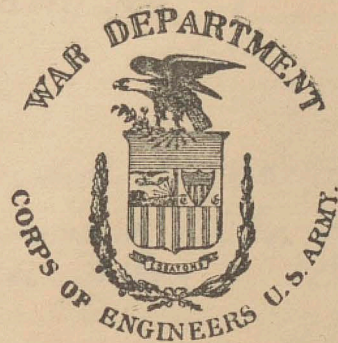


OBSERVATIONS
FOR
LATITUDES.

No. **72**
U. S. ENGINEER OFFICE,
Explorations AND Surveys
West of the 100th Meridian.

ASTRONOMICAL DEPARTMENT.

Observations and
Comparisons for let.



ASTRONOMICAL RECORDS,

Book No. 72, 1874.

U. S. ENGINEER OFFICE.

GEOGRAPHICAL AND GEOLOGICAL
EXPLORATIONS AND SURVEYS
WEST OF THE 100th MERIDIAN.

Corps of Engineers,
IN CHARGE.

Station: Las Vegas N. M. July 31st 1874

Observer: *S. F. Ramsey* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
1		6553	S	6	92.6	23.0	13.8	32° 18' 19.5"	38 55 52.9	35° 37' 6.2	- 1' 36.1	- 1.7	35° 35' 28.4
		6581	N	9	42.0	10.5	27.0						
2		6654	S	9	91.7	19.8	18.4	19 33 13.8	30 20.1	+ 4 57.9	- 0.2		27.8
		6697	N	2	18.3	18.0	20.2						
3		6709	S	12	43.9	18.0	20.0	19 30 1.1	28 53.8	+ 6 35.2	- 1.0		28.2
		6714	S	6	43.6	13.0	25.3						
4		6718	N	low									
		6731	N	11	6.0	20.0	17.3	44 25 7.3	26 50 9.0	37 38.2	- 2' 5.3	- 5.5	27.4
6762	S	7	80.7	22.7	32.4								
5		6799	N	11	21.0	19.3	18.0	47 35 52.2	23 45 18.2	40 32.7	- 5 0.6	- 3.8	28.8
		6827	S	3	42.6	17.5	10.0						
6		6830	N	11	77.0	24.0	13.4	47 36 29.5	70 51.3	- 5 21.6	- 1.6	+ 0.1 for merid.	28.2
7		4851	S	2	4.0	23.5	13.7	34 45 2.3	36 41 57.9	43 30.1	- 8' 2.3	- 0.6	27.2
		6875	N	14	55.3	12.3	24.8						
8		6893	S	3	41.2	16.0	21.0	6 55 29.0	64 28 7.9	41 48.4	- 6 24.3	+ 3.6	27.6
		6905	N	13	38.0	29.0	8.7						
9		6937	N	8	1.2	17.0	19.8	36 28 15.0	36 25 20.9	31 51.1	+ 3 41.3	- 5.5	26.9
		6967	N	5	74.0	16.2	21.2						
10		6998	S	13	76.8	8.3	29.4	34 35 27.3	30 24.1	+ 5 9.4	- 6.0		27.6
11		7067	S	13	49.3	22.3	15.2	29 57 1.9	41 2 40.4	29 51.2	+ 5 29.5	+ 10.3	30.9
		7101	N	4	94.3	38.0	0.3						
12		7119	N	13	4.7	33.5	4.3	41 27 22.0	29 53 39.8	40 30.9	- 5 6.8	+ 2.9	27.0
		7152	S	5	8.7	10.4	27.0						

Station: Las Vegas N. M. July 31. 1874

Observer: *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.	
					N.	S.				Microm. & Refr.	Level.	Merid.		
13		7166	N	9 88.5	25.7	12.0	<i>champs incl</i>	55° 33' 42.7	35° 37' 2.1	- 1' 42.8	+ 7.0	35° 35' 27.0		
		7200	S	7 23.5	27.2	10.7		15 40 21.4						
14		7241	N	2 63.0	17.0	20.5		43 35 9.9	34 59.6	+ 0	35.9	- 8.6	26.0	
		7256	S	3 53.7	12.3	36.0		27 34 49.3						
15		7290	N	21 24.0	26.0	12.9		43 58 55.0	46 52.2	- 11	22.2	- 4.8	(25.2)	
16		7309	S	10 1.8	17.8	20.0		- 6 19 7.6	38 52.3	- 3	22.8	- 2.8	26.7	
		7334	S	- 1 25.0	18.0	20.0		- 6 4 42.0						46 4.9
17		7381	N	15 28.0	14.2	24.2		77 36 52.3						
18		7394	S	3 49.5	18.2	20.2		- 5 2 43.3	43 5.0	- 7	37.2	+ 0.9	28.7	
19		7404	S	5 68.0	17.8	20.7		- 5 5 30.2	41 41.6	- 6	13.9	+ 0.6	29.2	
		7438	N	15 35.6	22.2	16.5		76 28 53.4						
20		7450	S	7 91.0	18.2	20.0		18 49 54.7	37 5.2	- 1	33.6	- 4.3	27.3	
		7483	N	10 34.0	11.0	27.9		52 24 15.7						
21		7488	N	12 68.0	5.3	33.5	<i>30 pm</i>	51 38 29.1	40 7.9	- 4	35.1	- 6.8	+ 0.1	26.1
		7528	S	5 54.2	18.8	21.0		19 41 55.8						
22		7548	N	19 46.3	10.3	29.0	<i>15 pm</i>	49 6 43.4	44 27.6	- 8	59.9	- 2.0	25.7	
23		7585	S	5 45.9	25.0	14.8		22 22 11.8	32 55.1	+ 2	35.7	- 3.6	27.2	
		7598	N	1 42.0	7.3	33.0		48 43 38.4						
24		7605	N	18 55.7	19.8	19.9	<i>25 pm</i>	60 6 29.3	47 20.5	- 12	6.9	- 6.8	+	26.8
		7641	S	- 0 30	15.5	34.7		11 28 51.8						
25		7695	N	12 58.0	16.5	23.0	<i>30^s after East wire</i>	46 37 20.0	40 37.3	- 4	58.8	- 16.0		
		7706	S	4 82.6	-	51.0		24 43 54.6						
				19 48.0	12.0	28.0	<i>lnz</i>							

Station: Las Vegas N. M. July 31 1874

Observer. *H. J. ...* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		7721		<i>ln</i>									
		7731		39.3									
		7765		<i>ln</i>									
		7788	S	7 39.2	21.8	19.0		5° 9' 36."3					
26		7810	N	9 49.5	11.7	30.4		66 4 11.1	35° 36' 53."7	- 1' 21."1	- 3."7	35° 35' 28."9	

Station: Las Vegas N. M. August 1st 1874

Observer. *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
27		6553	S	6	85.6	23.3	18.0	32° 18' 19.7"	38 55 53.2	35° 37' 6.4"	- 1' 38.8"	+ 0.8"	35° 35' 28.4"
		6581	N	9	42.0	20.0	22.0						
28		6654	S	8	86.3	18.5	23.0	19 33 14.0	30 30.3	+ 4	51.8	+ 6.8	28.4
		6697	N	1	30.4	37.5	4.0	51 27 46.7					
29		6709	S	11	46.5	8.0	33.0	19 30 1.3	28 54.0	+ 6	31.7	+ 2.0	27.7
		6731	N	10	62.5	20.2	20.7	44 25 7.5	3				
30		6762	S	7	21.0	26.4	15.0	26 50 9.3	37 38.4	- 2	11.6	+ 2.5	29.3
		6799	N	11	60.0	21.3	19.8	47 35 52.5	40 33.0	- 5	0.8	- 3.8	28.1
31		6827	S	3	79.0	12.0	29.7	23 45 13.4					
		6830	N	12	30.3	33.4	8.3	47 36 29.8	40 51.6	-			
32		6851	S	2	66.0	19.0	22.0	34 45 2.6					
		6875	N	15	23.5	29.4	12.0	36 41 58.2	43 30.4	- 8	4.7	+ 3.3	29.0
33		6893	S	3	83.0	21.3	19.7	6 55 29.1					
		6905	N	13	82.2	31.0	10.3	64 28 8.2	36 48.6	- 6	25.2	+ 5.2	28.6
34		6937	N	8	23.3	19.2	22.0	36 28 15.3	31 51.5	+ 3	33.2	+ 3.6	28.3
		6967	N	5	96.8	17.9	23.6	36 25 21.2	30 24.4	+ 5	0.6	+ 2.9	27.8
35		6992	S	13	76.5	30.0	11.7	34 35 27.6					
		7067	S	12	97.3	22.3	20.0	29 57 1.4					
36		7101	N	4	40.0	36.8	5.6	41 2 39.7	29 50.5	+ 5	30.5	+ 7.8	28.8
		7119	N	13	49.9	19.5	22.5	41 27 22.3					
37		7152	S	5	64.2	22.8	18.9	29 53 40.8	40 31.2	- 5	2.8	+ 0.2	28.7
		7166	N	9	86.9	18.0	23.9						
38		7200	S	7	28.3	33.0	9.0	15 20 21.6	37 2.3	- 1	39.7	+ 4.2	26.8

12¹/₂ no

Station: Las Vegas N. M. August 14 1874

Observer. *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
XX 401	40	7241	N	3 29.9	22.5	20.0	19 ^d	43° 35' 10." 2	35° 34' 59." 9	+ 0' 34." 0	- 6." 4		95° 35' 27." 5
	41	7256	S	4 8.2	6.0	36.0		27 34 49.6					
		7259	N	17 27	71.6	40.0	2.0	21 ^d	43 58 ₅₃ 31.6	10.6	- 8	45.5	+ 1.9
42		7309	S	9 87.0	21.6	19.8		- 6 19 7.7	38 52.5	- 3	29.2	+ 5.6	28.9
43		7334	S	-1 42.5	23.0	18.9		- 6 4 42.4	46 5.2	- 10	44.7	+ 6.1	26.6
		7381	N	15 29.9	32.6	10.2		77 36 52.7					
44		7394	S	2 61.3	20.0	22.0		- 5 2 43.2	43 5.1	- 7	36.2	- 2.0	27.9
45		7404	S	4 79.0	19.0	22.2		- 5 5 30.1	41 41.7	- 6	12.3	- 2.2	27.2
		7438	N	14 44.8	17.4	24.0		76 28 53.4					
46		7450	S	7 41.5	20.7	19.8		18 49 54.9					
		7483	N	9 97.8	20.4	20.0		52 24 16.1	37 5.5	- 1	38.8	+ 0.3	27.0
47		7488	N	12 78.5	23.0	17.3		51 38 20.4					
		7528	S	5 52.5	12.0	29.0		19 41 56.0	40 8.2	- 4	39.8	- 3.0	25.4
48		7548	N	20 13.6	19.7	21.0		49 6 43.7	44 27.9	- 8	56.9	- 3.8	27.4
		7585	S	6 20.5	12.6	27.6		22 22 12.1					
49		7598	N	2 32.9	33.0	8.0		48 43 38.8	32 55.5	+ 2	29.7	+ 2.3	27.2
50		7605	N	17 8.2	21.3	19.2		60 6 29.7					
		7641	S	-1 94.4	19.0	22.7		" 28 52.0	47 40.9	- 12	13.4	- 0.4	27.3
51		7695	N	12 82.9	22.2	20.2		46 37 20.3					
		7706	S	4 73.1	21.5	21.2		24 43 54.9	40 37.6	- 5	12.1	+ 0.5	26.0
52		7721	S	-2 27.7	25.0	17.2		42 33 31.9	49 29.9	- 14	4.3	+ 2.6	28.2
53		7731	S	-2 43.0	25.0	17.3		32 33 41.4	49 34.6	- 14	10.2	+ 2.6	27.0
		7765	N	19 62.0	23.3	19.8		39 5 27.9					
54		7788	S	7 49.5	20.3	22.3		5 9 36.5					
		7810	N	9 84.5	36.0	7.0		66 4 11.5	36 54.0	- 1	30.6	+ 6.3	29.7

Station: Las Vegas N.M. August 17, 1874.

