15 56	8.0	9.1	K2	3	..	38618i

THE HENRY DRAPER CATALOGUE.

221800

23^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	5912	30.1	m. ° ' 4 24	7.45	7.79	F2	9	..	19957b	51	4983	30.5	+30 38	7.91	8.69	G5	2	..	3862oi
2	6139	30.1	-10 14	8.1	9.2	K2	3	..	20146b	52	4578	30.5	+27 27	9.5	9.8	F2	1	..	3862oi
3	6778	30.1	-17 25	9.1	9.2	A2	6	..	24027b	53	5060	30.5	+7 50	7.30	7.58	Fo	8	..	3736oi
4	18754	30.1	-29 18	8.3	9.6	G5	5	..	42802b	54	4878	30.5	+3 30	9.3	9.9	Go	3	..	3735oi
5	16386	30.1	-42 1	9.7	9.9	Ao	3	..	41078b	55	6496	30.5	-14 0	8.7	9.5	G5	2	..	20146b
6	15289	30.1	-44 48	9.96	10.9	F8	2	..	39667b	56	6317	30.5	-15 51	7.34	8.34	Ko	4	..	20146b
7	12176	30.1	-52 41	8.1	9.1	G5	5	0,2	39675b	57	17961	30.5	-22 57	9.8	10.7	F5	3	..	45144b
8	2766	30.1	-71 3	9.9	10.2	F2	4	..	38385b	58	19610	30.5	-30 30	9.2	10.2	G5	2	..	42802b
9	3651	30.2	+51 17	8.5	9.1	Go	5	R	38598i	59	15076	30.5	-45 21	10.3	10.9	F5	2	..	39667b
10	4082	30.2	+46 57	8.4	8.7	Fo	1	..	38598i	60	7906	30.5	-59 45	10.5	11.1	G	2	..	39699b
11	4798	30.2	+24 44	8.7	9.1	F5	3	..	38123i	61	1327	30.6	+71 5	6.13	7.13	Ko	6	..	38139i
12	4851	30.2	+15 53	8.8	8.8	Ao	3	..	38618i	62	1619	30.6	+66 56	7.40	8.40	Ko	5	..	37909i
13	5026	30.2	+12 7	7.7	7.8	A3	9	..	3736oi	63	3655	30.6	+51 44	7.02	8.02	Ko	5	..	37241i
14	4958	30.2	+10 24	7.42	8.42	Ko	6	..	3736oi	64	4086	30.6	+50 56	9.5	9.5	Ao	1	..	38598i
15	6779	30.2	-17 8	7.66	8.66	Ko	8	..	24027b	65	4085	30.6	+47 13	8.9	9.0	A2	1	..	38598i
16	15075	30.2	-45 5	9.7	10.6	K2	3	..	39667b	66	5140	30.6	+14 3	7.6	7.7	A3	6	..	38618i
17	14706	30.2	-46 10	10.1	11.2	Ko	1	..	39667b	67	6240	30.6	-6 11	9.4	9.9	F8	1	..	19957b
18	14628	30.2	-47 30	8.5	9.4	G5	7	..	39667b	68	6239	30.6	-6 18	9.1	9.5	F5	4	..	19957b
19	8085	30.2	-58 4	8.5	9.1	Go	3	..	39699b	69	6524	30.6	-12 36	10.3	11.3	Ko	2	..	24575b
20	3012	30.2	-70 13	9.7	10.5	G5	3	..	38385b	70	6154	30.6	-22 17	8.8	10.0	F8	2	..	45144b
21	4741	30.3	+34 10	9.5	9.5	A	1	..	3862oi	71	14707	30.6	-46 43	9.9	10.9	K2	1	..	39667b
22	4740	30.3	+1 39	8.6	9.4	G5	3	..	3735oi	72	14011	30.6	-50 13	10.3	10.9	G5	1	..	39667b
23	6052	30.3	-7 42	9.1	10.1	Ko	2	..	19957b	73	..	30.6	-67 37	..	..	K2	2	..	38368b
24	6217	30.3	-9 32	9.9	10.3	F5	1	..	19957b	74	..	30.6	-68 0	..	..	Go	2	..	38368b
25	6110	30.3	-11 7	7.28	8.46	K5	5	..	20146b	75	3196	30.7	+53 28	8.6	8.7	A2	3	..	37241i
26	17960	30.3	-23 10	9.2	11.9	K5	2	..	45144b	76	5124	30.7	+20 2	9.0	9.5	F8	2	..	19799i
27	18756	30.3	-29 26	9.6	10.2	G5	2	..	42802b	77	6242	30.7	-6 34	9.7	10.5	G5	2	..	19957b
28	10492	30.3	-53 47	9.2	10.3	Ko	3	..	39675b	78	6435	30.7	-13 39	10.1	10.4	F2	2	..	24575b
29	403	30.4	+85 38	7.18	7.32	A5	7	..	37281i	79	6780	30.7	-16 51	8.1	9.2	K2	6	..	24027b
30	4982	30.4	+30 27	6.72	7.28	Go	7	..	3862oi	80	6478	30.7	-19 30	9.4	9.7	G5	6	..	24027b
31	5122	30.4	+19 49	10.0	10.4	F5	2	..	19799i	81	19351	30.7	-31 12	7.48	8.1	F5	9	..	42802b
32	5059	30.4	+7 58	6.89	8.07	K5	7	..	3736oi	82	16612	30.7	-33 11	8.3	8.8	Go	5	..	40725b
33	5018	30.4	+0 46	6.65	7.65	Ko	6	..	3735oi	83	15280	30.7	-41 28	9.3	10.8	K5	1	..	41078b
34	5019	30.4	+0 25	9.5	9.8	Fo	2	..	14175b	84	15290	30.7	-44 0	9.2	9.7	G5	3	..	41078b
35	6142	30.4	-8 1	6.51	7.51	Ko	9	..	20146b	85	13610	30.7	-51 5	10.5	10.9	F8	1	..	39667b
36	6443	30.4	-21 14	11.2	11.6	Ao	1	..	24027b	86	2617	30.8	+58 22	8.4	8.4	Ao	3	..	37241i
37	17755	30.4	-24 49	9.8	11.2	G5	2	..	39389b	87	4937	30.8	+31 36	8.8	9.8	Ko	1	..	3862oi
38	16373	30.4	-27 50	9.8	10.6	Ko	1	..	45144b	88	4685	30.8	+2 41	9.0	9.6	Go	1	..	3735oi
39	18257	30.4	-28 3	6.68	7.4	F8	7	..	45144b	89	4742	30.8	+1 53	8.6	8.6	Ao	4	..	3735oi
40	18758	30.4	-29 8	10.7	10.7	G5	1	..	42802b	90	6220	30.8	-9 19	7.33	7.75	F5	8	..	20146b
41	18757	30.4	-29 12	10.0	10.7	Ko	1	..	42802b	91	6111	30.8	-11 14	8.1	8.9	G5	7	..	20146b
42	17586	30.4	-31 57	9.7	10.7	G5	1	..	42802b	92	6112	30.8	-11 15	9.4	10.0	Go	4	..	20146b
43	15084	30.4	-39 31	7.63	8.7	Ko	6	..	40904b	93	6525	30.8	-12 11	9.9	10.7	G5	3	..	24575b
44	15428	30.4	-43 42	9.7	10.3	F8	2	..	41078b	94	6155	30.8	-22 12	8.7	9.7	F5	5	0,4	24027b
45	14630	30.4	-47 52	10.3	10.6	Go	2	..	39667b	95	16376	30.8	-27 28	9.2	11.2	K2	1	..	45144b
46	12177	30.4	-52 49	8.7	9.2	F5	4	..	39675b	96	14632	30.8	-46 57	9.3	10.0	Ko	5	..	39667b
47	10321	30.4	-54 14	9.1	9.7	Go	3	..	39675b	97	4363	30.8	-64 39	8.9	9.9	Ko	1	..	42519b
48	4165	30.5	+49 46	7.12	7.10	B9	8	..	38598i	98	3969	30.8	-67 20	8.8	10.0	K5	2	..	38368b
49	4497	30.5	+43 35	7.76	7.84	A3	2	..	38140i	99	1600	30.8	-76 23	10.3	10.6	F2	3	..	38135b
50	4935	30.5	+31 39	6.62	7.62	Ko	7	..	3862oi	100	2583	30.9	+60 49	8.6	8.9	F2	2	..	38937i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

221900

23^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	2987	30.9	+55 44	8.6	9.1	F8	2	..	3724ii	51	6436	31.3	-13 3	9.7	10.7	Ko	3	..	24575b
2	3484	30.9	+53 10	9.0	9.0	Ao	1	..	38598i	52	16538	31.3	-25 36	10.5	10.9	Go	2	..	39389b
3	5119	30.9	+39 29	8.3	8.3	Ao	5	..	38615i	53	15961	31.3	-35 55	8.7	9.5	F8	6	..	40743b
4	4579	30.9	+27 19	7.34	7.32	B9	8	..	38620i	54	15436	31.3	-42 55	8.5	10.0	G5	3	..	41078b
5	4769	30.9	+24 1	6.60	7.95	Ma	4	..	38123i	55	15435	31.3	-43 42	10.3	9.7	A5	2	..	41078b
6	17963	30.9	-23 27	10.7	10.9	F8	2	..	39389b	56	10301	31.3	-57 16	9.2	10.0	G5	4	..	39699b
7	16377	30.9	-27 26	6.54	7.0	A2	9	..	45144b	57	1073	31.3	-80 16	10.3	10.9	Go	3	..	38135b
8	16396	30.9	-42 37	9.7	10.3	G5	1	..	41078b	58	4975	31.4	+25 43	8.2	8.3	A2	3	..	38123i
9	14549	30.9	-48 1	8.8	10.0	K2	4	..	39667b	59	4770	31.4	+23 34	8.7	9.7	Ko	1	..	38123i
10	4907	30.9	-63 19	7.8	7.8	Ao	8	..	42519b	60	6323	31.4	-16 36	9.4	10.2	G5	2	..	17041b
11	897	30.9	-82 40	9.1	9.6	F8	2	..	15165b	61	16539	31.4	-25 48	7.72	8.2	G5	7	..	45144b
12	3660	31.0	+52 4	8.8	8.8	Ao	3	..	38598i	62	19358	31.4	-31 48	9.0	10.2	F2	1	..	42802b
13	4087	31.0	+50 43	7.22	8.57	Ma	4	0.3	38598i	63	15199	31.4	-40 30	9.6	9.3	Fo	4	5.5	40743b
14	4946	31.0	+17 53	8.0	8.8	G5	3	5.4	38123i	64	14710	31.4	-46 39	10.3	11.5	G5	1	..	39667b
15	5014	31.0	+15 9	8.19	9.19	Ko	2	..	38618i	65	14550	31.4	-47 59	9.7	10.3	F8	3	..	39667b
16	4686	31.0	+ 2 35	8.0	8.3	Fo	5	..	37350i	66	8086	31.4	-57 53	8.8	9.1	A2	4	..	39699b
17	6408	31.0	-14 18	10.1	11.1	Ko	1	..	24575b	67	6757	31.4	-61 24	7.2	7.7	Fo	8	..	42519b
18	15292	31.0	-44 16	8.9	9.7	Ko	2	..	41078b	68	3202	31.5	+53 55	8.5	8.8	Fo	3	..	3724ii
19	14709	31.0	-46 4	9.3	10.6	Ko	3	..	39667b	69	3485	31.5	+52 28	9.5	9.5	Ao	1	..	38598i
20	1790	31.0	-75 42	10.2	11.2	Ko	2	..	38135b	70	4671	31.5	+32 21	6.34	6.76	F5	9	..	38620i
21	1474	31.0	-78 43	9.3	10.1	G5	4	..	38135b	71	4958	31.5	+21 20	8.4	9.4	Ko	2	..	38123i
22	774	31.1	+81 8	8.8	9.9	K2	2	..	38964i	72	5127	31.5	+20 7	7.70	8.04	F2	6	..	38123i
23	4872	31.1	+22 59	9.2	9.3	A2	1	..	38123i	73	5195	31.5	+ 6 2	8.6	9.2	Go	3	..	14898b
24	4459	31.1	- 0 52	9.3	9.6	Fo	2	..	14175b	74	6342	31.5	-17 47	9.1	10.2	K2	5	..	24027b
25	6055	31.1	- 7 40	7.9	8.0	A3	7	..	20146b	75	16616	31.5	-33 8	9.0	10.3	Go	2	E	42810b
26	6499	31.1	-14 1	8.5	9.5	Ko	2	..	20146b	76	15297	31.5	-44 9	9.5	10.6	F5	1	..	41078b
27	15197	31.1	-40 43	9.4	10.5	K5	1	..	41078b	77	3013	31.5	-70 36	8.6	9.6	Ko	7	..	38385b
28	15283	31.1	-41 18	9.4	10.3	Fo	1	..	41078b	78	3664	31.6	+51 37	9.2	9.3	A2	2	..	38598i
29	16398	31.1	-42 35	10.1	10.0	A5	2	..	41078b	79	4093	31.6	+51 3	8.9	8.9	Ao	1	..	38598i
30	10322	31.1	-54 36	9.3	10.6	G5	1	..	39675b	80	5669	31.6	- 3 31	8.1	8.6	F8	5	..	14175b
31	10299	31.1	-57 37	9.5	10.3	G5	2	..	39699b	81	15862	31.6	-34 54	8.68	9.5	Ko	3	..	40743b
32	3970	31.1	-66 59	9.2	10.0	G5	3	..	38368b	82	15311	31.6	-37 21	7.53	7.8	F5	7	..	40904b
33	1601	31.1	-76 38	10.2	11.2	K	1	..	38135b	83	15200	31.6	-39 56	9.4	9.3	Fo	4	0.4	41078b
34	1621	31.2	+66 28	7.9	8.0	A2	2	..	37909i	84	16401	31.6	-42 37	8.8	8.7	Ao	6	..	41078b
35	2586	31.2	+60 21	8.36	8.34	B9	3	..	38937i	85	14014	31.6	-50 50	10.3	11.1	K	1	..	39675b
36	3661	31.2	+52 5	9.2	9.2	Ao	2	..	38598i	86	6758	31.6	-61 18	9.1	10.5	Mb	..	..	M
37	4104	31.2	+48 52	8.6	9.7	K2	1	..	38598i	87	3327	31.6	-69 50	10.1	10.5	F5	2	..	38368b
38	5015	31.2	+14 22	9.0	9.6	Go	2	..	38618i	88	1581	31.6	-77 5	10.2	10.6	F5	3	..	38135b
39	5174	31.2	+ 6 19	7.8	8.8	Ko	5	..	37350i	89	785	31.7	+80 2	8.91	9.47	Go	2	5.1	38964i
40	5915	31.2	- 4 0	8.9	9.5	Go	1	..	14175b	90	2484	31.7	+61 53	9.2	9.2	Ao	4	E	37909i
41	6221	31.2	- 8 54	9.4	10.0	Go	3	..	19957b	91	3665	31.7	+52 4	9.2	9.2	Ao	1	..	38598i
42	6341	31.2	-18 27	9.9	10.3	F5	4	..	24027b	92	4454	31.7	+44 58	8.0	8.8	G5	2	..	38140i
43	15080	31.2	-45 27	7.24	7.5	A5	..	2.9	28,217	93	5197	31.7	+ 5 22	8.86	8.92	A2	3	..	37350i
44	1072	31.2	-80 36	10.4	11.2	G5	3	..	38135b	94	6502	31.7	-14 6	9.2	9.6	F5	2	..	20146b
45	885	31.3	+76 5	8.97	9.53	G	2	..	38139i	95	6160	31.7	-22 36	8.7	10.6	G5	3	..	39389b
46	1622	31.3	+66 19	7.6	8.2	Go	1	..	37396i	96	16711	31.7	-26 0	10.3	10.3	F5	3	5.2	39389b
47	4107	31.3	+49 11	8.7	8.8	A2	3	..	38598i	97	19619	31.7	-30 26	9.8	10.7	Ko	2	..	42802b
48	4820	31.3	+42 6	7.8	8.8	Ko	1	..	38140i	98	7669	31.7	-60 3	9.1	9.9	G5	3	..	39699b
49	4605	31.3	+28 21	8.8	9.1	F2	2	..	38620i	99	3204	31.8	+53 24	8.5	8.6	A2	2	..	3724ii
50	4744	31.3	+ 1 32	5.65	6.07	F5	8	..	37350i	100	4093	31.8	+46 27	9.0	9.0	Ao	1	..	38598i

THE HENRY DRAPER CATALOGUE.

222000

23^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	4687	31.8	+ 3 5	10.0	10.3	F	2	..	3735oi	51	6462	32.2	-14 46	9.06	10.06	Ko	4	..	24575b
2	6345	31.8	-18 7	8.5	8.8	F ₂	8	..	24027b	52	6782	32.2	-17 27	9.1	9.5	F ₅	4	..	24027b
3	17594	31.8	-32 14	9.3	8.8	F ₂	5	..	42802b	53	16715	32.2	-26 14	9.8	10.6	K ₂	1	..	45144b
4	17593	31.8	-32 26	6.51	7.7	Ko	..	0.9	56,150	54	19622	32.2	-30 39	8.8	10.5	K ₂	2	..	42802b
5	10112	31.8	-56 39	9.1	9.7	Go	2	..	39699b	55	15317	32.2	-37 13	10.1	10.1	F ₈	2	..	40743b
6	8087	31.8	-58 44	7.2	8.7	Ko	8	..	39699b	56	15085	32.2	-45 29	9.4	10.6	Ko	2	..	39667b
7	2083	31.8	-74 28	9.7	10.3	G	2	..	38135b	57	14717	32.2	-46 51	9.5	10.0	Go	5	..	39667b
8	4963	31.9	+10 27	7.82	7.96	A ₅	6	..	3736oi	58	12186	32.2	-52 21	9.8	10.4	Go	2	..	39675b
9	5198	31.9	+ 5 37	9.0	10.1	K ₂	1	..	14898b	59	3971	32.2	-67 36	9.2	9.6	F ₅	6	..	38368b
10	6504	31.9	-14 7	8.1	8.6	F ₈	4	..	20146b	60	1583	32.2	-77 26	5.99	7.0	Ko	..	5,10	56,150
11	6161	31.9	-22 14	8.2	9.7	G ₅	5	..	39506b	61	341	32.2	-87 26	9.2	10.0	G ₅	3	..	22980b
12	16713	31.9	-26 25	8.80	8.6	Ao	5	..	45144b	62	3039	32.3	+57 12	8.4	8.9	F ₈	2	..	37241i
13	14713	31.9	-46 2	9.5	10.3	G ₅	3	..	39667b	63	3486	32.3	+52 54	7.70	7.68	B ₉	5	..	37241i
14	14636	31.9	-47 8	9.1	9.1	F ₂	7	..	39667b	64	4282	32.3	+45 44	8.0	8.0	Ao	2	..	38140i
15	1043	32.0	+73 22	9.0	9.3	F ₂	3	..	36282i	65	4873	32.3	+37 47	9.4	9.4	A	2	..	32383i
16	1542	32.0	+67 18	7.20	7.20	Ao	7	..	37909i	66	4876	32.3	+23 2	8.7	8.7	Ao	3	..	38123i
17	4209	32.0	+47 39	8.6	8.6	Ao	3	..	38598i	67	4960	32.3	+21 42	7.72	8.90	K ₅	2	..	38123i
18	4714	32.0	+42 46	7.8	8.9	K ₂	2	..	38140i	68	5178	32.3	+ 7 4	8.5	8.9	F ₅	5	..	14898b
19	5357	32.0	+21 11	8.9	9.9	Ko	4	..	38123i	69	6116	32.3	-10 53	9.7	10.7	Ko	2	..	24575b
20	4688	32.0	+ 2 47	9.7	10.5	G ₅	1	..	3735oi	70	16716	32.3	-26 8	10.5	11.4	G ₅	1	..	39389b
21	4460	32.0	- 1 40	9.57	9.85	Fo	1	..	14175b	71	15567	32.3	-38 13	9.0	9.6	F ₅	3	..	40743b
22	6781	32.0	-17 37	9.1	9.4	Fo	6	..	24027b	72	14552	32.3	-48 11	9.3	10.9	K ₂	2	..	39667b
23	16382	32.0	-26 57	10.5	10.5	F ₈	2	..	39389b	73	12187	32.3	-52 48	10.1	10.9	G ₅	1	..	39675b
24	16103	32.0	-34 10	9.3	11.6	Ma	..	..	M	74	7907	32.3	-59 20	8.4	9.6	G ₅	5	..	39699b
25	12184	32.0	-52 17	7.8	8.8	Ko	7	0.3	39675b	75	3786	32.3	-65 54	9.8	9.9	A ₃	2	..	38368b
26	1475	32.0	-77 53	10.7	11.3	G	2	..	38135b	76	2767	32.3	-71 28	7.5	8.5	Ko	4	..	12082b
27	786	32.1	+79 54	8.2	9.4	K ₅	1	3,1	38964i	77	2990	32.4	+55 20	7.51	8.69	K ₅	3	..	37241i
28	2022	32.1	+63 59	8.0	9.1	K ₂	1	..	38937i	78	4961	32.4	+21 56	7.9	8.9	Ko	3	..	38123i
29	3666	32.1	+51 44	8.1	8.1	Ao	3	..	37241i	79	6324	32.4	-15 46	8.67	9.45	G ₅	2	..	20146b
30	4280	32.1	+45 39	8.6	9.6	Ko	1	..	38140i	80	19623	32.4	-29 59	9.52	9.9	Fo	4	..	42802b
31	4872	32.1	+38 11	8.8	9.9	K ₂	1	..	38842i	81	8089	32.4	-58 45	7.46	7.9	F ₂	9	..	39699b
32	4966	32.1	+35 14	8.17	9.35	K ₅	1	..	38615i	82	7670	32.4	-60 20	8.2	9.1	Ko	6	..	39699b
33	4971	32.1	+30 7	7.16	7.72	Go	5	..	38620i	83	3574	32.4	-68 34	10.9	11.5	G	1	..	38368b
34	5145	32.1	+14 13	8.2	9.2	Ko	2	..	38618i	84	2296	32.4	-73 11	9.5	10.3	G ₅	3	..	38385b
35	5144	32.1	+13 54	8.4	9.2	G ₅	2	..	38618i	85	776	32.5	+80 57	8.4	8.7	F ₂	2	..	37227i
36	5090	32.1	+ 8 57	9.1	9.2	A ₃	2	..	3736oi	86	4214	32.5	+47 56	8.4	8.4	B ₉	4	..	38598i
37	4689	32.1	+ 2 55	9.0	9.8	G ₅	1	..	3735oi	87	4457	32.5	+45 10	8.67	9.67	Ko	2	..	38140i
38	5998	32.1	- 2 4	8.8	9.6	G ₅	3	..	14175b	88	5087	32.5	+37 10	8.6	9.8	K ₅	1	..	38615i
39	6506	32.1	-13 53	7.9	8.9	Ko	4	..	20146b	89	5066	32.5	+35 15	7.07	8.14	K ₂	5	..	38615i
40	6451	32.1	-21 29	10.8	10.8	Ao	2	..	24027b	90	6022	32.5	- 5 39	8.9	9.7	G ₅	1	..	19957b
41	15864	32.1	-35 47	9.6	11.1	F ₅	2	..	40743b	91	6145	32.5	-10 31	7.9	9.0	K ₂	4	..	20146b
42	15300	32.1	-44 41	9.4	9.4	F ₅	5	..	39667b	92	6440	32.5	-12 46	9.7	10.7	Ko	3	..	24575b
43	12185	32.1	-52 30	9.5	10.3	G ₅	2	..	39675b	93	6439	32.5	-13 37	5.74	6.52	G ₅	10	0,10	20146b
44	10324	32.1	-54 45	9.08	10.4	K ₂	2	..	39675b	94	6452	32.5	-21 3	9.4	10.0	Go	3	..	24027b
45	6433	32.1	-62 17	8.9	9.9	Ko	2	..	42519b	95	14720	32.5	-46 3	4.86	4.92	A ₂	..	..	28,217
46	4211	32.2	+48 1	8.4	8.4	B ₉	5	..	38598i	96	14721	32.5	-46 8	8.1	9.5	Mb	5	..	39667b
47	5037	32.2	+38 55	8.8	9.9	K ₂	2	..	38615i	97	4097	32.6	+50 25	8.92	8.90	B ₉	2	..	38598i
48	4744	32.2	+34 6	8.6	9.4	G ₅	2	..	38620i	98	4954	32.6	+16 17	6.18	6.18	Ao	10	0,10	38131i
49	4972	32.2	+29 29	9.0	9.5	F ₈	1	..	38620i	99	17773	32.6	-23 58	11.0	11.4	G ₅	1	..	45144b
50	6527	32.2	-12 7	9.7	10.2	F ₈	4	..	24575b	100	16553	32.6	-25 26	7.74	7.7	F ₂	7	..	45144b

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	13617	32.6	-51 4	9.7	10.3	Ko	2	..	39675b	51	4366	33.0	-64 36	7.92	9.0	Ko	5	..	42519b
2	3575	32.6	-68 37	10.9	11.5	Go	1	..	38368b	52	1329	33.1	+70 32	8.6	9.0	F5	3	..	38903i
3	1074	32.6	-80 20	9.9	10.9	Ko	2	..	38135b	53	2766	33.1	+57 33	8.4	8.7	Fo	2	..	37241i
4	4109	32.7	+48 49	7.9	8.3	F5	4	..	38598i	54	3487	33.1	+52 16	7.9	9.1	K5	1	..	37241i
5	4217	32.7	+48 8	9.0	9.6	Go	1	..	38598i	55	4112	33.1	+48 27	7.12	7.68	Go	7	..	38598i
6	4216	32.7	+47 59	8.4	9.4	Ko	1	..	38598i	56	4466	33.1	- 1 24	9.3	10.1	G5	1	..	14175b
7	4283	32.7	+45 55	4.00	5.00	Ko	..	o,R	1636c	57	6224	33.1	- 9 11	6.84	7.62	G5	8	..	20146b
8	4458	32.7	+44 30	8.1	8.1	Ao	1	..	38140i	58	6465	33.1	-15 10	8.7	9.8	K2	2	..	24575b
9	4508	32.7	+43 52	5.86	5.84	B9	9	..	38140i	59	17778	33.1	-24 6	10.3	11.7	Mb	1	..	39389b
10	4941	32.7	+31 55	9.2	10.3	K2	2	..	38620i	60	19620	33.1	-29 55	8.97	9.6	F2	6	..	42802b
11	4690	32.7	+ 2 49	8.0	8.4	F5	6	..	37350i	61	19627	33.1	-30 45	10.0	10.8	Go	1	..	42802b
12	6248	32.7	- 6 32	8.3	9.3	Ko	4	..	19957b	62	15100	33.1	-39 3	8.5	9.3	Ko	5	..	40904b
13	6146	32.7	-10 14	9.4	9.9	F8	3	..	24575b	63	15099	33.1	-39 34	10.3	10.0	K5	1	..	40904b
14	6622	32.7	-20 11	9.4	10.8	K2	2	..	24027b	64	15092	33.1	-45 49	10.3	10.3	F8	2	..	39667b
15	16720	32.7	-26 13	9.8	11.3	K5	1	..	39389b	65	14643	33.1	-47 2	10.8	11.2	G5	1	..	39667b
16	16385	32.7	-27 49	9.8	11.3	Ko	1	..	42802b	66	14204	33.1	-49 22	9.4	10.0	F8	3	..	39667b
17	19367	32.7	-31 7	8.2	9.9	G5	3	..	42802b	67	4913	33.1	-63 27	6.67	7.6	G5	10	..	42519b
18	15971	32.7	-36 26	8.7	9.8	Ko	4	..	40743b	68	4153	33.1	-64 58	8.8	9.9	K2	2	..	42519b
19	16409	32.7	-42 7	8.07	8.7	Ko	6	..	41078b	69	728	33.2	+82 39	7.69	8.69	Ko	3	..	37281i
20	10305	32.7	-57 1	8.1	8.8	Ma	7	o,3	39699b	70	1547	33.2	+67 23	8.0	8.4	F5	2	..	38937i
21	6759	32.7	-61 24	9.1	10.2	G	1	..	42519b	71	3673	33.2	+51 34	9.0	9.0	B9	2	..	38598i
22	1831	32.8	+65 11	8.70	9.20	F8	2	o,1	38937i	72	4099	33.2	+50 42	8.0	8.0	B9	4	..	38598i
23	3206	32.8	+53 47	8.6	8.6	Ao	1	..	38598i	73	4720	33.2	+42 43	4.28	4.23	B8	..	R	56,103
24	6152	32.8	- 8 30	9.2	10.6	Ma	2	..	19957b	74	4719	33.2	+42 31	6.92	7.92	Ko	5	..	25982i
25	6464	32.8	-15 38	6.66	7.66	Ko	8	..	20146b	75	4677	33.2	+32 17	9.2	9.2	A	3	..	38620i
26	17776	32.8	-24 25	9.8	10.0	B9	3	..	39389b	76	4942	33.2	+32 4	9.2	9.3	A2	3	..	38620i
27	18779	32.8	-29 18	8.4	10.2	K2	2	..	42802b	77	5129	33.2	+20 2	7.30	7.64	F2	7	..	38123i
28	14641	32.8	-47 42	10.3	11.2	K2	1	..	39667b	78	6326	33.2	-16 34	9.9	10.7	G5	1	..	17041b
29	10306	32.8	-57 24	8.8	9.7	Ko	4	..	39699b	79	6167	33.2	-22 43	9.7	10.6	G5	2	..	45144b
30	3328	32.8	-68 53	10.5	11.5	K	1	..	38368b	80	16556	33.2	-24 59	9.5	10.5	G5	3	..	39389b
31	3670	32.9	+51 41	8.8	10.2	Mb	..	..	M	81	14644	33.2	-46 57	10.5	10.6	Go	4	..	39667b
32	4286	32.9	+45 31	8.0	8.0	Ao	2	..	38140i	82	14557	33.2	-48 34	9.3	10.3	G5	3	..	39667b
33	4952	32.9	+17 51	5.42	5.42	Ao	..	..	56,103	83	8090	33.2	-58 21	8.6	10.3	Ko	3	..	39699b
34	16554	32.9	-25 47	9.2	9.1	F8	4	..	45144b	84	7908	33.2	-59 48	9.56	10.8	Ko	3	..	39699b
35	17604	32.9	-32 36	9.7	9.6	F8	3	..	42802b	85	2992	33.3	+55 24	8.86	8.92	A2	2	..	38598i
36	15207	32.9	-40 11	8.2	9.0	Fo	6	5,5	41078b	86	3017	33.3	+54 40	8.6	8.6	Ao	3	..	37241i
37	14725	32.9	-46 46	10.8	10.9	F8	2	..	39667b	87	4678	33.3	+32 26	9.4	9.4	Ao	2	..	38620i
38	10502	32.9	-53 3	9.2	10.6	Ko	2	..	39675b	88	4957	33.3	+17 2	8.0	8.6	Go	2	..	38131i
39	10503	32.9	-53 30	10.0	10.6	Go	1	..	39675b	89	4956	33.3	+16 30	7.8	8.8	Ko	2	..	38131i
40	R	32.9	-59 10	..	..	Ko	1	..	39699b	90	4751	33.3	+ 1 41	8.6	9.1	F8	4	..	37350i
41	3671	33.0	+52 7	8.1	8.1	Ao	3	..	37241i	91	4752	33.3	+ 1 22	8.69	9.19	F8	3	..	37350i
42	4220	33.0	+47 57	9.2	9.2	B9	2	..	38598i	92	6509	33.3	-14 16	8.1	8.4	Fo	5	..	20146b
43	4288	33.0	+45 39	6.56	7.34	G5	4	..	38140i	93	6627	33.3	-19 52	10.7	11.2	G	1	..	24027b
44	4676	33.0	+32 42	9.4	10.4	Ko	1	..	38620i	94	6168	33.3	-22 13	8.5	9.7	Ko	5	..	24027b
45	5008	33.0	+12 20	8.8	8.9	A2	3	..	37360i	95	19375	33.3	-31 12	9.8	9.9	F5	2	..	42802b
46	6000	33.0	- 1 53	8.2	8.3	A2	6	E	37350i	96	15324	33.3	-37 12	9.3	10.5	G5	1	..	40743b
47	5917	33.0	- 4 19	8.7	9.1	F5	3	..	19957b	97	14207	33.3	-49 39	9.7	10.0	F5	5	..	39667b
48	6626	33.0	-20 7	10.3	10.9	G5	1	..	24027b	98	2208	33.3	-72 58	11.2	11.2	Ao	2	..	38385b
49	17975	33.0	-23 4	10.5	11.2	Go	1	..	39389b	99	1835	33.4	+64 53	8.2	9.2	Ko	2	..	38937i
50	10118	33.0	-56 29	10.2	10.3	A5	2	..	14382b	100	4114	33.4	+48 23	8.7	8.8	A2	2	..	38598i

THE HENRY DRAPER CATALOGUE.

222200

23^h 33^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	6251	33.4	— 6 33	9.2	10.2	Ko	2	..	19957b	51	4695	33.9	+ 2 50	9.3	9.7	F5	2	..	3735oi
2	15093	33.4	—45 49	8.3	9.5	Ko	6	..	39667b	52	6531	33.9	—12 6	8.8	9.8	Ko	2	..	20146b
3	4368	33.4	—63 54	8.9	9.9	K	1	..	42519b	53	17785	33.9	—24 16	11.5	11.2	Go	2	..	39389b
4	3576	33.4	—68 28	9.9	10.2	Fo	6	..	38368b	54	17786	33.9	—24 38	9.8	10.3	F5	2	..	45144b
5	4514	33.5	+44 9	8.6	8.6	Ao	2	..	3814oi	55	16562	33.9	—25 33	9.8	10.9	K2	1	..	39389b
6	4512	33.5	+43 43	8.5	9.0	F8	3	..	3814oi	56	16394	33.9	—27 16	10.0	10.0	Go	3	..	45144b
7	4826	33.5	+41 57	6.79	6.77	B9	5	..	3814oi	57	14559	33.9	—48 39	9.9	11.2	Ko	1	..	39667b
8	5129	33.5	+39 56	8.8	9.6	G5	2	5,2-	3814oi	58	10310	33.9	—57 33	9.4	10.0	Go	2	..	39699b
9	4971	33.5	+34 59	9.0	9.1	A5	1	..	38615i	59	3329	33.9	—69 45	8.24	8.8	G5	5	..	38368b
10	5200	33.5	+ 5 41	8.7	9.0	Fo	3	..	3735oi	60	1793	33.9	—75 48	10.5	11.7	K5	3	..	38135b
11	6157	33.5	— 8 21	9.7	10.5	G5	1	..	19957b	61	1606	33.9	—76 40	9.3	10.3	Ko	4	..	38135b
12	6453	33.5	—21 25	7.9	8.4	Go	8	..	24027b	62	533	34.0	+84 37	8.8	8.9	A2	4	..	3728ri
13	15307	33.5	—44 11	9.7	10.0	Fo	2	..	41078b	63	3051	34.0	+56 26	8.5	8.4	B5	3	..	3724ri
14	10064	33.5	—55 20	9.1	10.9	Ko	1	..	39675b	64	2993	34.0	+56 3	8.7	8.8	A2	2	..	3724ri
15	4916	33.5	—63 36	8.9	9.9	Ko	2	..	42519b	65	3207	34.0	+53 53	7.49	8.49	Ko	4	..	3724ri
16	4915	33.5	—63 48	9.1	9.9	G5	2	..	42519b	66	4229	34.0	+47 31	8.6	8.6	Ao	2	..	38598i
17	2026	33.6	+63 47	9.0	9.0	A	1	..	38937i	67	4680	34.0	+32 24	8.7	9.8	K2	1	..	3862oi
18	2770	33.6	+58 6	7.22	8.22	Ko	5	5,2	3724ib	68	4959	34.0	+16 27	7.8	8.9	K2	1	..	3813ri
19	5119	33.6	+40 25	8.37	8.87	F8	2	..	3814oi	69	6148	34.0	—10 32	8.9	9.4	F8	5	..	24575b
20	5131	33.6	+39 20	8.9	9.4	F8	3	..	32383i	70	19379	34.0	—31 17	11.9	10.2	F2	2	..	42802b
21	4972	33.6	+34 28	7.02	7.08	A2	8	..	3862oi	71	10330	34.0	—53 57	9.3	10.3	Ko	2	..	39675b
22	4668	33.6	+26 56	8.8	8.9	A2	3	..	3862oi	72	3787	34.0	—66 49	7.4	8.4	Ko	9	..	38368b
23	17784	33.6	—24 14	8.2	8.8	Go	5	..	45144b	73	2085	34.0	—74 48	9.70	11.2	K	2	..	38135b
24	18279	33.6	—28 50	8.3	8.8	F8	5	..	42802b	74	778	34.1	+80 47	8.6	9.6	Ko	2	..	38964i
25	16419	33.6	—42 2	8.3	9.0	G5	6	..	41078b	75	2490	34.1	+61 35	6.72	6.78	A2	7	0,7	38937i
26	14730	33.6	—46 10	7.8	7.7	A5	..	0,9	28,217	76	4116	34.1	+48 38	8.1	8.4	Fo	4	..	38598i
27	7671	33.6	—60 51	8.8	9.9	Go	3	..	39699b	77	4996	34.1	+30 19	8.51	9.58	K2	1	..	3862oi
28	1605	33.6	—76 47	8.9	9.7	G5	4	..	38135b	78	5204	34.1	+ 5 39	7.76	7.90	A5	6	..	3735oi
29	4515	33.7	+44 8	8.5	8.9	F5	2	..	3814oi	79	6158	34.1	— 8 32	9.4	10.0	Go	2	..	19957b
30	4973	33.7	+34 58	8.05	8.11	A2	3	..	38615i	80	6353	34.1	—18 21	8.6	8.9	F2	6	..	24027b
31	5131	33.7	+19 27	9.3	10.3	Ko	1	..	38123i	81	6170	34.1	—22 28	7.76	8.2	Fo	6	..	45144b
32	5677	33.7	— 3 31	8.7	9.3	Go	4	..	14175b	82	16563	34.1	—25 6	10.0	10.9	G5	1	..	39389b
33	6169	33.7	—21 52	9.4	10.6	G5	3	..	24027b	83	16397	34.1	—27 43	9.0	8.8	F5	4	..	42802b
34	17609	33.7	—32 51	9.0	9.4	Go	4	..	42802b	84	16118	34.1	—34 3	7.87	9.0	Ko	6	..	40725b
35	14731	33.7	—45 58	11.2	11.2	F8	1	..	39667b	85	14734	34.1	—46 16	11.2	11.2	Go	1	..	39667b
36	8091	33.7	—58 6	9.9	10.7	G5	1	..	39699b	86	14650	34.1	—47 0	9.9	9.5	Ao	5	..	39667b
37	2299	33.7	—73 15	6.7	7.7	Ko	6	0,8	14357b	87	14651	34.1	—47 12	6.28	7.0	A3	8	..	37132b
38	4115	33.8	+48 20	8.7	8.8	A2	1	..	38598i	88	10504	34.1	—53 16	9.2	10.3	F5	2	..	39675b
39	5121	33.8	+40 17	9.12	9.54	F5	3	..	32383i	89	10331	34.1	—54 5	10.2	10.3	A5	1	..	39675b
40	5042	33.8	+38 29	8.2	9.3	K2	3	..	38615i	90	7672	34.1	—60 18	9.3	9.9	Ao	4	..	39699b
41	4974	33.8	+35 13	var.	var.	Nb	..	R	M	91	1111	34.2	+73 5	9.2	9.2	Ao	3	..	38903i
42	4879	33.8	+22 59	9.2	10.2	K	1	..	38123i	92	3208	34.2	+54 7	8.6	8.6	B9	3	..	3724ri
43	5066	33.8	+ 7 46	8.6	9.0	F5	4	..	3736oi	93	3676	34.2	+51 43	var.	var.	Mc	..	R	M
44	6225	33.8	+ 9 29	9.9	10.5	Go	3	5,2	24575b	94	6007	34.2	— 2 43	9.2	10.4	K5	1	..	14175b
45	6119	33.8	—11 3	10.3	10.8	F8	1	..	24575b	95	6485	34.2	—19 38	9.28	10.3	K2	3	..	24027b
46	15872	33.8	—35 28	9.0	9.8	F5	3	..	40725b	96	15312	34.2	—43 54	9.7	10.3	Go	1	..	41078b
47	1342	33.9	+70 5	8.24	8.32	A3	3	..	38903i	97	15095	34.2	—45 32	8.9	10.3	K2	4	0,3	39667b
48	4974	33.9	+29 30	8.8	9.2	F5	2	..	3862oi	98	13627	34.2	—51 27	10.5	10.4	G5	2	..	39675b
49	4880	33.9	+22 46	7.01	7.43	F5	6	..	38123i	99	3788	34.2	—66 51	9.5	10.5	Ko	2	..	38368b
50	5038	33.9	+11 38	7.56	7.64	A3	8	..	3736oi	100	1476	34.2	—78 46	9.9	10.4	F8	3	..	38135b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

222300

23^h 34^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>m.</i>	<i>o</i> <i>'</i>									<i>m.</i>	<i>o</i> <i>'</i>						
1	926	34.3	+76 16	9.07	9.41	F2	2	..	38139i	51	2493	34.7	+61 53	8.6	9.1	F8	2	..	38937i
2	1045	34.3	+73 17	8.8	8.9	A2	2	..	38133i	52	3055	34.7	+56 35	8.4	8.5	A5	3	..	37241i
3	1922	34.3	+65 56	7.8	7.8	A	1	R	38937i	53	4106	34.7	+50 47	9.2	9.2	Ao	2	..	38598i
4	4180	34.3	+49 55	5.32	5.30	B9	..	4,10	56,103	54	4114	34.7	+46 54	8.9	8.9	Ao	1	..	38598i
5	4749	34.3	+34 10	8.0	8.4	F5	3	..	38620i	55	4726	34.7	+42 47	7.60	8.02	F5	3	..	38140i
6	5180	34.3	+ 6 31	8.5	8.5	Ao	4	..	37350i	56	5000	34.7	+30 34	9.2	9.8	Go	2	..	38620i
7	4468	34.3	- 1 31	9.3	10.3	Ko	1	..	14175b	57	5254	34.7	+ 9 31	9.0	9.4	F5	2	..	37360i
8	6458	34.3	-21 7	10.1	10.3	Go	3	..	24027b	58	6256	34.7	- 6 6	7.81	8.88	K2	5	..	19957b
9	6457	34.3	-21 34	9.7	10.6	F5	2	..	24027b	59	6228	34.7	- 9 7	9.7	10.5	G5	1	..	40911b
10	16568	34.3	-25 46	9.8	11.4	Go	1	..	39389b	60	6121	34.7	-11 29	9.4	10.2	G5	4	..	24575b
11	14652	34.3	-46 53	9.7	10.0	G5	3	..	39667b	61	6487	34.7	-19 23	9.7	10.3	F8	3	..	24027b
12	6761	34.3	-61 19	8.8	10.0	Ko	2	..	39699b	62	18790	34.7	-29 30	7.56	8.8	Ko	7	..	42802b
13	2769	34.3	-71 41	8.2	8.7	F8	4	..	38385b	63	14566	34.7	-47 53	6.92	7.7	G5	8	5,9	39670b
14	927	34.4	+76 53	8.9	9.0	A3	2	..	38139i	64	7673	34.7	-60 45	9.2	11.1	Ko	2	..	39699b
15	4112	34.4	+46 55	9.7	9.7	A	1	..	38598i	65	1925	34.8	+65 38	8.5	9.1	Go	2	..	37909i
16	4945	34.4	+32 0	9.4	9.4	Ao	2	..	38620i	66	2627	34.8	+58 26	7.70	8.48	G5	3	..	37241i
17	4588	34.4	+27 41	6.97	7.53	Go	7	..	38620i	67	4979	34.8	+34 24	7.16	7.22	A2	8	..	38620i
18	6028	34.4	- 5 30	9.4	9.8	F5	3	..	19957b	68	5935	34.8	+ 5 5	4.28	4.78	F8	10	R	37360i
19	6254	34.4	- 6 10	9.1	9.6	F8	3	..	19957b	69	6629	34.8	-20 0	10.3	10.8	F2	1	..	24027b
20	6532	34.4	-12 31	9.1	10.1	Ko	4	..	24575b	70	15097	34.8	-45 36	10.5	10.3	F8	2	..	39667b
21	18788	34.4	-29 16	10.5	10.7	F2	2	..	42802b	71	10122	34.8	-56 31	9.6	10.4	G5	1	..	14382b
22	14653	34.4	-47 10	10.3	10.6	F8	2	..	39667b	72	8092	34.8	-58 24	10.0	10.8	G5	1	..	39699b
23	13628	34.4	-51 19	8.2	9.4	Ko	5	0,2	39675b	73	3014	34.8	-70 31	10.8	11.4	G	2	..	38385b
24	12192	34.4	-52 35	9.6	10.0	F5	3	..	39675b	74	1041	34.8	-81 7	10.1	10.4	F2	3	..	38135b
25	2772	34.5	+58 12	8.06	9.06	Ko	2	..	37241i	75	211	34.8	-88 50	8.9	8.9	Ao	6	..	22980b
26	4464	34.5	+45 10	7.77	7.83	A2	3	..	38140i	76	1218	34.9	+71 24	8.2	8.2	Ao	4	E	38133i
27	5044	34.5	+38 29	8.9	9.7	G5	2	..	38615i	77	5095	34.9	+ 9 7	6.07	6.13	A2	10	..	37360i
28	4751	34.5	+33 30	8.6	8.7	A3	3	..	38620i	78	5182	34.9	+ 6 53	9.1	10.1	Ko	2	..	17058b
29	5028	34.5	+ 0 57	9.7	10.1	F5	2	..	37350i	79	5029	34.9	+ 0 59	9.3	10.3	Ko	1	..	14175b
30	6227	34.5	- 9 25	9.9	10.9	Ko	1	..	40911b	80	4472	34.9	- 1 17	9.3	9.7	F5	3	E	37350i
31	6788	34.5	-17 36	9.7	10.7	Ko	2	5,2	24027b	81	5926	34.9	- 4 41	9.30	9.80	F8	2	..	19957b
32	17984	34.5	-23 5	7.16	7.6	Ao	7	..	45144b	82	6630	34.9	-20 17	9.9	11.2	K2	1	..	24027b
33	17790	34.5	-24 8	10.7	11.7	Ko	1	..	39389b	83	17793	34.9	-24 4	11.0	11.3	F8	1	..	39389b
34	19643	34.5	-30 5	8.2	9.6	Fo	4	..	42802b	84	16648	34.9	-33 14	9.7	9.3	F8	3	..	40725b
35	16646	34.5	-33 18	7.16	7.7	Ko	..	5,7	56,150	85	12195	34.9	-52 0	9.2	10.0	F8	3	..	39675b
36	10314	34.5	-57 52	9.2	10.3	K5	3	..	39699b	86	1032	35.0	+74 43	6.04	6.10	A2	9	..	38133i
37	7909	34.5	-58 56	9.1	10.2	Go	3	..	39699b	87	1047	35.0	+73 25	6.08	6.86	G5	8	..	38133i
38	4917	34.5	-63 26	8.9	9.3	F5	3	..	42519b	88	4234	35.0	+48 12	8.6	8.9	Fo	2	..	38598i
39	1030	34.6	+75 10	8.92	8.92	Ao	3	0,3	38903i	89	4466	35.0	+44 53	8.47	9.65	K5	1	..	38140i
40	2402	34.6	+61 32	8.9	8.9	Ao	2	R	38937i	90	4671	35.0	+26 59	6.75	7.75	Ko	6	0,6	38620i
41	4946	34.6	+31 55	9.2	10.2	Ko	1	..	38620i	91	4673	35.0	+26 17	7.65	8.21	Go	4	..	38123i
42	4469	34.6	- 1 18	8.92	9.20	Fo	2	..	14175b	92	5028	35.0	+14 16	7.9	8.0	A3	2	..	38131i
43	6030	34.6	- 4 53	9.55	10.33	G5	2	..	19957b	93	6257	35.0	- 5 54	9.7	10.3	Go	2	..	19957b
44	6029	34.6	- 5 13	9.1	10.2	K2	1	..	19957b	94	6332	35.0	-15 58	8.3	9.4	K2	3	..	14623b
45	6471	34.6	-14 47	5.16	5.30	A5	..	R	56,103	95	6488	35.0	-19 45	9.9	10.0	Ko	4	..	24027b
46	14564	34.6	-48 9	9.1	9.5	F8	6	2,5	39667b	96	18794	35.0	-28 55	7.7	8.4	F5	7	..	42802b
47	14565	34.6	-48 24	9.7	10.6	Ko	2	0,2	39667b	97	18795	35.0	-29 28	10.0	9.4	F5	3	..	42802b
48	12193	34.6	-52 10	7.5	8.5	Ko	8	5,3	39675b	98	15456	35.0	-43 49	8.6	9.5	Ko	3	..	41078b
49	10315	34.6	-57 18	8.5	9.4	Go	4	..	39699b	99	5098	35.1	+37 6	6.23	6.51	Fo	7	0,7	38615i
50	3330	34.6	-69 45	9.09	9.9	F8	3	..	38368b	100	5184	35.1	+19 15	9.1	9.5	F5	2	..	38123i

THE HENRY DRAPER CATALOGUE.

