

KG
11366
137

No. 11.

PROGRESS OF DRAPER CATALOGUE.

H. A. 27.

KG.11366.137

Table for I class

Left-hand pages.

D.C. or Current No.

R.A. 1900

Dec. 1900

Sp.

Magn.

Revol.

Obs. Per.

End.

FK

N.

Right-hand pages.

D.M. No.

D.M. Magn.

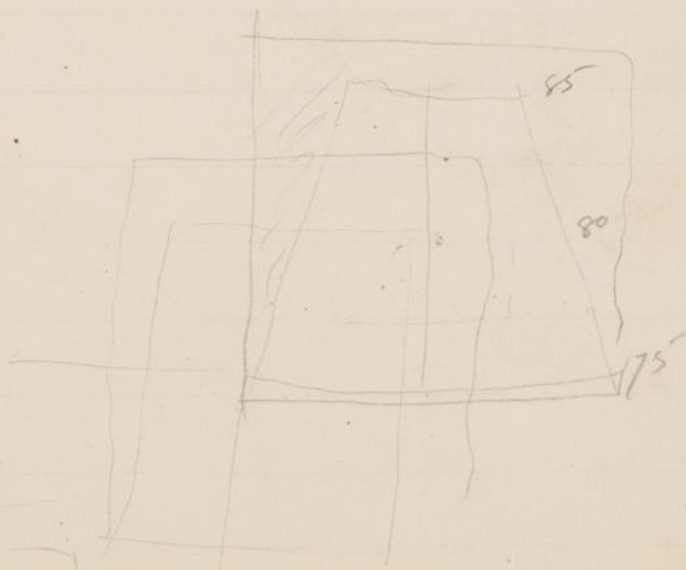
Plate Numbers

Comp. Brightness

~~D.M. R.A. and Dec.?~~

D.C. Spectrum P

D.C. Magn. P



KG 11366.137



List of work on hand.

Dm. P. Stars.

1900 Checked. Ent.

- ✓ HP.
- ✓ B.A.C.
- ✓ N.A.
- ✓ Comp. Spectr.
- ✓ Rosin
- ✓ miscell.
- ✓ Write Catalogue in order of R.A.
- ✓ Enter Dm Nos & Magns.
- ✓ " HP. & N.A. Standard Nos. & Magns.

Read Dm. magns with D.C. ^{or at 1st of hour} after D.C. is checked.

Shaper Catalogue.

✓ Check 22" & 23"

✓ Look up discordant spectra

Write remarks

✓ Make list of large residuals for second half of Catalogue

✓ Make second measure of large residuals

Revise identifications of discordant spectra

✓ " " " large residuals

✓ III type

sup.

Check Catalogue residuals in D.C. by Cat. C.

Photo.

" " " " " by taking their sum

Read

" " " " by Cat. C.

✓ Canis Minor. Change to Cm.

✓ N.A. Standard = 8 following No.

✓ Sextans = Sx

✓ Serpens Cauda = Sc

✓ Serpens Caput = St

✓ All stars in D.C. south of $+10^{\circ}9'$ not in N.A. or A.B.C. to be marked in column of Cat. Residuals✓ Make list of stars ^{in D.C.} south of the Tropic in N.A. & not in A.B.C.

D.C. list continued on page 8.

List of Work on Hand.

C. Catalogue (N & L. C.).

- ✓ Make entries in Second Cycle Cat. of H.P. Stars.
- ✓ Write Catalogue for D.M. Stars at N. & L. C.
Make list of large residuals
Measure same.
- Look up & make list, & measure D.M. stars at N.C.
already measured at N. & L. C.
M.F. Measure same.
- ✓ Red. to 1900.
- ✓ Write ^{Brightness} Cat. for 3 cycles combined in order of R.A.
- ✓ Write working Catalogue of N. & H.C. Stars, entering D.M. No.
R.A. 1900. Plate Nos. for 3 cycles, Mean Br. for 3 cycles, Cor. Br. at N.C. for 3 cycles.
- ✓ Write working Catalogue of L.C. Stars, entering D.M. No. R.A. 1900
Plate Nos. for 3 cycles Mean Br. for 3 cycles
Take means and residuals of corrected brightness for stars at N.C.
Find mean of residuals for each plate and apply correction to corrected by
entering in column headed Second approximation ^(Continued on p. 10) Series Double Stars.
- ✓ Make list of residuals of 3 & greater
- ✓ Reduce measures of Pleiades.
Write Catalogue of Plates.
- ✓ Write Catalogue of Double Stars.
make list for measurement of positions.

