

1896plate,proj..341C

KG

11365
540

KG 11365.540

1898phae.proj...541C

Add $\frac{1}{2}^{\circ}$ for East ^{hour angle} ~~dec~~
Subt " " West " "

Oct 2 1918

KG 11365, 540



Tuesday, Oct. 25, 1898.

7 15 S Cass.
d 6 r
v = e
v 3 f

M.

Interval between d and
e seems large

7 25 S Aquarius
Moon too near. Its stars
visible except one of about
6 m

7 30 R Draconis
v 3 e

7 45 T Aquarius
variable barely glimpsed
f distinctly seen

M

50 S Cass
k, v
v 2 l

Oct. 25, 1898.

7 55

S Persei

c 3 v

v 2 d

8

S Persei

c 1 v

v 4 d

8 12

R Aurigae

+ invisible.

8 05

R Lynx

v = k

Seems poor for
faint stars.

8 10

R Urs. Majoris

v = g

g 4 h

8 15

S Urs. Majoris

d 3 v

v 2 c

Oct. 25, 1898.

8 18 T Urs. Majoris

c4 v
v2 dComp. difficult because
the stars are so far
away.8 20 S Bortis
v1 d30 S S Cygni
v invisible
X glimpsedm . L35 T Ξ Cephei
v8 d45 S Cephei
d1 v
v4 e9 T Camelopard
g1 v Both stars faint

Thursday, Oct. 27, 1898

Var. 1279 Camelop + 62° 596.

730

C3V
v1d

Does this stay very
much? It has always
been bright when I
have observed it.

740

V Delphinus Var. 7458

Chart or position wrong. Can
not find star.

745

S S Cygni

v invisible

none of the familiar companions stars
seen

M

Oct. 27, 1898.

8 15

γ Cygni

n 12

v 10

(10)

(m)

(p. ①)

I think this is the provisional notation.

8 30

R Delphini

v invisible

The notation is different on the two charts. Inquired about this.

8 40

$R S$ Cygni

d 1-2 v

v 3 e

v is very red.

Oct 27, 1898.

9 30

RT Cygni

Var. 7085

43 v

v 1 f

9 35

Z Cygni

53 v

v 2 f

9 50

X Cygni

Var. 7120.

A star is distinctly seen in
the position of the variables. It
may be the faint star near it.

Monday, Oct. 31, 1898

7 40

SS Cygni

v invisible ^l ~~h~~ distinctly seen.

7 50

S Aquarii var. 8230

var. invisible
Jh. star ^{near} _n R. Jh. easily seen.

8 15

R Pegasi var. 8290.

η 2 v
v 3 θ

8 30

R Aquarii var. 8512

Moon too bright or Clouds.

9

R Aquarii var. 8512.

δ ' 3 v
v 3 δ

finder.

Oct. 31, 1898.

930

V Ceti

Can not identify field, as
faint stars are not seen.

940

S Lacertae
d4v

Var. 8068

Am not sure of fainter
comps. stars

Tuesday, Oct. Nov. 1, 1898

8 J Andromedae 103.
 $\beta 4 v$
 $v 1-2 z$

8 05 J Cass 107
 $e 1 v$
 $v 3 f$

8 15 R Androm. 112
 $h 3 v$
 $v 0-1 k$

Ask about comp.
 stars m & n.
 m is much fainter than n.

8 20 S Ceti 114
 Only two stars seen.
 Faintest two stars.

Mon 1. 1898.

8 30

S Cass

432.

k 3 v

v 1 l

Stars unsteady

8 35

R Piscium

513

v invisible

l clearly seen.

8 40

U Persei

678

d 2-3 v

v 2 e'

8 50

R Arctis

782

f 2 v

b 1 h

9

S Persei

814

c 4 v

v 2 d

9 10

R Ceti

Moon too bright.

Nov. 1, 1898.

9 X 15-

R. Trianguli

906

$$v = \varepsilon$$

$$v = 2.5$$

Provisional notation
marked on chart.

$$v = 4^m.5$$

9 30

S. S. Cygni

v invisible, seeing very poor
l & not seen. Only the three
bright stars of the triangle are
visible.

R. Ceti

Too hazy.

See p. 13.

Wednesday, Nov. 2, 1898.

7 30

R Aurigae
v invisible
m steadily seen
o glimpsed

7 40

R Leporis

k, v?

Field loir & images are very
unsteady -

7 45

R Urs. Majoris
g 2 v
r 3 h

8 00

S Ceti
v invisible
l steadily seen
n steadily seen.

810

Nov. 2, 1898.
S Cygni α 2 v
v, 5 p

Seeing excellent.

820 γ CygniFaint stars in region
of variables. α p α 2

v

 γ 2 δ 2

830

v = γ 2R Ceti
Too hazy.

Thursday Nov 3. 1898

7 30 R Cass
v invisible
s seen.

H.

40 v Ceti 85-97
Field no haze.

45 R Pegasi
v invisible.
Alt stars carefully identified
 η is well seen.

55 S Cephei
v = d
v 4 ~~e~~ e

8 10 T Cephei
v very bright & red.
Fully of magnitude brighter than
d. Can not find C or S.

Nov. 3, 1898.

8 20 I Aquarii 7468
 v invisible
 f easily seen, no fainter
 comparison stars on chart.

3 v U Cygni 7299
 f 2 v
 v 1 f v is very ud.

40 S S Cygni
 0 f 2 v f not seen.

45 R S Cygni 7259
 c 2 v
 v 2 d

55 S Cygni
 v invisible L

Nov. 3, 1898.

9 10

R Aquarii 8512

v-3 b

9 15

S Aquarii 8230

v invisible

9 35

S Lacertae 8068

f1 v

40

Z Cygni 7192

(32 v
v-2 f

Friday, Nov. 4, 1898

7.15
730

Adjustment of telescope.
R Lyncis
k k v
v 2 l H.

35

R Mrs. May:
g 3 v
v 0-1 l

40

S Mrs. May: 4557
d 1 v
v 4 l

45

T Mrs. May:
c 2 v
v 3 d

50

S Bortis
v = e
v 3 f

55

R Camelop
k 2 v
v 4 k H.

Nov 4, 1898.

8 05

R Draconis

v 5 e

~~e f t~~
e 1-2 f.

15

SS Cygni

p 5 1-2 v

H.

I never saw the variable
so faint & the unusually
clear.

20

v Ceti

8597

v = e

f = e

Inquire about these
stars.

30

R S Cygni

7085

53 v

v 1-2 0

Nov. 4, 1898.

9

R Piscium 513

$\alpha' 1 v$

$v 3 \alpha$

9 10

R Ceti

845-

Too hazy.

20

- Camelops 1279

$c 3 v$

$v 2 d$

30

γ Camelops

1623

$v = \rho$

9 50

δ Ceti

h, v

$v 3 h$

Mar. 4, 1898.

10

R Ceti

845

$r = m$

$r \approx n$

Monday, Nov. 6, 1898.

7 30 J Cass. 107
d 5 v
v 0-1 e

It is very much
brighter than e.
The interval
seems too large.

35 J Andromedae 103

$\Sigma 2 v$
v 1 f

45 U Persei 678

d 4 v
v 1 e'

Seeing excellent.

8 00 SS Cygni

o X 2 v
v = 2 f.

H
The stars remark-
ably clear.

R Saptarii
Too low.

Mar. 7, 1898,

810

RT Cygni

7085

 η 2 vv 2 θ η & ζ are nearly
of equal brightness.

15

K Cygni

7120

v invisible

H

30

~~S~~
Ceti
invisible

o steadily seen 114.

45

S Cass

432

L 4-5 v

v 0-1 m

H

v 3 m

9

X Ceti 1166

Selecting companion stars
marked on chart η 6 vv 1 θ

v = 10 m

Mar. 7, 1898.

9 30

R Tauri
k 2v
v0-1 l

1577

40

S Tauri
invisible

1582

k & s distinctly seen. H

50

U Orionis

gt. stars near,

l.

v? or θ ?

* L

Probably θ , looked up on a
photographic plate. v invisible

Tuesday Nov. 8, 1898

7 30 S. S. Cygni
p 52 v

v not distinctly
seen, barely glimpsed
seen steadily -

observation difficult because
field is so high.

7 40

Clouds

7 55

R Pegasi

v invisible

8

Clouds

9 20

S Persei

793

$d = v$

v 3 e

25

R Geminorum
Too low

Nov. 8, 1898.

930

T Orionis

1986

v invisible

35

S Orionis

v invisible . Clouds gathering.

Friday, Nov. 11. 1898

8 45-

S Cygni

c 43v

r 1 & d

bride, field mostly.

S Cephei

8 55±

c 4v

r 3 d

9 05±

R Draconis

v 4-5 e

Interval bet. f & e
is too small.

S Bootis

9 15±

e 1 v

v 4 f

Nov 11. 1898.

9 25+ R Mrs. May:

h1 v

Am not sure of h.

9 35- SS by gni

C ~~h~~ 1-2 v

v 2 & d

10 00 T Andromedae 10 3

Σ 3 v

v 0-1 δ

v 4 η

Saturday, Nov. 12, 1898

8
8 20

Adjustment of index.

R Cygni

~~k2v~~

v2b

old notation

c2v

v2d

final notation

30

R + Cygni

7085

$\theta 3v$

H.

$v = 0$

Seeing poor

35

V Ceti

8597

Field too hazy to identify again.

50

R Piscium

~~k4v~~

$v = c$

Nov. 12, 1898

9 U Persei 678
 e' 3 v
 v0-1 e

9.20 R Arietis 782.
 f 1 v
 w 4 h

9.25- O Ceti
 h 6 or 7 v
 v = R

Sky hazy for low regions. This
 probably affects this observation
 for h1 is much higher than the
 variable or R and h looks
 as bright as the comparison star
 g.

