

March 22, Monday.

Left Washington this morning 7:30 a.m.

W.B. & I went to Baltimore

and met Warden C.P. Smith at the

Small Hotel. W.B. obtained a search warrant

FIELD JOURNAL

in the afternoon went through the

Baltimore Cold Storage Company Warehouse

finding about 100 chicks in deposit by

ALEXANDER WETMORE

and by 11:00 a.m. was in the car

for one two hours set at temperature

of 50° F. ———— was glad to get out.

Left Baltimore 5:00 P.M. arrived

Washington 6:45 P.M.

March 23, Tuesday.

Left Washington 2:00 P.M. via

train and crossed to Annapolis

at 4:15 P.M. Found Warden

Smith and the Council Clerk

MARCH 22 TO 28, 1920.

MAY 28, 1920 TO MAY 19, 1921.

Cherry was in

registered at Maryland

Hotel and the weather

March 22, ¹⁹²⁰ Monday.

Left Washington this morning 7:30 a.m. via W.B. & A. & went to Baltimore. When I met Warden C. P. S. Smith at the Caswell Hotel. We obtained a search warrant and in the afternoon went through the Baltimore Cold Storage Company Warehouse seizing about 100 ducks in deposit by Mrs. J. Just. I worked in the dirty hole for over two hours at a temperature of 10° + Fahr. Was glad to get out. Left ~~Washington~~ Baltimore 5:00 P.M. Arrived Washington 6:45 P.M.

March 23, Tuesday.

Left Washington 2:00 P.M. via W.B. & A. and crossed to Annapolis arriving 4:15 P.M. Found Warden Mills of B. Knights and the Cornels Curlew. We outfitted in groceries, etc. and got things in shape to leave tomorrow. Have employed Chaney as an engineer. Registered at Maryland House Hotel. Fine clear weather.

March 24th Wednesday

Was out early this morning but failed to get away until 10:15. We discovered that the water tank leaked so had to take a keg aboard for water. Captain Johnson, Commanding Officer of the Reina Mercedes training ship at Annapolis was kind in furnishing me charts of the Chesapeake and Potomac which were lacking on the Curlew. Fine clear weather all day. We ran out from Annapolis past Thomas's Point light, and across the Bloody Point Shoals. From there we continued on up Eastern Bay to Tomlinson's Point opposite Claiborne. Laid here for nearly an hour eating & watching the birds and then crossed again going into West River. We cruised there here and finally tied up for the night at Hurdge & Bast's oyster house. Walked out over to a small stone pier to purchase a can opener and also walked out in the fields looking for birds. Capt. Chaney shucked out some oysters for us fresh tonged and

made a stew for supper. The Curlew is a well equipped deck launch 42 feet long belonging to the Survey. She has been out of the water all winter but is working well.

Bird list.

Mareca (all apparently affinis) 130 at Bay Bridge; Bloody Point Bar one; Entrance, West West River 200; Limer Bay at West River 800. The last two lots in large flocks. The great majority probably 95 per cent were males; I saw hardly any females.

Aidemia Heglandi. Bloody Point Bar 2; Eastern Bay, Tomlinson Point 385 (200 in one long scattered flock, 150 in another, rest scattering); From Eastern Bay to West river 40. About one third females rest males. The birds were mating ardently. I heard males calling on all sides. When we stopped, a double whistled note whew whew or and also a peculiar rattling cackling call. The males were in most brilliant

4. plumage. Frequently they lowered the head and neck in the water and then rushed along for a few feet with rapid strokes of the feet to pass near the female above the head erect and then call. As they rise in flight they make a loud rattling whirring noise with their wings.

Nepodytes cucullatus 14, (seven pairs) near Bloody point Bar. Known locally as "fisherman".

Actemia americana, Eastern Bay 21. Diving expertly.

Actemia perficillata 40 in crossing to West River. Seen on the wing. White on head & back of white on wings prominent field characters.

Charitonetta albola, six in Eastern Bay.

Harlella hymalis 50 in Eastern Bay.

3 in West River. Males in full plumage with long tails.

Clangula c. americana West River

20. males & females.

Marila americana. 25 mainly males in West River.

Eriomastura jamaicensis 20 in West River.

Local name Water Partridge.

Larus argentatus. fairly common

" glaucescens ^{one in amphipolis harbor.} Birds seen at West River.

Sturnella magna common singing.

Oriocalus g. fusculus common.

Oxyechus vociferus seen

Cathartes a. septentrionalis seen.

Corvus brachyrhynchos - a few.

Corvus ossifragus common. a flight

of Crows of both species toward the South east this evening.

Passerculus princeps. One seen over the water along a waddy fence. The bird flew up like a Savannah sparrow and perched under cover where it remained quiet without motion. When startled it rose and flew for a long distance.

Passer semistriatus seen.

Spizella pusilla common

Melospiza melodia common

Anthus rubescens 25 in a grassy field

Cotaptes c. luteus two

Arremonops imms about a dozen seen in winter plumage.

March 25, Thursday.

Was up this morning at 5:30 awakened by the cawing of crows passing overhead from their roost. Cooked breakfast and ate and after cleaning up had a few minutes in which to look around. Slept on the boat last night and was very comfortable. Clear and pleasant this morning and remained so all day.

I walked out to the oyster house where two men were at work and looked on for a short time. Each oyster was hit on the edge with a blunt square-ended hammer and then forced open with an oyster knife and the animal extracted. By watch I found that they average 10 oysters a minute.

A short delay was caused by the leaking of the exhaust pipe. This was soon repaired and we were off from Shady side in West River at 8:00 a.m. We came out into the bay, turned south and followed down to the southward a half mile off shore. Passed Herring Bay, Chesapeake

Beach and Plum Point within easy sight. I examined the sheer face of the Calvert Cliffs with considerable interest. Below we saw Cove Point, passing close inshore and soon after swinging into the Potomac. A fair number of birds lay here and below to Cedar Point. From here down to Point No Point there was considerable timber along shore. At Jerome's Bay I had a glimpse of a high shaft monument of some sort. Rounding Point Lookout we were soon in the Potomac entering in a perfect calm. From here we ran on up to St. George Island intending to go on to Rocky Point. The tide did not favor us however so that we ran in behind St. George Island and tied up at 6:30 at the wharf at Piney Point Post-office. This was in a well protected Bay.

The water was calm all day though

4 a cold wind blew at intervals -
visibility was rather low however as
a haze lay over the water distorting
objects beyond half a mile away.

No large rafts of ducks were seen
but scattered flocks lay all along.
Most were found in the vicinity of
the projecting points. In the Patuxent
I judged that there had been ~~no~~
shooting as ducks rose at a distance
of a quarter of a mile and gave the
Lancet Curlew a wide berth. I
saw one female White-winged Scoter
and one Oldsquaw that evidently
had been crippled as they were
unable to rise from the water.

At Point Lookout there is a
good stand of *Pinus taeda* that
looked very interesting.

Ducks are not so abundant as I
had expected. but I note that about
60 per cent of those seen today are
in pairs. The number of species
observed was rather small.

Colymbus auratus. one at mouth of
Patuxent, one near Point No Point, one near

Jerome's Bay, 6 in a flock in St. George's
Bay River. local name Pig witch.

Winnatus immer. Two near Plum Point
Two at Cove Point.

Bula bassana. One flew by at 60 yards
going north at Point No Point. local
name Branch Goose.

Larus argentatus fairly common
Larus delawarensis a few.

Larus philadelphia About eight on
the stomach at St George Island. a part
were in molt to summer plumage.

Marila affinis ~~three~~ ^{twenty four} in West River;
Five males near Cedar Point; all appeared
to be this species.

Didemia perspicillata. One in West River;
48 at Plum Point; 37 at Cove Point;
one ~~number~~ ^{number} at the Patuxent; 50 at Cedar
Point; 80 at Point No Point.

Didemia deglandi 6 at West River;
43 Horseshoe Point; 16 Herring Bay;
40 Chesapeake Beach; 160 Plum Point;
43 at Haris; 60 Cove Point; 400 Patuxent;
275 Point No Point; 45 Jerome's Bay;
21 St. George Island.

The birds were strung along in

10
lines of the beaches or gathered in small flocks off shore. They have a curious habit of lifting the tip of the bill and shaking it here or there from side to side when slightly alarmed or curious.

Udenia americana. 3 Cove Point; 11

Patuxent; 30 Point No Point; 1 Point
Lookout.

Harlelda hyemalis. 2 West River; 7

Horseshoe Point; 18 Chesapeake Beach;
24 Plum Point; 28 Cove Point;

130 Patuxent River, one large flock here;

310 Point No Point; 45 Jerome's Bay;

100 St. George's Island. Many of these handsome birds were in pairs.

Local name "Sother". The male swims before the female with head drawn in and then suddenly throws it up and out after which he retreats.

March 26 Friday.

Was awakened this morning by Song Sparrows singing at 5:45. The weather was threatening and a squall from the Southeast struck just as we left the dock at Piney Point. Took 30 gallons of gasoline here at 32 cents per gallon. We ran out but here through a

narrow channel between St. George's Island and the mainland. We had rough going for a time and a rain came on but later it cleared. Small flocks of White-winged Scoters and a few Oldsquaws came drifting in flying up stream, apparently this was heavy weather now outside. Comparatively few ducks were seen until we reached Blakistons light. Between that point and Rock Point in the Wicomico River we saw many among the birds here here about 500 Oldsquaws and more than 100 White-winged Scoters. I was surprised to find them so far inland.

We landed at Rock Point to enable Mr. Knight to transact some business. Ate lunch here and I purchased some bread and an oyster knife. Pulled out in a heavy south east wind and drove straight across to Popis Creek on the Virginia shore. I had expected to find many ducks lying in the cove here over some shoals but for some reason saw comparatively few.

12. The high rim of the Nominal cliffs made a point of interest. At Popo Creek a white column marking the birth place of Washington was visible. We came on then past Mattox Creek and Colonial Beach reaching just below Cedar Point and intending to come on around into Aquia Creek. A fog overtook us however and after swimming for half an hour we were forced to lay to for two or three hours, until we could get our bearings.

When it finally cleared the pump on the engine gave trouble and we finally ran in to Brent's Wharf in Port Tobacco River reaching there about 7:20 P.M. Did up here for the night. I had started supper while we were becalmed so that we were ready to eat when we got in. Had a fine oyster stew from Cluj water oysters. Storm threatening in the evening but later it cleared.

Columbus auritus. # at Piny Point.
1 Ragged Point; 5 Blakistone light; 14 Wicomico River; 3 Popo Creek;

Urinator minor. One between Popo Creek and Colonial Beach.

Clangula c. americana 54 Piny Point; 60 Blakistone light; 33 Wicomico River; 5 near Colonial Beach; A large part of those observed were adult males in full plumage. Only a very few females were observed. Local name Whiffler.

Aidemia deglandi. 25 Piny Point; 48 Blakistone light; 115 Wicomico River; 9 Popo Creek;

Aidemia perspicillata. 9 Ragged Point; 20 Blakistone light; 7 Wicomico River; 7 near Colonial Beach; 22 opposite Posier Creek; 1 at the mouth of upper Machodoc. I was surprised to find them so far inland. Due undoubtedly to heavy weather outwash.

Aidemia americana. 3 Wicomico River
Merula affinis. 13 Piny Point; 8 Ragged Point; 16 Blakistone light; 8 Wicomico River; 11 Posier Creek; 110 upper Machodoc. None seen that appeared to be *m. marila*.

14 Harlelda hyemalis. 3 Blakistons night;
540 Wiconico River; 3 Popps Crk.
Was also astonished to find this
Duck so far inland.

Eristalisia jamaicensis 3 near Colonial
Beach.

Anas rubripes. 4 Blakistons night;
1 Wiconico River.

Lophodytes cucullatus. 20 off Posies
Creek.

Mergus americanus 1 upper Machobos

Larus philadelphia 9 Ragged Point.

Larus argentatus fairly common.

Larus delawarensis a few seen.

Spizella passerina several singing
this morning at Piney Point.

Rough water and fog interfered
greatly with observations today.

March 27 Saturday.

Had a comfortable night's sleep
last night as we were in a sheltered
harbor. Was out this morning
at 5:30 and found it clear and
calm, a beautiful day. The River
lay like glass all around us.

We ate, took on some water
and were under way before eight.
Redwings were singing from the
rushes near by and I heard
chipping Sparrows also. We ran
out a short distance but almost
at once had trouble with the pump
and had to lay to three times before
getting out of the bay. When finally
under way we came on as far as
the light at Somerset Beach.
The wind had freshened from the
south west. Very few ducks were seen
here. At this point the pump gave
trouble again and we had to lay
to in a heavy swell for some time
before we were able to proceed. We
had more trouble opposite Potomac
Creek. Finally about ~~there~~^{two} we
continued on past Aquia Creek
Widewater and on to Quantico.
At this place we anchored for a
short time under a bluff to eat as
we had had nothing at noon. From

16. Now we continued on without great difficulty into Ocoquan Bay and came on up to Ocoquan for the night reaching there at six o'clock. We tied up here for the night rather disappointed but not being able to reach Washington.

Only occasional ducks were seen until we reached Ocoquan Bay. Here we found about 1500 Black Ducks, a few Bluebills and 9 swans the latter a beautiful sight.

The Ocoquan River above the Bay is narrow and tortuous but has a sub channel. Hemlocks grow here with their roots in lichen water a novel sight. The coastal plain strip is narrow on this side of the River so that the edge of the Piedmont Plateau comes down nearly to the Potomac bringing the Hemlocks with it. *Naviculina* ends with the village of Ocoquan as there is a sudden break and falls immediately above where we were at rest.

Anas rubripes. 16 Port Tobacco River
Maryland Point. 25 Aquia Creek.
1500 in Ocoquan Bay. In the latter locality Black Ducks were spread out all over the Bay in pairs and scattered flocks that rose at some distance as the launch neared them a part of those seen were of the northern red-egged variety.

Marila affinis. 30 Metomkin Point,
50 Aquia Creek, 125 at Widewater,
100 in Ocoquan Bay;

Clangula c. americana 3 at Metomkin Point, 12 at Aquia Creek.

Anas platyrhynchos one male with Black Duck in Ocoquan Bay.

Nergus americanus two pairs in Ocoquan River. Males in beautiful plumage.

Olor columbianus. Nine fine Swans were resting in close flock in Ocoquan Bay, a beautiful sight. Five were adults and 4 young, the

latter readily distinguished by their
dark heads. We saw near ~~them~~ and
they rose easily in the wing
at 150 or 200 yards and flew a
short distance to alight in the
water. They watched us closely but
were not much alarmed.

Larus argentatus fairly common
Larus delawarensis. a few seen on
the Potomac. 200 were resting on
two bars ~~at~~ in the lower course
of Occoquan Run.

Tringa alcyon. one at the mouth
of Occoquan Run.

Spizella passerina. several at Brent's
Wharf in Port Tobacco River.

Very few ducks seen between
Port Tobacco River and Occoquan.
I had expected to find many of
Wishwater but apparently they
have passed on. The small number
of Bluebills present was remarkably
especially in view of their abundance
at other seasons earlier in the
year.

March 28, Sunday.

Cold and raw this morning.
We were out early and left
Occoquan before eight running
directly out to the Bay. The
tide was very low leaving
bars exposed in several places.
We came out into the river
again and headed directly for
Washington swinging in for a
short distance at the mouth
of Dogue Creek. We came on into
Washington without incident,
tying up at the Public Wharves
about the fish market at 12 noon.

A long line of Black Ducks
lay in Occoquan Bay and above
then clear into Washington I saw
large numbers of ~~at~~ crows.

Spatula clypeata. One seen at close
range in Occoquan Run.

Anas obscura about 1000 in
Occoquan Bay. These birds were strong

20 out in a long semicircle to
jud on a line of drift on the
water caused by the meeting of
two tidal currents. 200 near
Hallowing Point; 300 in Gunston Cove
All in pairs; 2 Piscataway River;
: Marila affinis 50 Occoquan Bay
600 Hallowing Point; 350 Gunston
Cove; 1700 in Dogue Creek, a part
in pairs; 175 Little Hunting Creek;
600 River View; 1500 Broad
Creek; 2000 Big Hunting Creek;
8000 below the railroad bridge at
Washington. Many more males than females
75 at Dogue Creek
Marila marila 125 Piscataway
River; 500 River View; 60 at Broad
Creek; 1500 at Big Hunting Creek.
Nearly all of these birds were male
in full plumage. They were seen
in separate flocks that adjoined
flocks of the lesser scaup and
were distinguished by larger size,
whiter backs and some peculiarity
about the head. That I could see but
cannot express in words.

11
Marila americana. 200 near
Hallowing Point.

Chaulestomus streperus ~~two pairs~~ three
at the Piscataway River.

Mareca americana two pairs at
Little Hunting Creek.

Larus delawarensis 100 in
Occoquan Bay.

Larus argentatus common

Oxyechus vociferus, one in Occoquan
Run.

Brachyrocus bicolor 10 at the
Mouth of Occoquan Run.

May 28, 1920, Friday.

Left Washington via Penn. R.R. at 12:20 A.M. arrived New York City 6:45 A.M. Registered at Hotel York. at 8:30 went to office of Munson Steamship line and then spent the time until 2:00 P.M. arranging final details for passport. Visited the U.S. Customs House, and the Consuls for Uruguay, Paraguay, Brazil and Argentina. After noon I called for a few minutes on Mrs. C. H. Townsend at the aquarium.

Exchanged a pair of boots at Abercrombie and Fitch and made a few last purchases at a quarter of four went on out to the American Museum and returned some Cuban bones to Dr. Matthew. Examined a reconstruction of the skull of *Diatrypa* with Matthew and Granger. Talked with Miller and with Anthony and had supper with Anthony. Attended a lecture by Murphy on the grand islands of Peru in the evening.

May 29, Saturday.

Went over to Scribners this morning and purchased two Miller's book "In the Wilds of South America". About ten o'clock checked out at the hotel and went down to the Hudson tubes to cross to Hoboken. Found the steamer "Callao" Munson Steamship line.

at pier 3 and checked in my baggage with the baggage master. Had my passport visaed by a customs official and wrote two or three last letters.

Callao sailed at 3:30 P.M. Fine clear day. The "hewitman" lay at anchor near us, a tremendous boat. One English passenger left the boat as we were taken out from the pier and three young Ring-billed Gulls were seen in the lower harbor. Aside from this no birds were seen.

The Pier at Hoboken was a tremendous affair built by the government for troop transport during the war. It goes three stories high and had complete arrangements for water for drinking and furnaces at intervals for heat.

Had my last look at New York and the Statue of Liberty. At dusk when we were about ten miles out a few Petrels appeared in the wake of the steamer.

May 30, Sunday.

Was out early this morning. About 40 small Black Petrels with white rumps following the ship. The birds circled and swooned low over the water, with quick certain rapid beats of their wings so that

often they resembled Swifts. They remained over the wake of the boat not coming forward at all and always skimming the water. It was rare to see one ten feet above the waves.

Rather rough crossing the gulf stream and I had no interest in food today. Slept all the afternoon.

May 31, Monday.

My stomach quiet today and am feeling fine. 51 passengers only and I have a station alone. A few of the small Black Petrels still about. A dark-colored shearwater seen at a distance but was unable to make it out.

June 1, Tuesday.

A fine clear day. At noon we were below Bermuda. Two small black petrels with white rumps seen this morning but they soon disappeared. Many flying fish about. In the afternoon I had one glimpse of what I supposed was a Black-capped Petrel at a considerable distance.

June 2, Wednesday.

This morning there were four Black-capped Petrels about and I spent some time in the forenoon in watching for them from the bow of ship. The birds circled back and forth

far out at the side. ~~at such~~ and at long intervals crossed back and forth in front of the bow at such times frequently coming within thirty or forty feet of me. Unlike the smaller petrels they made no attempt to follow over the wake at the stern and in fact passed near only directly at the bow. After each approach they veered far out to the side. The flight was fairly swift with spread wings and frequent changes of course. The birds swept low over the water seldom rising ten feet from the water. The wings were flapped only occasionally. Occasionally the three birds joined and circled near together so that once I had them all in the field of the binoculars at one time. One was fully adult. It had a dark, apparently black crown, a white line behind it and a dull gray back, with white rump. The underparts were white with a slight indication of smoky along the sides. The wings underneath were outlined in blackish along the outer outer margin more heavily in front. Above the primaries appeared black and the coverts gray. The length was about 12

There was much wind floating in the water this morning and flying fish, from six to ten inches long were abundant. Many were observed at a distance, gleaming white as they caught the sun. Others rose directly under the bow and skimmed away on either side to avoid the ship. The forepart of the body with the broad pectoral fins left the water first. Frequently the fish came out instantly - again the rear portion of the body touched the water several times before they were always the rear fins were spread last. The animals on emerging were in a way headed toward the wind but veered at once to a quartering course. The underparts and fins were white. The long line of the back a dull dusky green. The large dark eye showed prominently against the pale sides of the head. As they entered the water they darted quickly first to one side and then to the other to avoid any possible enemy lurking below.

On one occasion a six foot shark, dull green in color rolled up and with a quick wriggle avoided the bow. The fish was of the common shark type and was so near that I could observe the the lines of the gill slits.

June 3, Thursday.

Much warmer today. Discarded my vest and put on a light tie. The sea is smooth enough for comfort

with a good breeze to temper the heat. For nearly two hours I remained on the bow watching the water. Flying fish were fairly common. I saw many that were only about two inches long. On leaving the water the forepart of the body rises first and the pectoral fins are spread. There is a quick wriggle of the tail that gives one last impulse as the fish leaves the surface. Instantly the posterior fins are spread and the fish is off.

I saw one school of about 25 other fishes that swam together at the surface bunching as the bow passed. These were green on the back and were thicker bodied than the flying fish.

An old sailor working in the bow said that formerly on sailing vessels they set a light at night and the fish rose to it to be caught in a sail. He said that their flesh was like that of mackerel but was drier.

I saw two Portuguese men-of-war but both seemed in poor condition.

Two albatrosses were about but came within view seldom. Both were in immature plumage. In flight they skimmed barely over the surface, rising and falling with the waves so that when

distant they were frequently concealed from view by a swelling length of wave. Thus they sailed along alternately in sight or concealed.

Some large patches of seaweed seen today. The amount of floating matter decreased rapidly until very little was present in the afternoon.

June 4, Friday.

Two hours on the bow revealed ~~nothing~~ more than many flying fish. I saw a few that were barely more than $1\frac{1}{2}$ inches long that made short flights on either side. Very little seaweed floating and no patches about this morning.

June 5, Saturday.

No wind available today at all. Flying fish abundant, no birds about, weather clear. The Southern Cross and the Pole Star both in view last night. The wind freshened in the evening and a flying fish about 10 inches long was blown on board. It was interested in nothing but the flat back and the triangular form of the throat that offered as little resistance to air as the prow of a boat to water. In vertical axis the fish was much less sup than one would suppose from viewing them at large.

June 6, Sunday.

The sea is somewhat heavier today though it remains calm and clear. There is no

Drifting wood visible at all on the water
off her now. Flying fish are abundant
still. I saw several living Portuguese
Man-o-war from the bow this morning. All
were colored a beautiful purple.

At ten we had fire drill on board with
much commotion. About half of the crew
are young fellows who have been little
at sea.

June 7, Monday.

Little change today. No wood drifting in
water now at all. Flying fish common.
I noticed several today emerging, submerging
until nearly spent, submerging for an instant
in the ^{crest} top of a small wave and coming
out at once to continue flight. This was
done occasionally several times. With the
wetting and additional impulses the
fish were enabled to fly for a considerable
distance further.

The second officer told me yesterday of coming to
off Palmyra Island in the Pacific he described
it as a low coral formation with little
elevation.

The passengers have organized so-called sports
consisting of potato races, three-legged races etc,
to pass the time away and have collected
four dollars from each man to pay for prizes.
Now that they have the money there is nothing

(clipping from Montgomery, Ala. sent
me by Miss (China) Holt.)

ORNITHOLOGIST TO MAKE TRIP TO SOUTH AMERICA

John H. Wallace, Jr., Commissioner
of Conservation, has received a com-
munication from Dr. E. W. Nelson,
chief of the bureau of Biological sur-
vey at Washington, D. C., to the effect
that the bureau will send Dr. Alex Wet-
more one of the best ornithologists of
this country, during the month of May
to Argentina, Brazil, Uruguay, and Par-
aguay, to be gone nearly a year, for the
specific purpose of investigating the
condition in those countries in relation
to the welfare of the migratory birds
which pass through and from the United
States and temporarily sojourn in such
countries.

This action has been taken by the
bureau of Biological survey in reference
to the Bankhead Resolution which was
passed by the United States Senate, re-
questing the President to propose treat-
ies with the Latin-American Republics
for the protection of migratory birds.

Mr. Wallace, who initiated the move-
ment looking to such treaties, confident-
ly believes that the result of the investi-
gation, which will be made by the bu-
reau of Biological Survey, will disclose
the fact that treaties are necessary for
the protection of many of the valuable
species of birds which migrate from the
United States during the late summer,
spring and fall months and temporarily
sojourn in the countries of South Amer-
ica, especially the teal, duck, the golden
plover, and many varieties of valuable
song and insectivorous birds.

to spend my with
it. Most of the
competitors do not
think to change clothing
before participating
and today I saw
at least one hundred
dollars worth of trousers
ruined in various
forms of foolishness.

Johnny Walker scotch
whisky is for sale
on board at \$50 a
drink or \$6.00 a bottle.
I also saw some of an
Argentinian male
called Cruz de
Piedra (red and white
varieties) at \$2.00 per
bottle.

Weather thus far
has been fairly cool
and pleasant with
a good breeze though

it was warmer this evening.

June 8, Tuesday.

The sky was overcast this morning
with occasional sprinkling and rain, the air
humid and close, with rather a heavy
swell but little wind. I watched for an

hour from the bow and saw one
castrata. This bird was in immature
plumage but was larger and heavier than
those observed previously. The sides were
conspicuously marked with darker and
this color appeared to extend almost if not
entirely across the breast. The back
was gray-brown with many of the
feathers margined with splashes where
there was an indication of a lighter band
on the hind neck and a gray brown crown.
The bill appeared larger and heavier than
in the castrata noted previously.

A small ash-colored Petrel with
pale white rump and upper tail coverts
also flew before the bow for a few minutes.
This bird saw for the rump was uniform
in color all over and was apparently 9
inches long. The feet did not project beyond
the tail noticeably. The bird for most
of the time flew rapidly and most erratic,
turning up first on one side and then
on the other with a curious darting
flight that was almost sand-piper like
and that made it difficult to follow.
Like the others it travelled low over
the surface of the water.
-and during such seen.

Three of the small black Petrels were following
in the wake last night. They had long tails, a
large white patch on the rump that apparently
included the upper tail coverts. The remainder of
the plumage was sooty black. One of them
showed distinct light margins on the
feathers of the dorsal surface. They were
apparently 8 inches long. They circled and
turned one hundred to two hundred
yards behind us, occasionally fluttering
down to drop their feet on the water for
an instant and then rose sweeping up
two or three feet and then turning abruptly
to glide on once more.

At six we passed the S.S. Martha Washington
at a distance of less than a mile. She is
now in the Shipping Board service and was
bound from Buenos Aires to New York.

Was on the bridge for a few minutes this
morning and found many interesting devices.

Dull, a heavy rain this coming.
Made an outline map of South America today
for making steamer route.

June 9, Wednesday.

The sea was nearly calm this morning
save for a heavy swell. We are now just
north of the equator and are supposed to
cross tonight. We are meeting the edge

of the south east trade now.

I saw only a few flying jacks and some *Phaethon rubricauda* this morning. Some of the latter did not have their sails raised and appeared plain dull white in color.

Two white birds that must have been Tropic birds reported today by the lookout.

June 10, Thursday.

Clear and pleasant all day. We crossed the equator late last night and have now turned almost directly south. During yesterday afternoon and today a number of rain squalls have passed some striking the ship. I counted three on the starboard side at one time today.

Another Tropic Bird reported but I did not see.

This evening at eight Father Neptune and a band of his followers came aboard and with a number of others I was duly initiated into the ranks of those privileged to travel the Seven Seas. Dressed in Khaki I was called to the tribunal given a tremendous dose of Epsom Salts ~~as~~ a proper stimulant, a lather of soap & flour with a shufler of catsup & soap together and then put into the swimming tank. About 20 novitiates were treated in a similar way.

S. S. "CALLAO"

SAILING FROM NEW YORK TO

RIO de JANEIRO, — MONTEVIDEO & BUENOS-AYRES

SATURDAY, MAY 29th., 1920 at 3.00 P. M.

FIRST CLASS PASSENGERS

FOR RIO de JANEIRO

Adler E., Mr.

Krause A. C., Mr.

Bitomske F. P., Mr.

Krause, Mrs.

Bitomske, Mrs.

Krause W., Miss

Bitomske F., Master

Luper A. W., Mr.

Bellinger A. A., Mr.

Luper, Mrs.

Begin T., Mr.

Luper A. T., Mr.

Battin Chas., Mr.

Luper F., Miss

Battin, Mrs.

Mendonca M. P., Mr.

Bomfim A., Mr.

Medeiros F. P. de, Mr.

Dantas de S. J., Mr.

Rose W., Mr.

Falcon J., Mr.

Sperry M., Miss

Greenberg H., Mr.

Sessums Jas. W., Mr.

Hackett L., Dr.

Torres A. D., Mrs.

Kcunecke H. A., Mr.

Valen O., Mr.

Waterman C. H., Mr.

FOR MONTEVIDEO

Fuentes M., Mr.

FOR BUENOS-AYRES

Asteros D., Mr.

Marr F., Mr.

W. W., Mr.

Mojo D. R., Mr.

Czepol-ki A., Mr.

Moran J., Mr.

Czepolski M., Master

Mollo C., Mr.

H. D., Mr.

Mollo Mrs.

erman S., Mr

Norsa S., Mr.

ean H. W., Mr.

Prahl A., Mrs.

n, Mrs.

Sarghél J., Dr

er M., Miss

Sarghél Mrs.

er E. O., Mr.

Sarghél E., Miss

jo J. M., Mr.

Wetmore A., Mr.

Wilson P. C., Mr.

J. Penso, Printer



Distance between New-York and	
Rio de Janeiro	4770 miles
Santos	4983 "
Montevideo	5801 "
Buenos Ayres	5925 "

S. S. "CALLAO"

Daily Run

May 30th.	230 miles
31st.	264 "
June 1st.	275 "
2nd.	282 "
3rd.	282 "
4th.	278 "
5th.	284 "
6th.	"
7th.	"
8th.	"
9th.	"
10th.	"
11th.	"
12th.	"
14th.	"
15th. (Due at Rio)	"
16th.	"
17th.	"
18th.	"
19th.	"
20th.	"
21st. (Due at B. A.)	"

***** † *****

SHIP'S OFFICERS

GEO. E. L. HOWARD COMMANDER

E. A. RIDDERSTEDT	CHIEF MATE
F. SOBOLL	FIRST OFFICER
D. ROBINSON	CHIEF ENGINEER
J. J. BUFFY	FIRST ASST. ENGINEER
F. VON GRAVE	PURSER
S. L. STALLARD	SURGEON
F. DAVIS	CHIEF STEWARD

RADIOGRAM

INDEPENDENT WIRELESS TELEGRAPH COMPANY, INC.

42 BROADWAY, NEW YORK, N. Y.

Date Filed.....19.....

ion.....

6.30	AT	SENT No. 127 TO	ROUTED VIA	DATE SENT	TIME	BY
------	----	--------------------	---------------	--------------	------	----

END the following message, subject to the terms on back hereof, which are hereby agreed to.

TO THE PASSENGERS OF THE GOLD STATE CARRIAGE
 APPROACHING THE EQUATOR
 OBEY! OBEY! OBEY! ALL IN THESE REGIONS OF THIS SUMMER; BE YE MEN TOWER
 FLAPPERS BABES IN ARMS, GOOD STORIES OF YOUR FATHERS, OLD SALTS OR YOUNG
 SWEETS. LANDLUBBERS, POLLYWOGS OR SEALADERS. TAKE NOTICE, HEED AND OBEY!
 I NEPTUNE LAWFUL AND AUTOCRATIC SOVEREIGN OF THESE OCEANS DO COMMAND. ENJOIN
 ANNOUNCE AND PROSCRIBE THAT ALL SHIPS SET IN MY DOMAIN PRESUMING FOR
 THE FIRST TIME TO CROSS THE ONE AND ONLY LONGBRIDGE MERIDIAN SHALL
 PRESERVE BALANCE WITHOUT FAIL OR FEAR OF THE GRAVEST CONSEQUENCES IN
 AVOIDABLE INTEREST OF THE HIGH COURT YOUR MIND
 TO OBEY! OBEY! OBEY! ALL OF THEM AT NIGHT.
 THINK O.B. OBEY! OBEY! OBEY! PRESENT THESE
 PRESENTING TO YOU AND YOUR DOMAINS AND WHERE THEY

CHARGES COLLECTED.	Dolls.	Cents
Station		
Ship		
Cable		
Land Line		
TOTAL CHARGES.....		
TOTAL COLLECTED.....		

RADIOGRAM

INDEPENDENT WIRELESS TELEGRAPH COMPANY, INC.

42 BROADWAY, NEW YORK, N. Y.

Date Filed.....19.....

ON.....

PREFIX	SENT NO.	TO	ROUTED VIA

DATE SENT	TIME	BY

END the following message, subject to the terms on back hereof, which are hereby agreed to.

SHALL UNDERGO PENANCE AND FULFILL SUCH OBLIGATIONS AND DUTIES AS WE SHALL
ALLOT AND DECIDE. AFTER WHICH AND HEREAFTER FOREVER THEY SHALL HAVE
LEAVE AND PASSPORT TO WANDER AT WILL OVER THE LANDS AND UPON THE SEVEN SEAS.

RECEIVED ASK.

CHARGES COLLECTED.	Dolls.	Cents
Station		
Ship		
Cable		
Land Line		
TOTAL CHARGES.		
TOTAL COLLECTED.		

June 11, Friday.

This morning I watched from the bow for some time but saw nothing of interest. Only two flying jacks noted. Later Mr. Bullock called me and I had a glimpse of one Chaetodon americanus in the distance. About 10:00 ~~the~~ high high with yellow rock exposures on the coast of Brazil just below Cape San Roque appeared, arousing pleasant imaginings of strange birds and other animals inhabiting them and regret that I was unable to see. This is the first land to come to view since we left the low coast of New Jersey on the twenty-ninth of May.

June 15, Tuesday.

A viagem ao Brazil de um grande ornithologista americano

WASHINGTON, 16 (U. P.) — O dr. Alex Wetmore, ornithologista do Bureau dos Estudos Biologicos do Departamento da Agricultura, empreenderá dentro de quinze dias uma viagem official ao Brazil, Argentina, Uruguay e Paraguay, para estudar os pezaros desses paizes.

O dr. Wetmore fará um estudo especial dos habitos dos passaros migratorios e determinará as condicoes em que vivem os passaros que passam o inverno nos paizes da America do Sul.

June 16, Wednesday.

We were awakened at a quarter of seven this morning and the doctor came off from the Quarantine Station at seven thirty. His inspection seemed interminable though it was done in a perfunctory manner and it was nine before we reached the docks. E. G. Holt came off in a launch with the Munson line agent and came aboard as soon as the quarantine flag was taken down. Our reunion was a most pleasant one, the more agreeably because of the anticipation that I had had of it.

The Harbor at Rio de Janeiro has been described so frequently that there is no need of giving great detail concerning it here. The city showed clearly in the light of the morning sun ~~as it filled~~ the valley around the bay and extending up over the slopes of the hills. Beyond were boldly wooded mountains with angular projecting peaks. The whole scene was set in a background of green verdure that changed into blue in the distance. Larus dominicanus flew about over the bay, Frigate-birds soared high overhead and a little flock of Agelaius circled past just above the water.

Holt with his usual hospitality refused absolutely to allow me to change any money, so that after an entire day's labor I had not handle a single piece of Brazilian issue of my own. After a short time in the office we walked up the main street the Avenida Rio Branco and then took a little trolley that carried us up the hill to his room at the Hotel Beau Sejour. His room opened on a little courtyard from which there was a fine view of the city and the bay three hundred feet below. Courts were filled with beautiful poinsettias growing 6 feet tall, fine double Hibiscus and dozens of strange plants and more on. I saw many Royal Palms in the office also. The architecture was varied and picturesque.

The people seemed courteous and pleasant. In the country we spoke to those that we passed and received reply and my courtesy was followed by "Abraço" (thank you). I saw Porters bearing weight on their heads as usual and men driving teams of little mules less than five feet at the shoulder.

During most of the forenoon we talked and looked over specimens of birds.

At lunch we sat at table on a little porch where we overlooked the city, a beautiful view. A Honey Creeper (*Coccyz*) sang his familiar little buzzing song from a tree and domestic pigeons sailed over the houses below. In the city I noted the alien House Sparrow in small numbers. Holt told me that this bird occurred in Rio Grande do Sul.

After an excellent luncheon we went further out in the street cars and finally proceeded on foot along the old "Square" Carlin at an altitude of about a thousand feet above the bay. The track led along the face of the ^{steep} mountain slope below the Corcovado, rising at a gentle slope and winding in and out of the gulches. Small birds were abundant in the trees that caught the sun but were not found in the deeply shaded steep sided gulches. Many strange chirps and chattering calls came from the undergrowth that we could not trace. Other birds that appeared in the open branches were unknown to us. In all it was a most interesting experience, exasperating at times because of inability to recall the name of some species seen.

skins, perhaps many years ago. *Thryothorus*
chiri, *Compsothlypis fatiaguini*, *Troglodytes maculatus*,
Quercus cayana, *Pygocidalon cyanoleuca*, *Coereba*
and *Brachypteryx capensis* were told readily.
Strange woodpeckers and a stray ^{reddish brown} woodhewer
My first for that family were less satisfactory.
A small bright yellow manakin(?) was shy and
elusive. A small sized parrot of the genus
Amazona flew across from one hillside to
another at intervals, flying with direct flight
and rapidly beating wings and calling as
they came. A few others that I saw
were not identified certainly and may
be omitted.

Cecropia peltata was prominent among the
forest trees in second growth.

We returned to the ship at six, had
dinner later at a Club, and then talked
until midnight when the ship sailed. The
pleasures of companionship with a true friend
are many.

Cool and pleasant water.

~~the sea was calm and the~~

June 17, Thursday.

The sea was calm and tranquil
today. Several *Dumetia melanophrys*
were about the ship and one whale
rolled up only a hundred yards away.
The first officer brought me a

A D I O S

Adios to thee, City of the dark-eyed gente,
Land of "mucho calor" and dulce far niente,
Home of the wailing donkey
And the all-abounding flea,
Mañana, Gracias á Dios, I bid adieu to thee.

Farewell ye gloomy casas, "mejor dicho" prison cells,
Ye dirty crooked calles, reeking with assorted smells,
Ye dirty little coffee shops and filthy pulperias,
Stinking stables, dingy patios and fetid cañerías.

Where beggars ride on horseback like Spanish cavaliers,
And vagabonds perambulate like jolly grenadiers,
Where Lavanderas wash the "ropa" when they feel inclined,
And hotel waiters strut about with shirt tail out behind,

Goodbye you Latin greasers "su atento servidor,
"Que vaya bien pues", my boat is on the shore.
Oh, dirty people, dirty houses, despicable spot,
Departing I salute thee in your filthiness and rot.
Steaming and streaming with boiling perspiration,
Seething and breathing with hurried respiration,
Adios forever, "Tierra tan caliente",
Infernal clime of vicious rum and fiery aguardiente.

*written by an American outward bound
after a prolonged residence in his yucayra, Yucatan
(given me by Mr. Peter Wilson)*

A D I O S

Adios to thee, City of the dark-eyed gente,
Land of "mucho calor" and dulce far niente,
Home of the wailing donkey
And the all-abounding flea,
Manana, Gracias á Dios, I bid adieu to thee.

Farewell ye gloomy casas, "mejor dicho" prison cells,
Ye dirty crooked calles, reeking with assorted smells,
Ye dirty little coffee shops and filthy pulperias,
Stinking stables, dingy patios and fetid canerias.

Where beggars ride on horseback like Spanish cavaliers,
And vagabonds perambulate like jolly grenadiers,
Where Lavanderas wash the "ropa" when they feel inclined,
And hotel waiters strut about with shirt tail out behind,

Goodbye you Latin greasers "su atento servidor,
"Que vaya bien pues", myboat is on the shore,
Oh, dirty people, dirty houses, despicable spot,
Departing I salute thee in your filthiness and rot.
Steaming and streaming with boiling perspiration,
Seething and breathing with hurried respiration,
Adios forever, "Tierra tan caliente",
Infernal clime of vicious rum and fiery aguardiente.

fly. (suckling!) The captured which we
saw barely in sight of land near Santos.
Much cooler today but the sun still remains
hot.

This evening the sun set before six or at least
disappeared behind the clouds. The winter
sunset with its changing colors was most
beautiful. An *Aestutata* was circling about
low over the water in the dusk and
and several ~~small~~ turtles 18 inches long came
drifting past on their surface or poked their
heads up for a few seconds and then down.
We are still in a warm southward
current.

June 18, Friday.

This morning it was much cooler and
I was glad to seek the sun. Mr. Davis
and I sought the shelter of the wireless
cabin and worked there during part of the
forenoon. The sea continued smooth. The Galles
passed near shore today and high
mountainous land of bold outline was in
sight, (in the state of Parana, Brazil).

Diomedea melanophrys seen with many
of the sooty tubinarine birds of large
size. *Sterna hirundinacea* common.
Since my day ashore in Rio I have

felt much brisker and more active. The large dark *Majagueros* are common.

Today we passed somewhat west, south within sight of the coast of the states of Parana and Santa Catarina, Brazil. The long low rim of the Serra Geral showed clearly until obscured by the sinking sun. At times we were so near that I could make out great dunes of sand along the coast.

In the evening Mr. Seiders, second officer invited me to visit the bridge where he gave me a first lesson in astronomy on the stars of the southern Hemisphere. Altair and Antares were prominent as was the Southern Cross of course. Rigel Centaurus near the Southern Cross was prominent and at one side was the constellation of Corvus. In general south lies to the left of the Southern Cross. It is unfortunate that there is no ~~true~~ ^{fixed} indicator of true south as there is of north in the northern hemisphere. Mr. Seiders kindly gave me a chart of the constellations of the Southern Hemisphere.

June 19, Saturday.

Clear and calm today. Land in sight for most of the time. *Dionaea melanophaea*, *Larus maculipennis*, & *Majagueros* common. Saw a few *Larus dominicanus*.

Last night Mr. Seiders called my attention to a most peculiar phenomenon, a star that had lowered almost to the horizon and that flashed alternately red white and green. The star in question lay on the ~~starboard~~ ^{port} bow. Our course was 212° and the star lay at 212° . Time 10:15 P.M. At this time Cedreira light, lat $30^\circ 11' 00''$ S. long. $50^\circ 12' 15''$ W., flashing alternately white & green lay on the starboard side just forward of the beam, 12 miles away. The star evidently caught the reflection from this light.

June 20, Sunday.

We arrived in Montevideo this noon and had about three hours ashore again. Montevideo is a beautiful place, clean and with broad streets. The public buildings were well put up and we saw many beautiful parks and fine residences. In the parks I noted eucalyptus and casahuate trees and there were rows of what I supposed were a species of *Byramore* (*Platanus*) trees.

the street. leaves on them were just falling and on other trees were few touches of yellow & red. On the whole the day reminded me of an October day at Washington. English & sparrows were abundant & I heard strange bird notes in the park. Many hans maculiferus on the Breakwater in the harbor.

From Montevideo we continued on up the River Plate, the water appearing cloudy and muddy.

June 21, Monday.

This morning the Callao docked at Buenos Aires about noon. The doctor from quarantine had come on at Montevideo and made the examination on the way over so that all that remained was the examination by immigration officials.

Our baggage was landed at the Customs house and I passed my suitcase through at once and took a taxi for a hotel. At 20 happened that the Fiesta de General Belgrano was in progress and all hotels were crowded & finally hired a taxi and made a grand tour of about 20 hotels finally securing accommodation at the Hotel

Steamship Callao, leaving New York,
May 29, 1920. Position at noon.

Date	Lat.	Long.	Dist. ^{into}
May 30, 1920.	Lat. 37° 58' N.	Long. 70° 18' W.	230m
" 31.	Lat. 35° 03' N.	Long. 66° 13' W.	Dist. 264.
June 1.	" 31° 36' N.	" 62° 37' W.	" 275.
" 2.	" 28° 06' N.	" 59° 02' W.	" 282.
" 3.	" 24° 32' N.	" 55° 40' W.	" 282.
" 4.	" 20° 56' N.	" 52° 30' W.	" 278.
" 5.	" 17° 05' N.	" 49° 35' W.	" 284.
" 6.	" 13° 29' N.	" 46° 37' W.	" 277.
" 7.	" 9° 39' N.	" 43° 57' W.	" 279.
" 8.	" 6° 01' N.	" 40° 58' W.	" 276.
" 9.	" 2° 22' N.	" 38° 02' W.	" 281.
" 10.	" 1° 41' S.	" 35° 27' W.	" 288.
" 11.	" 5° 57' S.	" 34° 40' W.	" 265.
" 12.	" 10° 19' S.	" 35° 25' W.	" 266.
" 13.	" 14° 31' S.	" 37° 04' W.	" 277.
" 14.	" 19° 16' S.	" 38° 53' W.	" 235.
" 15.	" 22° 37' S.	" 41° 01' W.	" 235.
" 16.	Rio de Janeiro, Brazil.		
" 17.	Lat. 24° 37' S.	Long. 44° 32' W.	
" 18.	" 28° 29' S.	" 48° 27' W.	313
" 19.	" 32° 35' S.	" 51° 56' W.	206
" 20.	Montevideo		
" 21.	Buenos Aires.		

80°

60°

40°

New York
May 30, 1920

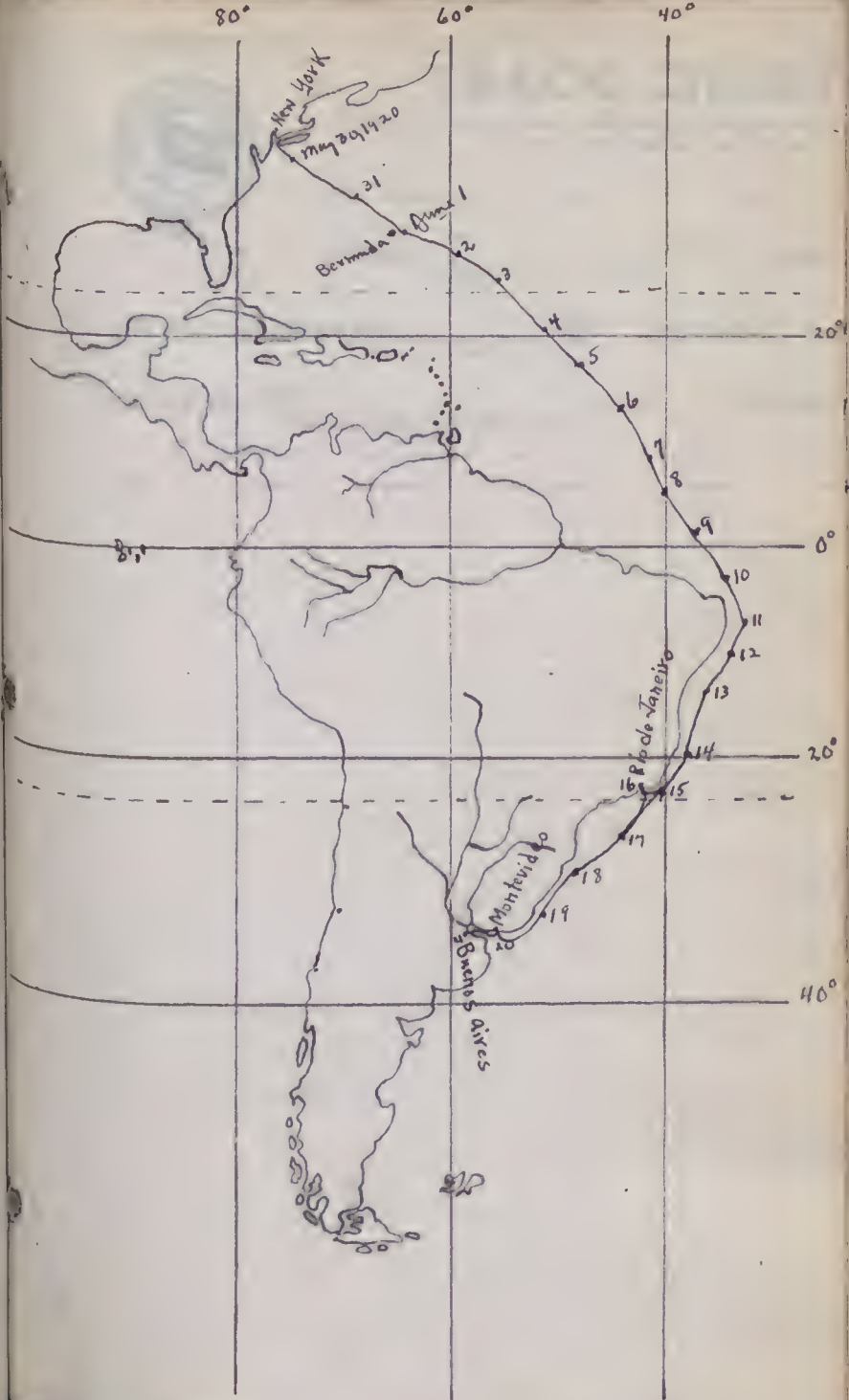
Bermuda

June 1

Rio de Janeiro

Montevideo

Buenos Aires



Paris in the (vivienda de Mauro, arriving about 5 minutes after J. R. Peters had checked out for a trip up the Rio Paracaguay. Wilson, Mojs and Harris had also just secured quarters at the same hotel.