Miscellaneous.

- ✓ Make corrections in H.A.
- ✓ Make additional corrections in H.A.
- ✓ Make table of B. Plates. R.A. Plate No. Quality
- ✓ " " " D " " " "
- ✓ " " " H " " Dec. " "
- ✓ " " " L 52 " " " "
- ✓ " " " L 12 " " " "
- ✓ To be made on half sheets of paper, 20 entries on a page. First & second cycles combined in order of R.A. & of plate No. for each R.A.

- ✓ Diurnal variation in Cloudiness at H.C. Observatory.

Make reduction to 1900 for all B.G.C. stars ^{north of -80°} from table ^{of positions} computed for 25 years. Stars south of -80° to be computed directly from position given + sec. var.
 Two copies to be reduced & compared

- ✓ Make corrections in D.M. and examine D.C. to see that it agrees with corrected positions as reduced to 1900.

Pikes Peak Meteorological Observations.

- ✓ Make table in order of R.A. of A/H/K^{90°} and J for measurement of λ and ^{air} adj. class
 Form for above table. No Pl. Date. Cl. Obs. Br. Magn. Read.
 already made in plates used for Pole Catalogue, for standards on Equatorial plates (J) and on K plates.
 Enter measures for standards 14, 15, 16, 17, 18, 19 and 20.

For ϕ plates north of +60° enter class of stars in D.C. in cast proof of Table I

- ✓ Make Table of Constellations for D.C.

I. Plates.

a = Read up plates from the Pole to $+60^\circ$ inclusive
 $90^\circ \ 85^\circ \ 80^\circ \ 75^\circ \ 70^\circ \ 65^\circ \ 60^\circ$
 abcd abcd abc

b = Identify from Dr. Charts

c = Identify from Dr. Catalogue

d = Reduce to 1900.

Form Catalogue on whole sheets
 allowing one page to each minute
 in R.A.

Draper Catalogue (Continued from page 42)

- ✓ Make list of stars having a dot or query for limits in D.C.
- ✓ Look up limits & enter letter for same in D.C.
- ✓ Examine D.C. for stars ^{having differently images} measured on same plate & if one or both measures of brightness are not underlined look up in observing book & examine limits of V and H.
- ✓ Read 1st D.C. (D) with Cat. C.
- ✓ Look up on 1 plates stars on G. F. & G. plates, not in Dm. find their positions & add to D.C.

✓ Make table of ~~A.G.~~ N.A. stars differing in magnitude from A.G.C.

July 31, 1889

- ✓ Examine each Dm. zone in D.C. and see that Dm. Nos. follow consecutively. Make notes where they do not and examine ^{Dm.} catalogue for identification and reduction to 1900. This examination is made to ~~prevent~~ stars being entered in wrong zone in D.C.
-

C. Catalogue. (U. & L. Cul.).

See page 5.

For stars on plates having no corrected brightness derived from H.P. take difference between means and uncorrected brightness. Find mean of differences for each plate and apply it to mean br. entering in column headed second approximation.

Take mean ∇ residuals and apply correction for Dec. to give final magnitudes.

For observations at lower Culmination apply correction obtained from mean of H.P. stars at U.C., + correction obtained in second approximation. Enter magn. of star at U.C. obtained in second approximation, and take the difference between corrected magnitudes at Upper and Lower Culminations.

Make count of stars sufficiently observed at Upper Culmination for every 10 m. in R.A.