Observer: *J.F.R.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		7829	N										
		7833	S										
		7843	S	10	96.0	23.0	19.5	31° 55' 46.4					
55		7858	N	5	51.7	32.0	11.2	39 7 59.1	35° 31' 52.7	+ 3' 29.8	+ 5.6		35 35' 28.1
		7875	N	13	21.5	18.0	24.8	61 7 35.3					
56		7908	S	7	50.8	25.5	18.0	10 10 35.9	39 5.6	- 3 39.8	+ 0.2		26.0
		7963	N	5	23.6	21.8	22.3	67 57 57.9					
57		7996	S	11	76.0	33.2	11.0	3 8 21.3	31 9.6	+ 4 11.4	+ 5.0		26.0
		8024	N	-2	12.3	24.0	19.8						
		8034	S	15	77.3	15.0	29.0						
58		8083	N	7	51.0	36.0	8.8	14 31 48.7	30 4.8	+ 5 18.6	+ 3.1		26.4
		8114	N	13	61.6	21.2	23.0	56 28 21.0					
59		8131	S	4	45.7	13.0	31.0	48 19 38.6	41 24.1	- 5 53.9	- 4.6		26.4
		8156	S					23 3 9.6					
		8159	S										
		8212	N										
		8229	N										
		8256	S										

low by clouds

Estimation

no star there.

low

low

Station: Las Vegas, N.M. August 2nd 1874

Observer. *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
60	6	6967	N	6 68.4	21.2	21.9	cloudy before	36° 25' 21.5"	35° 30' 24.7"	+ 4' 59".6	+ 3".4	35° 35' 27.2"	
		6998	S	14 44.2	29.3	13.3		34 35 27.9					
				12 71.0	15.0	20.1	changed length of bubble. corr. with - clouded up again.						

Station: Las Vegas, N.M. August 3. 1874.

Observer. J. J. Ramsay Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
61.		6553	S	7 14.3	17.0	17.0		32° 18' 20.2	35° 37' 6.9	- 1' 43.9	+ 7.0	35° 35' 30.0	
		6581	N	9 84.0	32.0	2.0		38 55 53.6					
62.		6654	S	9 53.0	21.0	13.0		19 33 14.4	30 30.8	+ 4	57.5	- 1.1	27.2
		6697	N	1 81.0	11.2	23.9		51 27 47.3					
63.		6709	S	12 4.0	20.2	14.5		19 20 1.7	28 54.5	+ 6	34.8	- 1.6	27.3
		6731	N	10 22.0	19.3	15.0		44 25 8.1					
64.		6762	S	6 84.2	17.7	17.3		26 50 9.7	37 38.9	- 2	10.2	+ 1.1	29.8
		6799	N	11 56.7	21.2	13.8		47 35 53.1					
65.		6827	S	3 82.4	- 0.3	35.7		23 45 13.9	40 33.5	- 4	58.4	- 6.6	28.5
		6830	N	6 32.0	35.0	0.8							
67.		6851	S	2 89.2	15.0	20.0		24 45 3.1	43 31.0	- 8	6.2	+ 3.7	28.5
		6875	N	15 50.5	28.2	7.0		36 41 58.8					
68.		6893	S	2 20.9	17.0	17.6		6 55 29.4	41 49.1	- 6	14.7	- 5.5	28.9
		6905	N	11 92.9	5.8	29.0		64 23 8.9					
69.		6937	N	7 84.0	18.1	16.0		36 28 15.9	31 52.0	+ 3	38.1	- 1.2	28.9
		6967	N	5 58.5	17.9	17.0		36 25 21.8					
70.		6998	S	13 50.0	14.0	21.1		34 35 28.2	30 25.0	+ 5	5.0	- 1.4	28.6
		7067	S	12 8.5	12.3	22.6		29 57 1.9					
71.		7101	N	3 37.5	23.6	11.6		41 2 40.4	29 51.2	+ 5	35.8	+ 0.4	27.4
		7119	N	12 53.4	14.8	20.0		41 27 22.9					
72.		7152	S	4 77.1	12.2	22.7		29 53 40.6	40 31.7	- 4	59.2	- 3.7	28.8
		7166	N	10 27.0	17.1	17.4		55 33 43.8					
73.		7200	S	7 95.6	7.0	27.7		15 40 22.1	37 3.0	- 1	29.2	- 4.9	28.9

Station: Las Vegas, N. M. August 3, 1874

Observer. *S. J. R.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
74.		7241	N	2 82.2	18.7	16.0	
		7256	S	3 66.0	1.0	34.0	
75.		7290	N	17 21.9	31.9	3.6	* XX. 401.
76.		7309	S	9 48.8	12.3	22.7	
77.		7324	S	-1 81.0	14.0	21.1	
		7381	N	14 86.1	29.7	6.9	
78.		7394	S	1 83.5	22.7	13.7	
79.		7404	S	3 99.7			
		7438	N	13 61.9	6.3	30.5	
		7450	S	6 35.0	21.3	15.6	
80.		7483	N	8 96.0	18.0	20.0	
		7488	N	11 98.7	30.0	8.0	
81.		7528	S	4 68.6	2.3	35.0	
82.		7548	N	19 76.2	21.3	16.8	
		7585	S	5 84.2	1.0	36.7	
83.		7598	N	1 86.8	33.3	4.7	
		7605	N	18 0.4	15.3	22.5	
84.		7641	S	-0 89.6	9.8	28.0	
		7695	N	11 94.0	16.0	22.7	
85.		7706	S	3 81.7	23.3	15.3	
86.		7721	S	-2 80.0			
87.		7731	S	-2 94.0	21.5	16.0	
		7765	N	19 15.0	21.3	17.2	
		7788	S	6 43.5	17.0	21.2	
88.		7810	N	8 76.0	28.1	11.0	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
43° 35' 10.9	35° 35' 0.5	+ 0' 32.3	- 7.0		35° 35' 25.8
27 34 50.1					
43 53 32.3	44 11.2	- 8	42.7	- 1.1	27.4
- 6 19 7.5	38 52.9	- 3	27.1	+ 2.9	28.7
- 6 4 42.2	46 5.6	- 10	42.7	+ 3.6	26.7
77 36 53.4					
- 5 2 43.9	43 5.6	- 7	34.1	- 3.5	28.0
- 5 5 29.3	41 42.2	- 6	10.8	- 3.6	27.8
76 28 54.8					
18 49 55.3					
52 24 16.7	37 6.0	- 1	40.6	+ 0.9	26.3
51 38 21.1					
19 41 56.5	40 8.8	- 4	41.4	- 2.5	
49 6 44.4	44 28.5	- 8	56.4	- 7.2	
22 22 12.6					
48 43 39.5	32 56.0	+ 2	33.2	- 1.7	27.5
60 6 20.4					
11 28 52.4	47 41.4	- 12	8.6	- 5.9	26.9
46 37 21.0					
24 43 55.4	40 38.2	- 5	13.1	+ 0.3	(25.4)
32 33 32.5	49 20.6	- 14	6.3	+ 2.2	26.5
32 33 42.0	49 35.3	- 14	11.3	+ 2.2	26.8
39 5 28.6					
6 9 36.8					
66 4 12.2	36 54.5	- 1	29.6	+ 3.0	27.9

Station: Las Vegas N. M. August 3. 1874.

Observer. *J. R.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.	
					N.	S.				Microm. & Refr.	Level.	Merid.		
89.		7829	N	8 2.8	18.0	20.1		62° 41' 15.9"	35° 35' 17.9"	+ 0' 11.7"	- 2.3"	35° 35' 27.3"		
		7833	S	8 33.2	15.0	23.0		8 29 19.8						
90.		7843	S	10 80.3	20.0	18.0	25 ^s pm.	31 55 46.9	31 53.3	+ 3	39.3	- 4.7	+ 0.1	27.9
		7858	N	5 11.3	7.9	30.3	39 7 59.7							
91.		7875	N	11 57.1	17.9	20.0		61 7 36.0	39 6.2	- 3	31.8	- 8.3	26.1	
		7908	S	6 7.5	2.3	36.0		10 10 36.4						
92.		7963	N	4 37.6	17.7	20.5		67 53 58.7	31 10.2	+ 4	23.6	- 6.1	27.1	
		7996	S	11 21.5	7.3	31.0		3 8 21.7						
93.		8024	N	4 71.8	18.3	20.0		56 25 43.3	28 46.3	+ 6	48.4	- 7.6	27.2	
		8034	S	15 31.5	3.8	34.8		14 31 49.2						
94.		8083	N	6 90.7	27.0	12.3		56 28 21.6	30 5.4	+ 5	24.1	- 3.5	25.9	
		8114	N	13 12.1	19.8	19.0		48 19 38.6						
95.		8131	S	3 85.9	19.0	20.0		23 3 10.1	41 24.3	- 5	56.9	0.0	27.4	

Station: Las Vegas, N. M. August 4, 1874.

Observer. *J. K. ...* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
96.		6553	S	6 50.0	24.5	24.0	
		6581	N	9 8.7	24.0	23.6	
97		6654	S	9 16.5	24.0	22.8	
		6697	N	1 42.0	19.6	27.9	
98		6709	S	11 59.2	29.0	18.2	
		6731	N	10 44.6	20.6	26.4	
99.		6762	S	7 9.3	26.0	21.0	
		6799	N				
		6827	S	lost by clouds.			
		6830	N				
				cloudy - clearing off again.			
100.		7241	N	2 71.9	22.5	13.1	
		7256	S	3 37.4	18.2	16.3	
		7290		21 21.0	17.1	17.4	
101		7309	S	9 64.2	17.0	17.2	
		7334	S	1 23.8	17.8	17.0	other star 73 ^{ds}
102		7381	N	14 89.7	13.7	21.9	
103		7394	S	2 55.1	17.0	13.0	
		7404	S	4 70.1	17.7	17.7	
104		7438	N	14 54.3	30.1	5.5	
105		7450	S	6 72.3	17.9	17.0	
		7483	N	9 42.9	28.2	7.4	

closed for Las Vegas

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
32° 18' 20.4					
33 55 53.9	35° 37' 7.2	- 1' 39.7	+ 0.2		35° 35' 27.7
19 33 14.6	30 31.1	+ 4 58.5	- 1.6		28.0
57 27 47.6					
19 30 1.9	28 54.8	+ 6 32.6	+ 0.6		27.4
44 25 8.4					
26 50 9.0	37 38.7	- 2' 9.2	- 0.2		29.3
43 35 11.2	35 0.8	+ 0 25.2	+ 2.6		28.6
27 34 50.4					
43 58 56.4	46 53.4	- 11 27.4	+ 0.4		26.7
- 6 19 7.4	38 53.2	- 3 22.5	- 2.0		28.7
- 6 4 42.1	46 5.8		- 1.7		wrong star.
77 36 53.8					
- 5 2 42.9	43 5.8	- 7 42.2	+ 5.5		28.9
- 5 5 29.7	41 42.4	- 6 19.4	+ 5.7		28.7
76 28 54.5					
18 49 55.6					
52 24 17.1	37 6.4	- 1 44.3	+ 5.0		27.1

35 35 27.67 ± 0.07
prob. error of one obs. ± 0.72.

