





Property of C.A. Goldman.

Tula.

Tulare Co.

Californiac.

Field Notes.

Mar. 7th to June 24th 1893.

Tula.

March 7 '93 Tula. Hidalgo.  
Left the City of Mex!  
this morning at 7:30  
arrived in this place  
about 10 o'clock after  
some looking around  
decided to stop at  
Hotel Hidalgo. Set out  
a lot of traps in the  
afternoon mostly for  
mice. The country looks  
rather barren is composed  
almost entirely of lime  
stone. The railroad  
leaves the plain bet-  
ween Huehuetoc and  
El Salto. I am here  
mainly to look for



Tula

jumping rats. Found no  
sure signs of them this  
afternoon. Think there  
has been is probably bet-  
ter suited to them, but  
they ought to be found  
here. The country is  
in some respects like  
that north of San Luis  
Potosi where I found  
jumping rats. The  
vegetation & some  
of the birds are the  
same. I shot an Otocoris  
this evening.

---

Mar 8 Tula.

My traps did not yield

Tula

much on a Sitomys re-  
gard the trouble of  
sitting them. These were  
from the high hill  
west of town. A canon  
comes out of the hills  
there, it has limestone  
cliffs on either side  
alkes grow on the hill  
Sitomys are very common  
here about they live  
among the rocks & eat  
the acorns from the oak  
I shot about a dozen birds  
today. Set traps this  
afternoon.

---

Mar 9 Went to traps



Tula.

fore breakfast. Caught  
 five foxes & six Sitomys.  
 three of one species &  
 three of another. The la-  
 ger kind are different  
 from any taken before.  
 They have very long  
 tails. Shot today 1 small  
 woodpecker, a Jay, an  
 oriole (Scott's). Mr Nelson  
 came on the 10 o'clock  
 train from Mex. I made  
 a long tramp in search  
 of jumping rats this after-  
 noon but did not succeed.  
 as I came back a little  
 after dark & crossed the  
 stream near town I saw

Tula.

a no. of bats about the  
 size of Myctinomus flying  
 about the surface of the  
 water probably looking for  
 insects. Set 1 gopher trap  
 & a lot of mouse traps  
 this afternoon.

March 10 Got 2 Heteromys  
 in traps set yesterday. Set  
 a few more mouse traps  
 this afternoon & seven gop-  
 her traps. Shot a myctinomus  
 this evening, also some <sup>traps</sup> meat.

March 11 Sat. Got a long  
 tailed Sitomys & 2 Bassaris.  
 Mr Nelson went out about



## Tula

8 o'clock across north of town  
to some old ruins, got  
back about 11 o'clock. shot  
2 large woodpeckers, a ver-  
million flycatcher, a small  
wren & a bayanna sparrow.  
I shot a spizella striolata  
this morning. worked on spe-  
imens until about 2 o'clock  
when hearing that there  
was a case of typhoid  
fever in the hotel. I im-  
mediately packed my trunk  
moved from Hotel Hidalgo to  
the house of a warmate liv-  
ing near by. Besides the Hotel  
just named there is one  
other in town built in '91

## Tula

Hotel Moctezuma & a res-  
taurant at the station.  
About the same plants in  
general grow here as near  
San Luis Potosi. Left out my  
gopher traps & set about  
40 mouse traps.

Sun Mar 2. Went out very  
early to traps this morn-  
ing set 4 more gopher  
traps & took up two caught.  
one gopher it is a very  
red Geomys entirely differ-  
ent from any taken  
before I think. My mouse  
traps yielded 5 of the  
long tailed Sitomys already



Tula

mentioned from this place. Shot a blackbird (Brewer's) this morning. Tula is located in the forks of two streams on low ground. It is surrounded by a rolling country covered with fragments of limestone. Remains of the town are mounds that mark the locality of Old Tula, an important Aztec city. It was here according to tradition that the use of guano as a fertilizer was first discovered. The Indian who made the discovery sent some of it by his daughter to the king.

Tula

The king liked it & took a fancy to the daughter at the same time. Today is market-day here the people swarm in from the country in all directions with vegetables, fruits, & miscellaneous goods of all kinds to sell. Some of the fruits are bananas, oranges, sweet lemons, limes, these do not grow here but are brought from the "Tierra caliente". The people do not make a business of working on sabbath day but many stores are kept open, some are at work in the fields & it is a favorite day for market.



## Tula.

Every village has a day each week usually Sat. or Sun.

A fine species of ash grows here, they have been planted along streets & in yards & a fine row borders the road to Pachuca as far as the bridge across the stream near town. The foliage is very dense & of a vivid green. The main trunk runs up to a height of 12 or 15 ft from the ground and is then lost in the branches which shoot up & form an umbrella like top.

I set some more traps today & will have out-

## Tula.

no others this evening as well probably since I returned from Pachuca.

Tula was the famous capital of the Toltec empire. They called it Tollan from Tollin—a reed on the "Cerro de Tesoro" near town are ruins of the ancient city. As I have before stated it was here that the use of pulque was discovered. Goehilt the daughter of a King induced prince

to fall in love with a man by her. The town now contains about 6000 people. It is situated on the mountains



## Pachua

river, is 49 1/2 miles from the city of Mex. The Mexican Central R.R. coming from Mex. sends off a branch here to Pachua, the main line running on south to El Paso, Tex.

Mon. Mar 13 Pachua, Hidalgo.  
 Got 3 gophers in traps this morning, all the same as the one of yesterday. Took in all traps & we packed up & took the train for Pachua about 10:13 A.M. & arrived in Pachua about 12:11 P.M. We crossed the dry bed of an old lake that once covered considerable country

## Pachua

Most of the lake bed is under cultivation. The soil is a black, dry loam. The crops raised are principally corn, wheat, sorghum & some grain plants. These latter however grow everywhere. Some of the grain when it has been irrigated is headed out. It grows very short & crops are just about right. The country is all dry & the land from this lake bed is generally useless for agricultural purposes. There are high hills with cliffs on their sides. Rocks crop out everywhere.



here it is limestone & porphyry.