In the afternoon I went down to the Customs House and secured more of my baggage. One trunk was held up as it contained a large amount of ammunition.

June 22, Tuesday.

This morning I registered at the American Consulate and then called at the American Embassy where I saw Mr. F. J. Stimson our Ambassador and his secretary Mr. Wiley. They will take up the matter of my ammunition for me.

The Ambassador left his card for me at the hotel.

This afternoon I visited the National City Bank, met Mr. ~~Stimson~~^{officer} and the officials, identified myself and drew some "Pistols" Argentinas.

Wrote for a time. We dined this evening with the Heusers, Mr. Merril and Mr. Ellett. It was cold and damp yesterday.

not disagreeable. Today the sun came out and it was very pleasant.

June 23, Wednesday

Clear and cold this a.m. temperatures about 45°. At ten I went to the Museo Nacional and learned that Mr. Dobbins would be in at 2 this afternoon. Arranged to have some Kodak film developed.

Today I saw a boy on the street with a cage 16 inches square on the ends and about 26 inches long containing about 20 living birds, which he offered for sale.

Molothrus bonariensis, *Sicalis*, *Paroaria cucullata* were represented and with them was one *Pitangus derbianus*, subsp. about a dozen, including the *Pitangus* clinging to the top of the cage about a seed trough and to all appearances were at freedom. The boy told me that these had been raised from the nest by hand. One or two flew a few feet but were recaptured without difficulty. He asked 4 pesos (m/n) for the *Cowbirds* and 5 pesos for the *Pitangus*. I learned later that their apparent names were due to their having had their sight destroyed. The men sell feather dusters there are struts, much of rhea feathers and these are in use in all of the stores and at the hotels.

game on the bill of fare at the Hotel Paris includes wild duck, ^(1.40) Perdiz (smanon), ^{1.40} Martineta, ^{1.50} Perdiz becassine (gallinazo), ^{1.30} and Pajarillo. The latter are small birds. Prices are in paper pesos. I ordered the Perdiz and found that it was a species of *Nothura*. It was served with the tarsus entire and only the toes removed. The meat was firm, very white and excellent in taste. These items figure as "Caza" on the bill of fare daily.

At two this afternoon I called on Mr. R. Dobbins at the Museo Nacional. The museum is open to the public on Mondays and Thursdays so I was told. I found Mr. Dobbins an elderly man of scholarly appearance. He was very courteous and affable and gave me his entire afternoon. He stated that the two yellowlegs and some other shorebirds remained in the Province of Buenos Aires during the entire year. The museum contains about 14,000 birdskins of which the Passeriformes numbering 6,000 are stored in Mr. Dobbins' office in wooden cases. The drawers contained naphthalene but Mr. Dobbins said that they had little trouble with moths. The cases had well made doors that fitted on a beveled margin but that were not particularly tight. He had good series of the commoner birds and representation of the rarer ones from Argentina.

foreign species were few in number and he had not attempted to build them up. The skins from this country were all made with hard bodies and were in good shape. All however had large labels about 2 x 3 inches in addition to another label on a string six inches long which made it difficult to handle them. He made criticism of Colombian birds sent him in exchange by Chapman.

On the exhibit collection I saw the wing of an Normal specimen of Eximura mayana in which the Diastema on the wing came between the 3rd & 4th secondaries. This was explained when it was noted that there were 8 metacarpal primaries, apparently one secondary had moved over on the hand.

I also saw two specimens of Passeris encallata that had lived in captivity for 32 and 29 years respectively.

Dr. K. Abbe was of the opinion that it would be well for me to go into the Chaco now.

June 24, Jueves

Last night there was some joshing of a function here at the hotel so that I was unable to get to bed and asleep until late.

This morning I first made attempt to locate a bird store but found that it had moved. Following this I visited some of the markets. El Mercado de Platero to look over the game displayed. This market is located in the 900 block between ^{calle} Cangallo and Sarmiento and covers an entire block. It is a one story building with the interior divided into aisles with fair sized stands. I found it clean and the display attractive. About a dozen stands here were handling game birds mainly Sinamus with a few ducks. No small birds were seen and none of our species. All the birds seen had been freshly killed. About 1000 Sinamus were on display. Mainly Notthura but with many Rhynchotus rufescens and a few Calopogon elegans. The birds on the stands were handling ducks; ~~and about 500 Metopias pepo~~ with about 500 on display. Many Metopias peposaca, Dafila spinicauda and Nettion flavirostris, with a few Mareca sibilatrix and 1 Dendrocygna fulva, all fresh. There were many Cairina moerhata also but I saw them confined live and all may have been ^{domestic} captive birds. Most of the birds seen were offered with the body plucked and men were working on the others. The feathers

secured apparently were described. Prices	
Notaspota Notaspota	.70 - .80 cent. (M/N)
Rhynchotus rufescens	.80 - 1.40
Calopryus elegans	1.20 - 1.50
Melospiza <u>juvencula</u>	1.00
Oxyla <u>opmearanda</u>	.80
Mitium <u>flavirostre</u>	.50 - .70
Manca <u>sibillatini</u>	.80
Dendrocygna <u>fulva</u>	.80

Vendors selling from baskets in the streets were offering ~~Notaspota~~ ^{nothing} at .80 - 1.00 and occasionally a few Calopryus and Rhynchotus at 1.40 - 1.50.

Wholesale told me that some tinamous were shipped to London but that not many were put in storage now.

Many interesting fish were seen also among them. The Protola a square bodied fish with a long filament in front of each pectoral fin. Called at the embassy again and was given a card to the Minister de la Ganaderia (Animal Industry) and some information that I wanted.

At three I went to the Museo Nacional and met Dr. Dabene who took me to the office of Sr. Angel Gallardo, President of the ~~Board of Education~~ Consejo Nacional de Educacion.

This gentleman was very courteous and pleasant and gave me a letter to his

School superintendent in Somosa, another to a large ranchman in Buenos Aires and another to the Director of the Board of Immigration. I presented the letter and explained the use of the immunization that I had brought with me. To my surprise I was told that I might have the trunk tomorrow.

Dr. Dabene informed me that Ernest Gibson, ornithologist, died about 4 months ago, and also that Dr. Director of the Museum of La Plata had died.

I secured an outside room at the hotel this evening greatly to my relief. The room that I had was so dark and poorly ventilated that I could neither work nor sleep in it without any degree of comfort.

Clear & pleasant day. Temp. this P.M. about 0° Centigrade. I wear gloves but feel no need of an overcoat.

June 25, Friday.

This morning I worked for a train on notes and then called at the Embassy. After lunch I went down to the Customs House and had my baggage examined. I had to

pay duty on traps & ammunition at the
rate of 20 much per kilo so that
the whole came to 65.50 pesos. Although
this might have been avoided it would
have meant at least a month's delay
during which time I would have
been unable to accomplish anything. So
I paid it with as good a grace as
possible being pleased that I was
allowed to bring the ammunition in at
all.

at there I called at the museum
and Dr. Dabben took me to visit
Mr. Jose Leon Suarez, head of the Division
de Ganaderia in the Department of
Agriculture. Dr. Suarez was away
but I met his second in command
^{Dr. Lopez} who ~~presented~~ ^{presented} ~~later~~ ^{later} sent me a number of letters
at the Hotel. Following this we returned
to the Museum and I looked through
most of the collection.

The Museo Nacional is located
at Peru 208 in the business part of
town. The building abuts on the street
as do all others and is of brick
covered with ~~stucco~~ ^{stucco}. It is two stories

NO SE ALTERE EL TALÓN

80000

LA PLATA - Palacio Municipal



Lotería de Beneficencia Nacional

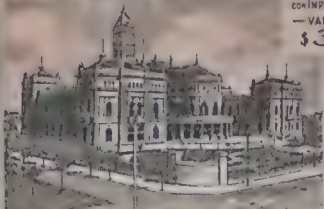
EL QUINTO
con IMPUESTO
— VALE —
\$ 3¹⁵

[AUTORIZADA POR LEY N° 3313]

JUEGAN
34
MILLARES

EL BILLETE ENTERO VALE \$ 15
IMPUESTO LEY N° 6086 \$ 0,75 - \$ 15²⁵

1322 - A



33862

SE JUEGA EL 22 DE JUNIO DE 1920

Carlos Alberto Falck
SECRETARIO

Alfonso Castiglioni
PRESIDENTE

PRIMER QUINTO - REPUBLICA ARGENTINA

CASA DE MONEDA - B° AIRES

NO SE ALTERE EL TALÓN

80000

LA PLATA - Palacio Municipal



Lotería de Beneficencia Nacional

EL QUINTO
con IMPUESTO
— VALE —
\$ 3¹⁵

[AUTORIZADA POR LEY N° 3313]

JUEGAN
34
MILLARES

EL BILLETE ENTERO VALE \$ 15
IMPUESTO LEY N° 6086 \$ 0,75 - \$ 15²⁵

1322 - A



33862

SE JUEGA EL 22 DE JUNIO DE 1920

Carlos Alberto Falck
SECRETARIO

Alfonso Castiglioni
PRESIDENTE

SEGUNDO QUINTO - REPUBLICA ARGENTINA

CASA DE MONEDA - B° AIRES

RIO-JORNAL

SEXTA-FEIRA, 16 DE ABRIL DE 1920

A viagem ao Brazil de um grande ornithologista americano

WASHINGTON, 16 (U. P.) — O dr. Alex. Wetmore, ornithologista do Bureau dos Estudos Biologicos do Departamento da Agricultura, comprehenderá dentro de quinze dias uma viagem official ao Brazil,

Argentina, Uruguay e Paraguay, para estudar os passaros desses paizes.

O dr. Wetmore fará um estudo especial dos habitos dos passaros migratorios e determinará as condições em que vivem os passaros que passam o inverno nos paizes da America do Sul.

From
Rio Journal,
Rio de Janeiro
Brazil.

in height and occupies about
one third of a block back to
about the mid line. I understand
that there is another building adjacent
containing the library. The exhibits
are on the second floor and are mainly
in closed in glass cases. The sections
are very crowded and the rooms are
not very well lighted. The specimens
on view are well assorted and
are better prepared than the average.
Everything is kept clean and in
order. Exhibits consist of nests & eggs,
mounted birds, mammals, skeletons etc.
There must be exhibits as well in other
branches that I have not seen.

1322

SE JUEGA
EL 22 DE JUNIO DE 1920

A

Es prohibido cobrar por este billete mayor precio que el fijado por la Administración.

1

Se pagan los premios al portador hasta los 180 días del sorteo. No se acepta reclamación por pérdida, sustracción u otro accidente.

PROGRAMA
34 MILLARES CON 6.600 PREMIOS

34.000 billetes a \$ 15 son \$ 510.000
A deducir el 30 % " " 153.000
70 % en premios \$ 357.000

PREMIOS	
1 de	\$ 80.000
1 "	10.000
2 "	\$ 5.000 "
4 "	2.000 "
12 "	1.000 "
50 "	500 "
100 "	200 "
250 "	100 "
800 "	50 "
2.800 "	25 "
6.600 "	premios \$ 357.000

Del premio mayor se deduce el 5 % para el número anterior y el posterior.

1322

SE JUEGA
EL 22 DE JUNIO DE 1920

A

Es prohibido cobrar por este billete mayor precio que el fijado por la Administración.

2

Se pagan los premios al portador hasta los 180 días del sorteo. No se acepta reclamación por pérdida, sustracción u otro accidente.

PROGRAMA
34 MILLARES CON 6.600 PREMIOS

34.000 billetes a \$ 15 son \$ 510.000
A deducir el 30 % " " 153.000
70 % en premios \$ 357.000

PREMIOS	
1 de	\$ 80.000
1 "	10.000
2 "	\$ 5.000 "
4 "	2.000 "
12 "	1.000 "
50 "	500 "
100 "	200 "
250 "	100 "
800 "	50 "
2.800 "	25 "
6.600 "	premios \$ 357.000

Del premio mayor se deduce el 5 % para el número anterior y el posterior.

The large bird skins are kept packed away in square boxes with glass tops. Dr. Dabney has a man go over the skins and dust them and brush them with a camel's hair brush.

At six I returned to the hotel. I am not at all pleased with the work in developing and printing that has been done for me here.

June 26, Saturday.

The air this morning was clear and humid and I found it oppressive as it is on similar days in Washington. I visited another market in the Pasco Colon this morning, a large place but with only two stands devoted to game. A few *nothura* and *Rhynchotus* were displayed but nothing else. Prices ran from .40 to a peso depending on the supply. All the stock was fresh. The dealers did not seem to think

that there was much game in storage. I learned today that there are no federal laws governing hunting or game but that each state makes its own regulations in this regard (not so.)

At eleven I went again to the museum after calling at the calculator where I found no mail.

Worked for a time on certain *Glycyptis* and also talked with Dr. Dabney. On Monday I shall receive a letter from the Museum regarding my work. Met Mr. Stuart Pennington, an Englishman doctor at the British Hospital in Quilmes. He is working on Hemiptera and desires to secure foreign material. I referred him to me after. He invited me to take lunch with him some day at Quilmes. He was a strong heavy set man with ruddy face and the appearance of perfect health.

Dr. Dabney is an elderly gentleman of scholarly appearance, tall but slightly stoop shouldered, with dark eyes and white hair. He is very pleasant and courteous in his manner and dresses with care. He speaks English gracefully

after lunch I went out to the Jardin Zoologico at Palermo. The gardens cover an area of 18 hectares on level ground about 30 minutes ride by streetcar from the business part of town in the cerincha do mayo. The gardens are surrounded by

a wall and an entrance fee of 10 centavos is required.

The park is beautifully laid out with winding gravel walks with ornamental shrubs and has in artistic profusion ~~with~~ open stretches of lawn. Small lagoons lead through the grounds adding the contrast of water to the other beautiful surroundings.

The collections were rich and diverse. A large part of the animals were kept in gun enclosures with houses in which they might take refuge.

Numbers of birds were pinned and kept at liberty so that they wandered about at will in the park. There were herons and Jabirus found or walked about near the lagoons and Chingass Caranamas, storks, ducks, coots and cranes wandered about on the path paying little attention to the people. The number of individual birds on hand was very great but the number of species was not so large as might have been expected.

Although the cages were cleaned sanitary conditions seemed rather poor. I noted a number of sick birds

and saw many affected with a bad diarrhoea. In one cage a glossy starling of some species was huddled up in a corner apparently nearly dead. Three or four male Molothrus bonariensis were torturing it by picking and pulling at the oil gland and the down around it. Bits of flesh that they pulled away were eaten with relish. At short intervals one of the black swits mounted the back of its victim and attempted to copulate!

I presented a letter to C. Onelli, Director of the gardens, from Dr. Breton, Ambassador from Argentina in the United States and was very well received. Dr. Onelli was emphatic in his belief that birds do not migrate from the north across the wooded areas of the Amazona & the Urinoco. This seems to be a common belief here in this region. Dr. Onelli has travelled extensively especially in Patagonia and is well versed in zoology. He said that there was practically no protection of birds here at the present time.

Apparently the Province of Buenos Aires

is a central place for migrants as this is said to be the metropolis for our North American Shorebirds, which in the southern winter many birds are said to come here from other regions.

Many of the species found here in warm weather migrate to the north in winter.

Wilson, Mojo, Davis and I entertained F. Marx, & Mrs. Hueser & his sister at dinner this evening and later went to a movie.

Sunday, June 27,

Left rather late this morning, and worked in notes for a time this entire lunch.

In the afternoon I took a car to a small place called Quilmes, in the Province of Buenos Aires just without the city. This gateway was my first sight of the open country, which I have ever most impatient to see. I find that it is cool and green and reminds me much of the plains of western Kansas save that it is less undulating and that there are more trees. I saw very few birds

save for English Sparrows which were ubiquitous. Aside from these I noted one *Troglodytes musculus* and several *Pitangus orbicollis*. The region that I was in was well settled and was broken up in small holdings.

A hedge of a spring plant was hung thickly with pendent cocoons of some moth. In spite of the sharp air a medium-sized black caracara was working, travelling along well defined narrow paths that led for many feet through the grass. The air was much sharper out here than in town.

Returned to the city at dusk after a view of a splendid sunset.

Two Italians were seen hunting small birds with small bore single shot shotguns, one of 12 mm and the other of 9 mm calibre. They had killed nothing here as yet. All small birds seen were very wild.

Monday, June 28.

A fine clear day today with the morning temperature about 40°. As yet I have not

felt the need of an overcoat though I usually wear gloves.

At dawn this morning I went to the American Embassy and later to the American Consulate.

This afternoon I saw Mr. Dabine, and securing letters to various people that will be of assistance to me in my work throughout the country.

Tuesday June 29.

This morning I took a train at 7.52 and went out to Berazategui in the Province of Buenos Aires. The first class coaches are clean and quite comfortable here. The track ran out through level country after leaving the city, with small settlements scattered along. There are many Eucalyptus trees in this country. Berazategui is a small place about fifteen miles from the city beyond Quilmes. From the station I walked out to the margin of the river and followed east along it for a time until I came to some deep lateral streams that I could not cross. The country was absolutely flat and level with only slight undulations.

It was open save for groves of Eucalyptus and for Willows and another small tree that grew in wet places. In places the shore was a muddy beach exposed by low tide while in others there were small marshes grown with rushes. A somewhat slender leaved Bromelia like plant growing four feet high was common in such situations. A cocklebur *Xanthum* was seen and two peris in flower, leaves were still in many of the willows though the many were yellow and were falling.

The day was overcast and a mist fell during part of the time.

The country as has been said was entirely open and was given largely to grazing. Many cattle, horses and a few sheep were in sight. Small tracts were under cultivation, partly in truck gardens. Small stucco houses were scattered about near the town and farther down near the river were small huts of boards & scrap tin & corrugated iron. I saw one with sides thatched with rushes set up on piles to feet above the ground.

Birds were common near the river and were of course of the greatest possible interest. In all I succeeded in identifying 35 kinds and of course saw others that

I could not ~~tell~~ name small bands of Neltin flavirostris were flying over the country attempting to alight in ponds scattered through the fields and an occasional flock of Metopias pefosaca passed near the river. Gulls, part at least Larus maculipennis were common and were flying back and forth inland. Lichenops & Machutornis of the curious Semipternis seen about on the beach or occasionally sought a low perch. A ~~Serpophaga~~ ^{Lissonia} flew along a ditch ahead of me alighting ^{indifferently} on the ground or on wood limbs. When I shot it I found that its feet were very muddy. Brachspiza was common in wady places and a squeak in a thicket brought out Cyclorhiza ^{octo.} and Pooziza pinnata. Ovenbirds squeaked near and far and an occasional Turdus of brown-bellied I popped out in view.

Along one ditch were many Cariacus dusky bodied little rodents that ventured out to feed a few feet from shelter but at any noise alerted to cover in the Bromelia like plants. They

were partial to wet localities. I had glimpses of another mouse-like rodent. Chimango fed along the beach in company with gulls. (An occasional Jacksonia ~~glimpsed~~ ^{seen} from the marshes.) Today was a holiday and I saw many gunners. At least twenty were observed in an area of 5 miles. As one old man remarked "Hay mas cazadores que patos." The men were armed with shotguns, many of them of an antiquated type. Gulls were favorite game and I saw one boy trying to entice the birds near by waving a dead gull about. Two young fellows behind a ditch bank had 8 gulls (Larus maculipennis) & Neltin flavirostris, 2 Gallinago paraguayae and one Plegadis. One gull, one duck and the dove were still alive but through helpless but no attempt was made to kill them. Other men were observed stalking gulls along the shore.

I returned to Berazategui and caught a train for town at 14:28 reaching B.A. at 15:05. Came to the hotel at 3:30 and had lunch at four.

At noon the hunters built small fires,

boiled water and made pots of mate.
After eating I felt more active as
I had travelled all day on a cup of
coffee and a piece of bread taken at
seven in the morning.

Catalogued and skinned my specimens
in the evenings. Was greatly interested
in the tracheophora signs of Furnarius
as it was the first one that I had seen.
About nine Wilson, Majo, Davis and I
went out and I had another little bite
to eat.

My first real day of field left me
with a feeling of satisfaction that repaid
some of the vexations of foreign travel.
June 30, Wednesday.

Clear and cold this morning.
I felt brisk and vigorous after
my exercise of yesterday.

Visited the Embassy this morning
and gave Mr. Wiley the Secretary
a memorandum regarding my work,
that he might ask for a letter from the
foreign office. Also visited the Consulate
to see Mr. Chausel.

After lunch I saw Mr. Debbins at
the museum and had opportunity

Expenses May 20 - June 20, 1920
Form 4 543.88
Paid June 21 by 2 checks ^{100.00} 443.88
Warrant # 23761 920.00
Voucher 1 543.88
Balance June 20 366.12

Expenses June 20 - June 30, 1920.
Form 4 132.15
Paid ~~July~~ June 30 by check 132.15
Balance June 20 ^{33.00} 376.12
Salary June Voucher 3 220.00
Expense Voucher 2. 132.15
Total 352.15
Balance June 30 ~~244.97~~
or warrant # 23761- 23.97

Exchange sheet # 2982 shows 1055.20 paid
at 23795. 76.51 paid drawn June 30 leaving
balance on this sheet of 978.69. Exchange sheet attached
to Voucher 2 for June.

Accounts Current May 20, June 30-1920.

Abstract of Expenditures.

	Voucher		
June 22,	1	Utes Wilson (Trav. Exp.)	543.88
" 30	2	" " "	132.15
" "	3	" " (Sal. June)	220.00
		Total	896.03

Debits - Account Current.			
	Priv. Exp.	Ames. Exp.	Total
Expenditures	876.03	20.00	896.03
Bal. due U.S.	24.97	0	24.97
Total	900.00	20.00	920.00

Credits.

Bal. due U.S. last account	0	0	0
Accountable Vouchers			
23761, May 8, 1920	900.00	20.00	920.00
Total	900.00	20.00	920.00

Bal. due on dep. Treasurer U.S.,	has outstanding avail. checks.	Paid.
24.97	Treasurer U.S.	896.03 24.97
held as follows.	920.00	
Total		24.97

Mailed from Piasistencia, Chaco, July 6, 1920.

to work through the old periodical *La Naturalista Argentina* published in 1878. Made certain extracts from it for Dr. Richmond - I have attempted to purchase this without success.

At then I went to the Minister of Agriculture and presented a ~~Memorandum~~ *Memorandum* Demarchi and presented a letter from Mr. Le Baron the Ambassador in Washington. I talked with the minister regarding my work and asked for a letter to the governors of the states and provinces. I was told that no one in the Dept. was working with birds at present. Was told to return tomorrow.

Visits to the government offices are time consuming as they are open only from 12 to 4 or 1 to 6 as the case may be, so that it is difficult to visit more than one a day.

Worked on expense accounts this evening.

July 1, Thursday.

Completed expense accounts today. Yesterday I made a number of purchases that I shall need in the field. Called at the office of the Minister of Agriculture and talked further regarding my work.

Went later to the office of Emigration for a visa on my passport but was referred to the Police office. There I was treated rather coldly and told to return tomorrow morning.

July 2, Friday.

Worked on notes this morning and later went out to purchase supplies. At noon I visited the office of the Consul for Paraguay and was told that my passport was in order for travel to that country. Visited the office of Emigration again and was fortunate in getting a visa on my passport for Paraguay. This morning I had visited the Police Office for the same purpose but did not get much satisfaction save to learn that it might require ten days to secure a police passport. About 200 were then in line.

Later I went to the Public library and looked through a copy of *La Ley* an old daily paper published in 1877 for a description of *Pithecopterus speciosus* to which I had found reference in his *Nat. Argentina*. Although the set of *La Ley* was incomplete I was fortunate in finding what I wanted on the first column of page 1 of no. 1 published just 43 years ago today.

Later still I worked on birds at the museum and then bought some supplies. Cotton is hard to secure. Finally found a fair grade on sale in a drug store *La Anglica* at *v. de Mayo*. Paid 11 pesos per 10 packages.

Drew more money today, exchange is now \$104.60 arg. gold for 100 American.

July 3, Saturday.

Repacked my outfit this morning for the field. I will leave one chest in storage here. Bought a ticket for a "Cama" for *Sanctor* for leaving tonight.

Completed packing and looked on notes in the afternoon. Sent my baggage out. Am not feeling tip top today. May be a touch of indigestion due to coffee that I drank late last night. Hope to avoid the cold that is prevalent.

El Naturalista Argentino

Tomo I - Entr. 1a Buenos Aires Enero 1 de 1878.

Revista de Historia Natural.

Directores Enrique Lynch Arribalzaga, Eduardo
Ladislao Holmberg. pp. 1-352, 5 plates in color, (com. of
p. 32) Tanagra striata, eleven numbers, dated Jan. to Nov. 1878.

[Trabajos recibidos

"Felix Lynch Arribalzaga, Podiceps speciosus,
nueva especie de ave palmipeda (con
lámina)."

Tomo I, Entr. 2a, Febrero 1 de 1878.

p. 63

"Podiceps speciosus - En la lista de los
trabajos si publicar incluimos en el
numero anterior, uno sobre esta ave
perteneciente a nuestro colaborador Felix
Lynch Arribalzaga. El autor, quien ya
lo publicó en "La Ley", la tenía por
nueva, mas posteriormente nos ha
escrito diciéndonos que declaramos que
ha incurrido en error, pues se trata
simplemente, segun él mismo lo manifiesta,
de un macho adulto con el plumaje de
la época del celo del Podiceps dominicus
Spix., Av. Bras., 101 (Syn.: Colymbus dominicus
Linn., Syst. Nat., - Sylbocycclus dominicus
i Bonap?). El Dr. Burmeister nos acababa de
advertir tambien, cuando recibimos la carta de
Lynch Arribalzaga, que el Podiceps speciosus no era
distinto del P. dominicus.

El Naturalista Argentino.

Artículos en birds.

Rápida ojeada sobre la fauna del Baradero.

E. L. Urribalzaga. III. Aves. pp. 52-58, 75-83,
101, 105, 242-248, 330-336.

E. L. ~~Urribalzaga~~
El Siete-Colores ó Siete-Cuchillos (Tanagra
striata Gmel.). pp. 59-63.

Sobre el Podager Macunda Vieill. 65-69.

E. L. Holmberg.

Contribuciones para el conocimiento de la
Fauna de Salta (con.). Aves., pp. 83-96.

118-122, 152-156, 315-319.

E. L. Holmberg.

Apuntes sobre una Colección de Aves
formada por el Sr. D. Manuel Oliveira
~~César~~ César en el partido de las Conchas
(Ubil, Mayo y Junio de 1878.), pp. 231-241

El Naturalista Argentino.

Tomo I - Año .49 Abril de 1878.

Enrique Lynch Arribalzaga y Eduardo W. Holmberg,
Noticia preliminar sobre una especie inédita
del género Rhea (Briss.) pp. 97-101.

presented by the authors at the "Academia
Argentina de Ciencias, Letras y Artes, April 6, 1878"
p. 101.

Rhea ulbricensis.

El macho adulto es, poco mas ó menos,
de la magnitud de la Rhea americana,
y de un color blanco sucio, excepto el
cero, que está cubierto por un baño
oplenado, y las partes anterior y posterior
del cuello, pues la primera es un
poco jaspeada de pardo claro y la segunda
está teñida por una tinta gris-far-
duzca. El pico y las patas son apizarradas.

En cuanto ~~el~~ el pollo es completamente
blanco sucio, con el pico y las patas del
mismo color que en el macho.

Estos individuos provenían de
Curhúé, punto fronterizo de la Provincia
de Buenos Aires, donde parece no ser escasa
la especie.

La ley | Diario de Intereses Generales |

Administración y Dirección, Maipú 211. Buenos Aires, julio de 2 de 1877 Redacción anónima |

Págs 1, Descripción de una especie del género Podiceps, por Felix Lynch.

Introducción [general notes on grebes, with statement that there are ^{four} species of grebes in Argentina instead of the currently recognized Podiceps bicornis, P. ludovicianus y P. dominicus. A number of these were found in May, 1873 in the isla de Baradero. Supposed to be a migrant from Entre Ríos.]

Podiceps spicuosus (Nobis)

La parte superior de la cabeza es parda oscura en la frente y vertex; sus plumas son bastante largas y forman un copetillo cuya punta se dirige hacia atrás. Cada pluma lleva un pequeño borde de color castaño. Cuando el ave se levanta eleva algo las plumas de la cabeza.

El occipucio es blanco, pero sus plumas tienen el extremo pardo oscuro. La parte inferior de la cabeza, sus costados, región parotida y algo del

Cuello del color blanco sucio, pero la cara y las plumas que cubren los ojos son jaspeadas de oscuro; la mancha blanca de los costados de la cabeza adquiere gradualmente un tinte acanelado claro hacia su borde posterior y en lo alto del cuello, este último es castaño claro en lo anterior y costados, y pardo oscuro en lo posterior. La base de él es algo más oscura y sus plumas se asemejan a pelos. El dorso del ave y las coberturas de las alas pardo oscuras con jaspe castaño claro u oscuro de que las plumas oscuras llevan un ribete de aquel color.

El lomo hasta la rabadilla, negro. La cola, blanca acanelada con algunas plumas negras. El pecho, vientre y costados acanelados claros, con tinte baño vinoso y cierto reflejo plateado sobre todo en los dos primeros.

Nueve de las remeras primarias son oscuras por encima con sus barbas externas rojizas, y por debajo son grises plateadas: la décima remera es blanca, pero el borde externo,

el mastil y gran parte del extremo son de color negruzco, las tres primeras remeras secundarias son blancas pero manchadas de negruzco como la décima primaria; el color negruzco disminuye gradualmente de una a otra en intensidad y extensión ~~hasta~~ hasta que, á contar de la ~~30~~ 30 secundaria las demás son blancas puras con mastil del mismo color.

Las tapadas, blancas con algún baño acanelado. Iris rojo carmin. — Pico negruzco en la mandíbula superior, azulado sucio en la inferior; el extremo de esta última del color de la superior. — Pies aplomados oscuros — longitud total, 23 cet. — Pico desde su ángulo hasta la punta, 0,02 — Tarso 6,94. — Dedo medio, 0,05; interno 9,035; externo 9,05, y pulgar 0,01

No plate or picture accompanies this description transcribed in the Bibliotheca Nacional, Buenos Aires, Argentina, July 2, 1920. A partial set of Volume I of the *La Hay* is large folio sheet that appeared daily, is bound in a volume with several other similar papers.

~~July 3, Saturday.~~

This morning I spent in repacking my outfit. I shall leave part of my supplies here at the Hotel Paris. The idea to reduce the bulk of my luggage. Purchase of a ticket, repacking, work on notes and on accounts concerned the entire day.

Left Buenos Aires via Ferrocarril Central Argentino at 21:45 P.M. This train carried sleeping cars that proved to be very comfortable! A long aisle led along one side of the car with compartments opening from it. The compartment that I was in had an upper and lower berth on either side with the berths running crosswise of the cars. The berths were commodious and comfortable. Bedding consisted of two blankets and a sheet. There was no heat. Each compartment had a sliding door shutting it off from the main aisle but ventilation proved to be good. A small basin on hinges let down from the wall between the windows & revealed a faucet with running water. A mirror hung above.

July 4, Sunday.
I had not realized that this was a holiday until late last night. I awoke at eight, shaved and dressed and then went into the corner restaurant car for coffee. Sat here for the rest of the morning as it seemed to be the custom.

I awoke near Serodino when I found good country mainly under cultivation, though I noted occasional alkaline swamps with grassy areas adjoining that were used for grazing. Small houses with low trees or occasionally a few tall Eucalypts were scattered over the country side. Small towns with brick stucco buildings came at intervals. The country was bare and open as even the grass along the right way had been burned off. There was very little cover of any kind for birds.

Many of the fields were planted so they appeared plowed, harrowed and smoothly rolled.

Birds were common.

Near San Eugenio and Larrachea more land was devoted to grazing with the grass cropped close. There was a change in the aspect of the country here a flat past appearance appeared

and I noted a few tracts covered with scattered thorny scrub.

Birds were abundant here. I saw many more than from trains at home. In fact birds of one kind or another were in sight constantly. An occasional *Nothura maculosa* flew or ran as the train passed. Chimangos were common. The English Sparrow abounded in the little towns. I note a tendency toward albinism among them frequently as at home. May this be a sign of degeneracy indicating decadence in the species that may in time eliminate the bird. The albino rat, mouse & rabbit, if it is true are strong but only under domesticated. An island species of small numerical strength albinism is common and may be considered a sign of senility.

Short-eared Owls flew out from the grass along the track to alight in the sun. I saw a few Burrowing Owls. Occasional flocks of quinas were observed. Little doves were common. I noted small gulls & *Belonopterus* on ponds and two hundred *Zenaidura macroura* flew up from one plowed field. A sparrowhawk seen.

At San José across the river from Santa Fe there was bushy country bordering the river that separated the two towns. The former had about 50 houses.

Santa Fe was a city of about 50,000 inhabitants and appeared very pleasant. I went to the Hotel Etaliano, arrived 11:45 a.m.

After lunch went out toward the river & looked for birds, found them common and saw a number of hunters. One man had killed a number of storks, a boy carrying they had one bird with a broken wing still alive. They made a very fair imitation of the notes of the small gull in effort to attract them.

Small boys were observed trying to trap birds under a flat box with a wire top that was held up by a stick with a string tied to it.

The country bordering the river was flat & open. There have been heavy rains here.

Returned to town at five & worked on notes.

In the main part of town the streets of Santa Fe are paved and clean. The people as in Buenos Aires appear attractive and intelligent, well dressed and clean.

Left Santa Fe at 23:05 P.M. and slept at 11:00

July 5, Monday.

This morning I awakened in Vera to hear the usual chirp of the English Sparrow. The morning was clear, and rather cold though the weather is warmer than in Buenos Aires. At Santa Fe a palm, apparently a date, and several tanners grew in the patio of the hotel opposite the door of my room.

The "dormitorio" on this narrow gauge line while not so commodious as the one occupied last night still was comfortable. The berth that I occupied rather lengthwise of the car though in another car to which I removed later in the day there were compartments as described yesterday. Part of the passengers slept with heads toward the engine; ~~others~~ on the opposite side of the car their positions were reversed. During the day the mattresses and the two pillows were rolled up at one end of the seat. Many of the passengers occupied the "Comedor" (dining-car) during the day.

Vera was a town of fair size. Cielito just beyond appeared an excellent site for field work but accommodations were questionable as the place was very small. The country traversed was level and was covered with scrubby low trees (macha).

that in places ^{were} open tracts with
the trees separated and in others the scrub
was dense and appeared impenetrable. We
passed occasional expanses of grassy
swamp.

A caracara was seen tearing at something
held in the ground beneath its toe. A
small ^{juv} black hawk with yellow legs and bill
stood in the edge of a bog. Two black Vultures
appeared. On the same sidings were great
piles of Quebracho wood in heavy logs or
in smaller shorter lengths, packed clean
of bark and ready for shipment. The
wood was dull reddish brown in color
like dark elays.

At one sidings one of the dining cars
boys came out and pulled a ^{rooster}
out from some receptacle beneath the
car. Another cock attracted by the squawking
came running up with threats of attack.
A small brown dog ran a gallant race
with the train for a quarter of a mile
but gradually fell behind. Our speed varied
for 15 to 25 kilometers an hour.

Garabato was a small town apparently
a fair place for work with a little cafe.
Small railroads led off into the Chaco
on either side to logging camps where Quebracho
was being cut. There were a number of
houses at a little place called Colmena
with forest coming up to the edge of town.

The tall grass, Paja brava, (Pampas grass?)
with tall heads with waving plumes
appeared here and was common until dark.
It grew in scattered clumps. The white
plumed tops were light in color and
stood out in beautiful outlines against
the darker background. At night they
were visible as light patches long
after other detail in the landscape had
been obscured by the falling light.

Near Colmena ^(north) I saw a few slender
trunked palms with rounded bushy
tops that apparently belonged to the
genus Aeria or near by. A green
moss or epiphyte appeared on the
trunks of trees in short fronds, occasionally
in fair abundance.

The region crossed had been
swampy in places but at Cañada Umbi
there was an abrupt change. The road
led across a broad open swamp, grown
with patches of cattails (looks like Jypha)
Rushes with large open patches covered
with a peculiar thick heavy leafed plant
that is as woolly as mullen. Machetarnis
rixosa ran lightly about on this
moundful of the water, snatching eagerly

at small insects. One of the other birds
was seen riding on the back of an ox
as it walked sedately along.

This swamp, though changing in
character continued unbroken so far
as hoc amores white it was very low.
And wet at Charadai when darkness set
in. The country was absolutely level
and in a way suggested the swamps of
southern Florida though with its open
tracts with wood. In the distance though
of course the vegetation was entirely different.
By noon the air became much warmer
so that I laid aside a sweater that
I had worn ^{earlier} later in the day.

The open swamp was succeeded
by a flooded wooded area. Small palms
30 or 40 feet high were common. The
trees grew in veritable bogs of dirty
muddy water that came up directly to
the track. The deciduous growth averaged
about 30 feet high. Trees here must be
able to withstand much water as the
water table of the soil is practically at the
surface. Certain level grassy areas
with trees scattered through them appeared
like meadows but in reality were grass
from swamps in which the mud
and water came up to the knees of the
cattle.

Hoc amores was entirely surrounded

by water. At many of the stops,
designated merely by the number of the
kilometre distant from the end of the line
the houses were placed in veritable
swamps. Black slimy mud and pools
of water were everywhere. Trails and
roads led indifferently through ponds and
mudholes. Apparently it had not
rained within a few days at least
so that the country must be almost
impassable in the rainy season.

Four wheeled wagons loaded with
wood had six patient oxen harnessed
to them and frequently showed wheels
caked to the axle with mud. At the
stations I saw swarthy men with
long muffers thrown around their
necks. Labourers wore shoes and
trousers that frequently came only
to their knees. Others had long canvas
leggings that reached halfway up the
thigh. The country people all seemed
to be of southern European descent. Few
negroes were seen but I judged that
there was an admixture of Indian blood
among the negroes. On the light houses houses
and stores were built of brick covered with

In the smaller ones the huts were made of poles, occasionally of boards and often of grass thatched rather thickly on the sides. Houses made of small poles with the chinks plastered with mud were not infrequent. In many cases roof and even houses were made of galvanized iron.

A dark colored ibis with slender head and a whistled note that may have been Phimosus was common. Eusomura maguari appeared and Cara caras were seen constantly. Sainoptera irapuro became common. Small birds were less abundant here but scavenger species especially of birds of prey were very abundant. I saw many ^{new} that I did not recognize.

A place called La Sabana was very wet but might serve for gold work for a short time. Near here 30 Eusomura were seen in one flock. Charalai might serve for gold work for a short time. Women were seen washing clothes in the banks of muddy pools of stinking water.

Beyond Charalai were endless swamps with lines of trees in the distance. Phimosus was seen, many Eusomura, one Jabiru and an occasional Jarana. At evening

Sociedad de Coches Comedores
y Dormitorios

Nº 00652

Línea

Café, Té o Chocolate completo ..

Café o Té con leche.....

Almuerzos

Cenas.....

2.50

[Handwritten signature]

50

Fecha

[Handwritten date]

Total...

3.00

RECOMENDAMOS

Se ruega encarecidamente a los Sres. Pasajeros dirigir sus reclamaciones con la presente a la Inspección principal de la Sociedad, Avenida Vélez Sarsfield y Olavarría, Buenos Aires.

COGNAC Fine Champagne "PRESIDENTE"

VINOS: Pommard, Beaune, Margaux y Saint Julien

Importados directamente por la

Sociedad de COCHES COMEDORES y DORMITORIOS
y garantidos legítimos.

building in the large patio at the hotel.
Several leguminous trees, two palms and
a grapefruit tree grow in the patio as
well as poinsettias & just tall. Roses
are in blossom here and oranges bearing on
trees in many yards.

Puerto Rico in the government of Chaco is
a pleasant little city of about thirty thousand
inhabitants. The streets are broad and
have many trees scattered along them. In
the residence section the houses are found
in broad lots in which are gardens and
fruit trees. The streets are not paved but
are clean though they must be extremely
muddy in rainy weather. The man who
drove at my baggage from the station drove
the pony and two little mules hitched to
a two-wheeled cart, the pony between the
shafts and a mule on either side. This
is a common conveyance here with a
fourth animal added at times. The
road was broad and open. As in Santa Fe
I note that the streets bear the same names
as in the central part of Buenos Aires.
The people seem mainly of clean Spanish
extraction.

I worked during the entire forenoon
on notes and in preparing my
accounts current for the night's part.

At noon I met Sr. Enrique Lynch in Bogota
and presented a letter to him from Mr. Deane.
Sr. Lynch and I conversed for a time and
then ate our noon repast together.
He is an elderly gentleman, about 5 ft. 7 inches
tall, perhaps 65 years old, with white hair
and a long white mustache. He has dark
brows also but suffers from a cataract
entirely across the pupil of his right eye
and wears dark yellow glasses. Pleasant
he is engaged in agricultural work
and has little time for ornithology. He
tells me that he has not made a
large collection, because for one reason he
is a bad preparator and again it is very
difficult to keep skins fresh from traps here.
Both ants and Peromyscus are very bad.
He has a few birds now but not many.
He recommended that I go later to
Puerto Bermijo where I could have access to
some wild country.

After eating I located the office
of the governor and found that his
secretary would be in about 4:30 or
5:00, walked around, sized up the town
and picked a route to travel tomorrow
in collecting. Arranged for the development

of a roll of film. Had some clothing
attended to etc. Registered an envelope
to the Department at an expense of 1.20
pesos.

At 5:00 I returned to the Governor's
office Sr. Enrique Carrero and met his
secretary to whom I presented a letter
from Don Alfredo Demarchi minister of
Agriculture and talked for a few minutes.
I requested a letter stating the purpose
of my visit that I might present it
in other towns and was told that it
would be sent to my hotel tomorrow.

In the meantime I am privileged to
go ahead with my work.

The sun was down at 5:30 this
evening. I have anticipations of the
birds that I shall see tomorrow.

This evening I came across a most
interesting thing, a communal spider
web, a net ~~sketch~~ 15 feet long by 6 feet
wide stretching in a single sheet between
two orange trees growing near a house in
town. The surface of this web was
occupied by approximately 600 spiders
of medium size, stationed at more
or less equal distances, from 6 inches to
a foot apart. When a gnat or other

small insect touched the net two or three
of the spiders near at hand vibrated the
web strongly warning that the insect was
entrapped and then the spider nearest at
hand seized the prey. Each a night has
been entirely foreign to my previous experience.

There is an orthopteran here in
the grass that stridulates subilantly,
sounding at a short distance like the
humming of telephone or telegraph wires.
At nearer approach it assumes the
shrill whistling made by the wings of
Clangula.

This evening Sr. Juchiky, Commissioner
called and proffered the services of
a gendarme to accompany me in the
country. Soon after Sr. Urribalzaga
appeared and we compromised when he
stated that he was going out with me at
ten in the morning.

July 7, Wednesday.

a Spanish toast-

Salud y pecetas y tiempo para pozuelo!
Those of evil mind change the last phrase
to y fuerza de las castañetas!

This morning at 8:30 I visited
Sr. Enrique Lynch Urribalzaga to view an
experiment of cotton & new crop here in the Chaco

About 1000 Hectares were planted in cotton this year and it is estimated that the tillage will be increased to 12000 Hectares during the coming season. The amount that may be planted is limited by the help available. Field labor is done by descendants of which there are only about 12,000 in the Gobernacion of Chaco. 2000 of these or more are employed at Las Palmas. The cotton shown was white of medium length fiber and seemed of good quality. Many squares set on a single stem.

At ten I had been directed to call again at the office of Don Enrique Caceres Gobernador of Chaco. This I did and talked with him concerning my work. He promised to furnish me a letter to the authorities regarding my work. This came to me at the Hotel about 2:30 this P.M., too late to do any good today as I had only a little more than two hours of daylight left.

I worked during the day in notes in Spanish and wrote official letters to the Museum here & to Dr. Ullrich in Buenos Aires. But the wind blew from the north and the sky became overcast. The wind increased

in the afternoon and clouds of dust filled the streets. At 10 in the evening it began to rain. Temperature last night was 62° F. and this noon 72° + F. In the plaza and in the patio here at the hotel I see a peculiar tree belonging to the family Bombacidae that grows 30 feet tall. The leaves are pinnate and resemble those of an ash somewhat. The trunk of the tree is swollen in the center so that it appears barrel like, it is dark green in color. On the trunk set closely are many strong conical shaped thorns an inch or more in height and 3/4 of an inch broad at the base. These are easily broken away by the fingers leaving a scar on the trunk. The tree is said to produce a good containing a cottony fiber. There are two species, one with red & one with yellow flowers.

Dr. Lynch U. tells me that *irupero* (*Danioptera irupero*) is a guarani word coming perhaps from *irupé* the name of Victoria regia and signifying to be bitter. *Puazuro* in the pigeon name is another guarani term of the same signification.

July 8, Thursday.

This morning I was out at 6:30 had coffee at seven and left at 7:10 for the country. Went to the bridge across the Rio Negro east northeast of town and from there followed along the stream. The Rio Negro is about 60 yards wide, is sluggish and flows with black murky water. The banks are six to ten feet high and are steep. At frequent intervals there are small lagoons of stagnant water on either side.

A broad road led out through the country with many rigs passing on it at this early hour. Wagons and carriages here are all broad gauge. Many had two wheels only. I saw several ^{with ~~two~~ ^{single} wheels} carts loaded level full with oranges. Men and women with long scarves ~~and~~ just around their necks passed us fast.

Last night at nine a sudden heavy rain came up and I wore rubber boots this morning expecting to find it very sandy. To my surprise the rain had hardly lifted the dust. After the rain there had been a sudden drop in temperature which with the wind

made the air very keen. At noon the thermometer stood at 13°C ~~and~~ that it could not have been far above freezing at daybreak.

I looked this morning through the woods and thickets along the Rio Negro visiting the lagoons as well. The wood was dense and had an undergrowth of the Bromelia like plant as well as many spring shrubs. It was almost impassable save on the trails. I lost several birds in the dense growth and refrained from shooting those that would have fallen out of reach. About the lagoons were broad open spaces grown to 7 feet high with a seed grass that reminds me strongly of *Meriacus* both in appearance and action. Scattered growths of aquatic plants were seen in the lagoons; no water birds were observed. The curious *Cariacus chrysophilus* was common, as were *Phospiza melanoleuca*. All I collected 16 birds of 15 species 13 of them new to me.

Many strange low calls came from the thickets. That I was unable to see but at that exact short intervals I encountered new birds. The first bird taken was the gorgeous Coryphospiza cucullatus, a dull red finch with a brilliant crimson crest.

I found a number of termite nests on the ground in the openings near the ground. One that I broke open after photographing it was two feet high and about 15 inches broad. The outer surface was irregular while inside were many galleries. Termites came running out rather aimlessly when I broke the nest in two. Occasionally one or sometimes two or three would raise the head as high as possible and then jerk the body back and forth very rapidly 5 or ten times swinging the weight on the proximal segments of the legs. I was almost certain that a faint sound was produced by this means. The nest was a solid lump that reproduced itself as easily as the decayed stump of a tree.

Returned to town at one.
Mr. Lynch 4. tells me that Chingua comes from the native name Chingua, that Burmeister, writing in Italian spelled it Chingua and that the person who reversed the genus reversed two of the letters.

July 9 is the anniversary of the day of independence for Argentina (July 9, 1916 being the original date). Tonight there was a celebration in the plaza with the band playing, and speakers speaking from a platform beneath the blue and white of the national flag, by the light of ^{gas} torches made of bits of glycerol packed rolled & dipped in paraffin held in the hands of onlookers. The speakers used a peculiar rising inflection at the close of each phrase that while noted impassioned, in fact rather impassive, had a swing to it that held attention, and aroused a feeling of tension and emotion.
Chimister 6 tonight.

July 9, Friday.

Today Argentina celebrates her day of Independence (established July 9, 1816). There was a grand holiday of course with many speeches etc. The sparseness of the ^{total} population was indicated by the small number of people present on the street today.

I was out at seven and found the thermometer still at 6°C. and ~~the~~ ground white with frost. It was told that this about as cold as it ever gets here. The sky was clear the heavy wind of yesterday had gone. It was cold and sharp in the morning but by nine the sun was high enough to warm the air. The remainder of the day was delightful and I remained out as long as possible. Birds were singing all songs and the sensation of warmth from the sun's rays was so pleasant that I desired to lie and bask in them.

