

Cupboard 27
Shelf 4
No. 7
1 book

TRIANGULATION.

Simpson

No. 16 ~~17~~

U. S. ENGINEER OFFICE,

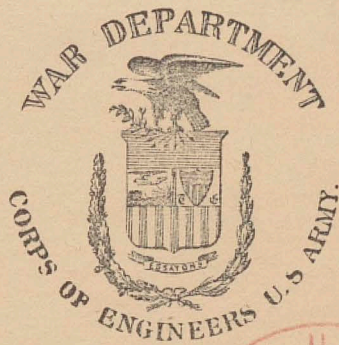
Explorations AND Surveys

West of the 100th Meridian.

TOPOGRAPHICAL DEPARTMENT.

July 26 to Oct 29.

1874



TOPOGRAPHICAL RECORDS,

Book No. *6147*, 1874.

U. S. ENGINEER OFFICE.

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

Corps of Engineers,
IN CHARGE.

Party No. 1, 2^d Div.
1874

From Pueblo, Col.,

To

Date: July 26 to Oct 29

Gilbert Thompson

Topographer.

REMARKS.

Instrument used no. 1459

10" Meckhale Transit.

Lampson's Monument
Lami Peaks.

Albani Pe

70-31

A
B
C

Blanca, buena

h. 24-25

Brazos, no. 26

28-29

Δ C of Pueblo Base 6-16
Luzma Verde Peak 22-23

Elongation is at - $G^{\text{hr}} 24' 18''$ at Santa Fe.
Nov Oct. 6, 1874

E of Ornelo Base

20

D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Gt of Pueblo Base 17-19

A H of Pueblo Base

1-4

H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Jenny Mrs no. 20

h. 32-3-4

Well 1870

Angles from Well. Observed 1870.

Zanara - Placer	37° 25' 50"
Placer - Gaha-	40° 46' 07"
	<hr/>
	78 11 57

Memorandum. All the mean angles in the Resumes are the result of the taking out of each one, not from subtracting of one mean from another mean angle. The arithmetical mean is taken, and the greatest difference between the observed angles, and, also the no. of Repeats, or times the angle was observed, is recorded by each angle.

L
M
N
O
P
Q
R
S
T
U
V
W
X
Y

Blair page 49

Simply bare

P
Q
R
S
T
U
V
W
X
Y
Z

San Antonio Mt.

26-27

Mt. Taylor

p. 41

Triangles, whose Vertices are
Mountain Peaks, p. 56

S
T
U
V
W
X
Y
Z

V
W
X
Y
Z

Zandua . Observed by Bull
1873,
Langes

mill 1873	—	Jatia	48°	17'36"
Jatia	—	Placer	38	23 48
			<u>86</u>	<u>41 24</u>

Comparison of Walch's

Hanna
2ⁿ 12'

Thompson
2^a 15' 26" Sect C

Ribs Peak

north-north-
 $\Delta = G$

north-
 $D =$

East-
C

S. East-
F

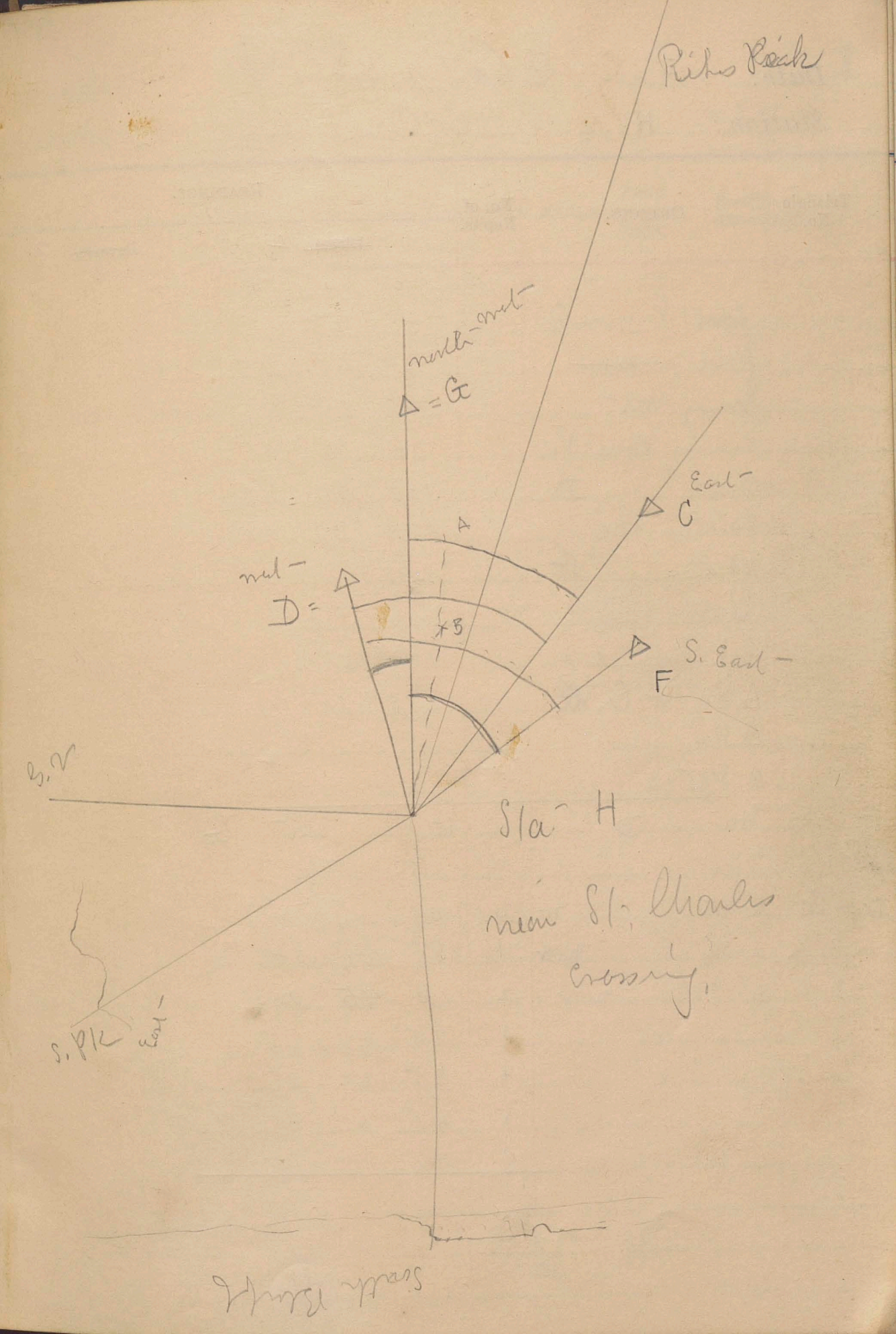
Staⁿ H

near St. Charles
crossing.

S. N

S. PK east-

South Branch



Date: July 26 1874

Station: H, of Pueblo Base, South of St. Charles (Mining)

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct. A			Reverse. B		
			o	'	"	o	'	"
	East-Shanish Pk		0°	0'	0"			
	West - do -		3°	40'	25"	183°	40'	25"
	Smoky Mt -		9°	35'	55"	189°	35'	55"
	Guerra Verde Pk		35°	16'	05"	215°	16'	05"
	Δ Sta D		130°	00'	25"	310°	00'	05"
	Basaltic Peak		125°	37'	00"	305°	36'	35"
	Δ Sta G		138°	22'	55"	318°	22'	45"
	Peake's Peak							
	Peak E. of - do -		140°	39'	00"	320°	38'	35"
	Δ Sta F G H		178°	11'	40"	358°	11'	45"
	Δ Sta							
	Δ Sta							
	Sta D		10			Sta G		
D - G	Δ Sta	n	0	0°	0' 0"			
	Δ Sta	n.w	1	8°	22' 20"			
	Δ Sta	n.w	2	16°	45' 05"			
	"		3	25°	07' 25"			
	"		4	33°	29' 55"			
	"		5	41°	52' 35"			
	"		6	50°	15' 15"			

135 195
22.5 32.5

Date:

Station: *same*

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			rev.	Direct.	A	Reverse. B		
	<i>North (80° + " for W.)</i>		0	'	"	0	'	"
	Sta	10			Sta.			
	Sta - North - S.E.	1	39°	49'	10"	219°	49'	00"
	Sta - S. E.	2	79°	37'	40"	259°	37'	30"
	Sta - Sta	3	119°	26'	35"	299°	26'	15"
	G - F	4	159°	15'	25"	339°	15'	00"
		5	199°	04'	25"	379°	03'	25"
		6	238°	52'	55"	58°	53'	15"

D - C

	Sta		0°	0'	0"	0°	0'	0"
	Sta. East	1	47°	36'	05"	227°	35'	55"
	"	2	95°	11'	35"	275°	11'	15"
	"	3	142°	47'	25"	322°	46'	55"
	"	4	190°	22'	00"	370°	21'	45"
	"	5	237°	57'	25"	417°	57'	30"
	"	6	285°	33'	25"	465°	33'	35"

$$\begin{array}{r}
 39-48-48.7 \\
 + 8-22-25.5 \\
 \hline
 48-11-14.2
 \end{array}$$

Observer: Gilbert Thompson -

Instrument: Starbuck 10 Transit No. 1459

MEAN OF READINGS.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.
W	Direct.	A	W	Reverse.	B			
°	'	"	°	'	"	°	'	"
39	49	10						
39	48	50.	39	48	45.			
39	48	51.6	39	48	45.			
39	48	51.2	39	48	48.7			
"	"	53.	"	"	41.			
"	"	49.1	"	"	52.5			
		<u>255.0</u>			<u>232.2</u>			
		51.			46.4	39-48-48.7		
								51.0 46.4 2) 97.4 <u>48.7</u> mean
								51 46.4 <u>4.6</u>
47°	36'	65" 0	47°	35'	55" 0			
47	35.	47.5	35	37.5				
47	35.	45.0		38.3				
		30		26.2				
		29		30.0				
		34.1		35.8				
		<u>191.6</u>		<u>166.6</u>				
		47.9		41.6				
		41.6						
		2) 89.5				47° - 35' = 44.7		
		44.7						

Date: July
 Station: Same

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			-Direct. A			Reverse. B		
			°	'	"	°	'	"
G C	Sta north - West Sta East		G - C					
	"	1	39°	13'	55"	219°	13'	55"
	"	2	39°	13'	55"			
	"	131	39°	13'	25"	219°	13'	25"
	"	242	78°	26'	35"	258°	26'	25"
	"	353	117°	39'	20"	297°	39'	15"
	"	464	156°	52'	25"	336°	52'	25"
	"	555	196°	05'	45"	376°	05'	45"
	"	666	235°	18'	25"	415°	18'	35"
D	Sta - nr. to Sta S.E.		D - F					
F	Sta - nr.		0°	0'	0"			
F	Sta S.E.	1	48°	11'	15"			
		2	96°	22'	45"			
			48	11	22			

Date: July
 Station: Same

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
D	Sta West		0	0	0			
G	" North-west		8°	22'	30"	188°	22'	30"
A	north end of Base		27°	13'	50"	207°	13'	50"
I	Astronomical Sta.		33°	38'	55"	213°	38'	45"
	Courthouse -		36°	50'	35"			
C	Sta East		47°	36'	00"	227°	35'	55"
F	" S. E.		48°	11'	45"			
	South Bluff		175°	32'	30"			

II Sett

C	Sta East - = C		0°	0'	0"			
F	S. E. F		0°	35'	25"			
	South Bluff,		127°	55'	45"			
	Rancho		199°	36'	10"			See Tablog Books
	Knoll		265°	05'				
D	Sta, S. W		312°	23'	55"			
G	Sta n. w.		320°	46'	25"			
	Pl. E of Pico Plk		323°	03'	25"			
A	n end of Base.		339	37	50			
S. Pueblo	Church & Spruce		346	8'	0"			
	l. Ho. Pueblo		349°	14'	15"			
	Aymull -		357°	58'	30"			

Observer: *Gilbert Thompson*

Instrument: *Stackpole 90" Transit No 1459-*

MEAN OF READINGS.

