

- Misallany -

Sick Report

Gila Expedition

8/1/11
6702

Expedition to the Gila

- Sick Report -

C C Parry
Asst. Surgeon. to Escort

C. H. K.

31 904
2018
29 885

31 826
1931
29 895

to Mrs



36
86
2/11/6
5

Auton Gailor

in

Dear back

la

Auton
Gailor

Relieved duty

James Fairer H Com 2 Inf
Henry Hiller A Com 1st dragons

September 20th 1849.

Relieved duty —

Name	Disease
James Fairer. "H" Compy 2 ^d Inf.	Sore Throat
Henry Hiller "A" Compy 1 st Dr ^g s	Syphilis

Sept 25th

Returned to duty

James Fairer. H Compy 2^d Inf

Oct. 2^d —

Relieved duty —

Geo Crittner. A Compy 1st Drag } Injury
of hand

Oct 10th

Returned to duty

Geo. Crittner — "A" Compy 1st Drag

Oct 12th

Relieved duty

Peter Gruber - Compy A 1st Dragons } Primary
Syphilis
worn brace

Relieved duty Oct 18^m
Joseph Nixon. "G" Comp'y 1st Dragoons
{ Intermittent fever

Oct 18th Relieved duty
Waggoner. "A" Comp'y 1st Dragoons
{ hemorrhoid with
Stricture -

Returned to duty Oct 22^d
Henry Hiller. "A" Comp'y 1st Dragoons

Oct 22^d 1849 Brown. Relieved Duty
G. Comp'y 1st Dragoons
{ Syphilitic abscess in groin

Oct 22^d 1849 Relieved duty
Lewis Brockman
"G" Comp'y 1st Dragoons
{ Dysentery

Oct 23^d Relieved duty
Garps. "G" Comp'y 1st Dragoons
{ abscess in palm of
the hand

Oct 25th Relieved duty
Wm Paterson "A" Comp'y 1st Dragoons
{ Diarrhoea

Oct 26th Returned to duty
Wm Paterson "A" Comp'y 1st Dragoons

Oct 26th Returned to duty
- Garps. "G" Comp'y 1st Dragoons

Oct 30 Relieved duty
Henry Hiller. "A" Comp'y 1st Dragoons

Returned to duty Nov 6th
Brown "G" Comp'y 1st Dragoons

Nov 8th Returned to duty
Private Waggoner "A" Comp'y 1st Dragoons

Nov 9th Returned to duty
Jos Vision "G" Comp'y 1st Dragoons

Nov 11- H Hiller. "A" Comp'y 1st Dragoons
Returned to San Diego

Nov 12 Lewis Brockman
Died "G" Comp'y 1st Dragoons

Nov 18- Relieved duty
Gardner "A" Comp'y 1st Dragoons
Syphilitic bubo

Nov 28

Relieved duty
Corpl Owens — {Primary Syphilis
of Compny 1st Dragoon.

Nov 28

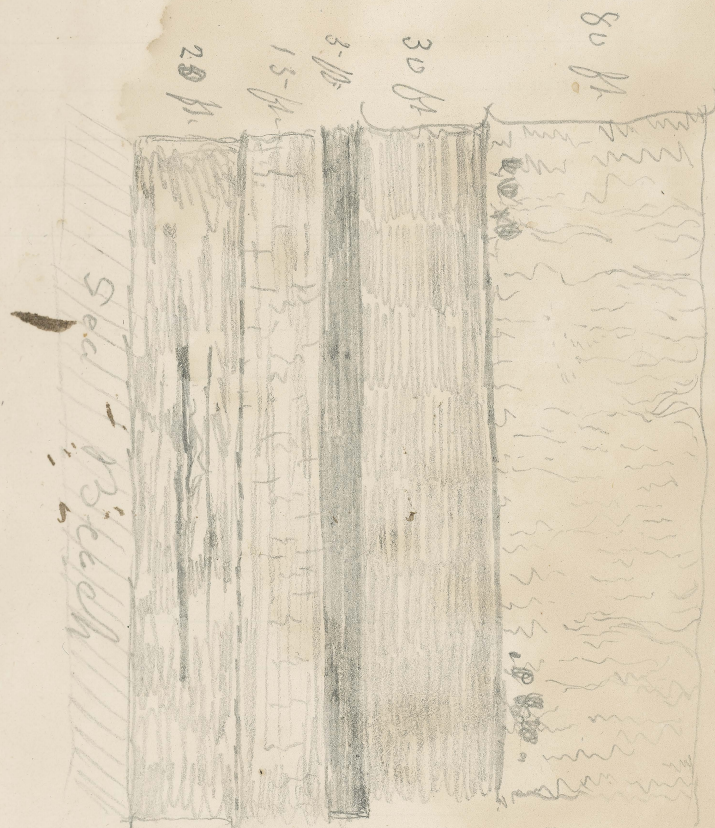
Returned to duty
Private Gribben A Compny 1st Dragoon

Nov 30

Relieved duty
Corpl Decker A Compny 1st Dr.

Remanning last Quarterly
Report Dec 31st 1849

16. — 5 sick 11. Convalescent



Sec. 13

20 ft Sand & Gravel

15 ft Parted sand & clay
abundant with clay
clay with irregular
sand of lignite &
asphaltum, with
sulfur & iron

3 ft

30 ft Coarse white sand

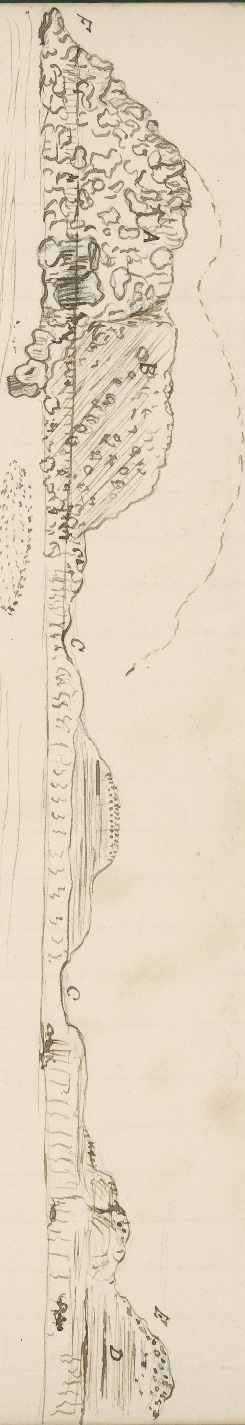
80 ft Coarse brown sand
with occasional
irregular pebbles



W. C. C.

Carlisle Colorado





- A. Breccia of *Heterophthio* gravel height 50 ft above low water mark
- B. Duff composed of fragments of the same, more granulated, the strata lying regularly at an angle of 35°
- C. C. M. beds of the gila. Below high water mark
- D. Shale of Sand. 40 ft. with seams of $\left\{ \begin{array}{l} \text{W of harder character. Same as the base of the} \\ \text{E layer of pebbles 15 to 20 ft. on top of } \end{array} \right\}$ to *Eurhaceras* fragment. forming little can? (low water)
- 17' fine high (Natural Section, east bank of Colorado, just below junction of Bear with creek 12 ft (of gila & Colorado rivers.))