I went out again to the region visited yesterday and today found conditions much different. Birds that were not noted at all yesterday were present in abundance today. Apparently some of the more tropical species are more or

less inactive during times of cold. Guirras, *Tamias*, *Sceloporus*, *Toucan* and many bush birds were in evidence. In the heavy forest squeaking drew small species all about me. *Colaptes* perched almost within reach. *Baculites leucoplepharus* came near at hand twitching its tail constantly. *Planesticus rufiventris*, *Columbids* and *Tachyphonus rufus* remained at a distance. The red eye of a large *Toucan* ^{was very large} glared out at me was positively devilish.

A few of the trees here have lost their leaves but most are still green. Frost has affected some of the plants of the lowlands but is not violent elsewhere.

I did some collecting today in the sawgrass swamps and found the grass as different of penetration so that found in the Everglades. My hands and face were cut by it in searching for birds that I had shot. I lost a good many birds too in the heavy undergrowth in the forest. As in seasons

10. Euphonia dropped immediately beside me. And I was unable to locate it. A Hummer was noted, also *Stephanothra* sp. And outdoors cage in the yard of a farmhouse contained *Planesticus* *fulviventris*, another *Thraupis*, *Paroaria cucullata* and *Melospiza bonariensis*.

Returned to town at noon with seventeen birds. In all I have collected 45 birds with 72 skulls, which is not bad considering the number of birds that I have lost.

Prepared specimens this afternoon and worked on notes in the evening. The cold here is penetrating; I worked all the afternoon with two shirts, a sweater and coat on and slept last night in my underwear, one flannel shirt and socks.

The meals are very good here at the hotel. For breakfast it was I have a jambu (ham & cold meat with salad), *Puchero criollo* (potatoes & cassava, boiled with meat, a legume, a pork chop or steak, with fried potatoes, a dulce and tea.

July 10, Saturday.

Last night I slept in underwear, heavy socks and a flannel shirt and so was comfortable; the thermometer stood at 60° F. at seven a.m. The sky was overcast today and it remained cool throughout the entire time.

I went out again to the Rio Negro and spent the morning in working through more good country than I have visited heretofore. A few birds were singing but there was not near the activity that I witnessed yesterday. The wood inhabiting species especially were quiet and silent. Although the temperature ranges only between 40° & 50° F. I find the cold quite penetrating.

Today in a low spot near a lagoon I found a large ants nest built up 15 inches high with a small clump of sawgrass as a base and composed entirely of shredded bits of dead grass. The ants inhabiting it were large strong species. No earth whatever was used in their structure which rose in an irregular dome with a rounded top.

I see considerable signs of fair sized rodents in the saw grass.

Twice lately I have noted butterflies flying among the trees in the open that I am certain are monarchs. Insect life has been very quiet however during my stay here there are no mosquitoes in the forests but in spite of the cold I find it necessary to use a mosquito bar at night as a few mosquitoes are active with the temperature as low as 45° F.

Small houses with grass sides are scattered all along the borders of the woods. Many of the country people are Chaldeans. The soil here appears to be a rich black loam that should prove very productive.

Had a shell explosion in my collecting pistol today and had to take it to a local "amero" to get it out. Am afraid the beggar ruined the chamber.

Met Mr. "Bob" ~~Stewart~~ from ~~Uruguay~~ this noon; he says that he has 20 leagues of camp in Alto Paraguay and invited me to visit him.

July 11, Sunday.

For the last two days I have not had enough sleep and have worked until nearly midnight every night. Last night however I turned in earlier and slept this morning until 7:30.

The style of saddle used in this region is interesting. This morning as I awakened I worked but through my gun window to see a horse being saddled for riding. A blanket was placed on the animal's back, then a piece of tanned leather. The saddle was then put in place. The cantles of the saddles are fairly high and rounded, there is no prominent horn but simply the end of the saddle turns up as does the cantle. The saddle has rather a broad tree covered with leather; frequently the front and backs are ornamented with brass or silver. On the saddle was placed a heavy square of sheepskin with the wool up. Over this another square of tanned leather. The girth is not attached to the saddle but is simply laid over it. A broad smooth piece passes of the seat and a web beyond this. The whole is passed around the pile of saddle leather and blanket and then drawn tight.

I worked this morning in repacking & rearranging my collecting outfit and in writing. Sr. Lynch came shortly before noon and I showed my my method of preparing skins. I also prevailed upon him to allow me to take a picture by train.

Paid a mazo then passed to carry my baggage to the station for the train going to Barranqueras. The wind has turned south again and it is very cold and raw. I went over to the station at 4:00 but found the train not in yet so walked about the village for half an hour. During this cool weather very few people are seen on the streets and all of the houses are closed tight. At night especially the streets seem practically deserted and there is no life in evidence in any of the dwellings.

At 4:30 the little train pulled in and my baggage - 6 pieces was loaded on board for the consideration of a peso. The engine was a small wood burning affair that drew two coaches each about as long as one first & one second class. I attempted a picture of the affair but the light was bad. A few passengers with baggage myself among them were attached on board and at five with many steam whistling notes we prepared to leave. At once pasajeros materialized apparently

from nowhere and in a few seconds the seats were filled with jabbering italians and quiet more reserved Argentinians. Others clambered on board as we pulled out and we stopped at nearly every corner with still more tools of the whistle to pick up more. After each stop the conductor blew a policeman's whistle loudly as a signal to start again. Three men were overlooked on one corner but ran after the cars and clambered aboard. One old fellow could not make it alone and a boy jumped off and boosted him aboard. We were then at the edge of town and apparently were off so we rattled along for over ten minutes. Suddenly there was a great commotion behind and a coach clashed up with the horses in the lead ran passed us and then stopped to discharge an old lady who clambered aboard as the engine stopped which her cochera turned and whirled back toward town standing erect at his seat and swinging his whip over his horses.

Barranqueras lies about 8 Kilometres from Puarisima. The intervening country was level and in the main was covered with

woods from which the larger timber had
been cut. We passed occasional marshes.
Grass thatched huts occurred at intervals
and rarely a more substantial dwelling.

We arrived at Barranqueras at 6:00
and found a small line of houses
scattered on the river bank. The bank of
the Rio Paraguay here was steep and abrupt,
rising about ten feet from the level. The
river as seen in the dim light was
rather disappointing - a turbid rapid
current swirled along, at this point
only about 300 yards wide. I had
pictured in my mind a mightier
stream. At 6:00 a small steamer
arrived and we got on board with considerable
confusion and were off. My baggage
cost me two pesos again in transfer.
Fare from Resistencia to Corrientes 2:10,
transfer of baggage 2:50. On the journey
up stream to Corrientes I had only a
view of the banks on either bank
and of the muddy current whirling
past. We reached Corrientes, a good sized
city at 6:45 and disembarked on a
dark landing where uneven stair steps
led to a broad pier above. Fortunately
I had my flash light in my pocket
and so journeyed safely. I made a
bargain here to take my baggage off the
wharf, store it over night and then

load it on the boat for Resistencia
the morning for 5 pesos; The Cargador
took the municipal badge bearing his
number from his hat and gave it to
me for a check.

Took a coach to the Hotel Buenos
Aires, price 1 peso. This is a large
hotel but apparently was almost full
as I could secure only a small
inside room. Had a high ball for
company and then dined with half
a bottle of Chianti. For some reason this
winter always reminds me of the
Hollister. Mr. Bot stayed here and talked
with him for sometime getting a line on
conditions in Paraguay.

July 12, Monday.

Arose this morning at 5:45, shaved
and dressed. Had some difficulty in paying
my hotel bill as the clerk was not up
but finally got away at 6:30. Took a
coach to the docks when I saw that
my baggage was put aboard for
Resistencia. The boat left at seven.

Shortly there was a larger steamer
that ran between Corrientes and Formosa
but I understand that it has "struck"
why I did not learn. The craft on which
I traveled was a government police

boat # B212, a fairly rapid craft about 75 feet long, a wood burner like most other engine propelled vehicles here. She had scant accommodation for passengers however and the twenty or so aboard, stowed themselves in a stuffy cabin or on deck as best they could. I chose the deck myself as I desired to watch the scenery.

For three days now the sky has been overcast and the temperature around 10° or 12° C or even lower. Because of the damp atmosphere the cold is extremely penetrating. Today I wore flannel shirt, vest, sweater jacket, coat and rain coat and still was none too warm. In fact I found it necessary to move about to keep up circulation.

The Rio Paranaíba here varies from 250 yards to a quarter of a mile in width: usually it was about 300 yards across. The banks were steep cut and stood from 4 to 8 feet above the water level. In the trees above that point I could distinguish an old high water mark from one to two feet above the ground. The banks in the main were covered with a growth of low trees, 20 to 35 feet

high. These were open in some places but usually covered densely with much thick undergrowth. We passed occasional patches of the beautiful Paja vava and at times came to extensive grassy swamps. Much of the banks however were high and dry. Occasionally small streams came in on either bank.

As we proceeded the undergrowth grew denser and at times appeared almost impassible. Only at long intervals did we pass grassy sides. But and the country along the stream appeared almost uninhabited. Clearings were few and only small numbers of cattle were seen.

At one point there was a hill 30 feet high a marked eminence in the generally level landscape.

Tormarants were common I saw one or two gulls at a distance, Cassin's, a few Megascops and occasionally a Black Vulture. One Cooi Heron passed. At 12:00 we came to the landing of Las Palmas. The bank here was steep and steep. The steamer cast anchor

and swung in to the bank. The plank
was run ashore, and the few passengers
for this point disembarked. After a
few minutes a little toy train came
chuffing down the track, luggage
and mail were loaded on a tiny truck,
the passengers clambered onto a small
gondola with one seat on each side
running lengthwise ~~and~~ so that our
feet swung out over the grass and
we started out. The road was crowded
with Indians, who rode along steadily
smashing lumps of hard bread. They
had little to say but clambered off
actively at every stop.

There is a strike of the workmen
near La Palma, though the Indians
did not go out, and we had three
or four soldiers armed with rifles on
the train as guards and picked up one
or two others along the track. La Palma
is an English estancia and covers in
all about 100 leagues of camp.

We arrived at the town at 2:00 P.M.
I had a card from Don Enrique Cáceres
to Mr. Young, the Inspector General.
I met his son first a tall young
Englishman two inches taller than
myself and then talked with the father.

Both were rather distrustful over the
trouble with the workmen. I was
given permission to shoot on this
property and as the company hotel was
just secured a room in a little
native fonda. My room is about
16 by 20 not too clean with two
or three lights out of the window.
The cold was penetrating and I
got out my own bedding to
supplement the single sheet of blanket
supplied by the "hotel." I found
supper not half bad. Had soup,
raviolis, meat, bananas & tea.

Before supper things seemed rather
bleak and cheerless. It was cold
and damp, and I waited in the dark
for time to eat, I wished for a
regimental travelling companion. A
good meal made things seem
more cheerful and I got out my
travelling electric light rigged up
up and worked in shots for a time
before going to bed.

This morning a large police boat
with a considerable number of men
left for Formosa just before we did

Men came bustling down carrying
bags of potatoes & other vegetables, strings
of onions & other supplies. The carcasses
of a sheep hung at the stern of a
vesicle. Part of all on yellow baskets
aboard carrying a patient looking
black dog. In a few minutes all
were settled and were drinking coffee
and eating hard bread. Some of the
fellows put little loaves of this
bread together with a wire like
crackling two stones and chipped off
little bits which they ate.

This bread known as galleta
was sent to me at supper. It
comes in biscuits oval in shape
slightly larger than an egg. They
are so hard that it is impossible
to crush one in both hands and
it is difficult to pry one in two
with a knife.

July 13, Tuesday,

Last night I shivered around until
eight, and then went to bed. After
Béja turning in I added my own blanket
to my supply of bedding and for once was
comfortably warm. This morning I gave
up pretending that it was warm weather

and put on heavy wooden underwear,
a wise procedure as I have felt much
better all day.

At a quarter of seven when I rose the
heavy clouds that had obscured the
clouds of yesterday were banked high in
the east but a change in the wind
soon cleared them away so that the sun
broke through and remained clearing
a cloudless sky all day. Until ten it
remained cold and I shiver but later
was pleasant until about five in
the afternoon when cold returned with the
lowering of the sun in the west.

I had coffee and a lump of
hard bread at seven and at midnight
out with my gun, walking out
through the village along various
footpaths until I came to a convenient
place at which to enter the woods.
I followed in the main near the
course of a small stream where
I found open wood, dense wood or
occasionally openings grown with
grass or containing lagoons. Bird life
was abundant and varied. Most of
the individuals observed seemed to feel
the cold and were rather silent
at times. One would find a warm

spot in the sun and then sing for
a time. Megascops however seems to
quit the cooing of spring as I judge
that they are nesting. Birds strange
to me appeared constantly. There seems
to be an increasing variety of Trochilids.
While in addition I met Cyanocorax,
cyanomelas two species of Basileuterus,
Sturnus, Columbids, a toucan and
last of all a band of Flickers. The
last had me interested as one of their
notes is exactly like that of a greater
yellowlegs and I came following them
hop expecting to see that bird.

Thryothorus irupero was common about
gardens in town and I saw a few House
& Sparrows. A flock of Columbids fed
all day outside my room and
perch familiarly on the backs of the
horses ⁱⁿ the yard.

While searching for a small bird
that had fallen among some saw grass
I found a small ball shaped nest
made of soft grass blades, built up
about 4 inches in diameter. This
nested on a foundation of woven material
near the base of clump of the grass
when it was entirely concealed from
view. Inside the nest I found up

in a ball was a little specimen
with larger than a large ~~specimen~~ of *Peromyscus*
The animal seemed dazed at being disturbed
and stared about, soon closing its eyes
in the bright sun shine. When handled
a little roughly it bit my finger but
was unable to break the skin. On the
ground it moved sluggishly and awkwardly
seeming it have little control of its
feet in this method of progression as
repeatedly it fell forward on its head.
Propulsion was mainly by the hind feet.
When placed in a small tight cylinder
was certain and easy. When removed
the animal expelled the air in its
lungs with a low expiring hiss. Its
body temperature was below 85° and
so did not register on the thermometer
then I had available (#1057).

In an open savanna I found one
termite nest that was three feet high.
Near by was a nest of the leaf cutting
ant that was the largest I have seen.
The creatures occupied a mound 10 feet
long by three feet high. A veritable
army of ants travelled in and out
through several large openings, leaving
trails of grass stems or other leaves
or rallying out in search of their food.

When I reached the jorda at twilight I found that I had 15 birds and on demand the care of which busied me until dark. At five thirty it is dark and at six is entirely dark.

I worked for a time after supper on notes. I am practically living in the open air here as I have a large room with the door continually open. Three lights are broken from my window so that air circulates freely.

July 14, Wednesday.

Drank my coffee this morning at seven with an accompanying lump of the hard bread known as galleta. This may be nourishing but is hardly a delicacy as it is usually sour to the taste and is too hard and heavy to be palatable.

This morning I went out once more along the small stream bordering town known as the Rio Ovia a guarani word signifying dirty. The forest bordering the stream is dense & heavy with an undergrowth of creepers and the Bromelia like plant. Outside it has been cleared up somewhat. In one opening is a large grassy green lagoon where patches of open water were grown with the curious fleshy leaved water plant.

The sky was overcast this morning and the ground was white with a fall of frost.

Frost is said not to injure the oranges that grow here. Yesterday I bought a sack of very good oranges containing at least 50 lbs. 50 cabbages. These are juicy and sweet the skin is rather thick and many are affected by scale. There are many seeds in the joints. I see trucking with oranges about many of the houses.

The Indians in this region are said to belong to the tribe of Joba. About 2000 are employed as laborers at the factory & plantation here where they work mainly as field hands. In the region where I am collecting I find numerous of their grass thatched huts with people squatting under little lean to shelters outside. This morning I saw an old woman standing beside her hut facing the east and shaking up and down in her heels with flexing knees with arms hanging straight down at her sides. An accompaniment with this regular motion she kept up a slow chant which rose and fell. This continued for ten minutes. Whether it was some religious ceremony or whether it was merely to start a circulation in the thin air I do not know but suspect the former. An old man passed me in the trail on his way fishing. He was armed with a bow five feet long with arrows of the same length. These arrows were tipped with long slender

iron rod the size of #12 wire and
were pointed. So protect his feet he
had a rudely cut rectangle of heavy leather
with a thong passing over it between
his toes to form a kind of slipper that
juddered with a scuffing noise as he walked.
Around his legs were wound crude leather
leggings apparently of the skin of a pacaary.

Very cold & chilly this afternoon. I was
glad to get the last of my birds put up at
dark.

Mr. C. Brownstone, who is also stopping
at the Fonda took me up in the evening
to the house of the engineer at the factory
where we met two other dams and placed
Danish Whist until midnight. Conversation
was in mixed English Spanish & Danish.
At intervals the long trail of the
pickets of the police guards around the
factory sounded at regular intervals.

July 15, Thursday.

Sky overcast again today with cold
gray clouds that shut out the sun. A
slight breeze during the night had prevailed
first. I worked out north of town during
the forenoon along the Rio Cuya (which
signifies dirty) and collected a number of
small birds. Made no attempt to get larger
stuff as I cut the first finger in my

right hand badly yesterday and cannot
use it in skinning today.

I believe from my limited experience
that a certain amount of change is
going on in the bird life here, that
with the cold more birds are coming in.
In addition small birds seem to travel
about through the scrub in loose bands,
so that today I secure certain things
and tomorrow others.

Thus far I have encountered parrots
only while flying. The Parakeets travel
in little bands that fly swiftly and dodge
like doves so that they make good shooting.
Today I killed a quira while the wily
with my pistol greatly to the surprise of
some clubians.

Was slow in working this afternoon so
that I could not prepare a skin in less than
15 minutes. The days are short so that I
must plan on being through by 5:30 and
then I have to put my instruments away
in a heavy chest. There are no lights
in the Fonda save candles.

Wrote for a time this evening on notes
Today I visited several small lagoons
with open shores lying in Seramaon

the route but found no shorebirds. By the whole this country is much too wooded for them.

Yesterday and ^{today} I jumped a small, very brown rabbit in low bunch grass in a dry field. The animals run swiftly and low without bounding, as do swamp rabbits. I had a shot today but put the charge into a stump just as the rabbit disappeared behind it. I have also seen a cavy today.

July 16, Friday.

This morning I crossed to the other side of the Rio Quia and worked out through open grassy savannas dotted with groves of trees. The day was very unfavorable as the sky was overcast and a mist filled the air that at times changed to a slow rain. This rendered small birds inactive and it was sometime before I found much of interest. Before returning however I found that my game bag was filled as usual with strange and interesting birds.

I crossed the Rio Quia (misspelled Ca-a above) in a dug out canoe fifteen feet long, square at the ends, hollowed out of a two foot log. To give balance a barrel was lashed on either side. The contrivance was attached by two rings to a wire and was pulled back and forth across

the stream by hand. The Rio Quia is sluggish body of water not more than 75 feet across, with dark, murky water and high banks. Growth of water plants choke its course in many places.

On the opposite side I found open country with broad savannas were traversed by shallow depressions containing standing water in places. The whole is probably under water in large part during the rainy season. Small groves some of only a few trees and others larger are ^{scattered} dotted the broad expanse. On the depressions was the inevitable saw grass while a bunch grass covered the higher lands. Tracts of dried grass had recently been burned away. On my return I traversed the border ~~there was~~ of a broad lagoon near town; there were many places suitable for shorebirds but I saw none save a few pairs of Belonopterus. The region covered above the river was in large part unsettled. Today I killed my first Zenaidura. Many years ago I read somewhere, that the

Simamoy was a bird of uncertain flight and so had believed. I found however that I had justice to revise this idea. The birds rise quickly and whirl off at great speed with a roar of wings. I missed my first bird clear but later made a double though I lost my bird in the grass as I was shooting without my glasses because of the mist.

I have wanted to collect some large birds but have held off for a time as my finger is so sore that I am uneasy at skinning.

The strike at the factory still continues though things are peaceful enough. The men aggregate to some extent at the Funda but there is no demonstration whatever. I understand that the police on guard however are afraid to leave the enclosure at the factory. The strike has stopped all train service save to Puerto Las Palmas which makes it rather bad for me as otherwise I should have been able to penetrate farther into the interior.

Today I saw a flock of ducks at a distance that may have been Bozalmita.

July 17, Saturday

Sky gray & overcast today but air much warmer. The clouds have a deaden

appearance and have the same curious way of stretching apparently to infinity as they do in a prairie country.

This morning I followed down the Rio Bura, the "riacho" as it is known locally on the southern side. The country here was brushy but was open enough to permit free passage. Occasional saw grass swamps were encountered and there were many long lagoons, now nearly dry. Taller trees bordered the riacho and also formed groves in the open country at the side.

The water in the stream was dark and almost black. A black sediment covers the bottom and the whole gives off a rank odor of H_2S .

At one place I started two small alligators so that they dove with a froglike ~~sign~~ up-a-noon in a minute or so they appeared again coming up head first. At once the tip of the tail rose and the remainder of the body came up more slowly. The animals floated at the surface watching me for a short time and then dove once more with their peculiar croak. Occasional patches of vegetation floated in the water and from one of them I flushed a dozen jacanas.

I saw when peaches had killed two oxen: the head which of one lay in the grass, the other had been thrown in the stream. Doubtless there were others as there was quite a gathering of caracaras and black Vultures down here. This region has no houses in it.

Small grass inhabiting birds remain inactive until about ten o'clock in the forenoon. As it becomes warmer they appear until the grass fairly swarms with them in places where there were none in circling two hours previous.

The frosts have killed many banana plants and have affected ~~some~~ few other tender plants. The abundant oranges however are unharmed. In fact a frost is said to make them of better flavor, as they become sweeter. The oranges are few and juicy and many are of fair size. The skins are rough and rather thick. They sell for about a peso per hundred.

The stove in the kitchen of the jarda is set on a brick foundation three feet from the wall and is about ten feet long. An old Indian, a man of all work about the hotel slips him behind the

stove every night with no more covering than a bit of sackcloth thrown across his knees. Tonight as I looked he lay on one side with a little pig squeezed in between his back and the wall for warmth while another pig lay at his head.

For the region where the summer heat is extreme the people here seem very hardy. The great majority of the country people go barefooted and very few wear stockings. Their clothing too is scant. The main precaution is to keep the throat protected. One small boy here at the hotel goes barefooted and wears an undershirt, thin cotton shirt & cotton trousers and yet seems comfortable. The great majority of people wear a poncho, a blanket that is thrown around the shoulders.

July 18, Sunday.

This morning I had a considerable number of birds left over from yesterday and they occupied me until noon. There was a heavy fog this morning that lifted later and in the afternoon the sun shone for a time. The sunset this evening was beautiful.

After dark the stars came out bright and clear. Last evening small frogs began calling from the marshy spots and continued ~~again~~ tonight. The note is a steady tink-tink-tink that reminds me of the call of *Hyla crotata*. I thought that I heard a goatsuck of some sort last night but was not sure.

This afternoon I cleaned up odds and ends of notes and wrote some letters. Much warmer today.

This is a very good night on which to retire early. Half an hour ago there was considerable shooting in the village a short distance, perhaps 200 yards away, and there has been more or less commotion ever since. Many men have been congregated in town this afternoon. One yellow showed a pistol made from an old 45-90 Remington, with barrel cut off at a length of six inches and a small straight stock put in it. The whole was no larger than my ordinary six shooter!

July 19. Monday.

A dense fog overhung the earth this morning and the air was saturated with dampness. My clothing was clammy &

damp and my trays for specimens were badly warped. By ten the fog had lifted and the sky cleared so that it was able to get some photos. I crossed the reaches (Rio Sinu) today and walked northwest, partly in open savannas and partly in dense thickets near the stream. Birds were abundant here and I had no difficulty in getting a large number.

The breeze turned off very hot and I found the change from the cold of the past week extremely exhilarating.

This evening I went out and set a line of 20 traps in grassy spots and along the bank of the reaches. Signs of large caracaras is abundant but I see comparatively little else. Was able to purchase oatmeal today but could not get bacon.

Went to bed early tonight as I was very sleepy. July 20, Tuesday.

Was out at twenty minutes of seven this morning and was in the country by a quarter past. There was a dense fog again this morning. My specimens

are not crying at all in the damp weather that has prevailed for two or three days. About 8 the fog lifted again and a moderate north wind, a hot wind blew the rest of the day. With the rising of the wind small birds became quiet and thickets & shrubbery seemed dead and lifeless. Small birds have a great faculty of hiding out here.

The day was extremely hot by contrast with the weather that we have had. It have changed to light rain again but found my hunting coat very oppressive.

In my trap line I found three mice (in 20 traps.) #1058 was caught among weeds at the border of a thicket along the Rio Guia. #1059 & 1060 were secured in a small patch of marsh grass about ten feet square in an open savanna. The white toes with square cut demarcation behind were especially noticeable in 1059. Orkagon chacoensis (Hamel. Zool. mamm., 1931, p. 427. This animal had a skin as thin as a rabbit's differing from any other mouse that I have handled. Two traps were

missing in my line and I suspect were carried off by the abundant caracaras. Great numbers of fishes were lying dead or dying along the shores of the Rio Guia this morning killed by waste from the factory. Many still alive tried the banks in attempt to get better water. I picked out specimens of all the species and put them in alcohol. Many in fact the majority of the non-predatory individuals had the tail fins more or less mutilated by other fishes. I have inquired regarding the perai or piranha and was told that it is common here and that it is known as the peacornita. Caracaras and buzzards were gathered to feed on the easily obtained spoils and word seemed to have gone abroad as a Comorant & a Snakebird came upstream. I shot the comorant but lost it.

To-day I tried to collect some buzzards (*C. ruficollis*) but shot three before finally securing one. Also killed a Caracara and skinned these two

in the field - a boy who came to watch me, wished to know if I had come from the "Estados Unidos a pie" I was glad of an excuse to sit in the shade and work on these birds as the heat was oppressive. I worked all afternoon in my shirt sleeves.

Today I had opportunity to dry some of my skins but had to be careful with them as ants are bad here that it warms. It continued clear & warm at night.

Indians were busy along the river today gathering the fish that were lying partly helpless.

Bananas were killed by the recent frosts but oranges seem unharmed. Mosquitoes were extremely bad last night while I was setting my traps.

July 21, Wednesday

Last night I slept covered by one sheet and was too warm at that. Was in the country all during the forenoon in my shirt sleeves and worked in that condition all afternoon & evening.

Was out at a quarter of seven and by seven fifteen had started for the country. I

went out north west again, striking the forest bordering the Rio Ania about two miles from town. Found from manufacturing imprudences the stream here had water that is comparatively clear and fresh appearing, far different from that below. The banks were steep and in places corrugated. There were considerable areas of forest here with some trees 50 or 60 feet high and much of the lower mountain on the open or other side. Long lagoons ran through the country some of them containing water. This region must be almost impassible in the rainy season.

A wind blew all morning that made collecting difficult and in the afternoon clouds of dust blew across the town. This has dried out the atmosphere and my specimens are curing in better shape than during the past few days. Ants however are becoming numerous and I have to be care to avoid their inroads.

Today I saw one small rattlesnake that made good a rapid escape in the

lung grass and also encountered
some lizards about an old bridge.

On the forest I encounter small
bands of birds travelling about in
loose company feeding as they pass
along. *Comptolypis pitagami* usually
acts as a convoy and usually there
are one or two species of *Alcedocephalus*,
perhaps a *Picumnus* and possibly one or
more of the rarer species of forest birds
with a *Basileuterus* or two. These birds
are all very silent. There is considerable
shifting of birds back and forth now
I am convinced. The *Melospiza brewsteri*
formerly common at the hotel handicapped
and I find new birds in places where they
have not been encountered before.

Indians bring in small nests of the
ground terns and break them open
that chickens may get at the insects.
Tonight half a dozen chickens slipped
in and went to roost in my floor.

My work attracts less attention now
than at first. The people here have
been very friendly & courteous throughout

July 22, Thursday.

A heavy rain fell last night breaking
the heat of the previous day. The sky
remained overcast most of the day
and it was cool and pleasant. At
night the air became sharp with cold.
After a breakfast of two fried
eggs and a galleta I put on
rubber boots and went out along
a large lagoon adjoining town. The
coffee here is composed of equal
parts of chicory and peanuts (burned)
and I had had to force it as
a beverage for my stomach's sake.

The lagoon was bordered with
rushes, sedge and a few cattails. Large
areas of water were covered with a
fleshy leaf plant and water hyacinth
floating in from six inches to two
feet half foot of water. Beyond was a
broad expanse of open water. Cane
fields fringed the shore behind.

Here I encountered a new fauna
and found a number of birds not
seen before. Juncos, I walked about
in the open like chickens. A few
whistling terns appeared and *Pelodactylus*
was common. Small quiches, perches

Glycypterus, *Rhipidura* and others
abundant; the aquatic growth. No
water birds were noted, however.
Flocks of jays walked about on the
open marsh.

I walked along, sometimes on shore
and sometimes wading, watching the
birds and collecting such as I
wanted. The richness of the airfauna
here is a perpetual surprise to me.
I was home at noon with 18
birds; including 8 species that I
had not encountered before. In all
I must have nearly 80 species.

I found one orange grove today
containing many oranges. Windfalls
that I picked up were very sweet
and juicy. As a refreshment I took
the juice of two. The sugarcane
here is excellent also.

The soil is a black loam rather heavy
that seems to produce very well.
Considerable areas are not productive
because of the swampy nature of the
soil, but there is a tremendous work
opment still to come.

At the Forda Mc. Brownstone a
Danish gentleman returned during the
afternoon. He had left Monday noon in

a Ford car for La Vedia, two leagues
away expecting to be back that night.
The car had broken and they had
been out all one night with it.
Roads here are very bad. Most of
the ~~other~~ vehicles here are two
wheeled and are of the usual
broad gauge type.

The strike at the factory still con-
tinues. It began because the
company refused to discharge one man
who would not join the union.

Now the strikers demand pay for
the time that they have been out
before they will return to work. Yester-
day it was reported that there
was some probability of the trouble
being adjusted today but now
there is no change in the situation.

At five thirty I went out and
set a few traps in some grassy places
not far from the Forda. The land
is grazed so close that it is somewhat
difficult to find suitable trapping localities
near at hand. The only sign that
I see is that of the cavies.
This evening my land beat brought

me a table so that now I am
fixed up in style. He also informed us
that one of the boats running to
Formosa has been cancelled so that
now there is only one trip a week
on Monday. This leaves me rather a
quandary as I had decided to leave
then I speak from tomorrow. There
is considerably that I wish to do
here but cannot lose too much time.
Mosquitoes have been quite bad
for the last two days.

This evening a bottle of cognac
Paraguayo "Marea Bandera" was brought
to me for the sum of 4 pesos. This
is a most excellent rum, far superior
to that of Bourbon in the West Indies.
It is bland in taste and excellent in
flavor. The bottle bears no revenue
stamp which accounts for the price
but I am not worried as regards that.
Indians bring the stuff across the river
at night. The rum comes in two
grades of which the present is the best.
It is excellent in tea, in small quantity.

July 23, Friday.

The air was sharp and cold this
morning at day break and there was a heavy
dew. I went out before breakfast to take
up a dozen traps but in long grass
near the lagoon beyond the hotel. Found
nothing in them. This open country
is grazed so heavily and has been burned
so frequently that small mammals
appear to be rare.

My breakfast consisted of two fried
eggs and a lump of bread, I say
lump advisedly as I ate a galleta
that was about as firm & hard
as a clay nodul. The Luke warm
"coffee" made of burned peanute &
chicon in equal parts, that has
been served to me regularly has lost
its charm and I have decided to
drink no more of it. The two meals
that I get here at the hotel
consist of a watery soup, two
plates or courses, a potato & tea or
coffee. At noon the first plate is
always fuchero, tough, boiled bull
meat with an Irish potato or a
cassava root accompanying it. Following

is another meat, fish. At night
we may have a salad on a little or
a fritter or rice & meat. Some of the
dishes are very palatable. Others only
20-20. There was then dining
rooms at the hotel. The first
in which I eat is for the upper
class, ordinary price of pension 45
pesos per month I pay more as
a transient but get better service.
A second dining room for the better
class of laborer, price 38 pesos per
month, and third a dark
hole behind the kitchen where
Indians are served. There receive
their food through a window in
the kitchen. There is one waiter, a
boy for each of the other rooms.

I walked out along this track
this morning, east, until I reached
the lagoon that I walked yesterday
and then skirted the shore to the
farther side. There was an open
strip on either side covered with
a growth of aquatic vegetation, that
appeared to be smooth level ground
from a distance when reality it was

underlaid with sand six inches to
two feet of muddy water. So firm
and ~~hard~~ dense was the vegetation
nowhere that hickens, Machitomis
and Pijito ran about as though
on dry land. Flocks of jacanas
walked about in the open feeding
busily with a preoccupied air, so
much accustomed to passing men
cattle and horses that they paid
no attention to me. At intervals I
encountered pairs of *Belonopterus* or
little flocks of *Ogelains cyanopus*
& *ruficapillus*. We wore hip boots
and found walking in the slippery
clay difficult as the whole area
was cut up by the tracks of stock
so that slipped and slid in and out
of their deep foot prints. Lining the
shore was a dense growth of
moss with the ground carpeted
with *Bromelia*. In places the moss
was more open and here I found
Cereus and a species of *Opuntia*
with remarkably few spines. A creeping
Cereus also occurred in the woods.
On the farther side I found an

area of wet swamp similar to
that seen from the train below
Resistencia. Trees stood 25 to 50
feet high with interwoven creepers
and lianas between them. The ground
below was covered with thorny
bush, dense mats of Bromelia ^{thorax}
three feet high, mingled with green vines
and other spiny creepers. Little open
spots two to ten or twenty feet
across were occupied by pools of
muddy water. Usually there was
a foot deep in soft mud. Occasionally
some apparently firm mud at
the end of half way to my hips
while I struggled to balance myself
with nothing to grasp for support
save cacti or thorny creepers.
Birds were in great abundance in
this Devil's paradise of thorns &
spines. Usually when I shot a bird
I had to put on a pair of gloves before
attempting to retrieve it to avoid
lacerating my hands severely. Often
I had to force my way through
dense growths of Bromelia when
the end spikes jabbed me in the eye

as I stopped or moved causing
a simulation of certain movements
of the cake walk that was checked
instantly by counter attacks from
the opposite direction. A number of
birds that dropped within a few
feet of me were lost irretrievably.
Others by great good fortune fell
at a distance in little open spots
where I found them easily, after
painfully working my way in through
the spikes guarding the morasses.
Poopyza & Synallaxis ranged in
more spots with a few Blackfyre
and a Guatancha or two for company.
A peculiar little olive green Flycatcher
glutted feebly along a few inches at
a time through the dense leaves
only six inches from the ground.
Dyctiopterus biguttatus appeared once
and a large and a small Woodhewer
were common. Two Blue grosbeaks
(*Cyanocorpus*) dropped in and
House Wrens (*T. musculus*) & *Sachyphus*
rufus, Black males with a few

white at the shoulders and
bright brown female popped out at
a squeak. Brilliant little Euphonia
whistled their plaintive call over
head perching near their inevitable
patch of mistletoe - a yellow
headed Buzzard circled overhead -
a peculiar Wrenlike Furnacebird popped
out with a most harsh raspy
chatter. It was indeed a populous
world in which I stumbled
and worked my way.

By noon I had twenty-five
birds including nine species not
taken before in my bag and so
worked out in the open and started
home.

My way led past two or three of
the grass thatched ranchos of Indians.
These were built near the shore of the
lagoon against the edge of the forest.
They were enclosed on three sides
and open on the fourth toward the water.
One apparently was occupied by two
families with a partition made of
half a dozen poles across the center.
One of the men with whom I talked
was about 5 ft 8 in tall, heavy set and

deep chested with high cheek bones, black
eyes and close cropped black hair.
Complexion swarthy. His canine teeth
were enormously developed. In the
morning he had gone down to the beach
to fish with bow and arrows with
point ten inches long with a
barb at the tip. He had secured a
number of fish and these were
cleaned split and spitted two
or three together on sticks were now
placed near a small fire to
broast. Cooking was done over the
open fire thirty or forty feet from the
beach. Women squatted about on the
ground and like other girls, the
apparently 15 years old played with
beach balls at one side. They had
made a crude bed in a hammock
but for their play mates. Half a dozen
waxy puppets hunched dimly about.
When they gapped widely at me
the women cooed their serenade on
the heads. Factors in several women
were washing clothing in little
spots of open water in the vegetation
covering the greater part of the lagoon.
Stumps or small boards were placed
out here, the latter raised up on stumps

and on these the women perched,
on their toes, squatting with thighs
spread apart. Some were nearly naked,
others more modest (jimmies & handkerchiefs)
had dressed tucked in closely
around their legs. In some cases the
purch on which they rested was small,
under these circumstances, as the clothing
was washed round and hung out
it was placed on top of the mud
where a little pile was balanced nearly
while washing on the remaining canton.
Many of these little water holes when
the women wash become murky with
suds. There is practically no drainage
at this season so that the water is
not renewed.

In the afternoon there was a
encourse of laborers from the factory
in an open space in the rear of
the hotel. A man on a box escorted
the crowd in impassioned phrase that
carried for many yards to the accompaniment
of vociferous cheering and applause from
the men who stood gathered closely
about him. Women and children were
scattered about at a respectful distance
in the background. As nearly as I
could gather the speech was composed
of the usual platitudes of the labor

organizer translated into the terms of
the country. I walked round and took
a photograph of the group. Excitement
grew I know intense and the speaking
blender as the volatile Latin temperament
became ~~more~~ aroused by contagious
mass exhilaration. Suddenly the police
interfered and the meeting was broken up.
For an instant it seemed that
there might be trouble. Men yelled and
shouted, women and children in
the background broke and ran in wild
disorder while the main crowd
milled about the speaker's platform.
The tension passed in a moment, the
leader appeared and the gathering
dispersed though little crowds of
men were gathered about houses &
other customary places of gathering all
the afternoon.

But few minutes later as the ground
dispersed I went out to set a line of
traps along the riacho. Guards had
been posted in additional spots about
the fence at the factory - Mr. Young
and several ladies were playing tennis
behind the superintendent's house. As I
stopped to speak to them a man armed
with a Winchester came sauntering

out through the trees. another guard told me of "Buenas tardes" near where I left the road for a side path. It is difficult to find suitable spots for traps here near town. The country is so heavily grazed leaving grass in small clumps only. I set 23 traps in brushy spots near the riacho paying much care in the sets. Used fresh bird manure on the trigger with a sprinkling of oatmeal.

The sky was overcast at dusk as I returned along a narrow path way toward town. The brief blaze of the sunset in the west illuminated the darker more sampl clouds behind. I passed both parties of clabians and of laborers returning from the meeting. It was dark as I approached town and scattered pedestrians hurried past without speaking. I spoke to the guards as I passed and received nervous replies. Half a dozen scattered reports of pistols came from various parts of the village.

It grew colder again and late at night a heavy dash of rain accompanied by lightning fell.

Mr. C. Brownstone returned from his Vedia today. He left three days ago in the only auto (a Ford of course) that I had been here, expecting to return that night. The car became stuck in a sand hole and they were left all night in the dark with the Mosquitos.

Mr. Brownstone is interested in developing a fiber plant here in the Chaco. I call it Hibiscus like species that he calls Hibiscus strobilifera. This he says was introduced originally one hundred years ago in Paraguay by the Jesuit fathers who grew the plant for a fruit with an edible pulp which it bore. Later they abandoned it and it is now wild in certain localities. Mr. Brownstone has worked in improving it for some years and has tried various regions for its growth. Originally he says it grew two or three feet high but this year he has produced plants 6 to 9 feet tall. He has a plantation of 300 hectares near his Vedia. The plant I judge is cultivated somewhat like cotton. He plants it in hills a meter apart so that it

has 70,000 plantings on a hectare
with three or four seeds in a planting.
He had a large bundle of stalks
with him. The bark stripped easily
in long strands that when
crushed were tough and strong.
It would appear that it is adapted
to the uses of jute. The seeds grow
in pods. The whole plant is closely
similar to *Hibiscus militaris* but
is said to bear a white flower. It
should do well in heavy
soil in low ground, perhaps in lowland,
east of us, or the coastal plain.
Possibly in some of the Caucaian valleys.
Growth should be similar to that of
the *Hibiscus* at Plumiers Island so that
wet ground should be chosen.

This evening I had another
session of Spanish whist at the home
of the engineer at the Factory Mr.
Giese. I met his wife, a Swiss and
his sons. They have lived here in
Las Palmas for six years. Mr. Uratutt,
Mr. Brownstone & Mr. Giese are international
whist players and we were at the
game until one. It was cold and
camp as we came back to the
Fmca.

The factory is brilliantly lit by
electricity but the village is entirely
dark.

July 24, Saturday.
This morning the sky was
overcast and the air cool. I went out
early and took in my traps. The
shrubbery was densely wet. In
23 traps I had secured four mice
belonging apparently to two species.
One # 1061, a form with moderate
tail with somewhat the appearance
of *Peromyscus* was taken in a little
opening at the edge of a thicket in
heavy grass. This one and another
of the same species have had the tail
injured near the base. The skin
of this species is delicate and tender,
I saw so thin in a very cool so that
I have to use great care in preparing
them.

The other species 1062-1064 was
a form like a *Peromyscus* with a very
long slender tail. These were trapped
at inconspicuous holes in the edges
of banks, under the roots of old trees. They
were badly eaten by some other small
mammal. There is very little sign
of mice anywhere.

I shot two birds and then returned
to the Zonda. The sky was heavily overcast
and rain began at once to continue
throughout the day at intervals, at
times the downfall was torrential and
when the weather lightened somewhat
in afternoon water was standing in

^{shallow} pools everywhere over the ground.
Fortunately I had not planned to
go as I had a large number
of specimens in hand. I then occupied
me until 5 in the afternoon. I had
many visitors during the day.

At 5 Mr. Orloff introduced me
at the "Club" at the factory where
I played a game of Billiards and
met a number of gentlemen who
have oversight of the work of the
factory. There is some probability
that the factory may close as there
seems to be no settlement of the strike
in sight. At the Zonda the landlord
is making the strikers pay their accounts
daily. It is curious how some small things

appear to me. At the club this evening
I had two or three slices of bread with
unsalted butter, the first butter I have

tasted since leaving Corrientes. It
seemed the most palatable dish that
I had ever eaten. There is no
butter at the Zonda and I have tried
to buy it in the almacén but they
have none.

This evening we had another
prolonged session of bluish Whist at
Mr. Guis's; too long in fact as I
did not get to bed until two
though I was dead tired and sleepy.

Rain continued through evening
This morning before the rains
a little pig near at my door was
running around playfully, jumping
and racing carrying feathers
& straws which it shook from
side to side. When the heavy
rain started it squealed and galloped
as the heavy drops pelted it
running around in fright under
the impression that it was suffering
attack.

As I work at my open door
Pionus and Parrakuts pass in flocks
and I hear the constant calling of *Paraceras*
& *Belonopterus*.

July 25, Sunday.

Mist or drizzling rain fell all day today and water is standing everywhere. This weather does not agree well with my desire to have specimens dry quickly.

I worked from 7:30 to this in notes, correspondence and odds and ends. Wrote the American Ambassador at Asuncion, Paraguay asking him to arrange for the passing of my baggage through customs. Have decided to remain here another week and then go to Foz de Iguazu. In the late afternoon I went up to the club, had a game of billiards and read some papers, first I have seen in two weeks.

July 25 put out of the birds that I have taken thus far have been killed with my collecting pistol. Only occasionally do I resort to the "gungi" for a Hawk or Woodpecker or some other large bird. In almost all cases smaller birds are so tame that there is no difficulty in approaching them.

Breadth of education in

the way is judged widely from the blunt point of the observer. We consider the Indians here as ignorant, yet they speak guarani a tongue most difficult to master and their own language in addition to Spanish in many cases. They are capable too of existing under conditions when 50% of white men would perish. The chief of the Sobas is said to reside here at Las Palmas with the semicivilized branch of the tribe. Others in a savage state are found in region back of Foz de Iguazu. Rumors of fighting and pillage on the part of these savages appear in the papers at intervals.

July 26, Monday.

Sky heavily overcast this morning and water standing from rain during the night. I went out along the farther side of the lagoon again. It was necessary to wear rubber boots as spots of water stood everywhere the clay soil

here forms a very slippery mud
that makes walking difficult.
Rain came on during the forenoon.
I remained out until noon getting
a good bunch of birds.

At the lagoon I found a pair
Phaethon chloropygia and secured one.
Two slits were seen also but did
not permit a shot. Two or three
small flocks of teal came in
but I made two shameful misses
on them. The wind turned south
during the morning bringing cold
with it, and a strong south wind
came up at night.

Birds were active all forenoon and
were working through the brushy country
in which I collected in little flocks.
A few *Phytoloma rubra* appeared.
From my short observation I am
satisfied that there is considerable
migration here. The cold has without
question been more severe further west
and has driven many birds down
to the protected swamps of the Chaco.

Cattle belonging to the factory are
being killed by the Indians. I had
not fired more than three or four shots

when two men came riding over
to see who was shooting.

An old Indian woman stopped me
and asked for 20 centavos which I
gave to her. She had straight lines tattooed
on her face down the sides of her nose
and under her eyes.

I kept careful watch for other shore
birds, visiting the country where they
were liable to stop but saw none
save the slits and many pairs of
Belonopterus. The broad open shores
of the lagoons here would furnish resting
places for sandpipers ~~collecting~~ migration
until the coming of the rains at
that time the ground now bare
muddy is undoubtedly covered with
water as the ponds fill up so that
feeding grounds would be few and
the birds would be forced to resort
to smaller pools elsewhere.

Men & boys here carry rubber
slingshots and are found potting at
small birds. I saw one little Indian
boy engaged in throwing at peccaras
with lead slings though without
succeeding in frightening them.

July 27, Tuesday.

This morning I was awakened before daylight by a cat in my room. Fortunately it got into nothing but will probably be back.

The morning was clear and fair with a beautiful sunrise; the sun now comes up far in the north. A strong wind last night had dried off some of the water on the ground but I found trails rather bad today. Left the Gondal at 7:15 and crossed the rocks in the boat and from there worked northwest to a long winding estero that paralleled the course of the Rio Grande. I crossed the estero three times, rather a precarious undertaking as it was very deep. Once we crossed on some logs, the boy with me fell in. The second time we crossed on a game trail over a yielding bed of rushes that threatened each moment to let us through. The country traversed was new and interesting. Open prairie covered with bunch grass was broken by groves of trees 50 or 60 feet tall. Low swales contained marshy lagoons or were grown with tall

saw grass. A tall robust sedge formed thickets in the esteros. The prairie country with its alternating wood and open reminded me of the prairie in south eastern Arkansas. The country appeared fresh and clean after the rain. The air was cool and the sun bright. Birds left the ^{near} woods and came out into open thickets or scattered trees on the prairie. There was considerable movement among them. I took a beautiful male *Ateles flavescens*. And three of the all appearing gubernatis came by with a harsh note. I tumbled one over and off course it fell on the wrong side of the estero. One large woodhewer that eluded me was of a species not seen before. On one place I obtained tracks of a small deer. I have seen the skin of this species before. Apparently it lives in swampy regions. Slugs were found under an old log. I continued on across country

to another crossing of the Riacho
when there was a somewhat larger
boat with an old man in charge
a ferry man. This crossing is on a
government road that is laid out
across country here. Formerly there
had been a bridge at this point
but it had been burned by the
Indians some time ago. The ferry
is supported by the state, the
ferry man receiving 45 pesos per month.

I returned through the Indian
village with its grass thatched huts
scattered along the shore of a lagoon.
A crossing at one place was very
deep. The Indians make frames of
thatch that they use in closing the
open fronts of their houses in bad
weather such as we have had the last
few days.

I met three or four families moving
into this pueblo. They had stopped for
a noon bite in an old field and were
fixing up their possessions preparatory
to moving on. The heavier loads were
carried by the women. A half grown

girl had a small sheep ^{skin} balanced
on her head. Women carried two heavy
thatch mats by a line passed across
the top of the head when it was
supported in a pad of cloth. Men
carried one or two, and two
or three poles. Children appeared with
miscellaneous stuff. The many dogs
trailed along under foot everywhere.
Not long ago the Indians paroled
one of their members and three men
in the estero at the edge of town.

I returned to the hotel but a quarter
of one with the usual heavy afternoon
dusk ahead of me. I made use of
the bright sunshine to air out
specimens and clothing and rid
them of moisture absorbed during
the storm. Two of the guards at the
factory (officers) appeared with a
Toucan that they wanted skinned
and prepared that they might take it
home with them to Buenos Aires.
These big birds prepare easily, though
it is difficult to get at the eyes because

of the casque which does not allow
the skin to pass. I was busy
until pitch dark with the
last of the birds to be prepared
skeltons. A mist settled over the
ground as soon as the sun went
down, though it was bright moon-
light overhead.

Dogs are innumerable in this
village and raise the devil all
day and all night. Many of them
are evil tempered brutes that take
advantage of any one afraid of them.