Make list of residuals of 6 and greater, giving plate number, observed brightness and residual.

Second measure made for residuals of 6 and greater. Where difference between first and second measures was 5 and greater a third measure was made. When the first measure proved to be wrong it was rejected and the second was used adopted to find the magnitude of the star in the second approximation.

2. Determine Atmospheric Absorption from L.C.

- ✓ A. Enter magn. at upper culmination.
- B. Subtract magn. at upper culm. from magn. at lower culm.
- C. Group diff. (B) according to declination for 12^h for each degree 5° S to 60° S N.
- D. Construct curve of mean absorption on right of average clearness.
- E. Enter mean absorption from curve D for each star on each night.
- F. Take sum of observed absorptions and divide by sum of mean absorptions = $\Delta B - \Delta E$.
- G. Multiply mean absorption E for each star by quotient F.
- H. Subtract G from B and enter residual in Catalogue of lower culmination.
- I. Group from residuals for each degree of altitude.
- J. In Catalogue of plates enter second approximation of constant and residuals of all stars, also residuals at lower culmination mean absorption I, hour angle and thermometer.
- ✓ K. Complete entry for absorption for all stars at L.C. (D. and G.)
- ✓ L. Subtract computed absorption from corrected obs. br., and enter in working Cat. for L.C., take means and resid. at same time enter final resid.
- ✓ M. Make cat. of C plates in order of No.

Progress of Work

- a = Examination of Discordant Spectra on plates.
 b = " " " " in catalogue.
 c = Revision of identification of discordant spectra from charts.
 d = Checking of correction for Dec. + atmospheric absorption.
 e = " " Catalogue & Photographic residuals + stars " measured twice on one plate, having no fixed index measure of brightness.
 f = " " Corrected brightness.
 g = Reading of Catalogue D with Catalogue C. completed & sent to printer.
 h = proof read & checked. (Table I).
 i = List examined (Table I)
 j = Remarks written up.
 k = Grouping of Dr. Jones Numbers in D.C.

No stars.	564	601	592	567	519	610	543	450	403	415	328	406
C. No. stars.	564	1165	1757	2324	2843	3453	3996	4446	4849	5264	5592	5948
	h	h	h	h	h	h	h	h	h	h	h	h
	0	1.	2.	3	4	5	6	7	8	9	10	11

a	.	.	.	.	.	.	.	.	.	.	.	.
b	.	.	.	.	.	.	.	.	.	.	.	.
c	.	.	.	.	.	.	.	.	.	.	.	.
d	June 19.	June 20.	June 20.	June 19.	June 19.	June 19.	June 21.	June 20.	June 20.	June 20.	June 20.	June 22.
e	May	May	May	May	May	May	May	May	May	May	June	June
f	June 1.	June 8.	June 14.	June 19.	June 27.	July 2.	July 8.	July 15.	July 17.	July 20.	July 23.	July 25.
g	June 5.	June 12.	June 15.	June 25.	July 1.	July 5.	July 10.	July 16.	July 18.	July 24.	July 26.	July 29.
h	June 18.	June 25.	July 5.	July 15.	July 20.	July 24.	July 30.	Aug. 4.	Aug. 8.	Aug. 10.	Aug. 16.	-
i	June 20.	July 8.	July 10.	July 19.	July 24.	July 27.	Aug. 1.	Aug. 5.	Aug. 11.	Aug. 13.	Aug. 17.	-
j	June 29.	July 23.	July 26.	Aug. 7.	Oct. 19.	July 8.	July 12.	July 18.	July 20.	July 25.	July 29.	July 31.
k	Aug.	Aug.	Aug. 4.	Aug. 7.	Aug. 9.	Aug. 9.	Aug. 9.	Aug. 9.	Aug. 9.	Aug. 9.	Aug. 5.	Aug. 6.

on Draper Catalogue.