Direct.			Reverse.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.
c	'	"	c	'	"	o	'	"	"		
			<i>III Set</i>								<i>Azimuth</i>
S End Base			350° 15' 25"			= B					= 45° 22' 55"
E Sta			359° 59' 55"			= C					<i>very windy.</i>
S.E. Sta			0 35' 30"			= F					
W. Sta			312° 23' 55"			= D					
n. w.			320° 46' 25"			= G					
N. ^{cond} Base.			not seen			= A					<i>Hazy</i>
S End Base			350° 15' 25"			= B					<i>good</i>
W. Sta			312° 23' 55"			= D					<i>good.</i>
S.E. Sta			0° 35' 30"			= F					
E Sta											
											<i>Breeze, but easy to see stations.</i>

*400
257° 58' 20"
w. 2° 01' 30" E*

Date: July 27th
 Station:

Triangle No.

OBJECTS.

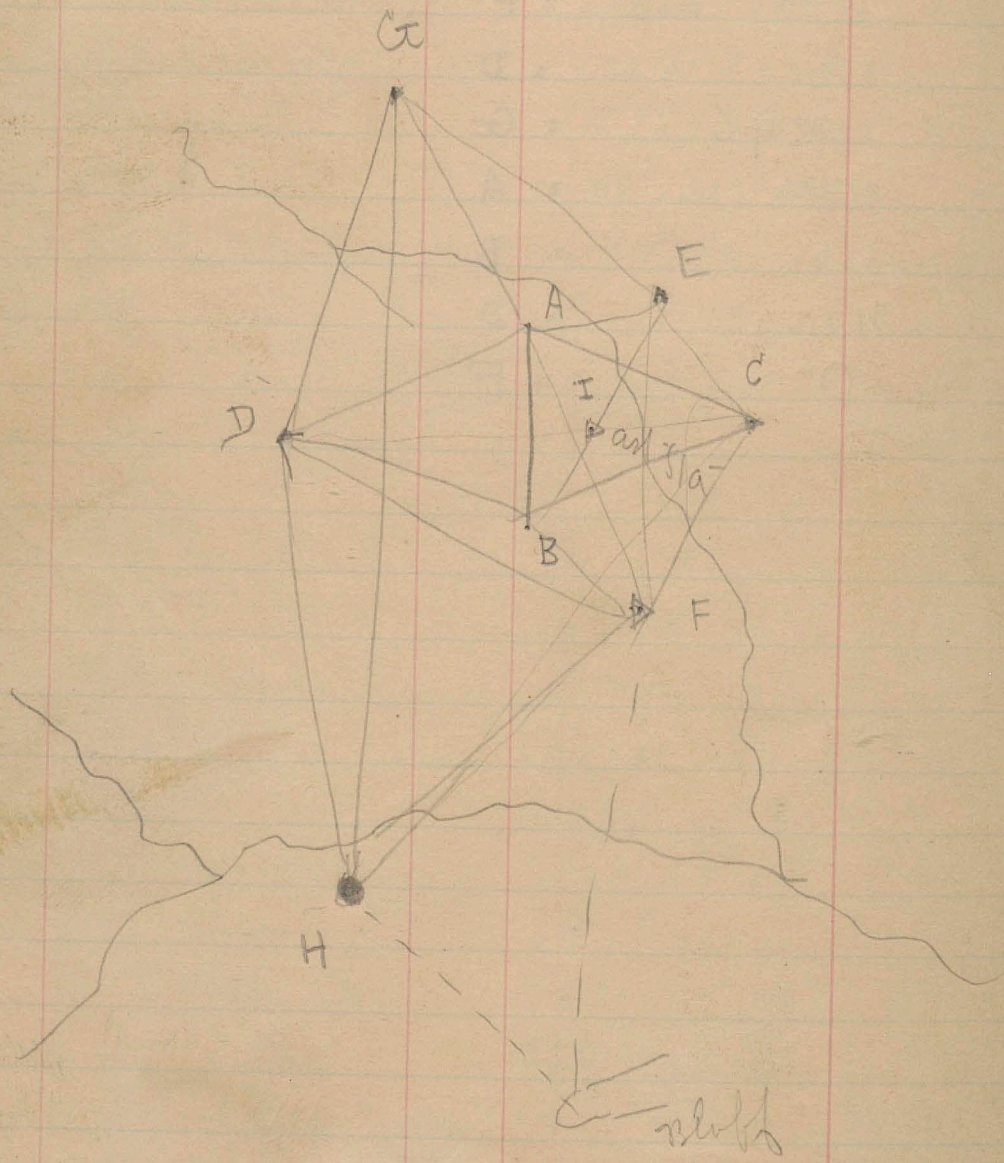
No. of Rep'ts.

READINGS.

Direct.

Reverse.

o / "



Observer: S. Thompson

Instrument: Blackhall Transit no. 1459.

MEAN OF READINGS.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.	Reverse.						
° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	"	"
							359. $\frac{21 \cdot 25}{38 \cdot 25}$
							B-D: $14^{\circ} 30' 10''$ D-A: $5^{\circ} 55' 30''$ B-A: $20^{\circ} 31' 40''$
							$\begin{array}{r} 30025 \cdot 05 \\ \underline{\quad 38 \quad 25} \\ 3107 \quad 70 \end{array}$

Date:

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.	
			Direct. A	Reverse. B
			° ' "	° ' "
F			359° 21' 5"	
H			0 0 0 (good)	
	East Span. Peak		1° 50' 5"	181° 50' 5"
	Saddle between E and W. Span. Peak		2° 57' 30"	
	West Spanish Peak.		4° 40' 30"	
B.			9° 53' 15"	189° 53' 15"
	Cuerna Verde Peak		23° 33' 45"	
I (astronom. station.)			22° 23' 25" (good)	202° 23' 25"
D.			24° 29' 30" (good)	204° 29' 25"
	Water Works Chimney.		22° 49' 45" (good)	
	South. Pueb. Church.		22° 41' 0"	202° 41' 0"
	Pueblo Court House		24° 40' 25" (good)	204° 40' 25"
A.			30° 24' 20"	210° 24' 20"
E.			35° 0' 25"	215° 0' 25"
G			54° 52' 25"	234° 52' 25"
	Knob No. 1.		108° 28' 25"	288° 28' 10"
	Pike's Peak House		126° 53' 15"	306° 53' 5"
	Knob No. 2.		130° 54' 0"	
	Knob No. 2, A.		131° 23' 40"	

Aneroid No. 1720 24 inches 24.73 inches
 Thermometer 85°

Time About 5 P.M.

Observer:

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.	
Direct.			Reverse.						
°	'	"	°	'	"	°	'	"	
									<u>78'55"</u> <i>Favorable for observations.</i> 22 22 55" D-G = 30° 22' 55"

Date:

Station: \downarrow

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Vernier A Direct.			Vernier B Reverse.		
			o	i	"	o	i	"
F			0°	0'	0"	180	00	00
	East Spanish Peak.		2°	29'	10"			
	West " "		5°	20'	50"			
B			10°	32'	5"	190°	32'	5"
	Cuerna Verde Peak		24°	^{12'} 22'	50"	204°	12'	45"
I (astronom. station)			23°	2'	30"	203°	2'	25"
D.			25°	6'	0" (bad)			
	Pueblo C. H.		25°	19'	25"			
A.			31°	3'	20" (good)	211°	3'	15"
E			35°	39'	50" (good)	215°	39'	50"
G.			55°	^{31'} 27'	55"	235°	31'	50"
	Pike's Peak House.		127°	32'	35" (good)	307°	32'	30"
	Azimuth.		178°	47'	15"			
H.			359°	54'	45" (bad)			
	Baroid No. 1720		24.74 inches					
	Thermometer		88 ³					
	Pike's Peak		127°	^{32' 55"} 32' 55"	(good)	307°	32'	45"

Date:

Station: C

Triangle No.

OBJECTS.

No. of Rep'ts.

READINGS.

Vernier A Direct.

Vernier B Reverse.

O. I. II

O. I. II

B

Guerna Verde Peak

0° 0' 0"

180° 0' 0"

13° 40' 35"

193° 40' 35"

~~D.~~

~~44° 59' 25"~~

I. (art. sta.)

12° 29' 50" (grad)

192° 29' 45"

S. Pueb. Church

12° 47' 35"

192° 47' 25"

Water Works Chimney

12° 56' 10"

Court House

14° 46' 5"

194° 46' 55"

A.

20° 30' 55"

200° 30' 55"

E.

25° 7' 15"

205° 7' 0"

G.

44° 59' 15"

224° 59' 10"

Pike's Peak House

117° 0' 0"

^{296°}
~~297°~~ 59' 50"

F.

349° 20' 10"

Guerna Verde Peak

13° 40' 0"

G

44° 59' 25"

Pike's Peak

117° 0' 0"

Azimuth.

108° 0' 55"

Time, Sunset.

Aneroid - 24.74

Temperature, 80°

South Limb of Sun. - 87° 3' 20"

Date: Resumé, for July 29th

Station: Included Angles from Sta. C,

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			0	"	"	0	"	"
	B - A	1	20	30	55	h. 9		
			20	36	15	h. 8		
			20	31	15	h. 7		
			20	31	40	h. 5		
			20	31	10	h. 8		
			20	30	55	h. 9		
			20	31	10	h. 7		
				8	20			
			20	31	11.4			
	F - A							
n. 6	31	03	30					
n. 7	31	03	25					
	31	03	20					
	31	03	15					
	31	02	55					
	31	16	35"					
	31°	03'	19"					
	F - D							
	25	08	00"					
	25	08	25"					
	F-H	0° 38'	25"					
	H-B	9° 53'	25"					
	B-D	14° 36'	10"					
	I-D	2° 06'	05"					
	D-I	2° 06'	05"					
	D-A	5° 55'	30"					
	A-E	4° 35'	55"					
	E-G	19° 51'	35"					

Date:

July 28th 74

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct. Vernier A			Reverse. Vernier B		
			o	'	"	o	'	"
F to A								
A North Base Sta.		1	31	03	45			
		2	62°	1'	5"			
		3	93°	10'	10"	273°	10'	5"
		4	124°	13'	10"	304°	13'	5"
		5	155°	16'	25"	335°	16'	20"
		6	186°	19'	25"	366°	19'	25"
		7	217°	22'	55"	397°	23'	5"
		8	248°	26'	5"	428°	26'	10"
		9	279°	29'	25"	459 78 29'	45"	
		10	310°	32'	55"	490°	33'	5"
A to B.		1	20°	31'	10"	210°	31'	10"
		2	41°	02'	25"	221°	02'	15"
		3	61°	33'	25"	241°	33'	15"
		4	82°	04'	35"			
		5	102°	35'	25"	282°	35'	0"
			4) 82°	4'	50"			
			20°	31'	12.5"			

Observer: *J. Thompson*

Instrument:

MEAN OF READINGS.							CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.				o	'	"	"		
o	'	"	o	'	"	"						
			31	03	45						Summed. not a cloud w. be sun. wind N.E. lt Anemid 1720 24.83 62°	
			31	03	22.5							
			31	03	23.0							
			31	03	17.5							
			31°	03'	17.0							
			31°	03'	14.1							
			31°	03'	22.1							
			31°	03'	15.6							
			31°	03'	16.1							
			31	03	17.5							
			31	03	19.4							
			31	03	19.0	31	03	19.2			165.7 18 19.4	

$20^{\circ} 31' 10'' .0$
 $20^{\circ} 31' 12.5''$
 $20^{\circ} 31' 8.3''$
 $20^{\circ} 31' 8.7''$
 $20^{\circ} 31' 05'' .0$
 $20^{\circ} 31' 12.6''$

 57.0

 $20 31 09.5$

Taken

Date: July 28th, 1874.