Error of my watch
 8^h 6^m 10^s mean(?) time 1st clock
 my watch, 7^h 57^m 35^s from Frodsham
 2^m 25^s slow.

Jan. 12, 1898.

940

S Persei

814

*C1v
v4d

Seeing excellent
variable appears
redder than usual.

~~S Ceti~~

950

R Ceti

845

variable not seen. It is probably
faint as L was seen clearly,
and m seen though faint.
Seeing very poor towards southern
horizon.

Monday, Nov. 14. 1898

Error of my watch

mean clock

my watch

9^h 18^m

9^h 15^m 50^s

2^m 10^s slow

9 20

SS Cygni
clouds —

10 40

SS Cygni

d3v

v1e

Tuesday, Nov. 15, 1898

S S Cygni

8.40

~~h~~ 3 v

v 2 ~~h~~ f

[Mistake in recording
names of comparison stars]

9

o Ceti

h 5 or 6 v

v 0-1 k

Eye

Interval large bet.
k and h

Light Clouds near.

9 30

Stopped by clouds.

Wednesday Nov. 16. 1898

S Cygni

7 30

$\begin{matrix} f 0-1 v \\ v 2-3 \end{matrix} \Delta g$

45

T Cass 107

$\begin{matrix} f 1 v \\ v 3 g \end{matrix}$

8 00

T Andromedae 103

$\begin{matrix} v = \eta \\ v 3 \end{matrix} \gamma$

8 10

R Piscium 513

$\begin{matrix} f 3 v \\ v 4-5 \end{matrix} h$

8 20

U Persei

$\begin{matrix} e 2 v \\ v 0 \pm 1 f \end{matrix}$

Nov. 16. 1898.

R. Trianguli

$\Sigma 3-4 v$

$v = 5$

$v = 6.5$

Star very bright
and difficult to
compare.

8 45 50
my watch
1/2 slow.

Meteor passed from east
towards the pole through field
of telescope.

9 . *T Camelop.* 1623

$m 3 v$

$v 1 g$

9 15 - *Camelop* 1278

$5. v$

$v 3-4 d$

Very hard to compare
this star, it is so
very red.

Nov. 16, 1898

9 20 U Orionis 2100.
V invisible
A seen

Clouds

9 30 S Cephei
Too cloudy.

9 45 - Stopped by clouds.

Sunday, Nov 20, 1898

S S Cygni

9 30

01v
v-2⁺⁺β

H⁺
M.

Monday, Nov. 21, 1898

4.50

R Bootis

no stars visible

5

R Coronae

" " "

5 30

V Aquilae

6834

$v = \alpha$

Inquire about ^{very red} comp. stars

$\gamma 1-2 \alpha$

5 40

S Coronae

Can not identify field, no corr.

7.30

R Piccini

573

$\epsilon 3 v$

$v 0-1 f$

m

Nov. 21, 1898.

7 40 U Persei 678.

f 4 v
v 3 g'

Int. bet. f & g'
is too large, and
bet. e & f too small.

8 R Arctis 782

f 2 v
v 3-4 h

8 10 U Ceti 893
v invisible H
g distinctly seen.

8 15 S Persei 814
d 0-1 v
v 4 e

8 0 R Lynx
x 0 2 v
v 2 p

Nov. 21, 1898

9

R Mrs. Mayonis

v 1 e

v 5 m

Can not identify
R from the chart.
The only star near
the position is fainter than R

9 10

S Mrs. May.

d 1-2 v

v 4 e

9 20

T Mrs. May.

v = d

v 5 e

Nov. 29. 1898

8 20

R Piscium

Too cloudy to estimate, v. seen.

Friday Dec. 2. 1898.

510 T Andromedae 103

22v
v-1θ

15 T Cass. 107
e 3v
v-0-1f v very red.

30 R Cass
v invisible
star "t" seen

45 R Pegasi 8290
-η 2v H
v-1θ

735 S D Cygni
p-1v H

Dec. 2. 1898.

7 50

X Cygni

7120

v invisible, or so faint that
I could not identify it by
the chart.

7 55

O Ceti

l 3 v

v 1 m

Eye.

8 10

R Piscium

e 4 v

v = f

15

R Arietis

782

f 4 v

v 0-1 h

20

R Tauri

1577

m 2 v

v 1 m

25

S Tauri

invisible

Dec. 2, 1898,

8 30

R Draconis
Too low. No stars seen.

Tuesday, Dec. 6, 1898

530

U Persei
g' 2 v
v 2 h

545

S Persei

C 4-5 v
v 1 d

Wednesday, Dec. 7. '98

7 30

o Ceti
b 4 v
v 0-1 m

eye.

8

R Trianguli

v 0-1 θ
v 4 η

Selecting comp. stars.

Est. v = 8 m

8 10

R Lynx

2478

p 1 v
q not seen.

15-

R Urs. Maj.
m 1 v
v 2 n

3825-

18

T Urs. Maj.

45-11

f 3 v
v 2 g

20

S Urs. Maj.
d 4 v

4557

v 2 e

Field, low

Dec. 7, 1898.

8 30

S Boötis

v not seen

Fields very low.

*g barely glimpsed.

h not seen.

40

R Camelopardalis

H.

v not seen

l barely glimpsed.

45

R Draconis

h, v

v, k

9

S Cygni

v invisible

H

Seeing excellent.

9 05

SS Cygni

f, v

H.

Dec. 7. 1898.

9 10

S Cephei 7609
 very bright and red.
 Oct 6^m

9 20

S Cephei

d 10

v 3 e

9 30

R Andromedae 112

m 2 v

v 10

Dec 8, 1898

7 30

R T Cygni 7085

a 3 v

v 1-2 k

40

Z Cygni 7192

0 2 v

8

S Ceti 114

v invisible

0 & seen

8 10

R Piscium 513

e 3 v

v 0.1 f

20

R S Cygni 7259

b 5 v

v 1 c

v is reqd.

9 Dec. 8, 1898.
 U Cygni 7299

e 3 v
 v 2 f

v is very red

9 15 R U Cygni 7783

β 5 v
 v 2 Σ

Large interval
 bet β & Σ .

9 30 S Lacertae 8068

e 4 v
 v 3 a

40 U Canis majoris
 Clouds.

Dec. 15. 1898

845-

SS Cygni

variable not seen
No stars seen in the triangle
except C, F, and G.
comp. star

January 26. 1899

U Canis Majoris 2735-

7.50

 $\alpha 1 v$ $v 3 p'$ M very close
- seen in fair
horizon

8

R Arctis

782

 $g 2 v$
 $v 1 h$

8.10

T Cass.

107

 $pl 3 v$
 $v = g f$ m

8.15

S Cass.

 v invisiblem

8.30

S Persei

 $b 4 c$
 $v 0-1 \& c$

Feb. 2, 1899

8 15-

R Draconis

v n. s.

by seen distinctly
Region low,

8 45-

U Camelop. 1279

a 3 b

b 2 c

c 3-4 d

Seeing poor.

b 2 v

v 1 c

v remarkably ud.

9 15-

- Eridani 3^h 59.8 -16° 0'

New chart. Selection of comp stars

5 3-4 v

v = 2

5 1 v

Monday, Feb. 20, 1899

J Cass 107 M

8 24

e 4 v

v 1 f

Seeing poor

8 40

R Cass.

f 2 v

v 1 g

High Power

50

S Cass
invisible

52

S Persei
c 1 v
v 5 d

900

R Aurigae
f 3 v
v 2 g

9 10

Feb. 20, 1899.
R Urs. Majoris
v invisible

Star marked on chart appears
brighter than usual. It is about
4th grade fainter than L.
Prismatic companion!



h
m
a

g

9 20

S Urs. Majoris
v invisible

9 35

S Urs. Majoris
L₂r
v m

20

S Bootis
v invisible H.

Feb. 20, 1899.

R Camelop.

9 45-

e 3 v

v 1 f

R Diacorus

48

v invisible

L.

50

S Cassio

Too low.

Right below the pole

55-

S Cephei

v 4 d

10 00

S Cephei

g 4 v

v = h

v is not red

but requires steady looking
to see. h at first looks
brighter than v but after
constant looking, the variable
came up as bright as h

Thursday, Feb. 23. 1899

8 R Andromedae
 r invisible H
 q distinctly seen.

8 10 R Arctis 782

$r = h$
 $r 3 h$

Haze or light clouds.

8 15 R Praecium
 Field too low

20 U Ceti 893
 Field too low.

8 30 R Trianguli 906. H

$\phi 2 r$
 $r 1 \phi$

40 S Lauri 1582

$n \approx r$
 $r 0-10$

Hazy.

M

Feb. 23, 1899.

8 45

R Tauri
invisible1577,
H.

9

T Camelop
d 2 v
v 3 e

1623

9 15

U Jovis
h 1 v
v 2 h

2100

20

R Genunonin 2528
v invisible. seeing good.

25

R Cancri L. 2946
Moon too near.

40

R Lyncis 2478
v invisible H.

50

H. P. 1267, 1268.

Bright. about 6^m
nothing on chart to compare with.

Friday, Feb. 24, 1899

8 T Andromedae 103
v invisible.

10 U Persei 678

m 3 v

H

v = n

20 U Puppis 2857

v invisible

L

40 R Cancri 2946

n 2 v

v 10

9 U Cancri

h 2 v

v 3 m

9 15 S Hydrae 3170

d 1 v

v 2-3 e

925

I Feb. 24. '99
Hydrae 3184Moon too close, can not
identify fields.

930

R. Leonis Minoris 3477

v invisible.

Monday, Feb. 27, 1899

8 15 R Leonis Minoris 3477.