M. F. ✓
 J. T. R. ✓
 J. T. R. & M. F. ✓
 J. T. R. ✓
 J. T. R. ✓
 J. T. R. & L. D. W. ✓
 J. T. R. & M. C. S. ✓
 M. C. S. & F. C. ✓
 M. F. ✓
 M. F. & M. C. S. ✓
 F. C. & G. G. ✓

330	312	264	304	264	426	653	460	296	304	423	464
6328	6640	6904	7208	7472	7898	8551	9011	9307	9611	10034	10498
12	13	14	15	16	17	18	19	20	21	22	23

June 19. June 19. June 20. June 21. June 24. June 27. July 8. July 10. July 12. July 15.
 June 20. June 20. June 21. June 22. July 3. July 3. July 10. July 10. July 13. July 16.
 June 22. July 7. July 11. July 23. July 27. July 30. Aug 6. Aug 14. Aug 17. Sept 7.
 June 22. June 24. June 24. June 24. June 24. June 24. June 25. June 25. June 25. June 25. June 25. June 25.
 June June 22. July 13. July 15. July 25. July 31. Aug 8. Aug 8. Aug 14. Sept 5. Sept 9. June 22.
 July 26. July 26. July 26. July 27. July 29. Aug 9. Aug 13. Aug 13. Aug 15. Sept 7. Sept 10. Aug 16.
 Aug 10. Aug 13. Aug 15. Aug 15. Sept 5. Sept 13. Sept 21. Sept 24. Sept 30. Oct 2. Oct 9. Oct 14.
 Aug 28. Sept 9. Sept 13. Sept 18. Sept 21. Sept 26. Oct 7. Oct 12. Oct 17. Oct 22. Nov. Nov.
 Sept. 6. Sept 13. Sept 14. Sept 25. Sept 25. Oct 1. Oct 10. Oct 15. Oct. Nov. Nov. Nov.
 Aug 13. Aug 15. Aug 15. Aug 16. Sept 10. Sept 14. Sept 21. Sept 27. Sept 30. Oct 4. Oct 9. Oct 15.
 Aug 9. Aug 10. Aug 11. Aug 11. Aug 12. Aug 15. Aug 16. Aug 17. Sept 3. Sept 5. Sept 12. Sept 13.

Progress of Work on

- a Checking of Glass of Spectrum
 b Checking Nos. of remarks with Catalogue D and last proof
 c Changing form of remarks etc.
 d Checking limits and value of K line
 e Copy sent to Printer.
 f Proof received and checked. (Table II).
 g Cast examined
 h Tabulation of add. lines according to wavelengths and D.C. ^{Class} _{Number}
 i Reexamination of plates for residuals of H and He taken from Table III.

No. Stars	564	601	592	567	519	610	543	450	403	415	328	406
D.C. Class No.	564 _N	1165 _N	1757 _N	2324 _N	2843 _N	3453 _N	3996 _N	4446 _N	4849 _N	5264 _N	5592 _N	6998 _N
	0	1	2	3	4	5	6	7	8	9	10	11
a	Nov	Nov	Nov	Nov	Nov	Nov	Nov	Nov. 19	Nov. 25	Nov. 29	Dec. 2	Dec. 5 ⁺
b	Nov. 16	Nov. 22	Nov. 22	Nov. 22	Nov. 22	Nov. 22	Nov. 22	Nov. 23	Nov. 23	Nov. 26	Nov. 26	Nov. 26
c	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.
d	Nov. 16	Nov. 18	Nov. 20	Dec. 5	Dec. 18	Dec. 21	Dec. 5	Dec. 17	Dec. 17	Dec. 28	Jan. 3	Jan. 4
e	Nov. 16	Nov. 22	Nov. 26	Dec. 19	Dec. 19	Dec. 26	Dec. 26	Dec. 26	Dec. 26	Dec. 26		
f	Dec. 6	Jan. 1	Jan. 10	Jan. 20	Jan.	Feb.	Feb. 20	Feb. 25	Feb. 26	Feb. 26		
g	Dec. 12	Jan. 8	Jan.	Jan.	Feb.	Feb. 24						
h	-	-	-	-	-	-	-	-	-	-	-	-
i	Jan.	Jan.	Jan.	Jan.	Jan.	Feb.	Feb. 20	Feb. 25	Jan. 29	Jan. 29	Jan. 29	

Draper Catalogue. Table II.