Station: C.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
	F to D							
	D D	1	25°	18'	35"			
	D		25°	9'	10"			
	East Spanish Peak		2°	29'	25"			
	Guerna Verde Peak		24°	13'	15"			
	Pike's Peak House		127°	32'	25"			
		2	50°	17'	45"			
		3	75°	27'	50"			
		1	25°	09'	10"	205°	09'	05"
		2	50°	17'	55"	230°	17'	55"
		3	75°	26'	25"	255°	26'	5'
Check	F - D) C =		55°	31'	55"			

Observer: Gilbert Thompson

Instrument:

MEAN OF READINGS.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.		Reverse.					
°	'	"	°	'	"	"	
25°	08'	52.5"					
25°	09'	16.6"					
25°	09'	10.0"					
	08'	57.5"					
25°	09'	02.5"					
25°	08'	46.2"					
25°	08'	55.0"					
25°	09'	05.0"					
25°	08'	55.0"					
	67	297.8					
25°	08'	59.7"	Taken				
		297.8					
		16.5					
4	281	12					
25	0.8						
7	58	281.2					
25°	08'	57.3"	Taken				

55 11 55
 25 08 57
 50 22 58

Date: July 28th 1874

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Vernier A Direct.			Vernier B Reverse.		
			°	'	"	°	'	"
	D to G	1	30	23	25	210	23	25
		2	60	46	45	240	46	35
		3	91	09	40	271	09	25
	D = 100° G:	1	130	23	25			
		2	160	46	35			
		3	191	09	35			
		4	221	32	35			
		5	251	55	25			
		6	282	18	10			
		7	312	41	05			
		8	343	04	50			
		9	373	28	10			
		10	403	51	25			
		11	434	14	15			
		12	464	36	55			
		13	495	00	10			
		14	525	23	05			
	D = 250° 0' 0"	G =	280	23	05			
	D = 310° 0' 0"	G =	340	23	15			
	D = 40° 0' 0"	G =	70	23	15			
	D = 100° 0' 0"	G =	130	23	25			
	D = 200° 0' 0"	G =	230	23	15			
	D = 220° 0' 0"	G =	250	23	15			
	D = 0° 0' 0"	G =	30	23	25			

Observer: Gilbert Thompson

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.	
Direct.			Reverse.						
c	'	"	c	'	"	o	'	"	"
30°	23'	25.0"							
30°	23'	22.5"							
30°	23'	13.3"							
30°	23'	25.0"							
30°	28'	17.5"	D = 0°	0'	0"	G = 30	23	25	1 st - 2 nd - 2 nd var. <u>bad</u> .
30°	23'	11.6"	D = 90°	0'	0"	" = 30° 23'	05"		
30°	23'	08.7"	D = 180°	0'	0"	" = 30°	23'	05"	
30°	23'	05.0"	D = 270°	0'	0"	" = 30°	23'	05"	1 st - 2 nd var. +
30°	23'	01.6"							2 nd 2 nd var. +
30°	23'	00.7"							3 rd 2 nd var. -
30°	23'	06.2"							4 th 2 nd var. -
30°	23'	07.7"							
30°	23'	08.5"							
30°	23'	16.8"							
30°	23'	04.6"							
30°	23'	05.4"							
30°	23'	04.7"							
30°	23'	05.0"							
30°	23'	15.0"							
30°	23'	05.0"							
30°	23'	25.0"							
30°	23'	05.0"							
30°	23'	05.0"							
30°	23'	25.0"							
30°	23'	05.0"							
30°	23'	25.0"							

3rd Test

32 Repeats

Taken 30° 23' 05"

Begin Reiterations at 90° in future.

25°
31°
40°
46°
56°

Test of Graduation of Instrument

D = 300°
G = 330° 23' 15" -

Date:

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.	
			Direct.	Reverse.
	Sta $\bar{h} = 90^\circ 10'$		90	0
	Sta \bar{D}	1	115° 8' 50"	0
		2	141° 17' 55"	
		3	165° 26' 40"	
	Sta. $F' = 0^\circ 0' 0''$			
	to $\bar{D} =$	1	25° 08' 45"	
	Sta. $F' = 120^\circ$			
	to $\bar{D} =$		25° 08' 55"	
	Sta. $F' = 240^\circ$			
	to $\bar{D} =$		25° 8' 45"	
<hr/>				
Sta \bar{F}	\bar{I} (astronom. station)	1	23° 02' 30"	
	Station $F = 90^\circ$		23 02 30	
	to $\bar{I} =$		23° 02' 26"	
			23 02 25	
			23° 02' 26"	
			130	
			23° 02' 26"	Latam
<hr/>				
Sta \bar{I}	\bar{A}			
	$F' = 0^\circ \bar{I} = 23^\circ 02' 30''$	A =	31° 03' 25"	see p. 11.
			23 02	for F to A
	F =		0° 0' 0"	
	I =		23° 02' 30"	
	A =		31° 03' 25"	
	E =		35° 34' 55"	

Observer:

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.							
°	'	"	°	'	"	°	'	"	"	
25°	08'	50.0"								
25°	08'	57.5"								
25°	08'	53.3"								
25°	08'	45"								
25°	08'	45"								
25°	08'	45"								see page 12
										Heat affects line of sight

Date:

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
H			0°	0'	0"			
F			359°	21'	25"			
	East Spanish Peak.		1°	50'	45"			
	Snowy Peak (1)		9°	36'	40"	=	Inclina	
	Guerna Verde Peak.		23°	35'	0"			
	Snowy Peak.		9°	37'	5"	189°	36'	25"
G			54°	53'	15"			
	Pike's Peak ^{left tangent.} right tangent.		126°	47'	10"			
	Pike's Pk. Houll.		126°	53'	25"			
	Pike's Peak, right tangent.		127°	05'	0"			
D.								

Temperature 83°
 Aneroid No 1720 24.83

H 0° 0' 0"
 G 54° 53' 15"

Date:

July 28

Station: C

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			rev.	Direct.	A	Reverse. B		
	H = 0°		0	1	"	0	1	"
	H to D	1	24	29	35	204	29	35
		2	48	59	25	228	59	05
		3	73	28	45	253	28	35
		4	97	58	05	278	57	35
		1						
	F to E	1	35° 40' 05"			215°	39' 55"	
		2	71	19	35	245	19	15
		3	106	59	25	286	58	50
	Pike's PK to L. Verde	8	0	0	0		0'	35"
	West Shan. Peak	2	122	12	10".0		1'	10"
	E. Shan. PK	5	125	03	25".0		0'	45"

Observer:

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.	
Direct.			Reverse.						
o	'	"	o	'	"	o	'	"	"
24	29	35.0	24	29	35.0				
		<u>32</u>							
24	29	42.5	24	29	30.0				
24	29	31.6	24	29	30.0				
24	29	<u>31.2</u>	24	29	00.7				
		140.3			140.3				
					<u>235</u>				
					225.3				
					33.6				
Taken			24	29	<u>32.1</u>				
35	40	05.0	35	39	55				I = 23° 03' 00"
35	39	47.5	35	39	20				E = 58° 42' 35"
35	39	<u>28.3</u>	35	39	35				G = 126° 51' 05"
	118	40.8		118	40.8				(mult. Fal. 71° 4')
					<u>237</u>				
					30.8				
			35	41					
Taken			35	39	<u>35.1</u>				

Date: July 29th 1874

Station: G

C = 90°
 I. (art. sta.) = 125° 42' 55" (S)
 South Pueb. Church = 126° 09' 15"
 Azimuth, 33° 26' 25"
 Mesa point, 266° 15' 0"

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
C.			0°	0'	0"	90°	0'	0"
E.			19°	9'	10"	109°	08'	40"
Pueblo Court House			24°	29'	35"	114°	29'	25"
A			39°	36'	05"	129°	35'	55"
F			47°	17'	25"	137°	17'	15"
B.			52°	03'	25"	142°	03'	05"
Mesa near H			81°	28'	25"	171°	28'	15"
H (good)			85°	54'	35"	175°	54'	35"
Mesa point.			90°	34'	55"	×		
D			95°	10'	50"	185°	10'	35"
East Spanish Peak			119°	29'	15"	209°	29'	20"
Saddle.			120°	58'	35"			
West Span. Pk.			122°	50'	25"			
Snowy Peak			129°	01'	25"	219°	01'	15"
Guerna Verde (good)			139°	11'	35"	229°	11'	05"
Basaltic Peak.			229°	39'	15"	319°	39'	15"
Knob No 1			248°	03'	15"	338°	03'	35"
Pike's Peak			265°	17'	55"	355°	18'	55"
Knob No. 2.			269°	03'	35"	339°	04'	10"
Tangent to mts.			276°	59'	00"			
Left tangent to Station C - bluff.			339°	45'	00"			
Station C. (good)								
C								

(excellent)

one misc point in line with D

Observer: Gilbert Thompson

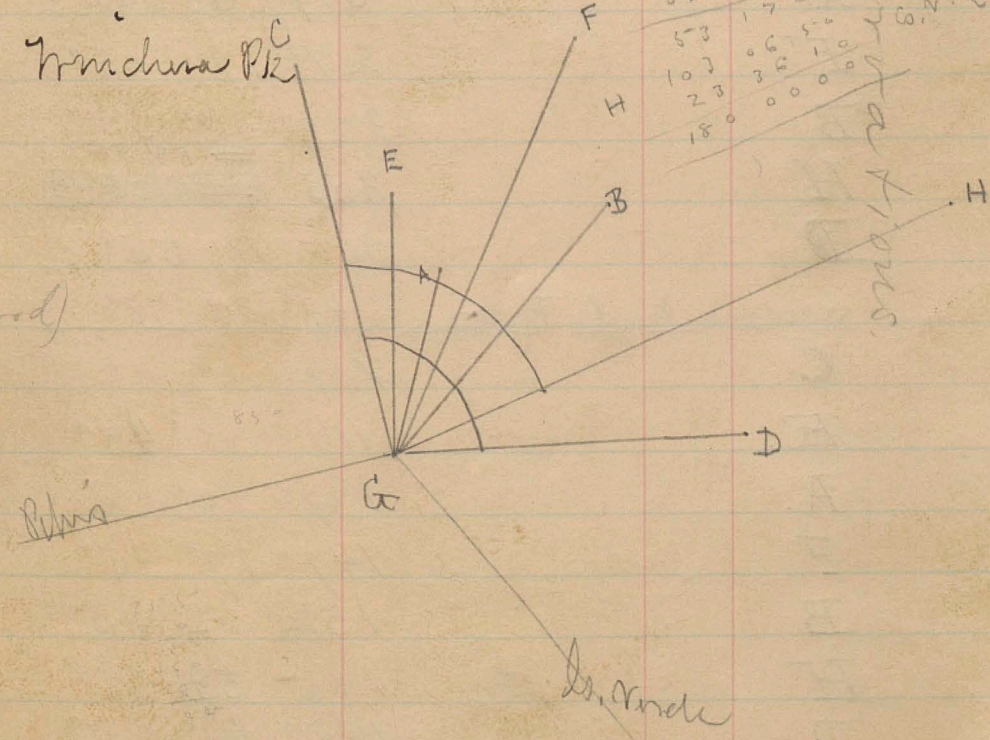
Instrument: Stackpole 10" Transit, No. 1459

MEAN OF READINGS.