Star seen in approx. position
of the variable, maybe another star.
g1 r

Star observed was comp. etc.
5, Mar. 2, 99.

The chart of ft. stars of the region
is not sufficient to identify variable.

8 45 Adjustment of telescope

8 50 T Hydrae

l2r

r2m

9 Z Virginis 4300

Moon too bright.

9 05 A T Virginis 4377

Too near moon

Feb. 27, 1899
 9 10 T Mrs. May. #511
 v invisible

20 S Mrs. 4557
 l 3 v
 v = m

25 R Camelop
 l 1 v
 v 1 e

R Draconis
 v invisible

Wednesday, March 1, 1899

7 55

R Cass

8600

$v = \beta$
 $v = 3/g$

L.

v is quite red.
H. star well seen.
Decl. circle = decl. of star.

8

T Cass

$e = v$

$v = 4/f$

Decl. circle set at 55°

8 05

S Persu

Co-v

$v = 4/d$

Dec. circle = 58.1

8 10

R Aurigae

$f = 3/v$

$v = 1/g$

Dec. circle = $53 \ 29$.

8 25

R Urs. Majoris H

This field is hard to identify
when the star is faint.
The variable is certainly seen and
is about one grade fainter than
star near comp. star "ii" but which
appears slightly following the position
given for "ii" on chart. From position of
star "ii" on photo plate it was the star compared with variable. 1899

8 35⁻ Incl. 1, 1899
 S Mrs. May:
 m1v
 v2n

50 T Mrs. May:
 v invisible H.
 v may be glimpsed, but I can
 not tell from chart I have whether
 the star I see is v or another
 faint star. It is about 1 $\frac{1}{2}$ mag.

55⁻ S Bootis
 v invisible H
 comp star "s" seen

9 00 R Camelop.

C4v
 v1d

b5c
 c4d
 d1-2e
 e3f

9 30 - Camelop +80° ~~380~~ 373

observed at Prof. Pickering's request

γ 2v
 v0-15

+80°373 observed instead
 of +80°380. Star +80°374 is too bright on ^{dm} chart.
 although the magnitude seems right on catalogue

Inch. 1, 1899.

9 35-

R Draconis

v invisible

Z.

40

S Cygni

H.

$v = 9$

$f 3 v$

Field just below
pole but the
seeing is fine.

45

T Cephei

$v = d$

$v 5 l$

50

S Cephei

$h 3 v$

$v = l$

$h 1-2 h$

Sec. circle reads $77^{\circ} 0$

10 05-

H P. 1267, 1268 (not seen double)

$v 3 \times$

no brighter star on chart.

Monday, Mch. 6. 1899

7 20 R Androm 112

$v = \gamma$ H.

25- R Piscium
Field too low.

30 R Arctis 782
h 30
v 12

40 - Erid. 3^h 59.8 -16°
Too low. only 2 or 3 stars seen

45- U Ceti
Too low.

48 R Trianguli

$v = \emptyset$
 $v 31\psi$

H.

8 15 U Camelop
c 12
r 32

March 6, 1899.

810

R Tauri
v invisible

20

S Tauri
02v
v1p.

H.

25-

J Camelopard.
e³ & v
v0-d f

30

U Orionis
e2v
v2f

2100

40

R Bootis
v invisible

50

S Virginis 4377

v invisible

Seeing good.

Wednesday, March 8, 1899

8 — Camelops +80° 380

$\varepsilon 4v$

$v 2 \frac{1}{2}$

8 10 R Cancri 2946

$n 1v$

$v 30$

8 25 S Hydrae 3170

$d 2v$

$v 3e$

8 35 T Hydrae 3184

$v = l$

$v 3m$

Dec. circle reads -70° 30'

" star is -80° 45'

8 40 R Leonis 3493

v invisible

Oct. 8, 1899

915

X Virginis 4300

$\alpha 2v$

$v1\gamma$

seeing poor.

930

R Virginis 4521

$\gamma 2v$

fainter comp. stars not seen.

945

U Virginis 4596

δ

m1v

~~m~~ v2n

10

D. M. +14° 2700 (Miss Bell's variable)

v not seen or barely glimpsed.
Several near-by stars seen that
are not in D. M. or not in
chart, at least.

Friday, Nov. 10, 1899

7.30

S S Cygni

H.A. 9^h 20'

in stars visible

7.40

S Cygni

in stars visible

7.45

U. Persei

H.

n 1 v

v 30

variable carefully identified

7.50

S Cass

107

d 4 v

v 1 e

8.5

S Persei

b 3 v

v 1 e

8

R Aurigae

f 1 v

v 3 f

Feb. 10, 1899.

8 20 S Urs. Maj.
Clouds -

8 40 R Geminorum
v invisible L.

45- U Orionis
e' 4v
v 1e

Dec. circle 20°
Dir. slat $20^{\circ} 10'$
Telescope best.

9 00 S Coronae 550x

v₃g

No comp. slat
"I" on chart.
and I do not
find a suitable one

9 10 R Coronae
too low

9 20 Clouds.

Thursday Feb. 16 1899.

8 I Leporis var. 1803

8 3 v
Field too hazy to select fainter
comp. stars.

8 30 I Cygni

9 3 v
Cannot find. Lack of fainter
stars.

Adjustment of Telescope. Circles
now all out.

9 15

γ Virginis 4492

γ invisible

β easily seen

9 20 R Corvi 4407

β 3 v
v 2 f

9 30 γ Virginis 4405

h 2 v
v 3 k

March 16, 1899

9 35

W Virginia

4816

h 4 v

v = k

9 40

S Virginia

4847

v invisible

9 45

R Coronae

5067

v 6 f

9 50

R Hydrae

Too low.

10 00

H. P. 2894

v 2 v

v 3 f

Friday, Mch. 24, '99.

7 40 J Cass. Mr.
d 4-5 r
v 2 c

45 S Persei
b 3 v
v 2 c

52 R Aurigae
e 3 v
v 2 f

53 S Cygni
Too hazy. just below pole

8 S Urs. Maj.
Invisible. known to be lost

8 05 R Camelopard
b 5 v
v 1.2 c

741

June 24 1899

8 10

γ Cephei
 $\epsilon 3 v$
 $v 4 f$

15

H. P. 1267 . 1268

$v 1 \alpha$

Stars too bright to compare well

8 20

η Orionis
 $\delta 1-2 v$
 $v 3 e'$

9

+80° 380

$\epsilon 3 v-$

$v 4-f y$

9 10

α Leonis
 known too near

9 15

α Bootis
 invisible

I can not find any other stars to serve.
 After setting the telescope on six or seven good
 finding them too near the moon or horizon,
 will try it up

Wednesday, April 5, 1899

7 25- R Cass
 l₃v
 v 3 m

Star marked on chart is much fainter in the sky than its size on chart implies

In sky
 m 2/x x

38 T Cass
 d 3 v
 v 2 e

40 S Cass
 v minor

45 S Persei
 b 4 v
 v = c

50 R Aurigae
 d 1 v
 v 3 e

April 5, 1899

8 20 R Lynx
v invisible or glimpsed.

3 0 S Urs. Majoris
m 2 v
v 1 0

4 0 R Canclorp
f 5 v
v = c.

5 0 S Cygni

~~f g
d v 2 d~~

I have no chart of faint
comp. stars.

9 S Cephei
v = f
v = 3 g

9 10 S Cephei
m 5 v
v 1 0

Can not find R.

Monday, April 10, '99

8

R Androm.
Too low.

Make chart of U Persei

R Arctis
Too low

8 30

R Trianguli

μ 3 v
v 2 ϕ

Field low.

40

U Camelops
c 4 v
v 2 d

50

R & S Lacus
Field too low for ft. stars.
Both are faint or invisible

April 10. 99.

9 10

T Camelop
 α, β

make chart

15

U Orinis

$\alpha \begin{matrix} \nearrow \beta \\ \searrow \gamma \end{matrix}$
 $\gamma \begin{matrix} \nearrow \delta \\ \searrow \epsilon \end{matrix}$

$\alpha \delta \gamma$
 $\gamma \epsilon \delta$

30

H. P. 1267, 1268

α, γ

Stars too bright to compare
 successfully.

9 H5

R Gemmonum
 invisible

April 10. 1899

950 R Leonis 3493
 $v = d$
 $v 2 C =$

10 R Cancri

From I 17698
 April 11, '99.

Can not identify variable
 from chart of faint stars.
 Must be looked up on a
 photographic plates.

10:15 S Hydrae 3470
 $f 3 v$
 $v 2 g$

Thursday, April 13, 1899

8 15 R Virginis 4521

lir
v2m

8 30 γ Cancri 2976

43v

H

.4m

8 50 R Cancri

52v

v2ε

Monday April 17, 1899

M.

8 05 U Persei

z_{4v}
 $v_{1g'}$

8 15

T Hydrae

c_{4v}

no sequence bet. g & c.
Look up.

20

J Virginis
Invariable,

4377

8 40

+80° 380

ϵ_{3v}

v_{3g}

Other stars marked
variables on chart.

$F_{1v'}$

April 17, 1899.

9 10

Miss Wells' Variable
D. M. + 14^h 27^m 00^s
invisible.

9 20

γ^2 Virginis 4492
b5v
v1L

Dec. Cir. reads - 30
Dec. Star - 30^h 52^m

25-

η Virginis 4808
b1v
v3L

30

ν Virginis 4816
b3v
v1L

10 00

ζ Virginis 4596
b3v
v1C

Wednesday, April 19, 1899

S Coronae 5504

8 40

v 2 g

Clouds near Obs. doubtful
g = h

Stopped by clouds.

Wednesday, May 3, 1899

8

I Cass.
Too low.

8 10

I Cass
Invis. L.

8 20

I Persei
Clouds —

Stopped by clouds.