Articles of food: cultivated, & native,
in use among the Yumas at
Mouth Gila —

(Ta-ditch) Maize — This is but little
depended on as a staple article, and does not
receive sufficient attention. To be of fine quality
the soil is too dry, & light, — and requires
irrigation to produce well — hence it holds
an inferior place in the estimation of the
Indians, and is looked on more as a luxury
it commands a high price —

Beans — (Amah nick - white variety
"Ak-mah" Yumas)

These are of excellent quality and several
kinds, it is the staple nutritious article
and receives the most attention. The varieties
are some of them very singular in appearance
differing from any cultivated in United States
they are mostly of the low kind, and habit
of our white bean — considering the attention
they receive they produce well. — They
are excellent eating having a mealy taste
and free to a considerable extent from
the raw taste peculiar to the bean family.

They are wholesome & easily digested - the
Indians parch them in the shell and
I suppose boil them - I have observed
different kinds - See Specimens
They are harvested in ~~September~~ ^{October} being
carefully dried in the sun & packed away
in large mud baskets, thoroughly dried
and sealed at top -

(Akmat ah) - Pumpkin Squash -

This is also an article highly prized and
being adapted to the soil flourishes - though
not attaining a large size - there are several
kinds, some with long necks - others short
and some flat - the latter are the best
They differ in colour from a mottled
white & green to deep yellow - They are
harvested by being collected in piles. They
are then when fully open, scraped
the stalk and seeds removed and then
cut in slices in a spiral manner each
pumpkin making one string then hung
up to dry the seeds are also preserved
both for planting & eating - They are

grown promiscuously with other plants
of the Melon family by which the latter
is often an evident amalgamation -
they are harvested in Nov -

Musk-Mellons. - (~~Chematonagah~~ ^(Chematagnis))

Musk Mellons. are plentifully grown, and
often of excellent quality. There are several
varieties which preserve their distinctive
characters - some are nearly worthless
on account of their approximation to the
pumpkin one of the best varieties I have
not seen elsewhere - consisting of a
smooth light yellow outside wrinkled long slender
from the insertion of the stalk - The
seeds are carefully preserved by the Indians
and when dried are used for seed & food
they are freely eaten by the Indians
at all times of day, and very little of
the rind is thrown away -

Water Mellons. "Landis" Sp. (~~Chematonagah~~ ^(Chematagnis))

These are also extensively raised and
were sufficient pains taken to keep them
separate from others of same class would

doubtless be of fine quality, as it is the
are evidently deteriorated, and being
generally picked before opening they
are much inferior to their true deserts.
The varieties are not very striking,
mostly with the usual mottled outside
& red in with reddish brown or black seed.
The Indians eat them without limit and
their mode of eating is quite aboriginal
a round hole is cut or broke in the top
and the inside scraped out with the
fingers, seeds dislodged and the remainder
eaten or drunk - it is certainly an
economical way - the seeds are preserved
as in others and go to form some articles
of diet -

Millet - (*Panicum* - ?) (*EK-Sun* (Guamas))

A species of grass seed. I suppose to be
native? - is the principal reliance in the
place of wheat. its grain is about the
size of mustard seed and covered with a
shining lenticular husk - this is ground
down by hand by pounding or rubbing -
in the former a pestle shaped stone is filled
to another concave mortar. the more
common mill consists of a flat gritty
stone 8 by 14? with gently raised edges
on this the grain is placed & rubbed down
with a round club. rolling pin shaped stones
of same character. the first grinding
merely breaks the husk and is performed
dry the product is then moistened & rubbed
up to a doughy paste this is either eaten
raw or made into tortillas. it is rather
husky, and would suit a graminde, well.

The remains of the grass from which
it is derived is common lying about their
Ranchos. it is a fine panicle with long
slender stalks. I have not satisfied
myself yet about its growth but I think
it native - It is singular that the
Indian name corresponds very nearly to

the German - If it is an introduced plant it may throw some light on the history of this interesting tribe

~~At~~ Uta-Ki -

This is another species of grass seed used like the former but apparently less abundant - the seed is smaller and of entirely different character - it grows on the banks of the Colorado in moist clayey situations - it is a coarse grass with digitate second spikes (see specimens) it is probably less easily cleaned than the former, but in all economical use is an equal substitute - both these species of grain are carefully hoarded being first thoroughly dried in the sun

and afterwards packed in their mud baskets. the season for collection is latter part of Aug or Sep -

Amaranth -

The black shining seeds of this common and coarse weed. I have seen at some of the Ranchos but it does not seem to be prized and contains little nourishment as an article of food it is ground into paste like the other grains above mentioned

There are all the articles I have noticed in cultivation or use for food among the Yumas - It is singular that none of the excellent roots (on which native tribes principally rely) have found their way among them - their soil is doubtless well adapted for some of these - and would add to their resources. among those deserving

Attention, would be Sweet potatoes &
Common Irish — &c.