Direct. A			Reverse.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.
C	'	"	C	'	"	O	'	"	"		
180°	0'	0"	good)								
199°	08'	35"	C = 90°								
			Thermometer	99.0							
			Aneroid, No. 1720	24.92							
219°	35'	55"	Time	9. A. M.							
227°	17'	25"									
232°	03'	05"	Azimuth $\epsilon = 150^\circ$	123° 47' 45"							
261°	28'	20"	Aneroid No. 1720	25.19							
265°	54'	05"	Thermometer	108°							
270°	34'	45"	Time	12. M.							
275°	10'	15"									
299°	29'	05"									
309°	01'	25"									
319°	11'	05"									
85°	18'	50" (good)									

129° 01' 25"
 85° 14' 35"
 43° 08' 50"

139° 11' 35"
 81° 54' 35"
 53° 17' 00"
 103° 06' 56"
 23° 36' 10"
 18° 00' 00"



Favorable for observations.

Date:

Station:

G

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.	A	Reverse. B			
			120°	'	"	0	'	"
	C to D	C = 180	0	0				
	D =	1	215°	10'	15"	35	10	15
		2	310°	20'	30"	130°	20'	35"
		3	405°	31'	25"	225°	31'	25"
	C to H	C = 180						
		1	265°	54'	35" (S)			
		2	351°	49'	40" (S)			
		3						
	C		270°	0'	0"			
	E		289°	08'	25"			
	A		309°	35'	35"			
	F		317°	17'	05"			
	B		322°	02'	55"			
	H		355°	54'	55"			
	D		365°	10'	55"			
	<u>Guerna Verde Peaks.</u>		<u>49°</u>	<u>10'</u>	<u>55"</u>			
	C		150°	0'	0"			
	E		119°	08'	45"			
	A		139°	36'	05"			
	F		147°	17'	15"			
	B		152°	03'	05"			
	H		185°	54'	55"			
	D		195°	10'	25"			

Observer:

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.					
°	'	"	°	'	"	°	'	"
95	10	15	95	10	25	C. is affected by heat		
95	10	15	95	10	50			
95	10	28						
85	54	35						
85	54	50						

ate:

Station: .

Triangle No.

250010

OBJECTS.

No. of Rep'ts.

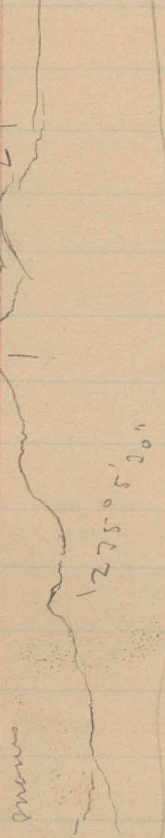
READINGS.

Direct.

Reverse.

o ' "

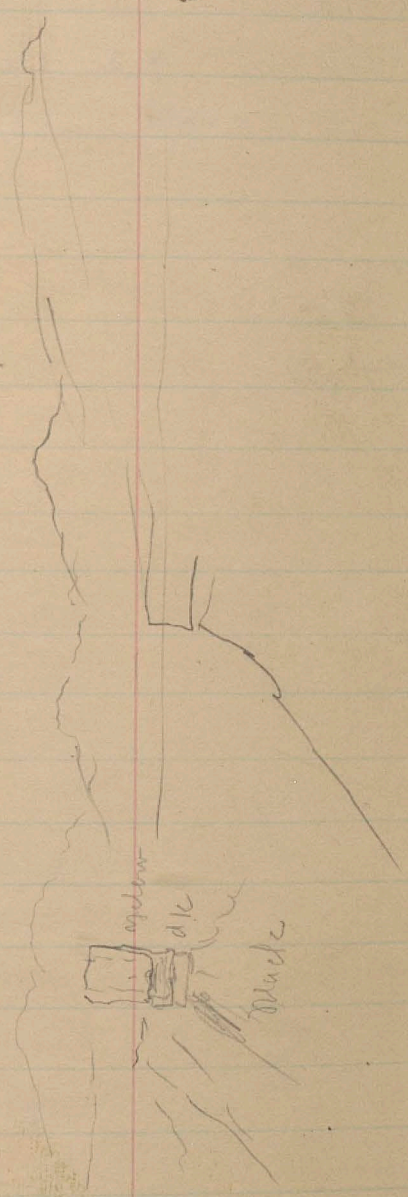
C = 100° 0' 0" Schuch Brun Sta. G
Sp. Ples
Spuma orudi
242° 10'



283° 12'

Side Wall

Auroid 110° 23, 18 12 h



Observer:

Instrument:

MEAN OF READINGS.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.		
Direct.			Reverse.							
°	'	"	°	'	"	°	'	"	"	
										River Peak ↙ <u>C + G = 22° 54' 15"</u>
										P.M. ↙ <u>H + G = 23° 36' 10"</u>

Date: July 29th 1874

Station: E

C = 0

azimuth = 322° 46' 0"

(left tangent of C. bluff = 334° 08')

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			-Direct. I			-Reverse. II		
			o	'	"	o	'	"
C			0°	0'	0"	90°	0'	0"
	Pueblo Court House.		76°	48'	30"	166°	47'	55"
	Water Works Flue.		93°	59'	15"	185°	58'	50"
F			181°	43'	45"	191°	43'	15"
I (ast. sta)			121°	33'	20"	210° 27' 05" 211° 33' 0"		
B			120°	27'	35"	270°	27'	05"
	South Pueblo Church.		126°	11'	05"	216°	10'	55"
	Mesa Point near H.		128°	17'	05"	218°	16'	45"
H (distinct)			135°	25'	45"	220°	25'	25"
	East Spanish Peak		144°	12'	50"	234°	12'	55"
	West " "		147°	21'	55"	237°	21'	35"
	Snowy Peak		152°	50'	05"	242°	50'	0"
D			161°	52'	25"	251°	52'	15"
	Guerna Torde		166°	50'	15"	256°	49'	45"
A			162°	56'	45"	252°	56'	05"
	(Cedar Bluffs south of Rock Canon)		196°	58'	0"			
	Far Peak		204°	59'	45"	294°	59'	15"
	Side-Hill Rock.		205°	50'	25"	295°	49'	50"
F G			219°	0'	55"	309°	0'	25"
	Basaltic Peak		247°	03'	45"			
	Knob No. 1.		261°	26'	45"			
	Pike's Peak House		278°	42'	45"	368°	42'	25"
	Knob No. 2		280°	53'	20"			
	Knob No. 3.		283°	26'	55"			
	Knob No. 4.		283°	55'	55"			

Observer: Gilbert Thompson

Instrument: Stackpole 10" Transit No. 1439

MEAN OF READINGS.

~~Labener~~ - ~~Rever~~

CORRECTED ANGLE.

Error of collect'n.

Condition of Atmosphere.

Direct. III

Reverse. IV

Direct. III			Reverse. IV		
c	'	"	c	'	"
180	0	0"	270	0	0"
256	48	25"	346	48	25"
281	43	05"	11	43	30"
301	32	20"	31	22	55"
300	26	35"	30	27	10"
308	16	15"			
310	25	15"	40	25	30"
341	52	05"	71	52	25"
346	50	0"			
342	55	55"	72	56	05"
399	0	45"	129	0	25"
458	42	05"	188	41	55"

C = 0
 Temperature - 102°
 Azimuth No. 1720 25.17
 Time 5 P.M.

C = 90°
 Azimuth = 53° 8' 25"
 C = 270°
 Temperature, 98°
 Azimuth, No. 1720, 25.17
 Time 6 P.M.

Date: Aug 9th 1874

Station: 4 Sierra Verde Peak, (over.)

Triangle
No.

OBJECTS.

No. of
Rep'ts.

READINGS.

Direct.

Reverse.

o ' "

East-Hornish Pk
Snowy Peak
Sierra Blanca
P

Observer: *J. Thompson*

Instrument: *10" Hacktule No. 1459.*

MEAN OF READINGS.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.	
Direct.			Reverse.						
°	'	"	°	'	"	°	'	"	"
									Time and quiet, until 1 o'clock. Left instruments in Mercurial. See Johog, Book.

Date: August - 8th 1874

Station: Luerna Verde Peak, Δ no. 4

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct-			II Reverse.		
			0	1	''	0	1	''
	Spanish Pk East		000	00	00	90	00	00
	do west Snowy Peak		6	54	05			
			20	11	25	110	11	55
	Sierra Blanca		59	48	35	149	47	55
	Three Teton's Horns		109	36	05	199	36	05
			140	55	35	230	55	05
	Pikes Peak		187	15	30	277	17	35
	Azimuth, Pueblo C. H		203	23	10			
			227	11	05			
	azimuth - M.M.		175	07	25	33	26	25
	Pikes Pk		159	07	25	17	15	45
	H Δ		215	13	25			
	G Δ ?					49	11	05
	Pueblo C.H							

Observer: *G. Thompson*

Instrument: *10" Transit - no. 1459*

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.	
III Direct.			IV Reverse.						V
0	'	"	0	'	"	0	'	"	
180	00	00	270	00	00	167	58	45	<i>Good. Shower at times</i>
						174	51	25	
200	12	15	290	11	55	188	10	55	
239	48	15	329	48	25	227	46	45	
289	35	35							
			97	15	20				<i>magnetic Az.</i>
168	00	55							
191	57	15							

Date: Aug. 15 1874.

Station: A Sierra Blanca

Triangle No.	OBJECTS.	No. of Rep'ts.	Letts READINGS.					
			I Direct.			II Reverse.		
			0	'	"	0	'	"
	Luerna Verde		0	0	0	40	45	25
	Baldy - (mt.)		8	05	05	68	50	55
✓	Spanish PK East		61	12	35(?)			
	do West		66	15	55	106	59	40
	Snowy Peak		87	29	45	128	12	20
	Castilla Point		113	20	25	154	03	05
	Point		126	05	05	166	48	25
	Point		136	25	40	177	8	35
	Mt mt		143	10	00	bad		
	Knob		150	03	05	190	46	55
	San Antonio mt		160	10'	00"	bad		
	Δ no. 26		173	26	35"			
	Point		206	18	25	247	03	25
	Point		223	33	05	258	34	35
✓	Humb		274	41	55	315	27	10"
	Jitons		298	36	25	339	21	30
	not-landed ^{mag}		142	42	20	154	24	45
	Ajimmith		114	42	20		5	3 10
<hr/>								
	Polaris		346° 37' 55"			at 9 ^h 15"		
	Ajimmith		360° 31' 05"			16.30		
	Pike		360° 14' 35"					
	Luerna Verde mt		35° 50' 25"					
	Span. PK East		97° 02' 30"					

WEST OF THE ONE HUNDREDTH MERIDIAN.



91°

86°

144° 0'

Cerro Blanca — Aug 14 1874—

346 37 55— Palanis

360 31 05— m. north

9^h 15^l p.m.—

Pikus R. 360 14 55— "

Cuena Verde 35°—~~30~~ 50—25—

E. Mian. R. 97 02 30

Aug 15th

Pikus Peak 5° 11' 10" West

Mog. m. 5 3 10

Mog. Staff at base of Island 114 42 20

at Mog Staff base Island

m. n = 0 0 0

S. Blanca mt— 329 54 15—

Baldy mt— 241 48 15—

when Van,

at Sierra Blanca

14° 5' 06"

S.D.,

(null.)

Date: Aug. 21, 1874

Station: San Antonio Mnt. A no.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct.			II Reverse.		
			0	'	"	0	'	"
	Ajimulth		0	0	0	39	05	25
	Δ 26		249	30	05	287	48	35
	Peak		276	15	05	314	34	35
	Peak		300	07	45	338	27	20
	Telono		30	57	25			
	S. Blomea		16	24	45	54	44	05
	Peak					90	18	40
	Mt Mnt							
	Peak		56	11	15			

Observer: G. Thompson

Instrument: 10" Transit no. 1459

MEAN OF READINGS.

CORRECTED ANGLE.

Error of collect'n.