Women here keep much in the
background. There have been two at
the hotel since my stay here and
they sat at table with folded hands
and downcast eyes without mingling
in the conversation. They have rather
small faces, sharp eyes, black hair;
most of them are not good looking
though occasionally one of the
younger girls is more presentable. Older
women come about freely but the
younger ones are evidently afraid
of all strange men.

July 28, Wednesday,
clear and very warm today as
there was no breeze. I made another
change today from woolen to cotton
underwear.

This morning I went down along
the shore of the lagoon opposite the
factory collecting small birds in the
grass and bushes. Because of the
heat birds were inactive and I moved
about very little. I was surprised to
find that I had a good many when
I returned at noon.

I went around to see orange
grove of about 200 trees or more
growing in rather heavy clay loam
interspersed with some sand. The trees
were on a very slight eminence above
the lagoon. Plantings had been made near
the shore of the lagoon but the trees
here had died probably because of the
high water table. Trees on the higher
ground seemed thrifty but those lower
down felt the water apparently as
many had yellowing leaves. I cut
about 30 cuttings, picking those trees
that seemed healthy and that bore good

fruit. The fruit chosen had undoubtedly
thin skin and was juicy. These
oranges contain many seeds.

After dinner I packed the orange
cuttings for shipment in two parcels
using dampened tree moss in default
of other packing.

I was invited to tea at there
at Mr. R. A. Young's house, the manager
for the Sociedad Anonima de las Salinas
and Mr. Young's three daughters and
a Miss Page, the latter an elderly
lady. Mr. Young tells me that he
had been here 30 years. He showed me
skins of the Puma and of an other
which he says is known here a lobo,
(a seal). The animal was of large
size. We had tea in a long
high ceilinged dining room and I
enjoyed the comfort of cake, home made
bread and butter. All displayed a
civil curiosity regarding my birds.
There seems to be a general belief
that bird life is scant here in spite
of the fact that I have now over 100
species from here in two weeks collecting
and that birds are very abundant.

later we played a few sets of
tennis in a court behind the house
with an Indian armed with a Winchester
in guard in the background. I do not
believe however that he was very
dangerous.

Ferrets are common pets here and
the young had half a dozen in the
back yard. The birds are kept at home
with little open cages in which
they are shut at night. We carried
two out and purchased them in traps
near the tennis court. I see they ferret
about many of the houses here.

This evening I catalogued specimens
part of alcoholics and worked in notes.

July 29, Thursday.

This morning I went up to the store
and purchased some boxes and other supplies
to use in packing up specimens. Cool and
pleasant today. At the store the
guards have a small box for a
guard house. Two of the men armed
each with a .44 Winchester were in guard
here. They had the inevitable fire
and were preparing breakfast in the
form of a bowl of mate, while strips
of meat were roasting over the coals.

On a rude gill made of some twisted
iron hoops.

This morning I prepared some specimens
secured yesterday. Although the weather
has been fairly cool, and though these
specimens were not more than 24
hours old the flesh was distinctly tainted.

It has been clear and dry for
two or three days now and I have
taken advantage of this fact to dry
out skins for packing. It has been
so damp previously that nothing has
dried. This afternoon I made over
some boxes and packed in good
sized box of skins. Also prepared
a bunch of alcoholics for shipment.
These I am packing in cans in cotton
soaked in alcohol.

The moon was clear and full
tonight. All evening I could hear
the rising and falling cadence of
the singing of the Indians in their
village more than half a mile away
in an air line. It was said that
"they are curing". The sick person
is placed on the ground and they
dance around slowly about
singing and chanting to effect a cure.

Las Palmas is very quiet now because
of the strike. Ordinarily it is a total
darkness every night. Now the
grounds at the factory are brilliantly
lighted but the village is in darkness
with lights glowing in the houses.
At regular intervals I hear the
trill of the whistles blown by the
guards. There was shooting again tonight
and I hear that one man was
killed in the ribs. The bullets
struck all of the windows in the
guard house this morning in broad day.

July 30, Friday.

Clear and cool this morning with
the air rather humid. I was out
early and left the ford at 7:15
crossing to the north side of the
riacho. I worked out across the
open country here through the savannas,
entering the grove and exploring on
tract of heavy timber. I found another
tremendous ant hill today at least
12 feet broad by four high. The entrances
that were open were all on the
north side. Little open trails led out

from this for at least 100 yards there
more through the grass. Some
mounds are also common across
this gun country. Some are thin to
fairly tall.

In the timber, I saw one climbing
Dendrocolaptid that I have glimpsed
twice now but that has escaped.
However I collected a Flycatcher
with a heavily streaked breast that
I observed but did not collect at
Piaxtancia. Also had glimpses of
Parus and of *Rhynchostes ruficeps*.
A hummer that I saw for an instant
looked like *Cyananthus* but of course
was some other genus.

Birds lay very quiet today because
of the heat and although I travelled
a long way between 7:15 and 12:30
I found comparatively few.

As I finished preparing my specimens
this evening I had a call from
Mr. Santiago May an Irishman who
has been here for six years. He says that
formerly the bookies here received
from 1.50 (pesos) to 1.80 a day but
that now they get 3.00 pesos. It was
of the opinion that they would win

the strike. About 40 men were
brought in by the company from the outside
today. This evening I worked in notes
until bed-time. The moon was
clouded but still it was bright out.
The little frogs make very pleasant
music in the evenings. There are
a good many mosquitoes but still
they are not very bad. No insects
come to my light save for an occasional
moth. Insect life at this season
seems rather dormant. There are
many March butterflies about. I
shot one two days ago to make sure
of the identity and I see occasional
wasps in the few hardy flowers. And
from a few flies and mosquitoes there
are all that are apparent.

I had a Danish toast with Mr.
Wiggen tonight.
"Din skaal, Min skaal, Alle vaktre Fædres
skaal."

July 31, Saturday.
Sky overcast again this morning with
a strong south wind blowing. Birds
are always active under these conditions
and I found today no exceptions. I

down to the lagoon, which by the way is known as the Laguna della Fabbrica, and found a number of birds. A Merganser stood standing vigilantly on guard with an ibis near by. ~~Two~~ my great delight, three lesser yellowlegs came by and circled fast several times out of range. Although I have been doing the work desired and have been watching for shorebirds it has been so much in a way that I have been accomplishing nothing until now these earliest of the voyagers have appeared. They seemed rather tired and may have come from some distance. Later the Phalarope came overboard.

From the lagoon I walked around to the south striking a wooded swamp with a broad open savannah extending for miles on my right. Trails leading into the swamps had pools of water in them but I worked in and out at suitable places finding birds abundant. Company of dull grey Robins fed with several shorebirds in an opening a hundred yards across in the water. At my approach all dove into the brush out of sight. Caracaras and Black Vultures circled about and I saw yellow-headed Vultures at a distance. It grew warmer and a flock of swallows found travelling rapidly inland. Little flocks

of bush birds were made up of the Red-capped Sialia-like, Boobies, melanoleuca, greatcatchers, "Pachyphloia", with an occasional small white-throated Zonariid. I saw one cycularis that I collected and another that escaped; a female hummer was taken and a second species that I did not get was very fast. In one place I heard a sublimed tapping and slipping into the forest shot a beautiful crested woodpecker that may prove to be ^(Celen's Kery) Dryobates. Returning I followed out across the prairie watching for Semamon but saw none. I flushed one Dendrocolaptes in long grass that I have not seen before but it escaped. A short time later I had as the peculiar sensation of being utterly turned around in my direction for an instant. I had been following along a path east of north without in the least the railroad track without keeping any marks in mind. Suddenly the sun appeared through the clouds, far to the north of the midline of zenith, as it was near noon. In an instant my northern bearing was turning made shorter seem due south and I had to stop and readjust my mind before I was able to proceed.

A village of Indians came in this morning to camp on the level space fronting the lagoon near the cemetery. The women ~~carried~~ bore the heavy loads. ~~The~~ old woman apparently is more of the hard work than the younger ones as I saw them carrying great bundles of mats. They came walking on looking about with grunting sounds finally pointed out a suitable site, dumped their loads and sat down to look around. Light frameworks for huts were going up in all directions but the people were not working very hard as it seemed to turn off sleep and there was no need for a water proof hut.

I am told that now these Indians are forsaking some of their ancient customs and that they even bury their dead in boxes, especially since the factory here furnishes the coffins. On some occasions Indians came in requesting a coffin for an old woman, but they returned it and when asked what was the matter said that the old woman did not like it. She was still alive, but useless and they thought to bury her to get rid of her.

This evening a heavy rain came on and the air was saturated with moisture. I worked until about packing specimens that I had dried before they became soft again.

Expense July 1-31, 1920

Form 4

184.86

228.33

~~210.00~~

Salary July

~~394.86~~

413.19

Exchange sheet # 2982 shows 1055.20 paid at 2.3795.

Amounts expended

June 20-30

76.51

July 1-31

439.87

516.38

Balance on this sheet still available 538.82

Exchange sheet attached to Voucher 2, exp. June 20-30, 1920

August 4 Sunday.

This evening Mr. World introduced me to Cacique Major-domo, the Cacique of the Tobas here and in Formosa. With him was his nephew Florito Gregorio Florito who acted as interpreter though the chief understood Spanish and spoke a certain amount. The chief was a man about 3 inches tall straight and of a slender athletic build. His hair was black, his eyes dark and his color swarthy. He had a black mustache, rather poor teeth. Usual rather flat face with high cheek bones. He was dressed in Khakis with a light shirt & cloth sandals on his feet. Florito was in police uniform and was a short heavier built man. I found them upon a little fire with half a dozen other Indians where they were making mats. In the dim light of the fire and of a light or two near by we talked and explained my purpose in going to Formosa. The chief

recommended that I go to Fontana
where Manuel Martin conducted a
cantine where I might find
cama y comida as he cared for
chance travellers. The son of Cacique
Major domo, Felipa was here at
Fontana and would be able to give
me information & help. At kilometre
263 there was a somewhat larger
settlement with a Fonda. Both were
quite favorable for work. The chief
told me not to go too far inland
away from towns as the Palagas
and some other Indians were very
bad at present and he could not be
responsible for them. Recently they had
killed a number of soldiers.

This morning I turned out
at seven and cleaned up a few
skins including one more toucan
for one of the guards. The streets
and paths were flooded with water
after the heavy rain of last night
and the sky was overcast. After
finishing my specimens I prepared
the field chest for shipment.

About two in the afternoon Mr.
World came by with a hand car
pumped by four Indians and went
with him to the post. On the way
down we stopped at the Indian
Village and and took a general
picture of the whole thing. There was
much activity here.

The ride down and back was
pleasant: the air was cool and
bracing but I wore no coat. After
three weeks of field work I am
again toughened to the outdoor air.
Mr. World tells me that the petyo
at Las Palmas is only 4 metres higher
than the post and that on occasion
when the river was high water has
come half way inland to Las Palmas.
Small fields of cane were scattered
along. Few peach trees about ranch
ranches were coming into bloom
and the country looked very green
and fresh after the rain. *Piqueras*
grew up along the tracks, *Antanas* was
common, a mocker or two were

observed and I saw two *Coryphæna*.
Two vessels lay idle in the port.
I talked for a time with the captain
of police; the carestia de la vida,
high cost of living, is affecting him
and every one else, and he was much
depressed.

The strikers have cut out small
cutouts at several places along the
road but these have been repaired.

On the return to the port, two
indians who had been hunting the
little guinea pigs. They had bags
made from gummy sacking thrown
across their shoulders and had
ten or dozen of the animals each.
I bought three for a peso getting
good specimens. They men work
along slowly and I cautiously through
the marsh grass and kill the
animals with sticks. The hair is
very loose and as they walked along
the Indians were plucking the animals
as they would birds. The pigs are
called *so go nah*, or in guarani
ah pe re ah. In Spanish they are

sometimes known as *Coryphæna*.
They are found in damp marshy situations
among dense growths of grass; in consequence
the Chaco offers them a home of
excellence. In travelling through the
savannah near the borders of the
marshes I see the animals dart out
across little open spaces to disappear
at once in a hole. They make
runs three or four inches broad in
which are an abundance of droppings,
elongate cylinders elliptical in form.

In addition they eat grasses and
eat them leaving little piles of discarded
ends. Because of their dark coloration it
is difficult to observe them. They are
most active during morning and late
afternoon. Their presence here makes it
difficult to set small mouse traps
as they range over most of the country
and are too large to be captured in their
small traps.

We stopped at the village once more
on our return and walked out among
the Indians. Three men have been shifted
here to work in the cane and have

brought their houses with them. The
lath walls made of grass & rushes
formed into mats six feet high and from
six to twenty feet long. A rude frame of
light poles is set up and the mats
are leaned against them to form a
house open toward the north. A roof
is made of bundles of grass. In stormy
weather other mats serve to cover the
front. One house was about sixty feet
long with occasional divisions of poles
serving more as supports than as
dividing lines between ~~poor~~ rooms. This
house was apparently for men with
no home ties. About thirty or forty were
gathered here, some asleep on bundles of
grass others gathered around small fires.
All were dressed in shirt & trousers & light
leggings, most were barefoot, but many wore
the tall high canvas leggings reaching
from the ankles to half way up the thigh that
are used in traversing the sawgrass marshes
and the wooded swamps. The sawgrass by the
way is known as the Paja brava. These
Indians are superstitious regarding photography.
We stopped before the long mat and a
boy who spoke ~~linguistic~~ Spanish came forward
to talk. We asked permission to take pictures but
after some discussion the men said that they

did not care to have me do it. Numerous
small houses containing single families
were scattered about over the level flat with
no attempt at orderly arrangement. Among them
we enquired for Pujio ~~the second~~ in
command since whose men these are but
he was not there. However we found Pujio
a second in command. We enquired for
his house and then called his name.
He came running out with a winchate
in his hand looking for any possible trouble.
We explained what we wanted and
he told us to go ahead. So I took my
set view (and several others surreptitiously).
It was not well to presume too far
so that then we left. A group of men
at a distance were playing a gambling game
all laughed exceedingly when they found
that I had decided only to secure game
pictures. One of the men on the bank
told me that he cared not for a photo of him
or his wife but would not permit a picture of
his house. It is well not to force the
issue as it would lead to certain
trouble in case some one should suddenly
become ill.

The Indians administer their own law
among themselves with little or no interference
from the police. As a matter of fact the

The police seldom know what is going on
until everything is over.

Not long ago in this same village, one
woman was accused of witching
another. She witched one called beneath
and the Indians held the other responsible
for her death. She was seized and hung
suspended by the arms and legs for two
days. After certain ceremonies the Indians
then killed her by striking her in the head
with a hatchet. She was then taken down and
buried beside the one that she was supposed
to have witched.

In burial these Indians are said to
dig a hole in which the body is placed in a
sitting position and the hole filled in with
mud and top of shoulders projecting above
ground. Wood is then piled around and the
projecting part is incinerated.

I have been able to get no clear idea of
the religion of these Indians. When they die
they say that some go toward the sun
and others toward the south.

This evening I unpacked my
wild chest & skinned my fags. They have no
projecting tail whatever and the vertebrae
are very short. I saw no use in measuring
them as the measurement would be more or
less arbitrary. The guard hairs sloughed badly.
The skin was thick and tough and the
flesh adured badly so that it was

El portador de la presente es el Doctor Alexander Wetmore, Ph.D.,
funcionario de la Oficina de Investigaciones Biológicas de los Es-
tados Unidos de América, comisionado por aquel Gobierno para hacer
un estudio relacionado con la vida de las aves en la República Ar-
gentina, y que ha sido especialmente recomendado al suscrito por el
Señor Ministro de Agricultura Ingeniero Don Alfredo Demarchi.-

En consecuencia las autoridades del Territorio, se
servirán prestarle toda la cooperación que les sea requerida para
el mejor desempeño de su cometido.-

Resistencia Julio 7 de 1920.-



Enrique Taccares

necessary to do much cutting.

At night the songs of the Indians came regularly from the camp.

This evening I also met Moreno ~~the~~ had charge of all of the Indians in this part of the Chaco. He was a man six feet tall, broad and confident, with broad square face. All of these Indians have meddling skins. Moreno is a very intelligent man and is working steadily for the betterment of his people. He is against the universal practice of carrying concealed arms, knives & revolvers, as he says truly it can only lead to trouble. The second chief Cacique Burgos a man of similar size and build was with him.

August 2. Monday.

This morning I completed my preparations for departure. At ten I went up to the factory to see Mr. R. A. Young and to thank him for his kindness to me here. He sent the train down to the port at eleven in order to make certain of catching the boat. I had my baggage transported to the track and soon the engine came chuffing down. I had one man commissioned to handle the whole but four or five were helping all desiderous of tips. I had quite a

formidable pile, 9 quires in all as I had my boxes of specimens.

The rick, down was also usual on these little trains, we rattled along apparently at great speed but in reality making only six or seven miles an hour.

At every cut-off an Indian jumped off the engine and ran ahead of the train (did not slacken speed) to see that the strikers had not destroyed the crossing. I sat near the front but had to move as sparks from the wood-burning engine beat back on to me.

We left the village at 11:00 and reached the port, six kilometers away at 12:00. In half an hour the boat from Corrientes came in sight but the current was so swift that it was half an hour before she made a landing. A row boat, a ferry, came across from Paraguay, with a cargo of passengers, bearing immense birdcage bird baskets and bundles some in a cloth with the four corners tied together and many oranges. After the passengers had disembarked a policeman made a perfunctory examination of the boat for contraband.

At one o'clock I was officially booked as a. Wetmore, north-American, bound

for Formosa. And my baggage was on board. The steamer I was on was a police boat but was a double deck boat, much more commodious than the one in which I came here. There is a Marine strike in now that has tied up the entire coast and since then service of the nation and the government is running small boats to handle the necessary traffic until the labor trouble has been regulated. Boats have been running from Corrientes to Formosa in Monday and Friday but now go only on Monday.

The boat was in ~~good~~ ^{poor} condition and was crowded with passengers, a theatrical troupe, all in couples, presumably married, several young officers in the army, with a sprinkling of lawyers, business men and casual like myself. It had been cool and fresh in the morning but turned warmer at noon. I ate a scrappy meal of a tough gopher's criddle and another plate of ragged meat and then went on deck. The current in the Rio Paraguay was very strong and wharfs made steering difficult and a matter of labor.

We hugged our bank on the other side
to avoid the strength of the windstream
current. She was well olive brown
in color. The swiftness with which
it passed made it seem that we were
travelling with great rapidity, a deception
easily detected by observing the
shore receding above us.

Soon the third sun came out changing
the dull gray blue of the banks as
viewed at a distance and bringing out
the very clear green, olive green and
bright yellow green of a landscape
fresh and clear from the rains. A feeling
of depression that I had had earlier in the
day, due without doubt to indigestion,
ceased and I found a seat on the bow
from which I enjoyed the vista.

Crocodiles or alligators call them which
you will, - the English are forever arguing
the proper use of these two names for the
South American animal, part contending
that crocodiles are peculiar to Egypt -
headed out on the river bank to lie
in the sun drew the ~~fire~~ pistol fire of
the officers. A big german, without
doubt, recently from the army ~~and~~ ~~was~~
brought out a Winchester and other
passengers produced old and new guns,
all including the officers were four shots,
I saw for me ranchman who usually

hit the animal at the second shot.
Often the jacaris lay motionless even though
died, more often still they started for
the water more alarmed I thought
by the sharp reports than by the bullets.
Some were at least twelve feet long
and were large and heavy.

The large Kingfisher, *Troglodytes* ^{*torquata*} was
common and was found always in pairs.
The cut banks here furnish them with
abundant sites for nests. *Chloroceryle amazons*
was common also. The birds sat on limbs
or sticks above the water jerking their tails.
Occasionally one threw the head up to rattle
and at the same time jerked the tail clear
of over the back, as though it was attached to
the head by a string.

The river averaged from a quarter to
half a mile wide and in general appearance
reminded me much of the Mississippi. The
channel apparently was much deeper than in
that stream. The banks all along were wooded.
In many places there was a dense growth
of a tree with a fan-shaped, palm like
leaf at the summit. On low shores trees
overgrown with creeping vines forming a dense
tangle hung out over the current. In places
cattle and game trails broke out through the

dense vegetation at the waters edge.
Late in the afternoon I went below to locate
my camp bed before darkness came and
then sat for some time at the lower
deck, only a few feet from the water.
Here my head was on a level with
the shore and I could look out directly
into the heavy growth. ~~Until we~~
~~approached~~ ~~the~~ ~~mouth~~ ^{Huayata} Paraguay was
situated immediately on the river bank
a small place with scattered houses.

The remains of a large building,
destroyed by cannon shot many years
ago stood out prominently.

At the mouth of the rio de oro was
a house in files occupied by a party of
five marines. The river led back into
heavy woods with the shores clogged
with floating vegetation.

Until we reached Puerto Bernijo
the banks were almost entirely unaltered.
For a time near this place we passed
scattered ranchos and little clearings.
At one ~~we~~ saw twenty or more bundles of
grass cut and stacked loosely against a
pole to dry; these were to furnish new
thatch for the house. Men were fishing
here with two or more lines tied to a log
for security and set up on low stools
from which they felt when a fish took
the bait.

Puerto Bernijo, known formerly as
Simbo was a place of some importance.
I was told that there were two schools
here and ~~as~~ we arrived near dusk
half a dozen electric lamps over the
streets were lighted. The town is
situated immediately on the shore and we
we landed directly at the bank. The landing
was characteristic. A boy threw a line
ashore to a man from the police office
who drew it in rapidly to find that the
sinker had forgotten to attach it to the
cable. When we finally ~~discovered~~
made fast two long planks were thrust
ashore and old ladies and other
passengers were led ashore over this
precarious footing. The younger and more
agile walked over alone. Baggage and
mail followed in confusion. At least one
hundred people were gathered to watch the
landing. A bat circled past and at last
was seen off again. It is well that I did
not come here as the country nearby does
not appear as good as that at Las Palmas.

About 8:30 we shut down off Carno
and a long rowboat manned by three
men came off. Trunks, mail, a sewing
machine and passengers were bundled in

And we were off again in a rapid
fire volley of Spanish. Villa Pilar, Paraguay,
lay across the river.

Many brilliant fireflies with a fine
white light were flashing along the
shore and a number came aboard.
An electric light globe on board. I
collected several with a large number
of staphylinids and one or two other beetles.
About nine the lights in deck were
turned off and I rolled my blankets
on a broad steel plate in the bows
where it was cool and pleasant. Elsewhere
the deck was hot. I saw for a streak of
rain that drove me to shelter for
half an hour. I slept soundly all night.
The dim vista of passing shore is
the coming was beautiful. Once we were
off the channel and rolled on bottom.

August 3, Tuesday.

At six this morning when I awoke
there was a patch of brilliant pink
on the water, reflected from a coming
sunrise in the east. I slipped on my
trousers and as I rolled my bed it
suddenly became daylight. The sky was
overcast and the incoming air was
fresh. Formosa was soon in sight

and at seven we made a landing
at a rush platform in the bank of
the river. A village of low huts lay
on a small island opposite which
the main town was spread along on
the high cut bank of the main shore.
I secured quarters at the Hotel Formosa
a hundred yards from the landing and
went back to secure my baggage.
I was delayed in getting it done by
the disembarkation of a tremendous amount
of mails. The sky was threatening and
as my trunk I went ashore. A
sudden shower broke. Two cargo men
that I had engaged grabbed the baggage
however and thrust it and the trunks
under a convenient canvas tarpaulin
and they remained in shelter until the
rain had passed. My entire lot was
then carried to the hotel.

I had a shower bath, clean clothing
and a much needed hair cut and then
went to the post office. I received only two
letters, one from Richmond & one from Holt.
Richmond's letter left Washington so that
there is something wrong here.

At eleven I called on the governor
of the Gobernación de Formosa and
presented my letters. The governor
Sr. Juan Comas was a man over
six feet tall and broad and heavy.
I explained why I had come and
that I merely needed a letter to
show the police which he promptly
wrote out himself and handed me.
He said that here in Formosa there
was only one law protecting birds, by
that prohibited killing the garza
and the mirasol sol for plumes.
There were no ~~game~~ other game laws
as it was necessary to permit the
Indians to hunt at all times for
food.

At the station I learned that the
Fontana lies at kilometre 182 and
that trains go out on Tuesday
and Friday but seven in the morning.

A heavy rain came on after noon
and settled down into a slow drizzle.

I worked on notes and official routine
all afternoon. At times it was so dark that
I had purpose to cease writing.

The boys here have a game known as

bolero that is peculiar. A bit of horn,
pointed at the end, is attached by a
string to another square cut larger
bit of horn with a hole in one side.
The trick is to hold the pointed bit
in one hand and jerk the other up and
catch the hole in the point as many times
without missing as possible. I paid
30 centavos for one.

There are electric lights here at the
hotel but not in the rooms. Rain continued
through the evening and after an excellent
dinner I spent some time in talk with
men in the verandah. I share a large room
with a Paraguayan gentleman who is desirous
of learning English.

For dinner I had a jambon, soup,
Puchero criollo, a dish of potatoes a cheese,
and a small steak with lettuce, followed
by two peaches served on an ordinary plate.
I drank tea instead of the usual coffee.
The hotel here is a one story brick structure
building with rooms opening on to the
verandah. There is the usual line of lower
buildings containing rooms behind a
patio. Yantias and other tropical plants
form a garden in front. There is one beautiful
trumpet flower in bloom. A few Chironomids
and a crane fly came to the light.

The dining room was a long bow room with brick floor badly out of repair. The walls were tinted a pleasant dull red brown, various lithographs hung on the walls, a piano, sadly out of tune stood at one end and clean white curtains hung at the windows. The whole gave a pleasant air of comfort and well being after the rather such conditions at the Jorda in Las Palmas and I lingered over a cup of tea for a few minutes to enjoy it to the utmost.

August 4th Wednesday

A fine clear day with a strong west wind. The streets here are unpaved and the sidewalks bad so that this morning everything was a sea of mud save the little travelled side streets where short green grass stretched from curb to curb. The wind however operated to dry things off in good shape.

This morning I started in on my expense account for July a long job as many explanations are entailed. This occupied most of my time during the day. I also completed my notes for Las Palmas and put them in shape and packed a lot of alcoholics a job that occupied much of the

afternoon. Ants are bad here and got into one of my boxes of specimens this morning. I succeeded in clearing them out however. I shall be unable to store specimens here until my return from the interior as there is danger of their being destroyed by ants. The express service I had been discontinued because of the marine strike and the boxes are too large to go by mail. Finally I arranged with the Comissaris or the police boat to take them to Corrientes and to expend them to Buenos Aires. Addressed them to myself care of the Museo Nacional and wrote Dr. DeBorja asking him to care for them until my return. There were three boxes. I paid the Comissaris 3 pesos for handling them and gave him 20 pesos to pay charges from Corrientes on. His to learn the change if any with Don Santiago here at the Hotel.

Formosa is rather a straggling town with broad good streets and scattered one story buildings. The Avenida de Mayo has a line of Eucalypts down the center.

and Casuarina, & legumes & Bombards
grow in yards. The city is ~~very~~ old
evidently and most of the buildings
are rather dilapidated. The Governor's
house on the Avenida is a striking
exception. On the Verandah at the
governors house are hung a dozen
Pages containing Pheneticus, canarius
etc. There is an open market for
oranges at the wharf and a
two story railroad station.

The men here are courteous and
polite and I was much pleased
with my reception. I share a room
with Dr. José María Silva of
P. Comayo, Formosa, a Paraguayan
gentleman who is learning a little
English and find him a pleasant companion.
Aug. ~~Sept~~ 5, Thursday.

This morning I completed my expense
account a long job. Was pleased to
find that the total was no more than
for similar work in the state. With the
"cheap" money of Argentina I am always
paying out. I had a bill of 5.0 pesos

And in a short time it is gone.
As the peso to one is like a dollar
my expenses have seemed tremendous
until I came to reconvert them into
our currency.

This morning I rose at six and
had a cargador carry three boxes of
specimens to the police boat for me. I
had expected to forward them to Washington
from here but find that the marine
strike has interrupted communications
until there is no means of parcel
shipment here. My boxes are too large
to go by post so I have arranged
with the Comissario in the police
boat to take them to Buenos Aires
where I have addressed them to me
care of the Museo Nacional and have
written Mr. Dabene asking him to
care for them for me. I find 3 pesos in
transportation to Corrientes and gave
20 pesos to prepay the freight to Buenos
Aires. The difference is to be left with
the hotel Kupfer for me.

The day was fine clear and cool.
I had desired to spend this evening

Ferrocarril del Estado was modern and seemed to be well kept. The road is an enterprise of the ^{Argentine} government and was undertaken to open up new country. It has now been completed on this end to Kil. 297 and at the other end it below stops at Emburacacion. The engine was a woodburner, of course and was of German construction. Passengers coaches were reasonably commodious and we carried a dining car. Freight cars were painted gray. One stock car was equipped as a travelling butcher shop. Carniceria - and had most of two beers in evidence hung in hooks. This was to supply people along the line.

Sunrise over the river was beautiful. The sky was absolutely clear with a pink glow in the east. The River bank was entirely bare here with a cut bank descending abruptly to the water 15 feet below. Several eucalypts with their open foliage and graceful outlines broke the straight outlines of the bank, beyond was the ramshackle

Adwaga ^{below a boat by two} and in the river a long island with rows of grass into along the shore. The further shore showed as a dark line, from which a rowboat was crossing, the water was smooth save for swirls made by the swift current. The air was cool sharp and invigorating.

A bell on the platform rang, a train guard blew a whistle and the train started. We carried a saloonlike car behind for officers.

The paper, money here in Argentina, especially the peso became much worn in passing from hand to hand. I learned today that it will not pass current if the number is missing. The paper is not of good quality and the money is easily torn.

The railroad pursues a westerly course ~~below~~ midway between the Bermejo and Pilcomayo Rivers. The entire region traversed today was level. Broad stretches of marsh and open savannah were

interspersed with groups of mont.
Near Formosa I saw broad
savannas dotted with innumerable
palms. The fully grown trees had
bleached trunks and round bushy
heads with fan shaped leaves and
gave the appearance of veris alternata.
What I take to be the young trees have
the broken patches of leaves entirely
covering the trunks. These palms
cover the open country for
broad great distances. The trees is
of importance as the trunks are
used for posts or split and used
to form roofs for porches and houses.
The center is cut out in a broad V
and the pieces cut in suitable lengths
are then placed alternately one on
the other to form a water proof roof
that turns water well. Thus.



For much of the distance the
train road ran through a
broad estero known as Pirani, meaning
putrid fish. Broad stretches were
covered with a narrow leaved Jolly

Others by a sedge ^{to ten} feet high
with an umbrella head. Occasionally
stretches of open water were found.
Broad ~~flat~~ areas were dotted
with thousands of ^{small} hills
from two to three feet high standing
from 10-20 feet apart. I saw
literally ~~thousands~~ hundreds of
acres of wet marshy ground occupied
in this manner during the day.
At intervals of 20 to 40 kilometers
the road crept out to the edge of
the estero and there was a small
station. All were numbered. I
~~noted~~ according to the distance from
Formosa I noted the following
kilometers 34-53-83-109-134-168 and
182. There was a small station at
each with a few low houses, grass
huts scattered about. The country between
was practically uninhabited.

The English Sparrow appeared a Kil-34
but no farther. I saw a martin
Progne chalybea comitatus all along
the ^{country} ~~land~~ ~~also~~ that I took to be St.

was common. The birds fly up with slow strokes of the fully extended wing with a pause at ~~the~~ end of each up stroke, a curious thing. A small dark guan was seen in a tree at the edge of a marsh in open country with little clumps of brush about. (Pipit?) An ovenbird rested in the entrance of its nest in early morning. I wonder if they roost in these nests.

The train arrived at Kil. 182 known locally as Fontana at 3:00. Here there was a small corrugated iron structure for a station, a siding with the usual wooden crane for loading Quebracho logs, a police station and a dozen low houses. I saw my baggage safely off, - there was no baggage man and the train jolted.

On the train I had the good fortune to meet Don Pedro Ufity, who invited me to accompany him to his place 3 leagues northwest of Fontana. This was good fortune indeed as for a considerable distance about Fontana the monte has been entirely cut away for Quebracho, and the country

is bare and few. At 4:30 we loaded various things including my luggage into a two wheeled cart drawn by four oxen and were off for a slow bumping ride across country. The road constructed by Don Pedro led across the open prairie. At first the country was almost entirely green with only an occasional stump, blackened by fire to show the original ground. Short grass covered the level but much had been burned over. Heavy smoke from grass fires hung over the horizon. Further out we passed occasional patches of monte. Darkness came and the stars came out in a clear sky. The air grew cold in contrast to the intense sun earlier in the day. I collected a number of mosquitoes. We crossed an estero or two in the darkness and finally at 8 came to the estero where I met Don Juan Grass & Srta Ufity. Baggage was unloaded. We had a fine supper of chicken, potatoes,

and I was glad to turn in for the night

August 7, Saturday

I was out this morning at sunrise at six and found the air cool and clear. The day was clear. The men were busy with work and I wrote for a time in notes. A fire in the kitchen was a good companion as my fingers were numb. By eight I had my baggage arranged, all sleep in a very good bed and have placed my chests in a building opposite used as a cotton gin.

The farm here is known as Linda Vista. It is placed on a slightly elevated tract and is the best in this region. Don Pedro tells me that he has occupied this site for four years and that he has made all improvements himself. He with partner now has a three brown horses, containing a small stock of groceries and other articles, a kitchen, and a cotton gin are arranged in part in a square with other buildings scattered about. The buildings are well built of adobe mixed with straw. The floors are of hard dirt. They are sprinkled every day so that

they dry hard. Everything is neat and clean in great contrast to the slovenly customs of some of the Paraguayos here. Both Don Pedro & Don Juan his partner are types of progressive men who will develop the country here to best advantage. They have farms employed and also use Indian labor. They plant cotton, maize, sweet potatoes and cacaos. The frost I note has killed some of the delicate plants here.

This region is or what is known as the Riacho Pilaga and lies about ten miles northwest of kilometre 182 on the railroad. Pilaga in the Chacabian tongue signifies Linda Vista or a fine ^{or pleasant} view.

I went out through the monte near the ranch house this morning. The country here in this Chaco is of different type than that below. The monte contains the same type of trees but there is an undergrowth that is impenetrable. I lost a number of good birds that I killed because I was unable to get in to them. This evening I bought a

machete is without it I can do nothing.

There is a curious mixture of wet and dry here. At present the *Sevammako* and *monte* appear very dry. There is much cactus and I see a tree that I am sure is a *Paloverde* growing at the edge of the *monte*. The fleshy leaved plant is also abundant, *surpecimim*. One that is suited to retain moisture during dry spells. Although this is true at the same time there are innumerable spots where water stands in pools at the roots of the grasses that I was continually making detours to avoid them.

As the sun mounted it grew intensely hot. Birds were less common than in the other Chaco but were found in good numbers. The country appears dry and does not have the green grassy appearance of below.

A parakeet feeds in abundance in the potato fields on the ground in company with blackbirds. *Zonotrichia* is engaged in mating. *Columba picus* and a *Columba* feed in flocks in recent

burns.

The whole country is ~~more~~ tropical than that below. It would seem to be a transition spot verging toward the dry country west. There is much alkali in the soil and white incrustations appear in many places.

On the afternoon I arranged my things and made up skins. This evening I set a line of traps at dusk. Strange birds were calling for the *monte* and I was tempted to break the track and return for a gun. In the evening we had music for the phonograph.

August 8 Sunday.

I am told that *Cacique Myrdano* last year sold 78 kilos of plumes of the *gorra blanca* and more of the *gorra* between 8,000 + 9,000 pesos. Today Don Pedro showed plumes of the *hibons* that he had on hand. Last year men came out from *Domosa* in an ox cart and brought up the entire supply. The killing of these birds is prohibited but there is no control of the *chachans*. I am told that if a man kills an

Indian that it means a long sentence
in Sierra del Fuerte but that if an
Indian kills a white man it is only
a month or two until he free. ~~Some~~
months ago Indians came in to
work at Palmiro 263 but ran
short of food and killed one or two
bullocks. I doubt started and the
~~Indians~~ ^{settlers} killed over one hundred Indians.
This led to considerable trouble and
many of the settlers here through fear
returned to Formosa. Others remained
and were not molested. Only a short
time ago a man was forced to kill
two Indians who were attempting to
rob him in Fontana. The matter was
brushed up until he was able to get
away into Paraguay.

Here in this back country the
whole region is government land. Survey
have been promised but nothing has
been done. The settlers though hold
no title to their lands which asks
well for their plea and perseverance.

I had three mice in traps set
in the cottage this morning but
nothing in the fifteen traps set out

in the month. I had in the gin
one of the long-tailed mice and two
young ones of another species. One of
the latter was eaten so that I
discarded it.

As this was Sunday I did not
go out very far but at that worked
hard all day. I was provided with
a good machete today and did
better in the monte than yesterday.
There was a light fog rising near
the ground and the grass was
drenched with dew. I followed
the monte and the edge of the beam
around to the next settlement. When
I could. I found the same dense
growth as yesterday. Birds were more
common and I secured a number
without especial difficulty. The heat
of the midday sun here is intense and
after 10:30 birds are rather inactive.

This evening Don Federico a neighbor
sent over a man with 5 birds ~~which~~
killed with a 22 rifle and invited me to
visit him. Among the five were three species
that I had not ~~before~~ ^{before}, a white-headed flycatcher.

and *Porocaria capistrata*. I skinned the flycatcher but had to save it as it was badly shot in the head and the others got over.

Was busy running traps in the cotton gin tonight. Caught 8 mice in four traps before I turned in.

August 9, Monday.

Was out this morning at 5:30. Had bread and coffee and left the house shortly after six. The morning was clear and cool but as the sun mounted light clouds came over the sky and it turned intensely hot. I crossed out on the main road to Fontana as far as the next lagoon. The road wound through the gum between groves of low timber. A flat pad cactus with few spines was common, and another with 4 sides was noted. I collected a *Chimaphila* with fleshy stem in an alkaline spot. 8 m. from grass fires rose all around and later clouded the distance in view. A low fog overhung the savannah in early morning.

The aspect here is exactly that of

the lower everglades in Florida. There are the same gum stretches of somewhat marshy *Savannah* and the same hammock growth, though of course the vegetation is entirely different. Birds here are active during the early day but become quiet as it becomes hot. At the lagoon I came to the house of Don Federico which stood on a low bank above the water. The lagoon like others seen here was fringed with a growth of *Sypha* 6 to 10 feet high. Gallinules were swimming about in a bank were in the water and small passerines that looked interesting flitted about in the rushes. I inquired for a boat and was soon outfitted with a craft of a sort new to me, a balsas. An Indian cut a quantity of green rushes (*Sypha*) and bound them in four bundles. These he placed side by side and bound together with the

butts all at one end. He then twisted
the long slender outer ends together
and tied them using such stalks
for this. In half an hour I had
a rude craft, 8 feet long, and a
width less than four feet broad at one
end that tapered to a point in front.
The whole floated buoyantly 10 inches
above the water. I was travelled
in various strange craft but was
doubtful at first of this one. I
found to my surprise that it was
comparatively stable. I kept as
rather squatted in my hub, canoe
fashion and propelled the craft with
a pole. As the water soon became
deep I was forced to paddle so
that progress was slow but certain.
In this manner I travelled around
the lagoon, bagging four gallinules, a
grebe and several small birds. With
practice I was able to paddle this
craft as I would a canoe from inside
only. Birds showed comparatively little
fear of me although I loomed high
from the water as the Indians bear
their craft constantly in jeering.

I found that I became stiff in
taken from kneeling and of course
was wet from the knees down
although when I was aboard I
was five inches above the water.
I was careful to stow my guns when
they could not fall off. The lagoon
was from four to six or ten feet
deep. The water was clear but
brown in color. A water plant resembling
Ceratophyllum grew in it in abundance.
I found that it was impracticable to
push my craft in among the
reeds and so lost a number
of desirable small birds that fell when
I could not reach them.

It is curious how local some of
the life is here. A Cotinga, that in the
male is black with a white head
inhabits these rushes near the water
but is unknown elsewhere. The yellow-
throated & yellow-billed cucks and chatters
like a marsh wren exactly and
strange cucks and calls from the
interiors of the rushes. I would
have given much for a good small bird

After two hours of this travel I
came ashore and shortly after returned
to Onokros. On the lagoon at the
house I saw a *Barkidius* and
a *Chaja* but was unable to get
either.

After dinner we hunted up a boat
on the lagoon here but found it
not reliable. The afternoon sun
was intensely hot and I was glad
to return. I had an appalling
number of specimens to catalog and
prepare and succeeded only in getting
the mammals and few of the birds
finished before dark.

Myzobolus were quite bad here
now for a short time in the evening.
Flies are very numerous and are
a pest especially at night.

As I work in the afternoon I hear the
incessant screeching of parrots.
Myopitta maculosa

Last night I set a few mouse
traps in the cotton gin when I
work and secured in all eleven
mice that I made. A species with

very long tail was taken and is
also found in the house # 1074-5.
This seasonal progression by leaping &
near them constantly in the cloth
ceiling overhead at night.

Another species # 1070-12 appears
to be *mus musculus* although I did
not have time to clean up the skulls.
If it is that species it is most curious
as this point is far isolated from
a spot where this mouse might
occur.

Another # 1073 appears similar
to the white-footed mouse.

In addition to these I secured several
examples of a coarse haired rat with
moderately long tail # 1077-8-1080.

These animals are very tough & strong.

1079 appears like an *Allyzomys*.
The bait used was a bit of sweet
potato in the trigger of the trap.

Aug. 10, Tuesday.

This morning I had a large
number of birds in hand and yesterday
I was able only to care for the mammals
and to get the remainder of the stuff cataloged.

The morning was cool and pleasant. I began work at 6:30 as soon as it was light enough to see and found that my fingers were rather stiff with cold. Worked until about a quarter of ten and then walked out around the border of the lagunas where I collected a few birds. A Screamer cluded me. I shot a Tinamou too that dropped in high grass where I could not find it.

On my return I saw a Coati lops across a little opening but could not get a shot. For some time it moved about among the vegetation and I followed but was unable to catch sight of it.

The early part of the afternoon was occupied with skins. About ten Indians from a village of Tobas north of here began to come. These men had fresh skins of foxes and cat like animal or two. One or two were able to talk Spanish. I spoke with them for some time. They get 1 peso each for skins. I offered them 2 pesos if they

would bring the animals in caters. Later one boy brought in a Beautiful Zorro Colorado. I offered him 2 pesos for the skins and 2 pesos additional if he would go back & get the skull. I paid him half & promised the rest when the skull came. The skin was a fine large one and I spent the evening in fleshing it and in salting it well.

The Indians were Tobas and averaged 5 ft. 8 in in height. They were rather heavy set but that did not show strong muscular development. They were clad for the most part in cast-off garments from the soldiers. Several wore overcoats but had nothing underneath above their trousers. It is the custom of these people to go naked save for a bunch about when away from civilized men. Several of the men wore crude mocassins made from the skin of the oso horninguero. All had bunches of ostrich plumes in their hats. They wore necklaces or hat bands of crude stone beads. In one case a hat-band was made

from ordinary small white buttons.
Two had wooden pipes cut from
Palo Borracho.

They brought skins, keraw plumes and
other feathers for sale, bringing in
a few at a time. They told of a
large gorged or colony of Garza mora
two days distant where the herons
now had young and wished permission
to go shoot ~~out~~ the colony.

One had three tree ducks and a
Sarkiloinis that he had killed, all
skinned. Another brought a rabbit
skinned and still alive.
A 1082, skinned and still alive.
They have a habit of carrying animals
alive in this way. This rabbit
was a pregnant female containing two
young.

The Indians established a crude
camp without shelter a hundred &
fifty yards away at the edge of the
monte and passed back and forth
trading until dark. Trading is carried
on through a window that opens to the
outside and the men are not admitted
within when the goods are kept.

About nine I went over and
visited their camp. Part were asleep

but five men including Cacique
sat ^{on the ground} ~~on the ground~~ a small fire around a
small fire. We spoke and came
up and sat down. After a minute
or two I passed word some of the
leech para guayun cigars made from
the uncurved leaf. These the Indians
crush and smoke in their pipes.
One in the group who spoke
crude Spanish kept up a sing-song
conversation without respect to whether
I joined or not. The others spoke
at intervals or conversed briefly in
their rude gutturals. The Spanish
with a sing-song effect as the
parrish bad Indians have a tendency to
accent each syllable equally as they
do in their own tongues. Their use of
verbs is primitive and they speak
many in the present participle - thus
as I came up and sat down, the
boy spoke after a minute "hablando
con los indios, tomando mate." As
he talked this boy brewed mate in
a large earthen bowl with a small
neck gourd which a bomba protruded

and passed it to the other Indians
in turn. Occasionally there was a
pause of a few minutes while another
small little of water was heated on
the coals. I was there for an hour
and the supply of water was exhausted
in the bowl.

One of the men sang at intervals
while the others conversed. He twisted
a ~~little~~ coarse fibres round a little
bundle of grass that he plucked to
make a drum baton. He sang one
or two which seated and then rose
and stood erect waving the baton
back & forth in a slight arc with
a slight wrist movement in time to
his music. The voice started loudly
and gradually died down until his
voice finally ceased and only the
swish of this baton was heard. This
continued for a minute and then
he repeated his song. The others paid
no attention to them.

They inquired when Cacique Mayabano
would return. It seems that he
had taken the horn plumes to sub and
had promised many things in the
way of presents and money which he

had not fulfilled. Four other Caciques
were going to kill him one night but
he escaped to Fortuna. I was told
that the Plagas ofuera was raising the
devil.

The night was dark and I had
only the feeble light of the fire. As
the flames leaped up they shone on
the naked torsos of the Indians
with their black hair curled down
straight in front, as they talked of
killing men as if night birds.
At 7:30 I returned to the house &
went to bed.

August 11, Wednesday.

This morning I left at a quarter
of seven with an Indian to show
the route to a trail or picada cut
through the monte by an engineering
survey party some years ago. The route
here in general is impracticable. The
game trails are obscure and do not
permit entrance through the dense
singing undergrowth, and cattle trails
them an none.

The morning was cool and sharp
and there was a very heavy dew. The

Indian was not only enthusiastic
and declared that the entrance was
my legs though I knew that it
was only two kilometers more or
less. He followed along behind gaining
it roared sweet jubilation as he
walked. My normal rate of walking
is much more rapid than that of
these people and I had to wait
for him at intervals.

The day was clear though a haze
of smoke hung in the air. I
saw the call before of the grass fin
at night in groups or few directions.
Tinamous were jumping from the grass
and as we passed she rose and I
killed it. It fell in dense growth and
I could not find it: I became thoroughly
wet from dew during the search.
We passed along the border of the
monte. At the entrance of the trail
a parrot with an acutely pointed
bill flew out to enjoy the sun in
a tree and I stalked it and killed it.
I paid off my Indian and
sent him back alone. The trail
was a narrow foot path passing

north through an extensive monte.
Large trees had been cut down in
making and formerly it had been
broad land open. Now the undergrowth
had crept out and enveloped all
save a narrow trail through the
center that wound about obstructions.
At once I killed a fine pair of
Scapanus leucopogon. The male was
drumming from the top of a dead
tree. The female contained an egg
ready formed.

Indians had passed along the
trail about two weeks previous.
I saw fresh tracks of deer and of
peccaries and a fair-sized cat.
The monte was of the usual type.
Trees 30 to 50 tall formed a grove.
Underneath was a heavy undergrowth
of thorny plants and creepers. Below the
ground was covered with the spiny
Bromelia like plant. Every bird that I
shot fell in among this and I had
to cut a trail to it with the
machete. My legs became sore from

The thorns and at times I hesitated
to enter. Many bird voices came
from beside the path but it was
impossible to stalk quietly as I
had continually to cut with
the machete. Much of the growth
had hard tough wood that resisted
the knife. Occasionally a branch
more springy than usual sprang
back & struck me a stinging blow
in the face.

A Sereus-like cactus grew
twenty feet high. Small palms
were common. I passed through
growths of some composite with
a fetid odor (see specimens). Also
collected a vine with a blue flower.
All was of the greatest interest.

I slipped along as quietly as possible
occasionally pausing to squeak.

A Furnariid the male with a
black throat came out in the dense
growth. Until now its voice had
been a mystery but today I secured
five. The curious sick-billed
Dendrocolaptes hopped out alertly and

A hummer darted at my head.
I passed one or two other holes
and came finally to a broad
marshy open. This I crossed and
then I turned back and had
come a league in the trail and
had many birds. The return
was rapid. I paused to examine
strange plants and to secure a
bird or two. I was soon in
the open and my return was
speedy. I stalked and shot a
beautiful brown hawk of large size.
It had very long legs. Paroquets
(Myiopsitta *imberbis*) came swimming
out the drink at the pagoda and
I killed several.

It was after twelve when I
reached the ranch and I sat
down at once at the table.

The afternoon was a busy one.
As I had more than thirty birds
and mammals on hand, cataloguing
was a long process and though
I worked until dark I had many

still in hand.