As we entered town the dumps of many mines appeared on the hills about town. I have set out about 35 mouse traps on the "Cerro de Guadalupe".

Leaving the train we took a hack & went to the Hotel Metropolitan.

Pachua Mar 14, Tue. Caught 4 of the long-tailed pitongs like those from Tula.

Some interesting native made away with about 10 of the mouse traps set

last night. This afternoon set about 40 mouse traps below on the plain.

This afternoon clouds began to gather over the hills & a strong wind to blow from that direction about 4:30 the wind increased in violence until a first class sun storm was in progress about dark the wind went down & it began to thunder & rain.

Pachua Mar 15, Wed.

Only a light shower fell last night just enough



## Pachuca.

to lay the dust. caught  
 12 *Sitomys* in my mouse  
 traps last night. most  
 of them were the short  
 tailed kind so com-  
 mon in the fields  
 around Amecameca  
 Mexico. The others were  
 long tailed like those  
 taken on the hill  
 yesterday. They are found  
 from away out on the  
 plain to the tops of the  
 hills. shot a small  
 worm a great one to  
 flycatcher. Besides resetting  
 mouse traps set two the  
 afternoon baited insect

## Pachuca.

meat.

The sky is overcast &  
 it is thundering in the  
 south. The indications are  
 good for more rain  
 tonight.

Pachuca Mar 16 Thurs.

1 Description of <sup>chipping</sup> ~~small~~ sparrow  
 killed this morning. — Crown  
 & back of head rusty. Hind  
 neck ash-gray slightly stain-  
 ed in center with darker.  
 Back, scapulars upper wing  
 coverts streaked with brown  
 & black. Lower coverts white.  
 Throat, breast, sides & rump  
 ashgray. Belly, lower tail



## Pachua.

coverts white on tips dark  
near base. Chestnut on head  
slightly parted in middle  
of forehead by grayish.

Caught 8 Sitomys of the  
two kinds taken, started  
this morning, also two  
possums each having  
nine young in pouch on  
stomach. Shot 4 birds &  
a savanna sparrow & a  
specimen of Lincoln's sparrow.

2<sup>d</sup> Description No. 2. Lincoln's sparrow.

Top & back of head rusty with  
black streaks. rusty of head  
parted in front by gray streak  
in middle. hind neck, back,  
rump, sides, tailcoverts, brownish.

## Pachua.

gray streaked with black,  
outer webs of secondaries &  
tertiaries tinged with rusty.  
Chin, front neck, upper breast  
& belly white, white of throat  
& front neck slightly streaked  
with black.

Made a trip up the small  
valley east of town to  
look for filomyia rats -  
found none only set a  
few mouse traps. The weather  
was clear this morning but  
it clouded up & rained  
a little this evening.

Pachua Mar 17 Fri  
3<sup>d</sup> Description. Throat, breast, belly,



pale yellow, under tail coverts  
same. head, back, rump  
upper tail coverts greenish.  
When feathers on crown are  
pushed forward a slight  
spot of rusty is seen about  
their middle.

H: top of head & middle  
of hind neck, middle  
tail feathers black, Back  
& rump white & black bars  
alternately, upper tail cov-  
erts black, wings black with  
white dots on each side of  
shafts making bars when  
wings are closed, wings also  
with black throat & belly  
dull white, also streak

down middle of breast  
sides of breast dull white  
streaked with black  
sides & under tail coverts  
white barred slightly  
with black, outer tail  
feathers barred & graduating  
to centre. A broad dull  
white <sup>dull</sup> streak down each  
side of hind neck from  
eye. streak from lower  
mandible to sides of neck  
black, also black streak  
from eye to ear coverts.  
groove in bill from nos-  
tril forward. Toes, two  
in front & two behind.  
Shot / Harporhynchus.



## Pachueca.

golden-crowned warbler  
*Spiizella strigularis*, 1  
*D. schularis*, / *Campitornax*  
 / *Chonoris*.

Weather still threatening  
 a little rain each even-  
 ing. Made a trip up the  
 valley east of town across  
 the divide & back to  
 town along the foot of  
 the hills to the right.