Thursday, May 4, 1899

8 35 T Virginis 4377
 Liris. L. Seeing fair

T Hydrae 3184
 Too cloudy.

9 20 R Camelops.
 b3v
 v4-5-c

9 28 S Persei
 c3v
 v2d Poor seeing

3 5 R Aurigae
 v3d

May 4, 1899.

9 55

R. Lynceus.
ft starsPnS

e. m

v p

m v

b

H

n 3 v

v 10

Stars n & o as marked above.
Every chart and there are several,
if the faint stars appears different.

10 05

R. Mrs. May.
Invisible

s easily seen

H.

May 4, 1899.

10 10

S Urs. Maj.

$v = k$
 $v = 4l$

hazy?

10 20

S Urs. Maj.

$k 3 v$
 $v 1 k$

Seeing good.

10 25

S Bootis

$v = f$
 $v 3-4 g$

10 40

R Draconis

$n 4 v$
 $v 10$

10 55

S S Cygni
 $a \times 5 - a$
 $v 1 c$

$b?$

c

v

Have no chart. Am sure of comp. class
but not for the star called for last night is found to be

Friday, May 5, 1899.

7 45 U Orionis
e' H r
r i e

7 55 J Cass
e 2 v
v 2 f

Field low
H. A 10^h 45^m W.

8 03 U Persei 678

v = e'
v 2 e

Field low,

8 15 R Gem 25.28

~~v~~
~~m 4 x~~
~~v 1 x~~

~~8 35~~ 0 4 v
v 1 d

8 35 S Pyxis
Diminishing
Seeing poor for ft. stars

May 5, 1899.

850

R Cancri

 $\delta 3v$

2946

 $v 1c$

915

V Cancri

 $0' 1v$ $v 2p$ H. Poor night for
high power.

920

S Hydrae 3170

 $\delta 2v$
 $v 2h$

922

T Hydrae 3184

 $\delta 3v$
 $v 1c$

940

R Leonis Minoris

 γ $\delta 2v$
 $v 1c$ $\delta 5v$ $v 1f$ β very faint

May 5, 1899.

9 50

R Leonis

3493

l 3 v

v 4 c

10

R Corvi

4407

l uvis.

 β clearly seen

10 05

Y Virginis

4492

l 4 v

v = f.

10

R Virginis

4521

f 2 v

v 3 g

20

W Virginis

l 1 v

v 3 l

22

V Virginis

~~m~~ 1 v

v 1 m

l 4 v

v 1 m

 $n > m$

May 5, 1899.

1030 χ Virginis 4300

$\beta_3 v$
 $v_0 - \gamma$

35 κ Virginis 4596
 $d_2 v$
 $v_2 f e$

1040 δ Cygni

$a_4 v$
 $v_1 b$
 $v_2 e$

May 7, 1899

9 10 U Camelops
 crv
 rzd

T Camelops.
 Can not identify from
 chart. Two of them and
 each ~~other~~ have star in cliff
 position marked as the variable.

H. P. 1267, 1268.
 . β . $+56^{\circ} 11' 36''$

. β'

. α

9 20 $\alpha 2 r$
 $r 4 \beta$

May 7, 1899.

9 25 R Hydrea
Too low.9 35 ~~R S. Virginis~~
~~R Hydrea~~ 4847
p1v
v2g L.

9 45 R Bootis 5237

e4v
v = f10 00 H. P. 2894
p1v
v2-3 5

10 20 S S Cygni

a5v
-v1c
~~v2b~~Field a little low. Star b
not on the chart, am not
sure of it.

Tuesday, May 2, 99.

9 10 S Coronae

g 2 v
v 3 k

stat h > g
h is below g in field.
h 2 g

20

R Coronae

v 7 f

No brighter star on chart

30

S Serpentis

5501

2 4 v

40

R Hydrae

v 6 R

very poor chart. Few comp
star marked

May 9, 1899.

10 00

Z Cygni 7192

β 25
v 15

10 10

Z Cygni 7120

Est. 6^m

10 20

R. T. Cygni 7085

v invisible

10 35

SS Cygni

b 2 v

v 1 c

Tuesday, May 10, 1899.

8 15- D. M. +140 2700 Mars well's bar.
v invisible

Ask about this star.

8 30 U Cygni 7299

c 2 v
v 3 d

8 40 S Cygni

v invisible

H.

8 45 S Cephei

H.

m 5 v

8 50 T of Cephei

l 3 v
v 3 m

May 10, 1892.

9

H. P. 1267, 1268

 $\lambda 2v$ $v 4-5-\beta$

9 10

H. P. 2894

 $\lambda 2v$ $v 35$

9 30

Deichmüllers var. in Cygnus

 $n 1v$ $v 3-40$

9 50

R S Cygni 7259

 $a 4v$ $r 1b$ v very red.

9 55

S Hercules 6044

 $m 3v$ $v = m$

10 30

S S Cygni

 $v = c$ $v 3-4$ ft d

Seeing poor

Friday, May 12, 1899

8.45

α Gem. 2528

m 0-1 v

v 1-2 m

8.55

δ Hydrae 3170

h 2 v

v 2-3 k

9.05

α Cancri 2946

δ 4 v

v 0-1 z

#

9.30

γ Cancri

β 2 v

γ not ~~not~~ seen v very faint

9.35

α Leonis Minoris

δ 3 v

v 3-4 γ

$\gamma > \beta$

9 40 R Leonis May 12, 1899.
3493

a3v

v2b

9 50 JX Virginis 4377

b3v

v1-2l

9 55 J Virg. 4492

d4v

v1e

v2f

10 00 R Virg.
f2b3v X5-2/
v4g

10 05 U Virg. 4596

d2v

v2e

10 10 W X Virg. 4816-4805
l4v
v1n n1m

10 15

v May 12. 1899
~~4816~~
 4805

25

~~It~~ viz.
$$\begin{array}{r} 4816 \\ \underline{4805} \end{array}$$
~~5287~~

$\frac{2}{3}v$

m 1-2 V

$$V = 0$$

d 2 v

Tuesday, May 17, 1899

R Draconis

9

$h = 4r$
 $r = k$

9 10

S Cass
minutae

9 20

S Persei
 $c = 3r$
 $r = 4d$

Stopped by clouds.

Thursday, May 25, 1899

8 20

H.P. 1267, 1268

Star β identified and chart
drawn.
Seeing very poor.

H. P. 2894

Identif. of comp. star γ .

8 40

S

N

γ

not γ

8 45-

R. Draconis
e2r
v1f

Seeing good

May 25, '99
R Camelopard

9
b3v
v3e

910 R Leonis 3493

a 1-2v
v 5b

915 T Virg 4377.
g1v
v2h

925 R Virg 4521
f2v
v3g

Tuesday, May 30, 1899

Lx Virg. 4377

8 55

g 2 v
v 2 h

9

R Virg. 4521

Seeing good

~~g 1 v
v 4 f~~

f 4 v
v 1 g

9 10

U Virg. 4596

f 1 v
v 3 g

x 9 15

R D acornis
v 3 e

d not on chart. e = f

May 30, 1899

9 30

H. P. 2894

γ 0-1 ν
 ν 3-4 δ

9 50

S S Cygni

(old notation)

γ 2-3 ν
 ν 1 δ

0 -- . -- K

$\gamma = 0$

$\delta = \beta$

δ

02-3 ν

ν 1 β

δ - δ - γ
in

Wednesday, May 31, 1889

8 45- R T Cygni 7085-

v invisibles H.
Comp. star π seen. This star
is very near the position of variable
and since it is slightly fainter
than star σ , preceding it in
the sequence, I assume that
it is star π , and not the
variable.

9 S Cass L
 v invis.
m. well seen.
In chart of fainter stars.

9 20 S S Cygni H
Y 2 v

9 35 R T Cygni 7085 H

π 3 v
seeing much better than earlier and
both stars are distinctly seen

May 31, 1899.

9 45- S Serpentis 5501
 $q = 1v$
 $v = 32$

Look up comp. stars.

9 50 T Urs. Maj.

$f = 4v$
 $v = 9$

10 S Urs. Maj.
~~ds~~ e 3-4 v
 $v = 1f$

10 10 R Urs. Maj. H
 e 3-4 v
 $v = 12$

Thursday, June 1, 1899.

Mme Carachis Algol var.

9³⁰
(approx.)

L4v

v2-3 γ

Friday, June 2, 1899

9 10

Mme Ceraski's Algol.

H. A. E. 6^h 10^m
 Set. Time = 13 50

$$\delta = +46^\circ$$

H

$\alpha 4 v$

$v = \beta$

~~$\gamma 3 v$~~ $v 3 \gamma$

9 30

S Cygni

H

v invisible.

δ is the faintest comp star seen.

35

T Cephei L.

$v = m$

$v 3 n$

45

S Cephei

H

$m 8 v$

$v = n$

50

S Cass

H

Invis.

δ barely seen

$\left\{ \begin{array}{l} \text{H. A. S. } 10 \quad 20 \\ \text{S. T. } 14 \quad 40 \end{array} \right.$

955

June 2, 1899.
S. D. Cygnus732
20-15

H

10
10

R. Lynx

h32
22m

H

Seeing poor.
Spot well
separated from
adjacent stars

Thursday, June 8. 1899
 Watch 21st star at 9^h 13^m
 Ceracca's Algol.

9 24^m 15^s

$\delta 3 v$
 $v = \delta$
 $v 4 \pi$

9 34

$v 0 - 1 \delta$
 $v 3 \eta$

9 40.5

$\delta 5 2 v$
 $\delta 1 \delta$

45.5

$\delta 1 2 v$
 $v 2 - 3 \theta$

55

$\delta 1 v$ $\delta 4 v$
 $v 2 \eta$

59

cloudy near equator

10 15

$v = \delta$
 $v 2 \delta$

10^h 23

June 8, 1899.