222400

23^h 35^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	6013	35.1	— 2 19	9.1	10.1	Ko	1	..	14175b	51	5074	35.6	+36 9	6.30	6.72	F5	9	..	38615i
2	16402	35.1	— 27 27	7.7	8.8	G5	6	..	42802b	52	4593	35.6	+27 20	8.6	8.6	Ao	3	..	38620i
3	16426	35.1	— 42 18	9.1	10.0	Ko	2	..	41078b	53	5073	35.6	+ 7 24	8.4	9.4	Ko	2	0,2	37360i
4	928	35.2	+77 4	3.42	4.42	Ko	..	R	840c	54	5072	35.6	+ 7 20	8.4	9.5	K2	3	..	17058b
5	1345	35.2	+70 14	8.09	9.27	K5	2	..	38903i	55	4547	35.6	— 0 8	7.68	8.68	Ko	5	..	37350i
6	1836	35.2	+64 17	8.00	8.00	Ao	5	0,3	38937i	56	4473	35.6	— 0 55	8.2	8.5	Fo	4	E	37350i
7	2268	35.2	+63 10	6.85	6.91	A2	7	..	37909i	57	15101	35.6	— 45 20	10.1	10.6	Go	2	5,2	39670b
8	4120	35.2	+49 10	9.2	9.7	F8	1	..	38598i	58	12197	35.6	— 52 32	10.9	10.9	A	1	..	39675b
9	4753	35.2	+33 16	8.8	8.9	A3	2	..	38620i	59	10068	35.6	— 55 44	9.6	10.6	Ko	1	..	14382b
10	5036	35.2	+ 4 15	8.2	9.4	K5	3	..	37350i	60	7675	35.6	— 60 23	10.3	11.1	G5	1	..	39699b
11	17990	35.2	— 23 34	10.3	10.3	A5	1	..	45144b	61	790	35.7	+79 16	8.2	8.2	B9	6	..	38964i
12	16736	35.2	— 26 45	7.50	8.1	F5	6	..	45144b	62	5075	35.7	+ 7 47	8.4	8.8	F5	6	..	37360i
13	14221	35.2	— 49 45	9.08	9.5	G5	6	..	39667b	63	5038	35.7	+ 4 38	9.0	10.0	Ko	2	..	37350i
14	1477	35.2	— 78 44	10.1	10.1	A	4	..	38135b	64	4701	35.7	+ 3 5	8.8	8.8	Ao	4	..	37350i
15	2030	35.3	+63 46	8.0	8.5	F8	3	..	38937i	65	6166	35.7	— 8 28	7.08	7.58	F8	9	..	19957b
16	4467	35.3	+44 31	7.47	7.45	B9	5	..	38140i	66	15335	35.7	— 37 48	8.46	10.1	K2	3	..	40904b
17	4784	35.3	+24 2	8.4	9.4	Ko	3	..	38123i	67	15588	35.7	— 38 26	7.56	9.0	K2	4	..	14593b
18	5188	35.3	+19 13	8.8	8.8	B8	4	..	38123i	68	16429	35.7	— 42 9	9.3	9.6	F5	3	..	41078b
19	4956	35.3	+17 40	7.26	8.26	Ko	5	0,4	38131i	69	2301	35.7	— 73 0	10.6	11.2	Go	3	..	38385b
20	4978	35.3	+10 18	9.32	10.50	K5	1	..	14198b	70	2088	35.7	— 74 20	9.3	10.3	Ko	4	..	38135b
21	6125	35.3	— 10 47	9.1	10.2	K2	4	..	24575b	71	1630	35.8	+67 0	7.8	8.3	F8	2	..	38937i
22	6489	35.3	— 19 33	8.03	8.4	Go	9	..	24027b	72	3025	35.8	+54 35	7.9	7.9	B9	6	0,4	37241i
23	17991	35.3	— 23 18	9.6	10.0	G5	2	..	45144b	73	4124	35.8	+49 8	8.7	9.8	K2	1	..	38598i
24	6435	35.3	— 61 53	8.9	9.9	Ko	3	..	42519b	74	5135	35.8	+19 48	8.6	9.7	K2	3	..	38123i
25	4183	35.4	+49 17	9.2	10.0	G5	1	..	38598i	75	5076	35.8	+ 7 26	9.5	10.0	F8	2	..	17058b
26	4235	35.4	+48 0	8.9	8.9	Ao	1	..	38598i	76	4474	35.8	— 1 17	9.0	9.8	G5	1	..	14175b
27	4957	35.4	+18 4	8.8	9.6	G5	2	..	38131i	77	6356	35.8	— 18 5	8.5	9.5	Ko	4	..	24027b
28	5070	35.4	+ 7 17	8.20	8.62	F5	4	3,3	17058b	78	16585	35.8	— 25 41	8.6	8.8	F8	3	..	45144b
29	6014	35.4	— 1 55	10.1	10.6	F8	1	..	14175b	79	16405	35.8	— 27 32	9.8	9.7	Go	3	..	42802b
30	6165	35.4	— 8 8	9.1	9.9	G5	1	..	19957b	80	17623	35.8	— 32 38	7.18	7.7	G5	..	5,7	56,150
31	6448	35.4	— 13 11	9.7	10.7	Ko	1	..	24575b	81	15114	35.8	— 39 35	9.9	10.2	Ao	2	..	40904b
32	17620	35.4	— 32 28	8.7	9.4	Go	5	..	40725b	82	14575	35.8	— 48 1	9.7	9.7	Go	5	5,4	39667b
33	17621	35.4	— 32 38	5.33	6.3	Ko	..	5,R	56,150	83	14574	35.8	— 48 23	10.3	10.3	Go	2	2,2	39670b
34	15886	35.4	— 35 16	8.7	10.1	G5	3	..	40725b	84	17995	35.9	— 23 47	9.8	10.9	G5	1	..	45144b
35	16427	35.4	— 42 12	9.2	10.3	K5	1	..	41078b	85	17796	35.9	— 24 43	6.68	8.3	K5	6	..	45144b
36	10067	35.4	— 54 55	10.2	10.6	F5	1	..	39675b	86	15463	35.9	— 43 42	10.1	10.3	F5	1	..	41078b
37	10321	35.4	— 56 59	7.2	7.6	Ao	6	0,9	41858b	87	14577	35.9	— 48 15	10.1	10.9	Ko	2	5,1	39670b
38	7674	35.4	— 59 56	10.3	11.1	G5	1	..	39699b	88	3491	36.0	+52 23	8.6	8.6	B9	1	..	38598i
39	4522	35.5	+43 47	4.33	4.33	Ao	..	R	56,103	89	3683	36.0	+52 11	9.0	9.0	Ao	2	..	38598i
40	4785	35.5	+24 8	7.82	8.24	F5	5	..	38123i	90	3682	36.0	+52 0	7.56	8.34	G5	3	..	37241i
41	5258	35.5	+ 9 50	8.1	8.4	F2	7	..	37360i	91	5076	36.0	+35 25	7.67	7.67	Ao	5	..	38615i
42	5071	35.5	+ 7 29	8.4	9.4	Ko	2	..	37360i	92	6070	36.0	— 7 2	8.3	8.6	Fo	6	..	19957b
43	6632	35.5	— 20 7	11.2	11.2	G	1	..	24027b	93	6535	36.0	— 12 14	6.13	7.13	Ko	10	..	20146b
44	15320	35.5	— 44 26	9.7	10.3	Ko	1	..	41078b	94	6491	36.0	— 19 40	10.7	10.9	Go	1	..	24027b
45	7910	35.5	— 59 44	9.56	9.9	Go	4	..	39699b	95	18291	36.0	— 27 57	9.5	10.5	K2	1	..	42802b
46	2773	35.5	— 72 33	10.3	10.6	Fo	3	..	38385b	96	16134	36.0	— 34 8	9.3	10.1	A2	4	..	40725b
47	1076	35.5	— 80 46	10.1	10.7	Go	3	..	38135b	97	15291	36.0	— 40 58	9.3	10.5	Ko	2	..	41078b
48	1033	35.6	+75 10	7.17	7.51	F2	6	..	38133i	98	1796	36.0	— 75 27	9.9	10.3	F5	4	..	38135b
49	4111	35.6	+51 11	9.2	9.2	Ao	2	..	38598i	99	4842	36.1	+41 18	6.84	7.91	K2	5	..	38140i
50	4185	35.6	+49 22	9.4	9.5	A2	1	..	38598i	100	5260	36.1	+ 9 29	9.0	10.1	K2	2	..	14198b

222500

23^h 36^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.
		<i>m.</i>	<i>o</i>									<i>m.</i>	<i>o</i>						
1	5208	36.1	+ 5 43	9.3	9.8	F8	6	..	3735oi	51	3015	36.4	- 70 0	7.94	8.8	G5	5	..	12082b
2	5209	36.1	+ 5 43	8.6	9.1					52	1631	36.5	+ 66 18	8.1	8.7	Go	1	..	38937i
3	5688	36.1	- 3 25	8.9	9.9	Ko	2	..	14175b	53	3493	36.5	+ 53 12	8.7	9.5	G5	3	..	38598i
4	6033	36.1	- 4 59	8.9	10.0	K2	2	..	19957b	54	3684	36.5	+ 51 53	8.5	8.5	Ao	6	..	38598i
5	6523	36.1	- 14 2	8.5	8.8	Fo	3	..	20146b	55	4127	36.5	+ 46 18	7.25	7.23	B9	7	0,4	38140i
6	6633	36.1	- 20 38	9.4	10.3	Ko	3	..	24027b	56	5143	36.5	+ 40 0	7.02	7.44	F5	7	..	38140i
7	6461	36.1	- 21 1	8.9	9.7	Fo	4	..	24027b	57	5002	36.5	+ 30 55	8.9	9.9	Ko	2	..	38620i
8	16433	36.1	- 42 8	7.7	8.7	F5	7	..	41078b	58	5262	36.5	+ 9 40	9.3	9.4	A5	2	..	37360i
9	14578	36.1	- 48 18	9.9	10.4	G5	2	0,1	39667b	59	5210	36.5	+ 5 44	9.0	9.6	Go	2	..	17058b
10	12198	36.1	- 52 42	9.2	10.0	F5	2	..	39675b	60	6261	36.5	- 6 4	9.2	10.2	Ko	2	..	19957b
11	4921	36.1	- 63 5	9.3	9.6	F2	3	..	42519b	61	6359	36.5	- 18 20	8.7	9.0	F	5	..	17041b
12	1478	36.1	- 78 13	10.6	11.1	F8	4	..	38135b	62	6636	36.5	- 20 19	7.9	9.7	Ma	6	..	24027b
13	755	36.1	- 83 42	9.0	10.0	Ko	2	..	15165b	63	6635	36.5	- 20 43	8.1	9.7	K2	5	..	24027b
14	2780	36.2	+ 57 17	7.22	7.22	Ao	6	1,4	37241i	64	17807	36.5	- 24 10	9.0	8.8	G5	4	..	45144b
15	4240	36.2	+ 48 14	8.6	9.4	G5	1	..	38598i	65	14581	36.5	- 48 51	9.4	10.9	Ko	2	0,2	39667b
16	4301	36.2	+ 45 40	7.22	7.64	F5	7	..	38140i	66	7911	36.5	- 59 27	9.3	11.1	K2	2	..	39699b
17	4526	36.2	+ 43 50	8.9	8.9	Ao	3	..	38140i	67	827	36.6	+ 81 26	8.4	9.4	Ko	2	0,1	38964i
18	5140	36.2	+ 39 55	10.6	10.9	Fo	3	..	32383i	68	1555	36.6	+ 67 48	7.7	7.5	B3	4	..	38937i
19	5050	36.2	+ 38 38	8.8	9.8	Ko	1	..	38842i	69	1838	36.6	+ 64 34	7.76	8.76	Ko	2	..	37909i
20	5039	36.2	+ 4 41	8.8	9.9	K2	2	..	3735oi	70	4127	36.6	+ 48 58	6.31	6.39	A3	..	0,9-	56,103
21	4758	36.2	+ 1 54	8.2	9.3	K2	3	..	3735oi	71	5144	36.6	+ 39 40	9.2	9.6	F5	2	..	32383i
22	6232	36.2	- 9 11	9.2	10.0	G5	2	..	40911b	72	4791	36.6	+ 23 40	7.47	7.53	A2	6	..	38123i
23	6493	36.2	- 19 5	10.1	10.6	F5	3	..	24027b	73	5078	36.6	+ 7 39	8.99	9.49	F8	2	..	37360i
24	16136	36.2	- 34 45	8.88	9.2	F2	4	..	40725b	74	6358	36.6	- 18 23	4.95	5.51	Go	..	R	56,103
25	15464	36.2	- 43 25	9.7	9.7	Go	2	..	41078b	75	15990	36.6	- 36 32	9.7	10.4	G5	3	..	40904b
26	12199	36.2	- 52 8	8.8	10.3	Ma	3	..	39675b	76	16435	36.6	- 42 50	7.28	8.4	Ko	8	..	41078b
27	1220	36.3	+ 71 18	9.2	9.3	A2	2	..	38139i	77	14228	36.6	- 49 12	9.1	10.3	Ko	4	0,4	39670b
28	4126	36.3	+ 48 33	8.6	9.6	Ko	1	..	38598i	78	14032	36.6	- 50 50	10.1	10.9	Ko	1	..	39675b
29	4952	36.3	+ 32 0	7.25	7.25	Ao	7	..	38620i	79	7912	36.6	- 59 31	9.2	9.6	F8	5	..	39699b
30	5190	36.3	+ 18 37	9.3	10.5	K5	1	..	38131i	80	5129	36.7	+ 41 13	8.4	9.5	K2	1	..	38140i
31	6539	36.3	- 12 31	9.9	10.7	G5	2	..	24575b	81	5079	36.7	+ 35 46	8.1	8.1	Ao	3	..	38615i
32	6797	36.3	- 17 14	9.1	9.5	F5	6	5,3	24027b	82	6262	36.7	- 6 32	7.9	8.7	G5	7	..	19957b
33	17997	36.3	- 23 7	10.5	11.3	G5	1	..	39506b	83	6234	36.7	- 8 55	9.7	10.1	F5	3	..	19957b
34	17802	36.3	- 24 27	9.8	9.4	F5	3	..	45144b	84	6340	36.7	- 16 41	9.7	10.9	K5	1	0,1	24027b
35	16744	36.3	- 26 14	8.8	10.0	Go	4	..	39506b	85	6637	36.7	- 19 57	8.7	9.5	G5	5	..	24027b
36	15591	36.3	- 38 0	7.93	9.0	G5	4	..	14593b	86	7676	36.7	- 60 29	9.3	11.1	G5	1	..	39699b
37	14579	36.3	- 48 33	9.9	10.6	G5	2	5,1	39667b	87	1797	36.7	- 75 17	10.5	10.9	F5	3	..	38135b
38	13645	36.3	- 50 59	7.8	9.4	Ko	6	0,2	39675b	88	1049	36.8	+ 73 59	8.8	9.1	Fo	2	..	38903i
39	13644	36.3	- 51 13	10.1	10.3	Go	2	..	39675b	89	1051	36.8	+ 73 50	8.8	9.6	G5	2	..	38903i
40	10070	36.3	- 55 48	8.6	10.3	K2	3	..	14382b	90	4242	36.8	+ 47 51	8.0	8.4	F5	4	0,3	38598i
41	10325	36.3	- 57 16	9.1	10.4	Ma	3	..	39699b	91	4553	36.8	- 0 33	9.0	9.6	Go	2	..	3735oi
42	2302	36.3	- 73 13	10.6	11.2	Go	2	..	38385b	92	6341	36.8	- 16 1	8.41	9.41	Ko	4	..	14623b
43	3060	36.4	+ 57 0	8.2	8.3	A3	3	..	37241i	93	19659	36.8	- 30 11	7.72	9.6	K2	4	..	42802b
44	4115	36.4	+ 51 8	8.0	8.1	A3	4	..	38598i	94	10509	36.8	- 53 37	8.1	9.7	Ko	5	..	39675b
45	6233	36.4	- 9 23	8.5	8.8	F2	5	..	19957b	95	10338	36.8	- 53 59	7.9	8.8	G5	7	0,3-	14382b
46	6336	36.4	- 16 11	9.31	9.87	Go	3	..	17041b	96	10327	36.8	- 56 56	8.4	8.9	Ko	5	2,3	39699b
47	6357	36.4	- 18 35	5.60	6.60	Ko	..	R	56,103	97	3976	36.8	- 67 27	9.5	10.3	G5	1	..	38368b
48	6495	36.4	- 19 30	10.6	10.6	G5	3	..	24027b	98	1034	36.9	+ 75 1	8.0	9.1	K2	4	..	38133i
49	16745	36.4	- 25 53	10.3	10.6	F2	2	..	39506b	99	5145	36.9	+ 39 46	8.8	9.1	F2	2	..	32383i
50	3577	36.4	- 68 20	8.1	8.5	F5	7	..	38229b	100	4814	36.9	+ 24 41	9.0	9.0	Ao	2	..	38123i

THE HENRY DRAPER CATALOGUE.

222600

23^h 36^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.
I	4792	36.9	+ 24 15	8.7	9.7	Ko	2	..	38123i	51	4601	37.4	+ 28 9	9.0	9.0	Ao	2	..	3862oi
2	5183	36.9	+ 6 42	5.85	5.85	Ao	10	..	3735oi	52	5139	37.4	+ 19 46	9.1	9.5	F5	2	..	38123i
3	5037	36.9	+ 1 14	4.61	4.75	A5	..	o, R	56,103	53	19399	37.4	- 31 41	9.5	10.8	A2	1	..	42802b
4	6235	36.9	- 9 23	10.3	10.9	Go	1	..	40911b	54	15994	37.4	- 36 15	9.6	10.4	F5	2	..	40904b
5	6799	36.9	- 16 49	9.4	10.2	G5	5	5,3	24027b	55	15296	37.4	- 41 48	9.7	10.5	G5	2	..	41078b
6	6361	36.9	- 17 56	10.6	11.4	G5	2	..	24027b	56	2500	37.5	+ 62 8	7.9	8.0	A3	4	1,3	38937i
7	16660	36.9	- 33 12	8.8	10.3	G5	2	..	40725b	57	4131	37.5	+ 48 37	7.9	7.9	Ao	7	2,3	38598i
8	15221	36.9	- 40 52	9.7	10.2	K2	2	..	41078b	58	4136	37.5	+ 47 12	8.6	9.1	F8	1	..	38598i
9	4846	37.0	+ 42 7	9.0	9.0	Ao	1	..	3814oi	59	4964	37.5	+ 18 7	7.30	8.30	Ko	4	..	38123i
10	5138	37.0	+ 19 45	7.60	8.10	F8	5	..	38123i	60	5935	37.5	- 4 7	9.1	9.7	Go	1	..	14175b
11	5044	37.0	+ 12 11	8.5	8.6	A3	3	E	3736oi	61	6476	37.5	- 15 6	4.62	4.62	Ao	..	o,4 R	56,103
12	5263	37.0	+ 9 54	9.1	9.9	G5	2	..	17058b	62	6640	37.5	- 20 26	9.9	11.2	K2	2	..	24027b
13	4888	37.0	+ 3 38	9.3	10.3	K	1	..	3735oi	63	19405	37.5	- 31 11	9.8	11.4	G5	1	..	42802b
14	18297	37.0	- 28 12	8.1	8.8	G5	5	..	42802b	64	19404	37.5	- 31 48	7.8	9.3	Go	7	..	40725b
15	15119	37.0	- 39 47	8.44	9.0	F8	7	..	40904b	65	14667	37.5	- 47 10	9.4	10.6	Ko	2	..	39670b
16	15293	37.0	- 41 38	10.3	10.8	G5	1	..	41078b	66	10513	37.5	- 53 37	8.9	10.3	G5	2	..	39675b
17	6762	37.0	- 61 37	7.1	8.4	Ko	5	5,5	42519b	67	3016	37.5	- 70 36	9.1	10.2	K2	3	..	38385b
18	3067	37.1	+ 56 43	6.33	7.11	G5	7	o,4	37241i	68	2770	37.5	- 71 23	7.7	8.5	G5	5	..	12082b
19	3218	37.1	+ 54 9	8.7	9.7	Ko	2	..	38598i	69	756	37.5	- 83 4	7.65	8.4	Go	4	..	15165b
20	3495	37.1	+ 52 37	9.2	9.5	F2	3	..	37242i	70	2038	37.6	+ 63 58	6.85	8.20	Ma	4	..	37909i
21	3686	37.1	+ 51 29	9.0	10.0	Ko	1	..	38598i	71	3070	37.6	+ 56 44	8.8	8.8	Ao	2	..	37241i
22	4130	37.1	+ 49 11	8.6	9.2	Go	2	..	38598i	72	3219	37.6	+ 54 3	8.4	8.4	B9	4	..	38598i
23	4793	37.1	+ 24 11	8.6	9.0	F5	3	..	38123i	73	3689	37.6	+ 51 50	8.9	10.0	K2	1	..	38598i
24	4794	37.1	+ 23 26	8.3	8.9	Go	2	..	38123i	74	4133	37.6	+ 49 3	9.4	9.5	A2	2	..	38598i
25	6344	37.1	- 16 35	9.7	10.7	Ko	1	..	24027b	75	4137	37.6	+ 46 22	8.2	9.2	Ko	1	..	38598i
26	16600	37.1	- 25 2	9.6	11.4	Go	1	..	39506b	76	6542	37.6	- 11 53	7.32	8.32	Ko	6	..	20146b
27	13649	37.1	- 51 15	9.4	10.3	Ko	3	..	39675b	77	16419	37.6	- 27 2	10.3	10.1	F5	2	..	42802b
28	7913	37.1	- 59 4	8.9	9.6	Go	4	..	39699b	78	10132	37.6	- 55 58	9.6	10.6	Ko	1	..	39675b
29	1557	37.2	+ 68 7	8.0	8.0	Ao	5	..	37909i	79	7677	37.6	- 60 14	9.1	9.3	Go	5	..	39699b
30	4132	37.2	+ 46 31	8.0	9.0	Ko	1	..	38598i	80	3331	37.6	- 68 59	10.9	11.5	Go	3	..	38368b
31	4955	37.2	+ 31 55	9.2	10.2	Ko	1	..	3862oi	81	2776	37.6	- 72 40	10.6	11.2	Go	3	..	38385b
32	4600	37.2	+ 27 45	8.9	9.9	Ko	1	..	3862oi	82	2609	37.7	+ 61 7	6.54	7.61	K2	6	..	37909i
33	4795	37.2	+ 23 42	8.9	9.3	F5	2	..	38123i	83	4872	37.7	+ 15 47	6.51	7.51	Ko	7	..	38131i
34	6021	37.2	- 2 3	8.5	8.8	F2	3	..	3735oi	84	5265	37.7	+ 9 20	8.0	9.0	Ko	4	..	3736oi
35	6237	37.2	- 9 23	8.5	9.1	Go	5	..	19957b	85	6477	37.7	- 15 8	8.9	9.5	Go	2	..	17041b
36	14666	37.2	- 46 56	9.1	10.3	Ko	3	..	39670b	86	16604	37.7	- 25 51	9.8	10.9	K2	2	..	39506b
37	10329	37.2	- 57 40	9.0	9.7	Go	3	..	39699b	87	19407	37.7	- 30 54	9.3	10.7	G5	1	..	42802b
38	8093	37.2	- 58 2	7.6	8.4	Ao	8	..	39699b	88	14668	37.7	- 46 52	6.76	7.1	G5	9	..	39670b
39	8095	37.2	- 58 31	8.1	7.1	Ao	5	1,8	41858b	89	4372	37.7	- 64 42	9.0	9.3	F2	2	..	42519b
40	2275	37.3	+ 62 24	8.8	8.8	A	1	..	38937i	90	2091	37.7	- 74 47	7.86	8.2	F2	6	3,8	14357b
41	4473	37.3	+ 44 26	6.70	7.88	K5	4	..	3814oi	91	1480	37.7	- 78 7	10.4	10.7	F	3	..	38135b
42	4530	37.3	+ 44 13	6.90	7.18	Fo	7	..	3814oi	92	1479	37.7	- 78 22	9.2	9.8	Go	6	..	38135b
43	6345	37.3	- 16 0	5.44	6.51	K2	..	..	56,150	93	1052	37.8	+ 73 34	8.0	8.0	B9	4	..	38133i
44	6802	37.3	- 17 43	9.9	9.9	Ao	2	..	24027b	94	4124	37.8	+ 50 53	7.34	7.34	Ao	7	..	38598i
45	18301	37.3	- 28 45	8.3	8.6	F8	5	..	42802b	95	4196	37.8	+ 50 2	8.1	9.1	Ko	1	..	38598i
46	3978	37.3	- 67 10	9.1	9.9	G5	3	..	38368b	96	5266	37.8	+ 9 55	8.4	9.4	Ko	3	..	3736oi
47	2608	37.4	+ 60 56	8.6	8.6	Ao	2	..	38937i	97	4558	37.8	- 0 19	8.6	9.4	G5	2	..	10158b
48	5056	37.4	+ 38 30	9.3	10.1	G5	1	..	38615i	98	18012	37.8	- 23 40	9.8	10.0	G5	3	o,3	39389b
49	4881	37.4	+ 37 23	8.9	9.0	A5	3	..	38842i	99	18811	37.8	- 29 36	7.16	8.8	K2	6	..	42802b
50	5006	37.4	+ 30 25	9.0	9.5	F8	2	..	3862oi	100	16664	37.8	- 33 21	9.1	9.4	F5	3	..	40725b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

222700

23^h 37^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	15353	37.8	-37 21	7.46	7.9	A5	9	..	14593b	51	5108	38.2	+36 22	9.2	9.7	F8	2	..	38842i
2	3578	37.8	-68 12	10.4	10.8	F5	4	..	38368b	52	4960	38.2	+31 49	9.2	9.7	F8	3	..	38620i
3	1609	37.8	-76 7	9.9	10.0	A2	5	..	38135b	53	4560	38.2	- 0 43	8.1	8.1	A0	5	..	37350i
4	3003	37.9	+55 53	8.4	9.2	G5	2	..	37241i	54	4479	38.2	- 1 16	8.0	8.8	G5	3	..	37350i
5	4139	37.9	+46 54	8.5	8.5	A0	1	..	38598i	55	6176	38.2	- 7 48	9.7	10.7	K0	1	..	40911b
6	5133	37.9	+40 45	9.2	9.3	A2	2	..	38842i	56	6242	38.2	- 9 36	8.8	9.59	G5	3	..	40911b
7	5106	37.9	+36 44	8.8	8.9	A2	2	..	38615i	57	19414	38.2	-31 31	9.0	10.5	G5	2	0,1	42802b
8	6175	37.9	- 8 3	8.7	10.1	Ma	1	..	19957b	58	14746	38.2	-46 18	10.5	10.6	F2	3	..	39670b
9	6238	37.9	- 9 11	9.9	11.1	K5	1	..	40911b	59	12208	38.2	-51 55	8.1	8.6	A2	7	..	39675b
10	6239	37.9	- 9 31	9.7	10.7	K0	1	..	40911b	60	3332	38.2	-68 59	9.8	10.2	F5	5	..	38368b
11	18812	37.9	-29 38	10.0	10.2	G5	2	..	42802b	61	2280	38.3	+62 24	9.2	9.2	A0	2	..	38937i
12	16666	37.9	-33 7	9.0	10.5	K2	1	..	40725b	62	3503	38.3	+52 36	6.5	6.46	B8	7	1,4	37241i
13	15595	37.9	-37 58	9.3	10.3	G0	2	..	40904b	63	4142	38.3	+46 28	8.6	8.7	A2	1	..	38598i
14	15125	37.9	-39 15	9.9	9.9	G0	3	..	40904b	64	5268	38.3	+ 9 46	5.39	6.74	Ma	8	..	37360i
15	15112	37.9	-45 43	8.7	8.8	A0	6	..	39670b	65	6073	38.3	- 7 18	9.4	10.4	K0	2	..	19957b
16	14670	37.9	-47 38	10.3	10.6	G5	1	..	39670b	66	6177	38.3	- 8 29	9.7	10.3	G0	1	..	40911b
17	4475	38.0	+44 20	8.5	8.8	F0	2	..	25982i	67	6804	38.3	-17 16	10.3	11.3	K0	1	..	24027b
18	5045	38.0	+11 17	8.8	9.6	G5	2	..	38107i	68	18018	38.3	-23 28	7.7	9.1	K0	9	..	24027b
19	5185	38.0	+ 6 15	9.5	10.0	F8	2	..	17058b	69	18015	38.3	-23 48	9.8	10.6	K2	1	0,1	39506b
20	6241	38.0	- 9 6	10.6	11.4	G5	1	..	40911b	70	3694	38.4	+51 41	7.6	7.6	A0	5	..	37241i
21	6454	38.0	-12 46	9.4	10.2	G5	2	..	20146b	71	4136	38.4	+49 3	9.0	9.8	G5	1	..	38598i
22	6348	38.0	-16 20	10.6	11.2	G0	2	..	24027b	72	4799	38.4	+23 54	9.2	9.3	A2	2	..	38123i
23	17816	38.0	-24 14	8.2	7.9	F2	7	..	39506b	73	4971	38.4	+16 41	8.6	9.4	G5	2	..	38131i
24	12207	38.0	-52 40	9.2	10.6	K0	2	..	39675b	74	5939	38.4	- 3 52	8.7	9.3	G0	3	..	14175b
25	7914	38.0	-59 2	9.7	10.3	G	2	..	39699b	75	6160	38.4	-10 14	8.1	8.7	G0	3	..	40911b
26	7678	38.0	-60 22	8.3	9.3	G5	3	..	39699b	76	6131	38.4	-10 55	9.2	10.3	K2	1	..	40911b
27	1481	38.0	-78 41	9.0	9.8	G5	5	0,3	38135b	77	17641	38.4	-32 9	9.0	11.6	K5	1	..	40725b
28	4135	38.1	+48 34	8.7	9.2	F8	2	..	38598i	78	14748	38.4	-46 29	10.1	10.9	K0	2	..	39670b
29	4741	38.1	+42 41	8.4	8.5	A3	2	..	38140i	79	10075	38.4	-55 23	9.4	10.0	G0	3	..	14382b
30	5134	38.1	+40 25	9.0	10.0	K0	1	..	38842i	80	6437	38.4	-62 17	7.6	9.0	Ma	4	5,3	42519b
31	4763	38.1	+34 11	7.35	8.35	K0	4	..	38620i	81	4374	38.4	-64 32	8.8	9.6	G5	2	..	42519b
32	5038	38.1	+ 0 33	9.5	10.5	K0	3	0,2	24592b	82	3792	38.4	-66 3	8.6	9.6	K0	2	..	38368b
33	5039	38.1	+ 0 21	8.68	9.46	G5	2	..	37350i	83	1800	38.4	-75 43	9.7	10.3	G0	4	..	38135b
34	6467	38.1	-21 39	8.1	9.7	K0	6	..	24027b	84	900	38.4	-82 29	8.6	9.7	K2	2	..	15165b
35	6179	38.1	-22 16	7.9	9.8	K0	6	..	24027b	85	1116	38.5	+72 31	9.2	9.3	A3	1	..	38003i
36	16606	38.1	-25 6	9.5	10.5	K2	2	..	39506b	86	4130	38.5	+50 21	8.07	8.07	A0	6	2,4	38598i
37	16757	38.1	-25 55	8.2	8.8	F2	7	..	39506b	87	4200	38.5	+49 31	8.8	9.6	G5	1	..	38598i
38	17636	38.1	-32 26	8.7	9.9	G5	4	..	40725b	88	5200	38.5	+18 44	8.6	9.2	G0	2	..	38131i
39	16671	38.1	-33 38	7.12	8.0	K0	7	..	40725b	89	5190	38.5	+ 7 0	9.1	9.9	G5	1	..	17058b
40	15128	38.1	-38 53	9.9	11.4	K2	1	..	40904b	90	5213	38.5	+ 5 20	9.01	10.19	K5	1	..	17058b
41	16443	38.1	-42 10	8.5	9.3	F5	5	..	41078b	91	6468	38.5	-20 50	8.7	9.2	F0	6	..	24027b
42	7679	38.1	-60 20	8.3	8.7	G0	6	5,5	39699b	92	19418	38.5	-30 55	8.6	10.8	K0	2	..	42802b
43	4373	38.1	-64 31	7.5	8.1	G0	5	..	42519b	93	1585	38.5	-77 8	10.6	11.2	G	2	..	38135b
44	3791	38.1	-66 0	8.4	8.7	F0	4	..	38368b	94	2787	38.6	+57 30	7.02	7.58	G0	4	2,3	37241i
45	3579	38.1	-68 25	9.6	9.6	A0	5	..	38368b	95	4138	38.6	+49 1	8.6	8.7	A5	3	..	38598i
46	1482	38.1	-78 2	9.5	10.1	G0	4	..	38135b	96	4477	38.6	+44 30	8.9	8.9	A0	1	..	38140i
47	3502	38.2	+52 47	9.2	9.2	A0	2	..	38598i	97	4822	38.6	+24 32	8.0	9.0	K0	4	..	38123i
48	3692	38.2	+51 23	6.60	7.60	K0	6	..	37241i	98	5214	38.6	+ 5 55	9.0	9.5	F8	2	..	37350i
49	4531	38.2	+43 51	8.6	8.6	A0	2	..	38140i	99	6179	38.6	- 7 53	8.7	9.5	G5	4	..	19957b
50	4742	38.2	+42 47	8.2	9.4	K5	1	..	38140i	100	6352	38.6	-15 50	var.	var.	Md	6	0,3R	14623b

THE HENRY DRAPER CATALOGUE.