finished Nov. 30. 1874

Station: Cimarron, N. M., August 31 1874

Observer: J. J. Rains Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		6895 6912	N S	low			SW Wind.						
1.		6940	S	5 86.0	20.3	24.6		26° 32' 4" 5	36° 29' 11.7"	+ 0' 56".6	+ 2.9		36° 30' 11.2"
2.		6943 6962	S N	10 42.9 4 39.2	20.5 31.0	24.0 14.0		26 26 15.9 46 26 18.8	26 17.3	+ 3 52.7	+ 3.1		13.1
3.		6997 7006	S N	0 51.0 16 52.0	29.8 9.0	15.0 35.8		36 36 33.4 36 44 23.5	40 28.4	- 10 17.0	- 2.8		8.6
4.		7065 7098	S N	7 27.0 9 54.1	29.6 27.3	15.8 17.8		10 23 38.8 62 34 27.1	31 33.0	- 1 27.5	+ 5.4		10.9
5.		7137 7176	S N	10 21.0 6 81.0	26.8 32.0	18.9 13.3		12 52 35.6 60 3 11.9	27 53.7	+ 2 11.1	+ 6.2		11.0
6.		7200 7215	S N	13 80.3 4 9.9	20.3 30.0	25.2 15.7		15 40 27.1 57 7 53.7	24 10.4	+ 5 58.7	+ 2.2		11.3
7.		7233 7256	N S	13 42.0 2 94.0	21.2 9.3	24.6 37.0		45 39 2.0 27 34 56.7	36 59.4	- 6 47.0	- 7.2		8.2
8.		7333 7368	N S	10 87.5 4 41.0	27.0 25.7	20.3 21.3		43 25 45.0 29 42 52.0	34 18.5	- 4 49.3	+ 2.6		11.8
9.		7402	N	10 41.1	22.8	23.5		43 25 10.8	34 1.4	- 3 51.4	+ 0.9		10.9
10.		7455 7461	N S	13 50.0 2 74.5	31.3 11.8	15.0 35.3		46 10 21.0 27 3 51.6	37 6.3	- 6 53.6	- 1.7		11.0
11.		7520 7555	S N	7 5.3 9 54.9	27.9 18.0	18.3 28.0		18 45 22.2 54 18 10.2	31 46.2	- 1 36.2	- 0.1		9.9
12.		7606 7643	S N	15 71.0 2 52.9	18.0 37.0	28.0 8.7		16 42 15.1 56 6 5.6	21 40.4	+ 8 28.2	+ 4.2		12.8

Station: Cimarron, N.M. August 31, 1874

Observer: *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		7676	S										
		7712	N	low									
13.		7742	S	8 33.0	23.2	23.0		15° 25' 26".6					
		7749	N	8 49.8	31.0	15.3		57 34 0.7	36° 30' 13".6	- 0' 6".5	+ 3".7		36° 30' 10".8
14.		7833	S	8 67.1	23.9	13.7		8 29 24.5					
		7837	N	7 57.5	10.4	36.9		64 29 30.3	29 27.4	+ 0 42.2	- 1.5		8.1
15.		7857	N	14 80.9	20.3	26.8		78 8 44.4					
		7884	S	2 38.1	23.5	24.0		4 52 23.4	38 10.5	- 7 59.0	- 1.6		9.9
16.		7902	N	10 29.9	20.8	26.8		62 55 56.3					
		7908	S	5 47.1	17.3	30.7		10 10 42.3	33 19.3	- 3 6.2	- 4.5		8.6
17.		7958	S	11 24.3	26.8	21.0		23 56 25.3					
		7995	N	11 27.1	28.2	19.0		49 3 51.1	30 8.2	- 0 1.1	+ 3.5		10.6
18.		8020	S	10 96.5	26.0	21.3	25 km	- 7 14 45.5					
		8048	N	4 24.5	29.8	17.8	very faint	80 6 17.7	25 46.1	+ 4 19.2	+ 3.9		9.2
19.		8058	N	12 84.0	21.3	26.0		41 23 30.9					
20.		8091	S	3 42.1	33.0	14.9	very faint	31 50 31.2	37 1.1	- 6 46.4	- 4.5		10.2
		8097	S	0 13.0	33.9	14.0		31 41 48.0	32 39.4	- 2 22.9	- 4.5		12.0
21.		8128	N	12 6.1	29.0	18.4		45 42 35.3					
22.		8156	S	1 51.9	9.0	39.0		27 23 19.9	32 57.6	- 2 50.3	+ 3.1		10.4
		8159	S	8 35.3	9.0	39.0		27 33 53.7	38 14.5	- 8 9.8	+ 3.5		8.0
23.		8171	N	5 13.2	24.0	23.5		42 13 18.6					
		8206	S	12 14.8	28.5	19.2		30 38 0.6	25 39.6	+ 4 30.5	+ 2.3		12.4

Station: Cimarron, N. M. Sept 4. 1874

Observer: S. J. Knapp Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
24.		6895 6912	N S	8 62.6 8 23.7	15.0 28.0	27.0 14.5	no Wind.	49° 45' 29".5 23 15 18.8	36° 30' 24".2	- 0' 15".0	+ 0".3	36° 30' 9".5	
25.		6940	S	5 9.8	27.0	14.8		26 32 5.1	29 12.4	+ 0	57.1	- 0.4	9.1
26.		6943 6962	S N	9 65.0 3 61.7	27.8 13.9	14.0 28.0		26 26 16.5 46 26 19.7	26 18.1	+ 3	52.5	- 0.1	10.5
27.		6997 7006	S N	- 0 67.1 9 36.5	30.5 13.8	11.3 28.0	30 ^s pen wrong*						
27.		7065 7098	S N	6 35.9 8 56.0	21.3 22.3	20.8 19.7		10 28 39.3 62 34 28.2	31 33.7	- 1	24.8	+ 0.7	9.6
28.		7137 7176	S N	9 32.0 5 87.0	21.5 24.0	20.1 18.5		12 52 36.1 60 3 13.0	27 54.6	+ 2	13.0	+ 1.8	9.4
29.		7200 7215	S N	12 0.3 2 66.3	34.4 6.5	7.8 35.7		15 40 27.7 57 7 54.8	24 11.3	+ 6	0.1	- 0.6	10.8
30.		7233 7256	N S	13 87.2 3 22.8	22.7 17.9	19.0 24.0		45 39 3.1 27 34 47.5	36 60.3	- 6	50.3	- 0.5	9.5
31.		7333 7368	N S	10 17.9 3 70.0	16.8 31.7	31.0 12.0		43 25 46.1 29 42 52.9	34 19.5	- 4	9.8	+ 0.1	9.8
32.		7402	N	9 73.2	10.0	34.0		43 25 11.9	34 2.4	- 3	52.5	- 1.0	8.9
33.		7455 7461	N S	13 18.0 2 34.2	34.2 10.0	9.8 34.0		46 10 22.1 27 3 52.4	37 7.2	- 6	57.8	+ 0.1	9.5
34.		7520 7555	S N	5 64.7 8 15.9	26.2 17.3	17.8 27.0		48 45 22.8 54 18 11.5	31 47.2	- 1	36.8	- 0.3	10.1
35.		7606 7643	S N	14 23.7 1 11.0	13.8 37.0	30.2 7.6		16 42 15.7 56 1 7.0	21 41.3	+ 8	26.1	+ 3.0	10.4

Station: Cimarron, N. M. Sept 4, 1874

Observer: *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
36.			N	16 75.1	13.2	31.0		52° 16' 43.4	36° 41' 11.0	- 11' 2.2	+ 0.8	36° 30' 9.6	
			S	-0 42.8	32.9	11.7		21 5 38.6					
37.			S	7 18.1	16.0	28.3		15 25 27.2	30 14.7	- 0	7.3	+ 2.4	9.8
			N	7 37.0	33.6	10.8		57 35 2.1					
38.			S	8 37.7	22.6	22.3		8 29 25.0	29 28.3	+ 0	38.2	+ 1.0	7.5
			N	7 38.5	24.6	20.8		64 29 31.7					
39.			N	14 15.1	26.0	18.9		78 2 45.9	38 11.4	- 8	0.3	- 1.0	10.1
			S	1 69.0	17.0	28.4		- 4 52 23.1					
40.			N	9 97.7	33.2	11.8		62 55 57.8	33 20.3	- 3	11.2	+ 1.4	10.5
			S	5 1.5	14.8	30.3		10 10 42.8					
41.			S	10 21.0	33.0	12.3		23 56 26.2	30 9.3	- 0	1.0	+ 0.2	8.5
			N	10 23.5	12.9	32.8		49 3 52.4					
42.			S	10 46.6	17.9	27.3	25 pm	- 7 14 45.0	25 47.1	+ 4	19.4	+ 2.8	9.3
			N	3 73.8	33.3	12.0		80 6 19.2					
43.			N	11 97.0	30.3	14.7	very faint	45 42 36.6	32 58.8	- 2	48.7	+ 0.4	10.5
			S	7 59.2	16.0	29.7		27 23 21.0					
44.			S	- 0 67.0	16.9	29.0		27 33 54.6	38 15.6	- 8	7.3	+ 0.8	9.1
45.			N	11 56.0	34.8	10.3		41 23 32.1	37 2.1	- 6	52.0	+ 0.4	10.5
			S	0 84.9	11.5	34.3		31 50 32.2					
46.			S	7 67.0	11.4	34.3		31 41 49.0	32 40.6	- 2	29.9	+ 0.4	11.1
47.			N	2 71.6	17.1	28.2	wrong setting	42 13 19.8	25 40.7	+ 4	28.1	+ 1.8	10.6
			S	9 67.0	32.4	13.6		30 38 1.6					

Station: Cimarron, N.M. Sept. 5. 1874

Observer: *S. Kamm* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
48.			N	8 44.2	22.7	15.0		49° 45' 29.7"	36° 30' 24.3"	- 0' 13.4"	- 0.4"	36° 30' 10.5"	
			S	8 9.5	14.0	23.5	23 15 19.0						
49. 50.			S	5 19.2	39.8	-		26 32 5.3	29 12.6	+ 0	67.7	- 2.9	11.4
			S	9 69.1	40.0	-		26 26 16.7	26 18.3	+ 3	55.1	- 2.8	10.6
			N	3 59.1	-	46.0	46 26 19.9						
			S	- 0 46.8	10.6	25.8							
			N	invisible									
51.			S	6 82.2	9.8	27.0		10 28 39.4					
			N	9 7.3	34.3	2.3	62 34 28.5	31 34.0	- 1	26.8	+ 3.4	10.6	
52.			S	9 56.0	15.9	20.7		12 52 36.2					
			N	6 19.6	32.8	4.0	60 3 13.3	27 54.7	+ 2	9.7	+ 5.6	10.0	
53.			S	12 35.8	21.0	15.7		15 20 27.8					
			N	3 8.0	17.0	19.5	57 7 55.1	24 11.4	+ 5	57.7	+ 0.6	9.7	
54.			N	12 18.6	27.9	8.2		45 39 3.3					
			S	1 53.9	4.0	32.3	27 34 57.7	37 0.5	- 6	50.4	- 2.0	8.1	
55.			N	10 24.2	-	38.3		43 25 46.4	34 19.8	- 4	8.2	- 2.7	8.9
			S	3 80.4	32.4	5.4	29 42 53.1						
56.			N	9 82.6	2.5	36.7		43 25 12.2	34 2.6	- 3	52.2	- 1.6	8.8
57.			N	13 79.0	9.0	23.7		46 10 22.4					
			S	2 97.0	24.0	14.0	27 3 52.6	37 7.5	- 6	57.1	- 2.2	8.2	
58.			S	5 81.2	11.2	27.0		18 45 23.0					
			N	8 40.1	32.0	7.0	54 18 10.8	31 47.2	- 1	39.8	+ 2.1	9.7	
59.			S	12 95.4	3.7	35.7		16 42 15.9					
			N	- 0 22.0	38.6	0.7	56 1 7.3	21 41.6	+ 8	27.8	+ 1.4	10.8	