 $\beta 3v$ $v = \gamma$

25

 $v 0-1 \gamma$ $v 2-3 \mu$ 10^h 3³
36 $\beta 2v$ $v 0-1 \gamma$

37

 $\beta 2v$ $v 1 \mu$

45-

 $\beta 3v$ $v 0-1 \gamma$ Sketch 7 minutes fast at 10^h 42^m

Monday, June 12, 1899

8 $\frac{2}{5}$ -

R Leonis

3493

a 2v

v 4b

8 30

R Urs. Maj

3825-

0.2 v

v 1-2 f

35

R Leonis Minoris

3477

0.3 v

v = f

g

k

v 2
0.2

f

Identification in Dreyer
Chart very poor.

That's a — lie

Many stars observed.

50

T Virginis 4377

f 1 v

0.3 f

June 12. 1899.

9

R Virginis 4521

h 3 v
v 2 h.

9 05

U Virg. 4596

v = m
v 3 m

9 10

R Hydrae 4826

v 8 X
Est 6.5-

9 20

X Virginis 4300

 α 2 v
v 2 β

H

9 40

S Librae 5494

 β 3 v
v = γ

H

June 12. 1899

10 00

S Serpentis 5501

9 25
10 12

H

10 20

R Leonis Minoris
v. invisible
4 glimpsed

Monday June 19, 1899

8 15

R Aurigae
Too low.

8 30

S Urs. Mij.
Clouds

Thursday, June 29, 1899

8 50

S Cygni
 γ_{3v}
 v_{15}

9

T Cass 107
 γ_{3-4v}
 v_{1h}

9 10

U Persei
 v_{2e}

Select brightest comp. star

9 38

S Persei 814
 d_{4v}
 v_{1e}

9 40

S Urs. Majoris 4557
 d_{3v}
 v_{1e}

9 45

T Urs. Maj. 4511
 c_{1v}
 v_{2d}

Wind high

9 50

S Bootis
 c_{3v}
 v_{3d}

10

Thursday June 29, 1899

R Camelop

d, v

v2e

Wednesday, October 4, 1899

S Cygni

H

7 45

o 1-2 v

v 2 f

50

R Androm.

L

v 3 e

, can not find b.

8 15

T Andromedae

L

4' 2 v

v = a

8 30

T Cass

H

o e

v

x

y

f

4 3 v

v 0-1 f

Identify these comp. stars.

8 40

U Persei

e, v

v, f

October 4, 1899.

8 50

R Arietis
h 3 v
l 1 v

Look up Janibū stars.

9

S Persei
f 2 v
v 2-3 g

9 10

T Persei
c 3 v
r 2 d

9 15

R Trianguli
o 3 v
v 3 φ

H

9 17

Clouds

9 25

T Aquarii

17468

l 3 v
v 1 m

Thursday, Oct. 5, 1899

V Aquilae 6834

7 55

v 3 x

No suitable star brighter than the variable is seen for comparison.

S Serpentis
Too low.

8 12

V Cozonae
Invisible
& seen.

5675

Seeing poor.

8 20

U Herculis 5889
m 2 v
v 1-2 m

R Bootis
Too low.

8 45

Clouds.

9

Too misty to continue observations.

Sat. Oct. 7. 1899.

S Cass

v invisible

H

8 45

R seen

p . . . k

+ and S not seen.

f

9

R Aurigae

v invisible

n seen.

9 15

R Lyncis

e 4 v

v f

9 30

R Urs. Majoris

0.3 v

v = p

9 40

S Urs. May.

4557

m 2 v

v = n

9 50 Cct. 7, 1899
J Urs. Maj:

m 0-1 r
v 3 n

#

10 00 S Bootis

m 1 r

v not seen.

#

10 10 S Cygni

p 2 r

v extremely f. #

Thursday, Oct. 12, 1899

7 50

R Camelopard

v invis.

h is the faintest comp. star^H
seen,

8

R Draconis

v invisible

D H is the faintest comp. star seen.^H
Seeing poor.

8 15

S Cygnus

v invis.

There is my chart of the faint
stars he found.

. double star

distinctly seen

. d

Seeing good, and stars of $\frac{10}{8}$ mag. easily seen.

8 30

T Cephei

d 3-4 v

v 1 e

October 12, 1899

8 35

S Cephei

g 3 v
v 0-1 L

8 40

R Cass

m 3 v
v = n

v 2-3 0

8 50

Z Cygni

v miris.

A seen

a not seen

7192

8 55

R S Cygni

7259

d 2 v

v 1 e

v remarkably red

9

U Cygni

7299

f 1 v

v 3 g

9 10

October 12, 1899

SS Cygni

~~K2-3v~~
~~v = 2~~

old notation

O2-3v

v = 3

new notation

9 15

L Cygni 7120

v2v

v 1-2 7

9 20

RH Cygni

v3 c

(old chart)

Mark comp. stars on chart

9 22

S Aquarii

8030

L4v

v1e

9 45

October 12, 1899
R Pegasi 8290

0.2 v

v = ϕ

10

R Aquarii 8512
d 3 v
v 2 e

10 25

Y Ceti
no stars visible. Region hazy.

Friday, October 13, 1899

815 Deichmüller's variable
 $n 1-2 v$
 $v 40$

830 $\frac{W}{X}$ Camelops 1279.
 $b 0-1 v$
 $v 3 c$

Seeing too poor to continue

Friday, October 20, 1899

8⁰⁰

J Camelopard
d 30
v 2.2

Mc

10

J Cass
d 20
t not seen

15

S Persei
f 4.5 v
w 1-2 g

30

R Aurigae
v quies.
l seen

L₁

40

R Lynceis

f 30
v 1-2 g

5-5

SS Cygni
d 30
v 1 p.

H

Wednesday, Oct. 25 1899

7 45 R Cass.
v seen. Seeing too poor
to compare.

Thursday, October 26, 1899

745 S Aquarii 7468

p 1.2 v
v 2 y

H.

805 R Scuti 6783
v 2 f (red ink letter)

companion star of f
is much fainter and
shy than on chart.

T Delphinus
Chart too poor.

830 S S Cygni
e 2 v
v 2 d

845 T Cephei
d 3-4 v
v 1 e

v not very red.

Declination star 68° 5'
" circ 67°

October 26, 1898
R H Cygni 7783

8 55

p 3 v
v 3 c

9 30

R Tauri
v miris.

H

♂ seen
also ft. star near R.

g. 10

R
ft. star

9 32

S Tauri
miris.
♂ seen.

H

9 34

V Ceti

Too hazy to identify fields

October 26. 1899

S Cephei

 $g_4 v$
 $v = h$

9 40

Monday Oct. 30. 1899

7 30

S Delphin
v seen, but can not
identify comp. stars as the
field is so hazy.

7 40

Z Cygni
v visible
J seen,

8 45

S S Cygni
v = ~~the~~ e
v 4 ~~the~~ f

L
Seeing poor.

8 55

R S Cygni

7259

e 4-5 v
v 1 f

K > f

Thursday, Nov. 2, 1899

9 10

S. Lygae
~~h 1 r~~
 v 1-1 k
 v 3 l

9 20

S. Cephei
~~v 3 l~~
 d 3 v
 v 1 l

9 30

R. Piscium 573
 d 4 v
 v 0-1 l

R. Arctis
 Clouds

9 50

R. Arctis
 d 3-4 v
 v 1 l

782

Saturday Nov. 4, 1889
 S S Cygni

8 00

u 2 v

H

v 0-10

9 R Pegasi 8290 H

 η 3 v

v 2 A

9 20 R Trianguli 906

 δ 3 vv 1-2 ψ

H

9 35 R Aquarii 8512

b 2 v

v 3 c

9 50 χ Cygni 7120

 λ 2 v

H

v = β

10 10 R Cygni

Monday, Nov. 6, 1898

7 00

S Cass

p 1 v

H

v 3-4 g

Star "e" on p. 129 is
apparently the presiding companion
of star e

7 45

S Andromedae

103

H

d 1 v

v = 12.5 m

Mr. Reed's chart.

d = u in new sequence

8

S Cass

r 2 v

H

s not seen

v seen steadily after the
eye looked a short while

8 30

U Persei

678

g' 2 v
v 1-2 h

L

Nov 6, 1899

8 40

S Persei

g 3 v
r 3-4 k

H.

No star "h" on chart.

8 50

R Aurigae

g glimpsed
f seen steadily

9

R Lynce's

h 3 v
r = k.

9 05

R Urs. Maj.

g 4 v

H

v 0-1 e

Field low, hazy.

9 20

S Bootis

L

v impossible
h barely seen.

Field nearly below pole.

Nov. 6, 1899

9 25

S Cygni
v rivis.
o seen

9 40

S S Cygni
f 1 v
v 1-2 f
or

old notation

o 1 v
v f 1-2 f

new notation

Tuesday, Nov. 7, 1899

5 30

R Androm. 112

20-12

v-4 f

L

5 45

R Cass.

05-2

v-1 p

H

8 25

S. Cass.

Star called "e" on p. 129 is in ~~flight~~ position for star s as given on chart. This is the star called γ on p. 119. It is however much brighter than γ , ϵ , ζ of the sequence, and there must be some error on chart. Probably the faint star north of ζ on drawing from plate I 23524 is really the comp. star s. This brighter s I was thought last night the prismatic companion of "e", but to night I found it was no near s and not bright. The prismatic companion of e it is near ϕ that it makes it ϕ double

Nov. 7, 1899

8 45-

R S Cygni

l 3-4 v

v-2 k

Have z and k been
interchanged on chart. k is
brighter than f , and also brighter
than h and g .