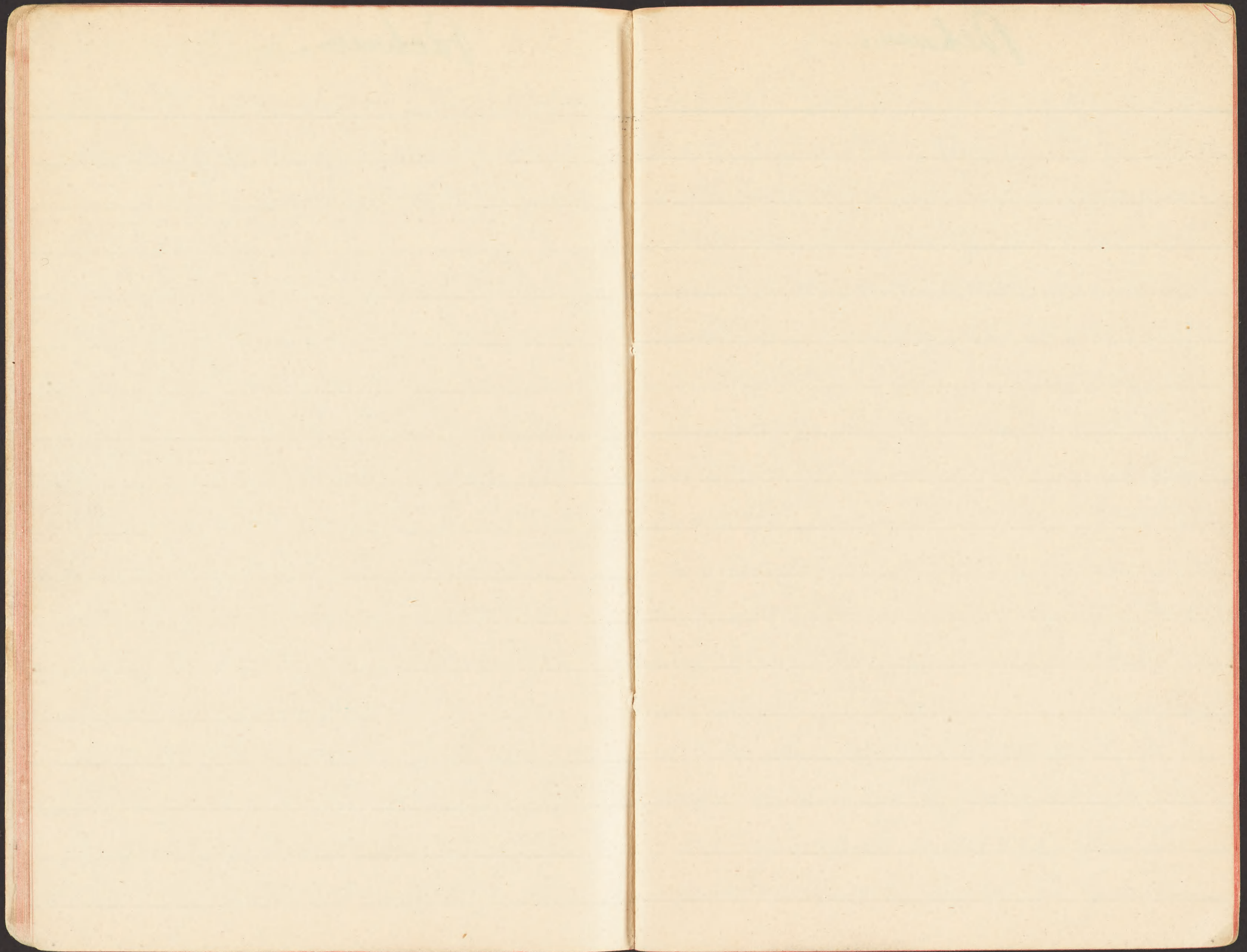
The warbler I shot off  
 a flowering century  
 plant it would fly  
 from one of the large  
 flowers to another. Hear-  
 ing off the insects &  
 other things flying

## Pachueca.

into the air as if taking  
 one on the wing like  
 a flycatcher.

Pachueca Mar 18, 1893 Sat.  
 Loaded shells most of  
 the afternoon yesterday.  
 Took the 7 A.M. train  
 on the "Tercero carril" "Hil-  
 algo" to San Augustin  
 to make a search for  
 jumping rats. I found  
 none. Shot a few birds  
 & saw a spermophile &  
 a rabbit. From Pachueca  
 the R.R. skirts the valley  
 & near San Augustin  
 cuts across a point of hills







leaving the high part  
on the right. In the hills  
a good deal of brush  
growth making cover for  
quails, rabbits & other  
game. By what little  
I saw of it I judge  
there is a good deal of  
game on them but on  
account of tall brush  
& stony ground they are  
probably hard to approach.

The country about San  
Augustin is the same  
or practically so as all  
the edge of the Valley  
of Mexico this side.  
The larger part of land

that can be cultivated  
& a good deal that can  
not be devoted to many  
plants. Fields of the best  
ground are here & there  
reserved for corn, wheat  
& barley. The corn is just  
being planted, some of  
the wheat is only a few  
inches in height & some  
is headed out.

It began raining about  
3:30 P.M. & I came in &  
waited for my train which  
was due at 4:40. As it  
drew near train time a  
few people living in the  
neighborhood were to go on



## Pachua.

the train & their friends  
came to see them off.  
It was quite an affecting  
scene. They could only go  
as far away as Pachua  
yet some of them shed  
tears when they embraced  
in the Spanish fashion  
at parting.

I shot a San Augustin  
(*Pteropus nagleri*, 2 *Pipilo* (Mr  
specimens) *Callipepla squamata*  
*Poocatus gramineus*? *Phylloscopus*  
*cinereus*.

Pachua Mar 19.

Foaded shells all forenoon  
in the afternoon went to

## Pachua.

a bull fight. Two bulls  
were killed & one horse  
Two other bulls were brought  
in but as the "matadors"  
made repeated efforts &  
did not kill them  
they were taken out.  
This was the first fight  
I have seen. I do  
not wish to see another.  
The horse killed was  
disembowelled by the  
bull & as he lay on  
the ground still alive  
at intervals the bull  
would make a rush  
at him & knock him  
around. The men but



finally died. The crowd about the entrance was rather boisterous & about 100 soldiers & policemen were present to preserve order.

Pachuen Mar 20. Mon.  
Was busy nearly all day getting ready for a trip to El Chico north of here about 12 miles.

<sup>Tax</sup>  
El Chico. Mar 21 ~~Mon.~~  
We left Pachuen about 7 this morning on horse-back a mossa came along with the pack-mule,

Riding north through the cañon from P. we got several fine views looking up cañon of mines. We soon entered a timbered country & found fir, a few pines & madroños & several kinds of oak. Reached El Chico about 10 A.

4.  
3<sup>1</sup>/<sub>2</sub> - Top & sides of head very dark gray, scapulars, feet rump, olive brown. Upper tail coverts, tail, wings same as head. Chin throat breast lemon yellow. Belly under tail coverts, under wing coverts white. White



superciliary stripe over eyes.

We stopped in this place in a room in the second story of a house. All of the houses are of very queer shapes. They are of adobe with roofs made of narrow shakes held on by chains nailed crosswise to each layer of them. The roofs are very steep and usually slope on all four sides. The eaves are very wide probably on account of the abundance of rain in summer. The streets are very narrow & very crooked. Several redaction

works are located here water ~~works~~ power. The water is brought through a flume from a canon near town. There are mines in the neighborhood (silver).