As I work I heard the continual screaming of Myiophila monachus as they feed in the plowed field opposite in company with Geomysopus chrysi. Occasionally a Chaja calls and at dusk the strange notes of the Aramides come from the lagoon.

August 12, Thursday.

Toba names for animals.		<u>soba</u>
Oso homiguero	<u>guaram</u>	Poti
Zorro Colorado	aguará	allukh
Chancheo negro		'kias
Chivo de monte		cher a no gôh
Chancheo de monte		yu loh

This morning it was clear and cool but a wind during the night had kept down the dew. I walked out for an hour this morning and killed my first specimens of *hemicorpus candidus* but spent the rest of the day at the ranch as I had a large number of specimens to can for. As a fact I worked steadily all day until dark and had to put tools & specimens away with the aid of a flashlight.

It was very hot today and would have been unbearable save for the wind. The Indians left today bound in some business of their own in the back country. I bought the skin of a fine red wolf from one with the understanding that I pay him half the price and the rest when he brought the skull this he did not do. These Tobas seem of rather low order of intelligence. They have no idea of distance for one thing and are slow to grasp an idea. For example ~~the~~ fox skins sell for 2 pesos each. I offered four for my best fox with the skull paying 2 pesos down. The animal was killed between Pilaga and the Indian village. Instead of getting me the skull the boy went all the way back to the village to get three or four dried skins expecting the same price for them and then had to sell them for a dollar.

Country fare here is simple -
For breakfast we have coffee milk
& gallettes, for noon, soup, &
spaghetti, eggs, sometimes chickens
pigeon or duck. At night rice,
noodles etc. Pickled sweet potatoes
baked in a bowl over an emerald
with each meal. Mandioca comes
once or twice a day. The latter
two serve as the bread of the country.
Fresh meat & the other game is
difficult to obtain.

Some of the mice that I get are
infested with a small mite that
is very troublesome. The creatures
have the pernicious habit of biting
me on the scrotum and as the
bite is as severe as that of an ant
there is nothing for it but to undress
and scrub the part. When first
discovered I thought that I was
in for something worse as I have
slept in some rather shabby quarters
recently. At each bite I swear
that I will never set another mouse
trap.

I secured a number of fleas from
a rat today.

August 13, Friday.

This morning the sky was over-
cast and the wind in the southwest.
In consequence it was cold: a sprinkle
of rain fell at intervals during the day.
The cold here is less severe than at
Las Palmas however.

I left the ranch early and followed
east as far as the Riacho Pelaya
or as it is known here the Monte Verde.
I followed carefully along the border
of the monte hoping for a shot at
a deer but luck was against me. I
saw plenty of fresh sign and tracks
of small deer called by Poccoy but
failed to encounter the animals. In
one place a jaguar apparently had
killed and eaten a calf sometime back.
The calf had been dragged into the
edge of the woods under cover
and only the skin, head and leg
bones remained.

Long tongues of monte and smaller
isolated groves were spaced with
open saramakas. In places there

were small bagsons but in general
the land was high and better
drained than farther back. The trees
were from 20 to 60 feet high and
many were of good size. The Brambles
were abundant and formed a floor
under a dense growth of thorny
bushes and small tough lianas.
The whole was impenetrable save
by use of a machete. Occasional
I was able to work in a few feet
inside the border but never far.
Trees standing in the open island
had been in part destroyed by fire.

A flock of *Ortalis kamoharui*
appeared in the tree top and by a long
shot I bagged one. A pair of
Muscovy Ducks passed and I shot one
but lost it. and had bad luck with
an Aramides. Lobo, a dog who
had followed worried my Chachalaca
or Charata, better called here, but
a sharp blow with the flat of the
machete taught him better and he
did not molest my other birds
though he was frankly disgusted
when I shot a yellow-headed buzzard

and seemed compassionate at my
desire for small birds. The Chachalaca
look to the tops of the trees at sight
of him and the Wood Rail flew.
At last I reached the Piraes but
returned in a short time. I had
been so intent on deer that I had
not paid close attention to my trail
and so followed a back track
through the confusing monte rather
than chance losing time over
a short cut as it was late. At
a general glance this level country
presents a confusing similarity of
vista and it would be an easy
matter to lose myself here when the
only way out would be to strike
south to the railroad game trails here
are small and are trampled by
animals of such low stature
that they are useless for human use.
Aside from one or two new made roads
and a catth trail or two, some or two
Indian trails the country is trackless
and away from the ranch toward the
north is broken save in two or
three places. Fires have taken the grass

in many places but in others the
growth ran from my waist to my
shoulders. I had therefore wasted time.

I returned to the ranch at
twelve and worked on skins all
the afternoon. The wind whistled
through the open cotton-wood in
which I worked but I did not
feel the cold so I did not feel
through I was less warmly dressed.

In the evening it rained. I
worked in the kitchen, a small
separate building with a stove
for company, until 11:15 on
notes as I was bound.

August 14, Saturday.

The dawn this morning was cold
and damp. As daylight crept over the
land the clouds broke and drove
away before a strong south-east wind.

At six thirty, as I crossed the open
savannah toward the forest my fingers
tingled in the cold air and my
glasses blurred with mist. The
grass was wet but less so than
I had expected. I followed east again
and south to the Riochito and
then continued along the stream for

some distance. As I entered a tract
of woods below the house a pair of
Hypothymis began their weird calls,
just one alone and then the two
in concert, a wild laughing combination
that would be startling indeed to
one not familiar with its source.
I slipped in through the *Bromelia*
toward the birds, careful of
the sharp thorns that scratched
my knees. The calling continued
steadily for five minutes. After a
hundred yards I saw one of the fine
birds resting quietly in the fork in
the upper branches of a tall tree
and in another second it was mine.

The Riochito Pilaga was at this
dry season a small stream, not
more than 30 to 40 feet across and
with little water. The bar of mud
occupied part of the channel, grown
with a *Scirpus* with 3 cornered
stem that looked familiar indeed.
A *Potamogeton* grew in the water
in abundance. The shores were
muddy and strongly saline. As

muddy flats a white efflorescence
had formed and small pools
had the characteristic brown
appearance common to such alkaline
waters. A Chenopod of which I
have specimens grew in abundance
along the shore. Back of it was
a bank of brush largely of a
thick round leaved plant that
gives somewhat the impression of
a *Chrysobalanus*. The banks were
8 or 10 feet high; undoubtedly in
rainy season the stream ran
bank full. In places the banks
were ground with a dense
growth of a grass resembling
Andropogon (spec.) that at times
was nearly to my shoulders, with
it was another grass with a
plume like head. In other areas the
monte formed dense growth. When
I could follow the stream bed
slipping about in the alkaline clay.
At intervals I was forced to cut
a trail to the top of the bank with
the machete and make detours to
avoid impasses. A Whistling

fern intent on food in the
water did not see me until too
late. Other typical water birds however
did not come to view.

I was fortunate in securing two of
the rarer *Synallaxis*ids of a species with
reddish brown abdomen, a black collar, and
a light throat. These either are rare or very
shy. Also shot a beautiful little flycatcher
with very slender tail feathers.

There were many tracks of a small
deer along the Rioche and also of
foxes, small cats and Coatis. *Onychomys*
there made a veritable trail.

A tall tree with *Convolvulus* like flowers
attracted a few birds and here I shot
two hummers and an Oriole. The latter
I was tempted to turn into a skeleton
but it is important to know what
subspecies occurs here and this is the
first that I have seen. I looked at
it longingly however as it seems to
have the same jaw structure as
Amblycercus. A flock of the latter
was seen and I shot one. *Coryphopterus*
was taken also.

On the return as I crossed a

a tract of mont, a fifth flock of Charatao (Ortalis) flew into the trees. They had not seen me and I moved cautiously up into range. A shadow moving had betrayed me and the I came up to secure it and I caught sight of the long tail of another.

The afternoon was fully occupied as usual in preparing specimens. An Indian came in the evening and I talked with him for a time securing names for the birds that I had.

At dark the work oxen and cows came running in wild confusion to the house and were restless and anxious during the entire night. Without doubt a jaguar barks afield some where near. Pumas are less common than tigers though I have seen two skins. The best hunters among the Indians kill these animals as they do all others with a single barrelled shot gun. Most of the guns in use here are Stevens single barrelled guns. I have yet to see a double barrel.

Aug. 15, Sunday.
The Tobas have no such words of greeting as Buenos dias, Buenos tardes, but in parting some times say ah with one form of greeting meaning how are you today is hiya-an bed-wah. A shot gun (double barrel) is ~~on~~ o-on-o-tih.

This morning as a sort of holiday I slept until a quarter after six. I had a good many birds on hand and worked on them all morning and for half of the afternoon. The stuff that I am securing here is mainly difficult to prepare so that I use considerable time over it.

For several days I have been trying to get Indians to make me a balca in the lagoon here at the hacienda but without success. A screamer and some other birds that I have seen there have kept consistently out of range and I have been casting about for some way to get at them. Two days ago don Pedro with characteristic energy went out and cut a large Pale Borracho

and in four or five hours work had fashioned a cachivo, a boat used by the Indians. The Palo Borracho, formed like a pregnant female, has a ~~very~~ large trunk greatly swollen in the center.

The bark is very hard: I have been experimenting on this tree with a machete and find that this outer bark scales off in brittle chunks. This outer skin is ~~about~~ from $\frac{1}{2}$ to $\frac{3}{4}$ inch thick. Within is a soft pulpy material that can hardly be called wood as it is soft and moist. This can be chewed out in great lumps as the ac buris in it completely at every stroke. The boat is fashioned with long ends which are not cut out for a distance of two feet. The center is hewed out leaving a lining of pulp 3 inches thick inside the trunk. This hardens in a day or two. The pulp has a visous, sticky touch. This evening we dragged the cachivos with four oxen down to

the lagoon and after some difficulty ~~had~~ a peon I managed to launch it.

I lay for half an hour at the edge of the marsh with my back against a termite hill, resting in the sun and enjoying the view. Large figs came straggling in to drink and then to perch in the top of the trees in groups. A hickensop flew alertly about at the edge of the rushes when it was huffing that an arumid might appear and an ovenbird dropped down to feed. Monk juncos scratched in the distance and quomopsar sang clearly. Before me was an expanse of mud, bordering a growth of Scirpus with cattails behind, beyond mints and sun savannas. The shouting of men at work was sounded in the distance. Giving up my rail finally I returned to the house. A Punimon rose and in another ^{instant} was on the ground. August 16, Monday. A heavy frost covered the ground at a quarter of six this morning.

After two cups of coffee and milk
with a couple of galletas, my
usual breakfast I left for the lagoon.
These galletas are made with
flour & water with a little salt &
yeast. They are shipped out from
the bakeries in jute sacks and
keep for two or three months. After
a week or two they become quite
hard but with some effort & a
certain amount of skill may be
cut with a knife. I take my
coffee with much milk as in
this way I get kind of milk without
any sour amount of tannin. Our
drinking water here comes from the
lagoon. It is tinged with brown
and contains some sediment. There is
a small amount of alkali in it.
I do not drink much clear.

At the lagoon I embarked in
the Cachico pushing it out through
the rushes. The boat is three feet
wide by two $\frac{1}{2}$ deep and is fifteen
feet long. The bottom is rounded.
Although it tilted easily I soon
found that it was a stable craft

and was able to move about in
it as in a canoe at will. Progress
was slow and laborious but at
least I had a boat. Lobo, a dog
who had accompanied me howled in
sorrow for an hour after I had
disappeared through the rushes.

The lagoon here is a quarter of
a mile long and 250 to 300 feet
wide. The shores are lined with
abrupt walls of tall Typha that
enclose the water in a little space
world invisible from without. A
sedge grows in clumps that drift
about over the surface of the water
in little islands driven by the wind.
In appearance these form a solid
green mass but in reality they
are merely thin screens over deep water.
I found that the water ran from five
to ten or twelve feet deep.

At first I neglected small birds in
order not to frighten the larger, rarer ones
that I wanted. Almost at once I
saw a fine pair of slate black birds

with white bands ~~at the~~ tail,
flying about low perches on clumps
of rushes. I had built a little
screen of rushes in the front
of the boat and behind this paddled
slowly down toward the birds. They
paid no attention to me whatever and
I had them both down with a right
and left. They fell among heavy
rushes where I could not enter
with my clumsy craft. The
Palometa or Piranha is common in
this water but as they did not
molest the birds I striped and
waded up to my waist and secured
them. A pair of screamers flew
over behind some rushes and I fired
and next I drifted down toward them.
The birds rose at rather long range
with strident calls of che ha che ha.
One presented a side shot and this
I dropped with a charge of sixes
in the head. The second swerved and
the heavy body protected it so
that it escaped. My only regret
was that I had to work

for fifteen or twenty minutes to
get at my bird and so could
not secure a temperature reading.
The screamer fell over behind a
drifted mass of vegetation. I had
to labor to show these birds and
so work a passage for the boat.
The water here was too deep to wade
and was so clogged with vegetation
that I could not swim. I saw however
I had the great bird aboard when
I could admire its Keep Keen wing
claws, the crested head and the
bare collar of skin around the neck.
The feathers had become thoroughly
saturated with water but soon
dried out.

Shortly after a Kingfisher and a
Cormorant were added to the bag
with some small birds. As I landed
a nan synallaxis that had previously
eluded me was taken.

The air was warm but there
was a cool breeze. I ~~could~~ enjoyed
a bath in the water, washed out
my clothing and then sticking up

My heavy pack of large birds returned to the ranch.

At night I hear a little owl calling (I suppose it is an owl)
Coo-oo-oo-oo too.

August 17 Tuesday.

This morning I made a short trip on the lagoon in the pichico and secured a Muscovy duck that I had yesterday. Also a cotinca that I wanted for an alcohol. There was a strong wind and I found my craft almost unmanageable as it veered about. The high sides caught the breeze so that the boat attempted continually to turn around. I shot a small alligator also but lost it.

Returning to the ranch I shot a couple of *Gnorimys* and then worked busy until dark on the assorted birds in hand.

The flesh of the screamer proved to be dark and coarse fibred so that in texture it was almost

as coarse as beef which it resembled somewhat in taste. The flavor was excellent however and I enjoyed it very much. The amount of meat secured from so large a bird however is surprisingly small as the breast muscles are short and broad.

Sunrise and sunset here are beautiful with many rosy tints and I enjoy them greatly. *Gnorimys* singing after dark this evening.

August 18, Wednesday.

Went out this morning at 6:00 and by 8:00 left the hacienda for the Picada. This trail it followed for about two leagues to the point where it crosses the Riachuelo. The day was cool with the sky overcast at times and at times clear. Rain started but none came.

Soon after leaving the ranch I shot a *hystrix* and a *Chinchilla* further on. The *hystrix* came trotting out of the grass in an innocent way, so though I had not sent him back at the house after all he was not bad company so I let him come along. He would give

certain warning of any big cats or other marauders I and was intelligent as well. He had been allowed to worry game that had fallen but I broke him of this on the first occasion that he followed me and though he looked round when I shot I had only to speak to him to cause him to leave the game alone.

A little Falcon perched over dead stub in the open game in sight and I started to stalk it. Suddenly with a loud whir of wings a big tinamou burst out of the grass and started off to get from the ground. I dropped it at 40 yards with a load of eight in a quartering shot recognising as I shot that it was *Rhycolotis rufescens*. The bird was large and heavy in body so that and the flesh was soft so that the muscle split in the side where it struck.

This tinamou and *Nothura* both have tender skin across the pelvis and loose many feathers here in skinning.

I admired the big bird very much.

The Indians in hunting these big tinamous are said to flatten branches with green leaves to their persons until

they are entirely covered and resemble a bush. They work slowly along imitating the note of the tinamou and so call them out of the grass and kill them with ease. Others hunt them with dogs trained for this purpose that track the birds and make them fly. The tinamous rise twice or three times and then are exhausted and are easily caught.

The Indians are said to use the same technique in hunting the rheas; the men resemble bushes and move only when the birds have their heads down feeding. When the ostriches are out the men remain motionless. In this manner they advance closely enough to kill the rheas with a 16 gauge shot gun.

A flock of *Phaethon* passed over seventy yards high but I killed one. A beautiful long tailed *Alcedo* came to hand next and then I entered the trail. The Pucara runs north & south through an extensive tract of forest known as the Monte Luján that is a hundred miles or more in length. The trail was formerly a broad path cut five years ago ago or more by surveying engineers who were running a line through the country. Now the

undergrowth has closed it in until only a narrow footpath leads down through the poorly defined opening small palms, ~~and~~ cypresses, and spiny shrubs encroached on the trail and in places I cut away some with the machete to clear a way. At intervals trees had fallen across the opening and detours were made around them seldom could I see more than 30 or 40 feet ahead.

Two small marshy openings were crossed. At intervals little open spaces in the undergrowth were encountered so that I could see for a short distance at the side. I found three or four spots of fresh water twenty feet across and four or five inches deep. I drank from one of these and found the water good. Here, miles from human habitation there is no chance of infected water.

The forest trees, the *Quadrachas*, averaged 30 to 50 feet tall. They have crooked trunks and angular limbs, light corrugated bark and

a moderate fringe of dull green leaves that remain on through the winter. About some of the ~~curiously~~ openings where water evidently stood in summer, the trees were smaller and many were dead. The mount in the main was elevated slightly above the surrounding country.

Birds were abundant in the morning as it was cool and fresh. Black-throated Tanager whistled loudly or came out to eye me curiously. The *la-tat* drum of the big woodpecker *Scapanus leucopogon* came at short intervals from dead stubs. These great birds are common here in the forest. An occasional *Picus* was seen and I took in *Cyclorhynchus*. I kept an eye out for the strange sickle-billed Woodhewer but saw none though I was fortunate in securing two specimens of a large brown species that I observed at Las Palmas but that escaped me there. The curious notes of the big *Thamnopelia* came at intervals and I encountered occasional troops of jays. Little troops of *Prospiza melanoleuca*, *Pachygloria* &

gnatecatchers appeared frequently. The trail opened abruptly on the Picocho angle a clear cut channel 40 to 50 yards wide with ~~cut~~ banks 10 feet high on either side. At present the thin trickle of water led down a slight depression. While the bed was a floor of shiny mud strongly impregnated with alkali. White efflorescences were separated by greasy appearing tracts of black alkali & clusters of this swarmed on the muddy surface. The whole bed was devoid of all vegetation. The scene was strange & wild in the extreme, an alkaline arroyo passing through an uninhabited forest, uninhabited save by wild creatures whose tracks showed in the mud before me. The breeze brought curious taints in the air some perceptible to me, others evident to the dog alone who wrinkled his nose & sniffed watching the opposite bank intently. A scene long to remain in memory.

The sun broke through in a brief interval and I secured some photos. For lunch we had the roasted body of a muscovy duck that I had killed

Yesterday stuffed with ground beef mixed with spices. At its most of the meat & two or three galletas and hobo content with fragments at first, cleaned the bones leaving only the keel of the sternum. We ate on the bank of the stream. A ^{big} blue jay came down to look at us curiously and then seeing the food became more interested. I tossed out bits of cooked meat and the bird came down to the ground for them keeping a sharp eye on the dog and retiring hastily to the trees after securing each morsel. The fragments were held between the intertars of the two feet and pulled apart. The jay ate this strange fare with relish though I doubt if it could ever have tasted cooked food before. It remained about perching within 10 feet until we left. I regretted that there was no sun so that I might secure a photo.

A pair of gnatecatchers came searching through the brush and small *Coozija* ~~melanotos~~ came with them. I heard calls from birds strange to me occasionally but now can recognize the ordinary bird notes from the forest as readily as at Plummers Island. New notes come continually of course but these I follow up and identify.

when practicable and then know them when I hear them again.

It became very warm afternoon. I travelled rather rapidly on the return as I wished to reach the Hacienda in time to catalog my birds before night. On this day forest birds remain inactive during the heat of the day and I saw very few on the return. Compared to the numbers noted earlier in the day, I desired one of the curious sickle-billed woodhewers to preserve in alcohol but in this was disappointed. At one place a medium sized cher sprang off offering a quick snapshot. I wounded it but lost it as I was unable to follow directly through the jungle. The dog came up with it once but it escaped before I could catch up with him.

At the close of a day's trip in this jungle my eyes became very sore from the constant pecking of the *Bombus* and at times I hesitate before entering to secure some specimen that I have killed and at times require resolution at times to proceed when the tangle is dense.

As we came out of the forest and

Artibeus canalicollis. Charaxes Red out from a papaya tree in flower where they had been feeding and I secured them both. The male I desired especially to preserve in alcohol to exhibit the peculiarity of the looped trachea. This was readily obtained through the skin. I also secured and flushed a *Nothura maculosa* which offered a quartering shot as it rose. To my surprise (as the shot was easy) the bird did not drop but continued a steady course across the savannah. As I stood watching it in disgust the bird suddenly lowered and then dropped straight down 300 yards away. Going over I was lucky enough to find it in the grass and discovering that it was shot through the head.

Continuing I stopped for a few minutes at the lagoon to drink and to rest. The water in the lagoon is brownish in color and has a slight swampy taste is sweet and palatable. Other lagoons nearby become slightly saline when water is low in summer but the water in this one remains sweet a valuable asset as ^{with} water is difficult

to secure in this region. At the
branch I found that I had 26 birds
ranging in size from the tiny *Pisum*
to the heavy bodied *Micropus*.
The hospitable señora up to brewed a bit
of tea immediately and after two or three
sips with a galleta or two I set to
work cataloging my specimens. This
and the care of them & four alcoholics
occupied me until dark.

August 19, Thursday.

This morning I was out before
six and was set work at my birds
by a quart of seven. There was
heavy frost this morning and a
strong wind so that it was decidedly
cold in the galpon as the cotton gin is
called. I had nearly 40 birds on
hand in all and they occupied me
until four in the afternoon.

As I worked *gnoring* sang clearly and
I heard the continual clatter of parquets
feeding in the fields. Toward evening
the strange calls of *Aramides* came
from the border of the lagoon.

After completing the preparation of skins
I began to prepare specimens for shipment
and continued this until dark.

August 20, Friday.

Another heavy frost covered the ground
and I came out at six this morning.
This day I employed in packing
preparatory to departure, a labor that
consumed most of the period of
daylight. I have four boxes of skins,
salted skins and skeletons from here.
Many of the skins are of birds of large
size that make considerably bulk.

About 4:30 I walked out to the
border of an estero north of the house
and devoted an hour to the collection
of insects by beating in the marsh grass.
The dry grass of the *savannas* is
practically devoid of insect life at this
season but over somewhat marshy
ground I collected a number of hoppers,
and a few small beetles. The collecting
was poor however and insects were
inactive due undoubtedly to the winter
seasons. Dragon flies are fairly common
on hot days and I see a good many
Monarch butterflies. *Chironomids* hung in
little swarms in the air and
mosquitoes were fairly common.

a small bat appears around the Hacienda and about on evenings when it is not too cold. I have not seen it here but this is the only snake that I have seen. (*Lachesis*) *Batrachoseps alternatus*

At dark I walked out to small tracts of alfalfa. Four or five *Nothos* flushed from the border under a flock of *Columba maculosa* rose from the center. The Perdy alighted in the grass of a marsh beyond. The wing light was beautiful. As it grew dark an Owl called from the forest, a single *hoo* repeated at short intervals. Another that I take to be a smaller species called *too-oo-oo* - *too* from the mouth near at hand. I have seen neither.

Last night we had the meat of *Phrynosoma munitus*, *Nothos maculosa*, *Geopelia* and *Uta* *carolinensis* in our dish. The meat of the two *Simons* was white and very tender. That of the other dark but of very good flavor.

The *Tobos* are a peculiar race and I have nearly enjoyed the opportunity to study them. Only though it was true. They are a primitive people and are less intelligent than our American Indians. The men of pure blood are rather short, about 5 ft. 4 to 5 with broad shoulders. Their features rounded forms with no heavy muscular development. Their hair is black and their eyes dark. The chin is receding, the cheek bones high & broad, the nose rather flat. The women often have lines tattooed around the mouth running around over the cheeks to the ears (and down over the neck). Their faces are broad & rather unintelligent.

These *Tobos* have no crops that they grow and no domestic animals save the dog. They do not form large villages for any length of time but have their pueblos spread over a considerable area of ground, a provision necessary during a

people dependant upon fish or game
for food. Meat is practically the
entire diet in a natural state
but at the ranches the Indians
buy galletas and secure mandioca
and sweet potatoes. Away their
only vegetable is the Shue of
the patch and a rhizome that
they get from the roots of the same
tree. The only fruit naturally
wild in the Formosan Chaco
that I have noted is the Opuntia
or flat pad prickly pear.

About the ranches the
Indians wear discarded soldier's
clothing that they secure from a
mission near here but away have
only a buck cloth. After an
overcoat is their only garment.
They live in a country and in a
way that would be impossible for
other men. I find their trails
unpracticable as almost invariably
they lead into esteros. The Indians
naked as they are become accustomed
to water waves in the wet season
and so pay no attention to water

even when they can avoid it
readily. So that their paths lead
along through winding esteros often
for miles.

Many of them now are armed with
single barreled shot guns, occasionally
and have a rifle. Others bear only
bows with long pointed arrows.
They make knives of hard wood.
There is no stone into this
country but occasionally stone knives
have been traced from Bolivia or from
northern Argentina. These natives kill
many birds for their plumes and
also ostriches. These they trade
with skins of animals for their
simple wants. In hunting they
often tie twigs and branches on
their persons until they resemble
small trees and so endeavor to
creep up on their game. The big
manas is killed from this
disguise as the Indians imitate the
birds note & so call it out & kill it.

August 21, Saturday.

This morning I was out at four and helped load my baggage in a bullock cart.

At five we started with the oxen lively in the cool air, running down slight inclines so that the carts jolted heavily. The sky was clear and the stars shone brightly. Everything was quiet & calm. A bank of clouds in the east obscured the first rays of the sun which pale the summer stars leaving only those of the first & second magnitudes in the sky shining against a greenish black background. Finally the "disappearance" of day was at hand. The first rays of the sun were welcome for the air was cold.

Birds were abundant along the road. They walked in the ruts. Hawks were observed at intervals and *Falco* species & *Myospiza* bobbed out of the grass. Near Fontana I saw many species.

We reached Fontana at nine. I had twelve parcels, ten of which had to be checked rather a formidable array. The whole weighed 179 kilograms. I had four boxes of specimens from here, certainly a good collection for two weeks work.

Various Hawks, Orange headed Blackbirds, ducks herons & ibis were noted. Birds were in sight constantly.

Paraguayans from the bank of the country I frequented here at present. They are characterized by swarthy skins, dark eyes & black hair. The men are often small, slight in stature & build with sharp cut angular faces. The women are heavier in build. Most of the latter wear bright colored dresses and the many had bright handkerchiefs about their necks. Many of the older women smoked the ~~pipe~~ short dark Paraguayan cigars. Many were barefoot. The men all bore arms of one kind or another.

The day was very hot but toward night it became cooler. We reached Formosa at 6:15 and I engaged cargadores for my baggage transferring it to the Hotel Bolivar. Settled here once more I secured mail at the post office and had a pleasant evening enjoying my correspondence.

At a distance of ~~about~~ between 50+60 Kilometros from the river there is a distinct change in the aspect of the country. Apparently this is the ledge of a rain belt that follows the river. Indeed there is a distinct division between wet seasons & dry seasons. Near the river rains may occur during the driest part of the year with more or less frequency. The vegetation beyond this point of change appeared fresher & greener. A small cane was common and I noted a shrub with opposite twigs in the same plane, the twigs abundant & with many leaves that I did not see inland. Conversely the Palo Verde as I have called it does not pass outside the dry region.

The Lapachol was coming into blossom everywhere. I caught the shell purple pink of its blossom at the base of the trunk way when. At this season the tree is leafless. In bloom with the crown filled with flowers and its light trunk it is a beautiful object and

A conspicuous feature of the landscape. The wood is hard and durable and this should be a good tree to introduce in suitable parts of the States.

August 22, Sunday.

I got out this morning shortly after seven. After a light breakfast I walked out along the shore of the Rio Paraguay to enjoy the sun for an hour. A little thirt of women were vending oranges and mandiocas, at the little market above the landing. Long narrow rowboats manned by two men kept arriving from the little settlement of Alberdi on the opposite shore in Paraguay with passengers and there was considerable bustle below the aduana. I arranged with a boy to get my things across on Thursday when the boat goes to Asuncion.

The air was cool enough to make the sun's rays enjoyable but the morning air here is less severe than at the Ptacho Pilaya. Pitangus called along the

bank and a *Copreus Polyborus* or two hawked up and down over the river in the lookout for food, the whole making a pleasantly animated scene. I spent the major part of the day in getting my notes in shape after the work in the interior, in giving bedding and in getting a few skins out to dry.

It was hot and close after noon. In the evening a band of boys played for an hour in the plaza and those so inclined walk up and down in conversation or at rest for benches. The majority of the women were in mourning.

Many here have birds as pets. In one yard that I passed today a quina and a male parakeet were at liberty without enclosures. The quina came running over over the alert with curiosity when it stopped to look at it. In another yard was a cage containing *Paroaria cucullata* & *Guiraca*. In still another parrots rested on perches

fastened to wire loops suspended from
the horizontal limbs of trees. The
wire hangers passed through a
piece of bottle with a hole the bottom
that effectually prevented the birds
from climbing up into the limbs
above



In the evening I
wrote for a time in
the dining room.

As there was no light in my room
save a candle.

August 23, Monday.

The hotel here is crowded and I have
been unable to secure a room alone. My
compañero en pieza a Paraguayan gentleman
Sr. Siato Rios who like others of better
extraction prefer to sleep with doors & windows
closed. As he came in last last night
I found every thing closed up tight when
I awoke this morning. Was out
at a quarter of seven and soon as I heard
stir in the kitchen and after a bite
to eat followed north of town along
the railroad track returning about mid.
The country here at Famosa as elsewhere
in this region is flat with prairie

little undulation. The country is
ground with low ^{open} scrub when it has
not been cleared but most of the
heavy woods has been cut away.
Before going far I came to a
road. Picked it and followed its
meandering until I came to an
extensive palmar or growth that
I had desired to investigate.
A mimosa like shrub with a yellow
aromatic flower was abundant in the
flats and also came down in
marshy ground to the border of the
water. In low ground I found
considerable growths of sedgess.

The palms grew in an extensive
grassy marsh some standing in
water and others on drier ground.
All were found however when the
water table was practically at the
surface. This palm grows from twenty
to 40 feet tall and has a round
bushy head & rather a slender trunk.
The petioles are long and are armed
with ^{many} sharp recurved hooks. After

tearing my trousers badly on a
young plant I learned to avoid
these leaves. The stems are
strong and the hooks fasten
personally into anything that
touches them. The palms grow
scattered about with opening grassy
ground between and present a
pleasing view. Although scattered
they fill the horizon in the distance.

This country is heavily grazed
with cattle and horses.

On the riacho I saw one large
jacaré resting in the sun on
some ^{floating} aquatic plants. It plunged
over into open water with great
commotion but came up almost at
once to the surface. It was about
ten feet long. In another place I
saw a small toad that surprised
me by a sudden leap of fully three
feet into a clump of grass where
it was lost.

Riacho beds ~~across~~ through the country
cutting it up into regular squares
and ranchos & small houses were

scattered about at short intervals.

Birds were common and in some
variety. I was much pleased to
encounter my first Solitary Sandpiper
and still better shot one with
my pistol. The bird seemed to be the
eastern variety. There were seen in all.
Also secured my first Leucosticte
and a small black & white Scolecophagus
~~that~~ I do not know. Martins
were common in the palms and
I observed one Stelgidopteryx serripennis.

The day was clear and warm.
Spring is evidently in its way.
Peach trees are in bloom and I
saw several Myrica trees in blossom.
Shrubs also were becoming more
active. Frogs which were calling
here last night were not noted at
the Riacho Allaga.

On the afternoon I prepared a few
skins and then called at the office
of the governor to get some data on
game laws. Was promised a copy of a
law protecting herons in Wednesday morning.
Also ~~ordered~~ a compilation of the National

laws with game laws and should
the title to purchase paper in Buenos
Aires. I have been looking for this
ever since I arrived, but was told that
there were no national game laws.

Looked up a photographer who
has some film of mine next and
then spent the evening in writing
in the cool shade in the yard
where I had a view of the river.

I am certain that the shorebirds
seen today have just arrived from their
African. tonight I saw P. lagotis
nacunda flying over the river and there
is other evidence of the beginning of
spring migration toward the south.
The shorebirds there for pass south
in their fall migration with the
southward spring migration of the
birds of the Southern Hemisphere.

August 24, Tuesday.

This day was clear and pleasant with
a cool breeze from the east that tempered the
heat. I went out at seven, stopping to buy
four oranges for ten centavos at the orange
market on the river bank to take with
me. Oranges are brought across here from
Paraguay and are offered for sale in piles

on the ground near the Adrians. Old
women sit and squat here all day long in
the sun selling what they can. At night
if more goods remain they erect a little
shelter. In Lomas two feet high and end
the night. In early morning the women
come with batatas, manioc, lettuce, fowls
etc. There is a constant traffic in rowboats
between Formosa and the little settlement of
Alvardi on the opposite shore. No one is
allowed to cross between after five in the
evening but beyond that there is no
restriction or request for passport. The landing
here is at the Adrians and men on
guard keep a sharp out on all bundles.
This morning I followed the margin
of the river for some distance. There is
an extensive series of small channels
here cutting back inland, that in places are
clear but that have broad areas choked
with vegetation of an equatorial nature. There
is no place here for shorebirds of any extent.
Indeed these channels become more
marshy and it was here that I found the
Solitary Sandpiper yesterday. None were
noted today.

Near the river I found some birds

Traps of an interesting design set up.
The traps were of a grade of small limbs
with the bark on tied together to form
a cage that rest on a cleared spot
in the grass with little channels
on either side for the lower bars
to drop into as the cage came down.
A handful of seeds had been scattered
underneath. The trigger arrangement
was very ingenious and I made
a crude sketch to illustrate it as
well as taking some photos.

~~Two light twigs c, d and e, f. lead from~~

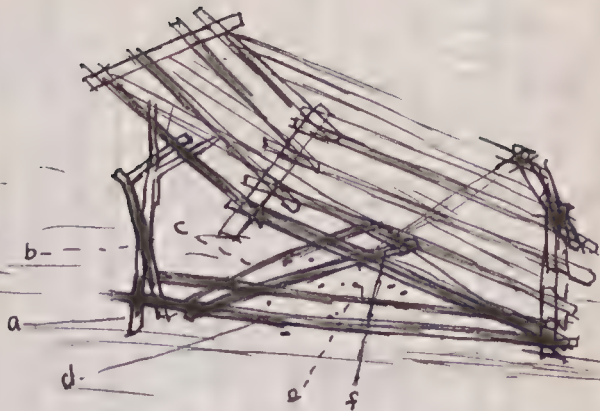
Data for trap.

a - forked upright

b - trigger

c, d, e, f. light twigs for pins.

The forked upright runs straight up
outside trap. The trigger b. passes through
the fork & supports the trap when it is
set. Four light twigs a, b, c, d; lead
two from either corner to the upright
about one inch from ground. d. passes
between upright a and trigger b. c is
pointed and rests in a very slight depression
in the side of d. e passes over on top of c
f then rests on top of e.
In coming into the trap a bird



Bird trap.

naturally weights on the small twigs
which fall to the ground and make it
a nuisance.

I crossed then through level
pastures through the palmars visited
yesterday and on to slightly higher
ground beyond. The palmars lay in
a slight depression below the surrounding
level in a great basin where the
ground was always wet. Even on
the upland the water-table was very
near the surface and was here
a foot deep containing water. Broad
expanses covered at present with
clay grass appeared absolutely dry
and hard but in crossing them
I found little marshy spots from
ten to a hundred feet or more across
very two hundred feet or less. In
these the ground water came to the
surface. Grass grew in clumps
all over this surface. I flushed
in patches here and a short curlew
and collected a heister.

In the afternoon I prepared the
birds taken and called for some film
that I had developed. The photographer
did good work but like others that
I have seen here was very careless about
finger prints.

I do not get further insight into
the laws of this country.

I learn now that game & fish laws
come under a section known as the
Codigo Rural. Each of the Provinces
of which there are fourteen has its
own Codigo Rural and its own
game laws therefor. In addition
there is a national Codigo Rural
to cover the nine gobernaciones
or territories which as yet do not
have sufficient population to be
self governing. My problem now

is secure copies of these Codigo
Rurales. I enquired for these laws
consistently in Buenos Aires but was
informed that they were non-existent.

Much of my information has been
secured from Mr. Carlos D. Magliano
of Fombosa a lawyer who has been
very kind in this matter. He has given

me an address in Buenos Aires where
I may purchase what I need.

This afternoon as I worked on my specimens
a little black hen came walking in
about in the corner. Finally she stopped
up on the bed where she settled down and
laid a fine egg. This she rolled about
by crooking her bill across it, turning
it from place to place until it was
in a secure spot and then walked out
with no demonstration whatever.

I learn that about a week ago I
left the trouble at her Palmas. She
was fighting and that a number of men
were killed. The Huelgas shot one
Indian and cut off his hand & one hand.
Soldiers were sent to quell the rebellion.

Aug. 25, Wednesday.

A clear pleasant day. The wind was
south this morning and it was colder than
on the days previous. I spent this day
in boxes though I should have preferred to
have been in the country. However a mass
of detail has been accumulating that it was
necessary to clean up while it was clear
in my mind.

I had six rolls of film developed here at
an expense of 2.40 pesos each and catalogued
them first. The work of development was

excellent and it was tempting to have
more done. However the photographer who
is an employe in the police department had
been very careless as usual with
finger prints and the end negatives on
each roll were in bad shape. One
fine roll from Formosa in which he
had particular interest had been thumbed
over until it was in bad shape. I
am considering buying a special gun
with which to kill photographers.

Naturalists travelling in foreign
countries instead of having difficulties
in travel should be welcomed and
paid for entertaining the populace. I
am beginning to think that we are
more of a long suffering race than
the man with two wheels in his
auto.

I learn now that the laws for the
governances of territories are all made
in the national assembly and that
they are not manufactured locally.
So I was unable to get the copies
of the Horn law today. I have
addresses in Buenos Aires however
from which I can obtain all
others.

El Gobernador de Formosa

El doctor Alexander Wetmore, funcionario de la Oficina de Investigaciones Biológicas del Dep. Agricultura de E. U. de America viene al Territorio a hacer estudios relacionados con los pájaros y ha sido recomendado al suscriptor por el ch

Ministerio de Agricultura y Fomento
de la Nación: en consecuencia
las autoridades policiales
no solo no le pondrán en
pedimento alguno, sino
que lo ayudarán en todo
lo posible para el mejor
éxito de su misión

Juan J. Correas

Agosto 3/1920

Four sugar galletas & similar commodities
to Paraguay. The pilot the advance
was very courteous in the matter
and packed my baggage with only
a glance though I had with me
4 boxes of packed specimens. This
stuff was loaded into a long
flat-bottomed boat and I was off for
Paraguay. The boat men row with
fairly long oars using loop of wire
for trawhich thrust over a trough
in the place of oar locks. The men
make use of great whir in
the current & to carry them part
way across. Head that opposite shore
the current is very swift.

Opposite Formosa is a collection
of small houses huddled in a narrow
point projecting into the river and
forming the settlement of Alberdi,
Paraguay. Landing here was on a
little sandy beach and my baggage
was piled on the grassy bank
above. As usual the dogs that
came to investigate sniffed on the
alcohol tank. There must be something
potent in the odor of that particular
box. I hauled up the safe &

COMPRA - VENTA DE HACIENDA
Y FRUTOS DEL PAIS
BARRACA Y DEPÓSITO DE CUEROS
AGENCIA MARÍTIMA

Tomás O. Escauriza

COMISIONES Y CONSIGNACIONES
Escritorios en ALBERDI (Paraguay)
y FORMOSA (Rep. Argentina)

Alberdi Agosto 26 de 1920



Señor Jefe de Recguardo

Suplico permitirme embarcar abordo
del vapor Posadas (nacional) con destino a Asunción
y a consignación del Señor Alexander Wetmore
los siguientes bultos:

- (5) cajas muestras de pajaros embalsamados con pesos
de cada cañón 15 kilos
- (1) un bulto con muestra de animales embalsamado
con peso de 30 kilos fdr.

Yours sincerely,
Thomas Escauriza

Concedido en embarque.
Pedro C. Bellard
Jefe de Recguardo

the Aduanq who I found to be
a short stocky, middle-aged gentleman
busily scraping a boat. He exhibited
my passport and explained my business.
He was greatly interested. We
walked down and I filled my
alcohol tank and collecting chest
greatly to the amazement of the small
crowd that promptly gathered immediately.
I became a personage of importance in
Alberdi. The day was satisfied
with this big view and we
adjourned to a little restaurant
then belonging to the agent where
we had further conversation with
other gentlemen and glasses of Vermouth
& bitters. Later the afternoon with
me ^{at the judge} and we had more talk. Meal
was "regular" nothing more. The food
at Formosa seemed good but I suffered
more or less from indigestion both times
that I was there.

The streets of Alberdi are narrow
& winding and the houses seem
placed with no relation to one another.
The ground was sandy and willow
trees furnished slight shade. I must

be tremendously hot here in summer.
A lagoon cut through immediately
back of the town.
It developed in the course of
the last century that there is considerable
feeling between Paraguayans & Argentines.
Apparently there is no love lost
between the sister republics.
The steamer the Posadas of the
Compania Argentina de Navegacion came
at three. A plank was thrown ashore
and my baggage went across to
the boat. With this aboard I
followed and was soon established
in a cabin with Don Alvarez,
cousin of the company as companion
in cabin. Soon we were off.
This is the first trip of this boat
on a run between Asuncion and
Villa Pilar. Service is different because
of the Marine strike. I found the
Posadas a stern wheel of the
usual small river type but clean
and reasonably comfortable. There is
always a lack of deck seats on these
craft. The boat was fairly crowded.
We make fairly good time stopping
occasionally at little ports where

There were six or eight houses to
discharge passengers.
The river is running bank
full though it is the dry season
here. I understand that it has
been high for nearly a year. The
water in many places had over-
flowed into the prairie where the
banks were low and the trees
and scrub were standing in water.
This high water has covered the
usual sandy and muddy flats
that border the stream and
has ~~run~~ cut off the usual
feeding grounds available for shore
birds. In places the river had
formed higher, abrupt cut banks.
The forest west of the usual
Chaco type on both sides. The
moon shown full at night. I
found the night air cool. Several
in about 18 and had a good night
sleep.

August 27, Friday.

This morning I awoke shortly
after six and found that we were
at San Antonio a station of the

International Products Company, a short
distance above, I had a view of
the narrow winding mouth of the
Rio Pilcomayo.

The character of the country
had changed on the eastern bank
the land was high and low
rolling hills two hundred feet
high or in places, four hundred
filled the horizon. In one place
I saw an abrupt sided but shaped
Arro. The bank here was
10 to 30 feet high and was of
a firm reddish clay. On the
opposite was the low shore line
of the Chaco. The hills apparently
are the outposts of the Brazilian
Plan alta and the river here opens
at the border between the high ground
and the low sunken basin of the
Chaco. The high ground formed
a welcome diversion in the view; it
was agreeable indeed after two months
in the Chaco - to ~~the higher ground~~ with
the distant view blocked ~~altogether~~ by
next to see higher ground on the
horizon. The varying greens & yellows
of the foliage were beautiful and

Lepachos filled with dull pink bloom
added a touch of color. This tree
here grows in a clay soil and
seems thrifty though smaller than
in wet heavy ground. I believe
it possible to introduce this tree
at Pannu's Island.

Ascension was soon in sight and
at nine we rounded a point and
came into the harbor. The boat
last anchor a few feet from the dock
and a flock of frog boats came
crowding off to transfer the passengers
to shore. The crowd waited until the
crowd had passed & then had my
baggage transferred to a boat. The
landing at the advance was at two steps
with the water lapping at them. The
Alhambra itself was a tall square
building with the walls decorated by
ivories. My trunks etc., were carried
into a little room & placed on planks
supported by trestles. By judicious use
of a few poles examination was brief
and my baggage was soon in a cart
drawn by three horses. Registered at
the Hotel Saint-Pierre, a large building.

Near the port. Had very good accommodations at 12 pesos Argentine a day.

The money in Paraguay is very low at present. It is valued at 11.40 pesos for each peso Argentine that it changed. This brings it down to about 27 pesos for an American. Because of this prices seem very high. I paid 18 pesos for a bottle of ink, 60 pesos a box for shot gun shells and 100 pesos by transfer. The money is all in paper in denominations of 50 centavos & 1, 2, 5, 10, 20, 50, 100 & 500 pesos. Much of it is ragged torn and dirty.

I went out at once & called at the American Consulate on Mr. Balch consul, a gentleman from Alabama. His office were pleasantly situated in his home in a pleasantly shaded yard. There I met Mr. Heflin an American and secured valuable information regarding the country. At his address I called on Mr. Stutz this afternoon president of the International Products Company and was given permission

to visit the properties at Puerto Paises. Mr. Stutz was very pleasant. Showed me some of a ground Sloth (*Megatherium*) from San Antonio, found that in a mud bank. The boat for Buenos leaves tomorrow. I required regarding shipping specimens but found that this is within law. Purchased shot gun shells this afternoon loaded with powder in the States & charged with shot subsequently down here.

Talked with Mr. Heflin again in the evening, packed alcoholics etc. Wrote Land official letter to the office, one or two others to Buenos Aires, and so did not get to bed until a quarter past twelve.

It was very hot in Asunción today and I found the sun oppressive. It was cooler in the evening. Mosquitoes were quite bad tonight.

August 20, Saturday.

This morning I was out before seven and completed the packing of some alcoholics. Took three canas with birds packed in alcohol saturated cotton around

And had them soldered tight to seal them. Made arrangements at the hotel to store five boxes of specimens until my return as there is no way of getting them shipped with.

I find that the Hotel Saint Pierre run by a french gentleman, M. G. Temperoux de Saint Pierre is a very select place. The old gentleman admits only a few persons although he has room for many and usually admission is only by letter. Apparently I was fortunate in getting in as simply came over & asked for a room. I find that there are about half a dozen in the hotel, all men. Service in the great high ceilinged dining room is excellent and there are some beautiful tapestries forming screens in the walls.

This morning I purchased Kodak film at 336 francs for 14 rolls of 16 exposures each, arranged for the ~~purchase~~ development of film etc. a round trip ticket to Pinasco, Alto Paraguay, cost me 1271 francs.

At 10 o'clock I called at the American Embassy and finding the Charge d'affaires out left my card. Went next to the Consulate where

Mr. Bales was kind enough to invite me to remain for lunch. We had an excellent american meal with strawberries as dessert. The latter were green but were of excellent flavor. I am told that they soon turn scorchingly red here.

At this I sent my baggage aboard the steamer Concepcion II of the Compania Argentina de Navegacion and then completed a few more errands. As it was Saturday afternoon practically all places of business were closed. The steamer was scheduled to leave at 5 but owing to volition did not get away until 7:15. This steamer was about 250 feet long and was a side wheler of the Inoval river type. The Company operating this line of boats is one that operates on the Rio Paraguay & Parana. About 8 months the service was completely tied up by the Merin strike. The Paraguayan government took over the service in Paraguay and is operating a contracted service between Caenacion and Puerto Iruya with a boat every two weeks to Coimbra. The boats run as naval craft with

a naval officer and a few marines
aboard. The boat was Argus.
I had two Paraguayans sharing a
cabin with ~~them~~.

On the boat I met Mr. Kennedy
and Mr. Murray of the Compania
Internacional de Productos on their
way to San Salvador. Mr. Hart,
a Dane was on board and we
played Auction Bridge in the evening.

My impressions of Asuncion seem
rather hasty as I was very
busy during the short time that
I was there.

The business section has fine
broad streets, paved with cobblestones
with comfortable wide sidewalks
on either side. The buildings are
mainly one story or two stories tall.
Occasionally I saw one three stories
tall. Auto care service is fairly good
but there is no telephone. Many
of the buildings appear shabby and
in need of repair. The streets near the
Paraguay present a busy scene but
elsewhere I am rather dead.

The town is over a low hill
rolling back from the shore of the
river. In the residence section
pavements are mainly lacking
the roads being a sandy red clay.
The residences are often set back
from the street in pleasant grounds
and many are well kept. Others
however show neglect and are
falling out of repair. Trees and
gardens abound and well
buildings are white or a pleasant
pale red. The town appears
picturesque and interesting at casual
inspection but is somewhat dull.
As I did not see such places often
appear I find them pleasant to the casual
visitor I who is there for a short
time but are not so desirable as
a place of permanent residence.

August 29, Sunday.
I awoke this morning at six
and was on deck before seven. The
boat drove steadily along up stream
fighting the current and taking
advantage of slack water to make

up a little time. The banks on either
shore were low and appeared
uninhabited. The vegetation was of
the usual class type. Broad areas
of dead water were filled with floating
vegetation. The boats in many
places came to the water. Elsewhere
there were stretches of grassy swamp.
Below Posuis on the east side
the banks became higher and
ranchos in little clearings were
strung along back from the water.
At Posuis we discharged many
passengers.