23^h 38^m.6

222800

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	16150	38.6	° 33 59	6.88	7.4	F5	9	..	40725b	51	891	39.1	+75 28	8.42	8.42	Ao	5	..	38133i
2	15338	38.6	° 44 9	8.8	9.4	Ao	5	..	39670b	52	1391	39.1	+68 31	8.6	9.0	F5	2	..	37909i
3	15114	38.6	° 45 39	6.26	7.2	G5	9	..	39670b	53	2792	39.1	+58 11	8.1	8.1	B9	3	..	37241i
4	14749	38.6	° 46 1	7.2	8.2	Ko	6	..	39670b	54	4853	39.1	+41 55	7.7	8.7	Ko	4	..	38140i
5	2771	38.6	° 71 3	6.04	7.4	G5	7	..	12082b	55	6501	39.1	-19 40	10.3	11.5	K5	1	..	24027b
6	1239	38.6	° 79 21	5.68	6.8	Ko	..	0,10	56,150	56	6763	39.1	-61 42	8.2	10.2	K2	3	..	42519b
7	344	38.6	° 87 49	9.6	10.7	K2	2	..	22980b	57	1935	39.2	+66 0	7.7	7.7	B9	6	..	37909i
8	3004	38.7	+55 49	8.6	9.6	Ko	2	..	37241i	58	5086	39.2	+35 47	7.40	7.90	F8	5	..	38615i
9	4144	38.7	+46 47	7.9	9.1	K5	1	..	38598i	59	5080	39.2	+7 57	9.3	9.9	Go	2	..	17058b
10	4624	38.7	+28 19	8.8	9.9	K2	1	..	38620i	60	4561	39.2	+0 10	8.03	8.53	F8	4	..	37350i
11	4977	38.7	+21 23	8.0	9.4	Ma	2	..	38123i	61	6485	39.2	-15 32	9.19	9.61	F5	2	..	14623b
12	6269	38.7	-5 59	9.1	9.4	F2	3	..	19957b	62	6181	39.2	-22 45	9.7	11.1	Go	1	..	39506b
13	6268	38.7	-6 31	9.7	10.7	Ko	1	..	40911b	63	10340	39.2	-53 54	9.3	10.6	G5	2	..	39675b
14	6074	38.7	-6 50	8.5	9.3	G5	6	..	19957b	64	1077	39.2	-80 30	10.4	11.4	Ko	3	..	38135b
15	6806	38.7	-16 53	9.4	10.6	K5	2	..	24027b	65	1223	39.3	+71 35	9.2	9.3	A2	2	..	38903i
16	6807	38.7	-17 22	9.4	9.5	A2	4	2,3	24027b	66	3077	39.3	+57 14	8.8	9.3	F8	2	..	37241i
17	6180	38.7	-22 37	9.4	11.2	G5	1	..	39506b	67	3506	39.3	+53 9	9.4	9.5	A2	1	..	38598i
18	18316	38.7	-28 36	9.8	10.3	G5	1	..	42802b	68	5696	39.3	-3 0	9.1	9.9	G5	4	..	24592b
19	10077	38.7	-55 45	8.8	10.4	Ko	2	5,1	39675b	69	6273	39.3	-6 20	9.4	10.0	Go	2	..	40911b
20	4159	38.7	-64 58	5.66	6.9	K5	..	..	56,150	70	6487	39.3	-14 59	8.02	8.36	F2	6	..	14623b
21	780	38.8	+80 45	7.87	7.87	Ao	4	..	37227i	71	6502	39.3	-19 21	9.7	10.3	Ko	3	..	24027b
22	4133	38.8	+50 43	9.2	9.2	Ao	2	..	38598i	72	16762	39.3	-26 48	6.26	6.9	F5	9	..	39506b
23	5152	38.8	+39 45	8.7	9.2	F8	2	..	38842i	73	10347	39.3	-54 45	9.8	10.4	Go	1	..	39675b
24	4882	38.8	+37 22	8.4	9.0	Go	2	..	38615i	74	536	39.4	+84 55	8.2	9.2	Ko	3	..	3728i
25	5194	38.8	+6 42	8.00	8.34	F2	4	..	37350i	75	3223	39.4	+53 56	9.5	10.9	Ma	..	..	M
26	6075	38.8	-7 25	10.1	10.9	G5	1	..	40911b	76	5081	39.4	+7 57	8.2	8.8	Go	4	..	37360i
27	6353	38.8	-16 13	9.02	9.30	Fo	6	2,3	24027b	77	5196	39.4	+6 22	9.7	10.3	Go	2	..	17058b
28	16612	38.8	-25 19	8.2	8.8	F2	6	..	39506b	78	5697	39.4	-3 44	7.24	7.74	F8	7	..	14175b
29	10343	38.8	-54 46	8.48	9.1	F8	4	..	14382b	79	6041	39.4	-5 34	8.9	10.0	K2	2	..	40911b
30	4160	38.8	-64 54	6.92	8.0	K5	..	5,4	56,150	80	16431	39.4	-27 2	8.6	8.8	F2	5	..	39506b
31	2778	38.8	-72 9	10.2	11.2	Ko	2	..	38385b	81	18821	39.4	-29 18	9.2	10.7	K5	2	..	42802b
32	2308	38.8	-73 43	10.6	11.2	Go	3	..	38385b	82	16677	39.4	-33 25	9.4	10.3	G5	1	..	40725b
33	6244	38.9	-8 50	9.1	10.1	Ko	3	..	40911b	83	15231	39.4	-40 4	9.3	9.6	F5	5	..	40904b
34	16423	38.9	-27 45	9.5	8.8	Go	3	..	42802b	84	3979	39.4	-67 14	9.7	10.8	K2	2	..	38368b
35	16005	38.9	-36 48	9.0	10.4	Go	2	..	40904b	85	2793	39.5	+58 13	8.0	8.0	Ao	3	..	37241i
36	15358	38.9	-37 41	9.6	10.5	K	1	..	40904b	86	3078	39.5	+57 12	8.0	9.0	Ko	2	..	37241i
37	15301	38.9	-41 14	7.7	9.0	K2	6	0,6	41078b	87	3033	39.5	+54 39	7.31	8.38	K2	4	0,2	37241i
38	15479	38.9	-43 35	7.7	7.8	Ao	8	..	39670b	88	4630	39.5	+29 13	8.6	9.6	Ko	1	..	38847i
39	10078	38.9	-55 15	8.3	9.1	F2	4	..	14382b	89	6275	39.5	-6 26	9.7	10.5	G5	2	..	40911b
40	1117	39.0	+72 48	8.6	9.1	F8	1	..	38139i	90	6276	39.5	-6 41	8.9	9.2	F2	5	..	19957b
41	4312	39.0	+45 23	8.92	8.92	Ao	2	..	38140i	91	6247	39.5	-9 25	8.3	8.8	F8	6	..	40911b
42	4627	39.0	+28 49	4.98	5.98	Ko	..	5,7	56,103	92	6366	39.5	-18 26	9.9	10.4	F8	4	..	24027b
43	4973	39.0	+16 58	7.8	8.2	F5	4	0,3	38131i	93	6503	39.5	-18 52	10.6	11.2	Ko	1	..	24027b
44	5104	39.0	+8 23	9.3	9.8	F8	2	..	17058b	94	6643	39.5	-20 29	9.1	10.0	G5	4	..	24027b
45	4764	39.0	+1 35	8.6	9.6	Ko	2	..	37350i	95	6182	39.5	-22 39	9.2	11.2	Ko	1	0,1	24027b
46	6457	39.0	-13 44	8.7	9.0	F2	3	E	14623b	96	15120	39.5	-45 48	9.3	9.1	F5	3	..	39670b
47	6500	39.0	-18 50	5.26	5.21	B8	..	R	56,103	97	10139	39.5	-55 57	10.2	10.6	F5	1	..	14382b
48	18819	39.0	-29 33	10.0	10.7	Go	1	..	42802b	98	7680	39.5	-59 59	9.32	9.9	Ko	4	2,3	39699b
49	10080	39.0	-55 0	7.38	8.9	Ma	5	5,4	14382b	99	1802	39.5	-75 12	8.8	9.8	Ko	6	0,2	38135b
50	7915	39.0	-59 40	8.5	9.1	A5	5	..	39699b	100	4316	39.6	+45 49	7.48	7.48	Ao	4	0,4	38598i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

222900

23^h 39^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	4880	39.6	+15 55	8.6	9.6	Ko	2	..	38131i	51	6183	40.2	-21 49	9.4	10.3	G5	4	..	24027b
2	6078	39.6	- 7 30	8.8	9.6	G5	4	..	19957b	52	6184	40.2	-22 25	9.4	9.7	G5	6	..	24027b
3	6248	39.6	- 9 1	8.04	8.04	Ao	7	..	40911b	53	18031	40.2	-23 34	9.8	9.8	Go	3	..	39506b
4	6164	39.6	- 9 55	9.46	10.24	G5	2	..	40911b	54	15919	40.2	-35 33	8.8	10.1	F5	3	..	40904b
5	18027	39.6	-23 44	9.2	9.8	Ko	3	..	39506b	55	12211	40.2	-52 33	9.1	10.0	Fo	3	..	39675b
6	16618	39.6	-25 12	9.8	10.1	Go	2	..	39506b	56	10342	40.2	-57 50	9.9	10.3	F5	1	..	14382b
7	16765	39.6	-26 13	8.2	9.4	K2	4	..	39506b	57	8097	40.2	-58 50	7.3	7.4	A3	5	2,9	41858b
8	16679	39.6	-33 27	9.0	9.9	Ko	1	..	40725b	58	1393	40.3	+69 11	7.03	6.98	B8	6	E	37909i
9	15137	39.6	-38 54	7.78	8.6	Fo	8	..	14593b	59	4539	40.3	+43 45	8.8	9.4	G	1	..	38140i
10	14594	39.6	-47 54	9.1	10.0	G5	3	..	39670b	60	4699	40.3	+33 5	9.0	9.1	A2	2	..	38620i
11	14595	39.6	-48 28	8.2	9.7	Ko	4	..	39670b	61	4965	40.3	+31 38	8.8	9.4	Go	3	..	38620i
12	7916	39.6	-59 44	8.86	9.3	G5	4	..	39699b	62	5277	40.3	+ 9 37	6.54	6.62	A3	8	..	37360i
13	2772	39.6	-71 44	9.7	10.5	G5	4	..	38385b	63	6032	40.3	- 2 30	9.2	9.7	F8	4	..	24592b
14	3009a	39.7	+56 2	var.	var.	Md	..	R	M	64	6031	40.3	- 2 42	10.6	12.0	Ma	1	..	24592b
15	3035	39.7	+54 56	7.66	7.64	B9	5	0,3	37241i	65	5698	40.3	- 3 11	9.2	9.8	Go	5	..	24592b
16	4317	39.7	+45 43	8.07	9.42	Ma	..	..	M	66	6185	40.3	-22 10	9.7	10.6	F5	3	..	24027b
17	5090	39.7	+35 46	8.7	9.8	K2	1	..	38842i	67	18828	40.3	-29 14	10.0	11.1	A5	1	..	42802b
18	5274	39.7	+ 9 58	9.7	10.3	Go	2	..	37360i	68	19438	40.3	-31 4	9.0	9.9	F8	4	..	44361b
19	5197	39.7	+ 6 39	6.91	7.91	Ko	5	..	37350i	69	14241	40.3	-49 14	9.9	10.3	Ko	3	..	39670b
20	17828	39.7	-24 4	8.1	8.9	Ko	5	0,7	39506b	70	13668	40.3	-51 6	10.3	10.9	G5	1	..	39675b
21	14038	39.7	-50 47	9.9	10.9	Ko	1	..	39675b	71	12212	40.3	-52 48	7.8	9.1	Ko	5	0,2	39675b
22	4747	39.8	+43 11	6.82	6.82	Ao	7	..	38140i	72	10352	40.3	-54 3	10.0	10.4	F5	1	..	39675b
23	4765	39.8	+34 9	7.9	8.3	F5	3	..	38620i	73	1483	40.3	-78 8	9.4	10.4	Ko	4	..	38135b
24	10348	39.8	-54 33	9.9	10.4	F8	2	..	39675b	74	2047	40.4	+63 20	8.4	8.4	Ao	2	..	37909i
25	6441	39.8	-62 28	9.0	9.6	Go	2	..	42519b	75	2512	40.4	+61 37	8.0	8.8	G5	3	..	38937i
26	3036	39.9	+54 50	8.2	9.6	Ma	..	..	M	76	4142	40.4	+50 18	9.07	9.05	B9	2	..	38598i
27	4139	39.9	+50 21	8.72	9.50	G5	2	..	38598i	77	5016	40.4	+31 10	8.2	9.3	K2	3	..	38620i
28	4485	39.9	- 1 13	7.34	8.52	K5	5	..	37350i	78	5147	40.4	+19 52	6.70	7.70	Ko	7	..	38123i
29	6810	39.9	-17 3	9.4	10.0	Go	3	..	24027b	79	5051	40.4	+11 49	9.0	10.0	K	1	..	38107i
30	18029	39.9	-23 11	9.0	9.2	Ko	7	..	24027b	80	5219	40.4	+ 5 55	8.8	9.4	Go	2	..	17058b
31	3011	40.0	+55 55	8.7	10.1	Ma	2	..	37241i	81	17835	40.4	-23 58	10.0	11.4	G5	1	..	39506b
32	3010	40.0	+55 16	6.62	7.40	G5	6	0,3	37241i	82	16622	40.4	-25 2	9.8	10.6	Go	2	..	39506b
33	4209	40.0	+50 2	8.02	9.02	Ko	4	0,2	38598i	83	18330	40.4	-28 4	8.8	8.8	Fo	7	..	44361b
34	4264	40.0	+47 57	8.5	9.3	G5	3	..	38598i	84	15365	40.4	-37 41	9.6	10.4	F8	1	..	40904b
35	4634	40.0	+29 1	8.9	9.9	Ko	1	..	38847i	85	15123	40.4	-45 13	9.2	10.0	F8	3	..	39670b
36	4766	40.0	+ 1 32	8.6	9.4	G5	5	..	37350i	86	5157	40.5	+39 53	8.9	9.7	G5	1	..	38615i
37	3334	40.0	-69 11	9.4	10.5	K2	3	..	38368b	87	15313	40.5	-41 38	8.8	9.1	A5	5	3,4	41078b
38	4145	40.1	+48 29	8.7	8.8	A2	3	..	38598i	88	14759	40.5	-46 27	8.6	9.4	G5	5	..	39670b
39	4698	40.1	+33 13	8.4	8.4	Ao	4	..	38620i	89	4377	40.5	-64 39	9.0	9.6	Go	2	..	42519b
40	5366	40.1	+20 51	6.98	8.05	K2	6	..	38123i	90	4164	40.5	-65 6	9.3	9.9	Go	2	..	42519b
41	5082	40.1	+ 7 40	8.2	9.0	G5	3	..	37360i	91	3980	40.5	-67 25	8.2	8.5	Fo	4	2,6-	42519b
42	6505	40.1	-18 40	10.1	11.3	K5	1	..	24027b	92	893	40.6	+76 7	8.02	8.08	A2	3	..	38133i
43	19434	40.1	-31 5	8.4	9.4	F5	4	..	44361b	93	3080	40.6	+56 49	8.5	8.5	B9	3	1,2	37241i
44	15310	40.1	-41 29	9.7	11.1	K5	1	..	41078b	94	4828	40.6	+24 55	8.8	9.2	F5	2	..	38123i
45	3017	40.1	-70 15	9.4	9.4	Ao	5	..	38385b	95	5022	40.6	+12 36	7.20	7.54	F2	6	..	38107i
46	5045	40.2	+14 29	7.7	7.7	Ao	6	..	38131i	96	16688	40.6	-33 29	7.81	8.0	A2	7	..	40725b
47	5276	40.2	+ 9 32	8.0	8.1	A2	5	..	37360i	97	15488	40.6	-42 54	8.2	9.7	K2	3	..	41078b
48	5046	40.2	+ 4 34	8.8	9.2	F5	5	..	37350i	98	10343	40.6	-57 10	8.9	9.7	Go	3	..	14382b
49	4486	40.2	- 1 32	9.3	10.3	Ko	3	..	24592b	99	7918	40.6	-58 56	8.9	10.2	Ko	1	..	14382b
50	6536	40.2	-14 15	7.84	8.12	Fo	7	..	14623b	100	4863	40.7	+41 41	8.2	8.2	Ao	2	..	38140i

THE HENRY DRAPER CATALOGUE.

223000

23^h 40^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	4893	40.7	+ 3 44	10.0	10.8	G5	1	..	17058b	51	15494	41.1	-43 49	9.7	10.6	G5	2	E	39670b
2	4708	40.7	+ 2 20	9.3	9.9	Go	2	..	3735oi	52	14686	41.1	-46 54	9.4	10.6	Ko	3	..	39670b
3	5042	40.7	+ 1 7	8.14	8.42	Fo	5	..	3735oi	53	10355	41.1	-54 47	9.3	10.0	G5	2	..	14382b
4	5043	40.7	+ 0 27	10.0	11.0	Ko	1	..	24592b	54	10091	41.1	-55 12	9.0	10.4	K2	1	..	14382b
5	6282	40.7	- 6 29	9.7	10.5	G5	2	..	40911b	55	4166	41.1	-65 8	8.0	8.4	F5	4	..	42519b
6	6491	40.7	-15 19	7.60	8.67	K2	7	..	14623b	56	3580	41.1	-68 37	9.0	10.0	Ko	2	..	38229b
7	6369	40.7	-18 21	10.3	11.1	G5	2	..	24027b	57	2294	41.2	+62 45	7.54	7.54	Ao	5	..	37909i
8	6188	40.7	-21 50	9.7	10.6	G5	3	..	24027b	58	3042	41.2	+54 46	9.2	9.2	A	2	..	37241i
9	15615	40.7	-38 33	8.1	8.7	Fo	6	..	14593b	59	4143	41.2	+50 43	9.2	9.3	A2	1	..	38598i
10	15238	40.7	-40 19	9.3	10.2	Ko	3	..	40904b	60	4989	41.2	+10 33	8.0	8.4	F5	5	E	3736oi
11	15239	40.7	-40 45	6.33	6.9	A2	10	..	40904b	61	5112	41.2	+ 9 15	7.9	8.5	Go	6	..	3736oi
12	7919	40.7	-59 0	9.1	11.1	Go	1	..	14382b	62	5198	41.2	+ 6 38	8.5	9.5	Ko	2	..	14205b
13	1587	40.7	-77 49	9.8	10.1	F2	4	..	38135b	63	16444	41.2	-27 28	9.6	9.7	G5	3	..	44361b
14	4148	40.8	+48 22	8.8	8.8	A	1	..	38598i	64	15317	41.2	-41 13	9.3	10.3	Ko	1	..	41078b
15	4540	40.8	+44 6	8.7	9.1	F5	1	..	3814oi	65	16457	41.2	-42 7	7.51	8.0	Ao	8	0,8	40904b
16	5114	40.8	+37 3	8.6	9.2	Go	3	..	32383i	66	15130	41.2	-45 23	7.6	8.4	Ko	5	..	39670b
17	4703	40.8	+32 44	7.30	7.30	Ao	7	..	3862oi	67	14244	41.2	-49 31	9.2	9.1	G5	5	..	39675b
18	4614	40.8	+27 38	8.05	8.47	F5	3	..	3862oi	68	6764	41.2	-61 19	8.5	8.7	Go	4	..	42519b
19	4998	40.8	+25 47	7.80	8.98	K5	3	..	38123i	69	4167	41.2	-64 52	9.22	9.6	F5	2	..	42519b
20	4976	40.8	+16 37	8.6	9.4	G5	2	..	38131i	70	2769	41.3	+59 55	7.11	8.11	Ko	4	5,3	38937i
21	6135	40.8	-11 5	8.5	8.8	F	1	..	20146b	71	4219	41.3	+50 14	8.02	8.16	A5	7	5,4	38598i
22	6539	40.8	-14 1	7.9	8.9	Ko	5	..	14623b	72	4542	41.3	+43 39	8.5	9.0	F8	3	..	3814oi
23	6494	40.8	-15 41	8.14	9.32	K5	4	..	14623b	73	4768	41.3	+33 39	7.85	8.92	K2	3	..	3862oi
24	6506	40.8	-19 14	5.45	5.59	A5	..	R	56,103	74	4978	41.3	+16 37	9.3	9.4	A2	2	..	38131i
25	16441	40.8	-27 22	8.3	9.1	G5	5	..	44361b	75	4709	41.3	+ 2 56	5.30	..	Na	5	R	3735oi
26	14040	40.8	-50 30	9.9	10.3	Ko	3	..	39675b	76	6284	41.3	- 6 7	9.9	11.1	K5	1	..	40911b
27	2774	40.8	-71 38	8.2	8.3	A2	4	..	12082b	77	6082	41.3	- 6 51	9.1	9.7	Go	4	..	40911b
28	4704	40.9	+32 30	8.6	8.6	Ao	4	..	3862oi	78	18034	41.3	-23 35	9.0	9.4	Ko	5	E	24027b
29	4563	40.9	- 0 17	8.2	8.7	F8	5	..	3735oi	79	735	41.4	+82 15	8.2	9.0	G5	2	..	37281i
30	6167	40.9	-10 1	9.2	10.4	K5	1	..	40911b	80	1225	41.4	+71 51	9.5	10.0	F8	2	..	38903i
31	6495	40.9	-15 3	8.98	9.54	Go	2	..	14623b	81	4151	41.4	+48 53	9.7	9.7	A	1	..	38598i
32	6814	40.9	-17 41	7.9	9.1	K5	3	..	14623b	82	4902	41.4	+22 54	8.0	9.4	Ma	2	..	38123i
33	10090	40.9	-55 34	9.1	10.3	Ko	2	..	14382b	83	6034	41.4	- 2 5	9.7	10.2	F8	2	..	24592b
34	2781	40.9	-72 32	10.8	11.2	F5	3	..	38385b	84	6258	41.4	- 9 33	7.26	7.82	Go	8	..	40911b
35	922	41.0	+78 0	9.0	9.8	G5	1	..	3882oi	85	6461	41.4	-13 19	8.7	9.7	Ko	3	..	20146b
36	3228	41.0	+54 11	8.6	8.4	B	4	R	37241i	86	6508	41.4	-18 53	9.7	10.0	F5	3	..	24027b
37	4213	41.0	+49 36	7.9	8.0	A2	4	1,3	38598i	87	6509	41.4	-19 19	9.7	9.5	G5	4	..	24027b
38	5209	41.0	+19 0	8.6	8.7	A5	2	..	38123i	88	17844	41.4	-24 25	9.3	9.1	F5	4	..	39506b
39	6815	41.0	-17 23	9.9	10.7	G5	2	..	24027b	89	16029	41.4	-36 26	9.7	10.1	F5	2	..	40904b
40	14243	41.0	-49 2	9.5	10.3	Go	3	..	39670b	90	15131	41.4	-45 37	9.2	9.1	F2	5	..	39670b
41	10522	41.0	-53 50	10.2	10.6	F5	2	..	39675b	91	2313	41.4	-73 40	7.7	8.1	F5	7	0,5-	12082b
42	658	41.0	-84 25	7.86	8.8	Ko	5	..	15173b	92	3521	41.5	+53 4	8.8	9.3	F8	2	..	37241i
43	2519	41.1	+62 7	7.7	7.7	Ao	7	..	37909i	93	4706	41.5	+32 51	9.0	9.1	A2	2	..	3862oi
44	2518	41.1	+61 26	8.6	8.7	A2	2	..	38937i	94	4617	41.5	+28 9	7.25	8.32	K2	3	..	38847i
45	3518	41.1	+52 33	9.0	9.1	A5	2	..	38598i	95	4980	41.5	+16 32	8.6	9.1	F8	2	..	38131i
46	4215	41.1	+50 7	7.62	8.62	Ko	6	0,3	38598i	96	4566	41.5	- 0 1	7.35	8.13	G5	6	..	3735oi
47	4321	41.1	+45 52	5.09	6.09	Kop	8	R	37904i	97	16445	41.5	-27 8	9.5	10.6	Ko	1	..	42802b
48	6081	41.1	- 7 16	9.7	10.3	Go	2	..	40911b	98	17662	41.5	-32 34	9.3	10.3	G5	2	..	40725b
49	6256	41.1	- 9 13	9.4	10.2	G5	2	..	40911b	99	16030	41.5	-36 34	10.3	10.1	Ao	2	..	40904b
50	6540	41.1	-13 55	8.0	8.8	G5	5	..	14623b	100	10144	41.5	-56 22	6.5	8.8	Ma.	6	5,3	14382b

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	7682	41.5 ^{m.}	-60 30	8.7	9.7	Ko	4	0,3-	39699b	51	3044	42.0 ^{m.}	+54 19	7.30	7.30	Ao	5	0,4	37241i
2	1588	41.5	-77 48	9.0	9.3	Fo	6	5,4	38135b	52	4147	42.0	+50 41	7.47	7.35	B5	6	..	37241i
3	1561	41.6	+68 5	8.7	8.7	Ao	2	..	38937i	53	4324	42.0	+45 39	8.02	9.02	Ko	2	..	37910i
4	4770	41.6	+33 17	9.0	10.2	K5	1	..	38620i	54	4685	42.0	+26 39	8.7	9.5	G5	4	..	35104i
5	6286	41.6	-6 1	8.7	9.5	G5	3	..	40911b	55	5114	42.0	+8 59	8.6	9.6	Ko	1	..	38107i
6	18837	41.6	-29 21	9.3	10.5	K5	1	..	44361b	56	6261	42.0	-9 13	9.9	10.5	Go	1	..	40911b
7	16461	41.6	-42 26	8.9	9.3	G5	3	..	41078b	57	6192	42.0	-22 20	8.5	9.7	Ko	6	..	24027b
8	4170	41.6	-65 22	9.2	9.8	Go	2	..	42519b	58	19445	42.0	-31 0	8.0	9.4	Ao	5	..	44361b
9	2051	41.7	+63 45	7.42	8.20	G5	3	..	37909i	59	17668	42.0	-31 53	9.7	10.5	F5	1	..	44361b
10	3043	41.7	+54 36	8.1	8.5	F5	4	5,2	37241i	60	16703	42.0	-32 58	9.0	10.5	Ko	2	..	40725b
11	4222	41.7	+49 25	9.0	9.0	Ao	2	..	38598i	61	14693	42.0	-47 17	9.9	10.3	Ao	4	..	39670b
12	4864	41.7	+41 28	8.0	9.1	K2	1	..	25982i	62	10148	42.0	-56 7	9.4	10.4	Ko	2	5,1	39675b
13	5117	41.7	+36 57	8.08	9.26	K5	2	..	38615i	63	3582	42.0	-68 17	8.2	8.3	A3	4	E	12082b
14	4638	41.7	+28 27	8.9	10.0	K2	1	..	38847i	64	1240	42.0	-79 14	10.9	11.7	G5	1	..	38135b
15	6260	41.7	-9 27	7.31	8.09	G5	6	5,5	40911b	65	2804	42.1	+58 6	5.09	6.09	Ko	10	5,7	37241i
16	6652	41.7	-20 5	10.3	10.8	Ko	1	..	24027b	66	4150	42.1	+51 0	8.5	8.5	Ao	4	..	38598i
17	6654	41.7	-20 19	9.1	9.7	F5	4	..	24027b	67	5056	42.1	+15 6	8.49	8.49	Ao	5	..	38131i
18	17846	41.7	-24 51	8.10	8.1	Ao	7	..	39506b	68	5048	42.1	+0 36	9.7	10.7	Ko	1	..	24592b
19	18338	41.7	-27 52	9.6	10.9	K5	1	..	44361b	69	6188	42.1	-8 17	9.4	10.2	G5	1	..	40911b
20	19683	41.7	-30 26	9.0	10.2	G5	1	..	44361b	70	6559	42.1	-12 28	5.90	6.90	Ko	10	..	20146b
21	17664	41.7	-32 33	9.0	10.2	G5	2	..	40725b	71	14610	42.1	-48 50	7.04	8.0	Go	7	..	39670b
22	15318	41.7	-41 16	9.9	10.3	Go	1	..	41078b	72	14048	42.1	-50 10	9.3	10.0	Fo	4	..	39675b
23	15357	41.7	-44 1	8.9	10.0	Ko	4	E	39670b	73	3085	42.2	+56 54	5.78	6.78	Ko	7	0,4	37241i
24	12214	41.7	-52 17	10.0	10.3	Fo	3	..	39675b	74	4760	42.2	+43 0	8.7	8.7	Ao	1	..	38140i
25	10145	41.7	-55 58	6.9	7.7	F5	5	3,9	41858b	75	4810	42.2	+23 23	8.6	9.7	K2	2	..	38123i
26	1614	41.7	-76 3	10.2	11.2	Ko	2	..	38135b	76	4710	42.2	+2 20	8.6	9.4	G5	3	..	37350i
27	757	41.7	-82 58	8.5	8.8	F2	3	..	15165b	77	6037	42.2	-2 4	9.1	9.4	Fo	2	..	14661b
28	1943	41.8	+66 13	5.94	5.77	B3	..	1,9	56,103	78	5955	42.2	-4 27	8.7	9.0	F2	1	..	14661b
29	4546	41.8	+43 21	8.4	9.6	K5	1	..	38140i	79	6289	42.2	-5 54	9.4	9.9	F8	2	..	40911b
30	5368	41.8	+21 4	8.9	9.3	F5	2	..	38123i	80	6168	42.2	-10 22	8.5	9.0	F8	4	..	40911b
31	4983	41.8	+16 59	8.0	9.2	K5	3	..	38131i	81	6497	42.2	-15 7	9.7	10.1	F5	3	..	14623b
32	15132	41.8	-45 21	10.1	10.6	G5	2	..	39670b	82	R	42.2	-22 50	7.8	8.4	Go	9	..	24596b
33	7683	41.8	-60 22	8.8	9.9	Go	3	0,4-	14382b	83	16638	42.2	-25 3	9.0	9.4	F5	4	..	39506b
34	2783	41.8	-71 52	7.11	7.9	Ko	5	..	12082b	84	17672	42.2	-32 1	9.7	10.2	Ao	3	..	44361b
35	3230	41.9	+53 39	8.4	8.8	F5	3	3,3-	37242i	85	16467	42.2	-42 4	9.4	10.5	Ko	1	..	41078b
36	4280	41.9	+48 15	7.38	7.38	Ao	5	..	37910i	86	6765	42.2	-61 5	7.8	9.0	Ko	3	..	42095b
37	4759	41.9	+43 7	8.5	8.5	Ao	1	..	38140i	87	4929	42.2	-62 53	9.4	10.0	G	1	..	42519b
38	4619	41.9	+27 52	7.45	8.80	Ma	2	..	37352i	88	4173	42.2	-65 48	7.4	7.5	A5	7	..	38368b
39	5049	41.9	+4 42	8.6	9.1	F8	4	..	37350i	89	784	42.3	+80 49	7.93	8.07	A5	3	..	37227i
40	6816	41.9	-17 39	8.6	9.6	Ko	4	..	24027b	90	5022	42.3	+30 55	8.8	9.9	K2	2	..	38620i
41	6510	41.9	-19 43	8.58	9.2	F5	7	0,4	24027b	91	4770	42.3	+2 11	8.8	8.9	A2	2	..	14661b
42	6655	41.9	-19 55	8.98	9.1	F8	5	3,2	24027b	92	6370	42.3	-18 29	8.6	8.9	Fo	5	0,7	14623b
43	6191	41.9	-22 4	8.7	9.7	F8	5	..	24027b	93	15626	42.3	-38 43	7.85	8.2	G5	5	..	14593b
44	17847	41.9	-24 38	10.5	11.4	Go	1	..	39506b	94	14766	42.3	-45 54	8.7	8.6	A2	6	..	39670b
45	14047	41.9	-50 47	5.37	5.25	B5	..	R	28,217	95	10359	42.3	-53 59	9.6	10.6	Ko	1	..	39675b
46	10349	41.9	-57 35	9.3	10.3	Go	1	..	14382b	96	4380	42.3	-64 45	9.1	9.7	Go	2	..	42519b
47	3581	41.9	-68 46	9.3	9.7	F5	3	0,3	38368b	97	2784	42.3	-71 54	9.8	10.3	F8	3	..	38385b
48	3335	41.9	-68 57	7.18	7.4	F2	8	..	12082b	98	..	42.3	-79 40	..	..	G5	1	..	38135b
49	2523	42.0	+61 56	8.7	8.8	A3	2	..	38937i	99	1038	42.4	+74 48	9.9	10.9	Ko	1	..	38903i
50	2801	42.0	+57 39	8.0	8.5	F8	3	..	37241i	100	2773	42.4	+59 45	8.6	8.6	A	2	E	38937i

THE HENRY DRAPER CATALOGUE.

223200

23^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	4226	42.4	+50 0	8.9	9.7	G5	1	..	38598i	51	5084	42.8	+ 7 27	9.0	10.2	K5	2	..	17058b
2	5004	42.4	+25 42	8.8	9.4	Go	3	..	35104i	52	5707	42.8	- 3 19	5.60	6.60	Ko	10	..	14661b
3	5005	42.4	+25 36	8.21	9.56	Mb	2	..	38123i	53	6550	42.8	-14 28	7.54	8.54	Ko	7	..	14623b
4	5049	42.4	+ 0 37	9.7	10.8	K2	1	..	24592b	54	6657	42.8	-20 4	10.1	10.6	G5	2	..	24027b
5	6038	42.4	- 2 42	9.4	10.2	G5	2	..	24592b	55	6196	42.8	-22 28	9.7	10.3	G5	2	..	24027b
6	6363	42.4	-16 32	8.29	8.71	F5	5	..	14623b	56	13684	42.8	-51 27	6.94	8.5	Ko	5	5,8	41858b
7	4767	42.4	-46 20	10.3	10.6	F8	2	..	39670b	57	217	42.9	+87 47	8.6	8.6	Ao	2	..	3728i
8	14611	42.4	-47 53	10.1	10.9	Go	2	..	39670b	58	2298	42.9	+62 24	8.1	8.2	A2	3	..	38937i
9	2054	42.5	+63 35	7.86	7.84	B9	4	..	37909i	59	3714	42.9	+51 21	8.9	9.0	A2	1	..	38598i
10	4773	42.5	+33 59	7.55	7.55	Ao	5	0,7	38615i	60	6191	42.9	- 8 9	9.9	10.5	Go	2	..	40911b
11	4834	42.5	+25 1	7.06	8.06	Ko	5	..	38123i	61	17856	42.9	-24 15	10.5	10.9	Go	2	..	39506b
12	4986	42.5	+16 23	7.7	8.0	Fo	6	..	38131i	62	15630	42.9	-38 35	9.9	9.6	F5	3	..	14593b
13	5050	42.5	+ 0 18	10.0	11.0	Ko	1	..	24592b	63	3019	42.9	-70 26	9.0	10.2	K5	2	..	38385b
14	5957	42.5	- 4 5	8.7	9.7	Ko	2	..	14661b	64	1589	42.9	-76 54	9.6	10.0	F5	5	..	38135b
15	6048	42.5	- 5 1	7.43	7.49	A2	7	..	14661b	65	1334	43.0	+70 56	7.66	8.66	Ko	4	..	38133i
16	6291	42.5	- 6 23	7.9	8.4	F8	8	..	40911b	66	3526	43.0	+52 45	8.9	9.0	A2	2	..	38598i
17	6169	42.5	-10 29	8.5	9.0	F8	2	..	20146b	67	3716	43.0	+51 17	8.7	8.8	A5	3	..	38598i
18	6365	42.5	-16 24	9.4	10.6	K5	2	..	24027b	68	4159	43.0	+49 14	8.1	8.1	Ao	4	5,2	38598i
19	16784	42.5	-26 44	9.2	10.6	G5	2	..	39506b	69	4283	43.0	+47 17	8.9	9.0	A2	1	..	38598i
20	16450	42.5	-27 13	9.8	10.3	Ko	3	0,2	39506b	70	5281	43.0	+ 9 36	8.8	9.2	F5	3	..	17058b
21	19688	42.5	-30 6	9.3	10.3	Go	1	..	44361b	71	6819	43.0	-17 15	7.52	7.94	F5	7	..	14623b
22	14696	42.5	-47 2	10.8	10.9	A2	2	..	39670b	72	6511	43.0	-19 38	9.58	10.6	Ko	2	..	24027b
23	12215	42.5	-52 46	7.4	8.8	G5	7	0,4	39675b	73	16710	43.0	-33 20	9.3	10.2	F8	2	..	40725b
24	10098	42.5	-55 51	9.1	10.3	Go	1	..	14382b	74	1562	43.1	+67 15	5.02	5.02	Ao	..	0,10	56,103
25	7921	42.5	-59 33	9.6	10.2	G	2	E	39699b	75	4232	43.1	+49 45	8.0	8.0	B9	5	1,2-	38598i
26	3981	42.5	-67 8	6.95	7.2	Fo	7	0,9-	42519b	76	5150	43.1	+40 33	8.2	9.0	G5	2	..	38140i
27	931	42.6	+77 12	9.2	9.3	A3	1	..	38964i	77	5085	43.1	+ 7 42	6.61	6.89	Fo	8	0,10	38107i
28	4158	42.6	+48 44	7.52	7.50	B9	4	..	37910i	78	4490	43.1	- 1 19	8.6	9.4	G5	3	..	37350i
29	4169	42.6	+46 16	5.84	5.67	B3	8	0,10	38140i	79	6141	43.1	-10 51	9.9	10.7	G5	1	..	40911b
30	4325	42.6	+45 28	8.0	9.1	K2	2	..	25982i	80	6512	43.1	-18 46	10.7	11.2	F8	1	..	24027b
31	4687	42.6	+26 37	8.8	9.9	K2	2	..	38847i	81	16454	43.1	-26 58	9.2	9.4	F5	5	..	37506i
32	4991	42.6	+10 51	8.6	9.0	F5	2	..	17058b	82	18350	43.1	-28 27	8.8	9.4	Go	4	..	44361b
33	4895	42.6	+ 3 40	8.2	9.2	Ko	4	..	37350i	83	17678	43.1	-32 36	9.6	10.7	G5	1	..	40725b
34	4568	42.6	- 0 21	10.0	11.2	K5	1	..	24592b	84	13685	43.1	-51 37	9.3	9.5	A3	3	2,1	39675b
35	4489	42.6	- 1 19	7.20	8.20	Ko	6	..	37350i	85	6443	43.1	-62 34	8.4	8.8	F5	5	..	42519b
36	6051	42.6	- 5 7	10.1	10.1	Ao	3	..	24592b	86	3583	43.1	-67 54	9.0	9.4	F5	4	..	38229b
37	10351	42.6	-57 45	8.5	10.3	K2	3	..	14382b	87	3020	43.1	-70 6	9.2	9.7	F8	5	..	38385b
38	4896	42.7	+ 3 36	8.2	8.8	Go	5	..	37350i	88	2055	43.2	+63 15	7.8	7.8	Ao	4	..	37909i
39	5706	42.7	- 2 52	9.9	10.4	F8	2	..	24592b	89	4691	43.2	+27 10	8.0	8.4	F5	2	..	37352i
40	6052	42.7	- 5 29	9.1	10.2	K2	3	..	40911b	90	4887	43.2	+15 23	8.94	9.50	G	1	..	38131i
41	6293	42.7	- 5 48	8.3	8.9	Go	6	..	40911b	91	5086	43.2	+ 7 38	7.98	9.05	K2	3	..	17058b
42	6139	42.7	-11 7	9.1	10.2	K2	2	..	40911b	92	5203	43.2	+ 6 36	7.08	7.86	G5	5	..	37350i
43	18044	42.7	-23 10	8.8	9.1	F5	8	..	24596b	93	6170	43.2	- 9 48	9.31	9.87	Go	3	..	40911b
44	18043	42.7	-23 35	8.6	9.1	Ko	7	..	24596b	94	6371	43.2	-18 27	9.9	10.7	G5	3	..	24027b
45	15938	42.7	-34 52	8.73	9.5	G5	4	..	14593b	95	14774	43.2	-46 24	10.1	10.6	Go	2	..	39670b
46	1039	42.8	+74 43	8.9	10.1	K5	1	0,1	38903i	96	2786	43.2	-71 53	11.2	11.2	Ao	2	..	38385b
47	4621	42.8	+27 50	8.2	8.3	A2	2	..	37352i	97	1946	43.3	+65 43	8.50	8.50	Ao	2	R	37909i
48	4989	42.8	+16 32	7.8	8.4	G	3	R	32266i	98	4233	43.3	+49 19	7.9	8.9	Ko	2	..	38598i
49	4990	42.8	+16 31	8.0	8.0	Ao	4	..	32266i	99	5058	43.3	+14 30	8.6	9.1	F8	3	..	23378i
50	5024	42.8	+12 40	8.7	9.7	Ko	1	..	38107i	100	6055	43.3	- 5 14	9.2	9.6	F5	4	..	24592b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

223300

23^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	6565	43.3	-12 4	8.1	9.2	K2	4	..	20146b	51	17866	43.7	-24 32	10.3	10.6	F8	2	..	39506b
2	6513	43.3	-19 27	8.1	8.8	Ko	7	0,8	14623b	52	18353	43.7	-28 41	4.64	4.64	Ao	..	0,R	28,217
3	16644	43.3	-25 30	9.8	10.6	F8	1	..	39506b	53	16185	43.7	-34 38	9.0	11.3	Ko	1	..	14593b
4	15157	43.3	-39 40	9.1	10.2	K5	2	..	14593b	54	15947	43.7	-34 57	8.73	10.1	G5	3	..	14593b
5	14776	43.3	-46 32	10.8	10.9	F5	1	..	39670b	55	16045	43.7	-36 1	9.3	11.0	K5	1	..	40904b
6	7923	43.3	-59 37	9.1	10.5	Ma	2	E	39699b	56	15140	43.7	-45 34	9.4	10.3	Ko	2	..	39670b
7	1948	43.4	+66 6	8.09	8.09	Ao	2	..	37909i	57	14703	43.7	-47 10	9.5	10.6	Ko	3	..	39670b
8	3529	43.4	+52 43	8.7	9.0	F2	2	..	37241i	58	1861	43.8	+64 19	6.38	6.38	Ao	9	1,9	38937i
9	4495	43.4	+44 53	8.5	8.5	Ao	2	..	38140i	59	4237	43.8	+50 12	8.27	8.25	B9	4	..	38598i
10	4765	43.4	+43 2	9.0	9.0	Ao	1	..	38140i	60	4162	43.8	+48 57	8.1	8.2	A2	3	..	38598i
11	6086	43.4	-6 56	6.27	7.34	K2	8	..	40911b	61	4553	43.8	+43 50	7.8	7.9	A5	3	..	37910i
12	6264	43.4	-9 23	9.7	10.5	G5	1	..	40911b	62	5028	43.8	+31 9	7.9	8.0	A2	3	..	37352i
13	6142	43.4	-10 51	10.1	10.9	G5	1	..	40911b	63	5059	43.8	+12 5	8.4	9.6	K5	2	..	17058b
14	6500	43.4	-15 25	8.8	9.2	F5	3	..	14623b	64	4570	43.8	-0 6	8.8	9.6	G5	2	..	37350i
15	6370	43.4	-15 46	8.59	9.37	G5	4	..	14623b	65	6658	43.8	-20 18	9.2	10.6	K2	3	..	24027b
16	18046	43.4	-23 14	11.0	10.3	A5	2	..	24596b	66	16648	43.8	-25 42	9.8	10.6	Fo	2	..	39506b
17	17680	43.4	-32 44	8.3	9.6	K2	3	..	44361b	67	16047	43.8	-36 24	9.0	10.1	Fo	4	2,3	14593b
18	12216	43.4	-52 3	8.9	10.0	Ko	2	..	39675b	68	6767	43.8	-61 20	8.4	9.0	A5	5	..	42519b
19	4174	43.4	-65 18	9.0	9.4	F5	2	..	42519b	69	2532	43.9	+62 2	8.6	8.6	Ao	2	..	38937i
20	3797	43.4	-65 57	8.6	9.8	K5	3	..	38368b	70	3719	43.9	+51 16	9.2	9.3	A2	2	..	38598i
21	3233	43.5	+54 9	7.8	8.8	Ko	2	..	37241i	71	5012	43.9	+25 46	8.2	9.2	Ko	4	..	35104i
22	4692	43.5	+26 35	8.8	9.4	Go	3	..	35104i	72	5222	43.9	+18 49	8.6	9.2	G	1	..	38123i
23	4836	43.5	+25 6	6.97	7.31	F2	8	..	38123i	73	4993	43.9	+11 5	9.0	10.2	K5	1	..	17058b
24	6566	43.5	-12 20	9.1	9.7	G	2	E	20146b	74	4718	43.9	+2 37	8.6	9.4	G5	4	..	37350i
25	6552	43.5	-14 26	8.7	9.0	Fo	5	..	14623b	75	6089	43.9	-7 31	9.4	10.2	G5	2	..	40911b
26	6822	43.5	-16 49	9.1	10.2	K2	2	..	24027b	76	6825	43.9	-16 49	8.7	9.7	Ko	4	..	14623b
27	6372	43.5	-18 38	10.1	11.3	K5	1	..	24027b	77	6480	43.9	-21 34	8.7	9.7	Ko	4	..	24027b
28	14613	43.5	-48 13	6.75	8.4	Ko	5	5,9	37262b	78	16789	43.9	-26 39	9.2	9.7	Go	3	..	39506b
29	3050	43.6	+55 5	7.56	7.44	B5	6	4,4	37241i	79	16478	43.9	-42 28	8.9	9.6	Go	4	0,3	45096b
30	4869	43.6	+41 38	7.7	8.8	K2	1	..	38140i	80	12217	43.9	-51 53	8.3	9.2	Ko	5	5,1	39675b
31	5107	43.6	+35 43	7.17	7.73	Go	5	..	38615i	81	10157	43.9	-56 51	9.8	10.6	G5	2	..	39675b
32	4625	43.6	+27 49	7.35	8.35	Ko	2	..	37352i	82	1241	43.9	-79 9	10.7	11.7	K	1	..	38135b
33	4984	43.6	+17 57	8.6	9.6	Ko	2	..	38131i	83	539	44.0	+84 31	8.1	8.9	G5	4	..	37281i
34	5052	43.6	+0 27	9.1	9.2	A3	3	..	37350i	84	832	44.0	+82 14	8.9	9.9	Ko	1	R	37281i
35	5959	43.6	-4 12	9.4	10.6	K5	2	..	24592b	85	2533	44.0	+61 40	5.61	5.67	A2p	7	R	37936i
36	6056	43.6	-4 59	8.25	9.32	K2	3	..	14661b	86	2777	44.0	+59 25	6.38	6.38	Ao	6	1,6	1897b
37	6296	43.6	-5 59	9.4	10.2	G5	1	..	40911b	87	3094	44.0	+56 40	9.2	9.0	B	2	..	38872i
38	6194	43.6	-8 43	9.4	9.7	F2	3	..	40911b	88	3234	44.0	+53 18	8.5	9.0	F8	2	..	38598i
39	18351	43.6	-28 6	9.8	10.5	Go	1	..	44361b	89	3537	44.0	+52 39	8.8	8.9	A5	1	..	38598i
40	18352	43.6	-28 41	9.8	9.2	G	1	..	44361b	90	5375	44.0	+20 34	8.65	9.65	Ko	2	..	38123i
41	14701	43.6	-47 24	7.09	8.4	K5	6	3,3	39670b	91	5283	44.0	+9 40	8.8	8.8	Ao	3	..	38107i
42	13687	43.6	-51 22	8.3	9.1	G5	5	0,1	39675b	92	5223	44.0	+5 50	8.8	..	R3	3	R	17058b
43	793	43.7	+80 1	8.28	8.28	Ao	5	..	38964i	93	5053	44.0	+0 16	10.0	10.6	Go	3	..	24592b
44	3051	43.7	+54 34	9.4	9.4	A	1	..	37241i	94	6171	44.0	-10 11	9.7	10.3	Go	2	..	40911b
45	4288	43.7	+48 1	8.6	9.6	Ko	1	..	38598i	95	6501	44.0	-15 29	9.1	10.1	Ko	2	..	14623b
46	4773	43.7	+1 39	6.42	6.76	F2	8	..	37350i	96	6515	44.0	-18 46	9.9	10.5	Go	1	..	24027b
47	6087	43.7	-7 28	9.9	10.7	G5	1	..	40911b	97	18052	44.0	-23 47	8.4	8.8	Ko	8	..	24596b
48	6196	43.7	-7 59	9.4	10.2	G5	1	..	40911b	98	13689	44.0	-51 23	10.1	10.3	G5	2	..	39675b
49	6553	43.7	-14 43	9.31	9.73	F5	2	..	14623b	99	7686	44.0	-60 38	7.6	8.4	Go	5	..	42095b
50	6823	43.7	-17 3	9.7	10.7	Ko	1	..	24027b	100	3799	44.0	-66 49	7.30	7.8	F8	6	0,5-	42519b

THE HENRY DRAPER CATALOGUE.