Condition of Atmosphere.

III Direct.

IV Reverse.

0 1 "

0 1 "

0 1 " "

233 05 00

259 50 45

280 44 05

345 49 20

0 0 0

43° 00' 25"

Good.

note: On blank occupied another point.

A worthless point.

Date:

Station:

Triangle
No.

OBJECTS.

No. of
Rep'ts.

READINGS.

Direct.

Reverse.

Triangle No.	OBJECTS.	No. of Rep'ts.	Direct.	Reverse.
	By. n. w.		o ' "	o ' "
26	- S. B.	3	130 27 12	1' 00

Date: Aug 29 and Sept 4, 1874
 Station: Abiqui Peak A no. 21

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			<u>back</u>	Direct.	I	<u>stad</u>	Reverse.	II
			0	1	"	0	1	"
	Aymulh-Sierra Blanca		246	22	35	76	38	45
	Baldy at S.B.		0	0	0	90	0	0
	(1)		0	52	35	90	53'	0"
	(2)		32	12	25	122	8	55
	Some'ki Baldy		72	17	05	162	11	55
	(3)		91	10	50	181	8	45
	(4)		102	39	35	192	34	35
	Zometra no. 20		136	31	10	226	24	30
	Zandia		(?) 157	00	05"	246	53	00
	del no. 20		204	51	15	294	44	15
	Mt. Taylor		211	32	05			
	Cerro del Esna,		226	48	50			
	Buttes		296	38	25	26	37	50
	Perdrial							
	Sharp point (5)		313	33	30			
	San Antonio (a)							
	do (b)							
	A 24 (census after no. 20 Zandia)		188	27	10	278	12	30
	(6)		324	38	25	54	38	15
	A 26		335	42	25	65	41	35
	Mesa Point		339	9	25	69	8	45
	San Antonio (a)		355	17	55	85	17	10
	do (b)		355	31	35			

Observer: *B. Thompson*

Instrument: 1459 10" transit

MEAN OF READINGS.							CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Prod	Direct. III			Prod	Reverse. III			Prod V			
o	'	"		o	'	"		o	'	"	"
								141	25	25	Excellent.
180	0	0		270	0	0		155	13	25	
212	8	55		1				187	22	35	Zohog Book no. page 41 nos. here refer to nos on h. 41 de- uly.
342	13	10						227	26	20	
252	12	20									
271	9	15		1	10	20		246	23	20	
290	51	55		20	53	15		266	06	45	
316	25	35		46	27	40		291	40	20	
336	53	40		66	56	10					
24	45	40		114	47	20		0	0	0	
								91	52	10	(8) of page 34
8	13	50		98	22	55		343	26	05	Error in place)
								119	52	15	(3) of page 34
155	41	55		245	42	35		120	55	25	
159	8	35						124	22	35	

Date:


Station:

Abiqui

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
S.B.	- Baldy ^Δ	5	91	10	25-		5	05
S-B	- Baldy	5	87	29	20	By diff		
S-B	- ^Δ Baldy	4	91	9	33.7		1	45
S-B	- Baldy	4	87	28	38.7	By diff		
m.J.	- S. Blanca	5	155	13	19.0	By the north	7	0"
m.J.	- S. Blanca	4	155	14	00.0	do	0	15"
26	- S. Blanca	5	24	18	14			1'00"

Date: Sept 9, 1877

Station: Jersey Mills (?) S of Abiquiu Pk Δ no. 20

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct. I			Reverse. II		
			0	1	''	0	1	''
	Ajimulth Δ no. (23)		0	0	0	31	28	10
	(1)		260	23	00			
	25- Peridinal 		313	51	05			
	Δ Abiquiu		314	33	10			
	(2)		bad 328	35	45	0	0	0
	Δ no. 26 21		336	27	35	7	47	35
	Mesa Point		346	22	50	17	56	35
	San Antonio (a)		349	05	05			
	— do — b		5	9	20			
	Sierra Blanca		bad 5	26	35	36	35	25
	(3)		11	11	00			
	Pk. n. of Baldy (4)		41	03	25	73	20	35 ²
	San'te Baldy Δ		80	27	20	111	53	15
	(b)		99	10	40	130	35	35
	(5)		111	42	15	143	7	15
	Jalía		120	39	05	152	4	20
	Placer Δ 1873		146	46	05	178	11	10
	Zandia		151	44	25	183	9	25
	Δ (24)		170	27	25	201	51	45
	M. Taylor		213	5	15	244	30	05
	Leno del Esna		219	13	55	250	39	05
			226	37	50	258	2	55

Date:

Station: no. 20 continued.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			VI Direct.			Reverse.		
			o	'	"	o	'	"
	Abruzzi Peak		300	00	00			
26			317	57	10			
	San Amb. a							
	" b							
		(3)	12	30	10			
		(4)	51	53	25			
	Santa-Fe Baldy Δ		70	35	25			
		(2)	82	07	05			
		(5)	92	03	45			
	Datia		118	10	35			
	Placer		123	08	55			
	Zandia		141	51	05			
	Δ 24		184	29	25			
	Mrs. Taylor		190	38	35			

Observer:

Instrument:

MEAN OF READINGS.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.	<u>VII</u> Reverse.		<u>VIII</u>				
° ' "	° ' "		° ' "				
	120° 00' 00"		240° 00' 00"				
	137 56 35		257 57 05				
	192 29 55		312 29 40				
	231 52 05		351 52 15				
	250 34 15		10 34 35				
	263 05 45		23 06 15				
	272 02 25		32 03 15				
	298 9 20		58 10 05				
	303 7 35		63 08 45				
	321 49 35		81 50 45				
	364 28 35		124 28 55				
	370 37 25		130 37 55				

Date:

Reserve

Station:

Δ no. 20

S. E. of Abiquit

Triangle No.

OBJECTS.

No. of Rep'ts.

READINGS.

Mean Direct. Angle Greatest Reverse. Diff.

0 1 "

Triangle No.	OBJECTS.	No. of Rep'ts.	Mean	Direct.	Angle	Greatest	Reverse.	Diff.
			0	1	"	0	1	"
21	- Talia	5	178	10	24.0			1' 05"
	Mt. Taylor - Talia	7	72	28	07.0			1' 10"
	" - Placer	7	67	28	19.3			0' 40"
	Baldy - Placer		56	31	44.3	This Angle by diff.		
	Baldy - Δ Baldy		3	57	50.0			
	Δ Baldy - Placer	7	52	33	54.3			1' 10"
	Δ Baldy - Talia	7	47	35	22.1			0' 35"
	Baldy - Talia		51	33	12.1	This Angle by Diff.		
	San Ant. - Δ Baldy	3	93	52	25			6' 05"
	San Ant. - Baldy		89	54	35	This Angle by Diff.		
	Banded Pk - S.B.	1	34	40	20			
	do - Mt. Taylor	1	117	11	40			
	S.B. - Baldy							

a b = c
a

Observer: *Resume.*

Instrument:

MEAN OF READINGS.

MEAN OF READINGS.			CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.
<i>Vertical</i> Direct.	no. of Repeats Reverse.				
° ' "	° ' "	° ' "	° ' "	"	"
mt. Taylor - 23	Reps - 1		41 09 05	—	good.
mt. Taylor - 26	4		127° 18' 30"	1'30"	By wall -
mt. Taylor - 21	6		109 21 06.66	1'40"	
21 - General Pic	1		7 47 25.00		
mt. Taylor - do -	By diff		117 09 01.66		

Date: Sept 10th & 11th 1874

Station: no. 24

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct.			II Reverse.		
			0	1	"	0	1	"
Sta I Sept 10	Azimuth		0	0	0			
	Δ 23 (Knobs.)		292	36	45	0	0	0
	(1)		333	36	20	41	29	55
	(2)		345	32	25	53	25	15
	Δ 26		356	43	10	64	35	45
	Mesa Point		1	38	00			
	San Antonio					79	30	35
	Δ Abiqui PK		21	55	40	89	48	10
	Δ 20		34	35	00	102	27	55
	n. of Baldy		70	48	55	138	41	25
	Baldy		84	29	40	152	22	35
	Zanclia		160	16	25	228	8	55

Azimuth Litt.

Azimuth	203° 33' 20"
Polaris	192 59 25
	10 33 55
Ag. angle of star	1 41 03
Variation	12 14 58
Δ 26	2 00 00 00
	7° 00' 35"
	1 41 03
Ag. Bg of 26	8° 41' 38"

Date: Sept 11 1874
 Station: 24 west-side

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct.			II Reverse.		
			o	'	"	o	'	"
Sta II	Azimut		233	20	05	165	26	20
Sept 11	Baldy		315	45	15	248	52	55
	Landia		32	33	35	324	41	00
	Loadrones (R.)							
	Mt. Taylor		94	24	45	26	32	25
	Labragon		98	48	35	30	56	15
	Δ 23 (Knob)		165	20	05	97	27	25

Observer: *Is. Thompson*,Instrument: *10" transit*

MEAN OF READINGS.

Direct.			Reverse.			CORRECTED ANGLE.				Error of collect'n.	Condition of Atmosphere.
°	'	"	°	'	"	°	'	"	"		
97	22	05								<u>Good</u> On Joblog Book no. pages. 49-50 for connecti- on of I + II	
181	1	25									
256	49	10									
218	40	35									
323	03	25									
29	36	15									

Date: Sept 16, 1874.

Station: 23 Non Macminuto

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct.			II Reverse.		
			o	'	"	o	'	"
	Azimuth-		161	03	35			
Δ	Abiqui RK		232	20	35	0	0	0
Δ	20		240	17	05	7	59	55
	Baldy,		17	1	5	19	1	5
Δ	24		270	27	15	38	7	35
	Zandia				Rain			
	Labayan		351	05	40	18	44	25
	Mt. Taylor		4	39	45	132	18	15
	<u>Lets</u>				VI			VII
	Azimuth-		248	35	50			
Δ	Abiqui RK		319	55	25	59	55	05
Δ	20		327	55	10	67	55	05
	Baldy,				Rain	78	56	05 ?
Δ	24		358	01	50	98	01	40
	Zandia		32	10	05	132	10	15
	Labayan		78	39	25			
Δ	Mt. Taylor		92	13	50	192	13	40

Observer:

Instrument: 10" Transit

MEAN OF READINGS.

III Direct.			IV Reverse.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
°	'	"	°	'	"	°	'	"	"	
28	26	05				148	29	45		
100	0	0	200	0	0	219	55	05		
107	58	20 [?]	207	59	35	227	54	45		
<i>Rain</i>										
138	4	25	238	5	55	258	00	30		
<i>Rain</i>										
218	42 [?]	35	318	43	55	338	39	15		
232	16	15	332	17	20	<i>Rain</i>				
<i>Rain</i>										
V III			IX			X			XI	
			268	08	40					
159	55	30	339	55	00	99	55	10		269° 54' 35"
167	54	55	347	54	45	107	55	05		277° 55' 30 ^{Good}
<i>Rain</i>										
198	01	55	18	02	30	138	02	40		288° 55' 20"
										308° 01' 15"
<i>Good</i>										
232	10	05	52	10	25	172	09	45		342° 09' 40"
<i>Good</i>										
292	13	05	112	13	50	232	13	25		42° 13' 25"

Date: Sept. 25, 1874.