Station: Cimarron, Dec. 5, 1874

Observer. *K. J. B.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
60		7676	N	17 7.9	18.2	21.0	
		7712	S	-0 8.1	18.0	21.2	
61		7742	S	7 4.2	34.3	4.7	
		7749	N	7 19.4	5.0	37.0	19.4
62		7833	S	8 73.2	20.3	20.0	
		7837	N	7 77.1	26.3	14.4	
63		7857	N	14 78.8	7.6	32.0	
		7884	S	2 30.1	32.0	7.8	
64		7902	N	8 98.9	19.0	20.3	
		7908	S	4 8.9	16.0	24.0	
65		7958	S	9 65.0	17.9	22.2	
		7995	N	9 69.9	25.3	15.2	
66		8020	S	10 70.1	18.7	21.2	
		8048	N	3 94.2	25.3	15.0	
67		8058	N	12 88.6	31.0	9.0	
		8091	S	8 52.2	9.0	32.0	very faint
68		8097	S	0 22.3	9.0	32.0	
69		8128	N	11 61.1	19.6	20.8	
		8156	S	0 91.2	21.0	20.0	
70		8159	S	7 73.1	20.8	20.0	
71		8171	N	5 50.3	15.1	24.7	
		8206	S	10 52.5	21.2	18.9	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
52° 16' 43.7"					
21 5 38.8	30° 41' 11.2"	- 11' 1.5"	- 1.4"		36° 30' 8.3"
15 25 27.4					
57 35 2.4	30 14.9	- 0 5.8	+ 0.1		9.2)
8 29 25.1					
64 29 32.1	29 28.6	+ 0 37.0	+ 2.8		8.4
78 8 46.3					
- 4 52 23.1	38 11.6	- 8 1.3	0.0		10.3
62 55 58.1					
10 10 42.9	33 20.5	- 3 9.2	- 2.1		9.2
23 56 26.4					
49 3 52.7	30 9.5	- 0 1.9	+ 1.3		8.9
- 7 14 44.9					
80 6 19.6	25 47.4	+ 4 20.6	+ 1.8		9.8
45 42 36.9					
27 23 21.2	32 59.0	- 2 48.2	- 0.2		10.6
27 33 54.9	38 15.9	- 8 8.2	- 0.2		7.5
41 23 32.4					
31 50 32.5	37 2.4	- 6 52.4	0.0		10.0
31 41 49.3	32 40.9	- 2 29.5	- 0.1		11.3
42 13 20.1					
30 38 1.9	25 41.0	+ 4 30.7	- 1.7		10.0

Final result: $36^{\circ} 30' 9.01'' \pm 0.06''$
 prob. error of one obs. $0.48''$
 finished Dec. 8, 1874.

Station:

Quiblo, Col. Ky. Sept 14: 1874

Observer. *J. F. Kane* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
1	6780		W	7 46.0	24.0	11.0	
	6794		S	6 25.2	4.2	30.7	
2	6824		W	10 36.6	35.0	-0.3	
	6827		S	14 90.0	-	37.3	the prev.
3	6835		S	3 76.6	-	37.5	
				10 94.9	3.3	31.3	wrong/ru
4	7140		S	11 67.9		-1.0	
	7166		N	2 52.0	2.0		
5	7213		S	13 54.0	42.0	2.0	
	7260		N	1 25.8	-	43.3	
6	7320		N	2 90.0	4.9	32.0	
	7336		S	13 43.0	28.3	8.7	
7	7365		N	4 61.2	31.4	5.5	
	7410		S	11 23.8	2.0	35.5	
8	7505		S	0 68.8	16.0	22.0	
	7524		N	10 27.0	18.0	20.0	very faint
9	7571		S	2 35.0	7.3	29.7	
	7589		N	13 50.4	25.8	12.0	
10	7644		N	8 90.5	26.9	12.0	very faint
	7689		S	17 26.5	8.0	31.8	
	7738		S	-0 59.6	32.3	7.0	very faint
	7754		N				

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
57° 43' 14".8					
18 49 47.8	38° 16' 31".3	- 0' 46".6	- 3.14		38° 15' 47".6
52 40 22.2					
23 45 20.2	12 51.2	+ 2 54.7	- 1.1		44.8
23 59 36.1	19 59.2	- 4 14.4	- 1.2		43.6
20 45 48.0					
55 33 56.5	9 52.2	+ 5 53.0	+ 0.5		45.7
36 1 57.1					
40 13 42.3	7 49.7	+ 7 53.3	- 0.6		42.4
38 9 52.7					
38 8 9.0	9 0.8	+ 6 44.8	- 1.7		43.9
53 3 12.9					
23 19 49.5	11 31.2	+ 4 15.4	- 1.8		46.8
37 58 27.2					
38 45 18.2	21 52.7	- 6 9.3	- 1.9		45.5
25 4 14.7					
51 41 31.2	22 53.0	- 7 9.9	- 2.0		45.1
71 53 58.4					
4 26 52.3	10 25.3	+ 5 19.9	- 2.1		43.3

Station: Pueblo, Col. Ty Sept 14, 1874

Observer: [Signature] Recorder:

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
11.		7778	N	6 86.8	22.9	16.0	
12.		7782	N	15 10.9	22.9	16.0	
		7807	S	1 65.0	15.3	24.0	
Pueblo, Col. Ty Sept 15, 1874							
		6723	N	10 80.5	35.0	4.0	
		6758	S	lost by clouds			
		6780	N	7 8.0	35.0	3.	
		6794	S	lost by clouds			
				clouds up.			
13.		6824	N	6 75.8	17.8	21.0	20 ^s pm
		6835	S	0 3.0	16.8	22.0	rev.
		6849	N	11 2.3	26.5	12.0	45 ^s pm
		6860	S	lost by clouds			
14.		6924	N	6 84.5	28.0	12.0	
		6933	S	6 72.0	12.5	27.5	
15.		6967	S	9 31.2	19.0	21.2	
		6986	N	3 78.0	27.2	19.5	
16.		7006	S	5 7.6	24.7	15.8	
		7022	N	8 60.1	17.0	23.5	
17.		7073	S	3 39.5	20.0	21.3	
		7114	N	12 2.1	20.0	22.0	
18.		7140	S	11 8.9	10.4	31.0	
		7166	N	2 0.0	29.8	12.3	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
56° 25' 12.1"	38° 19' 6.0"	- 3' 21.1"	- 0.4"		38° 15' 45.5" 42.9
56 35 46.1	24 23.0	- 8 38.7	- 0.4		
20 12 59.9					
52 40 22.3					40.5
23 59 36.2	19 59.2	- 4 19.3	+ 0.5	+ 0.5	
55 58 50.7					41.3
20 32 41.0	15 45.9	- 0 4.8	+ 0.2		
36 25 31.6					43.0
39 58 48.0	12 9.8	+ 3 33.3	- 0.1		
36 44 26.3					42.9
39 51 30.3	17 58.3	- 2 15.9	+ 0.5		
36 2 20.6					41.5
40 40 8.1	21 14.4	- 5 32.4	- 0.45		
20 45 48.2					42.0
55 33 56.7	9 52.4	+ 5 50.3	- 0.7		

Station: *Purdlow, C. Ky. Jan 15th 1874*

Observer: *J. J. [unclear]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
19		7213	S	12 70.0	33.5	7.8	<i>45 pmw</i>	36° 1' 57.3	38° 7' 49.9	+ 7' 51.8	- 0.4	+ 0.1	38° 15' 40.7
		7260	N	0 48.0	7.0	34.5		20 13 42.5					
20		7320	N	3 14.5	24.0	18.5	<i>2</i>	38 9 52.9	9 0.6	+ 6 46.6	- 5.4		41.8
		7336	S	13 64.5	17.0	35.8		38 8 9.2					
21		7361	N	3 89.9	16.0	26.5	<i>f</i>	58 3 18.2	11 31.4	+ 4 12.4	- 1.4		42.4
		7410	S	10 44.9	23.5	19.0		23 19 49.6					
22		7505	S	- 0 74.6	14.3	29.5		37 58 27.4	21 52.9	- 6 8.9	+ 0.5		44.5
		7524	N	8 82.5	30.3	13.0		38 45 18.4					
23		7571	S	1 12.3	8.0	24.5		23 4 14.9	22 53.2	- 7 12.9	+ 0.6		40.9
		7589	N	12 35.2	36.2	7.0		51 41 31.5					
24		7644	N	2 81.5	22.0	21.3		71 53 58.7	10 25.6	+ 5 18.2	- 0.3		43.5
		7689	S	11 7.2	21.0	23.0		4 26 52.6					
25		7733	S	6 17.5	28.0	15.4		20 21 50.3	17 27.3	- 1 44.5	- 0.1		42.7
		7754	N	8 88.5	15.3	28.5		56 13 4.3					
26		7778	N	7 22.0	43.3	0.5		56 25 12.4	19 6.3	- 3 23.9	+ 0.6		40.8
		7782	N	15 44.1	43.0	0.6		56 35 46.5					
27		7807	S	1 93.0	2.0	42.2	20 13 0.1	24 23.3	- 8 40.7	+ 0.5		43.0	

Station: Sidney Barracks, Nebr. Sept 24 1874

Observer: D. F. Hamer Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.	
					N.	S.				Microm. & Refr.	Level.	Merid.		
1.	1.	7706	S	7 55.9	30.0	8.0	heavy wind from SW. cloudy	240 44' 6".8	41' 9' 37".6	- 0' 59".0	- 2".0	41° 8' 36".6		
		7749	N	9 9.0	3.7	37.5		57 35 8.3						
	7789	N	12 71.9	18.0	20.5									
	7807	S	low by cloud											
2.		7824	N	15 49.8	28.3	8.7	25 ⁵ pm.	50 37 14.8	16 37.6	- 8	1.4	- 1.2	+ 0.1	35.0
		7843	S	3 1.0	6.4	31.2	31 56 0.3							
3.		7856	S	3 61.5	16.0	21.3		19 35 11.4	15 38.0	- 7	0.4	- 1.7	35.9	
		7902	N	14 52.0	18.0	20.0	62 56 4.6							
4.		7917	S	14 94.0	10.2	27.9		40 53 37.8	1 49.5	+ 6	53.7	- 1.8	35.4	
		7932	N	4 21.0	24.0	14.0	41 9 49.2							
5.		7902	N	10 23.6	25.0	12.3		41 17 30.6	5 34.9	+ 3	1.4	- 1.2	34.5	
		7972	N	8 69.8	16.0	22.0		42 38 53.9						
6.		7978	S	5 35.6	18.3	20.0		39 42 37.9	10 45.9	- 2	8.8	- 1.8	35.3	
		7984	S	low by clouds				40 56 13.2						
		7994	S	- 1 60.7	20.0	18.0		41 39 15.2	17 44.2	- 9	5.8	- 4.2	34.2	
7.		8023	N	12 55.1	9.0	29.0		70 12 13.5	8 16.3	+ 0	22.2	- 4.3	34.2	
		8037	S	low by clouds				69 59 46.4	2 0.2	+ 6	40.1	- 4.5	35.6	
		8106	N	12 65.0	21.5	17.0		12 4 14.0						
8.		8173	N	2 84.9	21.3	17.8		38 32 57.8	8 36.5	+ 0	4.9	- 4.4	37.0	
		8182	S	13 22.5	8.0	31.0		43 44 15.2	5 43.8	+ 2	58.3	- 4.7	37.4	
		8195	S	12 16.7	22.7	15.9								
9.		8223	N	12 3.9	6.6	32.3								
		8237	N	7 54.1	6.0	33.1								