A few miles below Curuzú-Chica
was another stretch of high bank on
the east and here I saw a few
trees of *Cecropia peltata*. Other
new things appeared to be creeping
in and I would take this to be the
southern limit of the ~~subtropical~~ tropical
zone on the river. Others of this
Cecropia was noted later. At Antioquera
where we stopped for two hours to
take on wood I saw mango trees
growing, the first noted. Banana plants
were observed a slight indication of
fruit. *Alseodora* was in bloom and

A ratlet one fine large *Somateria*.
Antioquera was a small place with
a high bank coming abruptly to the
water. Two lines of four narrow
boarded sticks of wood were laid to
lead into the stream. A boy in
each chain kept account calling each
stick. Each hundredth stick was
thrown into a corner. A conisario
perched on the corner of the deck above
kept a watchful eye on the loading to
see that there was no cheating.
The streets of the town were muddy
& sandy bordered with mud &
walled by palm trunk houses
covered with thatch. We walked
about for a time and then had
coffee in a little cabin. I had
a quinquina, a mate cup much
used by the men to swing
from the saddle in travelling, for
fifteen pesos.

All conversation between the natives
was in the unintelligible guaraní.
At Posuis we continued up the
river. At intervals rowboats came
out for passengers, cargo or mail.
Once or twice we came along with

the bank. Aside from this there was little evidence of habitations though I am told that back island on the east bank is one of the most densely populated districts and one of the richest in Paraguay.

I saw more Georgia on bank. Lapacho was in bloom but had passed its height. I saw an occasional Pala Boracho known in German as Samo or Samou. The moon was clear in the evening and the sunset beautiful. I enjoyed the dinner and second course I was rather bored.

The berths in the stateroom are short and hard but yet I manage to sleep comfortably.

August 30, Monday.

This morning passed as usual. Many passengers had left us but another American Duiker from North Dakota who had studied under Dr. Bell came on last night.

By noon we were in Villa Concepcion one of the most important cities in Paraguay and remained there until four

in the afternoon. I went below into the hotel and located my baggage.

The bank at V. Concepcion was high again. The streets were broad and of sandy red clay. The city has 8,000 to 10,000 inhabitants but shows little sign of business activity. The streets were straight and were broad and houses usually of good appearance.

The river I learn has now been up for three months. The level varies at different points in the course of the stream. It is beginning to drop now. There is no judging ground for Water birds evident. The water continues of a dull brownish ^{greenish} brown in color but is clear without sediment.

I see comparatively few birds. An occasional Phaethon chlorifrons, Buzzard or Kingfisher is about all that is in evidence. At the time I see Procyon nalybca. The English Sparrow as yet had not reached Asuncion. Comitis

and occasional snake birds are noted
and parrots pass at intervals.
Otherwise the stream is ~~dead~~
devoid of evident bird life.

August 31, Tuesday

Arrived At Puerto Pinasco this morning
at 5:30 a.m. just at dawn. There
was the usual bustle of passengers
and baggage on the wharf and I made
sure to see that my baggage went ashore.
Puerto Pinasco, Paraguay is a plant
owned by the Compañia Internacional
de Productos and is devoted to Brazilnuts
and cattle. The port lies on the west
bank of the river. Directly across is
a hill four or five hundred feet high.
There were a number of Americans
here whom I met during the evening.
Mr. J. Hethman, engineer kindly gave
me hospitable shelter in his room and
I ate at the company hotel.

In the afternoon I put my August
accounts in shape as best I
could. Was unable to complete them
entirely as I lacked certain data.

Expenses July-August 1-31, 1920.

Form 4.	237.22
Salary August.	228.33
	<hr/> 465.55

Expenses July, 1920	413.19
" August 1920	465.55
Total to Aug. 31.	<hr/> 878.74

Exchange sheet # 2982 shows 1055.20 pesos
at 2.3795 (attached to acct for June 20-30, 1920)

Amounts expended.

June 20-30.	76.51
July 1-31	439.87
Aug 1-31 (in part)	538.82
	<hr/> 1055.20

Exchange sheet # L. 2653 (attached to account for
Aug. 1-31, 1920) shows 313.65 @ 2.375 Argentine.

Amounts expended.

Aug. 1-31 (in part)	25.63
---------------------	-------

Balance still available on this sheet - 288.02 pesos.
Exchange sheet a + b. (attached to account for Aug. 1-31, 1920)
show 4788 pesos paraguayo. @ 11.40 Argentine

Amounts expended.

Aug. 1-31	2815.75
Balance still available on this sheet	1972.25

September 1, Wednesday.

This morning I met Mr. Campbell
manager of the property here who
told me that the ranch was mine
and that he would do everything
possible to facilitate my work. A
little later I went out on the
ranch railroad west of Puerto Pumas
with Mr. ^{Fred} ~~Carl~~ Nettman in his
small auto car that ran on the
tracks. The country here was the
usual level charco but seemed
to me to be less swampy than
farther south. Open savannas
alternated with tracts of mont in
which, near the track most of the
larger trees had been cut away.
The open were broad areas
grown with palms among which
were lagoons and esteros. The car
sped along over the uneven rails
at what might seem a furious
speed but as the others did not
seem alarmed I saw no occasion
myself. Part way out we caught

up with the ramshackle train
that goes out and back each day.
Our car was set off the track
and the train backed past us to
allow us to proceed ahead. Our
driver had no other way of
controlling his speed than to
cut off his spark at intervals,
allowing the train to coast.
A wood rail started across
ahead of us, and Kingfishers
& herons flew along side.

At Kilometer 25, 25 Kilometers west
I got off and spent the day in
collecting on a low hill that rose
50 or 60 feet from the level ground
surrounding. This hill was formed
by an outcrop of what seemed
to be a quartzite, porphyritic in spots,
with a thin deposit over it. In
the lime I noted a few traces of
molluscan fossils. This hill is very
peculiar as it is the only one that
occurs west of the river. At
Cuerto Pinasco the river flows east

and west the road being joined
by a series of hills that forms
down to the shore on the east directly
across from the port, forming a long
Cerro 300 or 400 feet high and
two or three miles long. This I
take to be the outlying ridge of
the Planalto of Brazil. The little
Cerro at Kilometer 25 would seem
to be an outlier of the same formation.
It is separated from the main
by a broad stretch of level country to
no hills are known beyond it. The
rock in places appeared smooth
as though worn by water and I
believed that at one time the river
had passed over it.

The Cerro 25 as it was known was
covered with a heavy forest of trees
most of which were unknown to me.
Some ranging up to one hundred feet in
height. Below the growth was dense
and heavy but the thorny jungle found
in Formosa was absent. I carried a
machete but found little or no use for it.

Men were cutting the trees for firewood
so that wood swarms led to it in
all directions. I worked slowly along
the collecting specimens of the
birds that I wanted.

A Chattering, perhaps a dozen in number,
circled about overhead beyond range
I watched for favorable opportunity
and wasted general shells on them
but without securing any. They
flew with all the maneuvering of
our swifts, sometimes singly sometimes
in two or threes. The call note was
a squeaky chatter. Parrots, a Plover
and a brown unicolorated Parrot
were common. I saw *Scolecophagus* &
a number of hummers. And all
I took 21 birds including seven
or eight species not mentioned
previously.

At four I returned to the track
and had a bite to eat at a
little store. The train came around
I returned to the port getting in
about 6:30. Mr. Kelliston returning
later encountered two foxes on the
tracks. One crouched on the track

and was killed by the motor car.
He brought it in to me for a
specimen. The car left the
track but still remained between the
rails.

Last night it rained in
torrents but the port but inland
the downpour was less. Apparently
rain comes more frequently near
the river. There was a shower this
morning but not enough to interfere
with work.

September 2, Thursday.

The Lake was rowed this
morning and. The sun appeared
only at intervals during the day.
I remained in all day, making be
notes & specimens. I sat up before
staying all once in the morning but
did not complete the job, the last
of the lot until nearly four. It
was cool all day.

I have very comfortable quarters
here and excellent food. It is
pleasant indeed to be among
Americans again.

On the old maps Puerto Pinasco
shows a Puerto Stanley.

September 3, Friday.

The sky cleared this morning
and the sun shone for the
greater part of the day. I followed
growth along the bank of the
Rio Paraguay to an estero where
my way was blocked so that I
continued inland. The land here is
high and in spite of the high
level of the river at present there
is a cut bank six feet high
above the water. This bank has
broken away so that the river
bottom is sloping. There was
space along here for shore or
a narrow playa of sand and clay
but I saw none. Inland the
esteros had flooded considerable areas
forming pools about which I
might expect solitary sandpipers but
I saw no sign of any. It is
curious that there are not present
here as certainly some must be
coming down now. I believe that
the bulk pass on over farther south.

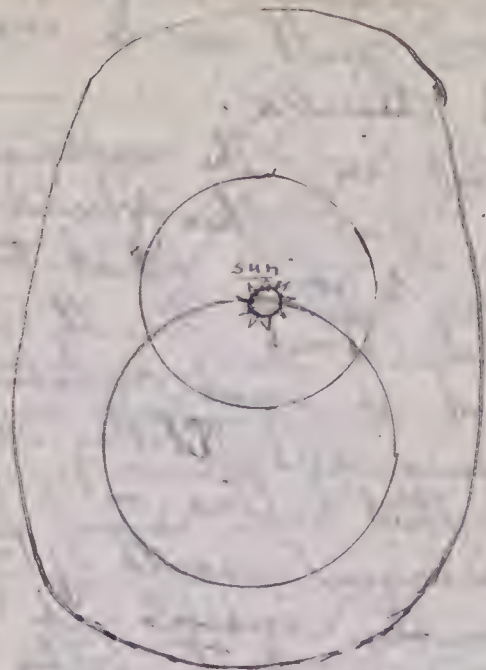
The river current here is swift
and turbulent. The water is clear
in color. The hills on the opposite
shore stand out clearly at least
300 or 400 feet high. They are heavily
wooded. I did not see the
outliers of the Plan Alto group.

Kingfishers were nesting along
the river bank and Cormorants
passed continually. Aland small
birds were abundant. Along the
esteros were extensive growths of
palms. These low, young
plants are destructive to clothing
and I found it necessary to walk
carefully in walking among them.
Young growth was abundant
among trees from 10 to 40 feet tall.
I observed a crawling Arachnid
among them that I have not seen
as yet. Near the river were scattered
groves of a tree with coarse
sugary bark and a yellow flower
formed like that of the hepachis. These
trees were not yet in leaf.

The yellow flowered acacia was
common in the estero and
rushes & sedges covered the part
where water was prominent. Grass
was abundant and of good
growth.

I shot 14 or 15 birds here of
deceivable varieties and returned
to the port at dawn in order to
take care of them. Collected a
small green snake in the trail
a very slender variety ^{aporocephalus lineatus}. Frogs were
observed under palm logs at the
border of the estero but escaped me.
Many butterflies were seen here.

At 10:30 the sun presented
a peculiar phenomenon. A halo
of some what prismatic border encircled
it extending out 10° on either side
a greater circle toward the south
cut the center of the sun in
its periphery and extended through
the smaller one. On either side
were two curving lines that
enclosed the whole but that were



rather indistinctly connected at
the ends. The whole was
most strange and indeed for
many an hour. At first I
thought that an eclipse was
on as the sun though shining
seemed here weakened days so
that the light seemed vague and
indefinite. Apparently however it
was due merely to reflections from
vapor in the air due to recent storms.
The Paraguayans were rather excited

about it, claiming that it
portended a great war to come here
in South America.

I worked in the afternoon on
specimens and then packed
preparatory to going inland tomorrow.

Several times recently I
have heard a legend prevailing among
the Indians of the Rey de los
Jacaris that lives in a trench
or in a lagoon south of Ponce.
This monster inhabits the water
or the mud at the bottom of
the lagoon and when it emerges
is so large that it makes a
tremendous hole in the mud.
Should any Indian venture to
enter the water he is seized by
a snake like head and engulfed.
The story is perhaps based on
some monstrous Jacari of man
eating proclivities.

The climate is warmer here
than further south and of find
the excess rays very hot.

September 4, Saturday.

This morning I left Pueli Ponce in
the ramshackle little train at 8:00
and proceeded to kilometre 40. Here we
transferred to another little train arriving
at 3:30 P.M. at kilometre 56 which was
the end of the railroad. The small
narrow gauge engine drew empty flat
cars for Quebracho logs, a load of rails
and a small covered car with
seats crowded with Paraguayans. Other
sitting on precarious perches of short
poles on the flat cars which were
packed only without platforms. Behind
were two small goods cars made
of galvanized corrugated iron and
two of these cars loaded with
iron. A rock in one of the goods cars
with the conductor. It was
extremely hot and close during the
day, much warmer than in Formosa.
The country traversed was entirely
level save for the belt at kilometre
25. The soil appears more fertile than in
Formosa and grass was abundant
and some fields were covered

with palms covering miles of
some what low ground. Elsewhere there
were open brush, both *Savanna* like
and *Distans* nature. Small
patches of palms trees were grouped
at scattered stops on the road
but elsewhere the country was unbroken.
Much work in cutting *Outbacks*
and is improving the line of railroad
was going on.

At the stops the conductor delivered
lots of groceries and meat to various
stations. Occasionally we unloaded
cattle. Men climbed on top of
the cars, and slipped two ropes
over the backs of the animals
which were then pulled out
backing and jumping. Some work
animals which were let away.
Others destined for beef were killed
with dispatch as a man ran
in, hamstringing one leg and then cut
the bounding animals throat.

At kilometre 56. I found a bullcut

And horses aint in from the ranch at
kilometre 80 by Mr. Frank Brennan and
set out at 14:00 on a 24 kilometre
ride to the ranch, arriving at 7.
I had a good, big horse and an
upholstered saddle & enjoyed the
ride though it had not been on a
horse previously in a year.

The road crossed the *Beicho*
Jacari once or twice but we
found little water in it. Everything
appeared fresh and green after the
dams which had left muddy
pools along the roads. At one
place we stopped for a drink from
a lagoon. The *Vasians* offering
me water in a *guampi* a drinking
cup made from a horn. The road
wound along through mountains and
open country. Two *Artatis* flew
across ahead of me and at dusk
a pair of *Podiceps macrurus* hatched
about. A swift flying bat of the
Molossus type darted at me at dusk

apparently jealous of its fellow hunter.
In another place three or four
Myiophobus flew up nearby from
the lagoon.

The evening ride was pleasant.
We reached the ranch at dusk
and Mr. Branson prepared some
after. After a good meal we
talked until nearly ten.
At Puerto Pinalco mosquitoes were
bad but here I found practically
none at this season.

September 5, Sunday.

Was out this morning before seven
and soon had my things arranged,
specimens drying etc. The ranch
house here (with painted mud
walls, (made from mud & cow dung
mixed) with a palm roof is
pleasantly located on a slight
at the border of horn-shoe shaped
lagoon. The main house is in
two parts with a vine covered
tulle covering the space between

Broad palm roofed porches surround
each part and the ^{two} large rooms
have two doors at either end to admit
light. A fence surrounds the
whole. Some have quarters in the
buildings in the enclosure at
short distance away. A short
distance from the house was a
two storied ^{structure} of palm trunks
with open sides used for
sleeping quarters in summer in
hot weather. Two large cisterns
supply water.

I loaded some ^{ammunition} shells
in the morning after some
difficulty in getting my ^{trading outfit}
in shape. To get powder and
shot I have had to open heavy
loads of 1's that I have with.
One heavy load makes 8 ^{one} shells.
In the afternoon we talked for
a time over ^{some} ^{water} and later
I wrote on notes.

September 6, Monday.

The sky was heavy and threatening this morning and soon after I left the ranch a heavy rain came on and continued for some time. I passed the time under the inclining trunk of a large tree as a storm was accompanied with lightning. The heavy rain passed, leaving the ground flooded with water but showers continued throughout the morning and remained out however as I was making some interesting observations.

At the ranch is a large horse-shaped lagoon along the shore of which I followed. This lagoon in part was artificial as the level had been raised by dams across the ends. I was swimming in it yesterday in company with some Paraguayans and found the water muddy and slightly saline. It serves however for stock.

The shores have been pastured and the usual prizing growth of rushes entirely destroyed so that it is different in formation from the lagoons examined below in the Argentine Chaco. The shore line offered a broad mud-

flats leading to the water that offered a feeling of ground for shorebirds during a considerable change in the rise of water level. Here I found about 20 white-rumped Sandpipers, 3 Golden Plover, 6 lesser Yellowlegs, 2 Solitary Sandpipers, and about 8 *Charadrius collaris*, but a mixture of the north and south. The birds I were seeing scattered on the muddy shore. I collected specimens and spent the morning in making observations on them, getting a new idea of the Chaco in relation to our *hinnicolas*.

Shore-birds undoubtedly pass over this country as they do in the states flying rather high both by night & day. When suitable water offers they descend to feed. Thus here at this open pond I find them while below at the enclosed lagoons that if examined there is nothing to attract them. However as the country settles stock will destroy many of the rush growths leaving open shores where sandpipers may descend and feed. The same thing has happened about the alkaline lakes in northern Arizona where formerly

There were abundant growths of lily
that have now in large part disappeared.
There is comparatively little water in
this country in the dry season, so
that it is necessary to construct
ponds for watering cattle. Thus as
the country settles shore-birds will
be offered increased facilities for
resting and feeding.

I collected a number of birds
during the morning. A *Passaria*
capitata that I wounded was
about to drop when a lily hawk
swooped in and stole it. *Chalchis*
called from the mouth and I stalked
and shot one. Iron-duck flew up along
the lagoon and I shot killed one from
a flock that passed. A *Chaja* was
seen and also a pair of *Arremon*.

The afternoon was occupied in
caring for specimens. I found that
the roof leaked over a swinging
shelf that I had put up at the house
so that my specimens were wet.
Every thing was damp but it is
not cold as it was in the south.

September 7, Tuesday.

The sky was still heavily overcast this
morning but no rain fell today. I
followed out through the gum country
to another large lagoon in the pampa
and spent the afternoon in caring for
specimens. In

I lesser yellowlegs were flying in small
numbers this morning and I
observed a few Solitary Sandpipers along
the open shores of a small stream
known as the Riacho Jacaré. The lagoon
visited was not suitable for observations
as it was covered with heavy
growths of bushes and there were no
open flats.

The country traversed was the usual
level save where the Riacho Jacaré had
cut a channel ten to fifteen feet deep.
Most of the area was open pasture
with scattered trees. Grass is abundant
and good. Mr. Branson tells me
that there are 23 leagues under fence here
and that they are running about 23,000
cattle. New land is put under fence
steadily and the pastures are being
extended inland. When the ranch

enclose an indian totola the chief
is given a call to move out. The
interior country in the Paraguayan
chaco is unexplored though it is claimed
that two Spanish expeditions ~~have~~ crossed
it in the 16th century. Recently Carl
Hiltman went out 270 kilometers west
of the river which is the furthest known
point at present. Water is difficult to
secure in the dry season as the region
is alkaline and the water bad.
Although it is unknown all of the
region is owned by private individuals.
There will probably be considerable
trouble when the lines are finally
run.

I followed along a muddy depression
for a distance where there was suitable
ground for sheep and then continued
across the river.

On the opposite side I came to an
indian totola where about 40 Indians
were living in a series of low thatched
huts that adjoined one another in
a line facing the north. Two old
men came out to talk to me but
knew no Spanish to amount to anything.
Their replies to my questions were

mainly to a vacant repetition of the
last words that I had spoken. There is
much eye trouble among the Adelphoph
and cataracts of the eye are common.
I am told that this comes from the
smokes that they use in stoves
to keep fire from insects. They were poorly
made save for a piece of cloth that
they wrapped around the waist. The
women were made from the waist
up and wore a crude skirt that
came to the knees. The men often had
only a piece of cloth in the form of
a poncho thrown over the shoulders
and wore nothing else. Their camp
was dirty; and despite they had walked
out only fifty feet in front of their fires.

\$ hens were common out. The
language and I saw many fine Manx
Ducks. The ease with which these great
birds perched in dead trees was a constant
surprise to me. I killed one fine male
and also shot a beautiful Widgeon
that passed overhead. A vaca who
with a companion was hunting here
was kind enough to carry these to
the ranch for me, as he was mounted

Sept 9, Thursday.

Last night I had a sudden attack of indigestion, & touch of pleurisy, so that I did not go far today. The sky was clear and at noon the sun was extremely hot.

After a light breakfast I followed out along the border of the lagoon and then went into the monte on the opposite shore.

Many more shorebirds were in and I found flocks of them feeding noisily shores & wet places where it was open.

The lagoon here near the house looks separate. Vegetation becomes in previous years it has been too heavily pastured and the stock has eaten every thing now. This makes ideal conditions for shore haunting water birds and is the one spot where I can make observations to best advantage in this region. All of the shorebirds thus far have been thin so that their preparation has been easy. Some seen today were wilder than others noted though no one is shooting

Across here I found several Sandpipers. White-rumps, Black-bellied & Golden Plover banded together with greater & lesser yellowlegs and Solitary Sandpipers feeding busily. One White-rump that I shot was a male. Others taken thus far fall the species have been females. Leaving the lagoon I passed back into the monte and collected some small birds. An accipiter like hawk came in at dusk which I shot it with my pistol.

Fox and small cat tracks are common in the monte along trails in the woods and bats are flying at night. I killed one small species tonight. One species that looks like a sparrow like a molossid frequently starts down at the barrier when flying *Podiceps macrurus*.

The folks in the country talk gauran among themselves entirely. Many of the children are unable to understand Spanish and frequently I have had some idea of the Spanish name of some article. The language has a peculiar jibbing sound and as it is poor in vocabulary

has much Spanish mixed with it. There are only four numerals. There is prejudice against it among American and educated people in general as the tongue has so many jilting expressions and phrases, especially in relation to women.

This evening Carl Hettner returned from Asuncion bringing a Ford car in which they plan to make expeditions in the Chaco west. This is the first car in the Paraguayan Chaco and is quite a sensation. The open camp here is cool and safe when it is necessary to cross Pichos as car can run together.

September 10, Friday.

This day was cooler than yesterday though the heat of the sun was extreme in the middle of the day. I do not find the sun so unbearable however now that I have become accustomed to it and the heat which general is no more even than at home. Thus far there has generally been a breeze to temper it.

This morning I went out east

and north part a series of lagoons and through a tract of monte along an Indian trail.

Small birds were common in the undergrowth of a cleared section but I did not encounter many along the borders of the monte. It is very in these woods now and I believe that many birds have moved to other localities. Harlequin and Vireos were common and I saw a number of streamers.

The monte here is rather low and has ~~only~~ not many large trees. The undergrowth is dense and spring and in many places it is difficult to penetrate far. The bromelia like plant known as Car-a-qua-tai makes it difficult at times to secure birds that I have killed. I found an Indian trail leading through one tract and followed slowly along it watching for small birds. A few Swifts were flying overhead and I fired at them several times but missed them. They have a mean habit of flying high where it is difficult to reach them. Carl stood watching for them a monkey ran

ran up in the top of the and out quickly
looking around I shot it and
found that it was a young male, a
fine long tailed brown animal. The
body temperature was 98.9° ; very near
that of the average for man. The
fur and feet of this animal were clean
but the head a pungent odor about
it that was unpleasant. In the afternoon
when I prepared it I offered the
body to the Indian after the way they
had been skinned. Some perhaps he
refused it. This is the more common
and they take all intestines and cut off
matter from the cattle that are killed
here at the ranch and also I have
known them to take bird bodies that
I have thrown out. It must be that there
is some superstition connected with them.

(Anon in Augustas. He says very much)
I killed a fine Charata today (Harris)

The flesh of these birds is very palatable
The layers are being past now
and there is a broad border around
each of them that is not covered by
water. Movement among the shorebirds
still continues and I find the
birds in small numbers.

September 11, Saturday

This morning I rode out to a tract of monte
~~about~~ 5 Kilometros west of here
seen through this and I was able to
follow it through it for nearly two
Kilometros along side it. I went out
on my back and then followed through
in front. The hunt was considerably
in the forest. The trees were rather
low and the monte was somewhat
open with a very heavy undergrowth.
Small birds were in pairs and
I had pointed to the forest
side I found very few. Here I killed
a cathartes aura and secured
8 or 10 small birds, including one of
the Bick-billed Dinobrochptids. Beyond
this monte was an extensive plain but
the ground now was entirely dry.
I saw one ~~streak~~ today but could
not get near it for a shot.

In the afternoon I had birds
sufficient to keep me busy. Things
are drying well here as the wind
blows the mud in one direction

September 12. Sunday.

This morning Carl Peterson and I
rode out in P. No. # 2 on the
west and visited a big cataract
there. The country here throughout
is cool. We crossed through
palms and around tracts of
meadows. At the cataract I killed
two *Melospiza* and as we
rode along to see, one flushed
a gallinule. I marked the bird and
later went back and wading in
shot it and another one, the first
I have taken. The water was about
1 km deep and the surface was covered
with water plants. A sedge grew in the
river making a channel where it
was probably deeper. Birds were common.

From here we passed on across
the river that was nearly dry. A
shear boomed and in a short
time I caught sight of it
slipping away among the
shrubby like shrubs. We turned our
horses and followed cautiously in

foot seeing where the great three-toed track
crossed in the sand of the river.
At the opposite the river moved slowly
off and finally stood. I fired at about
200 yards distance 30.00 and knocked
the bird down but to my disappointment
it jumped up and ran off very
slowly. We followed but found no
trace of it.

The grass here is growing in
good shape after the rains and
there is an abundance of food.
We crossed a good pasture, seeing
many cows each accompanied
by a calf, all sleek and smooth
and in fine condition. The country
while open was dotted with palms,
a thorny shrub and an acacia.
The water was especially common
along the border of the river.

We circled around through a brush
dotted pasture and at noon returned to the
ranch.

In the afternoon I cared for the birds

that I had secured and worked on notes.

A strong wind blew from the north all day and it was hot but not uncomfortable. The rain has called out a few mosquitoes.

September 13, Monday.

This morning I rode over to the lagoons de Palmas, tied my horse and spent the forenoon in hunting. The lagoon forms a horseshoe nearly a kilometer long.

Saw for two or three small areas of open water it is ground with a sedge resembling *Juncus*, with a line of cattails in the center. I attempted to wade through the rushes but could make little progress the water was from two to four feet deep and the growths of rushes clogged my progress. The lagoon is surrounded by an extensive palmar which made good cover through which to hunt. The palms bear an abundant crop of nuts

elliptical in shape and nearly half an inch in diameter. These have a black pith with a small quantity of sweetish pulp like a hazel. They are attractive to parrots and I found *Aratinga mitratrix*, and *Amazilia aestiva* feeding on them. The palms have strong preserved hooks along the ~~stem~~ long petioles of the leaves that tear my clothing unmercifully. The younger trees form a dense growth through which however it is possible to walk with ease. Above these tower taller trees in slender attenuated trunks.

I killed a screamer today and four ibis, a *Molybrythmus* and three *Theristicus*. Then tied to my saddle made quite a load and my horse was inclined to balk at the strange cargo but finally went along without trouble. As I forded the Riacho Jacari on my return a *Caracara* ran out but passed on through the brush without stopping.

An Indian sold at the lagoon
was not occupied today. The Indians
seem to travel through the country
building these temporary shelters whenever
they chance to stop. I photographed
this one. I found Indians have been
working at the ranch cutting weeds
and seem very industrious. They
are paid entirely in galletas and
cloth and similar articles. As my
occasionally does one of the caciques
have any idea of the value of money.

I did not get back until late
this afternoon and was unable to
complete my birds by dark. The
ibias skin very hard.

North wind continued steadily all
day.

September 14, Tuesday.

Last night I slept outdoors facing
my mosquito bed to a win. The
nights are warm but not too un-
comfortable. I awoke at six with a
noise from (*D. musculus*) singing loudly
a few feet away and a long tail

giving his chuckling rattling song behind
me. (*Scoenophylax phyzanophila*)

I rolled out and began work at once
on some birds that I had left over from
last night. I found that they had begun
to spoil but was able to save all but
one *Molybtophanes* of which I kept the
skull. Work on specimens occupied the
time until 9:30. After this I began
packing specimens that were dry and
in cleaning up a number of odd
jobs. The high north wind combined
with its dry heat all day and
has been making it difficult to
handle the birds that I had prepared.
By afternoon however I had two boxes
in shape and the other material
in condition when it was not injured.
As a matter of fact I am pleased
to have the dry weather as ~~strong~~
specimens handle much better than in
the damp atmosphere of the first few
days that I was here.

We have had a plague of flies here

at the ranch; the insects have swarmed on the dirt floors and at times have rendered sleep difficult.

For the last two days everything has been moved outdoors and the floors flushed with water. In addition a broad, banana-leaved water plant has been cut up and thrown about. Either the water or the plant has proved effective and the pests have in large part disappeared.

We appreciate the breakfast here at the ranch very much. Mr. Frank Branson usually sees that we have oatmeal, which with coffee and "hot" biscuit as he terms galletas, make a substantial meal. Mr. Branson has been in Brazil and Paraguay for six years and has a most thorough understanding of the natives. His administration of ranch affairs is efficient and the men he employs all like him. Carl Hettman who is with him and who I met in Asuncion was

born at Sparta, Wisconsin. Mr. Branson comes from near Winfield, Kansas.

September 15, Wednesday.

I found this morning that the wind had shifted south with clouds in the sky. It was much cooler and there was a promise of rain.

I went out first along the border of the lagoon and found a small flock of shore birds in but nothing new among them. Lesser Yellowlegs, Golden Plover, White-rumped and Pectoral Sandpipers were scattered along and with them I found a few Collared Plover (*C. collaris*).

A coqui howl flew up but I failed to secure it. A tinamou dropped in the grass but I lost it.

Peons came through chasing an unbroken ox that they were going to drive and I had to watch for a few minutes as the animal was "bravo" and liable to attack. Finally it was captured and led away bellowing and bucking.

From here I went into the mounds
and followed around to the chain
of lagoons in the north. A trail
cut to permit the bulking of an
fence offered a convenient path.
The fence posts in these new fences
are of Amburcho wood and are
said to be practically indestructible.
The wood is so hard that staples
cannot be driven into it, so the posts
are bored and the wire fastened
with wire loops around & through the
posts.

Birds were common in the wooded
areas. The strong hot wind of the
last three days has held them inactive
but with the change in temperature
all were out feeding & moving actively.
I believe that there is some evidence
of migration now. I saw three individuals
of a greyish flycatcher with black & yellow
brown & notched primaries that I
have not observed previously. Two
taken were rolling in greasy fat,
differing decidedly from other passerines

here which while in good condition
are not fat.

A small flock of Pines flew over
and I shot one which fell screaming
loudly. A pair of the large brown
woodhoop were seen in a
little opening. The breeding season for
some birds is approaching. I
noted considerable development in
the testicles of a hummer #4987, a
gray throated Tynniatid #4990 and
the large woodhoop #4996. Other taken
jays, an oriole, a long tail & a parrot
showed no signs of sexual awakening.

The glowers of the open plant in
the mounds were developing rapidly.

At the lagoon on the north I
shot a caracara that flew out to
drop in the water. I waded in for
it examining the lagoon with
interest. The shore line had been
by the receding water during the
present dry season was covered up on
the ~~near~~ higher part with short grass.
Near the margin of the water was

an abundance of stranded water plants. The soft fleshy leaved plantel de caballo was prominent among these and covered most of the water of the lagoon with a solid mat of thick blades whatever was cut with here. The bare shore of the lagoon at the estancia is thus without doubt to overfaturage.

The Chaco here has good soil and will prove very productive. at present it is no finer a cattle country as there is in the world with abundance of excellent fuel. within a few years however considerable areas will be taken by settlers for agricultural purposes and as this is the the marshy spots will drain and the country improve. with this change ponds will be made & the borders of lagoons, changed & trampled by stock. Flowed fields or fallow areas cleared of palms & high grass will also offer favorable

spots on which shore birds may rest.

There is prospect that a colony may be established here inland within a year. Mr. Eyles, from the States is prospecting the country now. I returned to the house at noon and proceeded at once to the care of the birds then. two species taken today, a hawk and a flycatcher I never met seen previously.

September 16, Thursday.

This day was cool and pleasant with a north wind. Birds were active during the entire forenoon.

I rode out after breakfast to the indian trail through the monte on the east and worked through to the north branch of the Riocho Jabori. This was larger than the other arm of this stream, had high cut banks and contained considerable water. The banks were brushy. Nearly worn some indian toldas but all were deserted.

In the monte birds were active: a strange note drew attention to a pair of *Signallaxids* of a species not

encountered previously. Swifts were
circling about over the woods and
I shot one but was so unfortunate
as to lose it.

A strange grunting call drew
attention to a band of ^{three} monkeys
that were scolding something fierce
a snake. One came down to make
pace at me and I killed it. It
is differently colored than the one
secured previously and is probably
older. The preparation of the feet of
these animals is difficult.

Rain threatened during the afternoon
but little fell. There was a small
flight of yellow blood and a few
small yellow ones from the south
during the afternoon.

Sept. 17, Friday.

This morning in examining my specimens
I found that maggots were infesting
a screamer that I had salted and
put away. The bird was a tuff high
when I skinned it and had attracted
flies. The larvae had been able to
work in among the air cells in the

wings and had done some damage.
A handful of salt soon finished them.

After breakfast I rode over to the
hacienda de Palmas to secure other
chigias. It was hot and close.
I worked around through the palms
and finally had a shot at screamer
securing two. One hung in the
top of a tree by its wings and
finally I had to use two shells
in shooting the limb off to get
it down.

A *Syrnium* flew up in the
lagoon and I took off my shoes
& my trousers and went in after it.
There were three here in all and
finally I shot one a fine female.
The bird does not appear to be
either *marmoratum* or *fasciatum* as
near as I can make out and may
be a new species described by Linnaeus
recently from Satarenda in the Bolivian
chaco!

Several other birds of interest appeared
in the lagoon and I put in two
hours in working with an

short excursion into the palms where
I had to use care in walking among
the small palms with their sharp
knives. The water in the lagoon
was only about knee deep but a
sharp edged rock made walking
difficult. The water was dark brown
in color and the bottom was soft
and muddy with black silt. *Cymbopogon*
was feeding here in company with
a flock of females of *Agelaius*
republicanus, the first of this sex that
I had seen. I also found a pair of
hickshaws, the first noted. One of the
rushes growing here was a tall
round stemmed *Scirpus* resembling *S.*
occidentalis. Water hyacinths were
in bloom and there were extensive
growths of cattails. The shore was
muddy everywhere so that after coming
out I rode back by my horse down
to a water hole where two palms
made a bridge from dry ground to the
water and here climbed up. With
a screamer tied on either side of

my horse and a tiger bitten in
my coat I had the fair load.

The palms are very picturesque
with the old ones towering
over the younger ones that form
groves often of considerable extent. With
a foreground of water there appear
especially fine. Such regions however
have had land marks and in
walking through them one has to
watch directions carefully. As a
matter of fact this applies to this
entire Chaco country as I have
seen it.

In the afternoon I began work
at once on my big birds. To complete
all I skinned small specimens for an
hour by lamp light.

The evenings here are cool and
pleasant usually with enough breeze
to make them cool. Mosquitoes are
somewhat troublesome and are becoming
a little worse. There is no attempt
here to screen the houses which is
an old palm structure plastered with mud
mixed with cow dung.

September 18, Saturday.

This morning I worked around the shore of the lagoon at the ranch in an area that I have not covered in several days. A small flight of yellow Plover continues about here and yellowlegs are common. I believe there is no remarkable amount among shorebirds. I was fortunate today in picking up two species of birds not taken before, a swallow *Chaerogoccyx tufus* and a beautiful teal.

The lagoon shores were open with scattered trees through the pastures. Prominent among these is a tree growing from 20 to 40 tall with rough dark corrugated bark and irregular straggling branches with few small twigs, so that the limbs are open. This, known as the *Pura* tree because it is used in making a medicine said to be of value in malaria and for indigestion and other purposes, at present has no leaves but is full flower. The flowers, shaped like those of a

morning glory but larger and yellow in color and are similar in form & size to those of the *Lupinus*. These fall when blown by the wind. Small parrots, (*Myiopsitta*) and quercos eat the blossoms and they are probably the food of other birds.

Birds are abundant in some of these pastures although in some areas where it is very they are found them scarce. A variety of species are often found near one another. The water I encountered *Baccharis capitata*, Umbellids, *Veronica squarrosoides* and *Leucocarpus cuneatus* in one small tract. Pipits that formerly were abundant here seem to have disappeared.

The water in the lagoon is thick & mud-poor. sand and is slightly saline. I have bathed in it several times but am uncertain of the exact properties of the water. There are many fish in it including the piranha. The latter does not seem to be dangerous here though I always take the precaution to wear a bathing suit.

~~Sept. 19. Sunday~~

Tonight I set a line of mouse traps near the house in growths of weeds and grass. There was comparatively little sign in evidence.

About 8:00 P.M. I rigged up my electric headlight and went out for two hours and a half around the meadow near at hand. The night was partly moonlit which made it bad for hunting but I chose such a night purposely to try the light as I was not certain that it would work and the ^{moon} light would aid me in getting home in case the lamp failed me. Two hours with bright green eyes were curious and followed me for a short distance. A small Gnatcatcher that ^{was heard just} began calling last night began calling and I followed slowly along in the direction of the sound. At first the bird was in leafy trees and I could see nothing. Others began their peculiar notes and I kept following along toward them. Humbirds were abundant and a

later with two phosphorescent spots on the thorax was common. These points of light were a clear translucent green. Suddenly low down I saw a single spot of deep ruby red that ultimately appeared and disappeared. The point appeared about as large as a quarter was round and in appearance reminded me of a coal of fire but had a deeper more intense light. Swinging the light so that I could see the gunlight on the end of the barrel I took careful aim and fired. Gas from the discharge scouted back in my face in the dead night air and the red spot disappeared. Coming up I found a beautiful little Gnatcatcher that I had killed as it rested in a dead limb. Beyond here I was fortunate in catching the eye of another and shot it. Now more than one eye was seen at a time so that I judge that this bird uses monocular vision in the main. Others of these birds continued to call and two species

of ours were heard. I fired once at
a peculiar dark green spot of light
high in a tree but found that it
must have been some phosphorescent
insect.

A Chaja (screamer) on the canyon
beyond began to call as the light
appeared and finally flew heavily. I
was unable to get my reflecting from
its eye whatever.

Beyond here I started over old tracks,
a trail cut through the woods.
The path was filled with stumps
and irregularities that were walking
uncertain in the dim light. The
headlight threw a small circle of
light that illuminated the branches
and leaves, shifting as I turned
my head. The red eye of another
ybatouche appeared and I fired but
could not find the bird which
may have fallen in a dense growth
of Caragobata. What I thought
was a jaguar coughed in the thick
growth at once side. It crossed

behind me and coughed again
from the opposite side. I stopped
several to squeak and once a
small owl circled my head but
went off into the woods. This
bird I believed to be a *glaucopteryx*.
It gave a clear whistled call of
several notes. Another owl had a peculiar
hooting note.

My light began to fail and I
returned through the jicada. The
walk home in the faint moonlight
was pleasant. At intervals trees
in blossom, (*algodon*) gave a
pleasant odor that filled the air,
great ruskies called and I heard many
grays. At the gate the logs were
pushing out with a great clamor
but were overjoyed to recognize me.

September 19, Sunday.

I was out this morning to see
to take in my traps but found that the
ants had eaten my specimens badly.
I had ten mice in all of at least
four different kinds. All were secured

under grass and among weeds. One
was entirely destroyed by ants and
two others were so damaged that I
kept only the skulls. It was very
hot this morning and I had to start
skinning at once to save my specimens.

Great toads are abundant here. They
are about in the rooms and in
the patios at night and in the daytime
are to be found in all sorts of cavities.
I encountered two or three ensconced
in holes in logs while setting traps
last night. ~~and~~ today a new door
that I was set up in the kitchen
failed to draw and a toad was
discovered obstructing the draft.
The animals fall into the cisterns and
are a considerable nuisance.

I worked on specimens, notes and
a number of necessary jobs all day long.
In the morning a man came
in and reported that a jaguar
(jaguar) had killed a calf. I rode
out at four in the afternoon and
set a trap for the animal. The

calf had been killed in a corral within
a hundred yards or so of the house.
The jaguar had struck it on the
side of the head breaking the lower
jaw. The animal was claw
marked on the neck slightly and
had been bitten once on the back.
The cat had eaten the entrails and
then had gone away. I was
assured that it would return
tonight but doubted it very much
as men had tramped all about
the place and had killed the calf.
I made a good set covering the
trap so that it was completely
concealed.

The country here is dry now and
the lagoons and esteros are receding
rapidly. Grass was shorter in this
pasture than in others. The out-ranch
or retiro visited was known as number
seven. It was a primitive palm structure
with open walls. The country was
the usual succession of open camp
and ranch. The jaguar had made his
kill in open country.

I rode back to the rancho with
saw a cowboy and the Argentine by
moonlight. I checked the little goatsuckers
regard to call but otherwise it was
quiet. The night was clear and fine
but a heavy storm was running
in the southwest.

September 20, Monday.

This morning I rode over north to a
pass in the mts and spent the forenoon
in watching for swifts. I was fortunate
finally in finding one that I killed though
two others were lost.

showers came up and it rained
more or less during the forenoon. I had
taken the precaution to remove the saddle
from my horse and so kept it dry.
For the past few days I have been
riding a padded native saddle and
find that it makes me a little sore.
The hard American saddles are much
better.

Birds were common in the mts
and were moving: a Myiophobus appeared
overhead and I shot it; small birds
were moving actively. There is no

doubt but that there is migration
among them now.
In the afternoon I searched for the specimens
taken in the morning.

~~September 21, Tuesday.~~

In the morning after another storm
there seemed to be considerable movement
among shorebirds. I walked out to
the least end of the lagoon and was
pleased to find a little flock of Sitts
and Semipalmated. Several pairs feeding busily
in the mud. As I watched they
rose suddenly with a not a noise
and whirling about were away
swiftly to the south. Some Sitts
remained and I shot ~~two~~ of these.
The evening was quiet and the same
pleasant. The water of the lagoon
was smooth save when a Kingfisher
dropped to strike at a fish. The open
shore were ^{broken by} ~~variegated~~ with scattered
trees while beyond lay the smooth lakes
of the mts.

As I returned at dark a fine
big Argemone passed over and I stopped
it from head.

September 21 Tuesday.

This morning I followed out around the lagoon ~~today~~ again. I had planned on packing today and leaving tomorrow but there has been so much activity among the shorebirds that I decided to remain for another days work in the field.

I found still Sandpipers fairly common with a few White-rumps, many lesser Yellowlegs and Golden Plover and one Solitary Sandpiper. Was much pleased at securing a fine specimen of the Buff-breasted Sandpiper. The shorebirds that I have taken here have all been found in ~~fresh~~ fat though in good flesh, evidence of their being in plumage. The contrast between their condition and that of migrant small birds that come in from Brazil is marked as the latter are rolling in greasy fat. Shorebirds have a direct line of flight to the south here and I saw many Golden Plover and occasional Sandpiper pass over during the entire afternoon, attracting attention by their

calls. During one cold storm a few returned but the last rain has not affected the migration apparently. Some to bring more birds in from the north. When the river is low exposing a sandy stage it is probable that many drop in along it but now there is little or no place for them to rest there as the stream is bank full. I have observed no large bands of these birds as yet 40 Golden Plover being about the largest I flock seen.

Since my arrival here it has in general been hot and dry with much north wind. These conditions have worked to dry up the water standing in shallow pools and esteros, so that these have disappeared rapidly. The level of the lagoon at the estancia has dropped six or eight inches in the past few days leaving a band of soft mud at the border from one to three feet wide. Other pools and lagoons where I have been accustomed to find water have gone dry entirely or

have been greatly worsened. Carl
Peterson reports from the interior
straight reporting that the lagoons
and esteros there have been drying up
rapidly and that the water will
not last much longer in many places.
The soil became hard and firm
under these conditions and
with the oxen teams ~~packed~~
so that it does not return to its
former boggy condition.

Today I shot a fine pair of
Crotophaga sulcirostris at the border of the Monte
and another *Myadestes* and several
Atelesia. As I came forth
along a post road I saw *Artibeus*
flying in dry open places which
there is much evidence of movement
in migration among small birds at
present and many seem to be coming
in. This is the beginning of spring
and from this condition many will
be nesting soon.

The dryness of the country
would seem to be a bar to small
birds at present but as a matter

of fact the species inhabiting the
Monte are able to secure water
from the Caraguata. This plant
has heavy pitted leaves clasping
the short stalk firmly and forming
cups that hold the rain water for
long periods. There is enough of them
for human use and though
it usually very dirty.

The Monte on the farther side
of the lagoon is rather open, though
with much Caraguata so that
birds could be detected easily. In
the hot sun I found it extremely
warm but with a heat that was
not oppressive. The small birds seem
to be light in this and more active

There is a small lizard in the
border of the Monte that I have not been
able to secure as yet. It runs rapidly
for a considerable distance and then
hides. Yesterday I picked up a toad
that I take to be a *Dendrobates*. It was
hopping about in the road after a shower.
Later Mr. Berman brought me another.
These creatures hopped occasionally but
more often crawled like Horned Lizards.
In color they were black, marked irregularly

above and below with Chalcedony, about
the palms of the feet, a broad oval
patch, and a spot on the lower surface
of the upper arm were Jasper red.
The animals were about 1/2 inch long.

I spread many specimens out
to dry today and get them in
good condition for packing. Heavy
rain came in this afternoon
and I had to bring every thing in.
It rained in torrents for half
an hour and at the close the
water stood everywhere on the
ground. It disappeared in two
hours more however as it was
absorbed by the dry soil.

The morning was clear and
vegetation appeared fresh and clean
from the rain. A scattered grove
of Para todo trees filled with
yellow bloom, in the opposite side of
the lagoon made a beautiful
picture against the light blue
greens of the mountains. The natives
extract a quinine like product from
the wood of this tree which they use
in fever. The rain will do

much good as the grass has
been in a mud of water.

Forest life is becoming more abundant
now that spring has been and
a few insects come to the light
in the night. Mosquitoes are just bad in
the early evening. Some of the many
bats have left. The little gnatcatcher
that I have this year is becoming
more common and called from all
sides tonight.

Angela is our crook has a
peculiar that she has raised by
hand and that now is three quarters
grown. The animal is tame and
affectionate and ~~she~~ has shown the
dominism of a dog than of a
jugo. When I stopped in to see it
today it came running up chasing
a little girl and then came jumping
up to rub against my legs with
soft breathing calls. It delighted in
being stroked and ~~was~~ expressing its pleasure
but waiting about. Tonight an expectation
came in from the outside bringing two
kittens of mountain cats and a little bear
alive.

Large Harems (Sabarus) of which I
have specimens are becoming common
in the month now. These insects
must breed in the water held in the
"Caraguata" and everything else is
going dry now. These flies, known
as Sabarus, have troubled my
nose greatly in the last few days.

September 22, Wednesday.

This day I was occupied all day
in ~~packing~~ packing specimens and in cleaning
up my outfit. I have a box of skins, one
of skinned birds and one of skeletons from here
as well as two trays of birds that are
not yet dry.

The wind blew hard from the north
all day and then in the afternoon some
rain came.

I have seen pieces of a wood known
as palo santo that is very hard and
heavy, so that it is utilized in making
bearings of some kinds. The wood is
resinous and burns with a clear
flame making a very small amount of
light gray ash. The wood is not very
common and so is sought after.
Last night my outfit came in
from outside that has been working

in fencing. They brought two kittens
of mounted cats of different species
and a pair of a small deer. The
latter though constantly on the
alert was tame and gentle and
came over to me to sniff at my
face and to be petted. They had
found one ostrich nest with 45
eggs in it. We have an ostrich
egg scrambled at noon and I
found it very good. When cooked
it presents the same appearance
as a hen's eggs.

It is believed among the ~~garage~~
men that if a cow is killed
(struck) with a knife by a man
with hot blood and warm hands
that the meat does not keep but
spoils quickly. On the other hand if
the butcher's hand is cool the meat
is easily preserved for a long time.
This was carefully discussed at table
last night.

Among the native remedies for

toothache is the application of
a fresh hen's tooth which is
said to be instantly efficacious.
Fresh horse manure boiled in a
tea and cooked down until it
is strong is an excellent remedy
for cholera as malaria is known
here. As the yellow fever it is
hard to take but ~~do~~ the business
Carl Wetman told of a cure that
he had seen for maggots in a
sore on a bull. The man with him
dismounted, made a little cross with
some bits of palm leaf and then held
this up near his eye and squinted
across it at the sore. After a minute
of this he mounted and rode on saying
that the maggots would disappear in
short order.