Megquite. (*Prosopis glandulosa*) - Ē-yah (Yumas)

This characteristic tree - is found on all the elevated sandy plains, and river bottoms west of the Cordilleras. It varies in character according to the nature of the soil. on the more elevated sandy plains being of a shrubby character its procumbent branches collecting the drifting sand in hillocks fortified on all sides with their thorny branches. - on bottom soil it acquires the character of a sizable tree* generally sending ^{radicle} branching trunks, which spreading with their outside spray close to the ground make an impenetrable chopperal. to all but hungry mules - The larger trunks by age acquire a shaggy bark - the wood has a large proportion of walnut colored heart wood and is durable. but from its habit of growth seldom affording sticks useful for farming or other purposes - it gives excellent fuel. Its wounded branches frequently exude a gum its pure tears undistinguishable from Gum Arab. possibly by adopting proper means it might be made prolific -

(Measurement of tree on Colorado; trunk above ground 1 ft 5 ft high)

Its foliage is a pinnate leaf - distributed in pairs. and subtended by thorns -

The flower I have not seen -

The fruit consists in a long (4 to 8 in.) pod falcate. ($\frac{1}{2}$ inch wide. &c) the separate seeds are enclosed in a distinct capsule which is coated externally by a glandular gummy substance sweetish acid - This seems to be the part that makes it nourishing to horses who are greedily fond of it - though when eaten alone without other fodder is apt to disagree being binding in its nature. The rectum voided being the undigested horny capsule enclosing the seed. - The pod is almost universally bored by an insect produced from a larva deposited in the immature state

The beans in time of scarcity are used by the Indians as an article of diet being softened by boiling & the saccharine pulp dissolved into a soup -

Circumference | branches spreading in a radius of 20 ft height 25 ft

"Screw Bean" *Prosopis Emoryi* Lariss (Germans)
(Forville, Mexican)

This is a tree allied to the former but less common, it is of a more symmetrical shape, but inferior size, it seems to select a richer and moister soil - growing frequently among willows - in other respects much resembling the former. its flowers grow in a short, somewhat ^{thick} obconic spike small yellow inodorous - 1 to 2 in long - the majority of these prove abortive, a variable number from 3 to 8, develop into a bunch of contorted pods, forming a cylinder (2 inches) ribbed by a nearly transverse spiral, coil of the pod on itself - ~~mm~~ These are divaricately sessile on the rachis - They have a more meaty character than the former, and horses generally have to acquire a taste for them when they are liked as much as the others, - These from their softer nature are more esteemed as an article of diet, being used in a variety of ways soup being probably the most convenient they are also parched, and said to make good coffee, they are also subject to the puncture of larvae - in falling from the tree the pods remain attached to the rachis, in which

respect they differ from the former

Scientific names of tropical fruits.
noticed at Panama, S.A.

Crocentia, Cayote. Calabash. - a middle sized tree, with singular, slender branches, covered with short fascicles of leaves deep green, flowers frequently adhering to the trunk. Not com.
Prignomaceae - fruit often the size of a mans head much used for dishes. &c

Laurus persea. "Alligator Pear". a common fruit, size of a large pear. Tree not seen.

Calanthocarpus fistula, pungent Cassia
some of the long cylindrical pods seen in market.

Anacardium occidentale. Cashew nut. - a walnut like tree growing in suburbs of Panama. Its fruit singular by having a bean shaped kernel, inserted on the top of a fleshy pome. - the latter is a greatly sub acid. - the nut is said to be pleasant, but its husk and exterior skin possess escharotic properties - It has

been said that ladies use the latter escharotic oil, principally to remove their old skin and give them a fresh, blooming coat. - Not com. ~~Anacardium~~

Theobroma Cacao - Chocolate tree
not seen growing -

Psidium, *Pomiferum*, *Uppiferum* -
"Guava" not seen.

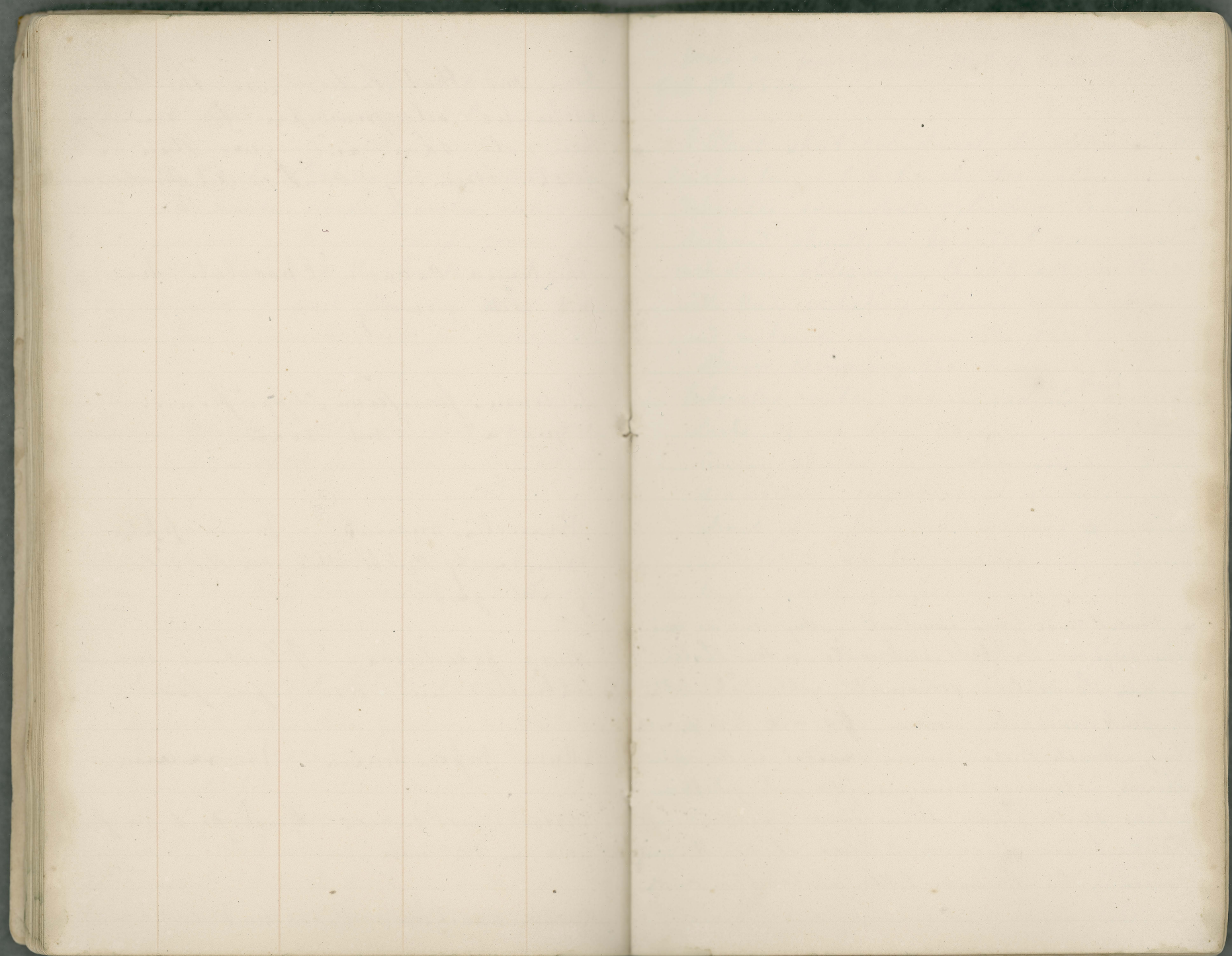
Bromelia ananas, pine apple
extensively cultivated on the island of Tobago -

Musa paradisiaca - Plantain extensively cultivated and used for food

Musa sapientium Bananna.