M.C.S. and M.F.

M.C.S.

M.C.S.

F.C., E.L.,

330	312	264	304	264	426	653	460	296	304	423	464
6328	6640	6904	7208	7472	7898	8551	9011	9307	9611	10034	10498
12 ^h	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h
Dec. 7	Dec. 30	Dec. 30	Jan. 4	Jan. 7	Jan. 14	Feb. 20	Feb. 20	Feb. 28	Oct.	Oct.	Oct.
Nov. 29	Nov. 30	Nov. 30	Nov. 30	Nov. 30	Nov. 30	Dec. 2	Dec. 2	Dec. 3	Dec. 3	Dec. 4	Oct. 4
Nov.	Nov.	Nov. 18	Nov. 18	Nov. 19	Nov. 19	Nov. 20	Nov. 20	Nov. 20	Nov. 20	Nov. 20	Nov. 20
Jan. 5	Jan.	Jan.	Jan.	Jan.	Feb.	Feb.	Feb.				

Feb. 27 Feb. 27 Feb. 27 Feb. 27 Feb. 27 Feb. 28 Mar. 1

S.H.P. and S.H.P.

- ✓ List of 100 Circumpolar Stars.
 - ✓ Apply to above list prec. for Dec. for 10 years.
 - ✓ Determine Zenith dist. of each star adding $11^{\circ}51'$ to Dec.
 - ✓ Arrange in order of zenith distance

 - ✓ A.G.C. Stars. Enter reduction to 1900.
 - ✓ S.H.P. Stars. Enter reduction to 1900.
 - ✓ Insert S.H.P. Stars in list of A.G.C. Stars.
 - ✓ Write new copy of combined catalogues in order of R.A.

 - ✓ Make catalogue of stars within 10° of south pole.

 - ✓ Enter residuals in table of H.P. Stars.
 - ✓ Adopt Constant.
 - ✓ Apply to journals
 - ✓ Enter. Series number, magn, and estimate in Catalogue

 - ✓ Prec. for Dec. for 10 years.
- | | | | | | |
|----|------|----|----|------|-----|
| 0 | 0.0 | to | 2 | 46.3 | +3' |
| 2 | 46.4 | " | 4 | 13.3 | +2' |
| 4 | 13.4 | " | 5 | 25.5 | +1' |
| 5 | 25.6 | " | 6 | 34.4 | 0 |
| 6 | 34.5 | " | 7 | 46.6 | -1' |
| 7 | 46.7 | " | 9 | 13.6 | -2' |
| 9 | 13.7 | " | 14 | 46.3 | -3' |
| 14 | 46.4 | " | 16 | 13.3 | -2' |
| 16 | 13.4 | " | 17 | 25.5 | -1' |
| 17 | 25.6 | " | 18 | 34.4 | 0 |
| 18 | 34.5 | " | 19 | 46.6 | +1' |
| 19 | 46.7 | " | 21 | 13.6 | +2' |
| 21 | 13.7 | " | 2 | 46.3 | +3' |

Miscellaneous.

- Distortion of lens (8 inch Draper Telescope).
(Bache Telescope).
- ✓ Write tables of 6, 7, & 8 plates for printer.
 - ✓ Complete measures of 7 Polar Stars.
 - ✓ Check 4 plates in table of Polar Stars, with Table I.
 - ✓ Check 5 plates with Table I.

Write any remarks necessary with regard to checking of Table I and individual Tables of plates.

Pleiades. Measure brightness.

Compare Planetary Nebulae with Type V.

Measure Saturn.

Measure enlargements of η Argus.

- ✓ Write table of D.C. Nos. entering uncorrected magnitude as found on right hand page of Catalogue C, New Book.