El Chico, Mar 22. Wed.

I set out some mouse & rat traps last night. They yielded 9 mice of the kind found everywhere in the oak woods. They appear to be very plentiful here. There are plenty of acorns which form their food. They however took wheat bait & I caught



## El Chico

The 9 specimens in 25 traps. Shot today warbler described in No. 5. One like No. 19. One of a small brown thrush living in woods on Mt. about the valley of Mex. / Pipilo (1st species) / Grosbeak / vireo. I also shot a small brown thrush last night.

6 - Top of head upper part of ear coverts rusty brown. Lower part of ear coverts white slightly tipped with brown. Hind neck, back upper tail coverts olive. Outer web of tail & wings slightly tinged with

## Pachuca

yellow. Superciliary stripe white. Eyelids & region in front of bill black. Chin throat & breast lemon yellow. belly white, sides, underwing & tail coverts buffy, joint in wings lemon yellow, bill black, feet flesh color.

Pachuca Mar 28. Tue.  
We left El Chico Mar 26. When we got on top of the divide Mr. H. & I set out some traps for *Thomomys* & *arvicolas*. Got out 9 traps for ~~*arvicolas*~~ <sup>*Thomomys*</sup> & 25 for *arvicolas*. Yesterday I went back to the summit & took up



## Pachua.

The traps caught 3 Thomomys 4 arvicolas & 6 Sitomys of the kind found usually on Mt. tops. While in El Chico Mr. N. & I made a trip one day to a place on top of the mts, called the "Llano de los conejos" where Mr. N. who had been there before had found some arvicolas in ways near some water in the center of the meadow. When we arrived some boys had just stopped with their open gears where we wanted to put traps. We waited a

## Pachua.

while & finally I struck off down the other side of the Mts. to town. Leaving Mr. N. to wait & set the traps when the boys moved off, I went up again the following day to take up the traps caught 3 arvicolas & a Sitomys common at high altitudes. I set a lot of meat traps on 4 different nights in canyons below El Chico but with rather poor luck as the people managed to get away with some of traps & 3 of



## Pachua.

my animals. Got 2 Ba-  
 asis, 1 percyon, 1 Procyon  
 1 Conipatus, Mr. H. bought  
 a Mephitis & a Phosin  
 novimaculata the day  
 we left.

The Sierra of Pachua  
 is covered with fine  
 fir timber on the north  
 slope down to about  
 8500 ft. then fine oak  
 woods begin. Below that  
 again is stunted growth  
 of pine & other trees.  
 These hills attain an  
 altitude of about 10000  
 ft.

## Iolo

Iolo Mar 30. Thurs.  
 We left Pachua yester-  
 day for this place by  
 the Mexican R.R. I ar-  
 rived here about 9 A.M.  
 I started out before  
 noon to look around.  
 The country is very sandy  
 & I thought looked  
 good for the Dipodomys  
 we have been looking  
 for. Near the mouth of  
 an arroyo I found  
 signs of them as I  
 supposed & set several  
 traps & caught a 5-toed  
 rat instead of Dipod.  
 I also set traps for gophers



7 mice, caught 1 gopher  
 & 3 Sitomys, same as those  
 taken in the "Armed"  
 at Halpung & Lasvun.  
 The canal through almost  
 continuous marshy fields  
 clear from Pacheco. The  
 soil is rather poor &  
 much of the land is  
barren. A little corn,  
 wheat, & barley, is raised,  
 but algae is the principal  
 crop.

Tolo Apr. 2. Sun.

I have caught 24 Thadipus  
depodoni hillipi does  
 not seem to occur here  
 I have taken 13 specimens

of a large longtailed  
Hesperomys in a canon  
 south of town. I shot  
 a Jack rabbit, saw one  
 yesterday & Mr W. shot  
 a gopher & a Swainson  
 Birds are very scarce no  
 birds of much importance  
 have been killed except  
 yesterday when Mr H.  
 killed a very large  
 black swift. I killed  
 a Pipilo (1st species)  
 The weather is clear, cool,  
 & fine with freezing  
 at night.

Tolo. Apr. 3.



Set 25 climax traps for  
jumping rats last night  
so as to have a good  
series in case they  
should prove to be new.  
Caught 9 making 31 in  
all. made skeletons of  
a pair of them. caught  
several mice of the 2  
kinds of *Sitomys* &  
1 *Mephitis*. A native brought  
in a *Callicyba* &  
1 small *Lepus* (cottontail)  
Have set more mist traps  
this afternoon & some  
traps are out for *Neotomas*.  
While out hunting the  
other day Mr H. & I ran

across a man & a boy  
in a maize field cutting  
the still living, fleshy  
leaves from exhausted  
plants & peeling & cutting  
to pulp to juices. When  
asked what it was  
for the man said it  
was for feed for oxen.

Apizaco, Mascala, Apr 4<sup>th</sup> Tue.  
Caught nothing in mist traps  
set out last night. My rat  
traps contained a rabbit  
caught by the forelegs. Slept  
Golds about 9 & arrived here  
about 10 a.m. on the Mexican  
road. Mr A. took the Interocano's



(441)

## Apizaco.

to Puebla in order to see the  
governor of Puebla. The country  
is about the same from here  
to Soles. I passed a limestone  
quarry where good building  
stone was being taken out.  
At Soltepec it is said that  
on clear days the Mts. Popocatepetl,  
Iztaccihuatl & Malinche  
& Orizaba can be seen only  
the first 3 were visible  
this morning. I obtained  
a fine view of Ixtac & of Popo  
showing the crater of the  
latter. I got a cargador on my  
arrival & moved the outfit  
from the station to Hotel del  
Estacion. Apizaco is a town

## Camp at Rancho

(442)

of several hundred people there  
is little apparent to support  
it. The Mex. R. R. have shops  
here. I set out some mouse  
traps this afternoon. I looked  
thoroughly over considerable  
country for jumping rats  
but found none.