Artocarpus incisa - Bread fruit, a fine grove, in the town. -

Cocos nucifera, Cocoa nut



Description of *P. Mamillaria* ?
found on grassy ridges. West of Cordilleras
Oct. 9th 1849 sent to Engelman

1 Plant. short cylindrical to globose 3 to 5 inches long - 1 to 2 inch. diameter
Tubercles. somewhat cylindric, 2 inch long disposed spirally in parallel rows crossing each other obliquely - thickly set, on the axis with their radiating spines interlocking and entirely covering the plant.

Spines crowning the summit of the tubercles. outer many radiate ^{straight} acicular while 1/2 inch long varying in length - inner spines 4. - arranged in form of a square. projecting at an angle of about 45° from main axis  hooked and sharp at the extremity. 3/4 inch long, reddish purple -

* - Flower not seen. -

Trunk in the axis of the upper tubercles crowned when immature with the remnant of the flower. when mature concealed beneath the surrounding branches of radiating spines - orbicular to pyriform a small deep umbilicus, at top after the flower has fallen, smooth, with the seeds appearing through the thin ^{juicy} envelope about 2 inch diameter. - length slightly more

* Flowers since found. abundant in dry ravines near San Diego - Sepals imbricate, outer shorter inner lanceolate acuminate yellowish with a pink mid rib. flower of cone 1/2 to 3/4 inch long 1/2 inch wide, growing immersed in the upper spines. Stamens numerous. filaments filiform anthers small yellow shorter than corolla
Pistil linear sigmoid 3 lobed at summit green exceeding the stamens. little shorter than corolla

seeds large for the capsule. — immersed in thin watery pulp with conspicuous white threads attached to the hilum, seeds irregular consisting of a lower hump portion to which the hilum is attached resembling a chalazya and a larger block wrinkled portion containing the cotyledons.

Hab. dry gravelly hills about the base of bare mountains, west of the Cordilleras, Capitol Hill junction of the Gila & Colorado rivers — growing in the dry clefts of rocks varying in size (specimens from which the description was drawn small —) a closely allied or different variety of the same species was noticed near the foot of the desert range of mountains — with oblong bright scarlet fruit projecting beyond the spine.

Texture of the plant, consisting of the external cellular portion of which the tubercles are composed and an internal soft woody fibrous matter, sending out thready fibres to the external each tubercle, with a root like texture, in decay withering up into a shrivelled mass —

(No 5 sent to Engelman)

Description of an *Opuntia* — found on the desert west of Cordilleras, on gravel hills opposite junction of Gila & Colorado — Oct 13th 1849 —

Plant cylindric, divaricately branched joints slender cylindric, primary trunk $\frac{3}{4}$ inch diameter, secondary $\frac{1}{2}$ inch diameter 3 to 8 inches long. Thickly branched and set with long spines interlocking. Tubercles, oblong, irregular diamond shaped large for the plant $\frac{1}{2}$ inch by $\frac{1}{4}$ inch slightly prominent — regularly spirally disposed in 4 to 6 rows. Areolae linear shaped occupying the upper part of the tubercles woolly in the axils with 1 long spine projecting from its lower part — Spines 1. to each areolae $\frac{1}{2}$ inch long with occasional small radiate ones around its base, — needle shaped, finely barbed and sheathed in a membranous envelope thickening at its insertion purplish in the center and somewhat transverse marked, sheath oblong sackate entirely enclosing the spines easily separating at base whitish below yellow above

- flower not seen -

Fruit oblong pyriform $\frac{1}{2}$ inch long less than $\frac{1}{4}$ broad thickly covered with small tubercles with barbed wool, and slender retrorse spines $\frac{1}{4}$ inch long - remains of the flower persistent, in small dry scales crowning the top of the fruit

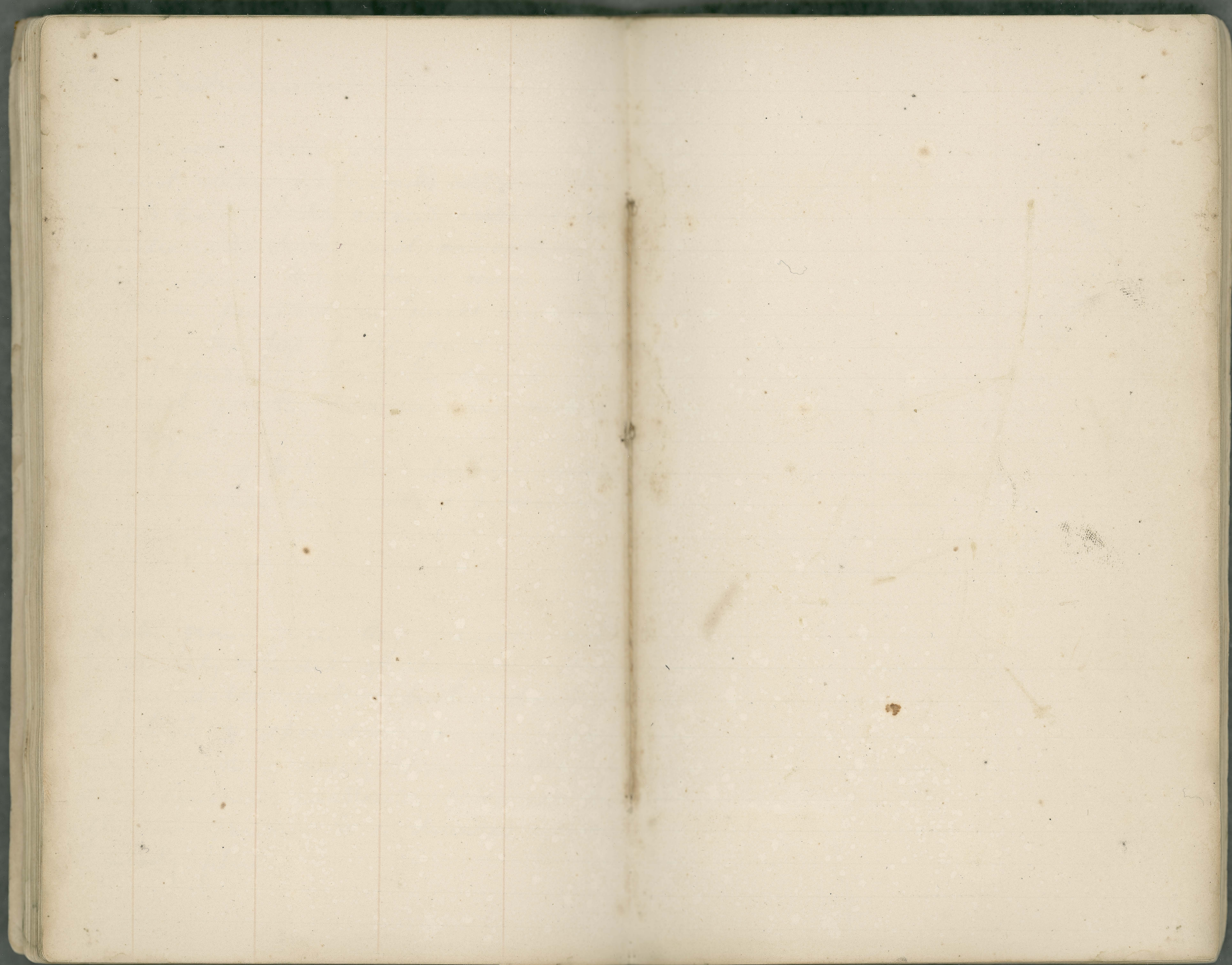
Fruit proceeding from the summit of the latest growth, deciduous when mature and dry -