Wednesday, Nov. 8, 1899

U Camelops 1279

8 10

b 3 v

v 1 c

r very red and
hard to estimate

8 25

J Camelops 1623

d 4 v

v 0-1 e

v 3 f

Thursday, Nov. 9, 1899

m.

7 20

T Mrs. May.

4511

v not seen

k is the faintest comp. star seen

7 22

S Mrs. May.

v not seen

k is the faintest comp. star seen

Field too, appears too hazy.

8

T Persei

d 1 v

v 3 e

8 05

R Mrs. Minors

d 2-3 v

v 2 e

8 15

R Camelopard

~~v = f~~

e 3 v

v = f

144

8 38

Nov. 9, 1899
S. Ophi
 g 4 v
 r 0-1 h
 v 2 l

(l 2-3 h)

8 55

U. Cygni
 h 2 v
 v 1 l

8 58

Z. Cygni 7192

r. nris.

♂ seen distinctly
 ♀ not seen

9 05

Deichmüller's var.

m 3 v

v 1-2 n

Friday, Nov. 17, 1899

m

5-3⁵₀

R Sagittarii
vivid.
0 ~~h~~ seen

6905- ~~h~~ ^h

5-⁴⁰₅₂

S Sagittarii
vivid.
0 ~~h~~ seen

6921 ~~h~~ ^h

5-53

J Androm
vivid.
9 seen

~~h~~ ^h

Tuesday, Nov. 21, 1899

5 30

V Aquilae
 γ 2 v
 γ 1 v

6834

5 45

S Andromedae
 γ invis.
 ϵ seen

H

5 50

Clouds

7 35

Clouds

8 25

S Delphini

α 3 v
 γ 2 α'

α' is the star near α

8 45

SS Cygni

δ 5 v
 δ 1-2 v
 $\gamma = m$

new notation

γ probably rising.

Nov. 21, 1899.

925

R Lauri

1577

R 2v

M

v 2 s

H

927

S Lauri

1582

v vivis.

s seen

950

Stopped by clouds

S 45

Friday, Nov. 24, 1899

SS Cygni

k 2 v

v 2 m

(new notation)

Object overhead.

Saturday Nov. 25, 1899

8 45

S S Cygni

$f_1 v$
v 2 h

9

V Ceti

8597

C 3 v

v 2 x

H

x inserted on chart near
b.

9 10

S Lacertae

8068

f_1
 $f_2 v$
v 2 5

9 30

U Orionis

2100

H

$f_3 v$
v = v

v on extreme limit of visibility, probably 13 m
old chart.

Nov. 25, 1899.

10

T Andromedae

γ invisible

μ & seen (new notation)

Stars too fainter than
 μ & could be seen.

10 10

R Aurigae

γ vibs.

δ seen

10 13

R Lynceis

$m_3 \gamma$

γ in

H

10 20

R Camelopard

γ 6 γ

γ 0-1 C

Sunday, Nov. 26. 1899

7 40

S S Cygni

$v = \frac{9}{v-3} \text{ H}$

H

very little brighter than
last night.
very clear.

Wednesday, Nov. 29, 1899

S. S. Eggen

7.45

e 1-2 r

v 3 f

Friday ~~Nov~~ Dec 1. 1899
 S S Cygni

L 2 v

r 2 m

old notation

Just caught between clouds.
 The seeing was good, but
 only clear for one look.

5-45

Saturday, Dec. 2, 1899

U Persei

k3v

v0.1l

7 40

S Cygni

~~n5v~~

L3v

v = m

v5n

old notation

7 45

S Cygni

double

d.v

H

.v

v

v1v

v4-5v

Can not find chart of faint
stars
Chart found

7 55

S Cygni

m1v

v3n

Dec. 2, 1899.

8

T Cephei
v b d

v quite red.

8 05-

S Cephei
e 3 v
v 2 f

v is very red.

8 25-

R Draconis.

v minor.

"f" on limit of visibility.

posted on
Bulletin to here

Monday, Dec. 4, 1899

5 10

S. S. Cygnus

m 4 v

n 0-1 v

v 3 0

Low power

old notation

Seeing excellent.

Tuesday, Dec. 5, 1899

5 15 J Aquarii 7468 #

v invs.
"s" seen two grades fainter
could be seen.

5 30 J Delphinus 744 #

v invs.
"g" seen one grade fainter
could be seen.

7 50 S S Cygni
w 3 v
v 0-10 (old notation)

8 R Urs. Min.
d 3 v
v 1 e

hazy.

8 10 R Camelopard
h 5 v
v 1 e

8
9 20Dec. 5, 1899.
clouds.8
9 45

R Cass.

d 2 v

v 2 t

H.

t barely seen.

9

R Androm

d 3 v

v 2 l

9 10

R Piscium

d 3 v

v 1-2 l

9 15

U Ceti

v r r r

if seen.

2 grades fainter might
be seen.

9 25

R Arctis

d 3 v

v 1 c

Wednesday, Dec. 6, 1899

5-10 ρ Cass opera glass
 $\rho 2 \tau$ Cass.

5-20 S Bootis
 v not seen
 S is the faintest comp. Star
 seen. v not seen even
 with high power. Field low

5-40 $S S$ Cygni H
 $v = \beta$
 $v = 3/g$ old notation

Thursday, Dec. 7, 1899

S S Cygni ✓

g. v.
v 3 β

H.

old notation

5 3 0

Saturday, Dec. 9, 1899.

S. S. Cygni

M

5 20

$v = \frac{K}{5}$
 $v = 3$

H

old notation

✓

5 30

S Aquarii

8 2 30

piv
 $v = 29$

H

5 40

R Pegasi

motion too near

5 45

R Aquarii

b3r

$v = 30$

rel.

8 00

U - Camelops

c1r

$v = 30$

8 05

T Camelops

d4r

84C

Dec. 9, 1899.
X Cygni

v. minor

V, 5, 3 not seen.

#

 β seen, and stars probably
2 mag. fainter

845

Z Cygni
v. minor0 seen = .3² that is
stars .2 of a mag. fainter
could be seen

850

R S Cygni
v. 2-3 k

k > f. f. k

900

U Cygni

v. 2

v. 3-4⁰

#

Dec. 9. 1899.

100 R Mrs. Maj.
v barely sketched
about equal to t.

1010 S Mrs. Maj.
f 3-4 v
v = g

1020 T Mrs. Maj.
v not seen
only is the faintest star seen.
Region hazy.

Noted to here

Saturday, Dec. 16, 1899

925

S Cephei.

d 1 v
v 3 c

Postdon
Bulletin
Moon half eclipsed
Henry
v very red.

930

R Cancri
b 4 v
v 2 c

940

S. Urs. Maj.
f 1 v
v 3 g

Tuesday, Jan. 30, 1900

7 35

S. S. Cygni

Field just identified
old notation is the fainter
companions star seen
or not seen.

7 45

R Camelopard

b 1 v

v 4-5 c

7 50

U Persei

l 2 v

v 2 m

(a)

not on chart.
m is also called
on chart.

8 00

R Arctis

782

k 1 v

v 1-2 c

8 15

R U Cygni

7783

l 2 v

v 1 a

Posted to
here

Jan. 30, 1900

8 25 S Lacertae 8068

Field too low to identify
variable

9 15 R Leonis
K1V
V3L

9 15 R Urs. Minor
in stars visible
Too cloudy in north

Thursday, Feb. 1. 1900

705

S Persei 814

f1v
br29

708

S Persei

c3v
v1-2d

715 S Cass 107

f2v
br29

720

S Cass

432

f1v
br5k

can not finish h.

740

Cass
A. Aurigae

8600

v n. s.

is seen steadily

Feb. 1. 1900

7 45 S Cephei 7779
 d 40 v
 r 1-2 e

7 50 S Cephei 7609
 d 5 v

Feb. 13. 1900. This obs. should doubtless be v s d, and the above is an error in recording.

8 S Cygni H
 v v v
 n seen.

8 05 S S Cygni
 x
 r 3 v
 r = 5

8 08 R Draconis
 v 2 e

8 10 R Urs. Min.
 e 2 v
 v if

Feb. 1, 1900

8 15

R Camelopard
a 5 v
v 1 b
v 4 c

8 18

S Bootis
v = e
v 4 f

8 22

S Urs. May
d 3 v
v 2 e

8 25

T Urs. May
h 2 v
v 3 k

8 30

R - Urs. May
v. mires
p seen

8 45

~~S B~~ R Lynceus H
v. mires
p seen

Feb. 1, 1900

905

Raiunai ✓

m 2 v

v 1-2 m

Therm 13° above

Friday, Feb 2, 1900

7 40 S S Cygni
 v ~~invisible~~ invisible $+$
 β seen (old imitation)

7 45 S Andromedae
 v invisible $+$
 C^2 seen

7 55 R Androm.
 $r 42$
 $v 0-1$ s

8 05 R Piscium $+$
 $v = \beta$ $v = 11 m$

8 20 U Ceti $+$
 v invis. ~~+~~
 γ seen

8 30 R Trianguli
 $\theta' 5 v$
 $v 1 \gamma$

Feb. 2, 1900

R. L. L. L.
h 4v
v 1k

8 140

Tuesday, Feb. 6, 1900

7 10

S S Cygni

m

v not seen

x seen steadily

H

β seen* at times (old notation)

7 20

R Camelopard

a 4v

v 2-3 f

7 30

R Leonis

h 2v

v 3 f

7 45

~~R Orionis~~

~~h 2v~~

~~v 2 m~~

Chart has wrong star
marked as variable

Old chart, very poor.
Make new one.