This afternoon a water snake two
feet long came chasing a huge
toad as big as my two fists into
the house. The toad was hopping
energetically with the snake his
mind set on food, bringing up the
rear at intervals as he caught
up with the toad he bit it bringing

in renewed efforts. I soon had the
snake in my basket jar. (Xenodon macrinus)

The number of Indians who had
been working and fencing came in to be
paid this afternoon. Several of them
were men six feet tall with well
developed muscles and bulging chests.
Their hair was black and straight
and was cut off below the level
of their ears. Their faces were broad
through the cheeks with full lips
and rather large noses. Several
of the younger I saw had flecked
of the hair from the body, save on
the top of the head remaining over the
eyebrows and eye lashes. Their dress
was usually a piece of cloth tied around
the waist hanging to the knees with the girth
at one side. This was usually held up by
a knit or worn sash; sometimes however
was merely knotted at the ends. Some had
large pieces of cloth that they threw across
their shoulders, wrapping their arms and
 chests in them. I saw from their only bedding
at night. Some had woven bags or rolls
of netting gourd at the end in which they
kept a few trifles, which hook, some staves

wooden pipe and a round gourd
with the top stretched out and both
fastened to make a tobacco box. These
last were fastened shut by an
ingenious arrangement of string and
were also held closed with a sash
of beawax. For a yard or two of cloth
and some corn I secured a number
of pipes and other tools and ends. The
men were paid at the rate of
 $1\frac{1}{2}$ to 2 yards of shaw, with one
meal for a week's work. One
or two knew a few words of Spanish
but Guarani was the usual
means of communication with them.

It was cold and windy today with
bad weather threatening.

September 23, Thursday.

This morning I was out at 6:30
and made preparations for a short trip
into the interior with Carl Hellman,
F. Engen and Gen. S. Mc Roberts about a
are interested in a colonization scheme
in the interior of the Paraguayan
Chaco. About a month ago Mr.

Hellman took Mr. Engen, and a small party
of men with an ox cart to haul
provisions and saddle horses and penetrated
over 200 kilometers west from Encarnacion,
farther than white men had been
before. Since my arrival here a Ford
car had been sent up from Asuncion
and a week ago Mr. Hellman went
out and with the aid of Indians
had cleared fallen palms and cut
trails through the monte to enable
the car to get through. It was
now going out and back to test
his road and kindly invited me
to accompany him.

This morning it was cold and
stormy with rain during the night.
We finally decided to start tomorrow
and I left about ten. From the main
estancia to the out station at kilometer
110 there was a road already built that
was used by ox cart. We found this
very good though it was necessary
to make detours at intervals to avoid
brush standing in the middle of the road.

We crossed several riachos and had to get out and shove once to get through some mud. The road on the whole however was excellent and we made good time. The first stretch was through a series of large pastures used for cattle and all under fence. We had to stop to open and close several heavy gates made with palm poles (shoved through holes in quebracho posts set in the ground). The fencing here is of quebracho posts and either barbed or smooth wire. Some of the barbed wire used was made for use on the western front in France during the war and is so marked on the rolls. It is now destined however for boundary fences in the heart of Paraguay! The quebracho wood is so hard that it is not practical to drive staples into it. Posts are nailed through the posts and the barbed wire held in place by loops of

smooth wire. Such posts are almost indestructible.

Toward K^o 110 the road led some what southwest. The camp was open but was dotted with trees. The Para woto was still in full bloom. The natives make an extract from the wood of this tree that they use for jeans. The rain of last night will do much good as the country is getting dry. The moisture will help the new growth of grass that now is starting in good shape. We had little trouble with the road and were at the ranch house at kilometer 110 at twilight.

There is a two brown palmed house built of palm palm poles and with a split palm roof and two other small houses of similar structure for use of the peons. We saw the car on beside the large house and then walked out around a lagoon which something to eat was being prepared. This lagoon is deep and forms a horse shoe shaped lake

bordered by cat tails. Indians had
several caches here made of
sam o. osh or silk cotton tree.
There were many of smaller trees than
the one I had used in Formosa and
were more readily handled. I
killed a *Leptotila* with my pistol
and also shot another *Chaetura*
junco and then we returned to eat.
This meal consisted of a gress
or stew of rice and meat flavored
by cold & boiled milk and sweet
potatoes and a can of peaches that
I got from a *Verde*.

From the same morning
A small *Armadillo*, tethered by
a long cord made of caraguata
fiber I had been kept for me here.
The little animal ran back and
forth with head and tail down
running on its toes, with all the
appearance of being operated by clock
work. Running out to the end of
its tether it fell over on its side
and then kicked until it was able
to regain its feet. In this way

it had circled a circular track
three-fourths of the way around
the tree. It killed it by thrusting
a spear suddenly into the heart.
It was an adult female with
two perfect mammae. The clitoris
was prominent projecting half an
inch so that at first I thought
I had taken it for a male. It was
somewhat hard to skin but was
prepared without great difficulty.
A mist came on while we were
eating that made everything damp and
wet as the weather was so uncertain
we decided to remain here overnight
rather than take a chance on a
heavy rain that might stall us further
west.

After eating we went out again along
the Cayson. The *Limpkin* was taken
here. I had noted this bird like
bird in Formosa from the train but
had failed to identify it. The birds
were found in pairs at the border of
the Cayson and flew with it further

flight. The night heron was seen also and screamed very common. I could have killed several of these great birds with ease. Cormorants passed and large juncos were common. I shot one ^{and} ~~and~~ a Kingbird in appearance that I had not seen previously.

The Para toco was in full bloom and with fresh green foliage on another tree nearby. Much a beautiful view. A few trees with similar flowers of a deep purple color were also coming into blossom.

The evening was cold and stormy: we ate a meat stew that was very good on the porch, and had more milk for desert. I worked on specimens until dark and then skinned two large birds by the aid of a makeshift lantern that gave very little light. I worked on a bench placed ^{out} ~~out~~ away from the wind.

An Indian here, Cacique Cap. i. ta. i. meaning little boss, had three baby ~~children~~ ^{near} or ^{near} ~~near~~ here, only a few

Days old. They were interesting little birds with a fortuitously old appearance that was betrayed at once by their stumbling as they ran. There were two distinct shades among them one gray and one buff. I purchased two for a yard of heavy muslin and made them into skins. The birds had a mournful little whistle that they gave constantly and that carried for some distance. They stood fully erect and very straight and were always gazing away as if at some distant object.

We turned in at nine but found first that the mosquito beds were covered with ants which had to be cleaned out. Next a plague of fleas bit us and although we slept we were well bitten up by them as the beds were fully drawing.

Cap. i. ta. i. a ongate was an Indian 5ft 10 inches tall, dark swarthy skin, rounded chest and full mouthed.

His hair was jet black and was
bobbed below his ears and for clothing
he wore a strip of cloth falling to his
knees. In addition to the ostriches
I secured from him two of the kind
or rather braided bags of Caraguata
fiber that the Indian use to carry
small articles when they are travelling.
One had rather a pretty pattern. The
Indians make hammocks of this same
fiber that are very strong. However they
soon rot if not kept dry.

The small armadillo taken today is
known as *Saty naranja*. In Nguate it
is called *gallina*. The sacks the
Indians use for carrying trifles are called
Vorah.

September 24, Friday.

This morning at six the clouds were hang-
low with a slight mist and were
driving rapidly northward before a cold
north wind. An hour however the
gray rain clouds had raised and the
weather seemed more favorable.

I skinned the armadillo this morning
without great difficulty though I found
it inconvenient to work upon.

Last night I secured a peculiar
bottle larva from the leaves of the plant
Sil Caballo in the lagoon. There was a
luminous organ at the posterior end
of the body that emitted a faint
poorly defined light at intervals. Several
were collected as they crawled about
over the leaves of this floating vegetation.

Birds were much in evidence as
we prepared for the start, a cormorant,
called *viquá* flew in to alight upon
a stub. Large frigates called *picazuro*
were flying about and Night Herons
passed. At a quarter of eight we were
off on our start over a country
without roads. We passed through
two small pastures, out through a gate
and then were in the open country.
The good road that we had followed
yesterday to the ranch at K-110 dwindled
to a rough cart track used occasionally for
hauling palms or wood. This became
a faint track in the grass and finally
changed to an Indian trail, a single
path leading along the border of the
monte with occasional trails or

picadas cut when it crossed narrow
tongues of forest.

We dropped our extensive palmas
at first winding in and out among
the palms. The track led across
dry riachos with a broad
level bed, several times. Palms are
always an indication of low country
as they grow in country that is flooded
part of the year. Small low palms
many with trunks blackened by fire
filled the foreground, while in the
distance the taller older trunks
slender, and at times straight, at
times curved, bore small rounded
leaves. The level dry riachos were
often very rough but elsewhere the
road was good.

After a short time we arrived at
the Laguna Lata, a large lagoon with
a growth of Pincal and a broad open
grassy space on the shore. The
water was now very low and will
be gone entirely in a short time.
Near here was an indian totoda with
about 30 or 35 Indians (Miguatis). The
totoda was about 25 feet in diameter

and had a rude frame of Quebracho
& other wood raised about eight feet
above the ground. This was covered
with a ragged grass thatch. As we
came out the Indians all came running
out in subdued excitement to view the
machine. We gave the cacique some
cigarettes and then passed on with
Indians following us to watch us out
of sight. These people had two or
three goats. The Miguatis make little
chabros or plantations of sweet potatoes
and mandioca and so grow part of their
food.

The monte here was composed of low
scrubby trees and was rather open. In
extensive areas tall small-topped palms
were scattered park like over the country.
Another lagoon, Laguna Perdido, smaller
than the Laguna Lata was practically dry.
Here the weather began to break and the
sun was soon shining in a clear sky, with
a cool south wind to temper the heat.

From this point the country became much
drier being similar to that at K^o 182 in Terma.
We crossed the Riacho Salada a broad

riachos with banks 10 feet high. The stream had a level bottom and was nearly dry. Only occasional alkaline pools were found along its course. There were scattered tracts of a triangular stemmed *Scirpus* here, and broad areas covered with an alkaline efflorescence. A *Salsola* similar to *rupestris* was abundant and a grass on the border was similar in growth and appearance to *Dicellaetis spicata* but was taller. It reproduced by runners but had no seed heads as yet.

None of the alkaline pools was the skeleton of a dead jaguar that had died within a few days. The bones had been scattered by salt-ticks but I secured a fine skull from it. There was no evidence as to the cause of death and the animal though large was not old. Jaguar tracks were seen in the mud here as well as tracks of foxes and small deer.

At this Riacho we stopped built a fire and made a charasco with meat thrust on a pole and roasted over coals.

The country beyond here was higher. Salinas disappeared in great part though the monte was low and somewhat open as before. Broad level areas covered now with bunch grass were smooth and were evidently the beds of ~~low~~ rainy season marshes & lagoons as they ~~were~~ strewn with empty shells of *Ampullaria*. This snail abounds throughout here and I see thousands of the dead shells lying on the ground. Small piles may be found under suitable trees where they have been dropped by *Prostreptopus*.

Other tracts were still higher and were somewhat rolling, swells rising 10 or 12 feet. The soil was a loose sandy loam, with a slight reddish tinge. The swells and hollows were regular in arrangement and to my eye seemed evidence of wind action as they resembled low dunes. The soil was light ~~and~~ fine enough quite for ~~loam~~ and in many ways resembled loam. All through this the ground had been

worked by the burrowing animals known as ocultos or rather ocultos. little heaps of earth like pocket gopher mounds were thrown up every few feet and the soil was so loose that from the workings that the car sank in four to six inches in crossing. Such areas are common and have given rise to the term ocultado among the Indian residents. These tracts would be excellent for agriculture as the soil is fertile. Even now it was moist below the surface. The ocultos are said to give no trouble as they disappear when the ground is plowed and worked. The whole tract was covered with grass. The lower more level tracts had a heavier black soil that will be excellent as the country becomes better drained as will happen with settlement.

The open camps were covered with growths of fine grass. New growth was coming in here in abundance.

forming a rich fuel. In many places the old grass came up on the radiator of the car.

In one place two others or "boos" were encountered travelling across country. They leaped in bounds through the tall grass, travelling slowly and awkwardly. I jumped out and chased them on foot and was gaining rapidly when they came to short grass and were able to run more rapidly so that they escaped into the woods before I came within range.

The road way continued steadily westward. Low scrubby algarobias acacias and Para trees in blossom were scattered over the open country giving a park like appearance. Much of the front of ~~the~~ suspected land ground out over the country reclaiming areas of open camp during the last few years as the trees were small. Many of the trees were dead, probably

from the effects of gross fairs.
Suddenly a fine large jaguar
appeared in the open camp ahead
standing looking at us with tail
erect. It sat about 150 yds. it both
and ran with curl ^{tail} ^{tail} the
chime to siga siga and was
standing on the back seat trying
to get ~~into~~ in a shot with a
44 Winchester. With the Ford making
26 miles an hour over open ground
this was a difficult proposition ~~but~~
I fired three times before the animal
disappeared in the brush without effect.
The last shot just as the
jaguar disappeared struck something with
a sharp spit but it may have been
a branch or a small tree. We followed
in through heavy monte for a hundred
yards but failed to locate the
animal. There were small openings
here in the *Caraguetta* under the
heavy monte of low brush. This was
apparently as clear as the animal had
seen when it had been lying in

several places and piles of dung were
scattered about.

Passing out of the monte to the car
we found two or three Indians around
with three or four more coming in the
run. Camp at Laguna Wall was
only a short distance away and in a
few minutes we were there. The
ox cart had been run in to the border
of the monte and at the end of it the
Indians had erected a rack
temporary *tolda* covered with a thin
thatch of cat-tails. The three men
here had a fire at one side and were
sleeping near the cart. We ran the
car in near the ox cart and were soon
unpacked.

Laguna Wall, discovered and named ~~by~~
by Pittman & Enger after Bishop wall of Florida
was about two miles or more long by
half a mile wide. The bed was green
with round-stemmed sedges, cat-tails
and *Pissal*. At present the water
was confined to a small open area

in the center where you congregated
Ibis, Tree Ducks and many Sandpipers.
Among the latter lesser yellowlegs,
Pectorals and Salt Sandpipers were common
and I heard 4 seen Golden Plover and
Solitary Sandpipers.

On the way out I saw two
White-tailed Nits. One of them the wind
had swung near me and I had killed
it. As it was only three o'clock I
sat down and skinned this and one or
two other birds that I had with killed
and then went out along the lagoon
with an Indian boy to pick up any
birds that fell in the water. It was
greatly mystified at my methods of
hunting and I paid no attention to the
Screamers, Ibis and other large birds
that he pointed out but continued
in pursuit of other things. A
large flock of Tree Ducks passed back and
forth overhead calling shrilly, besides
Trumpets and Chats gave their
goose like calls. The flock of swallows
came circling over the marshes as

sun became lower in search of a
roost in the rushes. I killed my
first specimen of *Pygochelidon* from among
them and was greatly pleased to
observe several Barn Swallows in their
company. A female was soon added to
my other species. This bird was in
worn plumage and was specios in flesh,
with no fat. In contrast the *Pygochelidon*
was about to enter on its breeding season
was in fine smooth feathers and had the
body covered with green fat. The
association of the two species, one
from the north and the other of the
south was most interesting. The birds
hawked back and forth in the evening
light and I watched them for some time.

There was a raised bank here two
or three feet high marking the high water shore
line. On one side were many ant-hills
standing from two to four feet high with
sides grown with vegetation. These were
elevated to the nests in the top out of
water. They ranged over a large area in
a regular formation like hay cocks. At dusk
I returned to camp and killed a small

and from a pair in a pool.
The Indians have been interested
in a way half afraid of the
in their eyes when the one
starts that is very strange.

The Indians used thus far have
been *Miquetés*. Here at Laguna Wall
a *hengué Cacique* with one man came
out camp and though the Indians all
lived in the same *higué* there was evidently
a strained relation. Two sat up around
a fire all night and I heard them talking
at intervals. Arrangement was made to
take the *Miquetés* back to Laguna beta
and pay them there. They did not wish
to be paid at Laguna Wall as they did
not care to carry their riches through the
country with them or have of attack
from *hengués* but on the Bay.

I was kept on the ground tonight with
mosquito bars up. It was cool and
pleasant. I found that my clothing
was still filled with fleas brought from
Kollu so that it was some time
before I was able to get to sleep.

September 25, Saturday.

This morning I was out at six and
found the air cold and sharp. After a
breakfast of *maca* and coffee with a
galleta or two I went out around
the lake again. The area around this
morning was grown with high
grass that in a way covered and
obscured the ant hills.

I worked in over the lake and
points of vantage from which I could
examine the shorebirds. Lesser yellowlegs
and the other species ^{seen} yesterday were
feeding on the vegetation floating at the
margin of the open water. They walked
about here sometimes sinking in almost
to their bodies. At all the species combined
I estimated that about 200 individuals
were feeding here. Small flocks evidently
in migration passed at intervals. During
the last season the open Broad reaches
and salines stretched they contain water
should be attractive to these birds. As the
lains are often late shorebirds would
be more abundant in ~~the season~~ ^{the season when}

they pass northward then when they
they come south. The case is
parallel to that of the great plains. When
rains looking like country occur
when the birds are on their way south
shorebirds appear in numbers. In
dry seasons comparatively few are seen.
When the birds when northward water
is abundant and in consequence they
stop to feed. Carl Hellman tells me that
in one place on the Rio Grande he
found hundreds of throw sticks
about two feet long and from half an
inch to an inch in diameter. These
are used by the Indians to throw
towards the flocks of sandpipers with
that close formation in which these
birds fly. It is easy to knock out
one or two. I can readily believe
that sandpipers pass here by the hundred
in spring.

From here I returned along and
through the marsh. This night was
cold being not more than ten is twenty
but all kind was composed in large
part of a thorny shrub known as *Vand.*
This is said to come in after a

season of spring. As you can see from
the marks could not have been any
old as some of the trees were large.
It has probably come in here within
the last 20 years. Fires combat the
extension of the marsh constantly. It
is the practice of the Indians to burn
grassy areas. I often camp to find
not the animals which they kill
at night. The borders of the marsh
have many pines and cedars
growing over the trees and these
scattered fire and being killing the
small trees. In the following year
the grass and cedars grow in
among the trees this to form heavy
growth. Should fire come again I
expect quickly through this in many
places continuing the trees leaving few
camp again. I was able to study this
condition of the marsh of this marsh very
and saw many of vines not yet burned,
marks that had been burned within a
few weeks killing the trees and old vines
that grow in vines leading back into
the marsh. It is undoubtedly the
grass fires that maintain the fire

Camp in areas where the wind
 is high. When the wind is low
 the water table may be so high for
 most of the year that trees cannot
 maintain themselves. It is common
 to see scattered trees growing in
 open camp that have been killed by fire.
 This country here is distinctly higher
 and drier than that farther east. The
 wet hazy wall seems to form the border
 of the interior. The more arid interior
 and the lower moisture regime.
 Coming in from the river this Vinal
 Mound seems characteristic of the
 arid section. As it I encountered
 a new avifauna with several species
 that I had not encountered previously
 and spent a most interesting period
 in studying it. One of my first birds
 was a small crested finch with
 a black spot on the breast (5077).
 A *Pooecetes* (5094) with brown ventral
 coverts was found in little rocks and I
 took a small Black-throated ^{Cotinga} ~~Trogon~~
^{*Xenopsaris albinucha*} (5090). That I take to be a brown-sided
^{*Salticula multicolor*}
Vireo Finch (5095) was found here
 also. A green hummer and a strange

lyrebird-like bird were with me.
 And finally found an *Amphispiza bilineata* (5075)
 a marsh flycatcher with blue and
 yellow breast (5080) and other common
 birds. Yesterday I flushed a *Hyphantornis*
 at the border of this tract. This month
 apparently marks the most isolated
 of the arid zone from the wet. Whether
 this is Bolivian in its affinities or
 whether it is the same as that
 from the arid country in northern
 Argentina I shall have to determine later.
 I worked up through *Pinus* in the
 arid zone and found an individual
 which I followed through a dense forest.
 A man had passed over it about
 two days before travelling rapidly toward
 the west. It was probably a hunter who
 had carried news of the coming of the
 so-called to the legends of *Luzon Verde* or
 the west from which our *Pinus* ^{specimens}
 had come. These Indian trails are most
 interesting. They are undoubtedly
 generations old and here lead through
 an otherwise trackless country. They
 pass directly but are narrow paths

all trails were by bare footed natives
and one of the snow banks was such as
two deep. I have no difficulty in walking
in them in spite of their narrowness
as I walk with my feet straight
ahead and place them one in front of the
other. The trails pass directly through
with slight undulations made to
avoid obstructions that may or may not
have disappeared long ago. They pass
usually along the border of the woods
and between small points of trees
which often pass through them so
that men travelling them are never
covered more or less. There is thus
something just as about them. Seldom
or never do they pass directly through
the center of broad open camps. The
Indians prefer this method of travel
as it keeps them well covered in case of
need. At camp one of the Indians who
went out after the deer in the evening
went out and returned through a
point of woods though it was as
near the return directly through open
camp. There the rails passed through

heavy woods. They wind and
twist about with many sinuosities
and curves though to avoid trees
and clumps of brush though still
proceeding directly. There is no doubt
but that the trails were there before
the forest. I have seen many others
though I see no indication that they
have been trampled out recently. I never
noticed any signs to have been
made in one place where a deer was
had cut a run within a week
or so.

On returning to camp I was
fortunate enough to shoot a fine
gambusia swainsoni a beautiful little
hawk.

The wind changed north today and
blew hard. On my return to camp I
drank several bowls of terebinthine
made with cold water and then got
my birds. The water in the canyon is
very salty but is palatable with milk.
I spent the afternoon in curing my
specimens and did not finish until dark.

Indians though they were darker in color. The boy about sixteen had an oval face thin nose and thin skin and was very good looking. I suspected that it was of mixed blood. He had a broad band around his forehead decorated with buttons and beads. The chief wore segments

the wing bone of a screech owl through eye-holes in the sides of his ears. I gave a boy a tin can with a cover in which Kodak film had come which pleased him greatly. Mr. Pittman presented the squaws with some pieces of colored yarn and a looking glass when they came in. Like the other three Indians were afraid of a camera. They believe that the little iron carries away one of their spirits otherwise they would be no picture. I secured several Howwood which are without much difficulty.

The Indians are fed in a preparation of coarse corn known as *tohra* and are given meat. This

composes their food in camp. We have meat prepared as *chague*. This comes in thin strips or strings dried hard in the sun. Roasted over the coals or cooked in a thick grease with rice and salt it is very palatable.

Talk with the Indians is always in *querana* though some know a few words of Spanish. All watches me constantly fascinated by my glasses. This habit here was unknown to white men until Mr. Pittman came in here three weeks ago. He went to *Quarant* a day and night country so far as the white race was concerned. Some of these natives had never seen a white man before.

There stays to the north and west there is said to be a *tolde quaza* a big *tolde* of *hangua* Indians. To reach this it is necessary to penetrate the big *vinil* marsh here. Water is also getting very scarce. Beyond this country the Indians say that there are tribes of *wad* Indians in *hangua* there

call Sobas though this is hardly
possible. Perhaps they are Chamuceros.
This whole area is as yet unexplored.

I completed my work at dark and
after a good supper we sat out in the
moon. The moon was full and
lighted the country on all sides.
The birds whistled as they passed
by. Little quail-like birds
were chuckling, calls from the north
and a hoarse "cat" hoarse & unusual
"Kang" came from the south. The
inhabitants sat around their camp
fire talking at intervals in
gatherings. Twelve or
fifteen days from this place on the
San Juan as close as they can
get for months.

The night was cold and sharp
and I was glad of my cover.
Twice during the night the birds
in the canyon rose with clamor as
a host of frogs came down from
my nose I had killed most of my
frogs and so got a good night's sleep.

September 26, Sunday.

This morning I awoke at day break
and found it very cold, nearly to frost
in fact. The morning was clear and
bright. We began preparations to leave at
once and were off by eight o'clock. The
morning was cool and pleasant, the air
invigorating and we made good time. The
country, covered with rich green grass was
very pleasing. The spots here with
more excellent ground for cotton, maize
and other crops. It was astonishing
in a way to travel so many miles with
seeing any sign whatever of human
inhabitation or occupation other than the
Indian trail that we were following.

Here as in Samosa the line of the
open camps and of the mountains ran in
general east and west. This was probably
because the lines of drainage are in general
to the east and southeast. The mountains
are in general a little higher than the open
camps. The prevailing strong winds are north
and south which would aid in
bulching east and west lateral ridges.
We retraced our trail of Friday without
accident, in one spot I had a change.

of a little deer standing in a little
opening at the edge of the bush idling
but when the sight of the car sprang
back and killed it with a bad
bullet shot. It was a small animal
standing about 18 inches high brown
in color with a few indications
of light spots on the sides. These
are probably a sign of immaturity.
I have seen many signs and tracks
of them deer here, in Somosa and in
Chaco but this is the first one that
I have killed on. They frequent the
borders of the monte usually, when
they are concealed and when they can
run back to cover at any alarm.

The animal is known as "guazú".
Farther on a fox jumped out but
we failed to secure it.

At the Indian tolda we stopped
for a minute and the Indians crowded
well around the car. On starting we
passed the entrance into a little
picada and three or four came running
back in excitement to show us the way.

At noon we came in No 110 where
we found Gonzales, a priest Cap-tan-i
a 1 metre of Lengua muslin that
covered him. As we came in a
number of Indians came out of the
lagoon with two large pint bags
containing at least half a bushel of
a small armored catfish, ranging
from four to six inches long. These they
had secured by piling in under the
logs of the catfish stores and then
catching the fish in their hands. The
fish were killed by hitting them
on the head. The body was covered
entirely by a double row scales on
either side that were hard and lay so
the heads were also of bone the pretensions
were so impregnable to attack as to
be invulnerable. They were thus safe from
the savage feral. We made a Charasco
here and I packed up a few specimens
that I had left here. We reached Klambo
without further incident at 3:30
in the afternoon.
I skinned my deer, which we had

brought in ^{hanging in} ~~the~~ side of the
car and got my other specimens out
when they would dry. Mr. Brauns,
Mr. Engel and Fred Killman came
in at dark.

September 27, Marley.

This day I was occupied chiefly
in getting my specimens brought out,
in packing and in working on notes. A
warm north wind blew all day.

In the afternoon I walked among
the trees of the bog into some of
a few *Scolecophagus*, *Pterodactylus*, *Adiantum*,
P. Cuvieri and lesser *Yellowlegs*. There was
little or no movement about here
today however.

I collected a few insects also but
did not find them common.

Yesterday we brought back a little
shrike *Talio* and it has been running
about all day. It is tame and friendly
and seeks companionship. Its call
note is a mournful little whistle ~~that~~
may be heard for some distance and
call the bird it is only necessary to
imitate this. These birds are easily

reared but when partly grown become
a great nuisance.

September 28, Tuesday.

My baggage left 50 this morning in
a rail car at Day and we
was off at seven on horseback,
reaching No 56 at 9:15. We galloped
considerably in going through in
order to make some road work many
short cuts. *Ortalis* perched in the tops
of the trees or called from the shrubs.
A fox ran out ahead of us and many
small birds were seen.

I regretted leaving No 50 very much,
as it was such a very pleasant land
compared there. Mr. Frank Brauns had
been very kind to ~~visit~~ and did everything
possible to make my stay there enjoyable.
At 56 I arrived about 1/2 of the road
and sent a boy back to look for it. It
came as the train was about to pull
out, my baggage was thrown on top of
a rail car and we were off. The road
to 70 was without interest save that it
was slow as usual. I perched in the

end of a Puchacho box with
one eye in my box of specimens
and watched the birds. Set 40 &
transferred to the other train and
at 6:00 arrived in Puerto Piasco.
Mr. Fred Williams had told me to occupy
his room and I had my things
brought over at once.

The Guarani language used
universally in the country here is
of course an Indian tongue though
without doubt it has been much changed.
It is spoken however rapidly and
with a Spanish accent in which
it differs radically from the Indian tongue
which are spoken slowly and with
many gutturals.

This evening I dined with Mr.
Morrison bookkeeper here and had a
pleasant evening. Mr. Morrison has spent
many years in tropical America and
learned much from him.

September 29, Wednesday.

This morning I was out at six
and spent the entire day in writing
on notes and in caring for specimens.
It was very hot again with a
strong north wind.

I had lunch this noon with Mr.
C. W. Campbell, manager of the distributed
Products Company. His house has a
beautiful view of the river.

Today I made arrangements to
cross to the opposite side of the
river on a collecting trip tomorrow.

The streets and yards here in
town are bare of all vegetation so
that dust blows badly. The
north winds are very hot and I
notice that they seem hard on the
noses of those who have been here
long. Mosquitoes are becoming very
bad too and fairly swarmed in the
room this evening.

Piasco has a hundred or more
palm huts with white-washed walls
in which the poor live. These are built

put in regular row on an open
space. The Paraguayan money is very cheap
at present and I find that I
have to spend it like water. So that
I find it to pass to get a suit-case
and food.

September 20, Thursday.

This morning I was out at
5:30 and after a cup of coffee
crossed the river in a cachivo
with Francisco and Aguati. Aguati
is Boatman. The cachivo was about
16 feet long and was hewed from
a Simbo. The track had been hewed
off square and then cut out so
that the sides were less than
an inch thick. The boat was
square behind and tapered to a long
point in front. I found it rather unsteady
but an excellent boat to us. We
crossed the river and then threaded
through obscure trails in the
Carnalote paddling through the
floating vegetation in places where it
would have been impossible to

pass with a rowboat.

The large leafed waterhyacinth
found just grows here in the water.
The flowers growing in a blue spike
were handsome. With this was a
tall grass and other plants. The
whole floating mass was known
as carnalote. This was anchored
by small trees and islands though
in most places the water seemed
to be from 6 to 12 feet deep. Inside
this mass was a broad open
riacho with more carnalote on
the opposite shore. My Indian boy
knew all the short cuts and
we had soon crossed the swift
current of the river and had
penetrated through a grove of trees
into the riacho. The air was
bland with a slight breeze and
I enjoyed the crossing greatly. Long
level beds of carnalote lay on
either side. From a distance this
bright green growth is so solid
that it appears like firm ground

but in reality is only a mask that
lies out concealing the true show line.
Ammocants passed in flocks and I
saw night and green herons. Small birds
shown were little in evidence.

At seven we had landed ~~and~~
at a high bank below the long
hill ~~is~~ known as the Cerro Barito,
This hill about three miles long
runs east and west and
here deflects the river from its usual
north and south course to run
~~east and west~~. The hill forms a
long ridge with regular outlines
and with the highest point
about 300 feet above the river. It
is heavily forested and a heavy
growth of trees comes close to
the water edge. An obscure
trail ran along near the water.
And I found the undergrowth
fairly open. In some places there
were growths of the thorny
carrizalata but these were not
extensive. In other places fallen
trees had made openings permitting

A heavy stand of underbrush
faced with creepers. By avoiding these
narrow channels able to work
through the mists without recourse
to the machete.

I worked along the river until
I came to a knoll and then turned
inland going to the top of the hill
at its highest point. At the knoll
an other swam out with curious
barking notes like a sea lion and
circled around watching me with
only the head projecting. I killed it
with a load of buck shot but
it dove in its death struggle
and was lost under the camalote.

In this lower forest I found
many tracks of peccaries and secured
two skulls in fair condition. Here I
also found a turtle fifteen inches
long with a great concavity in
the plastron. The animal had been
dead for some time but I was able
to get a good skull from it.

The hill core seemed to be
limestone, from outcroppings that clear

On the middle slopes were many very large trees, some being at least one hundred feet tall. Found the forest dry.

A small birds were common along the river but less in numbers in the higher forest. I collected a number of fine things including a *Nyctibius*. That I was much pleased to get. Saw all I secured 8 or 10 birds today. That I had not taken previously.

From the higher slopes I had occasional glimpses of the distant reaches of the river through opening between the trees. By ten o'clock it had become very hot in among the trees. As twilight returned to the boat and ate a lunch that I had brought with me. My Indian sat at one side. I gather that they do not care to me look at their food as they eat.

After resting a few minutes I climbed up another trail made by the Indian

Expenses, September 1-30, 1920.

Form 4	30.72
Salary	228.34
Total.	<u>259.06</u>

Expense July, 1920	413.19
" August "	465.55
" September "	259.06
Total to Sept. 30	<u>1137.80</u>

Exchange sheet #L 2653 (attached to account for Aug. 1-31, 1920 shows 313.65 Argentine / 2.375.

Amounts expended.	
Aug. 1-31 (in part)	25.63
Sept. 1-30	<u>72.98</u>
	98.61

Balance still available on this sheet 215.04.

Exchange sheets a+b (attached to account for Aug. 1-31, 1920 show 4788 Paraguayo @ 11.40

Amounts expended.	
Aug. 1-31	2815.75
Sept. 1-30	<u>832.00</u>
	3647.75

Balance still available on these sheets. 1140.25

Accounts Current July 1 - Sept. 30, 1920.

<u>Debits</u>		Gen. exp.	Income	Total
Expenses on purchase		1082.80	55.00	1137.80
Deposits to credit of Treas.		24.97	0	24.97
Bal. now due U.S.		2437.20	165.00	2602.20
Total		3544.97	220.00	3764.97

<u>Credits</u>				
Bal. due U.S. from last account		24.97	0	24.97
Accountable amounts		3520.00	220.00	3740.00
112 July 2, 1920				
Total		3544.97	220.00	3764.97

Bal. now due U.S.	On deposit	withholding checks	available balance
2627.17	3764.97	1137.80	2627.17

Abstract of expenditures.

1920	Voucher	Description	Amount
Aug. 4.	1	G. Wilson (Salary July)	228.33
Oct. 11	2	do " (exp. ")	184.86
" "	3	" (Salary Aug.)	228.33
" "	4	" (" Sept.)	228.34
" "	5	" (exp. Aug.)	237.22
" "	6	" (ex. Sept.)	30.72
			<u>1137.80</u>

recently to bring out a canoe that
they had made. Short sticks
an inch or two in diameter had
been placed every three or four
feet to provide skirts for the boat.
I followed this trail about a third
of the way up the hill but found
nothing of interest. A large wasp
nest of the paper cone variety was
seen. A small biting gnat was
abundant and caused some annoyance.
About one p.m. we started back. The
wind had risen and was blowing
very strong. We crossed the
raicho and then worked up
stream through a series of
narrow trails leading through the
canalote and passed around two
small islands. This brought us above
Punisco and we were able to cross
the main channel without difficulty.
The waves were rather high but the
cachives rode them easily. The high
stage of water in the river had
flooded considerable areas that normally

are bare of water. Houses on the small islands were almost unwork.

A number of good birds were taken on the return, among them *Sterna superciliosa* and *Phalaropus* which greatly to my surprise went out to a marshy bird.

I landed at Purisco at 11 and after a bath went to work on my birds. I found that I had nearly three hundred small ticks on me but was able to wash them off without much trouble. It was extremely hot and I had to work until 11:30 to care for my birds before they spoiled. Mosquitoes swarmed in the room tonight.

October 1, Friday.

This morning I cleaned up my collections of yesterday and then was occupied the rest of the day in packing ready for my return south. Mr. I had Hutton kindly gave me two Indian skulls found near here.

Very hot and windy today.

October - Saturday.
The steamer *Hummilla* of the *Alhonoritch* line came in at Purisco at 4.30 this morning and I at first I had left arrangements with the night watchman to call me and this he did but failed to carry down my baggage and did not show up. I secured three hours and got my stuff down in season. I had to pay the port of the club 50 pesos to take my baggage down to the wharf and to watch it until the steamer came, but he did not care to do it. His wages are probably about 15 pesos a day and his board, but his attitude is a usual one.

There was the usual breath and confusion at embarkation but finally we were off. The *Hummilla* is cleaner and better fitted than the *Concepcion* the boat on which I came up the river. I secured a good stateroom with a bed long enough for me and had running water.

The sunrise this morning was

pleasant. Large flocks of Cormorants
swam back and forth searching for
places to fish and occasional Cocoi
herons stood on the banks near
the masses of camaloti. Until
ten it was cool and pleasant and in fact
was not uncomfortable all day.

At three we were in Villa Concepcion
and then tied up for the night.
I went ashore and walked out in
the country. The town is of jaivaya
but is dead so far as business is
concerned. Until evening when it became
cool there was no life or movement in
the streets and little activity in the
shops. Three or four of the main
streets used as thoroughfares for
country travel. were paved with
sand and clay. The side streets
were grown with green grass
from curb to curb, cropped short
by cattle and horses and showing
no mark of wheels.

At the border of town I found
stretches of second growth scrub and
small open pastures stretching

away to higher forest in the background.
None of the fields were being cultivated.
The soil was a dark clay loam
and was well elevated above
the river though the country was
level. Small depressions a foot or
so deep held little pools of water.
From one of these I flushed a solitary
Sandpiper.

Other birds were common. A
red-breasted robin sang a flute-like
winning song from a thick flock
of parrots and parquets passed on
their way to roosts in the orchard
and a jifit piped a drawing
little song from the grass of the
pasture. The grass and trees were
green and pleasant showing none of
the dead winter growth of the
chaco. Herds of cattle and horses
grazed in the pastures and the grass
was cropped close. This would be
good country in which to collect and
I regret having to leave it without
settling more birds.

In the evening a boy played
a guitar and sang in the upper
deck and I sat out in the pleasant
cool air until rather late. Bits
of Camalote drifted by in the dark
and fireflies glided over the
water. Small boats passed back
and forth to the opposite shore. Once
there was the turbulent sound of
shooting opposite and the guitar was
stilled for the moment while we listened.
Mosquitoes were plentiful in my
stateroom and I got out a piece
of mosquito bar as protection.

My Skimmer called this evening
in pools near town was a small
frog-like batrachian with a curious
chattering, snoring call that I heard
before at Kilometer 180. I tried to collect
one but failed.

October 3, Sunday.

This morning was cool and pleasant.
I was up and soon watching our
preparations for departure. Large parrots
were common near the dock here. I
amused myself by throwing bits of

orange peeling into the water, as
they hit the water the fish
reacted savagely - sometimes two or
three together shaking a swirl in the
water.

At nine we sailed with marines
on guard against chance shots from
straying sailors.

The trip continued as usual.
Broad level expanses of vegetation
near the shores appeared as level
pastures but in reality were only
floating masses of Camalote covering
fringed deep water. Twice during the
day we broke paddles and had
to anchor until they could be
repaired.

October 4, Monday.

The Humaita reached Asuncion about
five this morning and I was able
to go ashore at seven. My baggage
was loaded in a small boat and
taken to the Customs house where it
was passed without difficulty, the
inspector having little interest in the

matter. I went to the hotel
Saint Pierre and secured a room, changed
up and did a few errands. At
last I went to the consulate and
secured my mail, a considerable
bundle of letters. One ~~parcels~~ envelope containing
many letters had been found but
as it contained nothing of value
had been sealed shut again.

Mr. Balch's ~~consul~~ had returned
to the states leaving Mr. ~~in~~
charge. I had lunch with him and
met Dr. ~~assistant~~

in the congress of Paraguay who
was educated at the University
of Pennsylvania. From him I learned
that the only law now in force in
any way protecting birds is that
requiring a police permit to carry
arms in the country. This single
information received before. The law
amounts to nothing in the way of
protection however as it is not
observed and as it permits gun
hunting. Dr. ~~has a law~~
formulated by Bertoni designed to

protect against birds and this he
is going to introduce before Congress
next year.

I returned to the hotel at 11:00
and went through my mail.
Had appointments at 3:30 & 4:00
and from 5:00 to 10:30 worked
on notes, assorting photographs
and correspondence. It ~~was~~ much
cooler this afternoon for which
I was thankful.

October 5, Tuesday.

This morning I made arrangement
for passage to Buenos Aires but was
unable to purchase ticket. At ten I
visited the office of the Argentine consul
with Mr. Seltzer vice consul for U.S. and had
my passport vized. At 2 this afternoon
I went to the American Legation and
met Mr. Samuel S. Dickson who is in
charge in the absence of the Ambassador
Mr. Momy. At 3 I went to introduce
in the botany to see Mr. Carlos F. F. F.,
Director of the Zoological and Botanical Garden.

To reach Trinidad I rode out to
a large cemetery where I changed
to a little car drawn by three
mules after a wait of half an hour.
This little train I wound up
and down over rolling hills to
the little village of Trinidad which
we reached in half an hour. The
soil over this hills was loose and
sandy. Groves of trees were interspersed
with cultivated tracts giving a
diversification in the scenery that
was pleasing. From the end of
the carline I walked for half a
mile along the railroad track until
I came to the entrance to the
gardens opposite the railway station.
The Botanical and Zoological gardens
have a beautiful site covering an
extensive area extending over low
rolling hills. Lines of trees led along
paths and roads leading through
the grounds with broad areas of
open country between much of which
was as yet undeveloped as a park.

The buildings appeared rather old
but were suitable for the purpose.
More modern equipment may be expected
to come with them. From the railway
station a line of trees led through
open fields to the office & house of
the Director & part of his staff.
Here there was one tall brick
building and two or three lower
structures surrounded by trees.
A boulevard led on through the
grounds to a long low building
of adobe housing the museum.
A small cage for animals and birds
not especially clean or well built
was scattered about through the
grounds, all in the fun. It gave
me rather a start to see a pair of
fine jaguars housed in a small
enclosed cage of heavy woven wire
only. The keeper was very friendly and
came over to have his head scratched.
A small stream ran through the
grounds and in a little enclosure was

This was a Cooi heron with a broken wing that threatened me with his bill.

In the museum there was a small collection of birds not very well mounted, a few mammals and some invertebrates. The Zoological collections of living and dead animals were rather primitive but no doubt will see much improvement.

All the botanical exhibits the trees and shrubs were well represented and further planting was going on with such a favorable climate this will make a fine exhibit in time.

The rainfall here is better distributed than in the Chaco so that grass grows abundantly making fine green lawns. So one accustomed to the winding walks of parks and botanical gardens of other countries with their ornamental arrangements of trees and shrubbery the park seemed rather bare in many places but the beginnings that have been made are excellent and the plans evidently under way will make the place beautiful when it is

fully developed. I had only a few minutes conversation with Dr. Siebig and then had to return to catch a car.

I reached town at dark and went at once to dine with Mr. W. J. Kennedy purchasing agent for the International Products Company and spent the evening with him.

October 16, Wednesday.

This morning Dr. Siebig with coffee with me at 7:30 and we conversed for half an hour. He is a German apparently of strong German affiliations, about 45 years moderate height and build with thin face and drooping moustache and rather light complexion. Horse back riding and other exercise has kept him in good condition. He says that at present he receives no scientific publications from the United States but that he is very anxious to do so. He is also a professor in some of the colleges here.

I promised to try and visit him again at Trinidad this afternoon but was unable to do so as I spent all my spare time ~~today~~ in getting my tickets for Buenos Aires. The agent refused to sell me tickets until the train was in and this arrival was postponed to various intervals between 3:30 in the afternoon. I had made a reservation early but was informed when the time finally came that there were no more beds to be had but that I could go Saturday.

When I began to inquire into the matter rather insistently however I was finally given my berth. Evidently the agent was holding it out for some one else. With this attended to I had only an hour or a quarter to get my baggage to the station and get it checked. This however was attended to expeditiously and by a quarter of five I was through. Baggage was simply marked to Buenos Aires with no attempt at

numbering or marking for identification. I had 14 pieces to check. I had some boxes of specimens in my trunk. Mr. B. S. Dickson in charge at the American legation was kind enough to give me a letter regarding my specimens to the Customs officials in Rosadas, and also to send Mr. Egan with me to the Argentine Embassy to get a visa on my passport.

At home I was busy tonight. I worked on notes and correspondence until eleven.

October 7, Thursday.

Was up this morning at 4:30 and left for the station at a quarter past five in a coach as no cars were available. The train left at six. I occupied a four berth compartment in company with Mr. Mallen a Scotchman and Mr. Jones an American salesman for the Dody car.

San Trinidad spoke for a few
minutes with Mr. Fiebig and
then we were off. The train was
fairly comfortable but the road was
immensely rough. The roadway climbed
steadily at first through rolling
wooded hills to Zapueay where it
came out on the broad rolling
upland. Below Zapueay a large lake
was visible on the north with
a long line of high hills lying beyond
it, a beautiful vista.

At Zapueay itself, of interest
because of the Foster collection of birds
in the National Museum, there is a
broad area of rolling open country
over which are scattered small
steep-sided irregular hills covered
with forest. Small valleys carrying
streams were forested also. The gun
camp was covered with grass. The
country was diversified and should
carry the forest. Extension of the
Brazilian fauna.

70. Small bird in American country was on the train

Beyond Zapueay we passed Villa
Bridges. The sun had now been
high and rolling water was scattered
west of north. The forest country
was usually well wooded but was
openable to the action of grass fires.
Villa Rica is one of the richest areas
in the country. I left this was
visible as we passed through town
was a few miles. Small houses
all more or less individual. Beyond
the mountains became more important
scattered in large part were scattered
open camp. To the westward however
the high hills with a railroad extending
at San Blas, distance between of 70
kilometers.

The rains had fallen all through
the night. Water was running in streams
in the ditches. The rains were a fortunate
circumstance as they kept the dust off
and made it all but pleasant travelling.
The country which was green and pleasant in
great contrast to the dryness of the Chaco.
Birds were fairly common. Occasional

species of *Salix* *trigynum* growing from
swampy spots as we passed. I met
many *Salix* were seen flying out
with their curious, hesitant flight.
Robins were feeding in areas that
I don't think I've seen before.

Walking country continues until
dark. The extended exploration of
Paraguay would be as interesting
as further work in the Chaco. I don't
know how to get to the coast and pack outfit.

I had a severe diarrhoea
all day caused by something spoiled
in the food that I ate last
night so kept rather quiet.

We reached Encarnacion about
ten and from here crossed to
Posadas ~~by~~ on the opposite side
of the Rio Parana by ferry. At
Sturles thirty we reached the
station in Posadas. Here our hand luggage
and pass ports were examined. I remained
up to see about my other baggage
but at 2:00 A.M. it was decided
to send it all down to the customs

House at Buenos Aires for examination
so that I was able to go to bed.

Saturday & Friday.

I awoke this morning at
seven near Apostoles in the
territory of Misiones. The country
was open and rolling with
very few clumps of trees in sight.
It appeared to be entirely a
cattle country with only occasional
areas under cultivation. The range
I should say was overstocked as the
grass was cropped very short. I
was surprised to find this open
pampa country here as I had
expected a wooded area. Small
towns were passed at intervals and
occasional houses were scattered
over the countryside. Below Santo
Tome the valley of the Uruguay continued
broad and open with the rolling
hills retreating on either hand. We
passed occasional tracks grown rather
openly with scrubby trees.

get tall but there were few in numbers.
In many places they were being
cut away for wood.

Comparatively few birds were
in evidence here, a marked contrast
to what I had seen in going in
July from Buenos Aires to Santa Fe.
I had found many all through
here and pools of standing water
were in evidence. I watched carefully
for shorebirds but saw none.

At occasional intervals I had
glimpses of the Rio Uruguay. The
shores were open without timber.
At last we came to Mato
aseros.

The road had improved greatly
today and we had both driving
and service. Still continues more
or less under the weather.

October 9, Saturday.

This morning I awoke in
medanos in southern Entre Rios
to hear the cheerful chirping of
Passer domesticus.

The country continued open but
the land lay more level as we
were near the Rio Parana. Much
water stood over the country in
slight depressions and ponds were
bordered with growths of ground-
stemmed tules. The grass everywhere
was cropped close by stock.
Occasional tall clumps of *Eucalyptus*
or other trees marked the location
of houses and we passed a few
open thickets of low scrubby trees in
leaf. The country resembled that
at Berazategui in the Province of
Buenos Aires. Birds once more
were abundant. I saw hinkins fly out
from near the track and Cormorants fed in
small pools. Mergansers were in pairs
resting at the borders of pools. The long tern
was everywhere in evidence.

In mid forenoon we came to Holt,
a small place near the Rio Parana, a level
damp area with swamps and a few trees.
Below here the train, 11 cars in all,

cut in three sections and run on a
broad jury. As this we continued
for nearly 4 hours on the Rio Paraná
to Zarate where landing was made.
The Paraná here was from 200 yards
to half a mile broad, perhaps more as
the channel was in places broken by
broad islands. The current was fairly
swift and the water muddy. At least
the shores were low and ~~marshy~~
marshy, like the Paraguay this river
was in flood. Sardinia on even broad
areas beyond with willows in
dense groves. Small houses were
scattered through these and
wherever the land was high enough
cultivation was taking place. The willows
were cut for wood.

Cormorants and Cocoi herons were noted
on the river but little else. An Aechmophora
The air was cool and pleasant a
welcome change after the heat of
Paraguay.

From Zarate we crossed a level
plain, either under cultivation or in

Expenses. Oct. 1-16, 1920

Form 4

211-99

use for grazing. Signs of human habitation were everywhere and more in great contrast to the country I have seen in the last few months. We were soon in the neighborhood of Buenos Aires and at 7 pm reached the station LaCrosse.

The baggage cars were jammed and much confusion. I had two porters engaged to handle my 14 pieces and had them set out at one side as they came off. They were then spread out belts skulls on the floor of the waiting room in the station. I proceeded to unlock my trunks and then called over the inspector of customs. On exhibiting my special passport and explaining what it had my baggage was passed without examination, a welcome privilege as I had nine boxes of birds on my hands. Made a bargain to have the whole taken to the Hotel Paris for 15 pesos and then went to the hotel myself.

found D. R. Mojo this last woman
else that I knew.