Camp at Rancho, Mt. Orizaba  
Apr. 21. Mr N. came on from  
Puebla Apr 20 & we took the  
train at 10 AM. The next  
day for Esperanza. We pas-  
sed through the same  
general character of coun-  
try as that about Apizaco.  
& reached Esperanza at  
12:15 P.M. We had a fine



(46)

## Camp at Rancho.

view of the volcano of  
Orizaba all the way down.  
We found we could work  
better from San Andres  
just above Espinazo so  
we waited until the next  
day, took the train back  
to the former place. The  
town of Chalchicomula is  
about 5 mi. from the sta-  
tion of San Andres & in  
the direction we wished  
to work Mt Orizaba a horse  
car line connects the town  
& the station we reached  
Chalchicomula by it about  
3 P.M. Apr. 8. We got a  
room at Hotel Central

## Camp at Rancho.

(47)

& I worked the neighbor-  
hood with fair success  
until Apr. 19 when leaving  
the bulk of our outfit  
at the hotel we started  
out on horseback with  
2 pack animals & 4 men  
for the Mt. We left town  
about 7:30 & rode up  
through what they call  
the Barrio above town.  
A short distance above  
the place named we saw  
a great many birds of  
various kinds, we crossed  
clearings where wheat is  
ripening & entered ~~thick~~  
a fine growth of pine.



## Camp at Ran.

+ a few oaks. The firs do not begin so low on the slope of this Mt. I think as on Popo & Tetac. We reached them & soon left them behind & entered pine again, the reaching to timber line. We camped in a cave near timber line where there was water & I set out a set of mouse traps. We rose early the following morning & after a light breakfast began the ascent riding up a trail to the very foot of the Mt. & above the first snow.

## Camp at Rancho.

Here we left our horses in charge of a man & went on two guides the guaraches & alpinists the real climb began. We ascended a ridge on the southwest slope. Nearly the entire climb was on the porphyry & lava there was very little snow on this part of the Mt. We proceeded very slowly after the first 2000 ft. the work began to tell on Mr. & he climbed up only a few feet & would have to stop & rest. Finally I & one of the guides left him & climbed on up to



The crater which we reached exactly at 10 AM. Clouds had meanwhile gathered about the Mt. & when we reached the summit nothing could be seen a part of the time clouds would shut in so that we could only see a few yards. During the climb the grasses of *Panicum* & *Potamogeton* could be made out just before their snow covered summit above the bank of dust which covered the entire country. Mr H did not appear for an hour &

5 min. during which time the guide told himself gathering sulphur & looking at the crater. The crater is about a quarter of a mile across of oval shape & over 1000 ft. in depth. Mr H. was pretty well winded & said he felt very shaky when he arrived, we all sat down just inside the edge where we were protected somewhat from the wind which had risen for about 1/2 an hour. Small fragments of the pumice containing sulphur were all the while falling from the sides



to the bottom of the crater pieces weighing 100 lbs. would become detached & fall with a noise something like broken glass or ice. After resting Mr. N. decided not to try to ascend to the highest point perhaps 200 ft above us, he had a headache & felt very shaky so while he took some pictures of the crater with his Kodak I left the guides & him & climbed to the top which is surmounted by a large cross. When I reached the top of the point & touched

the cross the entire Mt. was shut in by clouds & I could not see 30 yds. in any direction. The guides afterwards said there were some small holes near the cross from which sulphur fumes issue but I did not know it at the time & did not see them. I remained only about a minute on the point & immediately descended to the edge of the crater where Mr. N. was after eating a piece of bread we began our descent by a steep sand slope reaching down



the entire side of the Mt. only a short distance from the ridge we climbed up. The guides had light pack to carry & fell many times. M.M. & I with our alpen stocks kept our feet, & went down the Mt. side on a run through the sand avoiding the rocks & part of the time lifting myself with my alpen stock & landing 12 or 15 ft lower down at a jump. M.M. came down much the same way but had to stop every 150 yds. or so to rest & did not get down until long

after I did. It took me 3:40 min to climb from where we left our horses to the crater. I lingered along with M.M. for a while & then climbed on & left him. Gas thermometer registered 34° at the crater at noon. Several lava streams came down this side of the Mt. The lava appeared to have run down slowly pushing forward mostly but leaving a high ridge on each side of its path. Glacier formerly extended down to timber line, it is probable that a small



(86) Camp at Rancho

glacier exists today on the northern side of the mt. On the southern there is no show for one. Two kinds of pine are found below the fir & probably two above them. Getting off the peak we stayed another night at the cave near timber line. I got down in time to get out a set of traps. The following morning we moved down to a rancho in the fir belt here we found birds very numerous & got a fair yield from traps set out

Chalchicomula.

87

Chalchicomula, April 25. Fri.  
We left our camp at Rancho at 10 AM. yesterday & walked down to town. we had intended to stop last night at a place they call "Cerro" but concluded on the road to come on in. We shot a few birds on the way down. After getting in yesterday about 1:30 P.M. we first took a bath to get rid of some of the dust with which we were covered had dinner & then went to the P.O. got our mail & spent the rest of the afternoon reading it.



Periconada, Puebla, Apr. 20 Sat.  
 spent yesterday with P.M.  
 hunting rabbits got 1 small  
 rabbit & one - the largest  
 took the presence of *Spilothamnus*  
 to San Andrés & then took  
 train to San R.R. & arrived  
 1:30 PM on this place arriving  
 shortly after 2 o'clock, I went  
 out there to look for jumping  
 rats - I thought we  
 were down a few miles we  
 passed out the R.R. some  
 time ago.