Station: Sidney Barracks, Neb. Sept 24, 1874

Observer: J. S. Ramsay Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
12.		8268	N	6 95.9	15.8	23.5		57° 57' 17.9	41° 12' 2.6	- 3' 22.3	- 2.5		41° 8' 37.8
13.		8282	N	21 57.8	15.5	23.8		58 16 3.6	21 25.4	- 12 45.8	- 2.6		37.0
		8324	S	1 71.3	18.3	21.3		24 26 47.3					
14.		16	N	18 19.9	17.3	22.9	no wind now and splendid clear.	45 22 32.8					
15.		67	S	14 26.7 1 26.1	16.3	24.7		37 16 32.1	19 32.5	- 10 53.0	- 3.2		36.3
16.		100	N	11 5.1	25.1	14.9		43 42 8.4	14 13.4	- 5 33.1	- 4.2		36.1
17.		152	N	15 52.0	24.0	17.0		43 47 52.2	17 5.2	- 8 25.4	- 5.0		34.8
		173	S	2 41.0	6.3	34.8		38 46 18.3					
		215	S	13 70.0	17.7	23.0		23 35 11.9					
18.		254	N	4 44.9	17.0	24.0		58 30 15.3	2 43.6	+ 6 56.7	- 2.9		37.4
		283	S	13 46.9	22.4	18.8		40 40 19.9					
19.		337	N	3 99.0	7.3	34.0		41 24 54.7	2 37.3	+ 6 5.4	- 5.4		37.3
		368	S	4 38.0	27.0	13.9		6 54 52.2					
20.		387	N	13 89.0	0.0	41.0		75 34 49.5	14 50.9	- 6 6.6	- 6.5		37.8
21.		412	N	3 25.0	13.7	26.9		67 28 27.9	5 16.0	+ 3 28.3	- 4.9		39.4
22.		444	N	16 76.0	12.2	28.0		67 45 46.9	13 55.4	- 5 12.3	- 5.4		37.7
		453	S	8 65.5	16.0	24.0		14 42 4.0					
		487	N	17 67.5	33.0	6.9		47 59 34.5					
23.		516	S	2 86.6	1.0	39.0		34 36 49.1	18 11.8	- 9 30.9	- 2.8		38.1
24.		600	N	7 83.1	27.0	13.7		71 48 44.0					
25.		629	S	10 67.0	4.0	36.8		10 24 45.6	6 44.8	+ 1 49.4	- 4.5		29.7
26.		647	S	17 26.7	22.7	18.0		25 13 26.1 59.0	2 49.0	+ 3 55.0	- 4.7		39.3
		658	N	11 17.1	7.9	33.0		57 3 11.9	2				
27.		666	S	6 6.0	25.5	15.5		25 20 46.3	11 59.1	- 3 17.0	- 3.5		38.6

← see next page

Station: Sidney Barracks, Nebr. Sept 24. 1874

Observer. *H. F. R.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
28		691	S	9 0.0	13.5	27.3		32° 46' 35".2					
29		715	N	11 92.6	16.0	24.8		49 34 31.8	41° 10' 33".5	- 1' 52".8	- 5.2		41° 8' 35".5
		731	N	5 38.9	14.5	26.3		49 26 13.2	6 24.2	+ 2 19.2	- 5.9		37.5
		520	N	6 61.1	21.0	19.2		45 36 19.0					
		576	S	14 64.2	9.3	31.8		36 30 44.6	3 31.8	+ 5 9.6	- 4.8		36.6

Station: Sidney Barracks Nebr. Sept 26, 1874

Observer: J. F. (and) Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.			
					N.	S.				Microm. & Refr.	Level.	Merid.				
30	7706		S	7 0.0	27.0	7.6	good air.	24° 44'	7.1				41° 8' 35.7"			
	7749		N	8 62.4	8.4	26.2	W. & d. terrible	57 35	8.8	41° 9' 37.9	- 1'	2".6		+ 0".4		
31	7789		N	12 43.9	11.5	23.0		62 10	42.2				37.9			
	7807		S	7 37.0	26.3	9.0		20 13	1.7	11 52.0	- 3	15.4		+ 1.3		
32	7824		N	15 57.2	0.0	34.8		50 37	15.3				35.1			
	7843		S	3 3.0	36.0	-		31 56	0.7	16 38.0	- 8	3.5		+ 0.6		
33	7856		S	3 34.9	29.7	5.0		19 35	11.7				36.9			
	7902		N	14 30.0	7.1	28.7		62 56	5.2	15 38.4	- 7	2.2		+ 0.7		
34	7917		S	14 91.2	16.9	18.7		40 53	38.3				36.4			
	7932		N	4 21.8	19.3	16.5		41 9	49.7	1 44.0	+ 5	52.2		+ 0.2		
35	7962		N	10 21.2	20.0	16.6		41 17	31.1	5 34.7	+ 3	1.2	+ 0.4	36.3		
	7972		N	8 70.9	11.8	24.6		42 38	54.4							
36	7978		S	14 98.7	23.7	12.6		39 20	13.8	4 34.1	+ 4	2.1	- 0.4	35.8		
	7984		S	5 26.9	26.5	9.8		39 42	38.4	10 46.4	- 2	12.6	+ 0.9	34.7		
38	7994		S	- 1 59.0	16.4	19.8		40 56	13.7					35.5		
	8023		N	12 65.4	20.0	17.0		41 39	15.7	17 44.7	- 9	9.1	- 0.1			
	8037		S	invisible												
39	8106		N	12 32.8	14.6	22.9		70					36.8			
	8173		N	2 52.2	13.0	24.9		70 12	19.2	8 16.7	+ 0	18.5		+ 1.6		
40	8182		S	12 30.7	26.5	11.4		69 59	47.1	2 0.7	+ 6	36.5	+ 0.7	37.9		
	8195		S	11 87.8	28.7	9.0		12 4	14.3							
41	8223		N	11 89.5	10.5	27.4		38 32	58.3					36.9		
	8237		N	7 41.0	9.0	29.0		43 44	15.7	8 37.0	- 0	0.7	+ 0.6			
42										43 38	30.4	5 44.4	+ 2	52.2	- 0.1	36.5

Station: *Sidney Barracks, Vt. Sept 26. 1874*

Observer. *D. J. K.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
43		8268	N	7 0.0	17.3	20.5		57° 57' 18.6"	41° 12' 3.1"	- 3'	26.4"	+ 1.0"	41° 8' 37.7"
44		8282	N	21 62.5	17.2	20.8		58 16 4.4	21 26.1	- 12	50.2	+ 0.9	36.8
		8324	S	1 64.6	22.8	15.5		24 26 47.7					
		16	N	17 92.9	15.9	22.9		45 22 33.4					
45		x	S	13 86.1	25.0	13.8		37 86 32.4	19 33.4	- 10	57.8	+ 1.2	36.8
46		67	S	0 86.6	25.6	13.4							
47		100	N	11 81.6	12.0	26.3		43 42 8.9	14 13.8	- 5	37.4	+ 1.0	37.4
48		152	N	16 28.0	11.6	27.2		43 47 52.8	17 5.8	- 8	29.4	+ 0.7	37.1
		173	S	3 6.5	28.8	10.0		38 46 18.8					
		215	S	13 42.0	23.2	15.7		23 35 12.2					
49		254	N	4 24.9	18.0	20.9		58 30 16.0	2 44.1	+ 5	53.5	+ 1.1	38.7
		283	S	13 18.0	20.0	18.4		40 40 20.4					
50		337	N	3 86.5	19.8	19.0		41 24 55.2	2 37.8	+ 5	59.1	+ 0.6	37.5
		368	S	4 44.0	29.5	8.9		6 54 52.4					
51		387	N	14 12.4	8.1	30.5		75 34 50.2	14 51.3	- 6	13.3	- 0.4	37.6
52		412	N	4 3.0	10.0	28.0		67 28 28.7	5 16.4	+ 3	20.7	+ 0.4	37.5
53		444	N	17 52.5	10.3	28.6		67 45 47.6	13 55.9	- 5	19.5	+ 0.3	36.7
		453	S	9 23.7	29.4	9.8		14 42 4.2					
		487	N	16 73.0	17.1	21.5		47 59 85.0					
54		516	S	1 81.9	23.7	15.5		34 36 49.5	18 12.3	- 9	34.8	+ 0.9	38.4
		540	N	6 79.2	23.4	15.7		45 36 19.5					
55		576	S	14 64.3	19.7	20.0		36 30 45.1	3 32.3	+ 5	2.6	+ 1.7	36.6
		600	N	7 11.9	-	11.9		71 48 44.7					
56		629	S	9 83.0	13.9	-		10 24 45.7	6 45.2	+ 1	44.5	+ 0.9	30.6

Station: Sidney Barracks, Nebra, Sept. 26, 1874

Observer. *[Signature]* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
57.	647		S	16. 89.2	19.9	19.7	
	658		N	10 93.0	18.0	21.9	
58.	666		S	5 71.0	22.0	17.9	
	691		S	7 77.0	26.8	13.0	
59	715		N	10 81.2	14.0	26.2	
60.	731		N	4 31.1	13.8	26.8	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
25° 6' 26.4"	41° 4' 49.5"	+ 3' 49.8"	- 0.9"		41° 8' 38.4"
57 3 12.5					
25 20 46.6	11 59.5	- 3 21.2	0.0		38.3
32 46 35.6					
49 34 32.3	10 34.0	- 1 57.3	+ 0.4		37.1
49 26 13.7	6 24.6	+ 2 13.3	+ 0.2		38.1

Station: Sidney Barracks, N. Br. Terr. 27. 1874

Observer J. F. Kandy Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
61.		7706	N	7 90.4	15.0	21.5	
		7749	N	9 45.0	17.2	19.8	
62		7789	N	12 62.0	10.8	26.4	
		7807	S	7 61.9	21.3	16.1	
63		7824	N	15 59.8	-0.2	37.0	
		7843	S	3 10.0	35.5	1.7	
64		7856	S	3 66.9	18.8	22.9	
		7902	N	14 55.1	17.8	20.0	
65		7917	S	15 5.6	19.7	17.8	
		7932	N	4 26.5	12.0	25.3	
66		7962	N	10 26.3	17.0	26.6	
67		7972	N	8 23.8	14.0	23.8	
		7984	S	4 91.7	15.9	22.0	
68.		7994	S	-0 91.2	21.0	17.12	30 pins
		8023	N	13 34.0	10.7	28.0	changed in l.
69		8106	N	11 97.0	26.2	12.5	
	70.	8173	N	2 15.6	24.6	14.0	
		8182	S	12 41.0	15.0	23.3	
71.		8195	S	11 76.1	17.7	19.9	
	72.	8223	N	11 83.2	20.0	17.7	
		8237	N	7 31.0	17.9	20.0	changed by moving screws
73.		8268	N	7 3.2	13.8	23.7	
	74.	8282	N	21 64.8	11.3	26.4	
		8324	S	1 63.1	28.6	9.7	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
24° 44' 7.6"	57 35 9.1	41° 9' 38.1"	-0 59.6"	-2.1"	41° 8' 36.4"
62 10 42.5	20 13 1.9	11 52.2	-3 12.8	-2.4	37.0
50 37 15.6	31 56 0.9	16 38.3	-8 1.6	-0.8	35.9
19 35 11.8	62 56 5.5	15 38.6	-6 59.5	-2.6	36.5
40 53 38.5	41 9 49.9	1 44.2	+6 56.0	-2.6	37.6
41 17 31.3	5 34.9	+3 4.8	-2.9		36.8
42 38 54.6					
39 42 38.6	10 46.6	-2 8.0	-3.7		34.9
40 56 12.9	41 39 15.9	17 44.9	-9 9.7	-3.1 +0.1	36.2
70 12 19.6	8 17.0	+0 17.0	+1.3		35.3
69 59 47.5	2 1.0	+6 35.3	+0.5		36.8
12 + 14.4					
38 32 58.5					
43 44 16.0	8 37.3	-0 2.7	0.0		34.6
43 38 20.7	5 44.6	+2 51.6	-1.0		35.2
57 57 18.9	12 3.4	-3 28.2	+2.1		37.3
53 16 4.7	21 26.3	-12 51.7	+0.9		35.5
24 26 47.9					

Station: Sidney Barracks, Neb. Sept. 27, 1874

Observer: J.F.K. Recorder:

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
75		16	N	16 88.0	11.1	27.3		45° 22' 33.7					
76		67	S	12 79.2	31.5	18.0							
			S	0 21.6	31.0	7.9		37 16 32.6	41° 19' 33.1	- 10' 59.1	+ 1.6		41° 8' 35.6
77		100	N	12 8.0	22.9	15.9		43 42 9.2	14 14.2	- 5 39.2	+ 2.1		37.1
78		152	N	16 54.0	20.2	18.5		43 47 53.1	17 6.1	- 8 31.1	+ 0.9		35.9
		173	S	3 28.2	20.5	18.3		38 46 19.1					
		215	S	13 4.1	23.3	14.9		23 35 12.4					
79		254	N	4 24.1	15.2	23.6		58 30 16.3	2 44.3	+ 5 53.5	0.0		37.8
		283	S	13 44.4	15.7	22.9		40 40 20.7					
80		337	N	4 14.2	20.2	18.0		41 24 55.5	2 38.1	+ 5 59.4	- 1.0		36.5
		368	S	4 36.9	18.2	19.8		6 54 52.4					
81		387	N	14 10.3	19.9	19.0		75 34 50.6	14 57.5	- 6 15.3	- 0.2		36.0
82		412	N	3 53.0	15.1	22.4		67 28 29.0	5 16.6	+ 3 19.3	+ 2.0		37.9
83		444	N	17 4.6	13.4	24.5		67 45 47.9	13 56.1	- 5 21.7	+ 1.1		35.5
		453	S	8 20.0	27.0	11.2		14 42 4.3					
		487	N	16 23.9	20.1	17.8		47 59 35.3					
84		516	S	1 26.2	20.0	18.1		34 36 49.7	18 12.5	- 9 37.4	+ 1.0		36.1
		540	N	4 98.0	12.1	25.6		45 36 19.2					
85		576	S	12 85.3	28.8	9.0		36 30 45.3	3 32.5	+ 5 3.5	+ 1.5		37.5

600
629

For the final result pair 600 & 629 had to be excl.
Lat. of Sidney Barracks, Neb.

41° 8' 36.75 ± 0.054
prob. error of one obs. 0.48

finished Dec. 12. 1874

Station: Julesburg, Col. Hy. Oct. 9. 1874

Observer. D. F. Kemp Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		8071	S	5 0.0	24.7	11.0							
		8122	N	invisible									
1.		8146	S	14 40.0	9.3	26.5	rev.	20° 8' 38.7					
		8162	N	3 67.6	9.0	27.0		61 35 50.2	40° 52' 14.5	+ 6' 53.4	- 0.4		40° 59' 7.7
2.		8173	N	10 60.0	20.3	15.5		69 59 51.7					
		8122	N	6 2.9	8.3	27.9		12 4 15.4	62 3.5	- 2 56.2	- 3.4		3.9
3.		8195	S	0 38.2	8.0	27.6		38 33 1.3					
4.		8223	N	15 30.0	33.7	2.4		43 44 19.1	68 40.2	- 9 35.1	+ 2.7		7.8
		8237	N	10 80.9	31.3	5.0		43 38 33.8	65 47.6	- 6 42.0	+ 1.6		7.2
5.		8247	S	4 36.0	9.5	26.0	very faint	17 58 28.4					
		8277	N	13 8.4	29.0	7.0		64 10 58.0	64 43.2	- 5 36.3	+ 1.3		8.2
6.		8293	S	0 47.1	26.9	8.5		8 37 14.4					
		8314	N	17 56.6	7.0	28.8		73 42 54.4	70 4.4	- 10 56.7	- 0.8		6.9
7.		8324	S	1 82.0	14.0	21.5		24 26 49.8					
8.		8364	N	16 46.0	24.0	12.5		57 50 10.4	68 30.1	- 9 24.3	+ 0.9		6.7
		8372	N	11 94.0	23.0	13.8		57 44 23.2	65 36.2	- 6 30.1	+ 0.4		7.1
9.		Q. 4237	N	6 23.0	18.5	17.8	very faint	45 41 35.5	53 34.6	+ 5 32.3	+ 1.5		8.4
10.		13	N	6 34.0	18.5	17.8	very faint	45 41 45.3	53 39.5	+ 5 28.0	+ 1.5		9.0
		58	S	14 85.0	21.2	15.5	train is coming	36 5 33.7					
11.		102	S	12 80.0	15.0	22.0		15 45 15.6					
		131	N	5 50.9	21.3	16.0		66 3 38.6	54 27.1	+ 4 41.0	- 0.4		7.7
12.		Q. 96	N	12 77.7	17.0	19.8		53 30 51.0	64 25.4	- 5 17.2	- 0.4		7.8
13.		146	N	11 16.2	17.0	19.8		53 28 46.0	63 23.0	- 4 15.0	- 0.4		7.6
		164	S	4 54.8	19.0	18.0		28 37 59.9					

Station: Julesburg, Col. U.S. Oct. 9. 1874

Observer: *WPK* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
14.		178	S	7 86.1	18.8	18.0		23° 56' 38".9	40° 60' 21".5	- 1' 13".4	- 0".4	40° 59' 7".7	
		182	N	9 76.6	17.3	19.8		58 4 4.1					
15.		215	S	9 25.5	9.3	28.0		23 35 14.4	56 27.9	+ 2 37.8	+ 0.9	6.6	
		244	N	5 16.1	30.0	7.5		58 17 41.3					
16.		254	N	14 95.4	29.8	8.0		58 30 20.3	62 47.3	- 3 39.7	+ 0.7	8.3	
17.		283	S	4 90.7	38.3	-		40 40 23.7	62 41.1	- 3 33.9	- 0.5	7.6	
		237	N	10 43.2	-	39.4		41 24 58.6					
18.		351	S	11 87.2	19.4	17.8	an other train went through. 35 pm.	9 37 35.3	55 22.6	+ 3 45.7	- 0.1	8.2	
		376	N	6 1.6	17.5	19.5		72 13 9.3					
19.		393	N	12 93.9	23.0	13.8		72 4 10.1	64 37.7	- 5 30.0	- 0.5	7.2	
		408	S	4 38.0	13.0	24.3		4 5 5.3					
20.		444	N	5 11.3	17.3	20.2		67 45 52.1	53 36.1	+ 5 30.4	+ 0.2	6.7	
		476	S	13 68.1	20.9	17.2		14 1 20.2					
21.		502	S	1 60.7	13.9	23.3		39 56 35.4	57 52.3	+ 1 14.7	- 0.2	6.8	
		510	N	- 0 33.0	23.0	14.5		41 59 9.2					
22.		535	N	10 72.2	7.0	29.8		63 14 4.8	57 28.2	+ 1 40.9	- 0.8	8.3	
23.		564	N	2 26.1	6.0	31.4		63 3 9.3	52 0.5	+ 7 7.1	- 1.4	6.2	
		572	S	13 33.9	28.3	9.1		dpl. centre	18 40 51.7				
24.		610	N	5 62.2	18.0	19.5		64 17 44.9	58 27.7	+ 0 41.9	- 0.9	8.7	
25.		620	N	15 20.2	18.0	19.6		64 30 1.1	64 35.8	- 5 27.4	- 0.9	7.2	
		632	S	6 71.0	17.7	20.0		17 39 10.5					

* this stars are taken from the Pulkowa Catalog., where is their difference coming from?

Station: Julesburg, Col. Sy. Oct. 10. 1874

Observer. D. F. Kaund Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
26.	8071		S	4 78.9	18.5	21.1	very faint
	8122		N	13 16.2	18.0	21.5	
27.	8146		S	14 2.0	26.7	13.0	
	8162		N	3 24.2	8.7	31.0	
28.	8173		N	10 96.5	28.4	11.2	
	8182		S	6 42.8	5.0	34.7	
29.	8195		N	0 97.0	25.0	14.3	
	8223		N	15 78.1	11.0	29.3	
30.	8237		N	11 29.9	11.0	29.8	
	8247		S	3 71.2	37.3	3.0	
31.	8277		N	12 38.0	0.0	41.0	very faint
	8293		S	0 19.0	22.0	18.5	
32.	8314		N	17 15.3	11.2	29.7	
	8324		S	0 93.0	31.3	9.0	
33.	8364		N	15 55.0	7.0	34.0	
	8372		N	11 4.0	5.8	35.4	
35.	92237		N	6 41.9	25.6	15.0	very faint
	13		N	6 52.2	25.0	15.7	
36.	58		S	15 10.5	10.2	31.3	very faint
	102		S	11 95.5	43.0	-	
37.	131		N	4 58.5	-	47.2	
	9296		N	12 73.1	12.5	29.3	
38.	146		N	11 12.0	12.5	29.3	
	164		S	4 48.8	27.0	15.1	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
9° 8' 40.7"	73 0 24.7	40° 64' 32.7"	- 5' 22.8"	- 1.4"	40° 59' 8.5"
20 8 38.9	61 35 50.5	52 14.7	+ 6	55.4 - 2.0	8.1
69 59 52.0	12 4 15.5	62 3.7	- 2	54.9 - 2.9	5.9
38 33 1.5	43 44 19.3	68 40.4	- 9	31.0 - 1.8	7.6
43 38 34.1	43 38 34.1	65 47.8	- 6	38.2 - 1.9	7.7
17 52 28.5	64 10 58.3	64 43.4	- 5	34.1 - 1.6	7.7
8 37 14.4	73 42 54.8	70 4.6	- 10	53.9 - 3.5	7.2
24 26 49.9	57 50 10.7	68 30.3	- 9	23.6 - 1.1	5.6
57 44 24.1	57 44 24.1	65 37.0	- 6	29.7 - 1.7	5.6
45 41 35.8	53 34.9	+ 5	34.8	- 2.4	7.3
45 41 45.6	53 39.7	+ 5	30.8	- 2.7	7.8
36 5 33.9	15 45 15.7	66 3 39.0	54 27.3	+ 6 44.1 - 2.0	9.4
53 30 57.3	64 25.7	- 5	17.8	- 1.1	6.8
53 28 46.3	63 23.2	- 4	15.7	- 1.1	6.4
28 38 0.1					

Station: Julesburg, Col. T_y. Oct. 10. 1874

Observer: *D.F.K.* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
40.	178		S	8 7.2	25.7	16.0		23° 56' 39.0					40° 59' 8.7
	182		N	9 96.0	15.6	26.3		58 4 4.4	40° 60' 21.7	- 1' 12.8	- 0.2		
41.	215		S	8 77.0	28.6	13.3		23 35 14.5					6.6
	244		N	4 61.0	49.7	33.0		58 17 41.6	56 28.8	+ 2 40.4	- 1.9		
42.	254		N	14 38.1	7.9	35.0		58 30 20.6	62 47.5	- 3 36.3	- 2.7		8.5
43.	283		S	5 20.8	30.4	12.0		20 40 28.9					8.1
	327		N	10 75.3	5.0	38.0		41 24 58.9	62 41.4	- 3 29.9	- 3.4		
44.	351		S	11 58.5	24.3	18.0		9 37 36.0					10.1
	376		N	5 59.4	10.2	32.2		72 13 9.6	55 22.8	+ 3 50.9	- 3.6		
45.	393		N	12 47.1	24.2	13.0		78 4 10.5					6.6
	408		S	3 99.1	8.8	34.0		4 5 5.4	64 38.0	- 5 27.0	- 4.4		
46.	444		N	4 0.4	19.1	23.0		67 45 52.5					7.8
	476		S	12 64.7	19.0	23.3		14 1 20.3	53 36.4	+ 3 33.3	- 1.9		
47.	502		S	1 64.1	28.5	13.5		39 56 35.6					7.6
	510		N	-0 36.2	8.8	33.0		41 59 9.4	57 52.5	+ 1 17.2	- 2.1		
48.	535		N	13 36.7	31.3	10.2		68 14 5.2	57 28.5	+ 1 42.9	- 3.3		8.1
	564		N	4 94.0	32.0	9.8		63 3 9.6	52 0.7	+ 7 47.8	- 3.1		
49.	572		S	16 3.7	3.3	38.7		18 20 51.8					
50.	610		N	6 11.4	25.2	16.9		64 17 45.3	58 27.9	+ 0 44.8	- 4.8		7.9
	620		N	15 69.2	27.0	15.0		64 30 1.4	64 36.0	- 5 24.3	- 3.9		
51.	632		S	7 27.7	6.5	25.3		17 39 10.6					7.8

Station: Julesburg, Col. U.S. Oct. 11th 1874.