seeds few 4 to 5, often abortive, irregular obreniform white long with a pubescent margin -

Hab growing in clay gravelly soil. Its densely crowded spines giving it a formidable look. Bushy about 2 ft high & spreading younger joints covered with a mealy bloom - Main stem ligneous, weathering like all the cylindric prunella to a dissected cylinder of woody fibres -

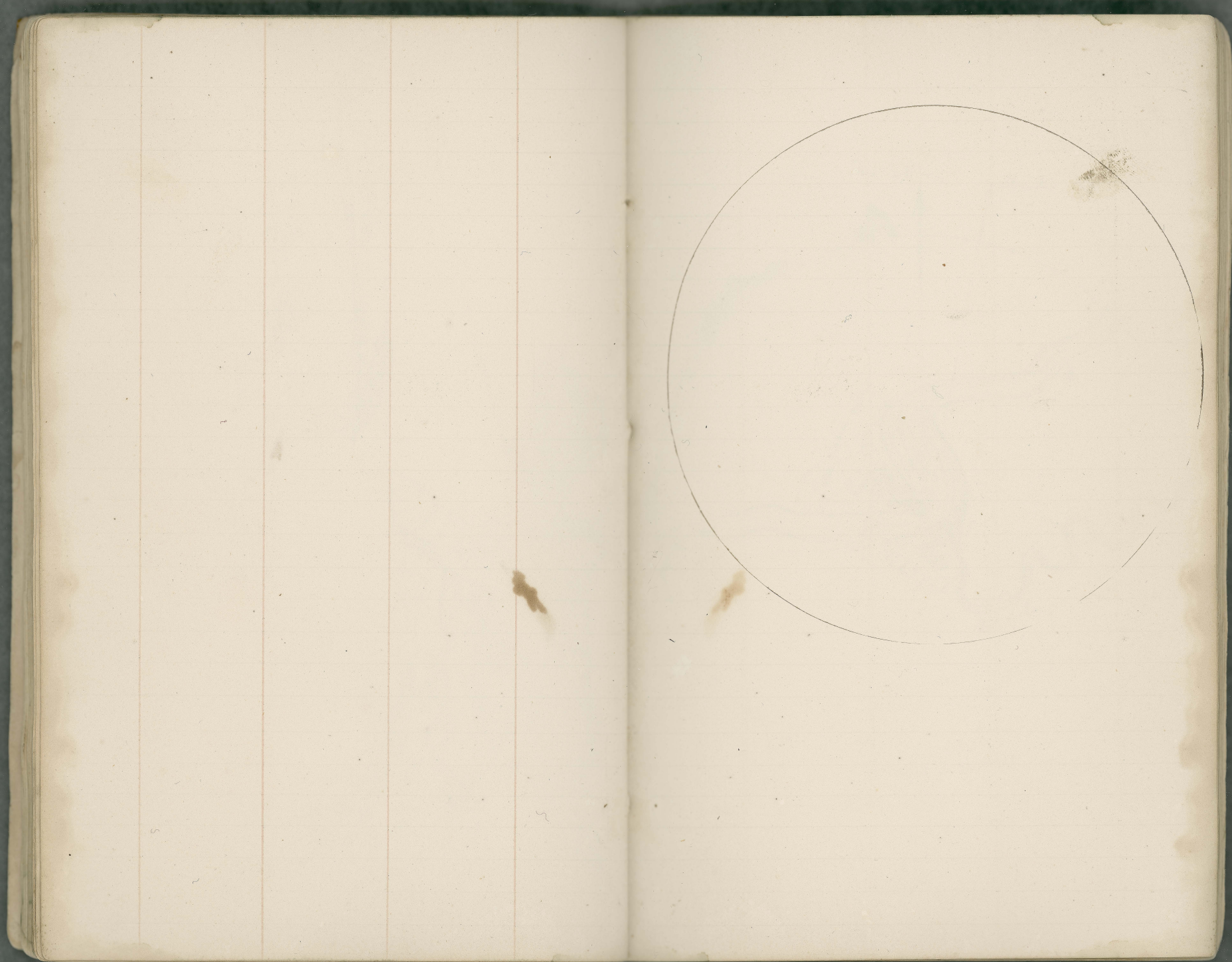
Approximate height from Cap Hancock

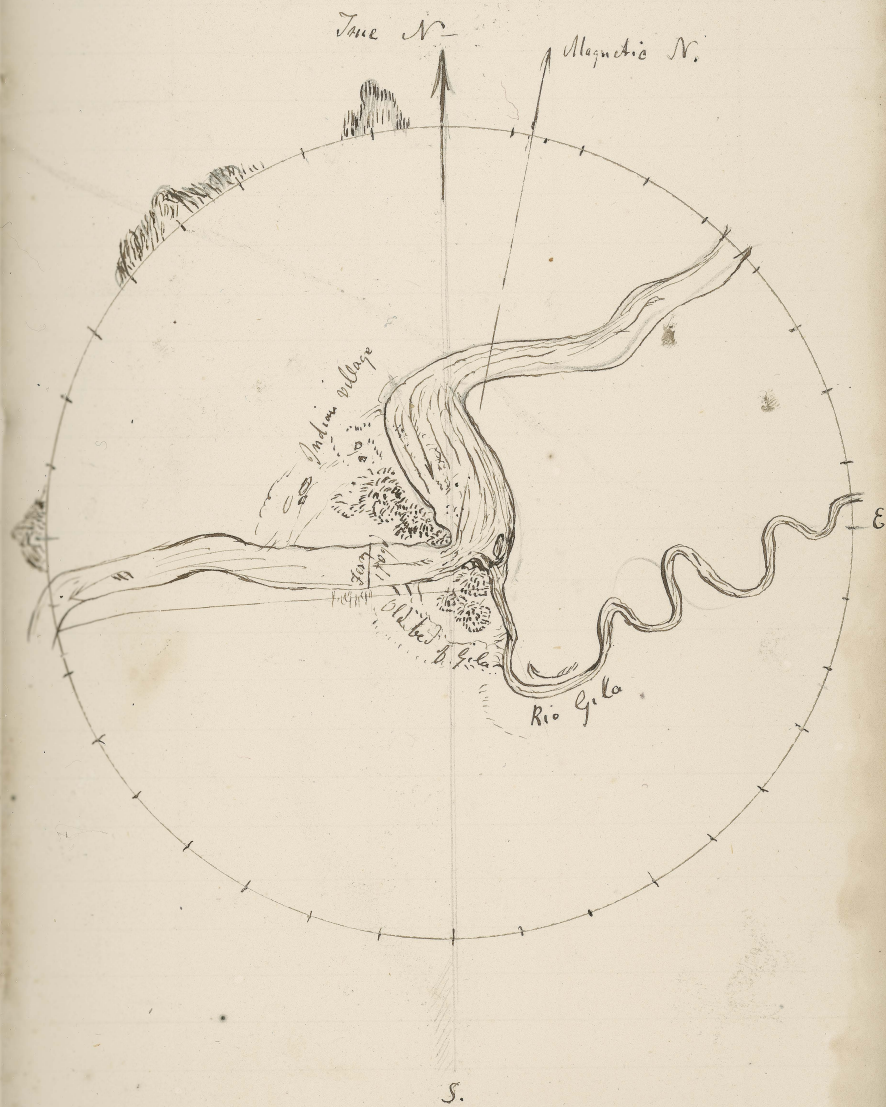
Tecate Valley	1609 ft above Camp Riley
Top of Mt Pinis	2760 ft " " "
Isacaci	3564 ft " " "
Wicamun	4404 ft " " "