223400

23^h 44^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	1061	44.1	+74 14	8.0	8.4	F5	2	..	38133i	51	16485	44.5	-42 50	8.3	9.7	Ko	4	2,2	45096b
2	5223	44.1	+18 43	8.8	9.4	Go	2	..	38123i	52	3801	44.5	-66 12	7.1	7.4	F2	9	..	38229b
3	4719	44.1	+ 2 59	8.8	9.6	G5	3	..	37350i	53	2775	44.5	-70 55	9.1	10.3	K5	2	..	38385b
4	6172	44.1	-10 5	10.1	10.1	Ao	2	..	40911b	54	..	44.5	-71 49	..	..	Ko	1	..	38385b
5	6558	44.1	-13 51	8.9	9.2	Fo	3	..	14623b	55	736	44.6	+82 26	8.6	8.7	A2	2	..	38964i
6	6557	44.1	-14 7	9.1	9.7	Go	2	..	14623b	56	3026	44.6	+55 54	9.2	9.2	Ao	2	..	37241i
7	6482	44.1	-21 27	9.7	10.8	G5	1	..	24027b	57	3953	44.6	+55 5	7.91	8.91	Ko	2	0,2	37241i
8	18361	44.1	-28 25	7.03	7.2	F8	3	..	8586b	58	3721	44.6	+52 6	8.9	9.9	Ko	2	..	38598i
9	14782	44.1	-46 24	10.1	10.9	Go	1	..	39670b	59	4337	44.6	+45 45	8.6	8.7	A5	2	..	37910i
10	12218	44.1	-52 52	8.6	10.3	F8	3	..	39675b	60	5110	44.6	+35 53	5.91	6.69	G5	8	0,8	38842i
11	8102	44.1	-58 42	9.2	10.4	F8	1	..	14382b	61	4649	44.6	+28 17	5.91	5.99	A3	6	..	37352i
12	3584	44.1	-68 30	8.8	9.4	Go	4	0,4	38368b	62	4996	44.6	+10 37	9.1	9.1	Ao	1	..	38107i
13	4292	44.2	+47 53	8.6	9.0	F5	1	..	37910i	63	5713	44.6	- 3 7	9.7	10.3	Go	3	..	24592b
14	5167	44.2	+40 14	8.87	8.93	A2	2	..	38140i	64	6659	44.6	-20 5	11.0	11.2	Ko	1	..	24027b
15	4841	44.2	+24 48	8.3	9.3	Ko	2	..	38123i	65	6484	44.6	-21 4	9.2	10.6	Ko	3	..	24027b
16	5054	44.2	+ 4 26	8.6	9.1	F8	5	..	37350i	66	16796	44.6	-25 54	6.44	6.3	Ao	5	..	8586b
17	6483	44.2	-21 0	8.7	10.0	Ko	4	..	24027b	67	16460	44.6	-27 24	9.8	10.3	G5	1	..	44361b
18	R	44.2	-22 46	10.5	10.3	K5	1	..	24596b	68	14784	44.6	-46 40	10.1	11.3	Ko	1	..	39670b
19	16790	44.2	-26 12	9.6	10.6	F5	1	..	39506b	69	8103	44.6	-58 38	9.1	10.4	F8	1	..	14382b
20	15370	44.2	-44 1	9.5	10.3	A2	5	0,3	39670b	70	6768	44.6	-61 42	8.1	9.0	Mb	4	..	42095b
21	2653	44.3	+58 25	6.44	6.78	F2	6	2,5	37241i	71	2625	44.7	+60 19	8.8	8.8	A	3	..	16266m
22	4161	44.3	+50 27	8.9	8.9	Ao	2	..	38598i	72	2625a	44.7	+60 19	9.2	9.2	A	3	..	16266m
23	4646	44.3	+29 10	8.9	9.0	A2	2	..	37352i	73	3028	44.7	+56 6	8.9	10.3	Ma	1	0,2	37241i
24	4695	44.3	+26 29	7.85	8.85	Ko	4	0,2	38847i	74	3539	44.7	+52 45	8.9	8.9	Ao	2	..	38598i
25	4908	44.3	+22 18	7.02	7.02	Ao	9	..	38123i	75	5714	44.7	- 3 18	10.6	11.2	Go	1	..	24592b
26	4571	44.3	- 0 39	10.0	10.6	Go	2	..	24592b	76	6516	44.7	-18 58	10.3	11.3	Ko	1	..	24027b
27	6174	44.3	-10 7	9.9	10.7	G5	2	..	40911b	77	6660	44.7	-20 16	10.8	10.6	Go	2	..	24027b
28	6373	44.3	-16 25	6.41	7.41	Ko	6	..	14623b	78	6202	44.7	-22 28	9.7	10.8	Ko	1	..	24596b
29	6199	44.3	-22 11	7.14	8.0	Ko	8	0,6	24027b	79	15167	44.7	-39 32	8.7	9.3	Go	6	..	14593b
30	17682	44.3	-31 58	8.01	9.6	Ko	6	..	44361b	80	16486	44.7	-42 52	7.8	8.0	Fo	8	5,8	45096b
31	15326	44.3	-40 56	9.0	10.8	K5	1	3,1	40904b	81	10164	44.7	-55 57	10.1	10.6	F8	1	..	39675b
32	14783	44.3	-46 23	10.5	11.2	G	1	..	39670b	82	10162	44.7	-56 50	9.6	10.4	G5	1	..	39675b
33	14056	44.3	-50 50	10.8	10.9	A3	2	..	39675b	83	7688	44.7	-60 42	8.7	10.0	Ko	2	..	14382b
34	1564	44.4	+68 7	8.5	9.9	Ma	..	..	M	84	1042	44.8	+75 12	8.52	9.52	Ko	1	..	38139i
35	3538	44.4	+52 37	9.5	9.5	Ao	1	..	38598i	85	3540	44.8	+52 54	9.9	11.3	Mb	..	..	M
36	4813	44.4	+23 19	8.1	8.6	F8	3	..	38123i	86	4698	44.8	+27 8	6.94	7.22	Fo	4	..	37352i
37	4720	44.4	+ 2 26	9.3	9.9	G	1	..	37350i	87	5015	44.8	+25 36	8.6	9.2	Go	4	..	35104i
38	5054	44.4	+ 0 31	5.77	5.83	A2	9	..	37350i	88	5961	44.8	- 4 9	9.4	10.2	G5	4	..	24592b
39	6297	44.4	- 6 7	8.1	8.9	G5	6	..	40911b	89	6503	44.8	-14 54	8.15	8.29	A5	7	..	14623b
40	R	44.4	-22 45	10.7	10.6	G5	1	..	24596b	90	17870	44.8	-24 44	8.65	9.1	F2	5	..	39506b
41	15166	44.4	-39 42	10.1	10.5	F8	2	..	40904b	91	19700	44.8	-30 22	8.4	10.5	K5	1	..	44361b
42	14616	44.4	-48 38	8.8	9.1	Go	5	..	39667b	92	15639	44.8	-37 54	8.1	9.0	F2	7	..	14593b
43	10360	44.4	-56 57	8.6	9.1	G5	4	..	14382b	93	3021	44.8	-70 32	8.9	9.4	F8	5	..	38385b
44	4931	44.4	-63 24	6.40	8.0	Ko	..	0,7-	56,150	94	2320	44.8	-73 15	8.8	9.1	F2	5	..	38385b
45	1811	44.4	-75 6	9.3	10.3	Ko	4	..	38133b	95	5006	44.9	+29 30	9.0	9.5	F8	3	..	38847i
46	5088	44.5	+ 8 5	9.1	10.2	K2	1	..	17058b	96	4998	44.9	+11 12	9.1	9.4	Fo	3	..	17058b
47	5055	44.5	+ 4 21	8.6	9.2	Go	4	..	37350i	97	5057	44.9	+ 4 50	9.3	9.6	Fo	3	..	37350i
48	6502	44.5	-15 20	9.4	10.5	K2	2	..	14623b	98	4723	44.9	+ 2 19	8.4	9.2	G5	4	..	37350i
49	18056	44.5	-23 40	10.3	9.7	A2	4	..	24596b	99	13693	44.9	-51 17	9.7	10.3	F8	3	..	39675b
50	18850	44.5	-28.54	8.8	9.6	K2	4	..	44361b	100	10166	44.9	-56 26	9.9	10.2	F2	2	..	14382b

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	2537	45.0	+61 39	8.2	8.0	B3	4	E	37909i	51	12220	45.3	-52 16	7.6	8.5	G5	7	0,3	39675b
2	5225	45.0	+18 59	9.0	9.8	G5	1	..	38131i	52	4165	45.4	+51 4	6.53	6.87	F2	7	..	37241i
3	5207	45.0	+6 29	8.5	9.1	Go	3	E	37350i	53	4243	45.4	+49 43	9.2	10.6	Ma	..	..	M
4	4897	45.0	+3 55	8.8	9.6	G5	3	..	37350i	54	5003	45.4	+17 3	7.42	7.40	B9	5	..	38123i
5	4780	45.0	+1 25	9.0	10.1	K2	4	..	24592i	55	5122	45.4	+8 57	8.4	8.7	F2	3	..	38107i
6	4491	45.0	-0 52	9.7	10.5	G5	2	..	24592b	56	5057	45.4	+1 9	9.5	9.9	F5	2	..	37350i
7	6060	45.0	-4 58	10.1	10.4	F2	3	..	24592b	57	4492	45.4	-1 4	10.7	11.5	G5	1	..	24592b
8	6176	45.0	-10 7	9.2	9.3	A2	3	..	40911b	58	6047	45.4	-2 38	10.1	10.6	F8	2	..	24592b
9	6146	45.0	-11 40	6.70	7.04	F2	7	0,9	42007b	59	6507	45.4	-14 58	5.92	6.92	Ko	9	..	14623b
10	6378	45.0	-17 56	8.8	9.2	F5	5	5,2	24027b	60	6508	45.4	-15 2	9.7	10.3	G	1	..	14623b
11	6485	45.0	-21 25	8.5	8.5	A5	7	..	24027b	61	6486	45.4	-20 47	7.25	7.7	A2	4	..	10109b
12	16659	45.0	-25 36	10.3	10.9	F2	1	..	39506b	62	17873	45.4	-24 34	10.0	10.4	G5	1	..	39506b
13	16802	45.0	-26 12	9.5	11.4	G5	1	..	39506b	63	16054	45.4	-36 8	9.3	10.4	Fo	5	..	14593b
14	16463	45.0	-27 41	9.3	10.6	K2	1	..	44361b	64	16491	45.4	-42 37	9.4	10.3	F8	1	..	45096b
15	19702	45.0	-29 58	7.74	8.8	G5	3	..	8586b	65	14785	45.4	-46 31	10.1	11.2	K5	1	..	39670b
16	16720	45.0	-33 4	9.0	9.9	Go	2	..	44361b	66	1402	45.5	+68 57	8.1	8.6	F8	2	..	38068i
17	15959	45.0	-35 1	8.7	10.5	Ko	3	..	14593b	67	1648	45.5	+67 1	8.6	9.6	Ko	2	..	38937i
18	14618	45.0	-48 1	8.9	9.5	G5	4	..	39670b	68	1647	45.5	+66 21	7.21	7.55	F2	4	..	37909i
19	10102	45.0	-55 5	9.9	10.5	Go	2	..	14382b	69	3095	45.5	+56 36	7.9	7.9	B9	4	1,3	37241i
20	4240	45.1	+49 25	8.2	9.2	Ko	3	5,2	38598i	70	4776	45.5	+42 52	7.64	7.64	Ao	4	..	37910i
21	5016	45.1	+35 13	7.77	8.27	F8	4	..	38615i	71	5225	45.5	+5 28	8.8	9.8	Ko	4	..	37350i
22	4912	45.1	+23 15	8.1	8.5	F5	3	..	38123i	72	6571	45.5	-12 10	8.7	9.3	Go	3	E	20146b
23	5226	45.1	+19 7	8.7	9.3	Go	1	..	38131i	73	18063	45.5	-23 2	10.5	10.3	Go	3	..	24596b
24	6177	45.1	-10 32	6.08	7.08	Ko	8	0,9	40911b	74	17876	45.5	-24 45	9.8	11.4	Go	1	..	39506b
25	16465	45.1	-27 12	10.0	10.6	G5	1	..	44361b	75	16806	45.5	-26 28	8.8	9.1	Go	5	..	39506b
26	16051	45.1	-36 32	9.0	10.7	K2	3	..	14593b	76	19706	45.5	-30 31	9.5	9.9	F8	2	..	44361b
27	14061	45.1	-49 56	9.58	10.4	K2	2	..	39675b	77	13695	45.5	-51 10	8.5	9.2	A2	5	..	39675b
28	10370	45.1	-54 15	8.7	10.8	Ko	2	0,2	14382b	78	2310	45.6	+63 11	7.21	8.28	K2	3	..	37909i
29	3336	45.1	-69 39	7.34	8.8	K2	5	..	12082b	79	2538	45.6	+61 37	9.2	9.2	Ao	2	..	38937i
30	3237	45.2	+53 49	9.2	9.2	A	2	..	37241i	80	2628	45.6	+60 27	9.5	9.5	A	1	..	38937i
31	4844	45.2	+24 18	7.51	7.51	Ao	7	..	38123i	81	2657	45.6	+59 4	7.7	7.7	Ao	3	..	37241i
32	5002	45.2	+17 6	7.7	8.0	F2	3	..	38123i	82	3238	45.6	+53 39	7.22	7.64	F5	6	0,3	37241i
33	5224	45.2	+6 0	8.6	8.6	Ao	3	..	37350i	83	4878	45.6	+41 16	7.8	8.4	Go	3	..	25982i
34	4783	45.2	+1 21	8.94	9.36	F5	3	..	37350i	84	5717	45.6	-3 12	10.3	11.3	Ko	1	..	24592b
35	6517	45.2	-19 35	10.6	11.6	Ko	2	..	24027b	85	6376	45.6	-16 41	8.8	9.8	Ko	2	..	14623b
36	3022	45.2	-70 24	9.3	9.7	F5	4	..	38385b	86	6519	45.6	-18 51	7.09	8.09	Ko	..	..	56,150
37	1078	45.2	-80 28	7.91	8.6	Go	4	0,8	14357b	87	6206	45.6	-21 53	9.1	10.0	A2	4	..	24027b
38	3543	45.3	+52 21	8.7	8.7	Ao	2	..	38598i	88	15267	45.6	-39 58	8.98	9.7	Go	3	..	40904b
39	5064	45.3	+14 19	8.7	9.3	Go	3	..	21226i	89	7926	45.6	-59 48	8.46	9.9	Ko	2	..	42095b
40	5959	45.3	+4 21	9.3	10.5	K5	1	..	17058b	90	2776	45.6	-71 41	9.2	10.3	K2	2	..	38385b
41	6471	45.3	-13 40	7.11	8.11	Ko	8	..	14623b	91	1229	45.7	+71 15	8.0	8.4	F5	3	..	38133i
42	6505	45.3	-15 8	6.96	7.96	Ko	7	..	14623b	92	4846	45.7	+24 44	8.6	9.4	G5	2	..	38123i
43	6506	45.3	-15 32	7.46	7.46	Ao	6	..	14623b	93	5285	45.7	+10 5	9.3	9.8	F8	2	..	17058b
44	6379	45.3	-18 41	10.1	10.9	G5	1	..	24027b	94	6093	45.7	-6 49	8.9	9.4	F8	6	..	40911b
45	6518	45.3	-18 49	10.3	10.9	Go	2	..	24027b	95	6381	45.7	-17 58	9.4	10.5	K2	2	..	24027b
46	R	45.3	-22 48	8.28	9.4	K5	6	..	24596b	96	6380	45.7	-18 37	9.9	10.7	G5	1	..	24027b
47	18062	45.3	-23 27	10.5	10.9	Ko	2	..	24596b	97	18065	45.7	-23 50	11.2	9.7	Ao	7	..	24596b
48	16490	45.3	-41 55	9.3	10.2	Ko	2	5,2	41078b	98	16198	45.7	-34 7	9.0	9.2	F8	4	..	14593b
49	14620	45.3	-47 56	6.58	7.5	Ko	6	..	37262b	99	15401	45.7	-37 27	9.0	8.9	Fo	5	..	14593b
50	14619	45.3	-48 14	10.5	11.2	Ko	1	..	39670b	100	14270	45.7	-49 13	6.91	8.0	Ko	5	0,8-	14881b

THE HENRY DRAPER CATALOGUE.

223600

23^h 45^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	2104	45.7	-74 16	10.1	11.2	K2	2	..	38385b	51	5033	46.3	+13 13	8.8	9.4	Go	3	..	21226i
2	5158	45.8	+41 12	8.2	8.7	F8	2	..	38140i	52	5211	46.3	+6 58	9.3	9.4	A3	3	..	17058b
3	4576	45.8	-0 43	10.7	10.7	Ao	2	..	24592b	53	5965	46.3	-3 57	8.1	9.3	K5	2	..	14661b
4	6472	45.8	-13 23	8.8	9.1	Fo	4	..	14623b	54	6488	46.3	-21 21	8.8	10.0	K5	4	..	24596b
5	16493	45.8	-42 10	7.6	9.1	K2	5	2,4	41078b	55	16729	46.3	-33 0	7.59	7.7	Fo	4	0,8	8586b
6	3803	45.8	-65 53	8.3	9.1	G5	4	..	38229b	56	15970	46.3	-35 3	9.1	10.1	F5	4	..	14593b
7	2544	45.9	+61 59	9.2	9.3	A2	2	..	38937i	57	10376	46.3	-54 27	8.7	9.9	Ko	3	..	14382b
8	4187	45.9	+46 57	var.	var.	Mc	..	R	M	58	10375	46.3	-54 39	8.9	9.9	F8	3	..	14382b
9	5037	45.9	+31 3	8.6	8.7	A5	2	..	38847i	59	10108	46.3	-55 48	9.1	10.2	F5	2	..	14382b
10	5964	45.9	-4 7	9.7	10.2	F8	5	..	24592b	60	4190	46.4	+47 12	7.6	7.6	B9	3	..	37910i
11	16666	45.9	-25 25	10.7	11.3	F8	2	..	39506b	61	4191	46.4	+46 56	7.75	8.03	Fo	3	..	37910i
12	16664	45.9	-25 51	10.3	11.4	Go	1	..	39506b	62	4707	46.4	+26 46	8.4	9.4	Ko	3	..	38847i
13	14271	45.9	-49 15	9.5	10.3	G5	1	..	39667b	63	5968	46.4	-4 2	9.1	9.6	F8	5	..	14661b
14	1592	45.9	-76 55	8.8	9.8	Ko	5	..	38135b	64	6383	46.4	-18 25	9.2	10.2	Ko	1	..	14623b
15	4169	46.0	+50 51	7.9	8.9	Ko	5	R	38598i	65	17882	46.4	-24 19	10.0	11.4	F5	2	..	24596b
16	5161	46.0	+40 37	7.32	8.39	K2	2	0,1	37382i	66	15973	46.4	-35 15	6.67	6.8	G5	8	..	14593b
17	4786	46.0	+1 41	7.22	8.00	G5	5	..	37350i	67	16061	46.4	-36 23	9.7	10.7	F2	3	..	14593b
18	5059	46.0	+1 1	9.5	10.0	F8	2	..	24592b	68	15409	46.4	-37 33	8.7	10.1	G5	3	..	14593b
19	6049	46.0	-2 30	9.2	10.2	Ko	2	..	24592b	69	4175	46.4	-65 22	8.2	8.2	B9	7	..	38229b
20	5718	46.0	-3 5	8.7	9.7	Ko	5	..	24592b	70	1567	46.5	+67 30	8.6	9.2	Go	2	..	37909i
21	6521	46.0	-19 36	8.23	8.8	F5	6	..	14623b	71	4171	46.5	+50 58	8.64	8.64	Ao	4	..	38598i
22	16667	46.0	-25 44	9.8	11.2	G5	2	..	39506b	72	4881	46.5	+41 31	7.09	7.17	A5	6	2,5-	38140i
23	14787	46.0	-46 16	10.1	10.9	Ko	2	..	39670b	73	5719	46.5	-3 6	9.4	10.5	K2	4	..	24592b
24	2064	46.1	+63 26	6.76	6.76	Ao	7	..	37909i	74	6183	46.5	-10 8	9.7	10.3	Go	2	..	40911b
25	3729	46.1	+51 32	8.5	8.5	Ao	2	..	37241i	75	6563	46.5	-14 32	8.2	8.2	Ao	7	..	14623b
26	4170	46.1	+50 47	8.0	9.1	K2	1	..	38598i	76	15410	46.5	-37 39	9.0	10.1	Ao	3	..	14593b
27	4560	46.1	+43 59	8.6	9.6	Ko	2	..	37910i	77	15339	46.5	-41 23	6.71	7.5	Ko	8	0,8	41078b
28	5125	46.1	+9 8	9.3	10.4	K2	1	..	17058b	78	15525	46.5	-43 14	7.26	8.2	Ko	8	0,8	45096b
29	6064	46.1	-4 59	10.1	11.2	K2	2	..	24592b	79	15524	46.5	-43 41	9.5	10.6	G5	2	..	45096b
30	17880	46.1	-24 0	10.5	10.0	Ao	5	..	24596b	80	15157	46.5	-45 19	9.7	10.9	F2	2	..	39670b
31	19710	46.1	-30 32	9.0	9.9	K2	2	..	44361b	81	14713	46.5	-46 53	9.7	10.6	G5	3	..	39670b
32	15336	46.1	-41 3	9.0	9.7	Ko	3	0,3	41078b	82	10109	46.5	-55 3	9.6	10.2	Go	2	..	14382b
33	15521	46.1	-42 56	7.3	8.0	F5	7	0,8-	41078b	83	926	46.6	+77 31	9.0	9.1	A2	1	..	38964i
34	15376	46.1	-44 9	8.8	9.5	Ko	5	0,5	45096b	84	3057	46.6	+54 29	9.2	9.2	B8	2	..	37241i
35	4777	46.2	+42 57	7.7	8.2	F8	2	..	37910i	85	4899	46.6	+4 9	7.05	8.12	K2	6	..	37350i
36	5174	46.2	+39 39	6.68	7.18	F8	5	3,6	38140i	86	6066	46.6	-4 55	10.3	11.4	K2	1	..	24592b
37	5127	46.2	+8 46	6.11	7.46	Ma	7	..	38107i	87	6303	46.6	-6 14	8.9	9.7	G5	3	..	40911b
38	5092	46.2	+8 5	9.3	9.8	F8	3	..	17058b	88	6095	46.6	-7 10	8.9	9.5	Go	4	..	40911b
39	6180	46.2	-10 12	10.3	11.3	Ko	1	..	40911b	89	6832	46.6	-17 26	9.7	10.7	Ko	2	..	24027b
40	6522	46.2	-19 28	5.32	5.32	Aop	..	R	56,103	90	6208	46.6	-22 12	10.3	10.6	F5	2	..	24596b
41	16060	46.2	-36 36	7.73	8.3	Go	8	..	14593b	91	16205	46.6	-34 2	7.9	8.6	G5	8	..	14593b
42	16496	46.2	-42 20	7.9	9.1	G5	5	5,4	14371b	92	15159	46.6	-45 4	9.2	10.3	K2	4	..	39670b
43	2777	46.2	-71 26	9.1	10.3	K5	3	..	38385b	93	6773	46.6	-61 18	9.4	10.0	G	1	..	42519b
44	2322	46.2	-73 45	9.5	10.6	K2	4	..	38385b	94	3101	46.7	+56 39	8.2	8.5	Fo	3	5,2	37241i
45	1593	46.2	-77 20	9.4	9.7	F2	4	..	38135b	95	6096	46.7	-7 10	9.4	9.9	F8	4	..	40911b
46	1242	46.2	-79 43	9.4	10.4	Ko	3	..	38135b	96	6524	46.7	-19 13	8.9	9.2	Ko	5	..	14623b
47	905	46.2	-82 34	5.10	6.2	G5	..	0,9R	56,150	97	17883	46.7	-24 39	9.3	9.4	F5	7	..	24596b
48	423	46.2	-86 27	7.91	8.3	B8	7	..	15173b	98	18861	46.7	-28 53	8.2	9.4	G5	5	..	44361b
49	2547	46.3	+62 3	8.9	9.4	F8	2	..	38937i	99	16733	46.7	-33 3	9.0	9.9	Go	2	..	44361b
50	4987	46.3	+21 47	9.2	9.8	Go	2	..	38123i	100	16732	46.7	-33 41	6.95	7.6	Ko	5	0,9	8586b

223700

23^h 46^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	14277	46.7	-49 24	9.9	10.2	Ko	3	..	39675b	51	14795	47.2	-45 52	9.3	11.4	K5	3	..	39670b
2	7927	46.7	-59 46	7.56	8.5	Ko	4	..	42095b	52	14627	47.2	-48 19	9.3	9.9	G5	4	..	39670b
3	6774	46.7	-61 5	8.1	9.6	K2	2	..	42095b	53	10372	47.2	-57 12	7.6	8.4	Ao	8	0,3	14382b
4	1816	46.7	-75 28	9.5	10.6	K2	3	..	38135b	54	7930	47.2	-59 7	7.8	7.7	A3	5	0,6	41858b
5	4780	46.8	+42 21	6.91	7.91	Ko	6	..	37910i	55	5386	47.3	+21 17	6.28	7.63	Ma	7	0,7	3888oi
6	5212	46.8	+ 6 55	8.4	8.4	Ao	4	0,3	3735oi	56	5164	47.3	+19 17	8.2	8.3	A3	2	..	38123i
7	4900	46.8	+ 4 11	6.67	6.73	A2	9	..	3735oi	57	4899	47.3	+15 55	9.0	9.4	F5	1	..	38131i
8	6097	46.8	- 6 56	9.7	10.5	G5	2	..	40911b	58	5226	47.3	+ 5 23	9.36	10.36	Ko	2	..	17058b
9	6662	46.8	-20 15	10.8	11.4	G	1	..	24027b	59	4790	47.3	+ 1 49	9.3	10.3	Ko	2	..	3735oi
10	15180	46.8	-39 25	9.3	10.3	Fo	4	..	14593b	60	4494	47.3	- 1 43	10.7	11.2	F8	2	..	24592b
11	14791	46.8	-46 6	9.4	10.0	F2	4	..	39670b	61	18864	47.3	-28 56	10.0	10.2	F8	1	..	44361b
12	7928	46.8	-59 22	7.6	8.4	G5	2	..	14382b	62	15980	47.3	-35 12	9.6	11.3	G	1	..	14593b
13	6446	46.8	-61 58	9.4	10.4	Ko	1	..	42519b	63	12223	47.3	-52 24	9.2	10.2	F8	3	..	39675b
14	3036	46.9	+55 22	8.9	10.3	Ma	..	..	M	64	10373	47.3	-57 34	8.8	9.6	F5	2	..	14382b
15	4173	46.9	+48 29	8.5	9.5	Ko	2	..	38598i	65	3585	47.3	-68 35	7.3	8.3	Ko	5	5,8	12082b
16	4883	46.9	+41 40	7.8	8.8	Ko	1	..	38140i	66	838	47.4	+81 17	8.57	8.63	A2	2	..	37227i
17	5179	46.9	+40 11	7.47	7.42	B8	6	..	38842i	67	2551	47.4	+61 19	7.31	7.59	Fo	4	..	37909i
18	4898	46.9	+37 20	7.05	7.47	F5	6	..	37382i	68	5231	47.4	+18 34	5.23	6.58	Ma	9	R	38123i
19	4725	46.9	+ 2 23	5.85	6.92	K2	8	..	3735oi	69	5036	47.4	+12 19	8.8	9.6	G5	3	..	21226i
20	6305	46.9	- 6 9	9.7	10.8	K2	1	..	40911b	70	5213	47.4	+ 6 59	9.7	10.0	F2	3	..	17058b
21	6150	46.9	-11 7	9.7	10.3	Go	2	..	40911b	71	5065	47.4	+ 0 31	9.7	10.7	Ko	3	..	24592b
22	6564	46.9	-14 25	9.4	10.0	Go	1	..	14623b	72	5720	47.4	- 2 55	9.2	10.2	Ko	3	..	24592b
23	19478	46.9	-31 39	7.8	9.9	Go	6	..	44361b	73	6100	47.4	- 7 11	9.7	10.3	Go	2	..	40911b
24	10540	46.9	-52 54	7.4	8.8	Ko	4	5,2	14881b	74	6515	47.4	-14 48	6.00	7.00	Ko	3	..	10109b
25	3985	46.9	-67 13	9.7	10.3	G	2	..	38229b	75	16212	47.4	-34 40	8.3	9.8	K2	4	..	14593b
26	5063	47.0	+ 0 57	9.7	10.9	K5	1	..	24592b	76	15160	47.4	-45 4	10.1	10.9	G5	3	..	39670b
27	6306	47.0	- 6 11	9.7	10.2	F8	2	..	40911b	77	2324	47.4	-72 58	7.4	7.7	F2	8	..	12082b
28	6578	47.0	-12 17	8.7	9.5	G5	4	E	20146b	78	1047	47.5	+74 59	6.55	7.62	K2	7	2,7	38139i
29	6834	47.0	-16 57	9.1	9.9	G5	1	..	14623b	79	4790	47.5	+33 53	8.2	9.2	Ko	2	E	38842i
30	6387	47.0	-17 57	9.1	9.5	F5	5	3,5-	39487b	80	4655	47.5	+28 23	8.6	8.6	Ao	2	..	37352i
31	934	47.1	+77 3	6.49	6.91	F5	5	..	38133i	81	5004	47.5	+10 23	5.39	5.47	A3	10	0,10	9704b
32	3058	47.1	+54 54	8.9	9.2	Fo	2	..	37241i	82	6308	47.5	- 6 33	9.9	10.9	Ko	2	..	40911b
33	3242	47.1	+53 47	9.9	11.3	Ma	..	..	M	83	6836	47.5	-16 55	7.72	9.07	Ma	4	..	14623b
34	4254	47.1	+49 33	7.64	8.64	Ko	5	0,3	38598i	84	6391	47.5	-18 11	10.1	10.7	G	2	..	24027b
35	4782	47.1	+42 57	7.9	8.4	F8	3	..	37910i	85	6527	47.5	-19 7	6.68	7.5	Ao	3	..	10109b
36	5124	47.1	+35 47	8.0	8.0	Ao	5	..	37382i	86	16678	47.5	-25 33	6.87	8.1	K2	3	..	8586b
37	6379	47.1	-16 25	var.	var.	Md	4	R	14623b	87	19480	47.5	-31 32	9.3	10.7	F5	1	..	44361b
38	6389	47.1	-18 35	8.3	8.8	F8	7	..	14623b	88	3244	47.6	+53 43	7.7	8.1	F5	4	0,2	37241i
39	14794	47.1	-46 41	9.1	10.0	G5	5	..	39670b	89	5024	47.6	+34 46	8.17	8.95	G5	3	..	38615i
40	6449	47.1	-62 28	9.2	10.0	G5	2	..	42519b	90	4852	47.6	+25 13	8.81	8.87	A2	2	..	3888oi
41	5180	47.2	+39 19	8.3	8.4	A2	3	..	38615i	91	4919	47.6	+22 25	9.2	9.6	F5	2	5,2	3888oi
42	4789	47.2	+33 27	8.6	9.0	F5	2	E	38842i	92	5387	47.6	+21 12	6.78	7.78	Ko	7	..	38123i
43	5064	47.2	+ 0 57	8.4	8.7	Fo	4	..	3735oi	93	5094	47.6	+ 8 10	8.6	9.0	F5	2	E	38069i
44	5971	47.2	- 3 57	9.7	10.0	F2	6	..	24592b	94	4495	47.6	- 1 24	9.7	10.1	F5	2	..	24592b
45	6307	47.2	- 5 49	10.3	10.8	F8	2	..	40911b	95	..	47.6	- 1 35	..	..	K2	1	..	24592b
46	6185	47.2	-10 7	8.5	9.1	Go	5	..	40911b	96	6070	47.6	- 4 51	9.25	9.31	A2	5	..	24592b
47	6525	47.2	-18 46	9.1	9.9	G5	3	..	14623b	97	6275	47.6	- 9 27	8.7	9.7	Ko	2	E	20146b
48	6526	47.2	-19 7	10.3	10.3	Go	2	..	24027b	98	6276	47.6	- 9 42	9.06	9.62	Go	3	..	40911b
49	6212	47.2	-21 48	9.7	10.8	G5	2	..	24596b	99	6188	47.6	-10 7	8.7	9.8	K2	3	..	40911b
50	16471	47.2	-27 37	9.8	9.7	F8	2	..	44361b	100	6579	47.6	-12 34	7.62	8.97	Ma	4	..	14157b

THE HENRY DRAPER CATALOGUE.

223800

23^h 47^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	10374	47.6	-57 20	8.2	8.7	A5	7	..	14382b	51	5232	48.0	+19 0	8.4	9.4	Ko	1	..	38123i
2	7931	47.6	-59 24	7.6	7.8	A2	4	..	41858b	52	5133	48.0	+9 9	8.4	9.4	Ko	2	..	38069i
3	2108	47.6	-74 29	9.0	9.8	G5	5	0,4-	38135b	53	5230	48.0	+6 8	8.6	9.8	K5	2	..	14205b
4	1868	47.7	+64 39	8.9	8.9	Ao	1	..	38937i	54	4793	48.0	+1 46	8.00	8.42	F5	4	..	37350i
5	4578	47.7	+0 10	9.48	10.66	K5	1	..	24592b	55	4792	48.0	+1 32	6.24	6.24	Ao	9	..	37350i
6	6101	47.7	-7 5	9.2	9.2	Ao	4	..	40911b	56	6052	48.0	-2 7	9.9	10.3	F5	3	..	24592b
7	6277	47.7	-9 33	5.96	6.96	Ko	7	0,8	42017b	57	5724	48.0	-3 8	10.3	10.9	Go	2	..	24592b
8	6567	47.7	-14 39	8.36	8.70	F2	5	..	14623b	58	6309	48.0	-5 53	9.4	10.6	K5	1	..	40911b
9	6837	47.7	-17 16	8.9	9.0	A5	4	..	14623b	59	6104	48.0	-7 12	8.5	9.5	Ko	4	..	40911b
10	6215	47.7	-22 2	7.9	9.4	F5	8	..	24596b	60	6154	48.0	-11 35	7.9	8.9	Ko	4	..	14157b
11	16681	47.7	-25 42	9.8	11.2	K2	2	..	39506b	61	16818	48.0	-26 37	9.2	10.0	G5	4	..	39506b
12	14721	47.7	-47 5	8.6	10.0	Ko	4	..	39670b	62	10375	48.0	-57 40	9.6	10.2	Go	1	..	14382b
13	4177	47.7	-65 3	9.5	10.3	G5	2	..	38229b	63	7932	48.0	-59 40	8.22	9.3	Ko	3	..	42095b
14	4178	47.7	-65 41	8.6	9.8	K5	2	..	38368b	64	3337	48.0	-68 54	9.1	9.2	A2	4	..	38368b
15	3023	47.7	-70 37	9.8	10.3	F8	1	..	38385b	65	796	48.1	+79 17	8.4	8.5	A5	4	..	38964i
16	2778	47.7	-70 57	9.4	10.0	Go	2	..	38385b	66	2784	48.1	+60 9	6.92	8.10	K5	3	3,3	38872i
17	1570	47.8	+67 30	8.2	8.7	F8	2	..	37909i	67	4988	48.1	+31 51	8.2	8.6	F5	2	..	23423i
18	2633	47.8	+60 44	8.6	9.6	Ko	2	..	38937i	68	4989	48.1	+31 21	7.36	7.70	F2	4	..	37352i
19	4308	47.8	+47 56	7.27	7.35	A3	5	..	37910i	69	5034	48.1	+25 27	7.68	8.68	Ko	4	..	38123i
20	4349	47.8	+45 57	7.7	8.7	Ko	2	..	37910i	70	5064	48.1	+4 36	8.8	9.6	G5	4	..	37350i
21	4791	47.8	+1 55	9.3	10.1	G5	1	..	37350i	71	5725	48.1	-2 56	10.6	11.2	Go	1	..	24592b
22	4579	47.8	+0 3	9.7	10.3	Go	3	..	24592b	72	6190	48.1	-10 1	9.4	10.2	G5	2	..	40911b
23	6051	47.8	-2 17	9.9	10.9	Ko	1	..	24592b	73	6155	48.1	-10 46	10.3	10.9	Go	2	..	40911b
24	5722	47.8	-3 9	10.1	10.9	G5	2	..	24592b	74	15346	48.1	-41 9	9.0	9.9	G5	3	5,2	14371b
25	5723	47.8	-3 43	6.09	7.09	Ko	9	..	14661b	75	14284	48.1	-49 30	8.3	9.0	F5	5	3,3	39675b
26	5972	47.8	-4 2	10.3	10.9	Go	2	..	24592b	76	10543	48.1	-53 16	10.3	11.1	G5	1	..	39675b
27	6152	47.8	-11 23	9.1	9.9	G5	3	E	20146b	77	1958	48.2	+65 51	8.2	9.3	K2	1	..	38937i
28	18870	47.8	-28 55	9.2	9.8	Ko	2	..	44361b	78	3552	48.2	+52 32	8.9	8.9	Ao	1	..	38598i
29	19483	47.8	-30 59	12.1	10.8	F8	3	..	44361b	79	5028	48.2	+34 29	7.90	9.08	K5	1	..	38615i
30	19482	47.8	-31 0	10.7	10.8	F8	3	..	44361b	80	5390	48.2	+20 19	8.95	9.45	F8	1	..	38123i
31	15280	47.8	-40 34	8.7	10.1	G5	2	5,1	40904b	81	5095	48.2	+8 13	9.5	10.1	Go	2	..	17058b
32	3024	47.8	-70 24	9.8	10.2	F5	2	..	38385b	82	6053	48.2	-2 43	10.8	11.2	F5	1	..	24592b
33	758	47.8	-83 34	6.75	8.7	K5	7	..	15173b	83	6072	48.2	-5 37	9.7	10.3	Go	3	..	40911b
34	935	47.9	+77 8	8.8	8.9	A2	2	..	38964i	84	17897	48.2	-24 47	6.24	6.3	A3	5	0,9	8586b
35	5167	47.9	+40 47	7.25	8.60	Ma	3	..	37382i	85	16819	48.2	-26 15	9.2	10.5	Go	4	..	39506b
36	4987	47.9	+31 30	8.2	8.7	F8	2	..	38847i	86	18379	48.2	-27 53	9.8	11.4	A	1	..	44361b
37	4999	47.9	+17 21	6.78	7.85	K2	5	..	38123i	87	15164	48.2	-45 13	9.9	10.6	Go	3	..	39670b
38	5068	47.9	+11 20	7.94	8.22	Fo	3	R	38107i	88	2788	48.2	-72 45	9.5	9.8	Fo	5	..	38385b
39	6153	47.9	-10 47	10.3	10.9	Go	2	..	40911b	89	1619	48.2	-76 11	10.3	11.7	Ma	..	..	M
40	17893	47.9	-24 7	9.8	11.6	Ko	3	..	24596b	90	1620	48.2	-76 37	10.9	10.9	A	3	..	38135b
41	15162	47.9	-45 11	9.5	10.0	Go	5	..	39670b	91	3038	48.3	+56 5	8.7	8.7	Ao	2	..	37241i
42	10112	47.9	-54 56	7.58	9.1	Ko	7	5,3	14382b	92	4513	48.3	+44 44	7.98	7.98	Ao	3	..	37910i
43	3986	47.9	-67 12	8.8	9.4	Go	4	..	38229b	93	5029	48.3	+35 5	7.77	8.84	K2	2	..	38615i
44	1044	47.9	-80 54	8.38	9.5	Ko	6	5,2	38135b	94	5039	48.3	+13 0	8.6	9.7	K2	4	..	21226i
45	2553	48.0	+62 5	9.2	10.4	K5	1	..	38937i	95	6582	48.3	-12 31	9.4	10.4	Ko	1	..	40911b
46	2667	48.0	+58 52	7.8	8.6	G5	2	..	37241i	96	6530	48.3	-18 49	8.9	10.0	K2	3	..	24027b
47	5126	48.0	+36 23	6.67	7.23	Go	7	..	38842i	97	15985	48.3	-35 13	9.1	11.8	G5	1	..	14593b
48	5014	48.0	+30 10	8.41	9.48	K2	1	..	38847i	98	6451	48.3	-62 17	9.2	9.6	F5	1	..	42519b
49	4920	48.0	+22 32	8.9	9.0	A5	1	..	38880i	99	1959	48.4	+66 13	8.0	9.2	K5	1	..	38937i
50										100	3554	48.4	+52 34	8.4	9.4	Ko	1	..	38598i

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	4787	48.4 ^{m.} +43 6	8.1	8.2	A3	3	..	2397ii	51	1337	48.8 ^o +70 56	8.9	8.9	Ao	2	2,2	38133i		
2	5137	48.4 + 8 33	9.0	9.4	F5	4	..	17058b	52	4570	48.8 +43 59	7.40	8.40	Ko	3	..	3791oi		
3	5065	48.4 + 4 15	8.5	9.3	G5	3	..	3735oi	53	5020	48.8 +30 12	8.01	8.29	Fo	2	..	37352i		
4	5066	48.4 + 1 8	8.34	8.90	Go	6	2,3	24592b	54	5001	48.8 +17 26	7.35	8.35	Ko	3	0,3	38123i		
5	6191	48.4 -10 33	9.4	10.6	K5	2	..	40911b	55	5727	48.8 - 2 57	9.7	10.0	Fo	4	..	24592b		
6	6531	48.4 -18 56	9.7	9.4	Ao	3	..	14623b	56	6280	48.8 - 9 18	9.9	10.5	Go	1	..	40911b		
7	6491	48.4 -20 47	9.4	10.6	K5	3	..	24596b	57	19492	48.8 -30 55	7.71	8.0	F5	3	..	8586b		
8	15347	48.4 -41 17	9.7	10.4	Go	3	..	45096b	58	17714	48.8 -32 21	9.0	10.4	K2	1	..	44361b		
9	14632	48.4 -48 9	8.9	9.6	F5	5	..	39670b	59	897	48.9 +76 1	8.22	8.17	B8	3	..	38133i		
10	14285	48.4 -49 35	9.9	10.2	Go	2	..	39667b	60	2636	48.9 +60 18	6.98	6.74	Bo	4	2,4	16266m		
11	14071	48.4 -50 0	8.04	8.4	Fo	6	..	14881b	61	5072	48.9 +11 27	7.8	9.0	K5	3	0,2	38107i		
12	14072	48.4 -50 22	10.3	10.8	F8	2	..	39675b	62	6075	48.9 - 4 50	9.15	10.33	K5	3	..	24592b		
13	3810	48.4 -66 31	6.74	7.4	F8	..	..	28,217	63	6192	48.9 - 9 51	7.41	8.59	K5	4	..	14157b
14	2779	48.4 -71 14	8.1	8.5	F5	5	..	12082b	64	6193	48.9 - 9 57	9.1	10.1	Ko	2	..	40911b		
15	3734	48.5 +51 23	8.0	8.0	B8	3	..	3724ii	65	18877	48.9 -29 3	9.5	10.1	K2	1	..	44361b		
16	4180	48.5 +50 58	6.97	7.97	Ko	5	..	3724ii	66	10175	48.9 -56 2	8.6	10.8	Ko	1	..	14382b		
17	5096	48.5 + 7 57	8.6	9.8	K5	2	..	17058b	67	7695	48.9 -60 6	6.96	7.1	Ao	6	..	42095b		
18	4580	48.5 - 0 21	10.3	10.9	Go	1	..	24592b	68	1818	48.9 -75 11	9.1	10.3	K5	5	5,2	38135b		
19	6106	48.5 - 7 21	9.7	10.7	Ko	1	..	40911b	69	3041	49.0 +55 56	7.48	8.55	K2	3	3,2	3724ii		
20	6492	48.5 -21 4	7.52	8.7	Ko	7	..	24596b	70	3062	49.0 +54 53	9.2	9.2	A	2	..	3724ii		
21	6217	48.5 -22 11	8.7	10.0	F8	4	..	24596b	71	5091	49.0 +38 44	6.71	7.21	F8	6	..	37382i		
22	16823	48.5 -25 59	11.2	11.1	Go	2	..	39506b	72	4903	49.0 +15 20	8.24	8.52	Fo	4	..	38133i		
23	15165	48.5 -45 30	8.9	9.8	F8	5	..	39670b	73	5138	49.0 + 8 41	8.6	9.7	K2	2	..	38107i		
24	3106	48.6 +56 16	8.0	7.8	B2	4	0,4	3724ii	74	5066	49.0 + 4 20	7.9	8.9	Ko	4	..	3735oi		
25	4662	48.6 +28 15	8.6	8.6	Ao	4	..	38847i	75	4583	49.0 - 0 9	9.3	9.9	Go	4	..	24592b		
26	4820	48.6 +23 55	9.2	10.0	G5	1	..	3888oi	76	4582	49.0 - 0 20	9.7	10.5	G5	2	..	24592b		
27	4795	48.6 + 2 9	9.0	9.6	Go	3	..	3735oi	77	16826	49.0 -26 11	9.8	11.6	Go	1	..	39506b		
28	6056	48.6 - 2 13	8.9	9.9	Ko	5	..	24592b	78	10544	49.0 -53 36	10.2	10.8	G	1	..	39675b		
29	6074	48.6 - 5 7	9.9	10.3	F5	3	..	24592b	79	1624	49.0 -76 44	8.3	9.1	G5	5	..	38135b		
30	6532	48.6 -18 46	9.7	10.7	Ko	1	..	24027b	80	3110	49.1 +56 39	8.8	8.8	B9	3	1,2	3724ii		
31	6534	48.6 -18 51	10.1	11.1	Ko	2	..	24027b	81	4515	49.1 +44 19	7.8	7.8	B9	4	..	3791oi		
32	6533	48.6 -18 56	7.42	8.4	G5	5	R	14623b	82	5074	49.1 +12 6	8.8	9.6	G5	3	..	21226i		
33	19728	48.6 -18 56	7.42	8.4	A3	5	R	14623b	83	5233	49.1 + 5 26	9.3	10.5	K5	2	..	17058b		
34	19728	48.6 -29 58	7.45	8.9	K5	4	..	44361b	84	6077	49.1 - 5 30	9.9	10.7	G5	3	..	40911b		
35	15168	48.6 -45 41	9.5	10.0	F5	5	..	39670b	85	6076	49.1 - 5 42	9.9	10.7	G5	2	..	40911b		
36	14798	48.6 -46 37	9.7	10.6	Ko	3	..	39670b	86	1235	49.2 +72 12	8.9	9.0	A2	3	3,3	38903i		
37	14726	48.6 -47 24	9.3	10.6	Ko	3	..	39670b	87	2637	49.2 +61 3	7.56	7.32	Bo	3	..	16266m		
38	14073	48.6 -50 34	8.9	9.4	Ko	5	..	39675b	88	3042	49.2 +55 26	8.6	9.7	K2	1	..	3724ii		
39	424	48.6 -86 15	9.2	9.6	F5	2	..	15173b	89	4728	49.2 + 3 8	7.8	8.8	Ko	6	..	3735oi		
40	4311	48.7 +48 4	8.5	8.5	Ao	1	..	3791oi	90	6313	49.2 - 6 17	9.2	10.3	K2	2	..	40911b		
41	5069	48.7 +14 56	8.1	8.9	G5	4	..	38133i	91	16479	49.2 -27 36	6.27	6.6	A2	6	..	8586b		
42	5232	48.7 + 5 19	9.46	9.96	F8	2	..	17058b	92	19497	49.2 -31 34	9.0	9.5	Ko	3	..	44361b		
43	4581	48.7 + 0 3	7.88	9.23	Ma	4	..	3735oi	93	4935	49.2 -63 26	9.1	10.5	Ma	..	..	M
44	6057	48.7 - 1 50	10.3	10.7	F5	2	..	24592b	94	2326	49.2 -73 41	8.8	9.4	Go	6	..	38385b		
45	5726	48.7 - 2 54	11.2	11.6	F5	1	..	24592b	95	2111	49.2 -74 31	9.3	10.3	Ko	4	5,3	38385b		
46	6584	48.7 -12 8	9.7	10.3	Go	3	..	40911b	96	1875	49.3 +65 13	8.35	8.35	Ao	3	..	37909i		
47	R	48.7 -22 52	10.7	11.2	Go	2	..	24596b	97	4190	49.3 +48 22	7.7	7.7	Ao	2	..	3791oi		
48	15668	48.7 -37 58	7.9	8.2	Ao	6	..	14593b	98	4312	49.3 +48 5	7.69	7.69	Ao	4	..	3791oi		
49	14634	48.7 -48 41	9.3	10.8	Ko	3	..	39670b	99	4207	49.3 +46 25	8.0	8.8	G5	2	..	3791oi		
50	896	48.8 +75 22	8.27	8.27	Ao	2	..	38133i	100	4731	49.3 +33 2	8.1	8.1	Ao	3	..	37352i		

THE HENRY DRAPER CATALOGUE.