Observer: D. F. Kaupf Recorder.

the instr. was very hard movable -

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
52	8146		S	14 52.2	22.4	17.0	through clouds	20° 8' 39".0					
	8162		N	3 73.1	9.6	30.0		61 35 50.8	40° 52' 14".9	+ 6' 56".0	- 3.5		40° 59' 7".4
53	8173		S	11 82.0	25.2	13.8	clouds	69 59 52.3					
	8182		N	7 25.1	2.2	37.0	30' pm.	12 4 15.6	62 3.9	- 2 56.1	- 5.4	+ 0.1	2.5 ex
54	8195		S	0 27.9	19.8	19.0	through clouds	38 33 1.7					
	8223		N	15 12.7	13.8	25.3		43 44 19.6	68 40.7	- 9 32.4	- 2.5		5.8
55	8227		N	10 66.0	12.2	27.0		43 38 34.3	65 48.0	- 6 40.2	- 3.2		4.6 ex
56	8247		S	lost by clouds									
	8277		N	lost by clouds									
56	8293		S	0 7.9	21.0	18.6		8 37 14.5					
	8314		N	17 1.6	9.3	29.3		73 42 55.1	70 4.8	- 10 52.9	- 4.2		7.7
57	8324		S	0 42.5	22.4	17.0	32' pm	24 26 50.1					
	8364		N	15 7.7	9.6	29.7		57 50 11.0	68 30.6	- 9 24.8	- 3.4		2.4
58	8372		N	10 55.6	9.6	29.8		57 44 24.4	65 37.2	- 6 30.5	- 3.4		3.3 ex
59	91.1237		N	lost by clouds									
	131		N	lost by clouds									
60	102		S	clouds									
	131		N	clouds									
59	91.96		N	changed inclination									
	146		N	11 75.0	18.0	22.0		53 28 46.6					
60	164		S	5 1.9	28.0	12.2		28 38 0.2	63 23.4	- 4 19.5	+ 2.7		6.6
	178		S	8 5.4	22.6	17.3		23 56 29.0					
60	182		N	10 11.8	23.5	16.6	changed incl.	58 4 4.8	60 21.9	- 1 15.7	+ 2.8		9.0

Station: Julesburg, Col. Sy. Oct. 11, 1874

Observer, J. F. K. Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
61.		215	S	9 3.2	33.0	7.0	
		254	N	4 99.0	12.2	28.5	
62.		244	N	14 78.5	12.0	29.0	
63.		283	S	5 6.9	16.0	24.6	
		337	N	10 67.5	29.5	12.0	
64.		351	S	11 22.1	26.5	14.0	
		376	N	5 39.5	16.0	25.0	very faint
		393	N	12 33.0	20.6	20.0	
		408	S	invisible	hazy		
65.		444	N	4 55.8	23.2	17.7	very faint
		476	S	13 23.0	13.9	27.7	13 ^T
66.		502	S	1 66.0	26.8	14.0	
		570	N	- 0 25.0	15.7	25.8	
67.		535	N	10 95.2	20.0	21.0	
	68.	564	N	2 51.1	19.3	22.0	
		572	S	13 52.8	20.3	21.3	
69.		610	N	6 35.5	21.3	20.2	
70.		620	N	15 94.8	20.2	21.6	
		632	S	7 42.1	20.4	21.6	

closed for Julesburg.

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
23° 35' 14."6					
58 17 41.9	40° 56' 28.3	+ 2' 35."8	+ 2."3		40° 59' 6."4
58 30 20.9	62 47.7	- 3 41.7	+ 2.1		8.1
40 40 24.1					
41 24 59.1	67 41.6	- 3 36.1	+ 2.1		7.6
9 37 36.1					
72 13 10.0	55 23.0	+ 3 44.6	+ 0.8		8.4
67 45 52.8					
14 1 20.4	53 36.6	+ 5 34.2	- 2.0		8.8
39 56 35.9					
41 59 9.6	57 42.8	+ 1 13.6	+ 0.6		7.0
63 14 5.5	57 28.7	+ 1 39.3	- 0.5		7.5
63 3 10.0	52 0.9	+ 7 4.7	- 0.9		4.7
18 40 51.9					
64 17 45.6	58 28.1	+ 0 41.1	0.0		9.2
64 30 1.8	64 36.3	- 5 28.7	- 0.6		7.0
17 39 10.7					

Mean latitude of Julesburg, Col. Sy.

40° 59' 7."63 ± 0."043

prob. error of one observation: 0."33

finished Dec. 19, 1874.

Station: North Platte, Nebr. Oct. 15, 1874

Observer: J. K. Kandy Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
1.		7994	S	- 2 64.0	25.8	5.0	
		8023	N	12 25.0	7.0	37.5	
2.		8106	N	12 66.7	17.9	24.7	very faint
		8173	N	2 88.1	17.3	25.8	
3.		8182	S	12 55.0	28.2	15.0	
		8195	S	8 82.6	25.8	17.0	
4.		8223	N	9 47.5	22.0	21.4	
		8237	N	4 94.5	20.0	23.5	
6.		8268	N	3 36.0	37.3	6.2	
		8282	N	17 97.8	36.7	7.0	
7.		8324	S	- 2 59.8	10.0	34.0	
		16	N	18 31.0	34.2	10.1	
8.		x	S	13 68.3	10.6	33.9	
		67	S	0 68.8	10.5	33.8	
10.		100	N	8 84.0	21.3	23.0	
		152	N	13 31.2	21.3	23.6	
11.		173	S	- 0 52.2	28.0	17.0	
		215	S	13 68.1	16.0	28.3	
12.		254	N	5 11.1	28.0	16.8	
		283	S	13 0.1	19.5	24.6	
13.		337	N	4 31.2	33.2	11.3	
		368	S	4 31.7	-	50.0	
14.		387	N	14 60.3	34.9	10.0	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
40° 56' 17.9					
41 39 20.0	41° 17' 49".0	- 9' 30.1	- 0.6		41° 8' 18.3
70 12 25.2	8 20.8	- 0 4.5	+ 1.5		17.8
69 59 53.6	2 4.7	+ 6 12.7	+ 1.1		18.5
12 4 15.8					
38 33 2.5					
43 44 20.5	8 41.5	- 0 25.9	+ 2.2		18.7
43 38 35.2	5 48.8	+ 2 29.6	+ 1.2		19.6
57 57 24.4	12 7.5	- 3 49.7	+ 1.6		19.4
52 16 10.2	21 30.5	- 13 13.2	+ 1.3		18.6
24 26 50.7					
45 22 38.4					
37 16 36.4	19 37.4	- 11 19.4	+ 0.2		18.2
43 42 13.8	14 18.6	- 6 1.0	+ 2.2		19.8
43 47 57.8	17 10.6	- 8 53.3	+ 2.0		19.3
38 46 23.4					
23 35 15.2					
52 30 22.2	2 48.7	+ 5 30.4	- 0.3		18.8
40 40 25.1					
41 25 0.0	2 42.5	+ 5 34.9	+ 3.9		21.3 ex
6 54 53.3					
75 34 57.2	14 55.3	- 6 35.6	- 7.0		12.7 ex

Station: North Platte, Nebr Oct. 15. 1874

Observer. J. F. K. Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
15.		412	N	4 20.2	32.3	12.2	
16.		444	N	17 68.5	31.0	14.3	
		453	S	8 87.0	12.3	33.0	
17.		487	N	16 92.0	35.9	9.8	
		516	S	1 42.0	12.3	33.4	
18.		540	N	3 78.5	40.3	5.3	very faint
		576	S	11 8.9	7.2	38.7	
19.		600	N	7 48.0	38.7	6.9	
		629	S	9 64.0	9.2	36.3	
20.		647	S	14 81.3	19.4	26.0	
		658	N	9 49.0	31.7	13.9	
21.		666	S	3 70.4	11.3	34.0	
		691	S	7 93.3	34.0	11.0	
22.		715	N	11 62.1	16.0	29.6	
23.		731	N	5 10.7	14.0	31.3	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
67° 28' 35.9	41° 5' 20.5	+ 2' 59".9	- 0".2		41° 8' 20.2
67 45 54.4	14 0.2	- 5 39.8	- 0.9		19.5
14 42 6.0					
47 59 40.2					
34 36 53.4	18 16.8	- 9' 57".5	+ 1.1		20.4
45 36 24.5					
36 30 49.1	3 36.8	+ 4 41.5	+ 0.8		19.1
71 48 51.2					
10 24 47.0	6 49.1	+ 1 23.3	+ 1.1		13.5
25 6 29.3	4 53.7	+ 3 25.2	+ 2.6		21.5
57 3 18.1					
25 20 49.6	12 3.8	- 3 43.1	- 1.1		19.6
32 46 29.1					
49 34 37.3	10 38.2	- 2 22.1	+ 2.2		18.3
49 26 18.7	6 28.9	+ 1 48.9	+ 1.3		19.1

Station: North Platte, Nebr. Oct. 16 1874

Observer: J. H. Hamer Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
24.		7856	S	3 13.0	17.7	19.0	
		7902	N	14 67.0	19.7	17.5	
25 26.		7917	S	15 2.4	37.7	-	
		7932	N	4 80.8	-	44.7	
		7962	N	10 81.0	-	46.4	
27. 28.		7972	N	8 66.7	19.0	18.0	
		7976	S	14 43.0	6.5	30.0	
		7984	S	4 72.6	9.6	27.0	
29.		7994	S	- 1 20.4	31.2	5.0	
		8023	N	13 51.2	1.1	36.0	
30. 31.		8106	N	12 28.6	9.0	28.2	
		8173	N	2 47.4	5.9	31.6	
		8182	S	12 12.5	32.0	5.0	
32. 33.		8195	S	8 52.1	34.0	2.3	
		8223	N	9 11.0	2.5	34.0	
		8237	N	4 58.7	2.0	34.7	
34. 35.		8268	N	7 26.1	11.8	24.8	
		8282	N	21 81.7	5.0	31.7	
		8324	S	1 24.1	29.8	7.8	
36. 37.		16	N	17 1.6	23.2	17.3	
		x	S	12 35.9	13.6	24.0	
		67	S	- 0 66.0	13.6	24.0	
38. 39.		100	N	12 1.5	14.3	23.0	
		152	N	16 47.0	13.8	24.0	
		173	S	2 62.5	26.4	11.8	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
19° 35' 13.8"	62 56 11.0	41° 15' 42.4"	- 7' 24.9"	+ 0.2"	41° 8' 17.7"
40 53 42.4	1 48.2	+ 6 33.8	- 3.3		18.7
41 9 53.9	5 38.9	+ 2 42.4	- 4.1		17.2
44 17 35.4					
42 38 58.8					
39 30 18.0	4 38.4	+ 3 42.2	- 5.1		15.5
39 42 42.6	10 50.7	- 2 31.9	- 3.9		14.9
40 56 18.0					
41 39 20.2	17 49.1	- 9 27.3	- 2.0		19.8
70 12 26.1	8 21.0	- 0 6.2	+ 1.8		16.6
69 59 53.9	2 4.9	+ 6 12.1	+ 0.3		17.3
12 4 15.9					
38 33 2.7					
43 44 20.7	8 41.7	- 0 22.7	0.0		19.0
43 38 35.4	5 47.1	+ 2 31.6	- 0.2		18.5
57 57 24.7	12 7.8	- 3 52.0	+ 2.0		17.9
58 16 10.5	21 30.6	- 13 13.2	- 0.9		16.5
24 26 50.8					
45 22 38.7					
37 16 36.6					
	19 37.6	- 11 21.4	- 0.3		15.9
43 42 14.1	14 18.8	- 6 2.0	+ 1.4		18.2
43 47 58.1	17 10.9	- 8 53.7	+ 1.0		18.2
38 46 23.6					