Tehuacan Puebla May 4.  
 I got some of the rats I  
 was after at Periconada

Tehuacan.

found they were the same  
 as those found at Periconada  
 & returned to that  
 place the following day  
 I also got *Periconada* which  
 I found at Tehuacan, we left  
 the Tehuacan office & took  
 the road to the station  
 running down there by  
 force of people, here we  
 saw a specimen of the road &  
 found many directions  
 taking the south-bound train  
 we reached Tepepana the  
 station below San Andrés  
 shortly after noon, after  
 dinner here we transferred  
 our baggage to the station



of the horse-car line to this place 30 miles from Esperanza. We left Esperanza about 1:43 P. M. travelled through country similar to that about Esperanza for some miles until we reached a grassy wet country we were descending gradually all the time & soon found ourselves in a country where a singular kind among others of cactus grows. They only attain a height of about 2 1/2 ft but grow very thick probably 15 or 20 ft in diameter. These cover the hills

& give them much the appearance of country from which very heavy timber has been cut leaving the stumps. The country is limestone & wild yucca palms began to appear also mesquites & a number of other species of trees. We passed the stations Cañada Moules, Llano Grande & the Hacienda del Carmen which has large quantities of dry. The country is limestone all the way & is generally dry & barren. Yet in places large springs flow out of the hills which afford limited quantities



Tehuacan.

of water for irrigation. There are some very large springs just east of Tehuacan which are used to irrigate the land lying along the arroyo in that direction & to the south. Water is brought down from the hills to reach the land running along the arroyo. I saw a portion of the land in the valley in which the numerous lands were fertile & passages of corn, wheat, maguey, beans, & other crops are raised. Corn is raised here as elsewhere in the country. The wheat, as most of it ready to cut - for use

Huamantla.  
Tehuacan.

in the place & the corn was all sizes from some just up to corn beginning to ear. A lot of maguey was raised in the old wooden stocks. Beans, maguey, maguey, maguey, & a small one here but are all of very inferior quality. Beans, maguey, maguey, the fruit of the maguey for cactus is, such as cactus, maguey, but everything the particular they were good in warmer country. There was some success here in raising Huamantla. Placeta, May 2 morning about 3 P.M. I saw light showers had fallen in Tehuacan while we were there but we were



(64)

Huamantla.  
Phacelia.

arrival in Huamantla we found it had rained much harder from Rimoncada north, doing considerable damage to the ripe grain. The soil is sandy so that the grain stems have no great amt. of strength & a strong wind or beating rain or hail knocks a good deal of it down.

Huamantla, Tlaxcala May 11  
I have been tramping around & trapping for mice & jumping rats with poor success on account of the rain. I got 3 jumping rats (*Dipodomys*) last night however which

Huamantla.  
Phacelia.

(65)

will be enough to represent the locality. Everything seems to be about the same here as at Chalchicomula Puebla, the same soil, altitude & vegetation & animals & birds. The rainy season seems to have about begun it is cloudy except a part of the forenoon every day & usually rains in the afternoon & evening. Huamantla is quite a town alt. 8200 ft. The principal occupation of the people in its vicinity is agriculture, wheat, corn, beans, & maguey plants being the principal productions. The town lies on



(66)

## Sierra Malinche.

The north-east slope of the Sierra Malinche which at times an alt. of 13,xxx ft. a few miles away. The soil is very sandy. Grain is sown very thin & corn hills far apart.

Rancho on Sierra Malinche Apr 13<sup>1893</sup>  
 We left Huamantla at 6:15 this morning on horseback with a guide intending to go up to the cañon which has come from near the summit on the side facing Huamantla. We soon found our guide knew nothing what ever about the trails on the Mt. At 8 o'clock we reached

## Sierra Malinche. (67)

a rancho where I left my blankets as I intended to make a two nights stay at this place & trap. We rode up through young pine until about 10 o'clock a few foxes had appeared & as there was plenty of large grass & *Arvicola* signs I set my traps while Mr. M. & the guide waited. It had been cloudy all morning & the fog shut in more & more as we ascended it came to meet us & at 10 A.M. we could only see a few yards. I set about 70 traps in about 1 1/2 hours &



(88)

## Sierra Malinche.

we mounted to our horses & came down a short distance to a point in the trail <sup>where</sup> we were ~~on~~ opposite a rocky hill on our left as we came down. Here I took some rat traps I had along, & some bread & cheese & giving my horse to the guide left him & Mt. N. to come on down & went across some small terraces to the hill where I found rat signs & set out some traps ate my lunch & then started for the rancho. The fog had lifted & it was raining a little. The guide & Mt. N.

## Sierra Malinche.

(89)

stopped at the rancho for some grout, & I found them still there on my arrival. The old fellow who runs the rancho insisted on my eating a piece of chicken, some beans, tortillas & drinking some pulque. I did justice to all in spite of the lunch I had just taken. We did not reach the "Cañada de San Juan" but probably it will not matter as far as collecting is concerned. It is cloudy & raining all the time now & surrounding mts. are shut in most of the time. After I had eaten & Mt. N. had



1901 Sierra Malinche.

went down to Huamantla  
leaving one with the mules  
and the old fellow sat  
down on a section of a  
pine tree which served as  
a seat & offered me a cigar  
which I refused. When he  
talked saying he supposed  
I was Astor & I did not  
return with Mr. & the  
guide. Then I asked questions  
about the Mt. & among other  
things he recommended me  
to go to a much better  
place by the mala  
and Mr. & advised  
me if I should meet any  
suspicious characters &

Sierra Malinche. 1901

tell them I belonged to a  
party of 14 who were coming  
to visit to the top. That  
the man of the Huamantla  
was one of the party. The  
ranch here consisted of sev-  
eral huts in which live  
several families. The huts are  
made of adobe & the  
the rest of stakes set in  
the ground thatched with  
straw. The adobes are covered  
with stakes. I am lodged  
in a large adobe with a  
damp mud floor. There is  
not a single window  
in the yard & have but one  
opening from the yard.



(72) Sierra Malinche.