224000

23^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	4995	49.3	+31 20	8.4	9.4	Ko	2	..	38847i	51	6453	49.6	-62 42	9.0	10.0	Ko	2	..	42519b
2	4856	49.3	+24 35	8.2	8.2	Ao	5	..	38123i	52	3025	49.6	-70 18	9.1	9.1	Ao	3	..	12082b
3	5139	49.3	+8 36	8.8	8.9	A5	4	..	17058b	53	2113	49.6	-74 28	10.6	11.2	G	2	..	38385b
4	4799	49.3	+1 55	8.2	8.3	A2	6	..	3735oi	54	1123	49.7	+72 25	8.9	9.3	F5	2	..	38903i
5	4497	49.3	-1 19	10.0	10.5	F8	1	..	24592b	55	2562	49.7	+61 17	7.16	6.92	Bo	4	R	16266m
6	6110	49.3	-7 23	9.4	9.9	F8	3	..	40911b	56	3559	49.7	+52 56	7.99	8.05	A2	3	..	37241i
7	16755	49.3	-33 2	8.7	9.2	F5	4	..	44361b	57	5047	49.7	+30 47	9.0	10.0	Ko	1	..	38847i
8	12225	49.3	-52 8	10.2	10.8	Go	3	..	39675b	58	5392	49.7	+20 47	9.4	10.4	K	1	..	38123i
9	12224	49.3	-52 25	10.1	11.1	Ko	1	..	39675b	59	5237	49.7	+18 40	9.7	10.7	Ko	1	..	38131i
10	6778	49.3	-60 55	8.6	9.3	G5	4	5,3	14382b	60	5002	49.7	+18 12	7.6	8.6	Ko	4	0,4	38123i
11	1243	49.3	-79 4	7.9	8.7	G5	8	5,3	38135b	61	4801	49.7	+1 16	9.7	10.2	F8	4	..	24592b
12	1654	49.4	+66 16	8.0	8.1	A5	2	..	37909i	62	4585	49.7	-0 27	5.98	7.33	Mb	8	..	3735oi
13	2323	49.4	+62 38	8.8	8.8	Ao	3	..	38937i	63	4500	49.7	-0 49	8.6	9.4	G5	2	..	3735oi
14	3111	49.4	+56 57	4.85	5.35	F8p	..	R	2396c	64	6538	49.7	-19 9	10.3	11.1	Ko	1	..	24027b
15	3248	49.4	+53 59	8.5	8.5	Ao	3	0,2	37241i	65	6540	49.7	-19 41	8.83	9.7	G5	4	..	14623b
16	4665	49.4	+29 7	9.0	9.8	G5	2	..	38847i	66	17719	49.7	-31 56	9.9	10.7	F8	1	..	44361b
17	5234	49.4	+6 1	8.8	9.3	F8	2	..	3735oi	67	16515	49.7	-42 33	8.6	9.2	Go	5	..	14371b
18	6079	49.4	-5 17	9.7	10.5	G5	4	..	24592b	68	4519	49.8	+45 13	9.47	9.47	Ao	1	..	38896i
19	6078	49.4	-5 30	9.7	10.3	Go	3	..	40911b	69	5130	49.8	+37 3	8.8	9.1	F	2	..	37382i
20	6196	49.4	-10 22	9.9	10.5	Go	2	..	40911b	70	4994	49.8	+21 54	8.0	8.0	Ao	7	0,7	38131i
21	15991	49.4	-34 59	9.3	12.3	K	1	..	14593b	71	5043	49.8	+12 39	8.6	9.0	F5	1	E	38069i
22	15285	49.4	-40 52	6.01	6.8	F8	8	3,10-	14371b	72	5236	49.8	+5 33	8.6	9.6	Ko	5	0,3	3735oi
23	14804	49.4	-46 29	9.7	10.0	F8	4	..	39670b	73	4729	49.8	+2 45	10.0	10.4	F5	2	E	24592b
24	14803	49.4	-46 39	10.1	10.9	G5	2	..	39670b	74	4586	49.8	-0 32	10.0	10.5	F8	2	..	24592b
25	7697	49.4	-60 26	9.2	10.0	Go	2	0,1	42519b	75	6541	49.8	-19 18	9.4	10.3	Ma	3	..	24596b
26	7696	49.4	-60 34	8.9	10.2	Ko	1	5,1	14382b	76	6667	49.8	-19 51	10.3	10.6	G5	3	..	24596b
27	4386	49.4	-64 41	10.6	10.6	A	2	..	38229b	77	6668	49.8	-20 36	8.1	9.1	F5	3	..	14623b
28	2112	49.4	-74 24	10.9	11.2	F2	2	..	38385b	78	14734	49.8	-47 15	9.5	10.9	K2	3	..	39670b
29	1080	49.4	-80 5	10.6	11.7	K2	2	..	38135b	79	14637	49.8	-48 51	10.3	11.4	F5	2	..	39670b
30	1079	49.4	-80 44	10.5	11.3	G5	3	..	38135b	80	7698	49.8	-60 32	9.0	9.4	Go	4	0,3	14382b
31	3066	49.5	+54 34	8.2	9.2	Ko	2	..	37241i	81	1626	49.8	-76 5	9.8	10.6	G5	4	..	38135b
32	5067	49.5	+4 30	8.6	9.1	F8	4	..	3735oi	82	3043	49.9	+55 37	8.4	9.6	K5	2	..	37241i
33	4584	49.5	+0 13	9.08	9.64	Go	3	..	3735oi	83	4666	49.9	+28 56	6.59	6.57	B9	5	R	37352i
34	4498	49.5	-1 9	9.3	10.4	K2	4	..	24592b	84	4667	49.9	+28 54	7.59	8.59	Ko	..	..	56,246
35	4499	49.5	-1 11	10.7	11.2	F8	1	..	24592b	85	4642	49.9	+28 6	7.30	8.30	Ko	2	5,2	38847i
36	..	49.5	-1 27	..	..	F5	1	..	24592b	86	5394	49.9	+21 9	9.2	10.2	Ko	1	..	38123i
37	6059	49.5	-2 31	7.74	8.92	K5	6	..	24592b	87	5170	49.9	+19 49	9.1	9.9	G5	1	..	38123i
38	5728	49.5	-3 32	8.7	9.2	F8	4	..	14661b	88	5294	49.9	+9 52	9.7	10.9	K5	2	..	21226i
39	5975	49.5	-4 7	9.7	10.7	Ko	4	..	24592b	89	5098	49.9	+8 0	9.0	9.3	Fo	3	..	17058b
40	18084	49.5	-23 36	9.3	9.4	F5	6	..	24596b	90	5097	49.9	+7 50	8.1	9.1	Ko	2	..	38069i
41	14289	49.5	-49 26	10.5	10.8	G5	2	..	39670b	91	5237	49.9	+5 23	8.56	9.63	K2	3	..	3735oi
42	3987	49.5	-67 48	9.4	10.2	G5	3	..	38229b	92	5730	49.9	-2 57	10.6	11.0	F5	2	..	24592b
43	..	49.6	-1 21	..	..	F5	1	..	24592b	93	6198	49.9	-10 1	6.80	7.08	Fo	4	..	10110b
44	5976	49.6	-4 1	9.1	9.6	F8	5	..	24592b	94	6197	49.9	-10 39	10.3	10.8	F8	1	..	40911b
45	16228	49.6	-34 12	9.0	9.5	Go	3	..	14593b	95	6394	49.9	-18 10	9.9	10.5	G	2	E	24027b
46	15671	49.6	-38 40	9.1	10.1	G5	2	..	14593b	96	15674	49.9	-37 56	7.52	7.7	F5	8	..	14593b
47	14636	49.6	-48 22	9.7	10.2	G5	3	..	39670b	97	16518	49.9	-41 58	8.7	9.5	Go	3	..	14371b
48	14290	49.6	-49 12	10.3	10.5	F5	3	..	39670b	98	1063	50.0	+73 51	6.57	6.55	B9	8	..	38133i
49	10386	49.6	-54 27	8.4	9.1	G5	4	5,2	14382b	99	3253	50.0	+54 2	7.8	7.8	B8	3	0,3-	38872i
50	10114	49.6	-55 25	10.4	10.8	F5	1	..	39675b	100	4211	50.0	+47 11	7.14	8.14	Ko	4	..	37910i

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23^h 50^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	4903	50.0	+37 31	8.2	8.2	Ao	4	..	37382i	51	3115	50.5	+56 53	6.05	5.81	Bo	..	0,6 R	2396c
2	4929	50.0	+22 31	9.3	9.4	A3	1	..	38123i	52	3739	50.5	+52 11	6.77	7.77	Ko	5	2,3	37241i
3	5216	50.0	+6 31	6.12	6.10	B9	7	1,9	38069i	53	4272	50.5	+49 46	8.36	8.78	F5	4	3,2	38598i
4	6081	50.0	-5 13	7.96	8.96	Ko	5	..	40911b	54	5100	50.5	+7 50	9.0	10.0	Ko	4	..	17058b
5	6285	50.0	-9 0	9.1	9.7	Go	3	..	40911b	55	5101	50.5	+7 40	6.74	6.74	Ao	8	..	38107i
6	6284	50.0	-9 7	9.7	10.5	G5	1	..	40911b	56	4731	50.5	+2 58	8.0	8.8	G5	5	..	37350i
7	6222	50.0	-21 56	7.31	7.9	Ko	4	..	10109b	57	4588	50.5	+0 9	9.33	10.33	Ko	4	..	24592b
8	6224	50.0	-22 11	9.7	11.4	G5	3	..	24596b	58	4589	50.5	-0 44	10.7	11.3	Go	2	..	24592b
9	14736	50.0	-47 4	9.9	10.9	F8	3	..	39670b	59	6199	50.5	-10 5	10.3	10.7	F5	1	..	40911b
10	3813	50.0	-66 47	9.7	9.8	A5	3	..	38229b	60	6200	50.5	-10 20	10.1	10.9	G5	1	..	40911b
11	16837	50.1	-26 2	9.8	11.6	G5	1	..	39506b	61	6161	50.5	-11 21	8.5	9.3	G5	3	..	14157b
12	17724	50.1	-32 27	6.73	7.0	A	..	R	56,150	62	17911	50.5	-24 48	9.15	9.6	F5	5	..	24596b
13	17723	50.1	-32 29	6.05	5.88	B3	..	..	56,150	63	15679	50.5	-38 38	8.5	9.2	Ko	5	0,4	14593b
14	7938	50.1	-59 19	9.6	10.4	G5	3	..	14382b	64	10393	50.5	-54 23	7.1	7.6	A5	8	2,9	39675b
15	1369	50.2	+70 11	8.94	8.94	A	1	E	38068i	65	4214	50.6	+46 48	6.13	7.13	Ko	7	..	37910i
16	2829	50.2	+57 32	7.58	8.58	Ko	2	2,2	37241i	66	4363	50.6	+45 48	6.84	6.82	B9	9	..	37910i
17	4187	50.2	+51 10	8.80	8.80	Ao	3	3,2	38598i	67	4792	50.6	+42 44	7.8	7.9	A2	2	..	37910i
18	4730	50.2	+2 41	8.6	9.6	Ko	3	2,5	37350i	68	4861	50.6	+24 35	8.8	9.6	G5	1	..	38880i
19	4501	50.2	-1 38	9.37	9.79	F5	4	R	24592b	69	5240	50.6	+19 4	9.0	10.1	K2	1	..	38131i
20	6060	50.2	-2 8	9.9	11.1	K5	1	..	24592b	70	4905	50.6	+3 32	9.0	9.8	G5	2	..	37350i
21	6083	50.2	-5 27	8.10	8.88	G5	5	..	40911b	71	6287	50.6	-9 37	7.33	8.11	G5	5	..	14157b
22	6286	50.2	-9 18	9.1	10.3	K5	1	..	40911b	72	6485	50.6	-13 43	6.80	7.58	G5	7	..	14157b
23	15290	50.2	-40 20	9.0	9.2	F2	3	..	14371b	73	6579	50.6	-14 31	7.22	7.64	F5	7	..	14623b
24	14076	50.2	-50 41	7.9	8.1	Ko	5	0,3	14881b	74	1370	50.7	+70 7	8.69	8.69	Ao	2	..	38068i
25	4270	50.3	+49 41	8.0	8.0	Ao	6	0,3	38598i	75	4322	50.7	+47 40	6.82	7.82	Ko	5	..	37910i
26	4318	50.3	+48 5	var.	var.	Mc	..	R	M	76	4801	50.7	+34 13	9.0	9.1	A2	2	..	38892i
27	4735	50.3	+32 20	7.60	8.60	Ko	3	..	38847i	77	5297	50.7	+10 5	8.7	9.8	K2	3	..	21226i
28	5042	50.3	+25 24	6.67	7.85	K5	6	0,6	38880i	78	4502	50.7	-1 7	9.3	9.8	F8	4	..	24592b
29	4995	50.3	+21 40	9.4	10.4	Ko	1	..	38131i	79	6320	50.7	-6 7	10.1	10.7	Go	2	..	40911b
30	4587	50.3	+0 5	10.0	10.5	F8	2	..	24592b	80	18087	50.7	-23 32	9.8	11.7	Ko	2	..	24596b
31	6062	50.3	-2 40	9.9	11.0	K2	1	..	24592b	81	17913	50.7	-24 10	9.2	9.9	Fo	4	..	24596b
32	6586	50.3	-12 31	8.8	9.4	Go	4	..	40911b	82	16490	50.7	-27 3	10.5	11.6	Ko	1	..	39506b
33	6577	50.3	-14 18	8.6	9.2	Go	2	..	14157b	83	14643	50.7	-48 40	10.5	10.8	Go	2	..	39670b
34	6521	50.3	-15 24	8.7	9.3	Go	1	..	14623b	84	13717	50.7	-51 45	9.7	10.2	Fo	2	..	39675b
35	6397	50.3	-18 23	7.70	8.12	F5	2	..	10109b	85	5134	50.8	+37 9	9.3	9.6	F	2	..	37382i
36	15351	50.3	-41 49	8.5	10.1	K5	2	..	14371b	86	5074	50.8	+14 41	6.59	7.94	Mb	7	0,5	38131i
37	14739	50.3	-47 33	10.5	11.2	F8	2	..	39670b	87	5068	50.8	+0 34	9.7	10.0	Fo	4	..	24592i
38	14640	50.3	-48 26	9.4	10.3	Ko	3	..	39670b	88	4503	50.8	-0 51	9.7	10.5	G5	1	..	24592b
39	1051	50.4	+74 19	7.84	8.84	Ko	4	..	38133i	89	5732	50.8	-3 41	10.1	10.4	F2	3	..	24592b
40	4193	50.4	+48 23	8.0	9.1	K2	2	..	38896i	90	6164	50.8	-11 25	8.9	10.0	K2	1	..	10110b
41	5179	50.4	+40 31	8.6	8.9	Fo	3	..	37382i	91	6499	50.8	-21 1	8.8	9.9	Fo	6	..	24596b
42	5731	50.4	-2 53	9.7	10.7	Ko	3	..	24592b	92	18088	50.8	-23 6	10.7	11.7	G5	1	..	24596b
43	6498	50.4	-21 30	7.9	8.6	Go	2	..	10109b	93	16700	50.8	-24 57	8.70	9.6	G5	6	..	24596b
44	18086	50.4	-23 35	10.3	11.7	Ko	1	..	24596b	94	15546	50.8	-43 25	8.3	9.1	F5	5	..	14371b
45	16487	50.4	-27 10	9.2	9.6	G5	5	..	39506b	95	14807	50.8	-46 33	10.1	10.3	G5	2	..	39670b
46	18394	50.4	-28 0	9.3	11.2	K2	1	..	44361b	96	14644	50.8	-48 30	9.3	10.2	Ko	4	..	39670b
47	12227	50.4	-51 56	8.4	9.0	G5	3	..	14881b	97	14292	50.8	-48 53	10.8	11.1	F2	2	..	39670b
48	10392	50.4	-54 37	9.1	10.2	Go	2	..	14382b	98	14079	50.8	-50 40	10.5	10.5	F8	2	..	39675b
49	6781	50.4	-61 32	8.7	9.9	Ko	2	0,2	42519b	99	6784	50.8	-61 1	8.4	9.1	Ko	4	0,3	42519b
50	2672	50.5	+58 51	7.37	8.37	Ko	3	5,2	37241i	100	6785	50.8	-61 26	9.4	10.0	G	1	..	42519b

THE HENRY DRAPER CATALOGUE.

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23^h 50^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	3588	50.8	-68 29	9.4	10.2	G5	2	..	38229b	51	4908	51.2	+ 4 5	9.0	9.6	Go	3	..	37350i
2	406	50.9	+85 21	8.68	8.68	Ao	3	..	37281i	52	5070	51.2	+ 0 17	10.0	10.4	F5	1	..	24592b
3	929	50.9	+77 22	7.8	8.8	Ko	2	..	38133i	53	6203	51.2	-10 3	8.5	9.3	G5	3	..	14157b
4	5396	50.9	+20 37	6.60	6.74	A5	8	0,8	38131i	54	15400	51.2	-44 45	9.36	10.9	Ko	4	..	39670b
5	4732	50.9	+ 2 59	8.44	8.86	F5	4	..	37350i	55	3815	51.2	-66 20	9.4	9.7	Fo	4	..	38229b
6	4591	50.9	+ 0 7	9.7	10.3	Go	1	..	24592b	56	2782	51.2	-71 36	9.6	10.2	Go	2	..	38385b
7	6588	50.9	-11 47	9.4	10.2	G5	3	..	40911b	57	3051	51.3	+55 26	8.5	8.3	B	4	R	37241i
8	6487	50.9	-13 2	7.9	8.2	Fo	5	..	14157b	58	4366	51.3	+45 31	8.0	8.1	A3	3	..	37910i
9	15680	50.9	-38 12	9.1	10.5	G5	2	..	14593b	59	5174	51.3	+19 40	8.0	9.1	K2	2	2,1	38131i
10	14741	50.9	-47 1	10.1	11.2	G5	2	..	39670b	60	5007	51.3	+10 22	8.42	8.92	F8	3	..	38069i
11	10550	50.9	-53 21	7.16	7.9	G5	7	5,4	14881b	61	5239	51.3	+ 6 8	10.3	11.1	G5	2	..	17058b
12	8114	50.9	-58 17	9.2	10.2	A3	3	..	14382b	62	4733	51.3	+ 3 2	9.3	10.3	K	1	..	37350i
13	4938	50.9	-63 26	7.3	7.4	A3	..	..	56,150	63	4592	51.3	- 0 4	9.0	9.3	Fo	3	..	37350i
14	..	50.9	-71 40	..	..	Go	2	..	38385b	64	4505	51.3	- 1 9	9.3	9.8	F8	2	..	24592b
15	2640	51.0	+61 6	8.9	8.9	Ao	2	3,2	38937i	65	4504	51.3	- 1 30	8.6	9.6	Ko	5	..	24592b
16	5053	51.0	+30 31	7.51	7.79	Fo	3	..	37352i	66	6322	51.3	- 6 32	8.9	9.9	Ko	2	..	40911b
17	4862	51.0	+24 48	8.9	9.5	Go	2	..	38880i	67	6291	51.3	- 9 17	9.9	10.7	G5	1	..	40911b
18	4826	51.0	+23 56	8.8	9.8	Ko	1	..	38880i	68	15549	51.3	-43 51	9.7	10.0	Go	2	..	14371b
19	4930	51.0	+22 53	8.2	8.8	Go	2	..	38123i	69	14082	51.3	-50 21	var.	var.	Md	4	R	14881b
20	5173	51.0	+19 18	9.3	9.9	G	2	E	38123i	70	10552	51.3	-53 8	9.3	9.6	A5	3	..	14881b
21	5075	51.0	+14 17	8.4	8.4	Ao	3	3,3	38131i	71	10184	51.3	-56 16	7.4	9.1	Ko	7	..	14382b
22	5069	51.0	+ 1 0	9.3	10.1	G5	2	..	24592b	72	1066	51.4	+73 35	8.2	9.3	K2	3	..	38133i
23	5734	51.0	- 3 14	9.1	9.9	G5	4	..	24592b	73	1969	51.4	+66 11	7.9	8.9	Ko	1	..	38937i
24	6402	51.0	-18 34	8.9	9.0	A2	5	..	14623b	74	3563	51.4	+53 9	7.78	8.56	G5	3	5,2	37241i
25	6225	51.0	-22 33	7.36	8.7	Ma	4	..	24596b	75	4193	51.4	+50 56	8.74	8.82	A3	2	0,1R	38598i
26	16703	51.0	-25 51	9.3	10.2	F8	5	..	39506b	76	4367	51.4	+45 27	8.2	9.3	K2	1	..	38896i
27	16842	51.0	-26 28	8.3	9.6	Ko	5	..	39506b	77	4804	51.4	+ 1 22	8.74	9.52	G5	5	..	24592i
28	15200	51.0	-39 37	7.9	8.9	Ko	3	..	14371b	78	5071	51.4	+ 0 41	8.8	9.8	Ko	6	..	24592i
29	2780	51.0	-71 26	9.2	9.7	F8	6	..	38385b	79	6403	51.4	-17 50	8.7	9.1	F5	3	..	14623b
30	2789	51.0	-72 34	10.2	11.2	Ko	2	..	38385b	80	6672	51.4	-20 21	9.4	10.8	F8	5	..	24596b
31	1658	51.1	+66 18	8.2	8.8	Go	2	..	38937i	81	6673	51.4	-20 44	8.9	10.8	K2	3	..	24596b
32	1877	51.1	+64 26	8.16	9.16	Ko	2	..	37909i	82	6226	51.4	-22 11	9.4	11.0	Ko	3	..	24596b
33	2674	51.1	+59 12	7.6	8.2	Go	2	..	37241i	83	16707	51.4	-25 18	6.33	7.2	G5	4	..	8586b
34	3047	51.1	+56 10	8.8	10.2	Ma	2	..	37242i	84	18891	51.4	-29 41	9.6	9.5	F8	2	..	44361b
35	4737	51.1	+32 55	6.96	6.94	B9	4	..	37352i	85	19746	51.4	-30 4	7.7	8.9	K5	4	..	44361b
36	4931	51.1	+22 20	8.4	9.2	G5	1	..	38123i	86	15182	51.4	-45 17	9.9	10.3	G5	5	..	39670b
37	5981	51.1	- 4 3	9.4	10.4	Ko	4	..	24592b	87	14083	51.4	-50 52	9.41	10.2	Go	3	..	39675b
38	5980	51.1	- 4 32	10.3	10.8	F8	4	..	24592b	88	10185	51.4	-56 3	7.4	8.1	Fo	4	5,9	41858b
39	6581	51.1	-14 4	8.5	8.9	F5	2	..	14157b	89	10186	51.4	-56 44	8.3	9.0	Go	6	..	14382b
40	16844	51.1	-26 0	10.3	10.8	Go	3	..	39506b	90	7701	51.4	-60 6	9.0	9.9	K2	2	..	42519b
41	14745	51.1	-47 8	9.2	9.8	Fo	6	..	39670b	91	2790	51.4	-72 22	10.4	11.2	G5	3	..	38385b
42	14294	51.1	-49 17	10.8	11.4	Go	2	..	39670b	92	4897	51.5	+41 58	8.6	8.6	Ao	2	..	37910i
43	12228	51.1	-52 32	9.3	10.3	Go	2	..	39675b	93	4593	51.5	+ 0 7	9.53	9.95	F5	4	..	24592b
44	4183	51.1	-65 14	10.1	10.6	F8	4	..	38229b	94	6674	51.5	-20 16	9.4	11.3	Go	3	..	24596b
45	3026	51.1	-70 49	9.7	10.3	Go	2	..	38385b	95	18090	51.5	-23 26	10.7	11.3	Go	1	..	24596b
46	2781	51.1	-71 52	9.7	10.2	F8	2	..	38385b	96	16527	51.5	-42 45	8.1	7.8	F5	8	3,3	14371b
47	1627	51.1	-76 8	10.9	11.2	F2	3	..	38135b	97	14810	51.5	-46 1	10.3	12.3	Ko	1	..	39670b
48	760	51.1	-83 33	8.12	9.4	Ko	3	..	15165b	98	14748	51.5	-47 44	10.1	10.9	F2	2	..	39670b
49	4670	51.2	+28 20	9.2	9.2	Ao	2	..	37352i	99	10383	51.5	-57 43	7.46	7.9	Ko	4	5,4	41858b
50	5300	51.2	+ 9 28	7.37	7.43	A2	5	2,4	38107i	100	8115	51.5	-58 13	8.9	9.9	A3	4	..	14382b

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	8116	51.5	-58 23	9.3	9.9	F8	2	..	14382b	51	16495	52.0	-27 24	9.3	9.6	Ko	4	..	39506b
2	5135	51.6	+35 41	8.8	8.9	A2	2	..	37382i	52	15186	52.0	-45 4	9.9	11.2	Ko	2	..	39670b
3	4999	51.6	+22 5	6.30	7.65	Ma	7	0,8	38123i	53	15187	52.0	-45 25	9.7	11.8	Ko	1	..	39670b
4	5046	51.6	+12 15	8.6	9.8	K5	3	..	21226i	54	560	52.0	-84 54	9.3	10.5	K5	1	..	15165b
5	4734	51.6	+3 11	8.6	9.0	F5	3	..	37350i	55	3076	52.1	+55 9	5.69	6.11	F5	..	3,7-	56,103
6	5983	51.6	-3 47	10.3	10.8	F8	2	..	24592b	56	4507	52.1	-1 13	9.7	10.3	Go	3	..	24592b
7	6204	51.6	-10 35	9.4	10.4	Ko	2	..	40911b	57	5737	52.1	-3 42	10.6	11.6	Ko	1	..	24592b
8	14647	51.6	-48 44	9.7	10.5	Ko	3	..	39670b	58	6544	52.1	-18 57	9.4	10.8	Ko	3	..	24596b
9	743	51.7	+82 38	6.42	6.42	Ao	8	R	37281i	59	16532	52.1	-42 39	9.4	9.5	F5	3	..	14371b
10	1239	51.7	+71 33	8.8	9.3	F8	2	R	36282i	60	14812	52.1	-46 40	7.8	8.0	F5	3	..	37262b
11	4368	51.7	+46 7	9.5	10.6	K2	2	..	37910i	61	4940	52.1	-63 31	6.04	6.1	A2	..	..	28,217
12	5400	51.7	+21 8	8.9	10.0	K2	1	..	38880i	62	907	52.1	-82 44	5.68	7.0	Ko	..	0,5 R	56,150
13	5047	51.7	+12 15	8.6	9.8	K5	3	..	21226i	63	851	52.2	+79 12	7.8	8.1	Fo	5	5,3	38964i
14	4909	51.7	+4 10	6.87	7.15	Fo	8	..	37350i	64	2647	52.2	+60 28	7.01	8.36	Ma	3	0,2	38872i
15	4506	51.7	-1 4	9.3	9.8	F8	5	..	24592b	65	4528	52.2	+44 22	8.2	8.7	F8	2	..	37910i
16	16709	51.7	-24 59	9.20	10.2	F5	4	..	24596b	66	4903	52.2	+41 22	8.0	8.4	F5	3	3,3	38896i
17	15403	51.7	-43 54	8.5	9.1	Go	6	..	14371b	67	4908	52.2	+37 16	9.0	9.6	Go	2	..	37382i
18	3589	51.7	-68 10	8.3	8.9	Go	6	5,2	38229b	68	4829	52.2	+23 50	8.8	9.6	G5	1	..	38880i
19	3055	51.8	+55 17	7.01	8.01	Ko	..	..	56,103	69	5002	52.2	+21 48	8.0	8.4	F5	5	0,4	38131i
20	4594	51.8	-0 24	9.5	10.3	G5	3	..	24592b	70	5001	52.2	+21 28	8.2	8.6	F5	3	..	38131i
21	6064	51.8	-2 41	9.9	10.9	Ko	1	..	24592b	71	5077	52.2	+15 4	7.74	8.74	Ko	3	..	38131i
22	8117	51.8	-58 42	7.4	9.4	Ko	3	..	42095b	72	5048	52.2	+12 40	8.1	8.7	Go	3	5,2	38107i
23	6786	51.8	-60 58	8.6	9.6	G5	2	..	42519b	73	4595	52.2	+0 8	10.0	10.5	F8	2	..	24592b
24	3744	51.9	+51 36	8.1	8.1	Ao	3	2,3-	37598i	74	6390	52.2	-16 39	8.6	9.2	Go	3	..	14623b
25	5003	51.9	+31 46	8.8	10.2	Ma	1	..	38847i	75	15551	52.2	-43 0	8.8	9.8	F2	5	..	14371b
26	5010	51.9	+10 40	9.0	10.2	K5	3	..	21226i	76	7945	52.2	-59 32	8.4	8.4	F5	4	..	42095b
27	5146	51.9	+9 13	8.8	9.3	F8	2	..	38069i	77	6456	52.2	-62 20	7.8	7.8	B9	7	1,6	22068b
28	5220	51.9	+6 55	9.7	10.8	K2	2	..	17058b	78	4390	52.2	-64 48	9.52	9.8	G	3	..	38229b
29	5222	51.9	+6 44	9.7	10.2	F8	1	..	17058b	79	3816	52.2	-65 57	var.	var.	Md	..	R	M
30	4735	51.9	+2 27	7.28	8.35	K2	4	..	37350i	80	4331	52.3	+47 43	7.46	7.46	Ao	6	..	37910i
31	6065	51.9	-2 42	10.6	11.2	Go	1	..	24592b	81	5187	52.3	+41 3	8.0	8.8	G5	3	5,2	37382i
32	5736	51.9	-3 10	9.1	9.9	G5	2	..	14156b	82	4737	52.3	+2 27	8.6	8.9	Fo	6	..	37350i
33	5735	51.9	-3 32	9.1	9.6	F8	4	..	14156b	83	6206	52.3	-10 12	7.83	8.39	Go	4	2,4	14157b
34	6115	51.9	-6 49	8.9	9.7	G5	3	..	40911b	84	18094	52.3	-23 9	11.0	11.8	G5	1	..	24596b
35	6213	51.9	-7 55	7.9	8.7	G5	5	..	40911b	85	18408	52.3	-28 36	8.2	9.3	Go	6	..	44361b
36	6490	51.9	-13 31	8.5	9.5	Ko	3	..	14157b	86	15436	52.3	-37 16	7.42	8.3	Ko	7	..	14593b
37	16529	51.9	-42 0	8.9	9.2	F8	5	..	14371b	87	16533	52.3	-41 54	8.7	9.5	Ko	4	..	14371b
38	2117	51.9	-74 52	8.8	9.4	Go	6	0,7	14357b	88	15554	52.3	-43 36	8.7	10.9	K5	2	..	14371b
39	1240	52.0	+71 45	8.9	9.0	A2	3	0,2	38903i	89	14813	52.3	-46 10	9.7	10.3	F2	4	..	39670b
40	4369	52.0	+46 3	8.0	8.1	A2	2	..	37910i	90	14650	52.3	-48 15	9.7	10.2	F8	4	..	39670b
41	4902	52.0	+42 6	6.04	6.46	F5	8	3,9	37382i	91	14299	52.3	-49 26	11.2	11.1	F2	2	..	39670b
42	5194	52.0	+40 2	8.32	9.32	Ko	3	..	37382i	92	4391	52.3	-64 52	5.16	5.22	A2	..	2, R	28,217
43	5098	52.0	+38 48	8.8	8.8	Ao	3	..	37382i	93	3817	52.3	-66 20	8.0	8.6	Go	7	..	38229b
44	4714	52.0	+27 1	7.50	7.48	B9	3	..	37352i	94	1244	52.3	-79 50	8.78	8.5	Ao	4	..	15165b
45	4736	52.0	+2 31	7.68	8.86	K5	4	..	24592i	95	1127	52.4	+72 18	7.8	7.7	B5	6	..	38133i
46	6324	52.0	-6 1	8.1	8.6	F8	5	..	40911b	96	5013	52.4	+17 42	8.1	9.1	Ko	3	..	38102i
47	6116	52.0	-7 28	9.4	9.8	F5	3	..	40911b	97	18097	52.4	-23 38	9.8	10.8	Ko	2	..	24596b
48	6500	52.0	-21 24	6.63	7.9	Ko	8	..	10109b	98	16497	52.4	-27 18	9.8	11.4	Ko	1	..	39506b
49	16494	52.0	-27 11	6.40	7.5	Ko	4	..	8586b	99	15295	52.4	-40 14	10.5	10.1	Ao	2	..	14371b
50										100	15189	52.4	-45 0	9.46	10.0	F5	4	..	39670b

THE HENRY DRAPER CATALOGUE.