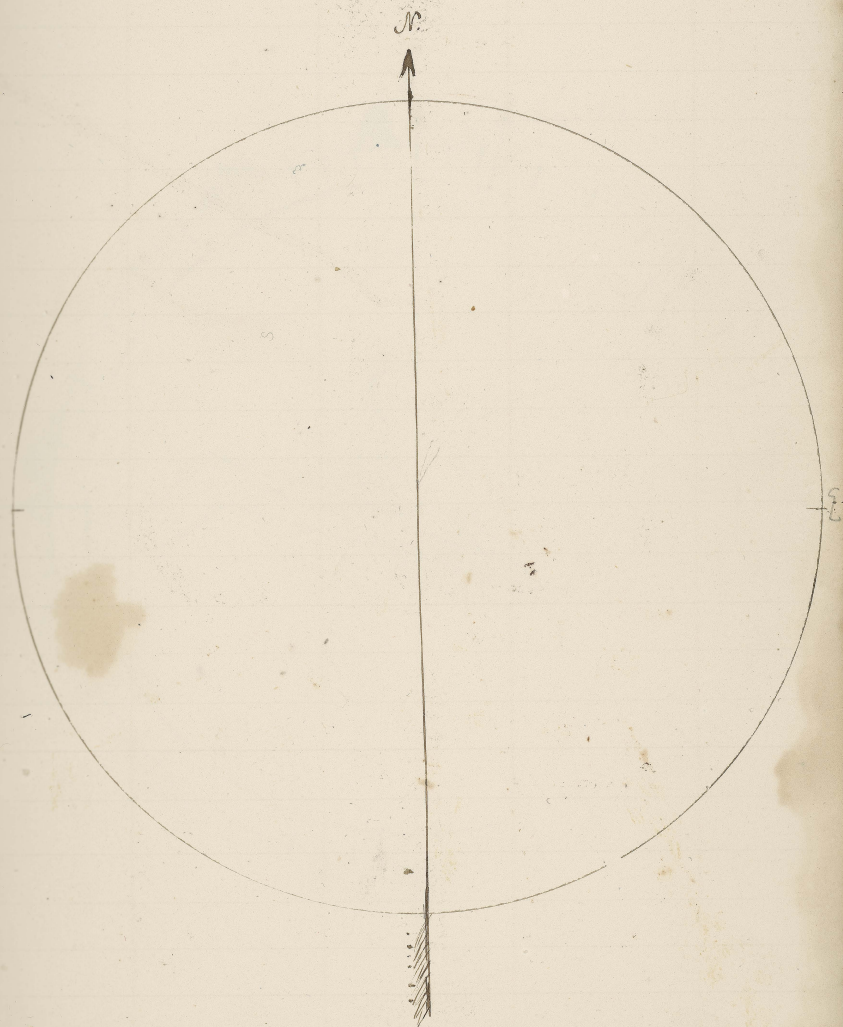






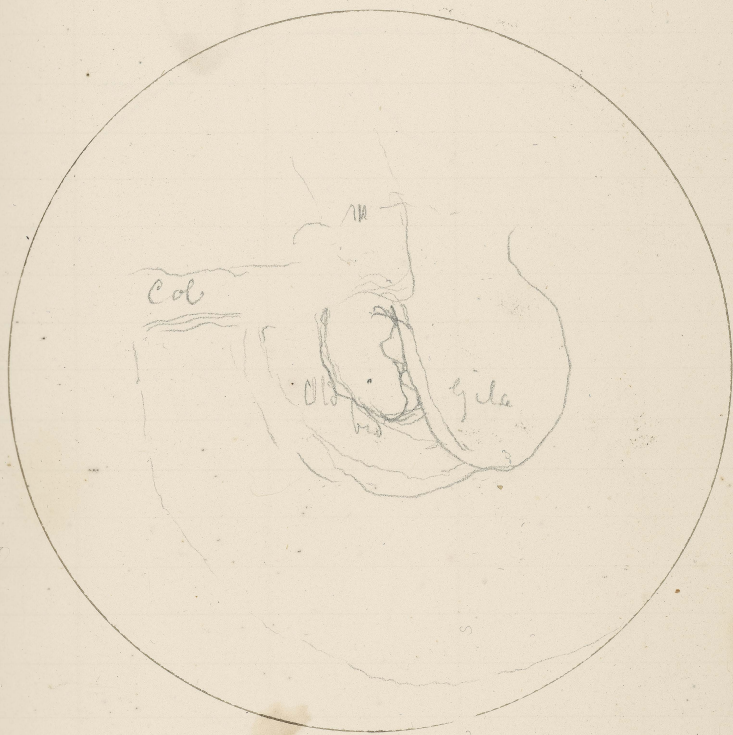






125
50
60







February 1850. Thermometer readings, San Diego

Sun rise & (after)		9 AM	3 PM
Feb 1	44° ⁷ clear still wind SW	57° ⁷	59° ⁷
2	46°	56	59
3	47° ^{clear}	65° (10 ^{1/2})	61°
4	53° ^{cloudy}	59°	63°
5	53° ^{Fog}	56	59
6	53° ^{cloudy}	55°	57°
7	52° ^{Fog}	52° ^{cloudy}	58
8	52°	55°	63°
9	49° ^{clear}	52°	65°
10	51° ^{clear}	58°	65°
11	55° ^{clear}	61° ^{Breeze}	69°
12	55° ^{clear}	61°	69
13	55° ^{clear}	63°	69
14	54° ^{clear}	57°	67°
15	51° ^{clear}	60°	67°
16	54° ^{Fog}	55°	60°
17	54° ^{cloudy}	60°	66°
18	58° ^{cloudy}		

Remarks

clear still - light sea breeze from NW in forenoon

Light Wind N. heavy fog on ocean. sea breeze PM

Clear in light sea breeze

Chilly wind from NE: Clear at 9 AM Hot Heavy fog at night

Foggy morning: Clear day with sea breeze PM

Day mostly cloudy

Foggy in AM Clear PM

Clear, still

Clear still; warm

Clear still

Clear: breeze from N dusty at 11. still at Sun down

Clear: light breeze W

" " " " "

" " " " "

" " " " "

fog. clearing up at 11 AM

Cloudy at 11 Clear 10 AM warm

Barometric Observations		Therm		Barometer 292 Gunn's	
Date & Station	Up Vern	Low Vern	AA	Det	Mean
Dec 2 nd 1 st Wells	3 PM 31.805	1943	73°	73	29.862
7 PM	31.778	1934	59.5°	61°	29.844
Dec 30 Sun rise	31.778	1929	46	45.5	29.849
mean					29.852

Dec 30	8 ft below	table of Desert half way to Lagoon Camp			
12 M	31.828	1915	68°	66°	29.913

Dec 39 4 th	Lagoon Camp				
6 PM	31.839	1884	60	57	29.955