This yard is partly surrounded by a tall stake fence & partly by the huts mentioned & sheds for poultry, horses, burros, dogs etc. But the huts occupied by the people are used almost as much by the animals as the sheds!

---

Camp at Rancho on Sierra Malinche, Apr 14. Went up early this morning to my mouse traps set yesterday. Got nothing from them excepting 2. Storey was somewhat disappointed at getting no *Arvicolas*. The fog shut in & lifted a little earlier today

Sierra Malinche. (73)

than yesterday, & this afternoon is much brighter & no rain has yet fallen but loose clouds are moving about & it may rain at any time. At one time this afternoon I saw the entire Sierra free of cloud. I found this morning that we rode yesterday without knowing it almost to the edge of the Cañada de San Juan. It is however useless as trapping ground. I shot a large bat last night at the edge of the woods a few rods above the Rancho. The birds as well as most other things are about



74 Sierra Malinche.

the same from this Mt. as those of Orizaba. The country in every particular is much the same. I think the timber line on this Mt. is in the neighborhood of 10,000 ft. The pines are only found a short distance below & pine is growing up to the line. The low timber line seems to be due to lack of soil rather than to temperature. People tell me the water in the Cañada de San Juan contains sulphur. The country ~~for some distance below~~ from timber line down some distance

Sierra Malinche. 75

is of black ashes & a layer varying in thickness up to 6 ft or more is of pumice to be seen in washes down the Mt. side nearly to Tlaxmanantla. This layer of pumice is white in color & of the same character as the beds of it near Chalchicomula & is covered many feet deep in sand. Malinche must at some time have been an active volcano.

Camp at Ranchos, May 15.  
I am in a hole in the ground, as I write a band of robbers about a dozen they tell me are watching



(76)

Huamantla

for me to come down from the woods & are also watching the rancho so that I cannot make my escape but will try to do so this night if I am not found before. If they find me they may be shy - not kill me & the people at the rancho here are doing all they can to prevent my being found. My hole is behind the bushes from the road under some bushes. I wrote at 10 min. to 2 P.M.

Huamantla, May 10. Remained in my hole on the mt. at rancho until

Huamantla.

(78)

about 4 P.M. when it began to rain & a part of the gang went down part way to Huamantla. The others remained until nearly dark when they too went down <sup>of me</sup> & of them remaining at a rancho just below. I climbed out of my hole & took shelter in one of the huts & at dark went across the road to another rancho where I stayed until 2 o'clock in the morning when I awakened an Indian who was to guide me across a lot of barrancas & down to near Huamantla by another road. I did not sleep any & was ready to leave the rancho where I stayed at the first alarm. The people at the rancho where I was hidden in the hole



(78) Huamantla.

did not consider it safe for me to try to go down at dark as the road was guarded below. I think I could have dodged them without difficulty however. Yesterday morning I left the rancho at 5 am. to go to my traps up near timber line & off to the rocky hill. returned to the rancho arriving about 8. PM & after washing & eating some tortillas & meat & drinking some pulque I went inside & began packing up my traps as I intended to go down. While so engaged someone said my "Compañeros" was coming as the day was bright I thought it likely Mr Nelson might come up to get some pictures. I got packed up &

Huamantla.

(79)

was making arrangements to leave when the old man seeing who was coming grabbed me by the arm & told me to get into the back room which I did. Those who were coming instead of being Mr N. & party was a band of about 12 most of them armed who pretended to want to arrest me & take me down to Huamantla they were merely a band of robbers who wished to take me off in the mt. & do me up. The old man did all he could to throw them off my track, he told them I had gone up into the mt. that morning & had not returned accordingly they left but found my fresh tracks coming down &



(80) Huamantla.

returned to the rancho to inquire about me. The old <sup>man</sup> told them the tracks they saw were made by me returning the night before.

I stood in one corner of a room inside listening to their conversation & expected every moment they would search the house. After some 10 or 15 min. talk they again rode off but remained in the neighborhood the entire day. One of the fellows at the rancho who was most active in my behalf came down today with my blankets & traps, & said he had seen the jefe & that 2 of the gang had been arrested.

Perote.

(81)

Perote, Vera Cruz, May 18. We left Huamantla this morning about 10:30 for San Marcos & from there took the "Terro Carril Occidente" to this place leaving San Marcos at 2:30 & arriving here about 4:30. The cornfields along the railroad between Huamantla & San Marcos were much greener than when we came up from Esperanza about a week ago. After leaving San Marcos we entered a different kind of country over the first station (Cjo de agua) there is a very large spring which forms quite a lake with tules growing in it & a few miles this side of it a series of hills



## Perote.

composed of lava begins having many small cliffs which must afford shelter for rats & other animals. The second station is Tirreyes it is also near the hills. The third station I do not recall the name of but an extensive lava bed comes clear into the place which consists of a Hda. & a lot of shanties. This side of there is a high hill with a sharp peak which we took for Perote from the Sierra Malinche. It also has many cliffs & broken places in the lava on its sides. Along the base of these hills grows juniper or a low bushy cypress I do not


## Perote.

know which it on the tops of some of them scattered pines. We came along a nearly level open country between the hills mentioned & a similar lot of them on our right. In this open country corn, barley, garbanos are raised also maquiys part of this plain is alkali & covered with water at this season. Back a few miles from here is a low part of the plain which is probably at all seasons of the year a lake. A good deal of this plain seems to have a thin shell of limestone a foot beneath the surface. I thought I saw jumping rat holes a short dis-



Since from the last station passed & between here & there I saw three individual of *Spermophilus mex.* Between here & San Marcos I saw among other birds *Sturnella magna mex.* red winged blackbird & *Polyborus* ~~in~~ *in*. The red winged blk. bird & meadow lark seem to favor the wet grassy plains altogether. I have seen them nowhere else. The "Cofre de Perote" did not show up much being covered with clouds, it seems to be covered with a pretty dense growth of pine on its slopes.