Measure α Centauri

Measure stars within 1° of N. Pole.

" " " " S Pole.

Look up regions containing Espino stars marked B.

Miscellaneous.

Miscellaneous.

- March 2, 1891. ✓ Comparison with Vogel
 " " " ✓ Comparison with Konkoly
 " " " ✓ Grouping of Stars of C. A. according to H. P. and D. C.
 " " " ✓ Grouping of Atmospheric Abs. according to Barm. and Thun.
 " " " ✓ Correction of Resid. L. C. stars.
 " " " ✓ Remarks on L. C. stars.
 " " " ✓ Grouping according to B. O. & H. O.
 " " " ✓ Introduction to Vol. XXVI pt. 1
 " " " ✓ Auxiliary Prism.
 " " " ✓ Scale of Spectra of B. Aurigae.
 " " " ✓ Scale of Polar Spectrum.
 " " " ✓ Measurements of blisters.
 " " " ✓ Vol. XXIII pt. 2.
 " " " ✓ Vol. XXVI pt. 2
 " " " ✓ Measurements of stars at L. C. 5th Cycle.
 March 18 " ✓ List of Northern Stars for Parallax.
 " " " ✓ List of Southern Stars for Parallax.
 March 21 " ✓ Enter R. d. & Dec. for 1900 in M. P. Cat of Polar Stars -80° to 90°. ^{with copy} when finished read.
 " " " ✓ Rewrite M. P. Polar Catalogue before taking means and resid. ^{when finished read with copy}
 " " " ✓ Check reduction of A. G. C. stars ^{in M. P. General Catalogue} by reading with 1900 positions entered in A. G. C. Cat.
 " " " ✓ Check reduction to 1900 of P. C. stars in S. M. P. General Catalogue by independent ^{proceeding Charles} reduction from ²⁵
 " " " ✓ Identify 5th Cycle N & L. C. stars from D. M. Charts ^{L. D. W. Check McS.}
 " " " ✓ Identify from D. M. Cat. N & L. C. stars. 5th Cycle
 " " " ✓ Reduce Obs. of N & L. C. stars 5th Cycle
 " " " ✓ Arrange acknowledgements of Publications, ^{in index of date} Foreign & Domestic Instit. Foreign & Domestic Individual
 " " " including ^{in index of date} for each Institution & Individual
 " " " ✓ Reduction of Intersection & Parallax & Meridians on the Moon.
 March 23 " ✓ Entering Catalogue letter in Vol. XXIV.
 " " " ✓ Measurements of spectra taken with 11 inch Tel. ^{Miss Cushman}
 " " " ✓ Reduction of C. S. M. measurements of spectra. ^{Miss Ireland}

Miscellaneous.

- June 13, 1891 Identify Objects of Interest on Spectrum Plates Miss Gill
- ✓ Check positions of Plates from Peru (5664 to 5845) Miss Gill
- Enter Plate No. in books containing regions and put ticks in bands. Miss Gill
- ✓ Reduce Observations M.P. Series to Miss Gill
- ✓ Enter " " " in Catalogue Miss Gill
- Reduce Barograph St. (H.C.O.) Miss H. Stevens
- " Thermograph " (") Miss H. Stevens
- Measurement of stars for Standards of Stellar Magnitudes Miss Leland
- Check identification of stars selected by Miss Leland.
- Reduction of Observations of Standards of stellar magn.
- Reduction to 1900 of stars selected for Standards of St. magn.
- Reduction of lines ^{in spectra} to wavelengths (C. Bates). Miss Leland
- Form Table for measures of each object. Miss Leland
- Identify wavelengths with lines in Solar Spectrum.
- Check ^{identification of} Objects of interest on Spectrum plates Miss Wells
- ✓ ~~Check~~ Identify C. Plates ^{from charts} (Trails U.C. and L.C.) Miss Wells
- ✓ Make chart of U.A. stars Dec. 79° to 90° Miss Wells
- Reduce Observations for Southern Proper Catalogue Miss Mackay
- Check identification from Chart and Catalogues for S.D.C. Miss Mackay
- ✓ Identify C. Plates from D.M. Miss Mackay
- Measure stars within $X+1000$ and $X-1000$ and $Y+1000$ and $Y-1000$ of N.Ple Miss Leland
- Measure erythrosin plates, one prism plate, and β rays. Miss Cushman
- ✓ Compute position ^{of stars} of N.C. stars magn ^{and height} ~~and height~~ ^{of photometer plates} Miss Cushman
- ✓ Make Charts of Regions on Transit Phot. Plates Miss Cushman
- ✓ Write Card Catalogue of objects of Interest Miss Cushman
- ✓ Reduce positions on Cards to 1900 Miss Cushman
- Compile Catalogue of Objects of Interest (for Printer).
- ✓ Check identification of C. Plates (U.C. and L.C.) Miss Stevens
- ✓ Derive Constant for (U.C. and L.C.) Plates Miss Stevens
- ✓ Compute absorption " " " Miss Stevens