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23^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	7946	52.4	-59 23	9.3	9.4	A5	3	..	42095b	51	6546	52.9	-19 31	10.3	11.3	F8	2	..	24596b
2	901	52.5	+75 45	7.72	7.72	Ao	5	..	38133i	52	18413	52.9	-28 34	8.8	9.4	F5	4	..	44361b
3	2573	52.5	+61 27	7.46	7.46	Ao	4	0,3	37909i	53	3028	52.9	-70 30	9.6	10.2	Go	3	..	38385b
4	2795	52.5	+59 28	6.42	6.37	B8	6	0,7	1897b	54	902	53.0	+76 14	9.02	9.80	G5	1	..	38133i
5	4335	52.5	+47 31	8.5	8.6	A5	2	..	38896i	55	1662	53.0	+66 42	8.1	8.1	Ao	3	..	37909i
6	5176	52.5	+19 47	8.00	8.78	G5	3	..	38102i	56	4198	53.0	+50 17	8.82	8.80	B9	2	..	38598i
7	5223	52.5	+ 6 51	8.8	9.6	G5	2	..	38069i	57	5007	53.0	+31 28	8.4	8.7	Fo	2	..	37352i
8	5240	52.5	+ 5 52	10.7	11.7	Ko	2	..	17058b	58	5034	53.0	+29 24	8.7	9.7	Ko	3	..	38847i
9	6088	52.5	- 5 30	8.92	9.70	G5	4	..	40911b	59	4830	53.0	+23 49	8.2	9.0	G5	3	0,3	38102i
10	16780	52.5	-33 45	6.90	7.9	F5	5	..	8586b	60	5072	53.0	+ 0 26	10.7	11.2	F8	2	..	24592b
11	12233	52.5	-52 46	8.6	9.4	A2	1	..	14881b	61	5989	53.0	- 4 32	8.9	9.9	Ko	5	2,2	24592b
12	2791	52.5	-72 20	10.6	11.2	Go	2	..	38385b	62	6232	53.0	-22 27	8.7	8.7	A2	8	..	24596b
13	941	52.6	+77 0	8.4	8.9	F8	2	..	38133i	63	16786	53.0	-33 42	9.0	9.2	F5	3	..	41067b
14	1067	52.6	+73 19	8.0	8.4	F5	6	..	38133i	64	10386	53.0	-57 46	7.3	7.9	F8	5	3,4	42095b
15	4288	52.6	+49 47	8.5	8.5	Ao	2	..	38598i	65	4291	53.1	+49 53	6.83	7.61	G5	6	0,5	37937i
16	4906	52.6	+41 35	8.2	8.3	A2	4	3,3	37382i	66	5403	53.1	+20 17	8.55	9.11	Go	2	..	38102i
17	5105	52.6	+ 7 52	8.7	9.5	G5	3	..	38069i	67	5150	53.1	+ 9 12	10.0	10.0	Ao	2	..	17058b
18	5986	52.6	- 4 19	10.3	11.3	Ko	2	..	24592b	68	6592	53.1	-12 1	7.9	8.7	G5	4	..	14157b
19	6215	52.6	- 7 56	8.1	8.9	G5	4	..	40911b	69	6234	53.1	-22 43	10.3	11.7	F8	2	..	24596b
20	15296	52.6	-40 30	9.6	11.0	K2	2	..	45096b	70	14090	53.1	-50 41	8.8	8.4	F2	7	..	14881b
21	14088	52.6	-49 58	8.45	9.0	A3	5	..	14881b	71	8120	53.1	-58 35	9.1	10.4	F5	3	..	14382b
22	13724	52.6	-50 53	11.8	10.2	Fo	3	..	39675b	72	4941	53.1	-63 34	6.6	7.6	Ko	..	5,8	56,150
23	3991	52.6	-67 34	7.1	7.4	F2	6	3,8	12082b	73	1373	53.2	+70 1	8.29	8.85	Go	2	..	38133i
24	2676	52.7	+59 9	7.8	7.6	Bo	4	..	16266m	74	5246	53.2	+19 9	7.45	8.52	K2	4	..	38102i
25	3119	52.7	+56 34	7.7	7.8	A2	4	1,3	37241i	75	5245	53.2	+18 45	8.8	9.8	Ko	1	..	38102i
26	3058	52.7	+55 20	8.46	8.52	A2	3	0,2	38872i	76	5307	53.2	+ 9 16	8.8	9.6	G5	2	..	38069i
27	4865	52.7	+24 35	4.75	6.10	Ma	..	0,8 R	37352i	77	5076	53.2	+ 5 6	9.40	9.68	Fo	4	..	17058b
28	5014	52.7	+18 9	8.0	8.1	A3	4	..	38102i	78	4808	53.2	+ 1 43	9.3	9.9	Go	2	..	24592b
29	5013	52.7	+10 55	6.53	6.53	Ao	7	0,6	38107i	79	5074	53.2	+ 1 1	10.7	11.5	G5	1	..	24592b
30	5073	52.7	+ 4 50	9.3	10.3	Ko	2	..	37350i	80	5991	53.2	- 4 38	10.6	11.4	G5	2	..	24592b
31	6329	52.7	- 6 1	7.7	8.2	F8	6	..	40911b	81	6394	53.2	-16 25	6.40	7.47	K2	6	3,3 R	14623b
32	6119	52.7	- 7 40	9.9	10.9	Ko	1	..	40911b	82	6505	53.2	-20 52	8.8	9.0	A5	4	..	14623b
33	19526	52.7	-31 0	8.2	9.5	G5	3	..	41067b	83	6235	53.2	-22 27	9.4	10.2	G5	3	..	24596b
34	3590	52.7	-68 38	8.9	9.5	Go	3	..	38229b	84	15694	53.2	-38 7	8.5	9.5	Ko	4	..	14593b
35	3120	52.8	+56 51	8.4	8.4	B9	2	..	38872i	85	15410	53.2	-44 30	9.1	9.7	G5	3	..	14371b
36	3122	52.8	+56 32	8.6	8.4	Bo	5	R	37242i	86	13726	53.2	-51 28	9.3	10.2	G5	3	..	39675b
37	4289	52.8	+49 59	8.8	8.9	A2	1	..	38598i	87	7705	53.2	-60 47	9.1	10.0	G5	2	..	42095b
38	5037	52.8	+34 47	9.0	9.0	Ao	2	..	37382i	88	6787	53.2	-61 38	8.8	10.7	K2	1	..	42519b
39	4509	52.8	- 1 36	10.7	11.1	F5	1	..	24592b	89	2334	53.2	-73 45	9.5	9.8	Fo	6	..	38385b
40	..	52.8	- 1 43	..	..	Ko	1	..	24592b	90	4202	53.3	+50 50	var.	var.	Md	..	R	2207c
41	5987	52.8	- 4 10	10.3	11.3	Ko	2	..	24592b	91	5103	53.3	+38 24	8.0	9.1	K2	2	..	37382i
42	6294	52.8	- 9 31	var.	var.	Md	..	R	M	92	5039	53.3	+34 26	6.71	6.79	A3	7	1,4	37382i
43	15438	52.8	-37 40	8.4	8.6	F8	6	..	14593b	93	4678	53.3	+28 17	8.4	8.5	A3	3	..	37352i
44	15210	52.8	-39 31	7.02	8.6	K2	5	..	14371b	94	5053	53.3	+13 15	7.9	8.0	A2	6	..	38107i
45	14655	52.8	-48 41	10.3	10.8	F5	3	..	39670b	95	5107	53.3	+ 7 31	8.6	9.4	G5	1	..	38069i
46	791	52.9	+80 48	8.5	9.5	Ko	1	0,1	38964i	96	4739	53.3	+ 3 0	8.6	9.6	Ko	3	..	37350i
47	5049	52.9	+12 37	9.5	10.0	F8	3	..	21226i	97	4809	53.3	+ 1 35	10.0	10.6	Go	3	..	24592b
48	4596	52.9	- 0 41	8.7	9.3	Go	2	..	14661b	98	4510	53.3	- 1 38	10.7	11.5	G5	2	..	24592b
49	6067	52.9	- 2 32	8.9	9.7	G5	2	..	14156b	99	5992	53.3	- 3 55	8.7	9.2	F8	4	..	14156b
50	5738	52.9	- 2 55	8.9	10.1	K5	2	..	14156b	100	6331	53.3	- 6 33	9.7	10.3	Go	2	..	40911b

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23^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.
1	16853	53.3	-26 29	9.3	10.8	F8	2	..	39506b	51	6496	53.7	-13 20	8.9	9.7	G5	3	..	14157b
2	16251	53.3	-34 51	8.43	9.8	Ko	3	..	41067b	52	6682	53.7	-20 12	8.1	9.0	Ko	6	..	14623b
3	15696	53.3	-38 0	8.8	9.0	Fo	5	2,5-	40904b	53	18423	53.7	-28 21	8.2	8.7	G5	6	..	44361b
4	14657	53.3	-48 21	10.5	11.4	Ko	1	..	39670b	54	10561	53.7	-53 19	5.14	6.3	Ko	..	0,8R	28,217
5	10389	53.3	-57 51	6.70	7.1	Go	6	5,5	42095b	55	10406	53.7	-54 20	9.9	10.5	Go	1	..	14382b
6	4377	53.4	+46 12	9.0	9.0	Ao	2	..	38896i	56	2122	53.7	-74 37	9.4	10.0	Go	4	..	38135b
7	4376	53.4	+45 44	8.2	9.2	Ko	2	5,1	38896i	57	3571	53.8	+53 7	8.2	8.2	Ao	4	0,2	37241i
8	4831	53.4	+23 52	8.8	9.6	G5	3	..	38880i	58	4349	53.8	+47 37	8.6	8.6	Ao	1	..	38896i
9	5224	53.4	+7 13	10.7	11.1	F5	1	..	17058b	59	4381	53.8	+45 52	6.46	6.34	B5	7	..	37910i
10	6068	53.4	-2 15	8.6	9.2	Go	2	..	14156b	60	5050	53.8	+26 5	8.6	9.6	Ko	2	..	35104i
11	6495	53.4	-13 1	8.5	8.8	Fo	4	..	14157b	61	5951	53.8	+25 31	8.8	9.8	Ko	3	..	35104i
12	6588	53.4	-14 41	7.18	7.46	Fo	6	..	14623b	62	4833	53.8	+23 38	8.9	9.7	G5	2	..	38880i
13	6548	53.4	-19 31	10.3	11.3	Go	3	..	24596b	63	4912	53.8	+3 43	7.8	9.0	K5	3	..	17058b
14	17934	53.4	-24 44	8.00	8.1	A2	10	..	24596b	64	5997	53.8	-4 19	10.7	11.5	G5	1	..	24592b
15	18903	53.4	-29 46	8.72	9.2	Ko	4	..	41067b	65	19004	53.8	-23 35	9.5	9.9	F8	4	..	24596b
16	15213	53.4	-39 15	10.5	10.5	F5	1	..	14371b	66	17937	53.8	-24 13	9.6	11.4	Go	2	..	24596b
17	1242	53.5	+72 1	8.6	9.6	Ko	1	5,1	38133i	67	19762	53.8	-30 29	9.3	9.5	Go	1	..	44361b
18	1414	53.5	+68 47	7.8	8.1	Fo	5	..	38068i	68	8121	53.8	-58 21	8.5	10.0	Go	3	..	14382b
19	2797	53.5	+60 8	8.11	9.18	K2	1	2,2	38872i	69	3032	53.8	-70 13	8.3	9.4	K2	2	..	12082b
20	5138	53.5	+36 20	8.9	9.3	F5	3	..	37382i	70	2783	53.8	-71 31	9.2	10.2	Ko	4	..	38385b
21	5406	53.5	+21 13	8.7	9.3	Go	4	..	38102i	71	1667	53.9	+66 15	7.8	8.2	F5	4	..	37909i
22	5075	53.5	+1 12	10.7	11.3	Go	3	..	24592b	72	3082	53.9	+55 12	4.93	4.74	B2	..	1, R	56,103
23	5995	53.5	-4 39	11.1	11.7	Go	1	..	24592b	73	3750	53.9	+51 16	8.72	9.14	F5	2	5,2	37937i
24	5993	53.5	-4 41	10.3	11.1	G5	2	..	24592b	74	4591	53.9	+44 11	8.5	8.6	A5	2	..	38896i
25	6593	53.5	-12 15	8.8	9.4	Go	3	..	14157b	75	5202	53.9	+40 14	8.37	8.51	A5	4	..	37382i
26	6681	53.5	-20 35	9.4	10.2	Fo	2	..	14623b	76	5104	53.9	+38 34	7.35	7.69	F2	5	..	37382i
27	16008	53.5	-34 52	9.73	11.7	K	1	..	41067b	77	5243	53.9	+5 51	9.0	10.1	K2	3	..	17058b
28	15443	53.5	-37 27	9.0	8.9	Fo	6	..	14593b	78	6594	53.9	-12 30	8.1	8.6	F8	5	..	14157b
29	15698	53.5	-38 47	7.77	7.9	F2	6	..	14371b	79	6508	53.9	-21 11	8.6	9.6	Ko	5	..	24596b
30	10405	53.5	-54 23	8.9	10.8	Ko	1	..	14382b	80	18907	53.9	-29 12	9.5	10.1	Ko	2	..	44361b
31	5011	53.6	+31 23	8.4	9.2	G5	2	..	38847i	81	10562	53.9	-53 4	9.2	10.8	Ko	2	..	39675b
32	5152	53.6	+8 41	9.3	10.1	G5	1	..	38069i	82	10126	53.9	-55 12	8.8	10.8	K2	2	..	14382b
33	5996	53.6	-4 7	5.07	6.07	Ko	7	0,10	3064b	83	10393	53.9	-57 8	var.	var.	Md	4	5,5R	41858b
34	6092	53.6	-4 45	11.1	11.7	Go	1	..	24592b	84	7707	53.9	-60 6	8.1	9.4	Ko	4	..	42095b
35	16501	53.6	-27 6	9.6	9.6	F5	4	..	39506b	85	3340	53.9	-69 30	8.9	10.3	Mb	..	..	M
36	19761	53.6	-30 4	8.8	9.2	Go	3	..	41067b	86	3205	54.0	+54 10	8.6	9.1	F8	3	3,1	37241i
37	10391	53.6	-57 34	9.3	9.6	F2	4	..	14382b	87	3573	54.0	+52 42	8.2	8.3	A3	3	1,2	37241i
38	6459	53.6	-62 9	7.8	8.2	F5	5	..	22068b	88	5006	54.0	+21 38	8.9	9.2	F2	3	..	38102i
39	1045	53.6	-81 41	10.1	10.9	G5	3	..	38135b	89	4913	54.0	+4 9	9.0	9.3	F2	3	..	17058b
40	942	53.7	+76 44	8.7	9.3	Go	2	5,2-	38139i	90	4513	54.0	-1 2	8.6	9.6	K	1	..	14661b
41	3570	53.7	+52 50	7.74	8.74	Ko	3	0,1	37241i	91	4512	54.0	-1 9	9.3	10.3	K	1	..	14661b
42	5196	53.7	+40 28	8.6	9.7	K2	2	..	37382i	92	5998	54.0	-4 24	10.3	10.9	Go	3	..	24592b
43	4745	53.7	+33 11	8.0	8.6	Go	3	0,2	38842i	93	6206	54.0	-9 3	7.9	8.0	A5	4	..	14157b
44	5012	53.7	+31 48	6.36	6.24	B5	6	0,5	38847i	94	6549	54.0	-19 6	8.1	9.3	Ko	6	..	14623b
45	5066	53.7	+30 16	8.36	9.43	K2	2	..	38847i	95	19005	54.0	-22 55	11.2	10.5	Ao	2	..	24596b
46	5153	53.7	+8 59	8.8	10.0	K5	1	..	38069i	96	16545	54.0	-42 48	6.90	7.3	A2	10	2,6	14371b
47	4741	53.7	+2 37	9.0	10.0	Ko	3	E	24592b	97	14822	54.0	-46 42	8.9	9.8	Ko	6	..	39670b
48	4511	53.7	-1 27	10.7	11.9	K5	1	..	24592b	98	1883	54.1	+64 20	8.0	8.1	A3	3	..	37909i
49	6093	53.7	-4 50	10.05	10.55	F8	3	..	24592b	99	2801	54.1	+59 29	10.2	10.0	B	1	..	16266m
50	6295	53.7	-9 23	8.7	9.2	F8	3	..	14377b	100	3064	54.1	+55 24	8.41	8.41	A	2	..	38872i

THE HENRY DRAPER CATALOGUE.

224600

23^h 54^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	4595	54.1 ^{m.} + 43 18	8.2	8.7	F8	3	..		38896i	51	6222	54.5 ^o - 8 22	8.1	8.7	Go	5	..	14377b	
2	5200	54.1 + 40 39	7.87	8.43	Go	6	2,3 R		38842i	52	14095	54.5 - 50 24	9.5	9.6	Go	3	..	39675b	
3	5155	54.1 + 8 49	8.6	9.1	F8	3	..		17058b	53	12236	54.5 - 52 11	9.1	9.6	A5	1	..	14881b	
4	4810	54.1 + 1 35	10.0	11.0	Ko	1	..		24592b	54	2336	54.5 - 72 54	10.2	11.2	Ko	3	..	38385b	
5	5999	54.1 - 3 47	10.1	10.6	F8	2	..		24592b	55	2803	54.6 + 59 45	8.6	9.7	K2	2	2,2	38872i	
6	6123	54.1 - 7 27	9.1	10.1	Ko	2	..		40911b	56	5141	54.6 + 37 14	7.80	7.78	B9	6	..	37382i	
7	16861	54.1 - 26 37	8.8	9.4	K2	3	..		39506b	57	5412	54.6 + 20 44	7.55	7.83	Fo	5	..	38102i	
8	15301	54.1 - 40 3	10.5	10.5	Go	2	..		14371b	58	5252	54.6 + 18 28	8.8	9.8	Ko	2	..	38102i	
9	3818	54.1 - 66 5	8.7	9.7	Ko	3	..		38229b	59	5016	54.6 + 10 48	8.8	9.8	Ko	2	..	38107i	
10	1068	54.2 + 74 15	7.92	8.00	A3	5	..		38133i	60	5244	54.6 + 6 7	9.3	10.5	K5	3	..	17058b	
11	3575	54.2 + 53 1	7.00	7.06	A2	6	0,5		37241i	61	6335	54.6 - 6 27	6.77	7.55	G5	6	5,8	10110b	
12	4297	54.2 + 49 58	7.37	8.15	G5	3	..		37937i	62	16732	54.6 - 25 12	7.83	8.7	Ko	3	..	23746b	
13	5202	54.2 + 40 35	8.6	9.7	K2	2	..		37382i	63	17763	54.6 - 32 46	8.3	8.9	G5	5	..	41067b	
14	5204	54.2 + 39 38	9.4	9.5	A3	2	..		37382i	64	16020	54.6 - 35 35	8.7	10.7	G5	3	..	41067b	
15	4721	54.2 + 26 43	8.3	9.4	K2	3	..		35104i	65	14660	54.6 - 47 52	9.9	11.1	Go	3	..	39670b	
16	4834	54.2 + 24 11	8.9	9.7	G5	1	..		38880i	66	13735	54.6 - 51 34	7.6	7.6	Ko	8	0,3	14881b	
17	5227	54.2 + 6 19	4.03	4.45	F5	..	R		1415c	67	2793	54.6 - 72 4	9.7	10.3	Go	4	..	38385b	
18	6856	54.2 - 17 30	8.5	9.3	G5	4	..		14623b	68	944	54.7 + 76 44	9.2	9.2	Ao	1	..	38903i	
19	6684	54.2 - 20 35	7.45	8.2	Ko	6	..		10109b	69	2343	54.7 + 62 26	8.2	9.3	K2	1	..	38937i	
20	6511	54.2 - 21 30	9.4	10.5	G5	3	..		24596b	70	3088	54.7 + 54 43	9.2	9.2	Ao	2	..	37241i	
21	16122	54.2 - 36 36	10.3	10.7	G	2	E		41067b	71	5413	54.7 + 20 36	8.8	9.1	Fo	2	..	35104i	
22	16546	54.2 - 42 37	8.9	8.5	B9	6	..		14371b	72	5080	54.7 + 15 13	10.7	10.7	A	1	..	38131i	
23	4186	54.2 - 65 29	9.9	10.9	K	1	..		38229b	73	5018	54.7 + 11 8	7.26	8.33	K2	5	3,4	17058b	
24	3127	54.3 + 57 7	7.28	7.28	Ao	5	2,4		37241i	74	5017	54.7 + 10 43	6.65	6.71	A2	7	0,6	38107i	
25	4298	54.3 + 49 57	8.16	9.23	K2	4	..		35763i	75	5111	54.7 + 7 42	9.3	10.3	Ko	2	5,1	17058b	
26	5180	54.3 + 19 53	7.75	7.89	A5	5	..		38102i	76	4813	54.7 + 1 18	9.09	9.59	F8	5	..	24592b	
27	5228	54.3 + 7 14	9.0	10.0	Ko	2	..		17058b	77	4514	54.7 - 0 51	7.02	8.37	Ma	5	0,5	14661b	
28	6592	54.3 - 13 52	9.1	9.4	Fo	3	..		14157b	78	6073	54.7 - 1 45	9.1	9.7	Go	2	..	14156b	
29	16863	54.3 - 25 54	9.6	11.2	Ko	2	..		39506b	79	6072	54.7 - 2 40	8.2	9.0	G5	4	..	14156b	
30	19765	54.3 - 30 3	5.70	7.4	K5	..	0,6		28,217	80	6553	54.7 - 19 4	8.7	9.3	Ko	5	..	14623b	
31	3994	54.3 - 67 33	9.6	10.0	F5	3	..		38229b	81	6552	54.7 - 19 18	9.7	9.9	F5	3	..	24596b	
32	3033	54.3 - 70 37	9.1	10.2	K2	3	..		38385b	82	18912	54.7 - 29 4	9.8	9.8	F5	1	..	44361b	
33	2126	54.3 - 74 32	9.2	10.3	K2	3	..		38135b	83	16022	54.7 - 35 38	9.0	11.3	G5	1	..	41067b	
34	3084	54.4 + 54 34	8.9	8.9	B9	3	3,2		37241i	84	14768	54.7 - 47 36	9.9	11.5	G5	2	..	39670b	
35		54.4 + 33 11	6.58	7.08	F8	6	0,8 R		37352i	85	4188	54.7 - 64 56	9.27	9.8	Go	4	..	38229b	
36	4747	54.4 + 33 11	6.58	7.08	F8	6	0,8 R		37352i	86	3819	54.7 - 66 8	4.71	4.69	B9	..	R	28,217	
37	5229	54.4 + 6 20	10.0	11.0	Ko	1	..		17058b	87	409	54.8 + 86 9	6.71	6.71	Ao	3	..	37281i	
38	6071	54.4 - 2 24	7.50	7.78	Fo	7	..		14156b	88	4873	54.8 + 24 41	9.4	9.9	F8	2	..	38880i	
39	5741	54.4 - 3 24	7.23	7.51	Fo	7	..		14156b	89	5245	54.8 + 5 24	7.66	8.66	Ko	7	..	17058b	
40	6685	54.4 - 20 5	9.1	9.9	F8	3	..		24596b	90	6688	54.8 - 20 3	9.1	10.5	Ko	2	..	14623b	
41	16506	54.4 - 27 6	8.2	7.0	Fo	4	..		8586b	91	6687	54.8 - 20 35	9.4	10.5	G5	3	..	24596b	
42	17761	54.4 - 32 15	7.34	7.9	F2	7	2,4		41067b	92	6512	54.8 - 21 34	9.9	10.2	A3	3	..	24596b	
43	15303	54.4 - 40 37	9.9	9.8	F8	2	..		14371b	93	19008	54.8 - 23 0	8.1	8.6	Go	8	..	24596b	
44	16548	54.4 - 42 51	8.1	9.3	Ko	4	..		14371b	94	18429	54.8 - 28 16	8.6	10.5	Ko	1	..	44361b	
45	10564	54.4 - 53 24	8.1	8.1	Fo	6	0,3		14881b	95	19769	54.8 - 29 53	9.2	9.2	F8	1	..	44361b	
46		54.5 + 54 8	8.0	8.4	F5	5	R		37241i	96	8122	54.8 - 58 36	10.0	10.0	Ao	3	..	14382b	
47	3267	54.5 + 54 8	8.0	8.4	A3	5	R		37241i	97	62	54.8 - 88 53	9.4	9.5	A2	5	..	22980b	
48	4208	54.5 + 50 17	7.17	7.15	B9	7	..		37937i	98	1244	54.9 + 72 4	8.0	9.0	Ko	3	..	38133i	
49	4683	54.5 + 28 30	9.0	10.1	K2	1	..		38847i	99	5108	54.9 + 38 18	6.61	6.59	B9	8	..	38842i	
50	4811	54.5 + 1 40	10.7	11.2	F8	1	..		24592b	100	5077	54.9 + 0 32	9.3	9.7	F5	7	0,3	24592b	

ANNALS OF HARVARD COLLEGE OBSERVATORY.

224700

23^h 54^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	6337	54.9	- 6 3	8.7	9.5	G5	3	..	40911b	51	14311	55.2	-49 40	9.5	10.2	Ko	3	..	39675b
2	6225	54.9	- 8 22	9.9	10.0	A3	2	..	40911b	52	1245	55.2	-79 37	8.9	9.5	Go	5	5,2	38135b
3	6409	54.9	-18 34	8.6	9.7	K2	4	..	14623b	53	1586	55.3	+67 18	7.9	8.0	A3	3	..	37909i
4	6513	54.9	-21 28	9.4	10.5	Go	3	..	24596b	54	2806	55.3	+59 48	9.2	10.6	Mb	2	..	16266m
5	15372	54.9	-41 9	9.0	9.5	G5	3	..	14371b	55	3129	55.3	+56 18	8.4	8.5	A2	2	..	38872i
6	14826	54.9	-46 20	9.3	10.6	Ko	3	..	39670b	56	3756	55.3	+51 23	8.8	8.8	B8	3	..	35763i
7	12237	54.9	-52 27	8.1	7.9	Fo	5	0,3	14881b	57	4916	55.3	+41 36	7.8	7.8	Ao	4	0,3	37382i
8	5149	55.0	+36 1	8.8	9.6	G5	2	..	37385i	58	4727	55.3	+26 22	6.38	6.58	F8	4	..	37352i
9	5054	55.0	+25 21	var.	var.	Md	..	R	M	59	5085	55.3	+11 43	7.6	8.6	Ko	3	..	38069i
10	5184	55.0	+19 41	9.5	10.9	Ma	..	..	M	60	4814	55.3	+ 2 6	8.2	9.3	K2	3	..	12386b
11	5078	55.0	+ 0 46	9.5	10.5	Ko	3	..	24592b	61	4601	55.3	- 0 21	9.5	10.0	F8	6	0,2	24592b
12	..	55.0	+ 0 44	..	..	F8	2	..	24592b	62	6301	55.3	- 9 39	9.66	10.44	G5	2	..	40911b
13	6689	55.0	-19 58	8.7	9.9	K2	3	..	14623b	63	6860	55.3	-17 15	7.46	7.88	F5	6	..	10109b
14	16864	55.0	-26 45	9.2	9.6	F8	4	..	39506b	64	14771	55.3	-47 44	10.1	10.9	F8	2	..	39670b
15	16128	55.0	-36 31	8.3	10.2	K5	2	..	41067b	65	10413	55.3	-54 38	10.5	11.1	Go	1	..	14382b
16	14663	55.0	-48 19	9.9	11.1	Ko	2	..	39670b	66	2794	55.3	-72 46	10.0	10.6	Go	4	..	38385b
17	13738	55.0	-51 26	8.7	9.3	F5	4	0,2	14881b	67	1594	55.3	-77 35	8.8	8.9	A3	4	..	14357b
18	1046	55.0	-81 14	9.7	10.7	Ko	4	..	38135b	68	3270	55.4	+53 44	8.9	8.9	Ao	3	..	37241i
19	3091	55.1	+55 9	9.51	10.86	Ma	..	..	M	69	5071	55.4	+30 41	8.31	9.31	Ko	2	..	38847i
20	4231	55.1	+46 23	7.25	7.31	A2	2	..	37007i	70	4661	55.4	+28 7	9.3	10.3	Ko	2	..	38847i
21	4912	55.1	+37 45	6.58	7.36	G5	7	..	37382i	71	5055	55.4	+25 17	8.11	8.45	F2	4	..	38880i
22	5143	55.1	+36 18	8.9	9.2	Fo	2	..	37382i	72	5115	55.4	+ 7 55	8.7	9.0	F2	2	..	38069i
23	4939	55.1	+22 58	8.2	8.8	Go	3	..	38880i	73	5246	55.4	+ 5 23	9.56	10.34	G5	2	..	17058b
24	5113	55.1	+ 7 27	7.84	8.91	K2	3	..	38069i	74	5080	55.4	+ 0 30	9.0	10.0	Ko	5	2,1	24592b
25	5079	55.1	+ 1 13	9.5	10.1	Go	4	..	24592b	75	5744	55.4	- 2 57	9.7	10.3	Go	3	..	24592b
26	4515	55.1	- 0 55	7.30	8.30	Ko	5	0,4	14661b	76	6003	55.4	- 3 52	8.5	9.6	K2	5	..	14156b
27	5742	55.1	- 3 30	10.1	10.7	Go	3	..	24592b	77	16743	55.4	-25 16	10.5	10.5	G5	2	..	24596b
28	19012	55.1	-23 9	9.3	9.6	Ko	5	..	24596b	78	16868	55.4	-26 11	8.3	9.4	G5	2	..	23746b
29	16740	55.1	-25 30	9.8	10.5	Ko	2	..	24596b	79	16026	55.4	-35 17	9.7	11.0	Go	2	..	41067b
30	16510	55.1	-27 26	9.3	9.6	F2	3	..	39506b	80	15378	55.4	-41 15	7.44	8.3	Ko	5	..	14371b
31	16129	55.1	-36 33	8.7	10.4	K5	3	..	41067b	81	10566	55.4	-53 12	8.8	9.9	G5	2	..	14382b
32	15306	55.1	-40 45	8.4	8.5	F5	6	..	14371b	82	10565	55.4	-53 40	6.52	7.1	Go	..	2,4	28,217
33	16553	55.1	-42 29	9.7	10.4	F5	2	..	14371b	83	3997	55.4	-67 15	7.4	7.8	F5	5	3,8	12082b
34	15419	55.1	-44 10	9.5	10.6	G5	2	..	14371b	84	2685	55.5	+59 1	6.37	7.37	Ko	6	0,4	37241i
35	14096	55.1	-49 55	8.85	9.6	Ko	4	..	39675b	85	4603	55.5	- 0 19	8.1	9.1	Ko	2	..	14156b
36	8123	55.1	-58 39	9.6	10.2	Go	2	..	14382b	86	6126	55.5	- 7 21	9.9	10.4	F8	1	..	40911b
37	1245	55.2	+71 51	8.9	9.0	A2	1	E	38003i	87	16802	55.5	-33 8	9.9	10.4	Go	2	..	41067b
38	1979	55.2	+65 23	8.40	8.68	F	2	R	38037i	88	4190	55.5	-65 2	8.4	8.8	F5	7	..	38229b
39	2841	55.2	+57 19	8.6	8.6	Ao	2	0,1	37241i	89	3034	55.5	-70 14	8.6	9.4	G5	4	..	12082b
40	3092	55.2	+54 53	8.9	8.9	Ao	2	..	37241i	90	2339	55.5	-72 53	8.8	9.1	F2	7	3,4	38385b
41	5042	55.2	+34 21	8.8	9.1	Fo	2	..	37382i	91	2338	55.5	-73 2	10.4	11.4	Ko	2	..	38385b
42	5056	55.2	+12 46	7.47	7.81	F2	5	0,4	38107i	92	2580	55.6	+61 37	7.05	7.61	Go	4	5,4	38872i
43	6175	55.2	-11 1	7.9	8.2	F2	5	2,4	14157b	93	4211	55.6	+48 58	8.9	9.3	Ma	..	..	M
44	6597	55.2	-13 57	8.8	9.2	F5	2	..	14157b	94	4817	55.6	+ 1 49	9.7	10.1	F5	3	..	24592b
45	6528	55.2	-15 3	8.7	9.5	G5	2	..	14623b	95	4816	55.6	+ 1 28	10.7	11.2	F8	1	..	24592b
46	17941	55.2	-24 0	9.3	9.9	F8	7	..	24596b	96	6227	55.6	- 8 3	9.4	9.5	A5	2	..	40911b
47	16130	55.2	-36 29	9.9	10.7	G5	2	..	41067b	97	19013	55.6	-23 14	8.4	9.1	G5	7	..	24596b
48	15375	55.2	-41 51	9.0	10.1	Go	2	..	14371b	98	18431	55.6	-28 29	8.0	9.3	Ko	5	..	44361b
49	15421	55.2	-43 55	8.3	9.4	F5	4	..	14371b	99	16027	55.6	-35 18	9.3	11.0	F8	2	..	41067b
50	15420	55.2	-44 51	6.23	7.5	Ko	..	..	56,150	100	14833	55.6	-46 0	8.2	9.4	G5	4	..	14371b

THE HENRY DRAPER CATALOGUE.

224800

23^h 55^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	4538	55.7	+44 42	6.25	6.25	Aop	8	1,9 R	3791oi	51	10570	56.1	-53 22	9.1	10.2	F5	3	..	39675b
2	4916	55.7	+37 58	9.5	9.8	Fo	2	R	37382i	52	6789	56.1	-61 11	9.2	10.2	F	2	E	14382b
3	5153	55.7	+36 13	8.2	9.0	G5	3	..	37382i	53	3344	56.1	-68 56	8.3	8.8	F8	7	0,3	38229b
4	5042	55.7	+29 51	8.7	8.7	Ao	2	..	37352i	54	1341	56.2	+70 22	7.69	7.97	Fo	5	..	38068i
5	4839	55.7	+24 2	9.0	9.5	F8	2	..	35104i	55	2810	56.2	+59 48	7.65	..	Na	..	R	M
6	4940	55.7	+22 58	8.0	8.4	F5	4	0,4	38131i	56	4919	56.2	+37 20	9.3	10.1	G5	2	..	37382i
7	5254	55.7	+19 2	9.1	9.5	F5	2	..	38102i	57	4752	56.2	+32 35	8.7	9.7	Ko	1	..	38847i
8	5027	55.7	+16 27	8.6	9.6	Ko	2	..	38131i	58	5233	56.2	+7 9	8.8	9.3	F8	4	..	17058b
9	6211	55.7	-10 5	9.4	10.4	Ko	1	..	40911b	59	6078	56.2	-2 11	10.1	10.9	G5	1	..	24592b
10	6504	55.7	-13 23	8.9	9.5	Go	2	..	14157b	60	5748	56.2	-3 7	10.6	11.6	Ko	1	..	24592b
11	16804	55.7	-33 17	9.0	9.8	Ko	2	..	41067b	61	6304	56.2	-9 29	9.1	9.7	Go	1	..	40911b
12	3821	55.7	-66 12	9.6	10.6	Ko	2	..	38229b	62	18925	56.2	-29 17	7.28	8.0	Ko	4	..	8586b
13	1246	55.7	-79 8	10.8	11.3	F8	2	..	38135b	63	17778	56.2	-32 28	9.0	9.2	Go	3	..	41067b
14	3580	55.8	+52 43	9.2	9.2	A	1	..	37241i	64	14666	56.2	-48 21	9.9	10.3	F5	4	..	39670b
15	4216	55.8	+51 7	8.59	9.66	K2	3	..	35763i	65	13743	56.2	-50 54	5.38	7.5	Ma	..	5,7-	56,150
16	5023	55.8	+17 19	8.2	9.2	Ko	2	..	38102i	66	3036	56.2	-70 41	8.6	9.7	K2	5	..	38385b
17	6598	55.8	-12 23	8.3	8.9	Go	5	..	14157b	67	661	56.2	-84 5	9.2	9.7	F8	2	..	15165b
18	6515	55.8	-20 59	9.1	9.9	Ao	4	..	24596b	68	2656	56.3	+60 17	7.36	7.24	B5	5	3,4	38872i
19	6245	55.8	-22 13	9.9	11.4	G5	2	..	24596b	69	2812	56.3	+59 47	8.7	8.7	A	3	E	3806oi
20	19776	55.8	-30 38	8.6	8.0	Ao	5	..	44361b	70	4309	56.3	+49 25	6.36	7.36	Ko	8	5,2	38896i
21	13741	55.8	-51 0	7.6	8.5	K2	4	0,3	14881b	71	4361	56.3	+47 23	8.6	9.4	G5	2	..	38896i
22	10136	55.8	-55 19	10.3	10.8	F8	1	..	39675b	72	4393	56.3	+46 10	8.2	8.3	A2	1	..	37007i
23	10137	55.8	-55 51	10.5	11.1	Go	1	..	39675b	73	5112	56.3	+39 4	8.6	9.4	G5	2	R	37382i
24	1595	55.8	-77 11	10.4	11.2	G5	1	..	38135b	74	4819	56.3	+33 29	8.8	8.8	Ao	2	..	38847i
25	1588	55.9	+67 54	7.9	7.9	Ao	3	..	37909i	75	5247	56.3	+6 13	8.0	8.3	Fo	9	..	17058b
26	1670	55.9	+66 17	7.21	8.28	K2	4	..	37909i	76	4606	56.3	-0 15	9.0	10.0	Ko	4	..	24592b
27	5009	55.9	+22 9	8.6	9.1	F8	3	..	38102i	77	..	56.3	-0 18	..	..	Go	1	..	24592b
28	6097	55.9	-5 29	8.7	9.5	G5	5	..	40911b	78	4944	56.3	-63 29	7.5	7.6	A2	8	..	22068b
29	6341	55.9	-6 23	8.1	8.5	F5	6	0,4-	10412b	79	2341	56.3	-73 10	9.0	9.8	G5	5	..	38385b
30	19014	55.9	-23 21	8.4	9.3	G5	7	..	24596b	80	1134	56.4	+72 44	8.9	9.3	F5	2	..	38903i
31	17944	55.9	-24 0	10.0	10.5	Go	4	..	24596b	81	4218	56.4	+48 27	8.6	8.6	Ao	3	..	38896i
32	17946	55.9	-24 0	9.8	10.8	Ko	3	..	24596b	82	5046	56.4	+30 11	8.01	8.57	Go	2	..	38847i
33	15563	55.9	-43 8	9.5	9.8	A5	3	..	14371b	83	6212	56.4	-9 59	8.7	9.3	Go	3	..	14377b
34	14316	55.9	-49 22	5.66	7.1	Ko	..	0,8R	56,150	84	6560	56.4	-19 42	9.9	11.7	Ko	2	..	24596b
35	14100	55.9	-49 53	10.3	11.4	Ko	1	..	39675b	85	6247	56.4	-22 42	9.7	11.3	Ko	2	..	24596b
36	1418	56.0	+69 1	7.81	7.79	B9	4	E	37909i	86	16269	56.4	-34 21	8.7	9.2	F5	5	..	41067b
37	2581	56.0	+52 36	8.2	9.3	K2	1	..	37241i	87	14317	56.4	-49 32	10.3	11.4	Ko	2	..	39670b
38	4818	56.0	+1 51	10.7	11.7	Ko	1	..	24592b	88	14104	56.4	-50 13	10.8	11.1	Ko	2	..	39670b
39	4605	56.0	-0 37	8.0	8.6	Go	4	..	14661b	89	1596	56.4	-77 37	4.73	6.3	Ko	..	R	28,217
40	6342	56.3	-6 26	8.1	9.1	Ko	4	0,4	40911b	90	1135	56.5	+73 3	6.52	6.52	Ao	7	0,8R	38139i
41	6516	56.0	-21 15	8.5	9.3	G5	7	..	24596b	91	1246	56.5	+71 41	7.51	8.51	Ko	4	2,4	38068i
42	16560	56.0	-42 27	7.9	8.3	F5	7	0,3	14371b	92	2582	56.5	+61 27	8.0	8.1	A2	2	..	37909i
43	10569	56.0	-53 3	8.9	10.8	Ko	3	..	39675b	93	2657	56.5	+60 40	5.70	5.84	A5	9	5,6-	37241i
44	5256	56.1	+19 11	8.2	8.8	Go	2	..	38102i	94	4605	56.5	+44 7	6.96	7.96	Ko	5	0,2	38896i
45	4819	56.1	+1 57	10.7	11.2	F8	2	..	24592b	95	4664	56.5	+27 53	7.02	8.02	Ko	3	..	37352i
46	5746	56.1	-2 54	9.1	9.9	G5	3	..	24592b	96	5196	56.5	+14 6	7.9	8.7	G5	2	..	38107i
47	6599	56.1	-12 31	8.9	9.4	F8	4	..	14157b	97	5081	56.5	+4 49	9.3	9.8	F8	1	..	12386b
48	6558	56.1	-19 34	9.4	11.3	Ko	3	..	24596b	98	4607	56.5	-0 41	10.7	11.8	K2	1	..	24592b
49	6246	56.1	-21 58	8.8	9.6	F5	6	..	24596b	99	16517	56.5	-27 2	9.5	10.8	Ko	2	..	39506b
50	16563	56.1	-42 3	7.5	8.6	K5	6	0,3	14371b	100	15310	56.5	-39 54	8.74	9.2	Fo	5	..	14371b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

224900

23^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	15380	56.5	-41 46	9.7	11.3	F8	1	..	45096b	51	10574	56.9	-53 26	10.4	10.8	F5	2	..	39675b
2	14836	56.5	-45 54	8.7	9.7	Ko	3	..	14371b	52	4193	56.9	-65 24	9.0	10.0	Ko	3	..	38229b
3	4192	56.5	-65 19	8.4	9.8	Ma	4	..	38229b	53	3594	56.9	-68 50	9.2	10.3	K2	2	..	38229b
4	2784	56.5	-70 53	9.7	10.3	Go	3	..	38385b	54	3345	56.9	-69 50	8.68	8.6	B9	6	..	12082b
5	2813	56.6	+59 54	9.2	9.0	B	2	..	38937i	55	4607	57.0	+43 58	7.8	8.9	K2	2	..	37910i
6	4920	56.6	+41 49	6.13	6.11	B9	8	1,8-	38842i	56	4923	57.0	+41 34	9.0	9.0	Ao	2	..	38896i
7	4844	56.6	+23 42	6.81	7.81	Ko	7	0,5	38880i	57	5113	57.0	+38 38	8.4	8.4	B9	4	..	37382i
8	4517	56.6	-0 45	8.8	9.6	G5	4	..	14156b	58	4609	57.0	-0 9	9.1	9.4	F2	3	..	14156b
9	4516	56.6	-1 42	9.57	9.57	Ao	3	..	24592b	59	5751	57.0	-3 23	9.9	..	Ro	3	..	24592b
10	6864	56.6	-17 5	7.96	9.03	K2	3	..	14623b	60	6531	57.0	-15 14	var.	var.	Md	..	R	M
11	6695	56.6	-19 45	10.6	11.6	Ko	1	..	24596b	61	6517	57.0	-21 25	9.1	9.9	F5	5	..	24596b
12	18442	56.6	-28 47	9.5	10.8	Ko	1	..	44361b	62	19020	57.0	-22 53	10.0	10.5	F2	4	..	24596b
13	19557	56.6	-31 15	9.0	10.1	Ko	2	..	41067b	63	19021	57.0	-23 14	10.5	11.3	K5	2	..	24596b
14	15311	56.6	-40 43	6.82	7.4	F5	8	..	14371b	64	19562	57.0	-31 14	9.0	8.6	Ao	5	..	41067b
15	3591	56.6	-68 40	8.8	9.4	Go	4	..	38229b	65	10405	57.0	-57 5	9.1	9.3	G5	5	0,3	14382b
16	1082	56.6	-80 24	10.8	11.8	Ko	3	..	38135b	66	1247	57.0	-79 51	9.8	10.4	Go	2	..	38135b
17	904	56.7	+75 37	9.02	10.20	K5	1	..	36282i	67	1047	57.0	-81 51	10.7	10.7	A	4	..	38135b
18	1984	56.7	+65 45	7.45	8.45	Ko	5	..	38937i	68	4225	57.1	+49 13	7.94	8.72	G5	2	0,2	37937i
19	1887	56.7	+64 54	7.85	8.27	F5	5	..	37909i	69	4239	57.1	+47 2	7.8	7.9	A2	3	..	37910i
20	3762	56.7	+52 13	9.2	9.2	A	1	..	37241i	70	4608	57.1	+43 52	8.7	9.7	Ko	1	..	38896i
21	5156	56.7	+35 47	8.8	10.0	K5	2	..	31187i	71	4610	57.1	-0 5	10.0	10.4	F5	2	..	24592b
22	5058	56.7	+25 34	8.8	9.8	Ko	2	..	35104i	72	4518	57.1	-1 3	9.3	9.8	F8	2	..	14156b
23	5419	56.7	+20 29	9.0	10.2	K5	2	..	35104i	73	6600	57.1	-12 31	8.9	8.9	Ao	3	..	10110b
24	5024	56.7	+18 11	8.5	9.5	Ko	1	..	38102i	74	6603	57.1	-13 58	7.03	7.53	F8	10	..	14157b
25	5235	56.7	+6 47	10.0	10.8	G5	3	..	17058b	75	16520	57.1	-27 14	9.8	9.9	Go	3	..	39506b
26	5749	56.7	-3 35	5.15	5.10	B8	..	..	56,103	76	19786	57.1	-30 49	9.8	10.4	F5	1	..	41067b
27	16876	56.7	-26 21	9.2	9.3	A2	2	..	23746b	77	16272	57.1	-34 18	10.3	11.0	F8	1	..	41067b
28	14319	56.7	-49 8	9.4	9.4	Fo	6	..	39670b	78	..	57.1	-68 5	..	..	G5	2	..	38229b
29	3592	56.7	-67 56	9.7	10.3	G	2	..	38229b	79	2342	57.1	-73 11	9.7	10.0	Fo	3	..	38385b
30	4734	56.8	+26 34	5.85	6.41	Go	5	..	37352i	80	2816	57.2	+60 9	7.04	8.39	Ma	3	0,2-	38060i
31	5084	56.8	+14 59	8.2	8.7	F8	3	..	38131i	81	3071	57.2	+56 12	8.2	9.2	Ko	1	..	38872i
32	5087	56.8	+12 6	8.7	9.2	F8	3	..	38107i	82	5052	57.2	+34 17	8.1	9.1	Ko	2	..	31187i
33	5236	56.8	+6 53	10.3	10.8	F8	2	..	17058b	83	5022	57.2	+10 27	8.52	9.52	Ko	2	..	38069i
34	4608	56.8	-0 25	9.3	10.1	G5	2	..	14156b	84	5313	57.2	+10 14	8.32	8.82	F8	2	..	38069i
35	6345	56.8	-6 35	4.66	6.01	Mb	..	0,10-	56,103	85	4519	57.2	-0 55	10.7	11.5	G5	1	..	24592b
36	15469	56.8	-37 47	7.03	7.3	Ko	8	..	14371b	86	6080	57.2	-2 42	9.7	10.2	F8	3	..	24592b
37	16567	56.8	-42 10	7.9	8.1	F2	7	3,3	14371b	87	6135	57.2	-7 32	9.4	10.4	Ko	1	..	40911b
38	1985	56.9	+65 53	7.30	7.28	B9	8	..	38937i	88	6309	57.2	-9 44	8.71	9.71	Ko	4	..	14377b
39	2351	56.9	+62 47	8.6	8.6	Ao	2	..	38937i	89	16522	57.2	-27 42	8.0	8.4	F8	5	6,4	44361b
40	2814	56.9	+59 23	8.8	9.6	G5	2	..	38872i	90	19790	57.2	-30 16	4.99	4.87	B5	..	R	28,217
41	4606	56.9	+43 31	9.2	9.2	A	1	..	38896i	91	347	57.3	+86 29	8.7	9.0	Fo	4	..	37281i
42	5209	56.9	+39 33	8.8	9.1	F2	2	..	37382i	92	1676	57.3	+66 36	7.8	8.4	Go	3	..	37909i
43	5144	56.9	+36 34	8.7	9.5	G5	2	..	38842i	93	4314	57.3	+49 56	7.37	7.37	Ao	4	..	37937i
44	6079	56.9	-2 7	10.6	11.4	G5	1	..	24592b	94	5314	57.3	+10 13	8.67	9.23	Go	2	..	38107i
45	5750	56.9	-3 20	6.85	6.93	A3	9	..	14156b	95	5164	57.3	+8 24	6.34	6.48	A5	3	2,5	9704b
46	6006	56.9	-3 50	9.9	10.7	G5	3	..	24592b	96	5252	57.3	+5 47	8.6	9.0	F5	6	..	17058b
47	6340	56.9	-5 46	8.5	9.3	G5	4	..	40911b	97	6348	57.3	-6 37	8.9	9.5	Go	3	..	40911b
48	19785	56.9	-30 43	9.8	10.4	Fo	2	..	41067b	98	18934	57.3	-29 8	9.6	10.1	Ko	2	..	41067b
49	15713	56.9	-38 28	7.04	8.2	Ko	8	5,3	14371b	99	4241	57.4	+46 51	7.58	8.08	F8	5	3,2	38896i
50	14669	56.9	-48 30	10.3	11.4	F5	2	..	39670b	100	5027	57.4	+18 8	8.5	8.9	F5	3	..	38102i

THE HENRY DRAPER CATALOGUE.