Station: North Platte, Nebr. Oct. 16. 1874

Observer: D. F. Ramsd Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
40.		215	S	13 36.6	20.1	18.0	
		254	N	5 30.1	20.5	17.9	rev.
41.		283	S	12 47.2	14.7	24.0	
		337	N	3 82.0	31.0	8.3	.
42.		368	S	16 21.0	15.0	23.6	wrong setting
		387	N	21 48.0	31.0	7.9	
43.		412	N	3 95.7	11.9	26.8	
	44.	444	N	17 43.6	9.0	29.8	
		453	S	8 46.1	37.3	1.6	
45.		487	N	17 37.2	21.2	17.6	
		516	S	1 79.2	21.3	18.0	
46.		540	N	3 20.7	17.3	22.0	
		576	S	10 57.0	19.7	20.0	
47.		600	N	7 94.1	25.3	14.0	
		629	S	10 1.1	12.9	27.0	
48.		647	S	14 14.1	24.6	15.0	
		658	N	8 84.5	18.8	21.0	
49.		666	S	2 96.9	26.5	13.3	
		691	S	8 4.0	21.3	18.7	
50.		715	N	11 77.6	25.3	14.6	
	51.	731	N	5 27.0	24.4	15.9	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
23° 35' 15".3					
58 30 22.5	41° 2' 48".9	+ 5' 30".2	- 0".1		41° 8' 19".0
40 40 25.3					
41 24 0.3	2 42.8	+ 5 33.5	+ 3.1		19.4
6 54 53.4					
75 34 58.0	14 55.7	- 6 35.9			
67 28 35.3	5 20.7	+ 2 53.6	+ 4.8		19.0
67 45 54.7	12 0.4	- 5 46.0	+ 3.5		17.9
14 42 6.1					
47 59 20.5					
34 36 59.6	18 17.0	- 10 0.6	+ 1.6		18.0
45 36 24.7					
36 30 49.3	3 37.0	+ 4 43.8	- 1.2		19.6
71 42 51.6					
10 24 47.1	6 49.4	+ 1 19.8	- 0.6		8.6
25 6 29.4	4 53.9	+ 3 24.1	+ 1.7		19.7
57 3 18.4					
25 20 49.6	12 4.0	- 3 46.6	+ 2.6		20.0
32 46 39.3					
49 34 37.5	10 38.4	- 2 24.0	+ 3.1		17.5
49 26 19.0	6 29.2	+ 1 46.8	+ 2.6		18.6

Station: North Platte, Nebr. Oct. 17. 1874

Observer: J. F. Kamm Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.
					N.	S.	
52.		7856	S	3 35.7	17.3	17.9	
		7902	N	14 91.0	18.0	17.9	
53.		7917	S	15 3.1	17.4	18.2	
		7932	N	4 90.4	19.6	16.0	
54.		7962	N	10 92.1	18.0	18.0	
55.		7972	N	6 33.7	16.2	19.6	
		7978	S	12 5.7	18.0	17.7	
56.		7984	S	2 33.0	20.5	15.0	
57.		7994	S	-0 52.1	6.0	29.0	
		8023	N	14 32.9	32.0	14.3	
58.		8106	N	12 64.0	12.8	24.8	
59.		8173	N	2 85.6	13.8	23.9	
		8182	S	12 51.7	25.8	11.7	
60.		8195	S	9 2.1	17.8	19.3	
		8223	N	9 68.3	24.0	13.5	
61.		8237	N	5 19.0	23.0	15.0	
62.		8268	N	5 21.1	34.0	14.0	
		8282	N	19 89.4	24.6	14.0	
63.		8324	S	-0 74.7	15.8	23.4	25 ^s p.m.
64.		16	N	17 87.0	21.2	18.3	
		x	S	13 20.7	19.6	20.0	
65.		67	S	0 19.8	19.7	20.0	
66.		100	N	8 90.0	21.0	18.0	
67.		152	N	13 38.5	21.2	18.2	
		173	S	-0 57.4	27.3	11.8	

Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
		Microm. & Refr.	Level.	Merid.	
19° 35' 13.8	62 56 11.2	41° 15' 42.5	- 7' 25.3	- 0.1	41° 8' 17.1
40 53 42.6	41 9 54.1	1 48.2	+ 6 30.3	+ 0.6	19.1
41 17 35.6	41 17 35.6	5 39.1	+ 2 38.4	- 0.2	17.3
42 38 59.0	39 30 18.2	4 38.6	+ 3 40.5	- 0.7	18.4
39 42 42.8	39 42 42.8	10 50.9	- 2 34.4	+ 0.5	17.0
40 56 18.4	41 39 20.4	17 49.4	- 9 32.4	+ 1.1	18.1
70 12 26.5	69 59 54.2	8 21.2	- 0 4.7	+ 0.5	17.0
12 7 15.9	12 7 15.9	2 5.0	+ 6 12.4	+ 0.9	18.3
38 33 2.9	43 44 20.9	8 41.9	- 0 25.5	+ 2.1	18.5
43 38 35.6	43 38 35.6	5 49.2	+ 2 27.6	+ 1.7	18.5
57 57 25.0	58 16 10.8	12 8.0	- 3 49.7	+ 0.5	18.8
24 26 50.9	24 26 50.9	21 30.8	- 13 15.7	+ 0.7	+ 0.1
45 22 38.9	37 16	19 37.8	- 11 21.3	+ 0.6	17.1
43 42 14.4	43 47 58.3	14 19.1	- 6 5.3	+ 4.3	18.1
38 46 23.8	38 46 23.8	17 11.1	- 8 58.1	+ 4.3	17.3

Station: *North Platte, Nebr. Oct. 17. 1874*

Observer *J. K. Anderson* Recorder.

No. of observation.	No. of pair.	No. in B. A. C.	N. S.	Micrometer Reading.	LEVEL.		Remarks.	Declination.	Half sum of Declinations.	CORRECTIONS.			Latitude.
					N.	S.				Microm. & Refr.	Level.	Merid.	
		215	S	<i>lost</i>									
		254	N	<i>lost</i>									
68.		283	S	13 72.2	4.8	33.2		40° 40' 25".5					
		337	N	4 75.1	38.7	-0.4		41 25 0.5	41° 2' 43".0	+ 5' 34".3	+ 2".5	41° 8' 19".8	
69.		368	S	3 91.2	17.4	20.0		6 54 53.4					
		387	N	14 27.0	23.0	15.2		95 34 58.0	14 55.7	- 6 39.3	+ 1.2	17.6	
70.		412	N	4 45.6	18.1	20.5		67 28 35.7	5 20.9	+ 2 55.5	+ 1.9	18.3	
71.		444	N	17 93.3	18.8	20.6		67 45 55.1	14 0.7	- 5 44.1	+ 2.0	18.6	
		453	S	9 0.9	24.9	14.5		14 42 6.2					
72.		487	N	16 18.8	23.2	15.8		47 59 40.8					
		516	S	0 54.1	27.0	12.7		34 36 53.8	18 17.3	- 10 3.2	+ 5.0	19.1	
73.		540	N	4 49.2	19.6	20.2		45 36 25.0					
		576	S	11 75.0	22.3	17.9		36 30 49.5	3 37.3	+ 4 39.8	+ 0.9	18.0	
74.		600	N	7 89.0	17.9	22.0		71 48 52.0					
		629	S	9 90.5	32.3	7.6		10 24 47.1	6 49.5	+ 1 17.7	+ 4.8	12.0	
75.		647	S	13 46.1	17.2	22.3		25 6 29.5	4 54.1	+ 3 22.1	+ 3.5	19.7	
76.		658	N	8 21.8	30.0	9.7		57 3 18.7					
		666	S	2 25.7	20.0	19.5		25 20 49.7	12 4.2	- 3 49.7	+ 4.8	19.3	
77.		691	S	8 28.8	16.6	23.0		32 46 39.5					
78.		715	N	11 61.5 <i>star</i>	30.5	9.2	12 ^{T d} 3.7/10715	49 34 37.8	10 38.6	- 2 24.5	+ 3.5	17.6	
		731	N	5 52.2	30.6	9.5		49 26 19.2	6 29.4	+ 1 46.6	+ 3.4	19.4	

exc. pair 600 & 629

lat. of North Platte, Nebr. $41^{\circ} 8' 18.23'' \pm 0.058$
 prob. error of one observation: $0.47''$
 finished Dec. 24. 1874.

Traut (Combined) No. 07. Multiples of a half Revolu-
 tion of micrometer screw. 1 Rev. = 97".078

Half Rev ^s	Value	Half Rev ^s	Value	Fraction
0.1	3".85	5.1	196".55	0.001
0.2	7.71	5.2	200.40	2
0.3	11.56	5.3	204.26	3
0.4	15.42	5.4	208.11	4
0.5	19.27	5.5	211.96	5
0.6	23.12	5.6	215.82	6
0.7	26.98	5.7	219.67	7
0.8	30.83	5.8	223.53	8
0.9	34.69	5.9	227.38	9
1.0	38.54	6.0	231.23	0.010
1.1	42.39	6.1	235.09	11
1.2	46.25	6.2	238.94	12
1.3	50.10	6.3	242.79	13
1.4	53.95	6.4	246.65	14
1.5	57.81	6.5	250.50	15
1.6	61.66	6.6	254.36	16
1.7	65.52	6.7	258.21	17
1.8	69.37	6.8	262.07	18
1.9	73.22	6.9	265.92	19
2.0	77.08	7.0	269.77	0.020
2.1	80.93	7.1	273.63	21
2.2	84.79	7.2	277.48	22
2.3	88.64	7.3	281.33	23
2.4	92.49	7.4	285.19	24
2.5	96.35	7.5	289.04	25
2.6	100.20	7.6	292.90	26
2.7	104.06	7.7	296.75	27
2.8	107.91	7.8	300.60	28
2.9	111.76	7.9	304.46	29
3.0	115.62	8.0	308.31	0.030
3.1	119.47	8.1	312.17	31
3.2	123.32	8.2	316.02	32
3.3	127.18	8.3	319.87	33
3.4	131.03	8.4	323.73	34
3.5	134.89	8.5	327.58	35
3.6	138.74	8.6	331.44	36
3.7	142.59	8.7	335.29	37
3.8	146.45	8.8	339.14	38
3.9	150.30	8.9	343.00	39
4.0	154.16	9.0	346.85	0.040
4.1	158.01	9.1	350.70	41
4.2	161.86	9.2	354.56	42
4.3	165.72	9.3	358.41	43
4.4	169.57	9.4	362.27	44
4.5	173.43	9.5	366.12	45
4.6	177.28	9.6	369.97	46
4.7	181.13	9.7	373.83	47
4.8	184.99	9.8	377.68	48
4.9	188.84	9.9	381.54	49
5.0	192.70	10.0	385.39	0.050

Genith level 0.93
 Sliding level 1.03

Recorder.

Latitude.

Station:

No. of observation.

2049

13.24

.2315

0.0

.1

.2

.3

.4

.5

.6

.7

.8

.9

1.0

.1

.2

.3

.4

.5

.16

.18

.21

1 0.23

2 0.46

3 0.70

4 0.93

5 1.16

6 1.39

7 1.63

8 1.86

9 2.09

10 2.32

Station:

No. of observation.

No. of pair.

Recorder.

Latitude.

0.5
0.4
0.3
0.2
0.1