Station: Mt. Taylor.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct			II Reverse.		
			0	1	11	0	1	11
Banded Peak	Ajinnuk-mag.		0	0	0	50	13	35
	La Plata		7	37	25	57	0	45
	23 nac.		228'	45"		71	44	15
	Labazan		S.P. 33° 54' 35" Center 33° 59' 05" R.P. 34 10 10			Center 83	23	5
	Aliquis 21		34	34	15	83	58	5
	20		36	54	05	86	17	45
	Jurney		37	45	25	87	9	15
	24		38	00	45	87	24	15
	n. of Baldy (1)		(quite snow on it)			99	20	55
	Baldy Δ oc. hill 73		53	53	55	103	18	55
	(2)		57	55	05	107	17	45
	Talia #		56	30	05	105	55	25
	Placer,		69	50	35	119	5	35
	Zandrá		74	40	45	124	5	35
	Loachones,	ab. Bull	82	36	25	185	48	35
	Magdalena		136	06	35	198	30	5
H 73 = 189° 08' 10"	San Mateo		149	06	35	198	30	5
	D of 73		160	09	00	248	37	45
	G - " -		199	14	05	252	28	45
	Escadilla E 73		203	05	35	255	19	25
	Escadilla		205	56	35	259	3	20
	S.B. 215		209	56	35	265	42	15
	216		215	51	05	269	49	15
	A 73 220		216	18	10	269	49	15
	287		220	36	50	337	18	45
	Chasca		287	55	45	337	18	45
	Bulle R. Lang,		291	10	00	340	13	10
	Point - is out on over		310	37	15	0	0	0

S. Blanca 265° 14' 45" east of peak

Observer: *J. Thompson*

Instrument: *no. 1459 10" transit.*

MEAN OF READINGS.

MEAN OF READINGS.						CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.			V				
°	'	"	°	'	"	°	'	"	"	
150	12	05	250	3	05	350	13	55	Good Set Taboy no. pages. 19-	
157	2	15	<i>good</i> 257	0	55	<i>good</i> 357	1	10		
171	43	55	271	43	50	11	43	35		
183	22	55	283	22	55					
183	57	35	283	57	55	23	57	55		
186	17	25	286	17	55	26	18	5		
187	8	45	287	8	45	27	8	45		} Right hand point
187	24	30	287	25	5	27	24	35		
199	20	35	299	21	0	39	21	10		} note: the Needle set - in carefully, each time
203	18	15	303	18	20	43	18	45		
207	16	55	307	17	0	47	16	55		
205	54	35	305	55	105	45	54	45		
219	4	45	319	5	20	59	5	25		
224	5	5	324	5	15	64	5	5		
285	47	25	285	48	35	125	47	10		
298	29	40	38	31	10	138	30	5		
348	36	50	88	38	20	188	37	10		
352	28	25	92	29	25	192	28	25		
355	19	25	95	20	30	195	19	35		
359	1	30								
5	42	25	105	43	50	205	42	15		
77	19	15	177	19	15	277	18	30		
80	13	55	180	14	05	280	12	55		
100° 0' 0"			200° 0' 0"			300° 0' 0"				

Date:

Station:

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			VI Direct.			VII Reverse.		
			0	1	''	0	1	''
	Azumuth		170	13	50	290	14	35
	Banded Peak		177	01	05	297	0	35
	23 Mar.		191	40	50	311	43	50
			203	58	25			
	Abiqui 21		203	58	25	323	57	40
	20		206	17	45	326	17	55
	Junco		207	8	35	327	8	10
	24		207	24	15	327	24	35
	n. of Baldy (1)		219	20	35	339	21	05
	Baldy		223	18	0	343	18	15
	(2)		227	16	45	347	17	25
	Tatra		225	54	5	345	54	35
	Placer		239	5	5	359	5	40
	Zandia		244	5	10	4	5	35
	Ladrono		305	47	45	650	48	25
	Magdalena		318	29	25	78	49	5
	D of 73		8	37	10	128	31	5
	G " "		12	28	25	128	38	30
	E " "		15	19	55	132	29	30
						135	20	25
	7 of 73		25	42	5	145	43	15
	Leasca		97	18	50	217	19	50
	Butte		100	13	10	220	14	15
	Point		120	0	0	240°	0'	0''

Date:

Mt. Taylor

Station:

Resumed.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			0	1	"	0	1	"
	20 - Placer	6	32	47	28.3		0	35
	20 - Talia	6	19	36	58.3		1	20"
	24 - Talia							
	24 - Placer							
	^{2nd} Chasco - 20	7	108	58	40.7			1' 25"
	Placer - Madalena	6	79	24	56.6	1873	1873	1' 30"
	Placer - D	6	129	32	19.1	"	"	1' 05"
	Placer - G = XXV	6	133	23	30.8	"	"	0' 55"
	Placer - E	6	136	14	34.1	"	"	1' 20"
	Placer - Escadilla	2	139	57	15.0	"	"	1' 00.
	Placer - F	6	146	37	32.6	"	"	1' 50"
	Placer - S. Blanca	1	146	00	30.0	"	near Lamb	
	— do —	1	146	09	10.0	"	Apache.	
	Placer - Loadores	6	66	42	40.8	"	"	1' 30"
	Placer - Zandia	7	4	58	35.0	"	"	9' 55"
	Banded Pl - 20	7	29	16	40.6			
	Nucle 10 - Banded P	8	57	01	02.5			2' 05"


32 47 28.3

108 58 40.7

141 46 09.0

Date: Sept- 30th 1874.

Station: Peak n. or. of Jemey Pueblo.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I Direct.			II Reverse.		
	mag.		0	1	"	0	1	"
	Ajinnulh-		0	0	0	100	00	00
	24		32	19	20	133	26	55
	Baldy		67	26	55	168	45	05
	(1)		75	32	40	175	38	45
	(2)		79	37	25	179	43	25
	Jalía		82	25	25	182	32	05
	nell Δ 1873		104	13	45	204	20	10
	Placer		107	20	05	207	26	25
	Zandra a		130	30	00	230	36	25
	b		131	18	35	231	32	55
	Sadrona 		175	53	00	276	01	55
	Mt. Taylor		222	59	15	323	05	30
	Cabayon		240	06	30	340	11	30
	Bulle, K. Lany,		252	53	55	352	59	20

Observer: *Is Thompson.*

Instrument: *Blackburne 10" transit - no. 1459*

MEAN OF READINGS.						CORRECTED ANGLE. V <i>lit</i>	Error of collect'n.	Condition of Atmosphere.	
III Direct.			IV Reverse.						
0	'	"	0	'	"	0	'	"	"
200	00	00	300	00	00	326	29	05	<i>Cloud.</i> <i>This point is known in previous obs. at <u>Jenny</u>.</i>
233	19	15	333	33	25	000	00	00	
267	25	25	7	39	55	34	06	15	
275	30	45	15	46	25	42	12	05	
279	36	10	19	50	10	46	17	05	
282	24	15	22	39	05	49	05	25	
304	12	30	44	27	35	70	53	15	
307	18	35	47	36	55	73	59	25	
330	28	55	70	47	15	97	08	50	
331	24	40	71	43	25				
16	05	20	116	23	35	142	46	05	
62	57	35	163	17	55	189	37	05	
80	05	10	179	54	35 <i>to 1st obs.</i>	206	44	35	
92	52	25	180	44	35 <i>to 1st obs.</i>	219	32	05	
			193	09	25				

Date:

Station:

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			VI Direct.			VII Reverse.		
			0	'	"	0	'	"
	Ay,		292	18	40			
	24					262	49	50
	Baldy		000	00	00	296	56	35
	(1)		8	05	45	305	02	05
	(2)		12	10	05	309	06	55
	Jatia		14	58	05	311	55	15
	nell, Δ 1873		36	47	05	330	43	20
	Placer		39	53	05	336	50	00
	Zanara a		63	02	55	0	0	0
	" b							
	Sachrones		108	38	50	45	06	35
	Mt. Taylor		155	29	35	92	27	55
	Labajos					109	35	40
	Butte		185	24	45	122	23	15

Observer:

Instrument:

MEAN OF READINGS.			CORRECTED ANGLE.				Error of col- lect'n.	Condition of Atmosphere.		
Direct.			Reverse.			o			'	"
o	'	"	o	'	"		o	'		
										Good
										See Jahoy Book no. page. 31
										This point - as <u>occupied</u> is not positive- ly the point - <u>observed upon</u> . <u>office note</u> This field opinion is not correct - C/L.

Date:

Station: **L**, Santa Fe Base Azimuth - Stars

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Oct 6 th 6 ^h 24' 18"			Oct 7 th 6 hr 20'		
			0	1	''	0	1	''
	Azimuth		360	00	00	293	00	00
	Baldy		42	27	45	336	25	10
	(1)		61	54	10	354	51	35
A	Cone		157	08	30	90	06	00
	Placer		174	48	15	106	08	05
	Zandia		204	08	05			
	Tatia		265	59	05	198	56	35
	Polaris						56	35
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Azimuth							
	By. of Baldy							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							
	By. of Polaris							
	By. of Star 35° 40'							
	By. of Baldy							
	By. of Tatia							
	By. of Cone							
	By. of Placer							
	By. of Zandia							
	By. of Tatia							

Observer: *B. Thompson*
 Instrument: *10" Transit*

11 03 05
23 05
264 17 05
250 55 35
10 48 30

READINGS.

Error of collect'n.

Condition of Atmosphere.

Oct 8th 6 16 *Oct 9th 6 12* *Oct 9th 6 35*

307 45 15

61 27 30

79 9 15

108 26 55

flag, 970 18 15

67° 16' 15"

150 38 00"

161 19 20

103° 45' 35"

187° 03' 05"

139

197 29 15

near Camp 46.

Thompson's watch

Elong.

5 2 40
264 16 25 (?)

253 58 35

10 17 50

307 45 15 (?)

1 40 38

11 58 28

(a) = 40' 12"

(b) = 40' 50"

b-a = 41"

94 03 05

95 43 43

161 19 20

150 38 00

10 41 20

1 40 38

12 21 58

94 03 05

95 43 43

197 29 15

187 03 05

10 36 10

(a) 40' 12"

41 33

42 53

43 43

44 03

4) 11 13 2

2 41 2 2

95 40 50"

95 40 50"

Elongation

at Elong. variations

12° 20' 23"

12 20' 03"

12 21 58"

62 24

12 20' 48"

Date:

Station: Ajimulh near Lamb 46

Triangle No.	OBJECTS.	No. of Rep'ts.	Date of READINGS. & Hours					
			Oct	Direct.	Reverse.			
			o	'	"	o	'	"
	Taticā Polaris mag. Ajimulh							
<hr/>								
	Abs. for variation of needle in Lamb 46 near Aj. Sta. Oct 11	az.	306	53	45			
		Polaris	294	31	45			
		(1)	12	22	00			
			1	40	38			Elongation 6 ^h
			14	12	38			
		g.	307	07	55			
(1)	14 12 38	Pol	294	31	05			
(2)	14 16 23		12	36	50			
(3)	14 13 35	(2)	1	39	33			6 ^h 30'
(4)	14 13 16		14	16	23			
4) 55 52"	az.	307	04	25			
	14 13 58	Pol	294	28	45			
		(3)	12	35	40			
(1)	14 12 38		1	37	55			6 ^h 40'
(3)	14 13 35		14	13	35			
(4)	14 13 16							
(3)	39 29	g.	307	03	15			
	14° 13' 09".6	Pol	294	27	25			
(3)	12 20 48".0	(4)	12	35	50			
	1° 52' 21".6		1	37	26			6 ^h 50'
			14	13	16			