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23^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	4925	57.4	+15 43	7.19	7.19	Ao	7	..	38102i	51	7954	57.8	-59 21	9.0	9.6	F8	3	..	14382b
2	5088	57.4	+14 48	8.7	8.7	Ao	2	..	38131i	52	4194	57.8	-64 59	9.6	10.6	Ko	2	..	38229b
3	5121	57.4	+7 56	5.78	6.06	Fo	7	0,4 R	37378i	53	5211	57.9	+39 54	8.6	8.6	Ao	4	0,2	37382i
4	5120	57.4	+7 50	8.00	8.78	G5	5	..	17958b	54	5213	57.9	+39 27	8.2	8.7	F8	3	..	37382i
5	6407	57.4	-16 24	9.1	9.7	Go	1	..	14623b	55	5212	57.9	+39 24	9.0	9.0	A	3	..	37382i
6	15238	57.4	-39 46	9.38	10.7	G5	1	..	14371b	56	5166	57.9	+8 35	8.8	9.8	Ko	1	..	38069i
7	14781	57.4	-46 59	9.4	11.5	Ko	2	..	39670b	57	5123	57.9	+7 43	8.6	8.9	Fo	4	5,7	38069i
8	10407	57.4	-57 28	9.6	10.2	Go	2	..	14382b	58	4748	57.9	+2 49	8.6	9.0	F5	4	3,6	12386b
9	1987	57.5	+65 33	6.02	6.58	Go	5	R	38937i	59	4520	57.9	-1 29	8.0	9.0	Ko	3	..	14156b
10	1988	57.5	+65 33	7.47	7.53	A2	4	..	38937i	60	6231	57.9	-8 23	8.2	9.0	G5	2	..	14157b
11	3101	57.5	+55 2	8.4	9.4	Ko	2	0,1	37241i	61	16047	57.9	-35 18	7.71	8.2	G5	2	0,3	41879b
12	3276	57.5	+54 0	8.8	9.1	Fo	3	0,4-	37241i	62	6792	57.9	-61 15	7.9	8.4	Ko	5	..	42095b
13	5259	57.5	+18 18	8.7	9.3	Go	3	..	38102i	63	906	58.0	+75 45	8.52	8.58	A2	4	..	38133i
14	6100	57.5	-5 45	8.7	9.0	F2	6	..	10412b	64	3769	58.0	+51 55	8.2	9.2	Ko	4	..	37242i
15	6310	57.5	-9 3	8.7	9.3	Go	2	..	40911b	65	4401	58.0	+45 21	8.92	9.06	A5	2	..	23971i
16	6700	57.5	-20 0	9.9	11.3	Mb	..	..	M	66	..	58.0	+44 34	..	..	..	..	..	..
17	15432	57.5	-44 31	8.5	9.7	Ko	3	..	14371b	67	4543	58.0	+44 34	8.5	9.0	F	3	R	38896i
18	3595	57.5	-68 12	9.5	10.3	G5	3	..	38229b	68	4925	58.0	+42 11	6.72	6.78	A2	3	..	37007i
19	748	57.6	+82 25	7.20	7.20	Ao	7	..	37281i	69	17960	58.0	-24 42	6.54	7.0	G5	5	5,4	23746b
20	799	57.6	+79 45	7.69	8.03	F2	3	..	37227i	70	16764	58.0	-25 49	8.8	10.2	K2	2	..	39806b
21	4226	57.6	+50 55	8.00	8.78	G5	2	..	37937i	71	16280	58.0	-33 56	9.0	10.7	Ko	3	..	41067b
22	4817	57.6	+42 22	7.72	7.72	Ao	7	2,4	38896i	72	4819	58.1	+43 5	8.03	9.03	Ko	2	..	37910i
23	5159	57.6	+35 16	7.32	7.32	Ao	5	..	38842i	73	5034	58.1	+16 59	6.66	7.66	Ko	5	..	38102i
24	4667	57.6	+27 59	8.2	8.3	A3	2	..	37352i	74	6233	58.1	-8 16	9.1	9.9	G5	2	..	14377b
25	5200	57.6	+13 22	8.6	9.7	K2	2	..	38107i	75	17961	58.1	-24 26	10.3	11.1	Ko	2	..	24596b
26	5023	57.6	+10 21	9.07	10.14	K2	1	..	38107i	76	16766	58.1	-25 9	8.05	8.5	Fo	4	..	23746b
27	5253	57.6	+5 29	9.3	9.8	F8	7	..	17058b	77	19571	58.1	-31 47	8.0	8.6	Ao	5	..	41067b
28	4820	57.6	+1 34	7.7	8.3	Go	4	..	37378i	78	14326	58.1	-49 44	10.5	11.1	G5	2	..	39670b
29	6007	57.6	-3 57	9.9	10.9	Ko	2	..	24592b	79	10422	58.1	-54 30	8.9	10.2	Go	2	..	14382b
30	6252	57.6	-21 48	9.9	11.1	Go	2	..	24596b	80	2848	58.2	+58 14	8.2	8.2	Ao	2	1,2	38872i
31	6251	57.6	-22 27	8.5	9.6	G5	6	..	24596b	81	2849	58.2	+57 55	8.2	8.2	Ao	2	..	38872i
32	10411	57.6	-57 21	9.6	9.6	A	2	..	42095b	82	..	58.2	+55 7	var.	var.	Md	..	R	M
33	8126	57.6	-58 12	8.3	9.1	Ko	3	..	42095b	83	4927	58.2	+37 40	9.2	10.2	Ko	1	..	38842i
34	4244	57.7	+46 42	8.0	8.0	Ao	4	2,1	38896i	84	4945	58.2	+22 58	9.2	9.2	A	3	..	35104i
35	4818	57.7	+42 58	8.4	9.2	G5	2	..	37910i	85	4612	58.2	-0 43	9.3	9.8	F8	3	..	24592b
36	4669	57.7	+27 41	8.3	8.8	F8	2	..	37352i	86	6013	58.2	-4 42	7.97	8.31	F2	6	0,6-	14156b
37	5752	57.7	-3 28	8.9	9.0	A5	5	..	14156b	87	6351	58.2	-6 1	9.4	9.9	F8	3	..	14377b
38	6137	57.7	-6 49	9.9	10.7	G5	1	..	40911b	88	6602	58.2	-12 30	8.5	9.5	Ko	4	..	14157b
39	6532	57.7	-15 36	8.73	9.15	F5	2	..	14157b	89	17962	58.2	-24 11	8.8	9.4	F5	7	..	24596b
40	17956	57.7	-24 27	9.8	9.4	Ao	7	..	24596b	90	16147	58.2	-36 7	9.7	9.8	F8	4	..	41067b
41	16760	57.7	-25 30	var.	var.	Ao	3	R	24596b	91	10210	58.2	-55 58	9.1	9.9	Fo	3	..	14382b
42	15386	57.7	-41 22	9.7	9.8	Go	3	..	45096b	92	4195	58.2	-65 2	9.4	10.5	K2	3	..	38229b
43	15387	57.7	-41 33	9.0	10.1	Ko	3	..	14371b	93	1136	58.3	+72 36	7.52	7.58	A2	7	..	38068i
44	1342	57.8	+70 48	8.0	9.0	Ko	2	..	38068i	94	2356	58.3	+63 5	6.26	6.04	Br	7	..	37909i
45	6703	57.8	-20 37	6.27	7.5	F8	8	0,10	10109b	95	3103	58.3	+55 0	7.56	7.37	B2p	5	0,3 R	37241i
46	16882	57.8	-25 58	9.2	9.4	F5	2	..	23746b	96	4946	58.3	+23 1	9.2	10.0	G5	2	..	35104i
47	19795	57.8	-30 43	9.0	8.6	Ao	2	..	8586b	97	5197	58.3	+20 7	7.60	8.16	Go	5	..	38102i
48	17789	57.8	-31 55	8.7	9.5	Ko	3	..	41067b	98	16528	58.3	-26 58	8.3	9.4	G5	2	..	23746b
49	15315	57.8	-40 5	9.1	9.8	G5	3	..	14371b	99	18941	58.3	-29 34	10.0	9.5	F2	2	..	44361b
50	14325	57.8	-49 28	10.3	10.8	Go	2	..	39670b	100	16149	58.3	-36 32	9.7	9.5	Ao	4	..	41067b

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23^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	16150	58.3	-36 49	6.90	7.3	Fo	4	..	41879b	51	5201	58.8	+13 50	7.26	7.54	Fo	5	0,2	3813ri
2	14782	58.3	-47 24	10.8	11.8	Ao	2	..	39670b	52	5754	58.8	-3 7	10.6	11.7	K2	1	..	24592b
3	4394	58.3	-64 18	9.2	10.0	G5	3	..	22068b	53	5755	58.8	-3 35	10.6	11.2	Go	1	..	24592b
4	3590	58.4	+52 45	8.0	8.1	A2	3	0,3-	3724ri	54	6418	58.8	-18 17	9.7	10.2	F8	2	..	24596b
5	4927	58.4	+41 47	7.6	8.6	Ko	2	5,2	37382i	55	18947	58.8	-28 57	7.62	8.0	G5	3	..	8586b
6	5264	58.4	+18 49	7.9	8.9	Ko	3	..	38102i	56	15576	58.8	-43 45	9.4	10.6	Go	2	..	14371b
7	5090	58.4	+11 46	7.21	7.35	A5	5	0,2	38107i	57	15227	58.8	-45 50	8.3	9.1	A3	6	1,2	14371b
8	4925	58.4	+4 11	8.8	8.9	A3	3	0,3	12386b	58	8128	58.8	-58 23	8.6	8.7	G5	3	..	42095b
9	19027	58.4	-23 50	9.8	11.1	K5	3	..	24596b	59	1891	58.9	+64 35	9.0	9.1	A2	1	..	38937i
10	16769	58.4	-25 19	9.5	10.8	K2	3	..	24596b	60	2585	58.9	+61 40	8.6	8.4	B	4	E	16266m
11	19803	58.4	-30 17	11.0	10.4	F5	2	..	41067b	61	5092	58.9	+11 35	7.21	7.49	Fo	6	0,4	38107i
12	16152	58.4	-36 10	8.1	10.2	Ko	3	..	41067b	62	6103	58.9	-4 52	8.75	9.75	Ko	3	..	14377b
13	3822	58.4	-66 23	8.9	9.7	G5	4	..	38229b	63	6140	58.9	-7 33	9.7	10.5	G5	1	..	40911b
14	1377	58.5	+69 45	8.0	8.0	Ao	6	R	38068i	64	6521	58.9	-21 27	9.7	11.3	F5	2	..	24596b
15	4616	58.5	+43 43	8.6	8.6	Ao	3	..	38896i	65	19032	58.9	-23 4	10.0	11.4	G5	2	..	24596b
16	5082	58.5	+1 2	9.3	10.3	Ko	4	..	24592b	66	15246	58.9	-39 9	9.6	11.0	K2	1	..	45096b
17	6416	58.5	-18 6	9.1	9.6	F8	3	0,2-	24596b	67	14684	58.9	-48 41	7.6	7.9	Fo	4	5,2	14881b
18	18946	58.5	-28 57	8.00	8.9	G5	3	..	44361b	68	2785	58.9	-71 50	9.4	10.0	Go	4	..	38385b
19	18945	58.5	-28 59	7.99	8.0	B9	6	0,5	44361b	69	1050	58.9	-80 57	7.85	7.9	A5	4	5,8	14357b
20	19578	58.5	-31 39	7.66	7.8	F5	4	..	8586b	70	3139	59.0	+56 22	8.1	9.1	Ko	4	0,2	3724ri
21	15390	58.5	-41 39	9.3	10.1	Fo	3	..	14371b	71	4321	59.0	+49 26	8.02	9.09	K2	4	..	3568ri
22	12246	58.5	-52 22	8.5	9.6	Ko	2	..	14881b	72	4322	59.0	+49 19	7.44	8.44	Ko	4	..	3791oi
23	1423	58.6	+68 19	8.2	9.4	K5	2	..	38937i	73	5117	59.0	+38 35	8.6	9.1	F8	3	..	37382i
24	4373	58.6	+47 53	6.76	6.82	A2	3	2,9	37007i	74	4523	59.0	-1 31	10.7	11.3	Go	1	..	24592b
25	4928	58.6	+41 29	7.7	7.8	A3	5	0,2	37382i	75	16889	59.0	-26 27	8.3	9.3	Go	2	..	23746b
26	5059	58.6	+12 49	8.0	9.0	Ko	2	..	38107i	76	15438	59.0	-44 37	9.5	10.9	Ko	2	..	45076b
27	4926	58.6	+3 20	7.9	8.2	Fo	3	..	37378i	77	..	59.0	-71 5	..	..	Go	2	..	38385b
28	4613	58.6	+0 4	10.0	11.2	K5	1	..	24592b	78	1059	59.1	+74 53	8.9	9.4	F8	2	..	38133i
29	6084	58.6	-2 7	9.1	10.1	Ko	3	..	24592b	79	1893	59.1	+64 36	7.80	8.98	K5	2	..	37909i
30	6014	58.6	-3 59	9.4	10.5	K2	2	..	24592b	80	2586	59.1	+61 44	6.00	6.00	Ao	5	0,9-	1897b
31	6609	58.6	-14 39	9.56	10.06	F8	2	..	14623b	81	5037	59.1	+16 52	7.8	8.2	F5	2	..	38102i
32	6417	58.6	-17 54	4.62	4.62	Ao	..	0,5	56,103	82	5202	59.1	+13 31	8.8	8.8	Ao	2	..	38107i
33	10421	58.6	-57 44	8.4	8.1	F8	4	..	42095b	83	4615	59.1	-0 34	9.3	10.4	K2	2	..	24592b
34	4396	58.6	-64 10	8.7	9.1	F5	6	..	22068b	84	6105	59.1	-5 29	9.4	9.5	A2	3	..	14377b
35	3346	58.6	-69 15	9.3	9.7	F5	4	..	38229b	85	6219	59.1	-10 42	9.9	10.7	G5	2	..	40911b
36	1993	58.7	+66 9	6.62	7.97	Ma	6	0,4	38937i	86	6419	59.1	-17 59	8.7	8.7	Ao	5	..	14623b
37	3138	58.7	+56 50	8.0	8.1	A2	4	0,3-	3724ri	87	19809	59.1	-30 42	7.06	7.0	B8	7	3,7	44361b
38	5425	58.7	+20 22	8.70	9.88	K5	1	..	35104i	88	16288	59.1	-33 52	10.3	10.1	F8	2	..	41067b
39	4614	58.7	+0 13	10.0	10.4	F5	2	..	24592b	89	16055	59.1	-34 59	8.43	8.9	Go	4	..	41067b
40	6611	58.7	-14 15	9.1	9.5	F5	2	..	12365b	90	3280	59.2	+53 43	7.55	7.38	B3	5	5,3	3724ri
41	19029	58.7	-23 13	10.5	11.5	Ko	1	..	24596b	91	4932	59.2	+42 2	8.2	8.6	F5	3	3,3	37382i
42	14683	58.7	-48 27	10.3	11.6	K2	2	..	39670b	92	..	59.2	+39 33	var.	var.	Md	..	R	M
43	14328	58.7	-49 27	10.8	11.2	F8	1	..	39670b	93	5022	59.2	+22 1	8.6	9.0	F5	4	..	38102i
44	10151	58.7	-55 33	8.6	9.6	F8	3	..	14382b	94	5061	59.2	+12 23	8.7	9.5	G5	4	..	21226i
45	2132	58.7	-73 53	10.2	11.2	Ko	2	..	38385b	95	6221	59.2	-9 48	9.31	10.31	Ko	3	..	40911b
46	2663	58.8	+60 33	8.6	8.4	Bo	4	..	16266m	96	6410	59.2	-16 23	9.1	9.7	Go	1	..	14623b
47	5146	58.8	+36 25	8.4	8.7	Fo	4	..	37382i	97	6868	59.2	-17 5	5.80	6.80	Ko	..	0,4	56,150
48	5026	58.8	+31 26	8.8	9.2	F5	2	..	23423i	98	6524	59.2	-21 7	9.1	10.2	F8	4	..	24596b
49	5019	58.8	+21 44	8.2	8.3	A2	5	..	38102i	99	19033	59.2	-23 49	9.3	10.8	Ko	4	..	24596b
50	5426	58.8	+20 24	8.35	8.91	Go	4	..	38102i	100	18950	59.2	-29 50	6.48	6.1	A2	..	2,8	28,217

THE HENRY DRAPER CATALOGUE.

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23^h 59^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	15439	59.2	-44 33	8.3	8.8	F5	7	0,3	14371b	51	12249	59.6	-52 9	7.4	8.3	Ko	7	0,3	14881b
2	10426	59.2	-54 28	8.4	9.6	Ko	3	..	14382b	52	2786	59.6	-70 58	7.7	8.5	G5	5	..	12082b
3	7714	59.2	-59 53	8.66	8.5	B9	4	..	42095b	53	2800	59.6	-72 0	5.64	5.62	B9	..	0,10	56,150
4	2345	59.2	-73 36	9.7	10.0	Fo	5	..	38385b	54	908	59.6	-81 54	9.7	9.7	Ao	7	..	38135b
5	6193	59.3	-11 45	9.1	9.9	G5	3	0,2	40911b	55	1379	59.7	+70 14	8.54	8.54	Ao	4	..	38068i
6	19813	59.3	-29 57	7.57	8.0	Ao	7	..	44361b	56	1994	59.7	+65 17	8.25	8.25	Ao	2	..	37909i
7	17802	59.3	-32 43	8.6	9.2	Ko	3	..	41067b	57	2855	59.7	+57 58	6.51	6.34	B3	6	0,8	37241i
8	14785	59.3	-47 38	8.9	11.2	Ko	3	..	39670b	58	4624	59.7	+43 25	8.1	8.7	Go	3	..	37910i
9	14331	59.3	-49 22	9.7	11.1	Ko	3	..	39670b	59	4931	59.7	+38 13	8.6	8.9	F2	3	..	37382i
10	4824	59.4	+ 1 41	9.0	10.2	K5	1	..	14156b	60	5057	59.7	+29 31	8.2	8.6	F5	2	..	37352i
11	6142	59.4	- 7 31	8.1	8.7	Go	5	..	14377b	61	4950	59.7	+22 43	7.87	8.65	G5	4	..	38102i
12	6194	59.4	-11 4	5.16	6.23	K2	..	2,10	56,150	62	5258	59.7	+ 5 52	9.3	9.4	A3	4	1,3	17058b
13	15492	59.4	-37 51	8.3	10.1	K5	3	0,2 R	14593b	63	6223	59.7	-10 25	10.1	11.1	Ko	1	..	40911b
14	4197	59.4	-65 25	10.1	10.9	G5	2	..	38229b	64	19818	59.7	-30 12	8.2	8.0	A2	3	..	8586b
15	1378	59.5	+69 55	8.04	9.04	Ko	3	..	38068i	65	16834	59.7	-32 56	9.6	9.2	F2	4	..	41067b
16	1679	59.5	+66 36	5.84	6.84	Ko	7	..	37909i	66	15392	59.7	-41 28	9.6	10.5	Go	2	..	14371b
17	4827	59.5	+43 0	var.	var.	Nb	1	R	37910i	67	14787	59.7	-47 9	10.3	11.8	Ko	2	..	39670b
18	4933	59.5	+41 33	6.03	6.09	A2	4	2,9	37007i	68	10424	59.7	-57 24	7.8	8.7	Ko	4	5,3	42095b
19	5059	59.5	+35 13	8.62	9.12	F8	2	..	37382i	69	3347	59.7	-69 24	9.2	9.8	Go	4	..	38229b
20	4827	59.5	+33 42	7.15	8.15	Ko	5	..	37382i	70	2348	59.7	-73 42	9.6	10.6	Ko	2	..	38385b
21	4749	59.5	+ 2 23	8.2	9.3	K2	3	..	14156b	71	1995	59.8	+65 58	7.8	8.2	F5	2	..	37909i
22	4524	59.5	- 1 37	8.92	9.20	Fo	4	..	14156b	72	1894	59.8	+64 52	7.50	8.50	Ko	4	..	37909i
23	6015	59.5	- 4 42	10.3	10.9	Go	1	..	14377b	73	2103	59.8	+64 13	7.7	8.1	F5	2	..	37909i
24	6240	59.5	- 8 45	8.7	9.8	K2	2	..	40911b	74	3141	59.8	+56 55	8.4	9.2	G5	1	..	38872i
25	6511	59.5	-12 51	9.4	10.4	Ko	1	..	12365b	75	3778	59.8	+51 41	9.0	9.0	Ao	2	..	37937i
26	6411	59.5	-16 27	8.7	9.5	G5	1	..	14623b	76	5068	59.8	+26 6	6.52	7.59	K2	3	..	37352i
27	6709	59.5	-20 0	9.1	10.5	K2	4	..	24596b	77	5031	59.8	+17 53	8.8	9.8	Ko	2	..	38102i
28	6526	59.5	-21 28	9.4	11.1	G5	2	..	24596b	78	6241	59.8	- 7 50	9.4	10.4	Ko	1	..	40911b
29	19584	59.5	-31 44	7.8	9.6	Ko	2	..	41067b	79	6870	59.8	-17 25	8.1	8.9	G5	2	..	10109b
30	4399	59.5	-64 44	10.1	10.5	F5	2	..	38229b	80	6421	59.8	-18 44	8.9	9.5	Go	4	..	14623b
31	2799	59.5	-72 15	9.0	9.8	G5	6	..	38385b	81	6710	59.8	-19 58	9.1	9.6	Go	6	..	24596b
32	2347	59.5	-73 13	9.7	10.3	Go	6	..	38385b	82	19820	59.8	-30 49	8.6	8.0	Ao	5	..	44361b
33	2346	59.5	-73 28	7.43	7.9	F5	7	3,8	12082b	83	17805	59.8	-32 34	7.90	8.9	Ko	3	..	41879b
34	2133	59.5	-74 25	8.9	8.9	Ao	5	0,5	14357b	84	16835	59.8	-33 4	9.0	9.2	Go	4	..	41067b
35	1600	59.5	-76 55	9.2	10.0	G5	4	..	38135b	85	10427	59.8	-53 55	9.1	9.9	F5	3	E	14382b
36	1599	59.5	-77 26	9.4	10.0	Go	3	..	38135b	86	..	59.8	-69 7	..	..	G5	1	..	38229b
37	4232	59.6	+50 59	8.2	8.3	A2	2	..	37937i	87	1639	59.8	-75 56	10.7	11.7	Ko	1	..	38135b
38	4405	59.6	+46 3	9.0	9.1	A2	1	..	38896i	88	1248	59.8	-79 8	10.4	11.4	Ko	2	..	38135b
39	4828	59.6	+34 7	6.23	6.79	Go	5	0,8	37352i	89	2667	59.9	+60 46	5.87	5.85	B9	10	1,6	38872i
40	5039	59.6	+16 31	8.4	9.2	G5	1	..	38102i	90	4251	59.9	+46 27	8.6	9.4	G5	1	..	38896i
41	5094	59.6	+14 24	7.23	7.65	F5	5	..	38102i	91	4540	59.9	+45 7	7.62	8.12	F8	6	..	38896i
42	5257	59.6	+ 5 58	8.6	9.6	Ko	4	..	12386b	92	4744	59.9	+27 7	6.57	7.35	G5	4	..	37352i
43	5084	59.6	+ 0 59	8.4	8.5	A5	3	E	37378i	93	5168	59.9	+ 8 43	8.4	8.7	F2	2	..	38069i
44	4616	59.6	- 0 30	8.6	8.9	Fo	3	..	14156b	94	5085	59.9	+ 0 29	9.0	9.8	G5	3	5,2	13921b
45	6143	59.6	- 7 2	9.7	10.3	Go	1	..	40911b	95	6089	59.9	- 2 7	10.3	11.3	Ko	1	..	24592b
46	16896	59.6	-26 0	9.0	9.4	Go	3	..	39506b	96	6108	59.9	- 5 32	10.1	10.7	Go	2	..	14377b
47	16536	59.6	-27 50	9.3	9.9	Fo	1	..	23746b	97	16162	59.9	-36 35	7.61	8.3	F5	3	3,3	12013b
48	18953	59.6	-29 25	9.0	9.2	Ko	2	..	41067b	98	14687	59.9	-48 19	10.1	10.2	F8	4	..	39670b
49	16833	59.6	-33 5	10.5	10.4	G	1	..	41067b	99	3038	59.9	-70 46	7.8	8.6	G5	4	..	12082b
50	16584	59.6	-42 36	9.5	10.1	F5	3	..	14371b	100	2787	59.9	-71 3	8.5	8.8	F2	4	..	12082b

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REMARKS.

200702. η Microscopii.
 200718. δ Microscopii. Read 0,10 R, for 0,R.
 200740. The intensities of several lines are peculiar. Line 4227 is faint for the class.
 200761. θ Capricorni.
 200776. The observation, F5, on I 37878, was rejected.
 200905. ξ Cygni. Read 0,10 R, for 0,R.
 200914. A Capricorni.
 200926. The lines are broad.
 200970. This spectrum contains a strong and wide band of absorption which appears to coincide with the cyanogen band from 4144 to 4184.
 200994. RS Capricorni. Variable. Class III. Max. 8.1. Min. 9.3. Other facts unknown.
 201015. V Capricorni. Variable. Class II. Max. 9.3. Min. 14.5. Period, 156^d.7. On a photograph taken June 27, 1895, the spectrum is of Class Mb, having the lines H γ and H δ equally bright.
 201091,2. 61 Cygni. Bu. 10732. P. A. 127°.2, Dist. 22".50, combined magn. 5.08. Parallax, 0".29. Proper motion of H. D. 201091, 5".18, 51°.4; of H. D. 201092, 5".12, 53°.7. Line 4227 is very strong in both spectra, and other lines characteristic of dwarfs are well-marked.
 201171. This star is C. DM. -59° 7657, magn. 10, and is not contained in the Cape Photographic Durchmusterung.
 201184. χ Capricorni.
 201192. N.G.C. 7026. Planetary nebula.
 201251. β^2 Cygni.
 201270,1. The spectrum is composite. The visual magnitudes may be nearly equal. In the photographic spectrum the lines of the component of Class G are seen from H β to about 4250. The region of shorter wave length is of Class A. Insert R in Table I.
 201272. N.G.C. 7027. Planetary nebula.
 201282. The observation, Ko, on I 38129, residual 10, was rejected. The spectrum is too faint with that dispersion.
 201305. X Cephei. Variable. Class II. Max. 9.7. Min. 17.2. Period, 565^d. On a photograph taken September 22, 1905, a faint spectrum is seen, having the line H δ bright.
 201371. α Pavonis.
 201381. ν Aquarii.
 201417. TZ Pegasi. Variable. Class II. Max. 10.1. Min. <14.0. Period, 122^d. On a photograph taken August 22, 1911, the spectrum is of Class Mb, having the line H δ 0.6 as bright as H γ .
 201474. This star is S. D. -23° 436, magn. 7.7, and C. DM. -22° 15233, magn. 7.4.
 201484. V Indi. Variable. Class IV. Max. 7.9. Min. 9.5. Period, 0^d.9 \pm .
 201527. The observation, G5, on B 40599, residual 10, was rejected. The spectrum is near the edge of that plate.
 201601. γ Equulei. Line 4077.9 is strong. The spectrum resembles that of α Circini, described in H.A. 28, 187, Remark 166. Read 0,10 R, for 0,R.
 201611. The star +55° 2530, ptm. magn. 8.06, follows 0^s.3, south 4'.4. The spectrum is superposed and is probably of a late division of Class B.
 201638. The lines are narrow and show only slight contrast to the continuous spectrum. No lines are clearly seen except those of hydrogen, and the line (K).
 201670,1. Bu. 10795. P. A. 300°.5, Dist. 17".74, combined magn. 6.37.
 201700. The hydrogen lines are narrow.
 201701. Classified Ko on I 37878, because the distribution of light resembles spectra of that class.
 201866. W Indi. Variable. Class II. Max. 8.6. Min. 11.0. Period, unknown. On a photograph taken July 28, 1908, the spectrum is of Class Mc, having the line H δ bright. This star is C. DM. -53° 8779, magn. 9.6, and is not contained in the Cape Photographic Durchmusterung.
 201882. RX Aquarii. Variable. Class III. Max. 8.0. Min. 9.2. Period, irregular.
 201940. The observation, F5, on I 38129, residual 10, was rejected. The spectrum is too faint on that plate.
 202012. T Cephei. Variable. Class II. Max. 5.2. Min. 10.8. Period, 386^d.7. The spectrum is of Class Mc, having H γ , H δ , H ϵ , H η and H θ bright at maximum. The bright H δ varies from 2 to 7 times the intensity of H γ .
 202051. R Equulei. Variable. Class II. Max. 8.7. Min. <14.2. Period, 262^d. On photographs taken October 26, 1905 and September 28, 1910, the spectrum is of Class Ma, having the line H δ 0.7 as bright as H γ .
 202064. This star is C. DM. -60° 7662, magn. 10, and is not contained in the Cape Photographic Durchmusterung.
 202109. ζ Cygni. The cyanogen band of absorption extending from 4144 to 4184 is very strong.
 202124. The spectrum is nearly continuous and may belong to Class Oe5.
 202209. The star C. DM. -39° 14174, ptm. magn. 10.1, precedes 2^s.9, south 1'.2. The photometric magnitude probably refers to the combined light of both stars.
 202275. δ Equulei.
 202306. RR Aquarii. Variable. Class II. Max. 8.6. Min. <13.0. Period, 190^d.5. On a photograph taken September 28, 1905, a faint spectrum is seen, having the lines H γ and H δ equally bright.
 202320. ϕ Capricorni.
 202358. The line 4077.9 is strong.
 202361. This star is C. DM. -60° 7669, magn. 9.7, and is not contained in the Cape Photographic Durchmusterung.
 202444. τ Cygni.

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- 202447.8. α Equulei. The spectrum is composite.
202488. This star is C. DM. $-60^{\circ} 7674$, magn 10, and is not contained in the Cape Photographic Durchmusterung.
202560. Proper motion, $3''.46$, $249^{\circ}.4$. The spectrum shows strong characteristics of low temperature. Line 4227 is very strong. The titanium oxide bands are only faintly seen.
202627. ϵ Microscopii.
202730. θ Indi. Read 2,10 R, for 2,R.
202764. This star is C. DM. $-59^{\circ} 7697$, magn. 9.9, and is not contained in the Cape Photographic Durchmusterung.
202850. σ Cygni. The spectrum has very narrow lines and resembles that of η Leonis, H. D. 87737.
202874. T Indi. Variable. Class III. Max. 7.2. Min. 8.9. Period, irregular.
202904. ν Cygni. The lines are wide. H β , H γ , and H δ are bright. See H.A. 28, 104, Remark 169.
203006. θ^{\dagger} Microscopii. Line 4077.9 is very strong and the spectrum is otherwise peculiar. See H.A. 28, 186, Remark 158.
203040. The lines of low temperature are strong.
203060. This star is C. DM. $-60^{\circ} 7691$, magn. 10, and is not contained in the Cape Photographic Durchmusterung.
203064. A Cygni. Read 0,10 R, for 0,R.
203069. RY Aquarii. Variable. Class V. Max. 9.2. Min. 10.2. Period, $1^d.9671$.
203128. This star is C. DM. $-60^{\circ} 7694$, magn. 9.6, and is not contained in the Cape Photographic Durchmusterung.
203133. Y Pavonis. Variable. Class III. Max. 5.7. Min. 8.5. Period, irregular.
203154. CE Cygni. Announced in H. C. 225 to be variable. A re-examination of the photographs shows that the variation, if real, is small.
203280. α Cephei. The lines are somewhat broad.
203282. The observation, Ko, on I 37945, residual 10, was rejected. The spectrum is not clearly defined on that plate.
203285. The class is not very certain, as the spectrum is indistinct at the end of shorter wave length.
203312. This star is S. D. $-23^{\circ} 439$, magn. 9.1, and C. DM. $-22^{\circ} 15347$, magn. 9.2.
- 203338.9. The spectrum is composite. Bu. 10925. P. A. $45^{\circ}.6$, Dist. $4''.59$, magn. 5.6 and 9.9.
203340. The spectrum may be composite. On a photograph taken with the 10-inch Telescope, it appears to be of Class F, having the line K only 0.7 as strong as H.
203349. T Capricorni. Variable. Class II. Max. 8.1. Min. 13.5. Period, $260^d.2$. On a photograph taken August 15, 1896, the spectrum is of Class Ma, having the line H δ 1.5 as bright as H γ .
203370. W Microscopii. Variable. Class II. Max. 10.3. Min. <13.5 . Period, unknown. On a photograph taken July 25, 1908, a very faint spectrum is seen, which has the lines H γ and H δ equally bright.
203374. The lines H β and H γ are bright and superposed on dark bands.
203387. ι Capricorni.
203467. The line H β is bright and superposed on a hazy dark band. H γ has a central bright line.
203495. V Microscopii. Variable. Class II. Max. 9.8. Min. <14.0 . Period, 382^d . On a photograph taken July 31, 1903, the spectrum is of Class Mb, having the line H δ very bright.
203562. β Equulei. Read 2,10 R, for 2,R.
203585. θ^{\dagger} Microscopii. Lines 4128.1, 4131.1 are strong. Helium lines are present. See H.A. 28, 186, Remark 147.
203597. This star is S. D. $-23^{\circ} 440$, magn. 9.2, and C. DM. $-22^{\circ} 15360$, magn. 9.1.
203608. γ Pavonis.
203699. The line H β is slightly reversed. The bright portion is barely seen.
203760. γ Indi.
203764. The star $+51^{\circ} 3051$, ptm. magn. 9.0, follows $2^{\circ}.2$, north $0'.6$. The spectrum is superposed and appears to be of Class A.
- 203943.4. H. D. 203943 is $+8^{\circ} 4670$, which precedes $3^{\circ}.9$, south $0'.5$, ptm. magn. 9.9. This star must have a spectrum of some division of Class A for in the combined image, the lines are wide and almost double.
203983. This star is S. D. $-23^{\circ} 441$, magn. 8.8, and C. DM. $-22^{\circ} 15382$, magn. 9.3.
204018. Innes $21^h 28$. P. A. $141^{\circ}.0$, Dist. $2''.46$, magn. 5.8 and 7.9. The spectrum resembles that of δ Normae, H. D. 144197.
204045. S Microscopii. Variable. Class II. Max. 7.9. Min. 11.5. Period, $213^d.2$. On a photograph taken August 20, 1909, the spectrum is of Class Ma, having the line H δ 0.9 as bright as H γ .
204075. ζ Capricorni. This star is S. D. $-23^{\circ} 442$, magn. 4.7 and C. DM. $-22^{\circ} 15388$, magn. 3.7. The spectrum has the lines 4077.9 and 4215.7 very strong, as well as other lines of high temperature. See H.A. 28, 97, Remark 111.
204381. b Capricorni.
204409. Photographed on a plate stained with pinacyanol. The spectrum is very faint from H β to the end of shorter wave length.
204438. X Indi. Variable. Class II. Max. 8.1. Min. <11.9 . Period, unknown. On a photograph taken July 28, 1908, the spectrum is of Class Mb, having the line H δ twice as bright as H γ . This star is C. DM. $-54^{\circ} 9000$, magn. 8.8, and is not contained in the Cape Photographic Durchmusterung.
204587. Proper motion, $1''.06$, $105^{\circ}.3$.
204688. N.G.C. 7078. Messier 15. Globular cluster. Photometric magn. 7.26 in H.A. 54, 244. Sixty-six variable stars have been found in this cluster.
204722. The lines are broad.
204771. g Cygni.
204783. ξ Gruis. Read 0,10 R, for 0,R.
204867. β Aquarii.
204961. The spectrum is slightly peculiar in the distribution of light. The brightest portion is from 4600 to 4752. Line 4227 is very strong.
205017. This star is C.P.D. $-19^{\circ} 8064$, magn. 9.6, and is not contained in the Southern Bonn Durchmusterung.

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205021. β Cephei. Variable to the extent of 0.1 magn., in a period of 0^d.190, which agrees with that of the spectroscopic changes.
205087. Lines 4128.1 and 4131.1 are strong.
- 205114.5. The spectrum is composite.
205146. N.G.C. 7089. Messier 2. Globular cluster. Ten variable stars have been found in this cluster. Photometric magn. 7.69, in H.A. 54, 245.
205211. Index Catalogue, No. 5117. Planetary nebula. Probably of Class Pd.
205227. This star is S. D. -23° 445, magn. 9.5, and C. DM. -22° 15463, magn. 9.4.
205333. The spectrum may be peculiar. The metallic lines appear to be strong for the intensity of line (K).
205432. In H.A. 54, 245, the combined magnitude of this star and H. D. 205450 is 9.28. The latter star follows 7° .9, north 0'.0.
205435. ρ Cygni. The spectrum is somewhat peculiar especially in the intensity of the hydrogen lines, which are as strong as in Class Go.
205450. See H. D. 205432.
205478. ν Octantis.
205484. Photographed on a plate stained with pinacyanol.
205618. The presence of bright lines is suspected.
- 205626.7. H. D. 205626 precedes 0^s.81, south 1^m.1. The line H δ appears to be slightly stronger in the spectrum of the following star than in that of the preceding, but owing to the superposition, exact differences are hard to detect.
205637. ϵ Capricorni. The spectrum is very peculiar. See H.A. 28, 183, Remark 95. H β is bright and variable. The helium lines are very wide, while the hydrogen lines are narrow.
- 205698.9. H. D. 205698 follows 0^s.5, north 1^m.1.
205730. W Cygni. Variable. Class III. Max. 5.0. Min. 6.7. Period, irregular.
205733. AB Cygni. Variable. Max. 7.7. Min. 8.9. Class and period not certainly known.
205767. ξ Aquarii.
205777. Probably of Class Nb. The spectrum is very faint.
205811. The star $+5^{\circ}$ 4829, photometric magn. 7.64, precedes 0^s.49, north 38^m.3. No trace of the spectrum of this star is seen.
205853. The observation, A5, on I 38818, residual 7, was rejected. The spectrum is too faint on that plate.
- 206054.5. H. D. 206054 precedes 0^s.5, south 0^s.7.
206067. d Aquarii.
206088. γ Capricorni. The spectrum may be composite. The metallic lines are very strong, considering the intensity of the hydrogen lines. Line 4077.9 is strong.
206107. N.G.C. 7099. Messier 30. Globular cluster. Three variable stars have been found in this cluster.
206165. The lines are narrow. On one plate, H β seems to have a bright edge towards the red.
206223. Suspected to be variable and called UU Cygni. Variation not confirmed.
- 206224.5. Bu. 11145. Stars A and E. P. A. 43° .6, Dist. 29^m.19, magn. 7.1 and 7.9.
- 206240.1. λ Octantis. The spectrum is composite. Innes 21^h 45. P. A. 75° .3, Dist. 2^m.78, magn. 5.6 and 7.7.
206261. The metallic lines are strong for the class. Insert κ in Table I.
206267. The line H β is suspected to be partially reversed.
206327. The lines are indistinct. Line 4200 is strong and the class is assumed to be Oe5.
206362. S Cephei. Variable. Class II. Max. 7.9. Min. 13.1. Typical star of Class Nc. See page 11.
206453. κ Capricorni. Read 5,10 R for 5,R.
206458. Y Indi. Variable. Class II. Max. 9.5. Min. 12.9. On a photograph taken September 22, 1908, the spectrum is of Class Mc having the line H δ 4 times as bright as H γ . The star is C. DM. -53° 8930, magn. 11.5, and is not contained in the Cape Photographic Durchmusterung.
206483. RU Cygni. Variable. Class II. Max. 7.5. Min. 10.3. Period, 436^d.
206516. This star is C. DM. -22° 15536, magn. 9.7, and is not contained in the Southern Bonn Durchmusterung.
206546. The line 4077.9 is strong.
206553. B Octantis. Read 5,10 R, for 5,R.
206570. Probably variable with a range of 0.3 magn.
206618. VX Pegasi. Variable. Max. 10.0. Min. 10.9. Class and period unknown.
206652. RR Indi. Variable. Class III. Max. 9.8. Min. 10.8. Period, irregular. This star is Z. C. 21^h 1131, magn. 9.5.
206672. π^1 Cygni.
206697. SS Cygni. Variable. Class III. Max. 8.1. Min. 12.0. Period irregular. On the Harvard photographs, taken at maximum, very narrow dark hydrogen lines are barely seen. At minimum, photographs taken at Mt. Wilson show broad bright bands of hydrogen and helium.
206742. ϵ Piscis Austrini. The lines are broad.
206750. RV Cygni. Variable. Class III. Max. 7.1. Min. 9.3. Period, irregular. The spectrum is faint and may be somewhat peculiar.
206773. The lines H β and H γ are bright. The dark lines are barely seen.
206778. ϵ Pegasi. The hydrogen lines are strong for this class. The region of 4144 to 4184 shows absorption like that in α Cassiopeiae.
206784. This star is C.P.D. -20° 8209, magn. 9.4, and is not contained in the Southern Bonn Durchmusterung.
- 206826.7. μ Cygni. Bu. 11214. P. A. 125° .2, Dist. 2^m.30, combined magn. 4.29.
206834. c Capricorni.
- 206844.5. The spectrum is composite. Bu. 11217. P. A. 142° .4, Dist. 1^m.82, magn. 8.4 and 10.3.
206859. Line 4077 is stronger than H δ , and line 4215 is also strong.
206890. RR Pegasi. Variable. Class II. Max. 8.7. Min. 14.0. Period, 252^d.5. On a photograph taken November 28, 1904, the spectrum is of Class Mb, having the lines H γ and H δ of nearly equal brightness.
206901. κ Pegasi.
206936. μ Cephei. Variable. Class III. Max. 4.0. Min. 4.8. Period, irregular. The spectrum is peculiar in the intensities of lines, especially between 4227 and the G band. Read 0,10 R, for 0,R.