7 50

R Cancri

2946

v 2 m

H

v 3 n

Postcard

Feb 6, 1900,

m

8 05

+ Leporis 1803

v seen thought to be seen
 about equal to ^{companion} star marked
 on chart. Think no error
 and no near moon for faint
 stars to be clearly seen

8 20

S Hydrae 3170

m 2 v

v 1-2 n

8 25[±]

J. ~~R~~ Camelopard.
 b 1 v
 v 2 c

Occultation of star.

8 38 5.5

At watch = -12^h 3 by B. 394

Test

Feb. 6, 1900

853

U Camelopard
e2v
v3d

855-

R Arctis
h2v
v2k

Posted to
here

Wednesday, Feb. 7, 1900

7 40

S S Cygni

No stars visible

8 20

R Geminorum 2528

V minor

p seen

H

q not seen, though stars

~~8 3~~H shades fainter than
p are certainly seen.

8 35

V Cancri 2976

V minor

m seen

H

8 40

R Leonis

h 3 v

v 2 k

9

Clouds.

9 20

R Camelopard.

Wednesday, Feb. 14, 1900

7 33

SS Cygni
v. minor.
x seen.

1+

M

7 40

U Persei
h 2-3 v
v = k

7 45

Z Cygni
lost lost

7 50

U Cygni
lost lost

8 05

R U Cygni

7783

β 2 v
v 1 d

8 10

R Camelopard
a 5 v
v 2 f

8 30

R Leonis
h 1 v
v 3-4 k

very near moon

Clouds

Postcard

855

Feb. 14, 1900

U. S. Navy

2100

212

220

Thursday, Feb. NT 1900

7 15

SS Cygni

Can not identify field.
Cloudy in N.W.

7 30

R Camelops

a 5 v

v 2-3 h ✓

7 35

T Ues. Maj

d 2 v

v 3 e

45-11

7 40

S Ues. Maj

d 1 v

v 4 e

Clouds

45-57

8 15

Stephens

d 1 v

v 3 e

8 17

T Cass

107

v = 7

v 30 g

Tuesday, Feb. 20, 1900

7 50

S S Cygni
 v invisible H.
 seen by glimpses
 (very clear)

8 05

S. Cass 432
 S³ v
 or 2 h ✓

8 10

S Persei 814
 I 2 v ✓
 or 2-3 f

8 12

S Persei 493
 C⁵ v ✓
 v 0-1 d

8 20

R Aurigae 855 H
 l 3 v ✓
 v 3 m

8 25 Feb. 20, 1900
 R. Cass 8600
 Field too low & hazy

8 30 J Cephei 7609
 v 5 d. ✓

8 35 R Urs. Maj. 3825
 v minor ✓
 p seen

8 43 S Bootis
 e 3 v ✓
 v 2 f

8 45 R Camelops
 v 1 b ✓
 as too bright to compare

8 55 R Urs. Min. 5948
 f 20 ✓
 no "g" on chart

Posted.

8 57

Feb. 20. 1900
R Draconis

v 3 l

d not on chart

9 03

R Leonis
hiv
v 4 k9
* 12

T Hydrae 3184

a 2 v

v 2 b

Friday, March 2, 1900

7 35

S S Cygni
 invisible
 glimpsed at times.

8 00

R Camelopard
 b2v
 v5c

✓

8 05

R Leonis
 v0-1h

no "g" on chart.

Clouds.

9 00

S Hydrae 3184
 b3v
 v1c

9 15

S Hydrae 3170
 m3v
 v1d

Feb. 2. 1900

9 25 — R Cancri 2946

β_1 r
 $\beta_2 - \beta$.

H

9 35 — V Cancri 2976

H

m 4 v

r 1 n

Saturday, Mel. 3, 1900

7.20

S S Cygni

H

$\gamma_3 v$
 $v = \delta$ (old notation)

7.35

R Androm

H

$\gamma_2 v$
 $v_3 \delta$

$\gamma > \beta?$

7.50

T Androm.

C 2 v

H.

$v_1 C^2$

8

R Piscium
Liris.

L

0 ~~seen~~

8.05

U Persei

678

$\gamma_4 v$
 $v = \gamma'$

Incl. 3.1900

R Arietis

$v = k$
 $v - 2 - 3 \text{ l.}$

8
7 20

R Trianguli

525
 $v - 4 \beta$

8
7 25

Monday, Mch. 5, 1900

7.30 S S Cygni
Too low

7.40 R U Cygni
Too low.

7.50 U Camelop 1279
b4r
r0-1c

obs. difficult
or not.

8 R Tauri & S Tauri

Both mires. Too near moon
to see 2^d. stars.
m is the faintest comp. star seen

8.05 + Camelop 1623
d4r
r1c

tested

Mch. 5, 1900.

M

8 15

U Orionis

2100

 $g \approx r$
 $r = h$

Moon near.

Coming up rapidly.

8 35

- Puppis

 $8^h 3.7^m - 22^\circ 38'$ $b \approx r$
 $r = c$

9

R Sextantis

Clouds in region.

PostedWednesday, March 7, 1900

7 12

S S Cygni

M.

c ³ p v

v 1 d

(new notation)

Field low.

7 30

R Cass

8600

v vivis.

u seen

H

7 40

S Cephei

e v

v 3 f

7 43

T Cephei

d 0-1 v

v 4 e

8 00

S Cygni

f .^k
d . ff .
id

double

f f star lying near d but am
not sure whether it is the variable
It is about equal to k

March 7, 1900.

m,

803

J Cass

107

f 3 v
v 1 g

✓

812

S Cass.

✓

g 2 v
v 3 h

very difficult
to compare with
h. too far away.

814

S Persei

✓

f 1.2 v
v 2 g

815

S Persei.

c 4 v

✓

v 1 d

822

R Aurigae

l 2 v

++

v 3 m

Inc. 7, 1900

m,

R Mrs. May.

3825

830

d 1 v
v 3 t

H.

835

S Mrs. May

4857

d 3 v
v 2 e

837

T Mrs. May,

v = b
v 1 e

845

S Boottis

5757

b 1 v
v 3 e

850

R Camelopard

b 3 v
v 3-4 e

855

R Mrs. Min.

d 3 v
v 1 e

Incl. 7.1900

\$900

R Draconis.

✓

l/v

v-2 f

910

R. Lynceis
vt invisible
p glimpses

✓

Thursday, March 8, 1910

7:10

S S Cygni

M

Fieldy too hazy.
a is the only comp. star I could
see.

7:30

J Leporis 1803

not seen
J seen

Very near moon

U Orionis

Too near moon.

7:50

R Leonis
v2h

3493

8:05

S Pygmae

a'2v

+2a

a' . . .
na . . . b

a' not on chart.

E. P. 100

8 30

Mel. 8.1900
 R. Sextantis
 v 3 1/2

H

8 35

R. Vignier 45 21
 f 3 v
 v 3 f

Monday, Feb. 12, 1900

8 28 R Leonis
v 3 h

M

8.3 0 R Camelops
b 4.5 v
v 2 c

9 05 S Can. Min.

m
x 3 v
v 1 ~~3~~ n

p

.p

.x

.v

4

Fl

m & n are on drawing of Jh. stars
on old chart.

new chart.

St

Look up chart of Jh. stars

9 38 R Cancri
Moon too near.

R Can. bet. 49X8
f 2 v
v 2 g
new chart.

196

posted.Tuesday, March 13, 1900

8 35

U Uanis

Mf 2, v
v 3-4 gRegion very hazy, but
stars seen clearly.

9 10

R Camelop.

L 4 v
v 3 c

Wednesday, March 14, 1900.

7 50

R Cancri, 2946

M

02 v

~~15 = m~~

March 15 Mongelai marked "m" on chart. "m" is a bright star near.

~~M < n or o.~~

~~Inquire about this.~~

ask why star very near R Cancri is not a comp. star.

8 00

R Leonis

f 3 v

very near moon.

8 15

T Cephei

7609

d, v

v 4 e

Nov. 14, 1950

820

S Cephei

$v = d$
 $v = 3c$

✓

827

R Draconis

$e = v$
 $v = f$

✓

835

R Urs. Min.

5948

$c = 2v$
 $v = 2d$

✓

838

R Camelopard

$b = 3v$
 $v = 3c$

✓

840

S Bootis

$a = v$
 $v = b$

✓

845

S Urs. Maj.

4557

$e = 2v$
 $v = f$

✓

Posted.

Mch. 14, 1900

8 50

T Urs. May 4511

a 3 v ✓
v 3 b

8 55

R Aurigae

k 3 v ✓ H
v 1 b

9 00

S Persei
f 1 v ✓
v 2-3 g

9 02

S Persei
a 5 v ✓
v 0-1 d

9 10

S Cass
v = g ✓

9 15

T Cass
b 3 v ✓
v = f

Postcard

Friday, March 16, 1900

7 58

R Trianguli

M

x 3 v

v 2 x'

8 00

R Arctis

782

h 2 v

v 1 h

8 03

U Persei

e' 3 v

v 2 e

8
X 07

U Camelops 1279

h 1 v

v 3 e

v very red

8 10

T Camelops

1623

d 5 v

v 0-1 e

Nov. 16, 1950

815

U Orionis
d 4r
v 2 c

838

R Cancri 29 46
v = f H
v B β

Wednesday, March 21, 1900

7 10

U Orionis
d5v
v1e

7 14

A Trianguli
x5v
v1x

7 30

U Puppis
k4v
v1e

Comp. stars marked
on drawing on chart.

7 34

R Camelopard
b6v
v1e

✓

7 50

A Urs. Maj. 3825
f3v
v2g

✓

II

Feb. 21, 1900

8 00

S Cygni
v. invis.
m seen

✓

8
8 08

S Urs. Maj.

✓

f 2 v
v 3 f

8
8 10

T Urs. Maj.
a 6 v.
v 0-1 b

✓

8
8 25

R Leonis
v 1 f

I can find it but it is too
far off to estimate the
interval and also too bright.