Sun rise	31.847	1847	49.5	51	30.000
					29.977

Dec 4 th	New River				
12 M	31.923	1800	54°	56°	30.123
	31.915	1815	65	67	30.100
					30.111

Dec 5 th	Lake				
9 AM	31.937	1774	54.5	56	30.163
10 AM	31.928	1784	54	54.5	30.144
1 PM	31.875	1842	54°	54	30.033
3 PM	31.860	1860	53.1	54	30.000
Dec 6 th Sun rise	31.890	1803	42.5	42	30.087
					30.085

highest water mark 16 ft
plain or 12
buccia (17) 6 ft
drift 29 - do
iron bottom 300 yds



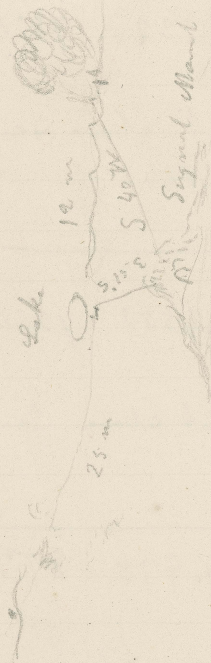
Junction of the Gila & Colorado.

River Gila 1 mile from mouth
depth - 4-10 - 4 ft 3 ft - 1 ft

111
12
10
133

	Barometer		Therm		Mean
	Up V	L Ven	AH	Det	
Dec 6 th New Water Camp					
3 PM	31.828	1.885	57 ⁷	57	29.943
6 PM	31.828	1.880	56	55	29.948
9 PM	31.836	1.860	53	53.5	29.976
Dec 7 th Sun eve	31.869	1.820	43	45	29.949
					4/216
					29.954

Carino Creek



S. 60 E

Green's Siphon

No. 222

Barometric observations, reduced to mean

Date	Station	Mean Height of B.	Thermometric mean Atch. Detach.	No. of observations Remarks
Sep 15 th 1849	Santa Maria near Rancho	28.686.5	79.57 80.7	4 Observations Day Clear &c
Computed height above San Diego -		1353 ft.		

Sep 17 th "	San. Isabel Camp on bottom near Rio Isabel	27.232	78.7 78.7	4 Obs. Day Clear
Computed height above San Diego		2842 ft.		

Sep 20 th 21 st	Vallecito	28.4552	90.57 91.57	8 Obs. Day Clear, Hot
Computed height above San Diego				

Sep 24 th 25 th 26 th 27 th	New River on Desert	29.975	87.87 90.37	12 Obs.
Computed height above San Diego		67 ft.		