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207017. This spectrum is difficult to classify, owing to its partial superposition on that of H. D. 207018, which precedes 1° , and is south $0'.1$.
207020. The star $+48^{\circ} 3492$, ptm. magn. 9.7, follows $0^{\circ}.5$, north $0'.5$. The spectrum is of Class A.
207037. This star is C.P.D. $-21^{\circ} 7987$, magn. 10.0, and is not contained in the Southern Bonn Durchmusterung.
207052. λ Capricorni.
207057. The star $+42^{\circ} 4198$, ptm. magn. 8.7, follows $2^{\circ}.9$, south $2'.8$. The spectrum is partly superposed and is probably of Class K.
207064. This star is C.P.D. $-21^{\circ} 7988$, magn. 10.0, and is not contained in the Southern Bonn Durchmusterung.
- 207091,2. These spectra are superposed in right ascension, so that the exact classes are uncertain.
207098. δ Capricorni.
207111. The line $H\gamma$ is very narrow. Other portions are indistinct. The spectrum may be composite.
207155. θ Piscis Austrini.
207192. R Gruis. Variable. Class II. Max. 8.0. Min. <12.0 . Period, 331^d . On a photograph taken August 13, 1895, the spectrum is of Class Mc, having the line $H\delta$ twice as bright as $H\gamma$.
207193. The observation, F5, on B 37682, residual 10, was rejected. The spectrum is too dense on that plate.
207241. \circ Indi. Read 2,10 R, for 2,R.
207260. ν Cephei. The spectrum has narrow lines and resembles that of α Cygni, H. D. 197345.
207330. π^2 Cygni.
207498. The spectrum is suspected to be composite.
207593. The lines $H\beta$, $H\gamma$, and $H\delta$ are wide and hazy. This is due to the superposition of the spectrum of $+30^{\circ} 4538$.
207616. The spectrum is probably composite.
207673. The hydrogen lines are narrow. The spectrum appears to resemble that of η Leonis, H. D. 87737.
207757. The lines $H\beta$, $H\gamma$, $H\delta$, and $H\epsilon$ are bright. $H\beta$ is the strongest and the spectrum is of the P Cygni type. See H. B. 762 for a description of changes in the spectrum and light of this star.
207819. This star is S. D. $-23^{\circ} 451$, magn. 9.1, and C. DM. $-22^{\circ} 15616$, magn. 9.2.
207826. The lines are probably narrow.
207958. μ Capricorni. Read 2,10 R, for 2,R.
207971. γ Gruis.
208006. The star $+24^{\circ} 4490$, ptm. magn. 9.3, precedes $0^{\circ}.5$, south $3'.8$. The spectrum is partly superposed and is of Class K.
208014. This star is C.P.D. $-27^{\circ} 7343$. The minutes of declination, 45.8, in the Cordoba Durchmusterung appear to be incorrect, and should be about 17.
- 208054,5. The spectrum is composite.
208063. The spectrum may contain helium lines, but their presence can not be determined because of the superposition on the spectrum of H. D. 208095.
- 208132,3. Bu. 11334. P. A. $140^{\circ}.4$, Dist. $1''.92$, magn. 7.7 and 7.3. The numerous well-marked metallic lines which are present are assumed to indicate that one of the components of this double star has a spectrum of Class G.
208171. The spectrum is poorly defined on both plates
- 208371,2. The lines are broad. Two stars are near this position. The star which is slightly fainter precedes 1° , and is north $0'.3$.
208450. δ Indi.
208454. This spectrum was photographed with the 24-inch Reflector on a plate stained with pinacyanol.
208501. The lines are narrow.
208512. This spectrum was photographed with the 24-inch Reflector on a plate stained with pinacyanol. It shows no light of shorter wave length than $H\beta$ and resembles the spectrum of VX Andromedae, H. D. 1546.
208526. RX Pegasi. Variable. Class III. Max. 7.7. Min. 8.6. Period, probably irregular.
208558. The identification in the Cordoba Durchmusterung assumes that the declination should read $22'$, instead of $32'$.
208816. Variable in small range. See H.A. 56, 110, Remark 155. The lines are narrow. The hydrogen lines are bright, but they differ in several respects from the bright lines in spectra of variable stars of Class M. On one plate, $H\beta$ shows a distinct double reversal, and on another, $H\delta$ has a sharp dark line on the edge of greater wavelength. Moreover, the brightness decreases from $H\beta$ to the violet as in spectra of Class B, and $H\epsilon$ is distinctly bright. There is very little trace of the wide absorption bands, (H) and (K). Numerous narrow bright lines are present besides those of hydrogen. Perhaps the spectrum is composite, combining one of Class Ma with one of the P Cygni class.
- 208926,7. The spectrum is composite.
208991. This star is C.P.D. $-19^{\circ} 8139$, magn. 10.2, and is not contained in the Southern Bonn Durchmusterung.
209014. η Piscis Austrini. The lines are broad.
- 209020,1. The spectrum appears to be composite. Bu. 11420. P. A. $250^{\circ}.1$, Dist. $12''\pm$, magn. 9.10 and 11.
209032. The star C. DM. $-44^{\circ} 14737$, magn. 9.2, precedes $3^{\circ}.5$, south $0'.8$. The spectrum is probably of Class K5.
209044. A star about 0.5 magn. fainter than H. D. 209044 follows $4^{\circ}.4$, north $0'.5$.
209100. ϵ Indi. Lines of low temperature are strong. Parallax, $0''.23$. Proper motion, $4''.71$, $123''^{\circ}$. See H. B. 789.
209119. The star C. DM. $-40^{\circ} 14608$, ptm. magn. 8.6, follows $2^{\circ}.4$, north $2'.1$. The spectrum is partly superposed and appears to be of Class K.
209127. V Pegasi. Variable. Class III. Max. 7.8. Min. 14. Period, 303^d . On a photograph taken October 21, 1903, the spectrum is of Class Mb, having the lines $H\gamma$ and $H\delta$ bright and of nearly equal intensity.
209143. The observation, G5, on B 42494, residual 15, was rejected. The spectrum is too near the edge of that plate.
209318. RT Lacertae. Variable. Class V. Max. 8.8. Min. 9.8. Period, $5^d.07257$.
209400. S Piscis Austrini. Variable. Class II. Max. 8.7. Min. <11 . Period, $271^d.8$. On a photograph taken August 11, 1899, the spectrum is of Class Mb, having the lines $H\gamma$ and $H\delta$ bright and of equal intensity.
209409. \circ Aquarii. $H\beta$ consists of a narrow bright line superposed on a wide dark band.

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209410. A star nearly as bright as H. D. 209410 precedes 1° , south $0'.3$.
209480. H. D. 209481 precedes $1^{\circ}.9$, south $3'.2$.
209512. V Octantis. Variable. Class II. Max. 8.0 . Min. 11.0 . Period, unknown. On a photograph taken October 4, 1907, the spectrum is of Class Ma, having the line H δ 7 times as bright as H γ .
209522. The lines are broad. Read $0.10 R$, for $0.R$.
209598. TW Pegasi. Variable. Class III. Max. 7.2 . Min. 7.8 . Period probably irregular.
209641. RT Pegasi. Variable. Class II. Max. 9.5 . Min. 13.0 . Period, $241^d.6$. On a photograph taken October 21, 1905, a faint spectrum is seen in which the line H δ is bright.
209688. λ Gruis.
209724. The star $+18^{\circ} 4923$, ptm. magn. 9.7 , precedes $2^{\circ}.3$, north $6'.8$. The spectrum is partly superposed and appears to be of Class K 5 .
209747. ν Pegasi.
209750. α Aquarii. The lines are narrow. The spectrum shows some peculiarities. In the distribution of light, it resembles Class Ko.
209789. The exact class is uncertain.
- 209790.1. ξ Cephei. Bu. 11483. P. A. $281^{\circ}.9$, Dist. $6''.93$, combined magnitude, 4.40 . The spectrum is composite. The combined spectrum is of the solar type with strong hydrogen lines extending to H λ . The line (K) is narrow, and is about 0.6 as strong as (H).
209810. Probably of Class Ao. The faint lines are lost by the superposition upon the spectrum of H. D. 209809.
209819. ι Aquarii.
209872. SV Pegasi. Variable. Class III. Max. 8.4 . Min. 9.0 . Period, irregular.
209890. RZ Pegasi. Variable. Class II. Max. 9.0 . Min. 12.4 . Period, 125^d . On a photograph taken November 25, 1905, the lines H β and H γ are bright. The spectrum is faint except between H β and H γ . It is uncertain whether it belongs to Class M or Class S. The Durchmusterung number $+32^{\circ} 4335$ may refer to the combined light of this star and RY Pegasi, which precedes $1^{\circ}.4$, and is south $6''.4$.
- 209942.3. Bu. 11514. P. A. $72^{\circ}.3$, Dist. $13''.58$, combined magn. 6.49 .
209947. Line 4077.9 is strong, also a band at 4179 .
209952. α Gruis. The lines are broad.
209975. This spectrum is intermediate between Classes Oe 5 and Bo. See H.A. 56, 110, Remark 159.
210010. The lines appear to be narrow.
210027. ι Pegasi.
210049. μ Piscis Austrini. The hydrogen lines are hazy and the metallic lines are faint and indistinct.
210066. ν Piscis Austrini.
210129. H β was found to be bright on the Mt. Wilson photographs. The best Harvard plate shows H β somewhat wide, but not distinctly bright.
210219. Perhaps of Class B8.
210221. The lines are narrow and sharply defined.
210224. The observation, F8, on B 14196, residual 15, was rejected. The spectrum is ill defined and near the edge of that plate.
210251. T Pegasi. Variable. Class II. Max. 8.4 . Min. <14 . Period, $373^d.8$. On a photograph taken October 26, 1905, the spectrum is of Class Mc, having the line H δ bright.
210302. τ Piscis Austrini.
210334. — Lacertae. This star shows a variation of small range on the Harvard photographs.
210418. θ Pegasi.
210424. ϵ Aquarii.
- 210432.3. Bu. 11542. Stars A and BC. P. A. $315^{\circ}.9$, Dist. $21''.68$.
210458. The star $+37^{\circ} 4499$, ptm. magn. 9.1 , follows $5^{\circ}.8$, south $0'.3$. The spectrum is partly superposed and is probably of Class F.
210459. π Pegasi.
210548. Variability suspected.
210578. The line H δ is strong. The spectrum may be composite.
210662. Y Pegasi. Variable. Class II. Max. 9.7 . Min. 14.0 . Period, $203^d.3$. On a photograph taken November 14, 1905, the spectrum is of Class Mc, having the line H δ bright.
210745. ζ Cephei. The spectrum resembles that of α Cassiopeiae.
210749. RS Pegasi. Variable. Class II. Max. 8.8 . Min. 13.9 . Period, 436^d . On a photograph taken November 14, 1905, the spectrum is of Class Mc, having the line H δ 7 times as bright as H γ .
210809. The line H β is not distinctly seen.
210839. λ Cephei. A typical star of Class Od. It differs somewhat from the spectrum of ζ Puppis. See H.A. 56, 110. Remark 162.
210853. ψ Octantis.
210934. λ Piscis Austrini.
210967. ϵ Octantis.
211088. μ^1 Gruis.
211202. μ^2 Gruis.
211336. ϵ Cephei.
211391. θ Aquarii.
211416. α Tucanae.
211493. R Piscis Austrini. Variable. Class II. Max. $.58$ Min. <11.5 . Period, 292^d . On a photograph taken October 8, 1892, the spectrum is of Class Ma, having the lines H γ and H δ bright and equal in intensity.
- 211524.5. H. D. 211524 precedes $1^{\circ}.5$, south $0'.2$.
211539. ν Octantis.
211547. This star is S. D. $-23^{\circ} 456$, magn. 7.2 , and C. DM. $-22^{\circ} 15834$, magn. 7.6 .
211594. The spectrum contains a strong band of absorption which may be the cyanogen band, 4144 to 4184 .
211610. X Aquarii. Variable. Class II. Max. 7.7 . Min. 13.8 . Period, 315^d . On a photograph taken June 29, 1895, the spectrum is of Class Mb, having the lines H γ and H δ bright and approximately equal in intensity.
211835. The lines show very slight contrast to the continuous spectrum.
211838. ρ Aquarii.
211880. The star $+62^{\circ} 2060$, ptm. magn. 8.5 , precedes 3° , south $0'.0$. Although about 0.7 magn. fainter than H. D.

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- 211880 on a chart plate, its superposition confuses the spectrum.
211965. ST Aquarii. Variable. Class V. Max. 9.2. Min. 9.9. Period unknown.
211998. ν Indi. Proper motion, $1''.45$, $120^\circ.6$.
212028. The star $+49^\circ 3823$, ptm. magn. 9.4, follows $5^\circ.2$. The spectrum is superposed and appears to be also of Class A.
212038. Proper motion, $1''.58$, $178^\circ.9$.
212044. The presence of a bright H β , suspected on the Harvard plate, has been found on photographs taken at Mt. Wilson.
212061. γ Aquarii.
212062. Suspected to be variable.
212076. The lines H β and H γ are bright and superposed on wide dark bands. Read 0,10 R, for 0,R.
212087. π^1 Gruis. Typical star of Class S. See page 10.
212132. π^2 Gruis. Read 5,10 R, for 5,R.
212243. RT Aquarii. Variable. Class II. Max. 8.7. Min. 13.1. Period, 241^d . On a photograph taken June 19, 1899, the spectrum is of Class Mc, having the line H δ bright.
- 212313,4. The spectrum is composite.
212385. The strontium lines, 4077.9 and 4215.7 are both strong, and the silicon lines 4128.1 and 4131.1 are well marked. The spectrum resembles that of ι Phoenicis, H. D. 221760, described in H.A. 28, 187, Remark 159. Read 1,10 R, for 1,R.
- 212391,2. The spectrum is composite.
212534. Index Catalogue, 5217. Planetary nebula.
212537. T Gruis. Variable. Class II. Max. 7.8. Min. 11.2. Period, 141^d . On a photograph taken June 29, 1895, the spectrum has the line H δ 0.4 as bright as H γ . The character of the spectrum is not clearly defined. Nearly all the light is between H β and H γ .
212539. S Gruis. Variable. Class II. Max. 7.4. Min. 12. Period, $401^d.8$. The spectrum appears on several photographs. On July 24, 1897, the spectrum was of Class Mb, having the lines H γ , H δ , H ζ , H η , H θ , and H ι bright.
212571. π Aquarii. The lines H β and H γ are bright. See H.A. 28, 101, Remark 164.
212581. δ Tucanae.
212593. The lines are narrow and the spectrum resembles that of β Orionis.
212617. T Piscis Austrini. The supposed variability, if real, is very small.
212636. The star $+52^\circ 3204$, ptm. magn. 9.0, follows $0^\circ.0$, north $1'.3$. The spectrum is partly superposed and appears to be also of Class A.
212678. RV Pegasi. Variable. Class II. Max. 8.8. Min. 14. Period, 390^d . On a photograph taken October 6, 1904, the spectrum is of Class Mc, having the line H δ 1.5 as bright as H γ .
- 212697,8. f Aquarii. Bu. 11715. P. A. $309^\circ.2$, Dist. $6''.72$, combined magn. 5.70.
212728. The lines are wide and hazy.
212939. The star $+48^\circ 3733$, ptm. magn. 8.6, follows $3^\circ.5$, south $0'.7$. The spectrum is partly superposed and is also of Class A.
212953. ν Gruis. Read 5,10 R, for 5,R.
213002. The star $+47^\circ 3801$, ptm. magn. 9.5, follows $0^\circ.9$, north $0'.3$. The spectrum is probably also of Class A, since the hydrogen lines of H. D. 213002 are very wide.
213009. δ^1 Gruis.
- 213051,2. ζ Aquarii. Bu. 11743. P. A. $317^\circ.0$, Dist. $2''.95$, combined magn. 3.75.
213080. δ^2 Gruis.
213087. The lines are rather narrow. The second observation was made on C 18322.
213191. S Lacertae. Variable. Class II. Max. 7.9. Min. 13.0. Period, 238^d . On a photograph taken November 30, 1907, the spectrum is of Class Mc, having the line H δ 5 times as bright as H γ .
213213. In the Bonn Durchmusterung, the declination of this star is $3'.5$ south of the correct position.
213296. ζ Piscis Austrini. Read 0,10 R, for 0,R.
213306. δ Cephei. Variable. Class IV. Max. 3.7. Min. 4.6. Period, $5^d.366386$. The spectrum changes from Class F5 to G0. See H.A. 56, 110, Remark 164. The velocity varies in a period which agrees with that of the variation in light. With H. D. 213307, Bu. 11772, P. A. $191^\circ.5$, Dist. $40''.94$.
- 213310,1. The spectrum is composite. From (H) to the end of shorter wave length, only the spectrum of the A0 star is visible.
213320. σ Aquarii.
213398. β Piscis Austrini.
213442. ν Tucanae.
- 213470,1. Bu. 11778. P. A. $357^\circ.2$, Dist. $14''.91$, magn. 6.7 and 10.0. The lines are very narrow and numerous strong lines resemble those in the spectrum of α Cygni. A trace of the G band is interpreted to belong to the spectrum of the fainter component.
213488. This star is S. D. $-23^\circ 458$, magn. 9.1, and C. DM. $-22^\circ 15939$, magn. 8.9.
- 213503,4. The spectrum is composite.
213558. The lines are broad.
213609. Bu. 11789. P. A. $148^\circ.7$, Dist. $12''.60$, magn. 8.5 and 8.7. The lines are double, and both spectra are probably near Class F.
213687. The class is uncertain. A strong line between H γ and H δ may be 4026.
213757. The lines are indistinct. Probably of Class B2 or B3.
213797. R Indi. Variable. Class II. Max. 8.5. Min. 12.5. Period, 216^d . On a photograph taken September 14, 1904, the spectrum is of Class Ma having the line H δ 4 times as bright as H γ .
213798. ρ Cephei.
213837. SS Pegasi. Variable. Class II. Max. 8.2. Min. <12.5 . Period, 412^d . On a photograph taken November 12, 1904, the spectrum is of Class Mc, having the line H δ 6 times as bright as H γ .
213845. ν Aquarii.
- 213973,4. The spectrum is composite. Bu. 11828. P. A. $274^\circ.5$, Dist. $0''.68$, magn. 6.6 and 7.1.
213975. The star $+49^\circ 3897$, ptm. magn. 8.6, follows $2^\circ.4$, north $2'.2$. The spectrum is partly superposed and is of Class B8 or A0.

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213985. — Aquarii. Variable. Max. 9.0. Min. 9.8. Probably of the Algol type.
213991. Perhaps of Class B8.
213998. η Aquarii. The lines are broad.
- 214167.8. 8 Lacertae. Bu. 11839. P. A. $185^{\circ}.0$, Dist. $22^{\prime}.42$, combined magn. 5.38. In the spectrum of H. D. 214168, H β is a narrow bright line. See H.A. 56, 110, Remark 165.
214197. RZ Lacertae. Variable. Max. 8.6. Min. 9.2. Found to be irregular in period, but the class of spectrum suggests variability of the Algol type.
214239. Nova Lacertae. The first spectrum was obtained here on January 4, 1911, 42 days after the first chart photograph was taken. The hydrogen lines were bright, and the bright band 4640 was well developed. During February 1911, the band composed of H γ and 4363 was the strongest. On July 22, 1911, the nebular band 5007 had become the strongest. See H.A. 76, 38 for a more detailed description of the spectrum.
214351. The observation, G $_5$, on I 38860, residual 10, was rejected. The spectrum is too faint on that plate.
214369. W Cephei. Variable. Class III. Max. 8.6. Min. 9.3. Period, irregular. On the Harvard plates, the spectrum has little or no light of shorter wave length than H γ . As photographed at Mt. Wilson, the hydrogen and some other lines are bright, and in certain respects the spectrum resembles that of η Carinae.
214376. κ Aquarii.
214470. The lines are probably narrow. Read 2,10 R, for 2,8.
214511. Bu. 11862. Stars AB and D. P. A. $137^{\circ}.0$, Dist. $41^{\prime}.97$, magn. 7.46 and 8.27. The spectrum of star D, $+72^{\circ} 1051$, is seen and is probably near Class G.
214575. T Tucanae. Variable. Class II. Max. 8. Min. <14 . Period, $250^d.6$. On a photograph taken November 19, 1909, the spectrum is of Class Ma, having the line H δ 0.8 as bright as H γ .
- 214605.6. The spectrum is composite. The two components are probably nearly equal in visual brightness.
214609. The star $+14^{\circ} 4837$, ptm. magn. 8.6, follows $0^{\circ}.3$, south $4^{\prime}.9$. The spectrum is partly superposed and is of Class K.
214666. The star $+48^{\circ} 3793$, ptm. magn. 8.6, precedes $0^{\circ}.9$, north $4^{\prime}.7$. The spectrum is partly superposed and is also of Class A.
214695. The observation, F8, on I 38844, residual 16, was rejected. The region of the line K is not clearly seen on that plate.
214748. ϵ Piscis Austrini.
214791. W Gruis. Variable. Class V. Max. 9.5. Min. 10.0. Period, $1^d.47603$.
214846. β Octantis.
214850. The line H δ is strong for this class.
214923. ζ Pegasi.
214952. β Gruis. See H.A. 28, 189, Remark 213.
214975. Z Lacertae. Variable. Class IV. Max. 8.5. Min. 9.3. Period, $10^d.89$. The spectrum changes from Class F $_5$ at maximum to G $_5$ near minimum.
214994. o Pegasi.
215038. The lines 4128.1 and 4131.1 are strong.
215048. This star is S. D. $-23^{\circ} 461$, magn. 8.8, and C. DM. $-22^{\circ} 16019$, magn. 8.7.
215059. SZ Aquarii. Variable. Max. 9.2. Min. <11.0 . The period is probably long. Bright hydrogen lines are suspected on one plate.
215104. ρ Gruis.
215167. g Aquarii.
215182. η Pegasi. Line 4077.9 is strong. In the distribution of light, the spectrum resembles Class G $_5$.
215254. R Lacertae. Variable. Class II. Max. 8.3. Min. 14.5. Period, $299^d.8$. On a photograph taken November 14, 1906, the spectrum is of Class Mb, having the line H δ 3 times as bright as H γ .
- 215318.9. The spectrum is composite.
215369. η Gruis.
215374. The star $-4^{\circ} 5748$, ptm. magn. 10.5, follows $0^{\circ}.4$, north $0^{\circ}.2$. The spectrum is superposed and is probably also of Class G $_5$.
215399. The spectrum is suspected to be composite. The metallic lines are strong, while line K is weak for the class.
215411. The observation, F $_5$, on Mc 6042, residual 12, was rejected. The spectrum is poorly defined on that plate.
215441. The lines 4128.1 and 4131.1 are strong.
215451. The spectrum appears to be intermediate between Classes K $_5$ and Ma.
215573. ξ Octantis.
215607. Variability has been suspected.
215648. ξ Pegasi.
215665. λ Pegasi.
215733. The line H β is suspected to be partly reversed. It is not seen as a distinct dark line.
215789. ϵ Gruis.
215848. Lines 4128.1 and 4131.1 are strong.
215899. This star is also S. D. $-2^{\circ} 5827$, magn. 9.5.
215922. The spectrum is ill-defined, due to its partial superposition upon the spectrum of H. D. 215907.
215924. U Lacertae. Variable. Class III. Max. 8.5. Min. 9.1. Period probably irregular.
216014. The line H β is not seen as a dark line, and is suspected to be bright.
216026. ST Pegasi. Variable. Class III. Max. 8.8. Min. 9.6. Period probably irregular.
216032. τ Aquarii.
216048. The observation, F8, on I 38130, residual 8, was rejected. It is too near the edge of the plate.
- 216050.1. The spectrum is composite. Bu. 11986. P. A. $299^{\circ}.3$, Dist. $0^{\circ}.48$, magn. 8.7 and 9.4. In Table I, the magnitudes and intensity refer to the combined light.
206105. X Lacertae. Variable. Class IV. Max. 8.2. Min. 8.6. Period, $5^d.44269$.
206131. μ Pegasi. The spectrum resembles that of α Bootis.
206151. RX Lacertae. Variable. Class III. Max. 8.2. Min. 9.7. Period, irregular.
216200. The lines are hazy.
216228. ι Cephei.
216300. Probably variable with a small range.

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216309. SU Aquarii. Variable. Class V. Max. 9.8. Min. 10.5. Period, unknown.
216336. γ Piscis Austrini.
216385. σ Pegasi.
216386. λ Aquarii.
216411. The lines are faint, and H β is suspected to be bright.
216435. τ^1 Gruis. Read 5,10 R, for 5,R.
216437. ρ Indi.
216533. The lines 4128.1 and 4131.1 are very strong.
216534. The lines are narrow.
216598. SW Lacertae. Variable. Class V. Max. 9.1. Min. 9.8. Period, 0^d.160357.
216627. δ Aquarii.
- 216655.6. The classification is difficult, owing to the superposition of the two spectra.
216676. TT Aquarii. Variable. Max. 10.5. Min. 11.5. Other facts are unknown.
216692. V Piscis Austrini. Variable. Class III. Max. 8.4. Min. 9.7. Period, probably irregular.
216735. ρ Pegasi. Read 0,10 R, for 0,R.
216763. δ Piscis Austrini. Line 4227 is 0.8 as strong as in the typical star.
216823. τ^3 Gruis. Read 1,10 R, for 1,R.
216851. A star of about 8.5 magn. follows 1^s, south 0'.5. The spectrum is superposed and makes the classification of H. D. 216851 difficult.
216852. The lines appear to be narrow.
216907. S Aquarii. Variable. Class II. Max. 8.0. Min. 14.2. Period, 279^d.7. On a photograph taken October 11, 1899, the spectrum is of Class Mb, having the lines H γ and H δ equally bright.
216956. α Piscis Austrini. A typical star of Class A₃. Proper motion, 0".14. The lines are broad and appear to differ in width on various plates.
217023. Suspected to be a dwarf.
217086. The spectrum is indistinct on several photographs which were examined. The class is uncertain.
217146. The star -6° 6114, ptm. magn. 10.5, follows 0'.8, south 1'.3. The spectrum is partly superposed and appears to be also of Class G.
217357. The spectrum shows the characteristics of dwarfs.
217364. ξ Gruis.
217401. Numerous metallic lines are seen, and a trace of the G band. Perhaps composite.
217431. This star is S. D. -23° 465, magn. 8.3, and C.D.M. -22° 16154, magn. 8.5.
217476. The lines are narrow, and their intensities resemble those in the spectrum of δ Canis Majoris, H. D. 54605.
217602. Lines 4128.1 and 4131.1 are well marked.
- 217675.6. \circ Andromedae. The spectrum is composite. The lines of the spectrum of the fainter component are narrow. See H.A. 28, 100, Remark 156.
- 217738.9. H. D. 217738, which precedes 1^s.0, north 0'.2, is about 0.4 magn. fainter than H. D. 217739 on a chart plate. Both spectra may be of Class G.
217775. The observation, F8, on B 24584, residual 13, was rejected. The spectrum is too near the edge of that plate.
217792. π Piscis Austrini. Read 0,10 R, for 0,R.
217891. β Piscium. H β , H γ , and H δ are bright and superposed upon dark bands.
217894. This star is S. D. -23° 467, magn. 7.1, and C. DM. -22° 8315, magn. 7.2.
217902. κ Gruis.
217906. β Pegasi. Variability to the extent of 0.5 magn. is suspected. Read 0,10 R, for 0,R.
217949. RW Pegasi. Variable. Class II. Max. 9.6. Min. 14.1. Period, 209^d. On a photograph taken November 7, 1910, the lines H γ and H δ are bright and superposed on a faint spectrum, the character of which is not clearly defined.
217987. The spectrum shows the characteristics of dwarfs. Parallax 0".29, Proper motion, 7".0, 80".5.
218045. α Pegasi. The lines are somewhat broad.
218060. h Aquarii.
218195. All lines are indistinct, so that the exact class is uncertain. The line H β is barely seen and may be bright.
218215. This star is S. D. -23° 468, magn. 9.1, and C. DM. -22° 16188, magn. 9.0.
218227. θ Gruis.
218240. c^1 Aquarii.
218242. ν Gruis.
- 218257.8. The spectrum is composite. Bu. 12160. P. A. 72".7, Dist. 0".3 \pm , magn. 7.0 and 9.3.
- 218268.9. Innes 23^h 4. P. A. 258".9, Dist. 8".33, combined magn. 5.65. No peculiarity is observed, and both spectra may be of Class F₅. Read 3,10 R, for 3,R.
218280. This star is S. D. -23° 469, magn. 8.2, and C. DM. -22° 16192, magn. 8.1.
218282. This star is C.P.D. -27° 7493. The declination in the Cordoba Durchmusterung is about 3' too far south.
218292. R Pegasi. Variable. Class II. Max. 7.5. Min. 13.2. Period, 377^d.5. On a photograph taken November 2, 1912, the spectrum was of Class Mb, having the lines H γ , H δ , H ξ , and H η bright. The intensities were estimated 10, 40, 2 and 1, respectively.
218393. The lines are very narrow, and the intensities resemble those in the spectrum of α Cygni, H. D. 197345.
218527. A Piscium.
218541. Y Sculptoris. Variable. Max. 7.8. Min. 8.9. Period irregular.
218594. c^2 Aquarii. Read 5,10 R, for 5,R.
- 218640.1. c^3 Aquarii. The spectrum is composite. See H.A. 28, 188, Remark 194. Also classified Composite on B 41985, where the hydrogen lines from H ξ to H μ are seen as in spectra of Class A. The line (K) is about 0.5 as broad as (H).
218658. π Cephei.
218670. ι Gruis. The line 4227 is about 0.8 as intense as in the spectrum of α Phoenicis.
218888. This star is S. D. -23° 471, magn. 9.1 and C. DM. -22° 16232, magn. 9.2.
218942. SS Andromedae. Variable. Class III. Max. 8.9. Min. 9.6. Period, 145^d.
218997. V Cassiopeiae. Variable. Class II. Max. 7.1. Min. 12.6. Period, 231^d.5. On a photograph taken November 27, 1905, the spectrum is of Class Mc, having the line H δ 5 times as bright as H γ .

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219075. Owing to an error in identification, the spectrum of this star is given incorrectly in H.A. 56, 149. The star there intended was H. D. 221006.
219134. Parallax, $0''.16$. Proper motion, $2''.08$, $82^\circ.3$.
- 219157,8. These two stars are of nearly equal brightness on chart plates. The spectra may be alike.
219175. The star $-9^\circ 6'150$, ptm. magn. 9.4, follows $0^\circ.3$, south $0'.4$. The spectrum is partly superposed and is probably of Class G.
219215. ϕ Aquarii.
219224. It is assumed that the declination in the Bonn Durchmusterung should read $47'.8$, instead of $49'.8$.
219285. The spectrum is very faint and indistinct on the second plate. Class uncertain.
219346. TY Andromedae. Variable. Class II. Max. 8.2. Min. 10.0. Period, 144^d . On a photograph taken January 12, 1906, the spectrum is of Class Mc, having the line H δ bright.
219390. This star is S. D. $-23^\circ 472$, magn. 8.8, and C. DM. $-22^\circ 16258$, magn. 8.5.
219449. ψ^1 Aquarii.
219512. The spectrum shows some characteristics of the composite type.
219571. γ Tucanae.
219576. χ Aquarii.
219590. Suspected to be variable in a small range.
219614. A star about 0.5 magn. fainter than H. D. 219614, precedes 3° , south $0'.6$. The spectrum is probably also of Class G.
219615. γ Piscium. H γ is strong for this class.
219617. Proper motion, $1''.31$, $202^\circ.9$.
219688. ψ^2 Aquarii.
219693. ϕ Gruis.
219749. The lines 4128.1 and 4131.1 are the strongest except those of hydrogen.
219765. τ Octantis.
219784. γ Sculptoris.
219832. ψ^3 Aquarii.
219871. In the Cordoba Durchmusterung for minutes of declination, read 42.7, instead of 32.7.
219916. o Cephei.
219946. W Pegasi. Variable. Class II. Max. 7.5. Min. 13.5. Period, 341^d . On a photograph taken December 23, 1908, the spectrum is of Class Mc, having the line H δ 8 times as bright as H γ .
- 220002,3. The spectrum is composite. Innes $23^b 25$. P. A. $209^\circ.8$, Dist. $16''.4$, combined magn. 6.11. See also H.A. 56, 157, Remark 280.
220009. b Piscium.
220022. This star is S. D. $-23^\circ 473$, magn. 8.9, and C. DM. $-22^\circ 16291$, magn. 9.0.
220033. S Pegasi. Variable. Class II. Max. 7.3. Min. 13.1. Period, $317^d.5$. On a photograph taken September 25, 1906, the spectrum is of Class Mc, having the line H δ 4 times as bright as H γ .
220061. τ Pegasi. Read 3,10 R, for 3,R.
220292. SV Aquarii. Variable. Class III. Max. 8.4. Min. 9.4. Period probably irregular.
220294. This star is S. D. $-23^\circ 474$, magn. 9.2 and C. DM. $-22^\circ 16298$, magn. 9.3.
220300. The line K is strong for this class.
220321. b^1 Aquarii.
- 220391,2. Innes $23^b 28$. P. A. $211^\circ.2$, Dist. $25''.8$.
220515. RU Aquarii. Variable. Class III. Max. 8.7. Min. 9.7. Period, probably irregular.
- 220636,7. The spectrum is composite.
220657. v Pegasi.
220704. b^2 Aquarii.
220719. Proper motion, $1''.59$, $90^\circ.6$.
- 220723,4. Bu. 12363. P. A. $194^\circ.8$, Dist. $62''.94$.
220729. o Gruis. Read 2,10 R, for 2,R.
220733. N.G.C. 7662. Planetary nebula. Typical nebula of Class Pe. See page 5.
220825. κ Piscium. The line 4077.9 is strong, and the spectrum resembles that of θ^1 Microscopii.
220954. θ Piscium.
221006. The lines 4128.1 and 4131.1 are strong.
221231. The star C.P.D. $-69^\circ 3324$, magn. 9.0, precedes $2^\circ.0$, south $0'.6$. The photometric magnitude refers to the combined light of that star and H. D. 221231.
221256. This star is S. D. $-23^\circ 475$, magn. 9.1, and C.D.M. $-22^\circ 16343$, magn. 9.0.
221354. Proper motion, $1''.08$, $85^\circ.2$.
221433. V Phoenicis. Variable. Class II. Max. 8.5. Min. <12 . Period, 251^d . On photographs taken September 21 and 22, 1908, the spectrum is of Class Mb, having the lines H γ and H δ equally bright.
221507. β Sculptoris.
221565. b^3 Aquarii. The lines are broad.
221650. Z Andromedae. Variable. Class III. Max. 8.3. Min. 11.4. Period, irregular. The spectrum is very peculiar. On a photograph taken October 17, 1900, the lines H β , H γ , H δ , H ϵ , and 4686 are bright. See H.A. 76, 27, H. B. 797, and H. C. 168.
221700. Y Piscium. Variable. Class V. Max. 9.0. Min. 12.1. Period, $3^d.76582$.
221760. ι Phoenicis. Numerous well-marked lines are present, among which 4077.9 and 4215.7 are strong.
- 221782,3. The lines are narrow. The presence of numerous faint lines seems to indicate a fainter component of Class G.
221809. The star $+51^\circ 3650$, ptm. magn. 8.6, precedes $0^\circ.3$, north $3'.5$. The spectrum, which is partly superposed, appears to be of Class K.
222107. λ Andromedae. Line 4227 is stronger than in the spectrum of α Bootis. Read 0,10 R, for 0,R.
222140. This star is C. DM. $-59^\circ 8173$, magn. 9.7, and is not contained in the Cape Photographic Durchmusterung.
222173. ι Andromedae.
222241. ST Andromedae. Variable. Class II. Max. 8.3. Min. 12.4. Period, 299^d .
222293. SV Cassiopeiae. Variable. Class II. Max. 7.5. Min. 9.2. Period, 272^d .
222303. The spectrum is faint, and is perhaps of Class A5. The magnitude 7.8 in the Bonn Durchmusterung may be an error for 8.7, which is the magnitude in the Catalogue of the Gesellschaft.

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222340. The lines 4128.1 and 4131.1 are probably stronger than normal.
222345. ω^1 Aquarii.
222368. ι Piscium. Parallax, 0".11.
222404. γ Cephei. The spectrum resembles that of α Cassiopeiae.
222433. μ Sculptoris. Read 5,10 R, for 5,R.
222439. κ Andromedae.
222547. A^1 Aquarii.
222574. A^2 Aquarii.
222603. λ Piscium. Read 0,10 R, for 0,R.
222661. ω^2 Aquarii.
222800. R Aquarii. Variable. Class II. Max. 6.0. Min. 10.8. Period, 387^d.1. The spectrum is of Class Mc, and near maximum, the lines H γ , H δ , H ζ , H η , H θ , and H ι are bright. On photographs taken with the large reflectors at Mt. Wilson, the nebular lines 5007, 4959, and 4363 are also present.
222847. i^1 Aquarii.
222914. Z Cassiopeiae. Variable. Class II. Max. 8.6. Min. 15.1. Period, 499^d.3. On a photograph taken October 28, 1905, the spectrum is of Class Mb, having the line H δ bright.
223024. i^2 Aquarii.
223036. Perhaps of Class Oe5.
223047. ψ Andromedae. The line K is slightly fainter than normal for the class and the spectrum is suspected to be composite.
223075. 19 Piscium. Probably variable in a small range. Typical star of Class Na. See page 11.
223145. σ Phoenicis.
223147. The observation, A5, on B 12082, residual 10, was rejected. The definition is poor.
223165. τ Cassiopeiae.
223182. This star is S. D. $-23^\circ 476$, magn. 7.5 and C. DM. $-22^\circ 16450$, magn. 7.7.
223248. The class is uncertain, as the spectrum is partly superposed on that of H. D. 223249, which follows 0^c.3, south 1'.7.
223297. The star $+65^\circ 1947$, ptm. magn. 8.6, follows 3^s, north 8'.5. The spectrum is partly superposed and appears to be of Class K.
223352. δ Sculptoris. Read 0,10 R, for 0,R.
223384. The line H δ is strong for this class.
223385. The lines are very narrow.
223392. Typical star of Class R3. See page 10.
223418. This star is S. D. $-23^\circ 477$, magn. 9.0, and C. DM. $-22^\circ 16463$, magn. 9.3.
223440. This is S. D. $-23^\circ 478$, magn. 9.1, and C. DM. $-22^\circ 16466$, magn. 7.7.
223546. This is S. D. $-23^\circ 479$, magn. 8.0, and C. DM. $-22^\circ 16472$, magn. 7.7.
223608. TZ Andromedae. Variable. Class III. Max. 7.2. Min. 8.7. Period, probably irregular.
223615. A star which is about 0.8 magn. fainter than H. D. 223615 precedes 2^s, north 0'.6. The superposition of the two spectra renders the image indistinct.
223640. i^3 Aquarii. The lines 4128.1 and 4131.1 are strong.
223647. γ^1 Octantis.
223737. Z Aquarii. Variable. Class II. Max. 7.3. Min. 9.5. Period, 216^d. The spectrum shows only a trace of the characteristic features of Class M. On September 13, 1895, the line H δ was 0.3 as bright as H γ .
223768. ϕ Pegasi.
- 223838,9. Bu. 12613. P. A. 278^o.8, Dist. 19".16, combined magn. 6.80.
- 223932,3. The spectrum is composite.
223947. This star is C. DM. $-22^\circ 16496$, magn. 9.4, and is not contained in the Southern Bonn Durchmusterung.
224014. ρ Cassiopeiae. The lines are narrow and very sharply defined. The spectrum resembles Class K0 in the region of H β . The star may be variable in a small range.
224055. The lines are poorly defined. The class appears to be B0 or Oe5.
- 224083,4. Bu. 12628. P. A. 143^o.4, Dist. 111".56, combined magn. 6.23.
224112. The spectrum shows only the hydrogen lines. It may also contain helium lines but, if so, they are lost by the superposition on the spectrum of H. D. 224113.
224119. The spectrum is suspected to be composite.
224126. RS Andromedae. Variable. Class III. Max. 7.0. Min. 9.0. Period, irregular.
224151. The line K is strong for this class. The lines may be narrow.
224257. The star $+55^\circ 3049$, ptm. magn. 8.5, precedes 4^s.4, north 2'.3. The spectrum, which appears to be of Class G, is partly superposed and makes the classification of H. D. 224257 difficult.
224269. R Phoenicis. Variable. Class II. Max. 7.4. Min. 13.0. Period, 270^d. On a photograph taken September 29, 1914, the spectrum is of Class Ma, having the line H δ 0.7 as bright as H γ .
224275. The observation, F8, on I 37937, residual 15, was rejected. The spectrum is too faint on that plate.
224309. V Cephei. Formerly supposed to be variable. See H.A. 55, 67.
- 224310,1. H. D. 224310 follows 7^s, north 1'.1.
224362. γ^2 Octantis.
224379. R Tucanae. Variable. Class II. Max. 10.2. Min. <12.6 . Period, 286^d.0. On a photograph taken August 25, 1891, a very faint spectrum is seen, in which H δ appears to be bright.
224392. η Tucanae. Read 2,10 R, for 2,R.
224427. ψ Pegasi.
224436. The spectrum may be nearer to Class Oe5 than to B0.
224442. V Ceti. Variable. Class II. Max. 8.9. Min. 14.0. Period, 261^d. On a photograph taken September 3, 1894, a very faint spectrum shows the line H γ to be bright.
224481. The absorption in the region of 4227 is greater than normal.
224490. R Cassiopeiae. Variable. Class II. Max. 4.8. Min. 13.2. Period, 431^d.6. A larger number of photographs of the spectrum show it to be of Class Mc, in which H δ is from 7 to 10 times as bright as H γ .
224554. π Phoenicis.
224572. σ Cassiopeiae. Read 1,10 R, for 1,R.
224583. S Phoenicis. Variable. Class II. Max. 7.2. Min.

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- 8.7. Period, $151^d.2$. A photograph taken August 31, 1910, shows the spectrum to be of Class Mb, having the line $H\delta$ 0.5 as bright as $H\gamma$.
224602. The star $+40^\circ 5199$, ptm. magn. 8.4, precedes $2^s.1$, south $2'.0$. The spectrum is superposed and is of Class G.
224617. ω Piscium.
- 224635,6. Bu. 12675. P. A. $216^\circ.8$, Dist. $2''.36$, combined magn. 5.83.
- 224646,7. The spectrum is composite. Aitken 1498. P. A. $67^\circ.6$, Dist. $0''.38$, magn. 8.3 and 8.6.
224686. ϵ Tucanae.
224709. Z Pegasi. Variable. Class II. Max. 8.3. Min. <13.5 . Period, $319^d.7$. On a photograph taken September 28, 1897, the spectrum is of Class Mc, having the line $H\delta$ bright.
224738. The hydrogen lines are narrow. Other lines are indistinct. The spectrum may be composite.
224801. The lines 4128.1 and 4131.1 are strong.
224802. The star $+37^\circ 4915$, ptm. magn. 9.5, precedes $4^s.0$, south $2'.8$. The spectrum is partly superposed and is of Class K.
224834. τ Phoenicis.
224855. Probably variable to the extent of 0.5 magn. The spectrum is slightly peculiar in the relative intensities of the bright portions.
224873. Bu. 12696. P. A. $331^\circ.4$, Dist. $0''.28$, magn. 8.5 and 8.9.
224889. θ Octantis.
224890. Solar lines are numerous. The lines 4077.9, 4128.1 and 4131.1 are especially well marked.
224960. W Ceti. Variable. Class II. Max. 6.5. Min. 12.0. Period, 366^d . On a photograph taken August 18, 1908, the spectrum is of Class Mb, having $H\delta$ 4 times as bright as $H\gamma$.
224990. ζ Sculptoris.
225003. c Piscium.
- 225009,10. Bu. 12704. P. A. $70^\circ.7$, Dist. $15''.03$, combined magn. 5.77.
225041. RU Sculptoris. Variable. Max. 9.8. Min. 10.7. Other facts unknown.
- 225066,7. Bu. 12719. P. A. $85^\circ.0$, Dist. $16''\pm$, magn. 9-10, and 10. The spectrum is hazy. Both stars may have spectra near Class F.
225082. Y Cassiopeiae. Variable. Class II. Max. 9.0. Min. 13.9. Period, 411^d . On a photograph taken November 26, 1904, the spectrum is of Class Mb, having $H\delta$ very bright.
225095. The line $H\beta$ is bright.
225114. The lines 4128.1 and 4131.1 are strong.
225192. SV Andromedae. Variable. Class II. Max. 8.0. Min. 13.5. Period, 318^d . On a photograph taken September 28, 1903, the spectrum is of Class Mc, having the line $H\delta$ bright.
225213. Line 4227 is very strong. Proper motion, $6''.29$, $114^\circ.2$.
225217. SU Andromedae. Variable. Class III. Max. 7.9. Min. 8.5. Period, irregular.

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