8 35

R Comae

43.15

v. invis.

H

q seen

Posted

Mar. 21, 1900.

852 U Virginis 4596.

v. v. v.
β seen

H

Thursday, Mch. 22, 1900

8 05 U Orionis
e 2 r
r 3 f

8 20 S Hydrae 3170 H
p 3 r
r 3 g

8 30 T Hydrae 3184
e 1 w
r 3 f

8 40 R Geminorum
v v v v v

very faint stars seen, certainly
V 12 m. Before I could
select the faintest comp. star
clouds covered the field

L
m m

Star marked \odot not
seen. Look up.

Friday, Mich. 23, 1900

7 20

V Cancri

#

Can not identify variable

S

3 2 1

three stars in a row

(2) seems to be in position of variable

IV

It is a little brighter than n.

Look up on plate. If (2) is V Cancri, where is star o on Mr. Reed's Chart?

Mich. 29. (3) in above drawing is V Cancri. (1) is n. (2) is o. Compare o and n. It is a very faint star near o. ^{Plate} 13970 compared with B. 17688

8 10

χ Virginis 4300

#

χ 3 v
v 1 β

8 20

γ Virginis 4377

#

v invisible
 β seen

Mar. 23, 1900.

8 30

γ Virginis 4492
 invisible
 (dark) R seen

8 35

μ Virginis 4805
 lrv
 r m $n > m$

8 45

ν Virginis 4816
 invisible
 R glimpsed #

8 50

α Bootis 5237

lrv
 r 39

9 10

α Leonis (opera glass)
 v = l
 v 47

Wednesday, March 28, 1900

7 55

R Leonis (opera glass)

drv
vse

8 05

U Orionis

elv
v5f

8 15

S Cephei

drv
vie

v very red

8 18

T Cephei

lv-4v
v1f

8 30

T Cass

f3v
v1g

8 45 Mch. 28, 1900.
S Cassi.

$g^3 v$
v = h

✓

8 50 T. Persei
C 4 v
v = d

✓

8 55 S Persei ✓

$g^1 v$
v = 4 g

9 10 Adjustment of telescopes.
Rings on west circle all out.

9 15 R Aurigae
h 4 v
v = c

✓ H

9 18 R Draconis
 $g^3 v$
v = h

✓

Potted.

Mar. 28, 1900

920

R Mrs. Minoris

c 2 v
v 1 d

✓

922

R Camedops

c 3 v
v 3 d

✓

924

S Bootis

f 1 v
v 5 c

✓

927

S Mrs. May

f 3 v
v 1 g

✓

936

+ Mrs. May

a 3 v
v 2 b

✓

Thursday, ⁹ ~~Feb.~~ ^{Mar.} 28, 1900.

7 25

R Trianguli
 $\times 3 v$
 $\sigma 3 \times'$

7 30

R Urs. Maj. 3825

01 v ✓
 $v 3 p$

7 40

V Cancri 2976,

02 v
 $v 3 p$

H.

$n > 0$ Sep. 206,

7 45

V Coronae 5675

$v = \gamma$
 $v 3 \delta$

7 55

S Coronae 5504

$v 4-5 g$

8 00

U Coronae
 $v 3 g$

f not in chart

Postcard

Mch. 29, 1900

8 10 R Coronae 5667

r 8 f

No higher comp. stars
marked

8 30 R Cygni 7045

Region identified

. . . r? Star seen is
probably r $\frac{1}{2}$ on chartr = μ
r 3 p.

Tuesday, April 3, 1900

Posted

S Cass

107

750

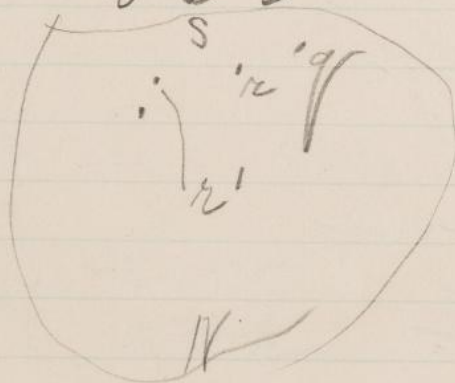
$v = \frac{8}{3} \frac{f}{g}$

Seeing poor

845-

U Gemmaurum

$m 3 v$
 $v m 4 r$
 ~~$v 2 r'$~~



r' is a better comp. star than r , for r is too near q .

857

U Orionis

$d 4 v$
 $v = e$

928

S Cass
 $g 5 v$

✓

Wednesday, Apr. 4. 1900

7 45

S Cephei
d 3 v
v 1 e

✓

7 55

S Cephei
v = f
v 4 g

✓

8 03

S Persei
v = f
v 3 g

✓

8 05

S Persei
e 2 v
v 2 d

✓

8 20

R Aurigae
l 1 v
v 3 - ~~4~~ x m

✓

H

8 35

U Gemmorum
g 3 v
v 2 h'

April 4, 1900.

845

R Leonis (opera glass)
v 2 d.

858-

R Lynceis

v iris
q seen.

✓ H

858

R Urs. Maj.
n 2 v
v 10

✓

900

S Urs. Maj.
h 1 v
v 4 k

✓

905

T. Urs. Maj.
h 3 v
v 1 c

✓

910

S Boottis
h 1 v
v 4 c

✓

Posted

April 4, 1900

9 13

R Camelops

e.5v

v = d

✓

*

9 20

R Uls. Min

v = e

v 3-4 d

✓

9 25

R Draconis

k, v

v 3-4 l

✓

9 30

S Cygni

v miss.

n & seen

✓

9 40

R Cass

too low

Thursday, April 5, 1900

7 50

U Persei.

α_{3v}
 $v 1 e'$

(Notation on chart)

7 55

R Trianguli

α_{3v}
 $v 1 \alpha'$

8 00

U Camelopard 1279

b_{3v}
 $v 3 e$

v very red.

8 05

R Tauri
invisible
n seen

~~A~~ L

8 07

S Tauri
invisible
n seen

L

April 5, 1900

8 15 I Camelopard

g 3 v m^h on chart (a)

Look up these comp. stars.
Why is not stay bet. f and
v a comp. star.

8 20

U Orionis

d 3 v

v 3 e

very near moon

8 35

U Geminorum

g 4 v

v 3 r

8 50

S Canis Minoris 2684

h 3 v

v 2 h

Posted.

April 5, 1900.

9 00 - Puppis $\delta^h 3.1$ - $22^\circ 38'$ b 2 v
v 3 c9 10 R Cancri
 $\delta 1 v$
v 3 e

H

9 20 I Cancri 2976

n 2 v
v 3 0

H

9 30 S Hydrae 3170

v miris.
p seen

H

9 35 T Hydrae

b 1 v
v 3 c9 50 R Leonis (opera glass)
v 3 d

6
Friday, April 5, 1958

M

- 7 40 J Leporis 1
 Look for obs. nov.
- 7 50 U Puppis 2857.
 l4v ✓
 r2m
- 8 05 S Pyxidis
 cl2v ✓
 r1d
- 8 15 R Sextantis
 53v ✓
 r4y
- 8 20 J Hydrae 9246 mag
 x3v ✓
 r2β r red.
- 8 30 X Virginis 4300
 x2v
 r2-3β ✓ H.
- 8 38 R Comae 4315
 r invisible ✓
 q seen.

April 6, 1900,

8^h 45^m W R Genetrium
 95v (2815) Moon very near
 v 1 r

9.05 R Corvi 4407 ✓ H
 Invisible. β seen.

9 10 γ Virginis 4492 ✓ H
 Invisible. γ seen.

9 18 R Virginis 4521 ✓
 L 2-3v
 v 1 m

9 25 δ Virginis 4596 ✓ H
 Invisible
 β seen

9 30 W Virginis 4805 ✓
~~n~~ 1 v
 v 0-1 m n > m

9 40 γ Virginis ✓ H
 Invisible
 R glimpsed.

Postell to
date.

Phil. Trans. Royal Soc. vol cxc i (1898)

Star of North Hemp. by F. McClean

Spectra of Southern Stars (Stanford, London, 1898)
for Southern stars by McClean.

Nov. 16 • Mean time 9^h 12^m A.M.
 Latitude 23° slow.

" 11° " at 7^h 25^m P.M.

Nov. 17 11° " " 9 15 A.M.

" 18 14° fast " 9 5^m A.M.

" 19 36° " " 10 50 " "

" " 31° " " 3 21 P.M.

" 20 64° " " 3 55 " "

" 21 1^m 46° " " 9 05 - A.M.

" 23 1^m 19° " 4 20 P.M.

" 25 19° " 5 00 " "

" 26 8° " 4 05 " "

" 29 56° slow " 8 00 " "

Dec. 2 1^m 43° fast " 5 02 " "

" 6 1^m 53° slow " 5 10 " "

" 7 2^m 24° " " 7 20 " "

" 8 2^m 51° " " 7 15 " "

Posted

Wednesday, April 11, 1900

8 00

U. Gemmorum

L. ^M ✓

s seen.

Moon very near
and sky hazy.

8 15

U. Iovis

d 5 v ✓

v = e

8 25

R. Trapezii

α 2 v ✓

8 30

T. Urs. Maj.

c 1 v ✓

v 3 d ✓ 45-11

8 30

S. Urs. Maj.

g 5 v ✓

v 1-2 k ✓ 4557.

8 40

S. Bootis

b 3 v ✓

r 1 c

Posted

Wednesday, Apr. 11, 1900.

8.58 R Camelopard

f1v

v3g

8.55 R Draconis

h 2-3 v

v2l

The contents of this book are
all ledgered. Apr. 25, 1901.
L.C.

1899phae, prof., 541C