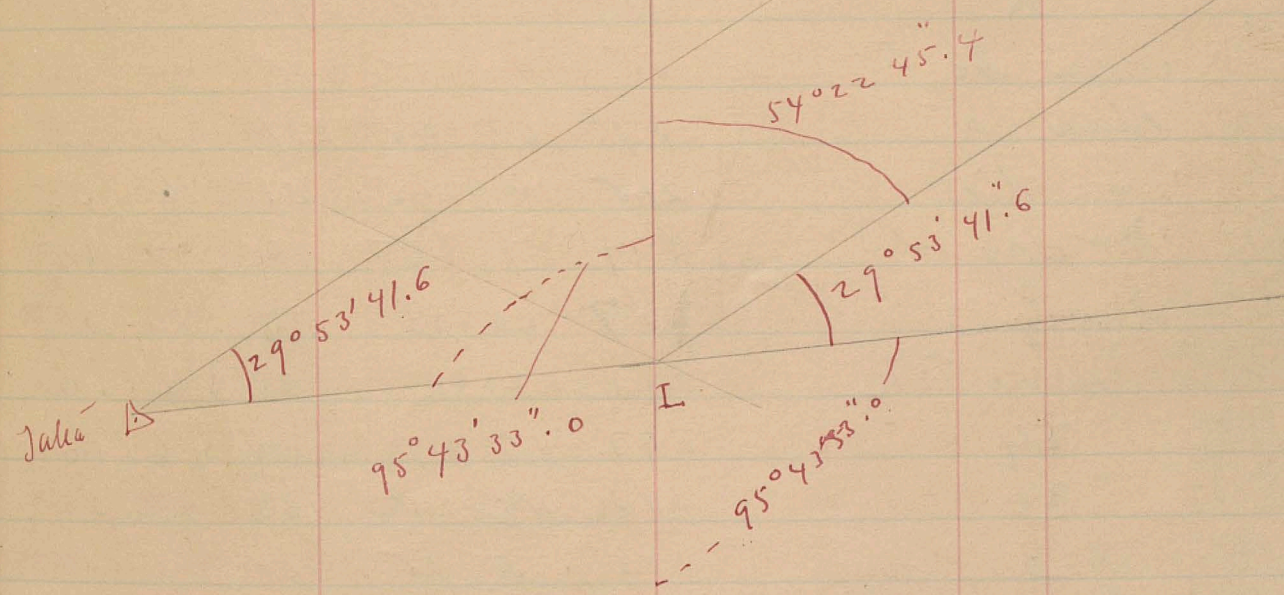
Diff

Observer: *I. S. Thompson*

Instrument: *10" Transit*

MEAN OF READINGS.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.				

ay. Julia to Ast. Sta - N. 54° 22' 45".4 East - Ast. Sta -



1	40	38
2	40	38
<hr/>		
30	21	16
95	43	33.
<hr/>		
92	22	17
29	53	42
<hr/>		
122	15	59
57	44	01
<hr/>		
180	00	00

95°	43'	33".0
29	53	41.6
<hr/>		
125	37	14.6
54	22	45.4
<hr/>		
180	00	00.0

20^m

Date: Oct. 1874

Station: Placer

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct. A			Reverse. B		
			o	'	"	o	'	"
	ag.		0	0	0			
	D		347	9	25	167	9	25
	As. Station		355	59	25	175	59	35
	H		1	21	55	181	21	55
	Baldy		2	23	10	182	22	55
	△ Baldy		3	31	55	183	32	5
	(1)		9	41	25	189	41	35
	I (?)		9	28	35	189	28	25
	K		18	10	45	198	10	35
	Comer's 26 (?)		35	44	55	215	44	55
	Mesa "a"		57	0	45	237	0	35
	Sandia		215	16	45	35	16	35
	Mt. Taylor		274	7	15	54	7	15
	Labayan		257	50	25	77	50	25
	Jurney PK		271	52	10	91	52	10
	24		297	46	05	117	46	10
	20		313	47	25	133	47	30
	B		318	15	45	138	15	55
	Tatia F		317	18	25	137	18	35
	Tatia		321	31	05	141	31	05
	E		327	50	05	147	50	15
	A		329	48	15	149	48	20
	San Antonio		334	43	20			
	G		333	42	5	153	42	5

Observer: *S. Khambo*

Instrument: *10" Transit No. 1459*

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.	
Direct.			Reverse.						
c	'	"	c	'	"	o	'	"	"
347	10	30							good.
356	0	30							good
1	2								good
3	32	30	183						good
9	42	50	189	42	50				
9	30	00	189	30	00				Doubtful.
18	11	35	198	11	55				
35	46								
56	58	30	236	58	30				
215	19	25	35	18	30				
234	8	25	54	8	30				
257	52	00	77	52	15				
271	53	15	91	53	30				
									bad
313	48	45	133	48	45				
318	16	35	138	16	45				good
319	18 18	55	137	19	10				good
321	31	05				321	32	10	good
327	50	25	147	50	45				
329	48	25	149	48	50				
333	41	35							bad

Date:

Oct 20

Station:

Placer Trig. Sta.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct. A			Reverse. B		
			o	'	"	o	'	"
	Point		335	31	25	155	31	35
	C		340	3	55	160	3	55
	D		347	9	55	167	10	00
	Azimuths		100°	0'	0"			
	C		99	30	55	279	30	35
	D		106	36	45	286	36	15
	N. Station		115	26	05	295	25	35
	Δ Baldy		122	57	55	202	57	35
	Zaneria		204	40	25	184	40	35
	mt. Taylor		250	52 ⁽⁵⁾	55	173	53 ⁽⁵⁾	05
	20		73	15	20	253	14	35
	H		76	44	5	256	43	35
	B.		77	41	35	257	41	5
	Tatia		80	56	25	260	56	15
	E.		87	15	50	267	15	25
	A		89	14	35	269	13	45
	G		93	7	35	273	6	50
	Point		94	57	10	274	56	35
	C.		99	29	45	279	29	25
	D		106	35	15	286	34	50
	N. Station		115	24	55	295	24	25

Observer: *J. Thomson*

Instrument:

MEAN OF READINGS.						CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.					
"	'	"	"	'	"	"	'	"
335	31	30	155	31	35			
340	3	55						<i>good</i>
347	9	55						

Date: Tuesday October 20th 1874

Station: Placer

Included Angles

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.							
			Direct. A			Reverse. A				
	mt. Taylor 4 20 "									
	79° 41' 25"	1	49	43	55	30	20	25		
	159 21 40	2	99	26	55	60	22	5		
	239 2 30	3	149	9	25	90	13	25		
	388 43 25	4	199 ⁸	52	35	120	3	35		
	398 38 23 45	5	248	35	55	149	54	55		
		6				179	46	05		
	40 10	7				209	37	05		
	40 20									
	40 15	8				239	28	25		
	40 15									
	41 25	9				269	19	55		
	41 30	10				279	10	25		
	79 41 25	1	49	43	55.0					
	79 40 50	2	49	43	27.5					
	79 49 5.0	3	49	43	08.3					
	79 40 51.25	4	49	43	07.1					
	79 40 45.0	5	49	43	11.0					
			49	43	53.0					
	221									
	60									
	15/ 281		6)		149.9					
	56".2				25.0					
					49° 43' 25."					
	79° 40' 56".2		6)		161.					
					49° 43' 28.5					

Observer: *G. S. Thompson.*

Instrument: *10" Transit No 1459*

MEAN OF READINGS.						CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.	A	"	Reverse.	A	"					
<i>Talia + S.</i>			<i>Talia + As. Station</i>			<i>Talia + Baldy. Δ</i>				
25	38	30	34	29	0	42	0	35	1	
51	17	51	68	57		84	1	05	2	
76	55	35	103	25	15	126	1	30	3	
102	34	10	137	53	35	168	1	20	4	
128	13	10	172	21	25	210	1	35	5	42 00 19
			206	50	15	252	1	35	6	
			241	18	35	294	1	35	7	
						336	1	55	8	
						378	2	15	9	
			34	29	00.0	42	00	35	1	
			34	28	30.0	42	00	32.5	2	
			34	28	37.3	42	00	45.3	3	
			34	28	37.3	42	00	20.0	4	
			34	28	23.5	42	00	19.0	5	
			34	28	23.5	42	00	15.8	6	
			34	28	23.5	42	00	14.4	7	
			34	28	17.0	42	00	14.3	8	
			34	28	17.0	42	00	15.0	9	
			34	28	22.5	91		209.3		
			34	28	22.1			23.2		
			<u>152.4</u>			42° 00'		23.2	9	
			34° 28'	21.7		<i>Talia + Δ Baldy</i>				

Date:

Station:

Resumi

Placer Mt.

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			mean					
			o	'	"	o	'	"
	Art. Sta - Jalia	11	34	28	28.5		0	42
	Zandia - Jalia	5	106° 14' 51"				1' 40"	
	Zandia - hell 1873		55	52	05	Zakus		
	hell 1873 - Jalia		50	20	47	55	53	55
	1873 Angles.		<u>106 12 52</u>			<u>50 20 56</u>		
	Mt. Taylor - 20	5	79° 40' 56".2				0'	45"
	~~~~ " ~~~~	11	47".8				1'	20"
	~~~~ " ~~~~	8	32".0				0'	40"
	Mt. Taylor - Jalia	4	87	23	17.5		1'	10"
	Jalia - Δ Baldy	9	42	00	23.2		0	20".7
	Jalia - Baldy		40	51	34.3	This angle by diff.		
	Baldy - Δ Baldy		1	08	48".9			
	20 - Δ Baldy	10	49	43	28".5		0'	55".0
	20 - Baldy		48	34	39.6	This angle by diff.		

(mem. Δ Baldy is (Lake Peak))

Date: Oct 29¹⁰ 1874
 Station: Baldy (at Monument)

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			I	Direct.	A	II	Reverse.	A
	" see Sketch (A)		0	'	"	0	'	"
	(B) Δ Baldy		128	06	05-			
	Δ Baldy. <u>ml-</u>		160	26	15-			
	Pracev		184	19	25-			
	Londra		200	07	05-	200	07	05-
	Art. Sta. Δ					209	48	15-
	Tatia					213	06	25-
	mill '73					224	43	15-
	ml. Taylor					234	44	10
	24 Δ					235	00	35-
	20 Δ					259	33	05-
	Abiqui Pk. 21					275	00	25-
	Perdinal					279	26	15-
	Peak					284	43	55-
	San Antonio							
	Sumi Blomaca							
	(19) ?		352	58	10			
	Peak n. of Baldy		6	40	55-			
	d		121	03	25-			
	g.							
	Mesa point							
	nambe Church							
	ag.		0	0	0			
	nambe comb							
	For Topog. Sketch							

Observer: *J. Thompson*

Instrument: *no. 1459* *10" transit*

MEAN OF READINGS.							CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
III	Direct. A			IV Reverse.			0	1	2		
	0	1	2	0	1	2	0	1	2	3	
	163	36	10		4	25					Clear. -
	195	56	45								windy -
	218	07	25	54	36	25					ther. 18°
	219	50	15	56	19	05					
	235	35	45	72	06	55					
	245	17	35	81	47	35					<u>note</u> , no
	248	36	15	85	05	35					inscription
	260	13	20	96	42	15					found in the
	270	14	25	106	43	35					monument,
	270	30	55	107	00	25					
	310	30	55	147	01	45					
	314	56	35	151	27	25					
	320	15	25	156	45	50					26 not seen
	351	25	45	187	56	35					Charles W.
	9	28	15	205	58	05					at Mt. Kailash
	28	28	35	224	59	15					was.
	42	11	35	238	41	50					
	56	35	05	253	05	55					
	277	35	35								
	32	50	00								
				184	53	45					S. of 26
				145	51	25					
				145	29	15					no.