Miscellaneous

- June 13, 1891. ✓ Add stars obs. in 5th Cycle N.C. and L.C. to N.C. Cat., L.C. Cat. and to Combined Catalogue.
- Oct. 14. " ✓ Make list of S.M.P. stars ^{mag.} 6.1 and 6.2. Miss Lewis. (27th).
- " 22. " ✓ Check " " " " " " " Miss H. Stevens
- Measure lines in Nova Aurigae Miss Cushman
- ✓ Absorption for S.M.P. Miss M. Stevens
- ~~Apply Abs. and take means & residuals~~ Miss E. Gill
- ✓ Uranometry (Mr. S.D. Bailey's). Miss M. Gill
- ✓ New Book of Ephemerides
- ✓ Reduction of Spectrum Plates Dec. $+80^{\circ}5'$ to $+85^{\circ}$
Catalogue of Obs. on Sp. Plates Dec. $+70^{\circ}$ to $+90^{\circ}$
- ✓ Count of Bache Series Plates for each month Miss M. Gill
- ✓ Count of 8 inch Draper Plates " " Miss M. Gill
- Table of obs. of H.P. stars in S. America. Miss M. Gill
- Table of Standard Stars Vol XIV p. 47 Miss M. Gill
- ✓ Make count from B.3 (M.P.) of number of obs. of each St. Star Miss M. Gill
- ✓ Make table of Fundamental Stars M.P. Miss H. Stevens
- Check " " " " " " Miss M. Stevens
- ✓ Make table of Fundamental Stars S.M.P. Miss M. Kay
- ✓ Check " " " " " " Miss Cushman or Miss M. Stevens
- ✓ Enter Julian day in Printer's Copy of S.M.P. Miss E. Gill
- ✓ Enter atmospheric Absorption (Comp. from South Stars) in Working Cat. S.M.P. Miss M. G.
- Apply Abs. to (obs br. + const). Miss E. Gill
- Take Means & Residuals Miss E. Gill
- ✓ Check entrance and application of abs. Miss M. Stevens?
- Miss Cushman. Measure plates of β Aurigae showing separation Miss Cushman
- ✓ Check entries from obs. B.K. Uranometry Miss H. Stevens
- Miss Wells. Examine C Plates for stellar Parallax Miss Wells
- Miss Leland. Measure Position of Prof. W.D. Rogers' doubtful stars Miss Leland
- Uranometry. Group values of grades Miss Cushman
- of " Apply correction for second approximation Miss M. Gill