Sept 27th

Barometric observations, reduced to mean

41	San. River	12 M
21 V	31.831	31.912
2 V	1917	1.881
47 Th	69	96.5
Det 11	70	99
Mean	29.814	30.031
	188 845	29.945
	29.9215	29.943

12) 35.9700
29.975

87.8

Rancho Santa Maria

Barometer Readings

Green's Syphon
222

	9 Am	12 M	3 P.M.	6 P.M.
Sept 15 th	31.252	31.231	31.212	31.178
Lower V	2.539	2.512	2.531	2.545
Ther. alt	81.0	86.5	83.5	67.5
" det	82°	86.5	84	67.5
Mean	28,713	28,719	28,681	28,633

81	28,713	27,232	28,511
86.5	28,719	27,256	28,492
83.5	28,681	27,2531	28,439
67.5	28,633	27,189	28,442
131.85	4) 124,746	4) 108,930	3) 88,480
79.5	28,686.5	27,232.5	28,480

Rancho San Isabel

	9 A.M.	12 M.	3 P.M.	6 P.M.
Sept 17 th				
Up V	30.484	30.540	30.506	30.564
Lower V	3.252	3.284	3.253	3.375
Ther. Alt	70.5	84.5	86	71.5
" det	74	81.5	86	71.
Mean	27,232	27,256	27,253	27,189

Valle Ojo

	9 A.M.	12 M.	3 P.M.	6 P.M.
Sept 20				
Up V	31,246	31,246	31,230	31,194
Lower V	70.5 74	2,735	2,738	2,755
Ther. A	84.5 81	99.5	96.5	96.5
" D	86 86	99	99	98
Mean	4) 97,235	1302	28,511	28,492
	78.	75	455.2	28,439

Sept 24th

New River Jornada Sep 24.

	Total	1 P.M.	3 P.M.	8 P.M.
Up V	31,843	31,859	31,844	31,799
Lower V	1,724	1,750	1,759	1,774
Alt Th	70	96	98.5	86
Det Th	72	100	102	88
Mean	30,119	30,109	30,085	30,025

New River Jornada, Sep 25

	9 A.M.	12 M.	3 P.M.	6 P.M.
Up V	31,680	31,977	31,966	31,928
Lower V	1,745	1,963	1,966	2,020
Alt Th	68.5	94.5	100.5	104.6
Det Th	69	98	104	108
Mean	29,835	30,014	30,00	29,968

	9 A.M.	12 M.	3 P.M.	6 P.M.
Up V	31,820	31,880	31,855	31,880
Lower V	1,940	30,119	30,109	30,109
Alt Th	75	30,085	30,085	30,085
Det Th	75	30,025	30,025	30,025
Mean	29,880	29,835	29,985	29,985

Valle Ojo

	9 P.M.	Sum. rise	9 A.M.	12 M.	3 P.M.
Sept 21					
Up V	31,164	31,080	31,220	31,224	31,205
Lower V	2,752	2,680	2,759	2,749	2,762
Ther. A	74	61.5	96	100.5	99.5
" D	75	62	101	99	99
Mean	28,412	28,400	28,461	28,484	28,443

Gila Expedition

Thermometric observations

	9 A.M.	3 P.M.	9 P.M.	Barometer
Sep 11 th	70° F	85° F	68° F	
" 12	67°			
" 13		71°	65°	
" 14	79°	85°	59	
" 15	69°	84°	60	
" 16	San Luis 50°		67	
" 17	" 49°	86°	47	
" 18	" 46	89°	61	
" 19	54	98°	77	
" 20	" 57°	100°	75-	
" 21	62	101		
" 22	74	106		
" 23	7			
" 24	72	106	88	
" 25	69			
" 26				
" 27				
" 28				
" 29				
" 30		104°	70°	
Oct. 1	59°	105°	82°	
" 2	70°	101°	82	
" 3	61°	100°	80	
" 4	68	101	75	
" 5				

The Mission
Camp at the Ranch of San Miguel, 12 miles from

Camp Santa Maria Clear

" " " Clear

" " " Clear

" San Isabel Clear

" " " "

" San Felipe "

" El Puerto "

" Valle Verde "

" Carrizo Creek

crossed. jornada, heavy rain 5 P.M.

New River Camp

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

Rio Colorado Cloudy
Rio Colorado Clear

Rio Colorado, junction Rio Gila

" "

" "

" "

" "

Oct	6th	9. A.M.	3. P.M.	9. P.M.
"	7th			
"	8			
"	9	Zero point stake E Bank Col		
"	10			
"	11	to stake S end Island	$3^{\circ} 33'$	
"	12			
"	13	to " on Meridian hill	$15^{\circ} 22'$	
"	14			
"	15	to N end Base line	$17^{\circ} 17'$	
"	16			
"	17	to center obs tent	$20^{\circ} 45'$	
"	18	to S end Base line	$21^{\circ} 4'$	
"	19			
"	20	to Chimney peak	$39^{\circ} 30'$	
"	21			
"	22	to highest point N.W. Range	$69^{\circ} 10'$	
"	23			
"	24	to Pilot Knob lower peak	$65^{\circ} 47'$	
"	25			
"	26	to Signal mountain	$42^{\circ} 00'$	
"	27			
"	28			
"	29	to Capitol dome	$24^{\circ} 6'$	
"	30			
"	31			

Trangulation from Emorys Hill
Lower peak

		Bearing	N 18°-15'
Capitol dome		Zero point	00000
to stake on E bank Colorado			
to stake on S end of Island	$3^{\circ} 33'$		
to " on Meridian hill	$15^{\circ} 20'$		
to N end Base line	$17^{\circ} 13'$		
to Center obs tent	$20^{\circ} 42'$		
to S " " "	$21^{\circ} 7'$		
to Chimney peak	$39^{\circ} 28'$		
to highest point N.W. range	$69^{\circ} 8'$		
to Pilot Knob lower peak	$74^{\circ} 10'$		
to Signal mountain	$54^{\circ} 10'$		
to Capitol Dome			

Height of steep bank above water mark 80 ft
 Right of rounded & angular boulders with
 indurated layers of sand & mud
 dipping at 35° to the west 80 ft
 Right below Cañon horizontal layers
 Sand & gravel 40 ft covered with boulders
 111' Corner of Sec N 30 W

A hand-drawn sketch of a landscape within a circular frame. The drawing is on aged, stained paper. The central scene depicts a winding path or river that flows from the upper left towards the lower right. On the right side of the path, there is a small, simple building or hut. The background is filled with horizontal lines, suggesting a field or a body of water. The entire scene is enclosed within a large circle. Around the perimeter of this circle, there are small, dark dots, possibly representing stars or a decorative border. The drawing is executed in a simple, sketchy style with visible ink lines.



uk a-ti'

ek-suni

eks-uni

grass

Beans
aka-miah

QK3|
P248n
v.7

Masked and N

Mod No, usually
- Cerro cana -
black & white
blanco mayor
shrub
grasses
in
Simons

1137

N 55 E

Cano Col

80 gila

(Cephalium
bitter)

S. N. 15.44

491943 3 35470 89

manzanita -

Aechlos lahylos

chancelagua

canchelagua

N



A Yemas Lady

342244