Date: Oct 29 1874
 Station: Baldy

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			V	Direct.	A	VI	Reverse.	rev. A
			o	'	"	o	'	"
(A)			119	50	10	239	25	00
(B)	Δ Baldy		174	20	15			
	Mt. - do -		176	03	55	295	38	05
	Placer		191	50	15	211	23	50
	Zandira		201	31	55	321	06	45
	Art. Sta. Δ		204	26	55	324	01	05
	Jatía		206	27	45	321	29	25
(53)	mell '73		226	29	05	376	01	35
	Mt. Taylor		226	45	25	346	02	45
	24							
	20		266	44	25	346	19	05
	21 Abiqui		271	10	25	26	45	35
	Perdnial		276	28	45	36	03	05
	Peak		307	38	55	67	13	50
	San Antonio		325	40	25	85	16	40
	Sierra Blanca		344	41	35	104	17	25
(19)			358	23	45	117	59	15
	Peak n. of Baldy		12	48	45	132	21	45
	d							
	2							
	mesa point							

Observer:

W. W. Hance Recorder

Instrument:

MEAN OF READINGS.			CORRECTED ANGLE.			Error of collect'n.	Condition of Atmosphere.
Direct.			Reverse.				
°	'	"	°	'	"	''	
							See July Book, no. 24 page 6
							C A
							Ascertained by G. Johnson " W. W. Hance

Date:

Resurrección

Station:

Baldy

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			Mean	Angle	inverted	diff		
			°	'	"	°	'	"
	Nell 1875 - Placer	5	34	38	02.0		1	50
	20 - 21	4	4	25	47.5			10"
	Jalía - Placer	5	24	36	45.0		1'	35"
	20 - Jalía	5	50	17	33.0		1'	20"
	20 - Placer	5	74	54	37.0		2'	05"
	20 - San Antonio Mt	4	58	56	43.7		1'	35"
	S. Blanca - Abigini	4	73	31	42.5		0'	50"
	S. Blanca 20	4	77	57	52.5		1'	70"
	S. B. - Mt. Jaylor	4	117	57	45.0	By north	1'	40"
	Mt. Jaylor - S. Antonio	3	98	57	31.6		0'	20"
	20 - Perdinal	5	9	44	01.0		1'	00"
	20 - S. Blanca	3	77	57	23.3		0'	40"

Date: 1874

Station: Triangles, whose Vertices are

Triangle No.	OBJECTS. Vertices.	No. of Rep'ts.	READINGS.			Reverse.
			1st	mean. of Direct.	Angle	
			0	"	"	0
	Mt. Taylor h. 43	6	32	47	28.3	
	Δ 20 h. 34	7	67	28	19.0	
	Placer h. 49	11	79	40	47.8	
			179	56	35.1	
	Error.			3	24.9	
	Mt. Taylor h. 43	6	19	36	58.3	
	Δ 20 h. 34	7	72	28	07.0	
	Jalía B. h. 16	5	87	53	37.0	
			179	58	42.3	
	Error.			1	17.7	
					25.9	
	Jalía - B. h. 16	4	79	26	25.0	20.83
	Placer - h. 52	4	87	23	17.5	13.33
	Mt. Taylor h. 43	6	13	10	30.0	25.84
			180	00	12.5	1' 00.00
	Error.				12.5	

Date: 1874.

Station: Triangles, whose Vertices are Mountain Peaks

Triangle No.	OBJECTS. Vertices	No. of Rep'ts.	READINGS.					
			Direct. mean			Reverse.		
			1 st	'	"	0	'	"
	Talia B. h. 16	7	114	21	31.4			
	Placer h. 49	4	40	51	34.3			
	Baldy h. 55	5	24	36	45.0			
			179	59	50.7			
	Error.				9".3			
<hr/>								
	Talia B. h. 16	6	78	07	34.1	78	07	34.4
	Baldy h. 55	5	50	17	33.0	50	17	33.0
	Δ 20 h. 34 By Diff		51	33	12.1	51	33	12.1
			179	58	19.2			
	Error.			1	40.8			
					30.6			
<hr/>								
	Δ 20 h. 34		56	31	44.3	56	31	44.3
	Baldy h. 55	5	74	54	37.0	74	54	37.0
	Placer. h. 49		48	34	39.6	48	34	39.6
			180	01	00.9			
	Error.			1	00".9			

Date:

Station:

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			o	'	"	o	'	"
	Mt. Jaylor A 20 Baldy							
	Mt. Jaylor Placer Baldy.							
	Mt. Jaylor Atrique or (21) Baldy							

Date:

Station:

Triangle No.	OBJECTS.	No. of Rep'ts.	READINGS.					
			Direct.			Reverse.		
			°	'	"	°	'	"
at-	on							
Luna Verde	W. Span. Pt - Sa. Blanca	1	52	54	40"			By diff.
	E. Span. - W. Span.	2	6	53	22			
	E. Span. Pt - Sa. Blanca	5	59	48	02"			
	Sa. Blanca - Pikes	2	127	26	55'			bad. yields of times.

Observer:

Instrument:

MEAN OF READINGS.

Direct.			Reverse.			CORRECTED ANGLE.	Error of collect'n.	Condition of Atmosphere.
0	'	"	0	'	"			
Sierra Blanca	Peak	—	Humbó			68 23 38.3	(3)	diff. 15"
"	Del Norte	—	Humbó			62 21 38.3	(3)	— 15"
"	Peak	—	Pikes			118 - 07 - 56.0	(37)	
"	D. Norte	—	Pikes			112 - 05 - 56.0	(37)	
"	Humbó	—	Pikes			49 - 44 - 17.7	(3)	
"	C. V	—	W. Span. Pk			66 14 33.0	(5)	diff. 40"
"	Pikes	—	C. Norte			35 33 20.0	(5)	diff. 1' 45"
"	W. Span Pk	—	Peak (a)			140 03 25.0	(5)	0' 30"
	mens. <u>Closes</u> =					359° 59' 13"		
"	W. Span Pk	—	Trinchera			21° 12' 34"	5	30"
"	Trinch	—	Culebra			13° 52' 20"	1	
"	W. Span Pk	—	Culebra			35° 04' 54"		By diff.
"	W. Span Pk	—	Costilla			47° 03' 46"	5	1' 05"
"	Pikes	—	Baldy.			63° 39' 17.0	5	1' 00"
"	Pikes	—	E. Span. Pk.			96° 44' 58.3	3	2' 40"

142 47.15

95 11 35

495 - 11 - 15

142 47 - 15
107 135
47 35 45

142 47.35 47 1/2
46 55
47 35 38.3

47 35 37 1/2

190 - 22 - 00
142 120
47 35 30

21.45
141 105
35 26.2

237 57 25
127 145
47 35 29 -

57.30
177 130
35 30

297.8
180
8) 477.8
59.7

northern corner of the year, the
 that lies between the two
 of the Santa Fe Creek. The slope
 of good passes along it, from
 San Jose to the next stop station.
 I hope this better may reach
 you before you occupy your
 around Santa Fe & that there will
 will prove an addition for you to

Please address reply to

St. Louis, Mo. Co.
New-Mex.

United States Engineer Office,

Explorations and Surveys West of the 100th Meridian,

Washington Address,

P. O. Lock Box 93.

Las Pecos Ruins, Oct 6th, 1874.

Mr. Gilbert Thompson
Dear Sir.

After having waited
2 days for clear weather I succeeded to
day in occupying a point, that may
answer for Δ Station No. 26 (conjectural)
There is no prominent point nearer to
the locality indicated on the map, than
the one we choose. It is about 7 miles
N. E. ^{true} of the point given on the Δ map,
 Δ^{29} bearing $S 55^{\circ} W$, Δ^{27} bearing $S 88^{\circ} \frac{1}{2} W$ & Δ^{25}
 $N 24^{\circ} W$, bearings being magnetic.

The angles are: betw. Δ^{29} & Δ^{27} — $38^{\circ} 17' 19''$
" Δ^{27} & Δ^{25} — $69^{\circ} 24' 57 \frac{1}{2}''$

$142 \begin{array}{r} 47.75 \\ 142 \\ \hline 47 \end{array}$ $95 \begin{array}{r} 35 \\ 95 \\ \hline 47 \end{array}$ $195 \begin{array}{r} 11.75 \\ 195 \\ \hline 47 \end{array}$
 $190 \begin{array}{r} 120 \\ 190 \\ \hline 47 \end{array}$ 21.45 $35 \begin{array}{r} 26.2 \\ 35 \\ \hline 47 \end{array}$
 $287 \begin{array}{r} 120 \\ 287 \\ \hline 47 \end{array}$ $57 \begin{array}{r} 28 \\ 57 \\ \hline 47 \end{array}$ $35 \begin{array}{r} 30 \\ 35 \\ \hline 47 \end{array}$ 297.8
 $285 \begin{array}{r} 18 \\ 285 \\ \hline 47 \end{array}$ $33 \begin{array}{r} 35 \\ 33 \\ \hline 47 \end{array}$ $35 \begin{array}{r} 35.8 \\ 35 \\ \hline 47 \end{array}$ $47 \begin{array}{r} 7.8 \\ 47 \\ \hline 59.7 \end{array}$
 $2 \begin{array}{r} 120 \\ 281.2 \\ \hline 401.2 \end{array}$
 57.3

Cordially 11.1874
 Yours
 J. J. Jones

I am writing that you & all members
 of your party are well, I beg you
 to remember me to those I know.
 I will persevere on this point for you to
 around Santa Fe & that there are
 you before you occupy your por-
 I hope this letter may reach
 you 'to the next stop station.
 Road passes along it, from
 the Santa Fe Creek. The slope
 that lies between the two rivers
 their corner of the plateau,
 which is on the highest point of the
 will pass very near our point,
 to the southward fork of Baldy
 from Santa Fe a few tangents
 on the bottom of 10 ft high. I fear
 the built a stone monument 6 ft high

79° 37' 40"

129 3 35
90 13 25
29 50 10

39. 48 50

37 30

48 45

119. 26 25

39 - 48 51.5
45.

159. 18 15 150
15 25 15
19 20

39 48 51.2
48.7

199 04 25 03 25
105 140

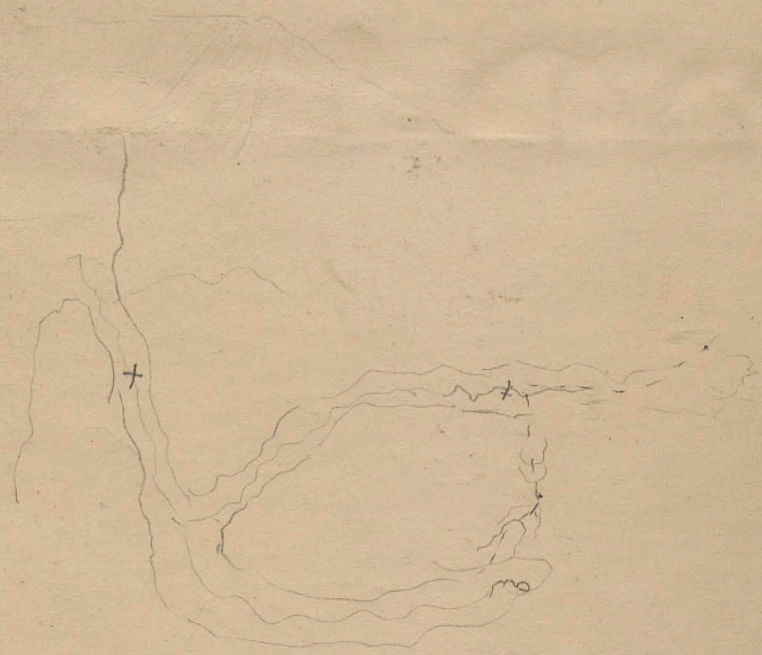
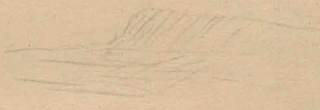
39 48 53 48 41

238 52 55 53 15
29 315

39 48 49.1 48 52.5

112 47 15
47 36 5
190 23 20

149 54 55
120 3 35
29 51 20
79° 37' 40"



H	1
C	2
G	3
E	4
D. Verde	5
S. B.	6
S. and -	7
26	8
21	9
20	10
24	11
23	12
M. J.	13
Jimmy.	14
Placer,	15
Baldy	16

13 48 00

13 34 50

13 21 5

2) 26 69 15

13 34 37

22 35