Miscellaneous

- Sept. 5, 1893 ✓ Enter S.M.P. Magns. in Vol. XXIII & take diff.
 Enter adopted magn. of these stars in M.P. Constant book No. 6?
 Derive final atmos. abs. M.P.
 Apply " " " " "
 Derive final Magns. and residuals
 Make list^{from abs.} for obs. with M.P. (stars 7.5 and br.).
 Interpolate stars from Cordoba S.D.M. and enter No. 9 Magn. for these also at.
 Interpolate " " B.D. $-0^{\circ} 8' - 1^{\circ}$ " " " " " " "
 ✓ Make list from Vogel's Catalogue 0° to $+20^{\circ} 0'$ " " " " " "
 Enter identification with U.A. and interpolate any stars omitted.
 Compare with B.D. 0 to $+20^{\circ} 0'$ and make list " " " " Red. to 1900
 ✓ Reduce to 1900 by means of D.C. or by process in charts
 Make list^{check red.} of 7.5 and br. from B.D. $+20^{\circ}$ to 40°
 Reduce to 1900
 Check red. " "
 Make list of 7.5 and br. from B.D. $+40^{\circ}$ to $+79^{\circ} 54'$
 Reduce to 1900
 Check red. "
 Number stars on AB Plates
 Identify stars on AB Plates
 Measure stars on AB Plates
 Sept. 19, 1893. Write Catalogue of X, Y, and Z Plates combined (W.H.P.) Miss Leland
 Write ledgers for objects contained on these plates
 Re-number plates X, Y, Z & O. and enter object on cover of plate.
 Write up catalogue of Backe Plates.
 Identify Backe Plates which are behind.
 Write up catalogue of Boyden Plates.
 Enter all southern plates in tables which indicate regions
 " " " " " " " " " " " "
 " " " " " " " " " " " "
 Make^{out} scheme of work for^{18 in.} telescope, 13 prism, Dec. 0° to $+70^{\circ}$

Miscellaneous.

Sept. 19, 1893

Plan for a General Catalogue of all stars observed with the Meridian Photometer.

Bring forward < 1900 the places of all stars observed & the four series 1878-82 (H.P.), 1882-88, (M.S. XXIV) 89-91 (S.H.P. XXXIV) and 92-94 (Revis. H.P. XLIV).

Form a general catalogue giving magnitudes for each year as below, and for all combined. Perhaps better give for all combined only.

No.	BD	RA 1900	Dec. 1900	yr.	No.	Magn.	Remarks
15186	2567	13 ^h 25.6	+42° 16'	2.	42	<u>4.86</u>	
				77	6	4.75	
				78	5	4.91	

		Ball-Lyn	Aug 1892	Nov 1892	
M.	4x5 Sanderson	200	481	281	
O	8x10 "	800	1112	312	
R	Copie	2600	2692	92	
U	Reffelt		438	438	
V	2 1/2 wit		315	315	
X	13 wit Embry	3800	3969	169	
V	" Diab.		153	153	100
Z	" Spuria		328	328	100
B		5845	8767	2922	1355 1565
				5010	

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" 2 3 Ursae Maj.

" 3 3 Canis

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" 5 11 Mon. de.

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- 1 *Proc. Nat. Soc.* ~~XXI~~, 1, 1888; II, 1889; ~~XXXI~~, 1, 1890; II 1891
- 2
- 3
- 4 *Mon. R.* XIV, 141, ~~XXIV~~ h.p., ~~XXXIV~~ S.M.P.
- 5 *Mount Cate* XV ^{Dec. 70-80} Cl. Jan 50-55 ~~XXV~~. *Proc. Nat. Soc.*
- 6 *Orpheus* ~~XXVI~~, I Dec. 70, II, Jan. Orpheus
- 7 " ~~XXVII~~ Orpheus Cl. ~~XXXVII~~. ^{+90° to -90°} *Comet* Dec.
- 8 *Miscell.* ~~XXIII~~, 10 Nov., ~~XXVII~~. ^{Nov. 80} *phys.*
- 9 *Misc.* ~~XXIX~~ ^{Nov. 1890-91} *Zool. Light, Calif.* ~~XXIX~~. ^{by J. L. Smith}
- 0 *Blue Hill*. XX, 1, 1887, II 1888; ~~XXX~~, 1, 1889, II 1890; ~~XL~~, I, 1891.

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1356	2142	12567	13.6	+15° 27'	9.2	III Ma	V.	r

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