Perote, May 20. Have been

trapping in the neighborhood with fair success. Mr Nelson left for Jalapa to see the governor day before yesterday & has not yet returned. The peak of Perote shows up well from town and is shaped thus as seen from here  I really does look like a box and its name "Cofre de Perote" indicates. It is not more than a quarter of a mile to the base of the Mt. from town. The birds are about the same here as at Chalchicomula or Huamantla. Yesterday while up in the hills a short distance I discovered a cave



containing at least a ton of fat dung, but no bats. The weather has been fine ever since our arrival although stormy just before. Hardly a cloud has appeared. It is very cool with light frosts at night.

Perote, May 23. Mr N. returned from Jalpa yesterday. The weather is still fine. I went out this forenoon & killed 10 birds. He will leave for the Mt. tomorrow.

Rancho in Malpais about 4 leagues from Perote. June 2<sup>d</sup> Fri. We went up from Perote toward

the "Cofre". The weather had been perfectly clear before but on the morning we left P. a fog settled down in the valley or plain & lifting about 10:30 it began to rain on us as we were riding up through the fir timber. It rained in small drops until we reached the "Casa del Negro". I got out some traps for arvicolas & 3 for gophers during a lull. Got 9 Arvicolas & 1 gopher in each trap. We were here until the 27<sup>o</sup> of May during which time it rained & snowed almost continually. I got out traps for rats but did not get any.



Malpais,

Perote is a small town  
 all of one story buildings  
 & these usually of wood  
 with shake roofs & plastering  
 on all 4 sides & having wide  
 eaves. The rainfall here is  
 heavy. Corn, wheat, barley, garden  
 & alfalfa are the principal  
 crops.

Malpais



Malpais, Malpais  
Cofre de Perote

Caught a few white-rumped  
Sclerurus & arvicolas. By the way  
the mt. as the one called had  
spent itself & the morning being  
cloudy we concluded to climb the  
the top about 1 1/2 or 2 mi.  
above with our pack we found  
on the plain a forest appeared  
the top of the mountain was foggy  
we reached the top the clouds  
rose & shut in everything so  
that we saw no birds or  
what lay below us. The mt.  
undoubtedly commands a  
splendid view in the direction  
of the Gulf but it was our  
luck as on all the other mts.  
to have a bad day. We got

Malpais Malpais. (91)  
Cofre de Perote

had a few specimens of plants  
which grow near & about timber  
line & captured a lizard on  
the extreme summit of the  
Cofre. about 13500 ft. above the  
sea. Mr H. took some pictures  
of the Cofre etc. & about noon  
we were back at the Rancho.  
The yellow ones got this animal  
ready & packed our outfit  
down to the lower edge of  
the pine. we waited about  
arriving about 2:30 I got  
out a lot of traps & some  
poppers in the better I had  
good success. There are three  
timber belts here as a feature  
beginning at the bottom



92) Cofede Perote  
then are the ...  
one with ...  
a ...  
the ...  
a ...  
come the ...  
left ...  
the ...  
a ...  
a ...  
the ...  
out ...  
in the ...  
camp ...  
near lower edge of ...

Cofede Perote 13  
May 31 with fair success ...  
3 ...  
Mt. ...  
the ...  
the ...  
raised at the ...  
recess ...  
of the ...  
upper ...  
open grassy ...  
hardly ...  
near the water ...  
and ...  
the ...  
side ...  
slope on the ...  
down to town on foot ...  
hunter having brought two



(94)

Rancho in Malpais

burros for our outfit. I loaded cartridges for my auxiliary & did various jobs until about 11 A.M. June 1 when I left with 2 hunters on foot for the lava bed lying about 9 miles northwest of town an arrival taking my outfit on a pack animal. Mr. M. stayed in Perote.

Rancho in Malpais June 3 - Mon. I have been having fair luck here, will probably return to town this afternoon. The people here eat the fresh young leaves of the tuna cactus & the buds of the spike of

(95)

Perote.

the wild maguay. The latter are served up fried.

Perote June 5. Came in town day before yesterday did not get off on 5th as my pack did not turn up got out another set of traps. Had out traps here night before last & last night for meat animals but got only a dog. It has been raining again and is cloudy still.

Las Vigas, June. We came from Perote June taking the train there at 4.40 and driving here







Stelactites and Halysites  
 several crabs in the water  
 whole bunches of dipping  
 water and as the water  
 cleared the mud plenty  
 of both on the way a small  
 bird a party of water-lots  
 got a lot of produce this came  
 from the water way  
 account for their abundance  
 during the summer I climbed  
 back to the hill towards the  
 crater to get over a trail I saw  
 upon a small black insect  
 which had been numerous, being  
 in the lower part of the  
 water a small pattern of  
 the same time. Next to

the trail for town and I  
 went with the Mexican by  
 a roundabout way through  
 the woods to look for squirrels  
 we found a lot of fresh signs  
 but no squirrels. Reached town  
 about noon, I worked on spec-  
 imens until about 3 P.M. and  
 then went to set some mouse  
 traps near the station but  
 caught nothing.

Yes, Vera Cruz, more 24. It is  
 very well in 700 ft. and  
 old were very plentiful of  
 probably 3 kinds, one very  
 rare one as is peculiar  
 the other. A few fresh



## Descriptions.

- No 17 17. *Spizella socialis*,  
 " 2 " 18. *Melospiza tinctoria*,  
 " 3 " 19. *Helminthophila celata*,  
 " 4 " 20. *D. Scularis* ♀,  
 " 5 " 31.  
 " 6 " 34.

Raffito were seen near the  
 station on the plain but  
 were wild and not common  
 an offer by Mr Nelson  
 to the natives of 75 etc.  
 a piece failed to get any  
 for us. Continued in next  
 Book.

*Myiodynastes lutescens*.

*Myiozetetes texensis*

*Sporophila noveboracensis*

*Amthia olivacea*

Yellow bellied junco

Mateo Ramon

Pojo de agua