Oct 10, Sunday.

In the morning that I arrived in
Buenos Aires I was taken with a bad
diarrhoea but became partly over it
in a day or two. It came on again
in a severe form on Thursday evening
and has continued to the present.
This morning I took a big dose of
castor oil in an effort to be rid
of it. Am feeling rather rocky.

This afternoon I went out to
Luzerne on an electric train. An
extensive area here of marsh has
been reclaimed and in part is now
used as a pleasure resort. Channels
lead out through a maze of islands
on which are summer houses and
in some cases orchards and farms. At
Luzerne itself are a number of boat clubs
where rowboats, placed on little cars
on a railroad track are run down
to the water and placed in the water.
The boats were beautifully made and
finished, in a natural wood varnished.

They were equipped with cushioned
seats, sun shades and cushions with
ropes for steering. Capacity varied
from two to ten people. Besides
these there were launches of varying
types ranging from small affairs
up to expensive yachts.

Large boats come in here through
some of the channels and
I saw lighters loading with
willow wood.

The day was fine and clear and
the air cool enough to be pleasant.
I hired a man with a boat
to take out through the channels
but accomplished little of real
interest as the place was too
populous to be adapted to birds.
Pitangus and similar species were
common and I noted a few comments
on shore birds.

Returned to Buenos Aires at 6:45.
The electric cars used were of a fine
modern type. There is a string of
pleasure resorts along the line with many
more going out a them.

October 11, Monday
Called at the consulate at ten this morning and secured mail which occupied me the rest of the forenoon and part of the afternoon. Also arranged to have Kodak film developed and some cards printed. Tried to make an appointment with a dentist but found him out of town.

worked on ^{upward accounts} notes in the afternoon. Still feeling rather rocky.

October 12, Tuesday.

This morning I took half a bottle of Agua Rubinat as a purge and was in my room until noon.

Today is known here as "la día de la raza" and is a fiesta celebrated by every one. (Columbus Day). All stores and offices were closed.

I worked on notes and in taking photographs this morning and then about two o'clock and I went out to Palermo, via the Avenida de Mayo,

called Calleas and the Avenida above. This is a beautiful drive. Fifth and broad streets and are lined with fine houses. A number of houses were set back in extensive grounds with ornamental trees and shrubs. Small parks were passed beautiful with Eucalyptus Magnolia and other trees. The Palermo Aires in its appearance and customs is essentially European and differs markedly from our cities.

At Palermo there is a broad park with beautiful groups of Eucalyptus and a few trees. We walked over through to the water front where a high wall has been put in to protect a railroad and the park from inundation. Many were out here fishing. I observed many Cormorants out here but nothing else.

Football games and tennis were going on in certain areas and there was a large crowd.

October 13. Wednesday.
Feeling somewhat better today but
still do not have much ambition.
Have lost about 7 lbs.

Today I made some boxes
and worked on notes photographs
and correspondence.

At noon I had an amalgam filling
put in a tooth. Later I had
lunch with Mr. Pethyman my
dentist.

October 14, Thursday.

Greatly improved today and am
feeling like myself again.

Worked on notes for a time this
morning and made arrangements
to ship the specimens on hand.
At 1:30 I had 12 boxes taken to a
box factory near the hotel and
band iron put around the ends of the
boxes, new covers where necessary and
the boxes put in good shape for
shipping. I have been unable to do
this before as there has always been
a strong probability of my having to
open the lot in some Customs House.

I tried with this lot all the afternoon
and had it done in good shape.

October 15, Friday.

Wangled this morning for
shipment of 12 boxes of specimens
through the Compañia Express Villalaga.
I found that there is an export charge
of 270 and the valuation of my shipment
with an additional 270 on each
thousand. The duty in total is
not much by the time all
the stamps and fees are paid for
it comes to considerable. At the
consulate I was advised to take the
matter up with the embassy and
did so with the result that they
are going to take the matter up
with the minister of Hacienda asking
for privilege of free export. Like most
other things I had to go here where I
came in contact with officials this
matter was taken about three times as
much time as I expected.

The ways of the Adunas are peculiar.
I had notice to call at the post office

for a parcel addressed to me from Brazil
The arrival of which that the parcel
contained a book which entered duty
free. there was no duty but I
was charged \$2.12 for the service
of opening and examining it to
determine whether or not it was
dutiable.

am busy constantly on notes, labelling
films etc and am getting expense
accounts in shape. at museum this evening

October 16, Saturday.

was occupied the entire day in
purchasing supplies, ammunition
commat, arsenic, cotton etc. In
the evening worked on notes and
photographs.

I had wished to do some work
at the museum but was unable to
get at it. the hours there are inconvenient
As the place does not open until 12
and people begin to leave at five.

Dr. Dobson reiterates that the
government here is not interested in

bird protection and that there
would be no interest in a treaty
project protecting birds.

I bought copies of *Coloquio Real*
containing game laws today.

October 17, Sunday.

worked entire day on quarterly
accounts and in preparing an
expense account for the first
half of this month. Was not outside
until evening. Have found it expedient
to make up an account for the period
Oct 1 to 16 as my expenses have been
heavy and I need this money.

When I arrived here in June I
secured Argentine paper pesos at the
rate of 235+ for each \$100 U.S. at the
present time the rate is 274+ and
is steadily mounting. Thus for each
\$100 U.S. I now get nearly 40 pesos more
than I did a little more than three
months ago. At the present time there
is an embargo on the exportation
of gold in quantities larger than \$500.
There is considerable U.S. gold in the

country, probably hoarded during the war. Because of the prohibition on export this is at a premium discount so that \$100 in U.S. gold may be purchased for \$248 Argentine paper. At the same time New York exchange is now selling for about 285. This condition is injuring American business here and shippers are returning to the States. In six months most American goods will be off the market.

October 18, Monday.

This morning I made a few last purchases and made final arrangements for the shipment of specimens to the States, thus necessitating another visit to the Embassy. Received two letters at the consulate.

This afternoon I went through my outfit cleaned it out and repacked, stocking up with new supplies straight through. In the evening wrote a letter to office. Did not turn in until 12:30. Forwarded accounts by registered mail.

October 19, Tuesday.

I left Buenos Aires this morning via Ferrocarril Sud at 7:50. Fares on this road appear higher than on other roads that I have used. I paid 12.85 for a ticket to Dolores, Prov. de Buenos Aires a distance of 203 Kilometers while excess baggage cost me .87 for each 5 Kilos. The train carried first and second class coaches and a dining car. The seats in the first class coach were comfortable and resembled those in our cars at home. Most of the first class passengers rode as usual in the comedor. Promptly on time a bell struck three times, the guard blew his whistle and we started.

I was interested in noting that Barracas one of the familiar localities for Argentine bird records is now within the actual limits of Buenos Aires. It is a suburb of many houses with little or no open ground so that birds must be now casual in occurrence there.

After leaving Sempurly we came into the country. The land was level and open. Most of it was in pasture heavily grazed by sheep, cattle and horses. I saw horses grazing with sheep something that they will not do at home. Occasionally small areas were under cultivation but most of this region was in pasture.

At intervals we passed small towns of brick & stone houses cream or terra cotta in color. Even the older houses were of this same material as wood for building is lacking here in the pampas. The houses are ordinarily small square structures with few windows usually only one story high though occasionally with a small second story room. All have flat roofs.

Clumps of eucalyptus trees were scattered through the country and at occasional intervals there had been considerable plantings of trees. Palms and pines make rather an incongruous combination - Casuarina trees were

seen to considerable extent. The general appearance of the country is that of the great plains but the land is more level and the soil grayer in color.

Birds were only fairly common. I saw Polyborus & Helwags at intervals, an occasional fork-billed Flycatcher or Pitangus. At intervals we passed small flocks of pigeons that I did not recognize and occasional pairs of Belonopterus were noted. Below Chosma were occasional shallow lagoons. I watched for shorebirds along the coast but saw only one small flock of Pinnacops probably maculata. There were Eudynamis megalura seen. The English Sparrow was abundant at all way stations.

From present observation I believe that any shorebirds limited here in range in this province to dry upland will be eliminated through use of the land by man. Others that frequent low wet

ground will persist but in amount
smaller. The golden Plover thus will
be decreased but will not be exterminated.
It is said that 75 percent of
the land holders in the province of
Buenos Aires are Italian and that
that does not speak will fall the
possibilities of bird protection here.

I reached Dolores at 11:35
and went to the Hotel Roma where
I had the usual greasy Italian
cooking that to me is usually unpalatable.
I worked until 5:15 in getting
my notes in shape and then
went out to look over the town.

Dolores is a pleasant town of
about 20,000 inhabitants living in
little stucco houses crowded in close
blocks on the streets. The streets are
paved with cobble stones with long
smooth stones laid like a track to
make a road for autos and carriages.
Here also two of these tracks in the
street a great convenience as they
eliminate the noise & discomfort of
in carriages over cobblestones.

I found a small plaza fronting
a large finely built Catholic Church.
On the plaza was a statue with
an inscription to the effect that Dolores
was founded in 1819. The people that
I met were almost all Italians - Turks
and Syrians operated some of the stores.
Occasional I saw one man with
the dark skin straight black hair & high
broad cheek bones I that indicated Indian
blood. As a stranger, obviously a
foreigner I was subjected to close scrutiny
as I passed.

There is some evidence of spring
here. mulberry and sycamore trees are
not quite in full leaf. The tall Eucalypts
had shed their bark and the Crataegus
is in bloom. The blossoms at a little
distance give the effect of willow catkins.
Frogs were croaking merrily in small
pools and I saw two fair sized loads
one of which I collected. I had a glimpse
of a small bat at dusk. I walked out
to pick a way out of town tomorrow
returned at dusk to the hotel.

Worked on notes all afternoon and
revised my notebooks for further work.
October 20, Wednesday.

This morning at daybreak I
was disgusted to find that heavy
rain was falling. It lightened
somewhat about seven but looked
threatening and finally came down
again in torrents. It was useless
to go out so I remained in all
day working in my room on notes
and on a mass of accumulated
correspondence.

About two the sky cleared
and later the sun came through.
The cloud effects in this flat
country are beautiful and enjoy
watching them. The clouds
come up clear cut again the
sky and seem to hang very low.
It turned colder after the rain
and I have been hesitating whether
to put on heavier underwear or not.

Today I made arrangements with
Seraphino Davila to go to Havalle. I
am to pay 70 pesos to go by rail

as far as Corozal and the rest of
the way in "brake" which I believe
may be.

Customs language diff: today I
settled for agua caliente for use in
shaving to learn that it is common
here as agua tibia!

Some birds of some sort were seen
in the night but I was unable to
tell what they were.

It is a strange I am subject
of great curiosity here. Men women
and children stare at me fixedly
as I pass and turn to watch me
after I am by.

October 21, Thursday.

This morning after coffee bread
and butter I was on my way to the
country at seven. The girl who served
me complimented me being "maquero"
as I was the only guest in the
hotel. I walked out south of town
a large drainage canal and then
followed toward the east along the
low sea. The land out side of town

was level and heavily pastured.
Horses, cattle and sheep when any
kins of ~~human~~ ~~gathering~~ ~~casualties~~
grew along the road sides but I
was soon in open country. There
were scattered houses with clumps
of Eucalyptus about them. The
ground level almost at once into a
rush grown marsh where the vegetation
was still dead and brown from winter
though new growth was starting.

A heavy blind rush was common
I saw some ~~decayed~~ ~~stems~~
Scirpus. After a short distance I
was forced to remove my shoes and
continue to wade for a mile or
more. Rushes standing in a foot or
more of water grew up as far as five
feet tall - the appearance of the country
was still that of winter.

The higher pasture land was
dotted with small pools left from
the rain, a paradise for shore birds
but these species which I had
hoped to find in abundance were lacking.
I flushed one *Gallinago paraguayana*

and saw one little flock of
Parulas flying at a distance that
I did not identify but that was
all. Chickens were abundant
and another ~~country~~ was giving
its aerial song on all sides. Stone
trideamus and a small black-headed
gull probably *L. maculipennis*
flew back & forth the same along
the canal & the gulls ~~crossing~~
I shot a bird in the wing with
the pistol. One nest of white
eggs containing three eggs
was taken and other small birds
were about to begin breeding. The
country was fresh & green
after the rain. Although disappointed
in shore birds I took three birds
not seen previously, *Stroma trideamus*,
Cyanotis subquater and *Spiraea delawarensis*.
A small frog with a prominent
brown stripe down the back was common
in pools and I collected another
larger species also. Toads were calling
from ponds.
The marsh traversed was extensive

wind apparently continued from
distance.

I met one man who had known
Ernest Gibson. He said that in ^{offense}
Gibson dumbled me as he was tall
black & dark. Gibson I have been
told was "mas Criollo que nestos"
referring to the other Argentines.

This afternoon I prepared the
specimens taken this morning. The
electric lights were off during most
of the evening as they did not get
much wanted here.

October 22, Friday.

This morning I awoke to find it
cold and sharp with a raw wind from
the south, though the sun was shining.
I was out at a quarter of five and
at 5:30 was on the road for Luvall
in the city district in a Ford car.
The road led out along the bank of
of canal for a long distance, a canal
that formed one of a series for drainage
of part of the low lying district here.
The embankment made by the ditch through
out of the ditch made an elevated

roadway about the wet fields on
either side, flooded by the rain. The
road was gullied out considerably
but was passable for a long
distance. We traversed country that
to me appeared excellent for shore birds
without sighting one. Finally
at one point about 100 ducks were
gathered in the canal and with
them a few lesser yellowlegs.

The country was level and
open with only an occasional
clump of eucalyptus marking the
site of some houses. In order to
get through to Luvall it was
necessary to go far north.

At one point there were two
elevations of a few feet on the
level plain that were covered with
heavy mats, forming two groves of
some extent. The flat country here
in places was rather sandy and in
places a clay marl. Elsewhere a
sheet of humus covered the marl.

apparently the whole has been
recently located above the sea.
Fragments of shells were often in
evidence. The little hills containing
shells are evidently older and
represent old islands in an ancient
marsh. I saw other small hills
six to ten feet high with rather
cool tops that had been cleared
of trees.

The area here was one of great
estancias. Leagues of land were held
by single companies or men who
have no country places here but who
for the most part live in Buenos Aires.
The country thus is not heavily
settled: in fact for long areas
houses were scattered from one to
six miles apart and these houses
represented merely the dwellings of
huguleros of fairs. The
country around was utilized for
stock, horses, cattle & sheep. Sheep
are run everywhere and have the
grass cropped close so that it appears

like a lawn. Horses were fastened
with them and fed with them
which they will eat to at times.
The Horses were fine large animals
of good stock in contrast to what
I had seen in the Chaco.

We had a blowout wrecking one
of the hind tires and had no spare
tires to put on. We ran up to the
estancia Santa Clara on the rim
and then got in a boot which
however did not last long. When
it gave out we were near Casaca
where there was a little Bolicho
and a house. I regret steps along
the road had given me opportunity
to look over the country. Rains
had found faults everywhere
the grassland and in places were
areas of more permanent water. In
spite of this apparently favorable
condition I found no show birds.
The road was so broad here
between fences that was a little

travelled that there was no track
in most places simply a level carpet
of grass; occasionally we made
detours through the fields to avoid
deep water holes.

At Conessa we had come to the
end of auto traffic for this season of
the year. Here my baggage was
entrusted to a "Bake", a
four wheeled spring carriage with
a seat for the driver in front and
an enclosed space behind with
seats running lengthwise. The
whole was about two thirds
the size of a Studabaker wagon.
Two strong horses were ~~put~~
on the poles and two others travelled
along side. The pole horses had
collars, the outside ones had
the native saddles cinched tight
with a chain ^{worked} on the side of
the saddle with a ring, that
passed back to the corner.
At the Bolicho I bought bread

Sulamir etc with a litre of
wine and with a roast duck
brought by ^{scripting} S. Davila the owner
of the outfit. I travelled with
made a good meal. Coffee was
served ~~made~~ ^{made} nicely in the
cups and was taken through
a Bombilla. Coffee was put in
the cup and boiling water poured
on it. The Bombillas were rather
subintending but I did not at my
mind wander at that point but went
ahead & enjoyed the drink.

We arrived here at 11:30 and
left at 12:30. The Bake swayed
and bumped threatening at times
to throw me out. There was no
regular road in many places as
we made detours to avoid mud
holes. Elsewhere the road was
often marked merely by a ~~small~~
narrow winding of smooth grass
delimited by the ~~bound~~ ^{bound} grass

in either ward.

The few Passina here was very slightly rolling. An appearance I was reminded of the San Joaquin Valley and the Coastal Plain of Texas. Eucalypts and Casuarinas grew about scattered houses. Elsewhere there was occasional clumps of a low shrubby, as alder like plant with a low heavy gutty stalk and no branches. This was just coming into leaf. Grass was starting in abundance and appeared fresh and green after the rains. Cattle & sheep were cropping it eagerly.

Pools stood everywhere and occasional arroyos gullied out three or four feet below the surrounding surface were filled with water. In this region I was pleased to encounter scattered flocks of shorebirds. Groups of golden Plover stood about on the higher ground, lesser yellowlegs, a few greater, Pectoral & White-rumped were found in the ponds.

On travelling about the water leagues, 36 miles I saw the following.

Golden Plover 260
Lesser yellowlegs. 60
Pectoral Sandpiper 20
White-rumped Sandpiper 4
Greater yellowlegs 20.

Their abundance was about as it might have been in such areas in other states, and nothing remarkable at all.

At one lagoon the Comanche Fernandez whinn many ducks. Mainly Melospiza and Fulvous tree ducks. I saw five Associates birds. This point was Three leagues from La Vall.

One of the horses on a chain at one side soon played out and was replaced by another encountered in the San Joaquin. Later the other side horse was changed. A pony on horseback led the way riding through arroyos and ponds & felt a secure crossing for us. At bad points he attacked

his sawn horse cases to the job and helped to fall through. About four he rounded up from men houses paying in the gun camp and all the horses were changed for fresh ones.

About a league and a half from here we turned into a new travelled road and signs of habitation were more in evidence. La Valle itself which we reached at 6:30 proved to be a straggling place with scattered houses. It was formerly called the Cijo district: the name was changed some years ago.

I found accommodations in an hotel run by a Baqueño a huge man. Found a clean room and good food. Ate a hearty meal and turned in at 8:30 sleep.

From different people I gained knowledge of Ernest Gibson today, the anthropologist. He lived at an estancia

called Los Yaguajais. A league and a half from La Valle, which was the main estancia on the property at one time but the headquarters were later transferred to a newer place known as Guirapana. I had no Yaguajais at a distance, the place being marked by growths of tall eucalypts visible for a long way across the gun camp. Gibson and his study of birds were well known to the people. He was said to be a hard drinker, often to excess, though restrained in this by his wife. After her death with less restraint he continued and it was this that caused his death. He is buried in Buenos Aires though he died here at the estancia.

October 23, Saturday.

This morning I was out at six and worked until ten or odds and ends. At the latter hours I hunted up the Comisario de Policia who I was fortunate in encountering in the hotel and explained myself and my business to him. Following at 11 o'clock

My outfit and wrote further until
noon. I have changed underwear
since noon and am wearing full
length cotton again which I find very
comfortable.

The air was sharp and cool this
morning and it was near a frost. ~~As~~
the sun rose it became warmer but
a cool breeze came up from the east
and continued to blow until dusk.

The cool air was like a tonic. At
one I went out through the marshes
along the river. The land here was
entirely level with the horizon
broken only by trees. The rains
have turned the country sick green
once more ~~so~~ that the view was
pleasant on every hand. The short
close-cropped green turf is similar in
appearance to the pastures of New York
or Wisconsin at home.

The Rio Ajo is a winding stream
passing between low banks with
many small branching radiating
out through salt marshes. Broad
alkaline valleys were bare of vegetation

or were covered by a ^{*Salicornia peruviana*} ~~salicornia~~
that grew in heavy mat. a grass
that from like salt grass *Lygms*
there. Broad areas were covered with
a round ^{*Juncus acutus*} rush with dark green stem
and slender hard acute point similar
to the same plant that I found in
the coastal marshes of Florida.
A softer stemmed rush with
grass like blades was just starting
new growth. Broad areas were
covered with its yellow brown stalks.
Winding tide channels from the
river, itself only a tidal stream,
a mere riacho led out through the
marsh making it difficult to travel.
Hundreds of a crab ^{*Chasmagnathus granulata*} as much to
1 3/4 inches ^(last known previously outside of Brazil & Uruguay) across the carapace
walked about in the mud or in
the waters. These crustaceans lived
in little ^{rough} holes in the mud that
seemed scarcely large enough to permit
their entrance. Though found in small
groups they did not make the mudding

sound in walking so noticeable
with Uca pugnax. The mud was
dotted with the pit-like tracks
made by their pointed feet.

All through the marsh were
little elevated spots two to four
feet above the ~~surrounding~~ level
spots that apparently escape
inundation in the highest water.
These were crowded with little
scattered clumps of thorny bushes.
One species of ~~tree~~ had no under
leaves but was merely a mass
of green branching thorns with
points projecting at all angles.
This bore an abundance of small
white bell like flowers.

About these clumps of bushes
I found numerous birds, Brachspiza
a pair or two of hickups, a pair
of House Wrens, a little flock of
Phoebe domus. From the marsh
grass came the twittering little song
of Cistothorus palustris.

Gulls passed overhead and a
Archon phous swam in the river.

Mosquitoes swarmed in the marshes
and as always in salt marshes inflicted
bites that were instantly painful. The
wind kept them down and scarce for
it they would have been unbearable.
At times my arms and breast were
buck with them. I returned to the
hotel at 5:30 with 14 birds, four of
them representing species not taken before
so I was well pleased with my first
expedition here.

I was able to catalog my birds before
dark but then had to stop as I had
no lights other than candles.

Although the country crossed this
afternoon was favorable for shore birds I
saw only one, 12 greater yellowlegs.

Sunday, Oct. 24,

At seven this morning I began work on
my skins and was through before noon.
The afternoon was occupied with notes and in
writing some letters.

About five I walked down the port on the
river six or eight blocks from the hotel and

made arrangements to get a boat for
use tomorrow. There is a fish salting
station here where corvina are prepared
for the market. The fish are secured in
the ocean and are brought up the
river in sailboats. About 200 had
just come in big fish looking fish
averaging 25 or 30 pounds in weight.
The corvina look like the Channel bass
& *Sciaenops ocellatus* but lack the ~~white~~
margin in the preopercle. Men laid
them out on the ground with the
heads against some sticks, stood with
one foot on the tail and removed the
scales with an iron instrument like an
ice chopper. The scaled fish were then
laid out in rows and their heads chipped
off with an axe. The entrails were then taken
out with the back bone and the fish
salted. The heads & back bones are dried
in the sun and used as fuel. As they
contain much fat they burn with a
very hot flame.

Strong wind still continues from
the east. Fruit is setting on trees in the
garden at the hotel and roses are in bloom.
Potatoes are ready to blossom. There was
some damage from frost however.

October 25, Monday.

This morning I was up at five thirty
and after coffee and milk had a piece
of bread worked in water until 7:30. The
bread here is always rather sour and
without butter I find it rather unpalatable.
At seven thirty I loaded up and went
down to the port to get my boat. My
arrivals and departures from the village
are always the cause of some excitement
as people come out and stare to see
what is happening.

The tide ebbs and flows about 3 or
so 4 feet here in the Rio Cijo and
I took advantage of the ebb in going
down. My boat was a flat bottomed
skiff rather unmanageable in the wind.
For oars I had two old fellows that
had seen long service as testified by
their worn ribs. One had been broken
but had been repaired by a wrap of leather
with cheat nailed on each side all the
way round. I found it rather a task
to row and had to watch carefully to avoid
breaking it. The other had strips yew
nailed on the blade to strengthen it. They

were heavy and immediately. With
this outfit I worked down to the
mouth of the river a distance of
about five miles. The stream ranged
from 20 to 50 yards wide and was
fairly deep so that trees nested
Pachomus ~~came~~ came up to the
top. Supplies are brought to
Kwail from Buenos Aires by water.
There were a few boats in at the
wharves today. The banks of the stream
were low in most places though
occasionally cut banks rose 4 or 8 feet
from the water. Many muddy side
channels led out in tide streams
through the flats. There were no
trees whatever.

At the end I took advantage of
the ebb tide in going down. Broad
areas of mud were exposed along the
stream on either side with the
tide channels opened in broad mud
flats. At the mouth of the river
I found the land low with
broad flats marked by meandering

channels where the mud was so deep
as to be almost impassable. I walked
out through here on foot making long
detours to find places where I could
cross the conglomerates as these winding
streams are called. At high tide they
are filled with water. At low tide they
present an expanse of soft clay
that at the best was two feet
deep and in many places was
so deep that I could not cross.
Myriads of crabs (*Chasmagnathus granulata*
(see specimens))
ranged over these flats crawling
in and out of round holes in the
mud as a ^{*Uca wuergaeiensis nobilis* in small numbers.} approach. In spite
of this broad area suitable for shore birds
I saw very few; four Pectoral Sandpipers
passed me and on one projecting clay
bank my eye caught the familiar form of
a spotted Sandpiper. The latter I shot
as it flew: from books I have available
it seems to be the first one recorded
from Argentina.

Broad areas of flats were level and open being either entirely barren or else covered with salicornia. Higher ground near the canyons where drainage was better was covered with grasses and rushes forming fine mats. For a point against the heavy masses of sawgrass. Scattered clumps of low trees were found over this open country, but many had been destroyed by fire. I worked for three hours trying to find a way through to the coast and finally succeeded. I found low tidal flats of bare mud with many gulls standing about. By 1:30 I had to start back toward the boat which by knowing the country I was able to reach in an hour. I found that the tide was just changing and ate my lunch of bread, cheese, apples & membrillo and a bottle of wine while waiting for the full force of the tide. Small gulls which I take to be *Micropodiceps* passed back and forth

and I saw two eyscatchers. A few large semipalmes came in here and I killed one.

High ground here near the mouth of the rivier was taken by a few fishermen whose houses were engaged in sailing the Corvina. The rivier entrance made a safe harbor for them.

At 3:00 I shoved my boat down into the water once more and prepared to return to Cavalli. Several hundred crabs had sought refuge under the boat and were exposed when I pulled the craft around. By aid of the tide and the wind I returned without great effort as my partner & I rowed merely enough to keep the boat from drifting into the bank. It was hot all day though I found the sun rays hot.

On the return I drifted down and secured *Archimophorus major* and shot three of them. One had a toe bitten off as though by a turtle or small shark.

My accommodations in the hotel
here are very good although I
find the late dinner table at 7:30
rather inconvenient. As I have
no lights at night I get up
early to utilize all the daylight
possible. In consequence of that the
eyes I've had before me I find it difficult
at times to sleep after a heavy meal.
I was struck today about the
curious fact that many long-tailed
birds are resident in open country
where they are subject to heavy
wind. Thus here in Argentina there
is the Muscivora tyrannus, Alecturus
and Cathartes, the Long tail ^{of the Americas} which
is ^{Domesticus albigularis} today has a very
long tail. Am enough some forest
birds are long tailed also as
Pharomacrus, the Motmots and some
Toucans, but there would seem to be
a distinct tendency for long tailed birds
to develop in such areas as the Pampas.

Tuesday, October 26.

This morning I rose at 5:30 and
after a cup of coffee and a piece of
Dors bread in the clean kitchen in
company with Don Pedro began work
on my birds which occupied me
until noon. During the night the
wind shifted to the southwest it rained
and then turned colder. The sky was
overcast this morning and the temperature
was down around 50°. Had it not
been for the wind there would have been
frost.

At noon I met Mr. Enrique Griffin
Manager of the Estancia Yaguas or
Estancia Vieja as it is called, the former
estate of Mr. Ernest Gibson the Ornithologist.
With him was Mr. Imbabau, Mr.
Gibson's brother-in-law. I ate lunch with
these gentlemen and enjoyed the opportunity
of conversing in my own tongue to the
fullest extent. Mr. Griffin tells me that
he has noticed no appreciable change in
the numbers of sandpipers & shorebirds in
the past few years. He considers that the

Bulk of the birds do not come until
November and December. Mr. Ernest
Gibson died a year ago today from
influenza. Don Guillermo was kind
enough to invite me to visit the
estancia; I am to come tomorrow.

Besides Mr. Claude Grant, L.D. Box has
collected mammals here for Mr. Thomas
and Pousset has made a collection
of birds for the Museum at La Plata.
In the afternoon I was occupied
in getting up my notes and in
preparing a letter to the office.

There are no lights in the
rooms here save candles as usual so
that it is necessary to do all work
by daylight. The hotel is rather
a rambling structure with a building
containing in a sort of court in
the rear. The father, Don Pedro Habringa
is a Basque, a tremendous man; His
two sons have been very pleasant to
me. The Padre is also a guest at the
hotel and we have had a number of
conversations.

October 27, Wednesday.

This morning I picked up an offer
to take out to the estancia with
me and then arranged with some
reports and letters. It was still cold
and sharp this morning though the
sun shone. Arrangement had been made
for a coach at ten but need had
Parisien to send this coach to Dobos so
that I was left without conveyance.
Finally at seven a Ford auto was
secured and I started out. The
journey was not made without further
misadventure however. I had hardly left
Lima when I recollected that I had
forgotten my gun and returned with my
servant for an hour before I could make
him believe that I really wanted to go
back after it. Then started once more but
had a puncture. A tire was changed
however in record time and we were
off again.

The road near town was
fairly good though water lay across it
in several places. Fortunately at such points
the soil was sandy so that we did not very
in crossing. As we went out we passed

near reaching the new Gibson estate
A large plantation of trees stood out,
against the sky line and I had a
glimpse of the white buildings of the
Estancia.

Beyond here the soil became more
sandy. We swung around and
finally turned in to the Estancia
by a narrow about three leagues from town.
Near the entrance the soil was
very sandy and some low dunes had
been thrown up. The soil was loose and
light and the dunes no doubt mark
an ancient ocean beach. Now they
are covered with trees. These dunes rise
ten or twelve feet in places and have
a rolling irregular surface.

The approach to the estancia was
through a lane of ~~trees~~ *Eucalyptus*
giving a pleasantly varied view.
The houses were arranged in an
open plot surrounded by trees with
openings giving pleasant views of the
pampas. After eating Mr. Walden
showed me through the grounds.
Mr. Gibson's old study in which

there is a billiard table and
a number of cases of drawers was
a small well lighted building at
the side. His collections of skins had
been packed and shipped to the
British Museum at South Kensington
a fortunate circumstance so they
were thus well preserved, rather
than left to the ravage of moths
as so often happens.

We walked out through the
grounds and I collected a few
specimens. Birds abounded and
I heard strange songs and notes on
all sides. Gulls flew over head,
Chimango were common and many
parrots screeched from the eucalypts
on all sides. A duck flew from
an old parrot's nest as I passed.
Roads and trails led out through
the trees with grass now pleasantly
green from the rains. Robins & ovenbirds
walked about on the ground and
Black-headed skinks flew about. *Tamias*
auriculata very abundant.

October 28, Thursday.

Was out this morning before six and worked on notes until eight. Today I sent in for more of my outfit as a trip down to the coast had been arranged.

After breakfast accompanied by a pack animal, mounted on horseback I sallied out to work along the Cañadones. It was cold today with a strong southwest wind and an overcast sky. Last night it was cold enough for frost.

Birds are very abundant in the extensive groves about the estancia buildings. This morning I was awakened by the curious ^{causing} notes of the small gulls, which ^{thrushes} sang and English Sparrows chattered outside my windows.

As we passed out into a pasture I noted the freshly built nest of an ovenbird on a post at the gate. Why the bird should have picked this exposed spot with the cover there is available here is inexplicable.

The Cañadones are long winding ^{estancia} grown with clumps of round stemmed

Scirpus that stand from a six feet high and other rushes. During winter they have been practically dry but with the rains they have filled with water. They constitute the drainage of the pampa here and are said to often to be thirty miles or more in length. The one I visited today was winding with an ill defined channel and many pools of water spreading through the rushes. Ducks were abundant. I started in to collect some small birds but at my first shot with the auxiliary the end blew off a defective shell being the tube of the shell driven far up into the barrel. With this useless I went about to collect large birds. A pair of *Querquedula discolor* jumped up: I missed one knocked down another and then had to shoot it a second time to prevent escape in the rushes. Hearing their birds concealed in a clump of rushes with cut rushes over them to shield them from the vigilant eye of

the caranchos I went in - a small
Trachophora that made a noise like
clicking two pebbles together was common
in the rushes and I soon secured one
of these with a load of #12s. Then as
Everglade Kite circled overhead in the
wood and I brought it down.

Some Spoonbills and then a flock
of Black-necked swans passed. Dulciss
Grebe ducks were common and I
shot one from a flock and a minute
later killed a cormorant. A magpie
stork came by and a load of #2
shot brought him down. As I
carried this bird out of the marsh
to higher ground three or four more
came circling overhead and with
two shots I killed another. These
large birds are very strong and
it is almost necessary to break a
wing to bring them down. I sat down
here and skinned one of the storks
with my pocket knife and then
started back toward the estancia.

Some Jacksnipe like birds flew up
from a grassy ground shallow pool

and one that I thought I had proved
to be Bobolink simulans a bird that
I have searched for constantly since
the beginning of my field work here. The
delicate greens of bill and feet were
beautiful and the soft duck colors of
the back contrasted with the prominent
lighter markings suggested a goatsuck.
A passing Bay-billed duck (Malpina)
added to the day made another species
new to me. And all I had secured
seven not taken previously secured this
morning; certainly one of the most
exciting days I have had recently, in
a country where unknown species are
constantly giving a thrill.

Though I had only eight birds I
was occupied during the entire
afternoon until dark. I worked in the
well-lit little building where Mr. Johnson
had had his study, the scene of so
much ornithological work here in the
estancia. It was necessary first to
catalog the specimens and then to
record colors of the soft part - by some
cases these were shown and had to be

Following this beyond the labor of getting
and calling the big stuff which could
be until six thirty; A completed other
it became dark.

While cleaning up for dinner the
rest of my baggage arrived.

In the evening we had music
Mr. B.S. Donaldson, brother of Mrs.
Johnson (who is now in Europe) is an
accomplished musician as well as an
artist: sang Mr. Harris' song.

October 29, Friday.

Last night there was heavy frost
and I found it cold and sharp this
night morning. I was out before six
and put my notebooks in shape before
breakfast. After eating I went out along
the Canada again in search of
other birds. The sky was very partly
overcast today and sun appeared at
intervals. The clouds were lighter and
drifted across the sky in grey
masses the bottoms cut off flat
by the winds. As the weather was
I saw settled birds were working less
actively in air but I found many
things of interest. Two species of birds

Fulica armillata & *S. rufifrons* were collected
the latter apparently much more common
than the larger species. A small
marsh hawk I flew past and was caught
to the way and I shot my first
Larus maculipennis. A short-eared owl
flew out from the marsh and after
circling about alighted on the
open ground a few hundred yards
away. I gave the gun with me
my gun and let him ride out a short
it breath to his delight. Many
storks circled overhead attracted by
the birds in my hands but I did
not molest them. In one spot 11
English tits circled together high in
the air. My intention had been to
collect more small birds today but
after securing them as far as I again had
the misfortune to have a shell blow up
and lodge in the barrel of the gun
which I blocked this plan off totally.
Fortunately I was able to fire the shell
out on my return to the house without
difficulty.
The soil here in the spring is a heavy

account of the Paraguayan Chaco
in the geographical journal (London)
for September 1848, p. 157.

October 30, Saturday.

This morning it was cold and sharp
again. After an early breakfast I walked
out through the marsh to see what small
birds were about. As I passed down the
line of Eucalypts towards the grove I stopped
for a time to admire and watch the
Yellow-billed Seal that perched in the branches.
A male was taken. The morning was
clear and bright and birds abundant.
Mask Parakeets shrieked & chattered in every
hand. Securing a small series I shot them
at one shot.

Ambrids abounded and I collected
several. I was interested too in cutting into
one of their curious nests.

The groves here aside from the introduced
Eucalypts are composed mainly of a
native tree known as the ^{Peltis} tala. ^{It is}
is a low shrubby tree that at times
attains a height of 20 or 40 feet. ^{Several} trees
growing in the grove were ^{small} bushes.
This tree was just coming into leaf.
The curious Ambrids with its beakless
like root base was common but the
branches were still bare. The corovilla
had small dark green leaves and
apparently was voracious. It had the appearance

of a box. One of the Eucalypts was in
blossom.

I returned at noon with a full
quote of small birds and after lunch
proceeded at once to skin them. Sets
of eggs of the *Brachypteryx* & *Plinesticus*
were also collected.

At five thirty in company with Mr.
Meredson I went out and set a line
of traps in favorable localities that I had
noted earlier in the day. Also set
my only "O" out-of-sight trap for a
two-two. The burrows of this
curious animal were common in
the loose sandy soil. At intervals
of a few feet low mounds of loose
sand had been thrust out through holes
to give room in the burrows below. These
piles of sand completely concealed the
furnings from which they had been thrust.
Occasionally I heard the peculiar grunting
notes of the animals in the soil below.
The workings looked like those of
Hummingbird and I set a trap in the
same manner as for a pocket gopher.

Slugga scraping away a loose patch of
still fresh sand & probed about with
my knife until I discovered the
concealed hole. This was plugged
with sand for a distance of eight inches
and then was open for a foot or more.
It ran in at a slope I estimated a
foot below the surface it entered the
main burrow of the animal. I
dug in until I could reach the
main run. ~~It~~ I can not destroy
the roof and then set my trap, sunk
level with the floor in the main run.
The entrance was then closed with small
sticks, grass laid across them & finally
sand filled over the hole to exclude
light. ^{A snake *Ninia* *psedonotus* taken.}
Returning I found three mice in my
traps already.

October 31, Sunday.

This morning I visited my traps some
after daybreak and found several mice
in traps. These were all of a species
living in holes in the dam area. On
reaching the two traps trap I found the
ground well dug up near the set and
on removal of sand showed the animal
caught in the trap rested. Pushing out

in the chair, cautiously in case the
animal was held insecurely & soon had
a fine two-toes in view. It proved
to be a flat-headed animal with short
legs, long blunt head and strong muscular
tail. It rested on all fours squashing
its heavy gnawing teeth at me angrily
and occasionally giving its peculiar grunting
whistling call. The color was light brown
and I found that the guard hairs were long
while the underfur was soft and velvety.
The nails on the toes were protected by
heavy stiff hairs that projected out over the
base. The claws were less heavily
developed than I had expected: I pushed
the shoulders and head remarkably
muscular. The eyes were large and eyesight
good.

Nearly were many other fresh workings
and I set the trap again in one of
them. Apparently the two-toes appears
its burrow for a time in early morning for
nutrition as I saw several open runs
and occasionally noted one of the animals.
Their eyesight is very keen and they seem
very indistinctly when their eyes appeared at the
surface and at once edged back. Like the

potholes appeared they appeared to run along
formed on backward with equal facility
I set the trap in one of the open
runs claiming it to include all light
but later found that it had been plugged
up with earth so that it could not be
springing.

This morning I rode over to a
new locality bordering a Canadian
was given a very big horse and
found it remarkably easy to ride after
the hot blooded small horses that I
have been riding recently. It was
really a pleasure to be in it.

In this new locality I found the
Canadian as before a long narrow filled
with water in which were growths
of rushes, heavy in places, in thinning
way to open ponds. These Canadian
are long winding stretches that
represent the drainage of the surface
in this sea. The land is all as near
sea level as possible that seen in case
of heavy rain there is no current whatever
in the channels at an early stage in
the elevation of the land here they

probably represented the winding empty
channels of the tidal marshes. So
the Canadian lie in the depression
with all the water land sloping to them
The water that they contain is not
available for irrigation. In some places I
note alkali along them. These
channels are nearly or entirely dry in the
winter season but fill with water during
the spring rains. Vegetation begins its growth
at once and the herds of birds that
make this of such interest to the
ornithologist appeared to be carrying on
their breeding.

Among the first birds that fell
to my eyes this morning was a
least tern with streaked back that
rose at least 50 yards away and tried
to escape over the bushes. In a pool nearby
I killed a pair of *Metopius infusca*
and with them a small yellow billed
coot & *Leucophaea* that I had not encountered
previously. On recognizing it I took another
in a pool nearby. Poshah spoonbills circled
about and I saw many ducks. Cowbirds
kites circled in the air over sun with
rasping chattering calls and gulls and

terms followed me with protesting notes.
Entering the marsh again I shot my
first night heron and also another
Bostratula that I desired especially for
preservation in alcohol. A *Caracara*
that passed overhead was also added to
the pile.

I returned at noon with more
specimens than I could care for
and was busy with them all the
afternoon.

November, Monday.

Mr. Davis and Mr. Dudgeon cross
in to walk this morning and left me
alone to do as I pleased. Today, All Saints
Day is a festa in which it is customary
to place flowers in the graves of the
remembered dead.

The day was cool after rain last
night. I walked about through the
marshes this morning collecting a few small
birds and worked busily in preparing
accumulated specimens, birds, eggs etc
until dark. I desired to get some English
sparrows here; but although the birds have
been very common in evidence since my arrival
when I appeared with a gun, with an
eye on them they took to good with their
customary alertness. I shot one that lodged
in a tall eucalyptus tree but after some
struggling finally secured a female.

The short-bird situation here still remains
most peculiar. I have ransacked the
pastures and the canals nearby but
have found only scattered quails and lesser
yellowlegs. The region appears favorable to the
birds in every way but for some reason
they are not here.

November 2, Tuesday.

This morning early I walked out to try to get *Arctostaphylos* yellow-billed teal among the *Eucalyptus*. But though I saw a pair I failed to secure one. The morning was cool and pleasant but at about the sun hot water I walked out through the grove to the Canadian in a new locality. Black-headed stilts were singing merrily with *Struthio* and *Psittopygia*. The tuba trees were filled with fresh green foliage and from the Umbels I picked many *Zenaida* doves.

Stumps are pastured very abundantly in the fields but since the rains the tall grass has grown more rapidly than they can eat it. I scums in pairs and parties walking about among the stumps quacked in with loud hoarse calls and several small gulls circled about overhead. Catching the march of killed my first pair of *Dipla spinica* the male looks the bright side of *D. acuta* so that both resemble females. a glossy dove that circled near was added to the bag also.

For half an hour following I had a run of bad luck in finding birds in the heavy growth of bushes. A pair of *Rostratula* flushed with a sudden flutter of wings. They stopped over the bushes I without giving time for a shot. It followed cautiously and this time as they rose, both together again I dropped one but could not find it. A few moments that was sparkling away to safety was also found but *Uvularia* could not be located. Then I dropped a *Rostratula* apparently stone dead in an open place but it disappeared before I could reach the spot. While hunting for this bird however my luck changed as I flushed a *Rostratula* from a fine set of two eggs. The nest reminded me strongly of that of *Chalchipe*.

I had here I waded out across the Canadian to the opposite side. *Phalaropus* were nesting and I took a set of 3 beautifully marked blue eggs. Two other nests contained young several

As their strong walled mud nests they
were free from rainey attack but I
carried them away with me to be
preserved in alcohol.

5. Rose-billed ducks, pintails and teal
swam in pools among the rushes,
gulls and cormorants circled overhead
and in the distance I saw a flock
of Roseate Spoonbills. A heavy shadow
passing betrayed a maguari stork
circling low overhead to examine me
curiously. Once or twice I had a glimpse
of a shy pint-billed grebe.

While working cautiously along the
border of a pool in the rushes I saw
a Roseate Spoonbill approaching. Hastily
slipping in a heavy charge of #2's I
had a long shot at ~~about~~ 70 yards
but was fortunate in bringing down my
bird. It fell ~~into~~ down on dry
ground and was uninjured. As this
was my first specimen I was greatly
pleased, the curious bill and curious
recurved pattern on the breast and
rich coloring all demanded attention
I was particularly interested in the

upper pouch. This will be found described
in my notes and in the tractus,
which half down the neck forked to
form the branch. The bird was heavy
muscle and strong. Returning to the
rushes I left the bird lying in the
grass where it had fallen. In five
minutes another passing near was
attracted by its companion and shared
its fate. Upon returning to the pool I
had the pleasure of securing a
beautiful little grebe, a male in
full plumage, with ducks and
Spoonbills, etc, a least better and
more than bird I had a head. Before
starting I rested for a minute in the
grass lying at full length in the
sun. I then went on with my
morning work. a male *Rhedeina anomala* taken
this afternoon was occupied in the
preparation of specimens as usual.
November 3, Wednesday.
this morning I was out a few days
and caught some birds eggs and

other specimens that I had on hand
and found an outfit for a trip of
a few days to the coast. At Ten o'clock
I was ready to start. My horse & cart
& a mule pack with a supply of food
were loaded on at two o'clock early
started to a heavy driving wind.

At 10:30 a few mounted men
accompanied me on horseback to
open gates and felt the way through
supposedly bad roads. They had been
the tales of humpbacked camels
and enough impossible that
I could not get out and return
had had experience as to my ability
to go on. As I climbed on and was
started off I was glad somewhat what
was in store.

It was not until about 10:45
having been out right. We drove
out across the fields through immense
gates dividing the pastures. An
place half a dozen rheas circled
about with spread wings flashing in
and out excitedly. Pifito sang in the
air and terns ran about in the

ground. All it was a pleasant morning.
In accordance with the usual custom
the blinds were drawn so tight about
the eyes of the horse that I was driving that
the animal had only partial vision. When
travelling at a trot I she gave me trouble
but when walking would have travelled
in a circle had I not watched her
constantly. We went first to the
Estancia 'Suiza' whose manager had
kindly given permission for me to occupy
a little house near the beach. I
learned that this was unlocked and so
after a little conversation continued my
way. More gates followed leading through
pastures devoted to sheep, cattle and
horses. The land was level with only
slight undulations. Finally the soil
became more sandy with scattered
clumps of *Spartina* spiny pointed rushes,
a head of sand the higher line of the
sand dunes. We were soon among these
winding about about to find a grass
ground road to make easier pulling for
my horse. One or two rather sandy
slopes made a little work but

mt back. After the first time of
June, the country became more
open again. Pools of sweet water
lay in long swales. We rounded
the point of one of these, passed through
a final gate and headed toward the
house that could be seen half a mile
away. Here there was a surprising bunch
grass and sand but still not bad.
Going. I wondered when the bad
places were reached finally we were
up in the yard of the little shanty
where I was to make my quarters. The
camino malo had been almost entirely
in the mind of my poor, who
like others of his class can't little perhaps
for solitary joints such as the one I
was on at present.

We arrived at ~~one~~ one o'clock.
I found a little frame shanty with
a galvanized iron roof, twelve x 16 feet,
two doors, no window and a dirt floor.
A small canopy of thatch behind it
served for a kitchen.

Our outfit was soon unloaded
and in place and a fire going

built with leña de vaca (don't cooking)
a strip of meat thrust on an
iron bar over the ~~the~~ coals was
soon being turned into churrasco
and by two we were eating a meal
of galletas, tea and sweet meat.
This evening I walked down to the
beach and collected some herms
Maculiffennis, *L. dominicanus*, and others
typical of the coast. The latter known as *caja de*
la costa were especially welcome.

Purpoises were leaping in the surf
and I found in the beach one
up on the beach. At last we returned to
the cabin. I had the misfortune to lose
one of my auxiliary barrels and could
not find it without success.

We ate by candlelight, consuming the
remains of the churrasco, galletas & tea.

November 11, Thursday

I was out this morning at a quarter past
five and proceeded first to the cave for some
of the specimens secured last night.
The wind blew steadily all night
from the southwest and continued till

day today blowing strongly from the
same direction.

The cabin lies near the landward
side of the dune area. Between it and
the beach proper there is about a
quarter of a mile of sand dunes, at first
these are low and undulating and
are bound by vegetation so that they
do not move. In the beach however
they coming higher and in many
places show shaded clumps of vegetation.
Beyond this point is open sand with
only a scattered plant or so over its
surface. Under influence of the wind
the sand grains are in constant movement.

Dunes large and small were marching slowly
along ~~and~~ with the sand grains following
and drifting like snow. A low broad
open area of sand followed with an
inter line of dunes behind the beach.
The latter was a fine open place from
100 to 200 feet wide of clean sand
with a few shells extending in certain
direction as far as the eye could reach.
Even for weeks of their dead blowing
and the porpoise mentioned yesterday

the beach was clean there being
no drift.

A strong wind from offshore
rolled in the breakers in great shape.
Masses of foam flew off across the
beach sand and the air was filled with
fine spray that obscured vision in the
distance. Some of these species were collected
and with that evening I saw two species
of jaegers. Two species of gulls, subarctic
calchus was common. Which Procellaria
fulvirostris diving back and forth offshore.
I watched in vain for shearwaters as usual
and subarctic I did not see. The
other which is a most interesting one
and as to find the lack of subarctic
I secured some fine stuff. Return of
to the cabin at noon with a full
load.

I proceeded at once to cataloguing
and a mass of stick gallees and
then was soon ready. The afternoon was
fully occupied with the preparation of
skins. A lot of water Enderbago and Brachyptera
came to the door, Tropicus sang outside
and the clear whistle of Rhyacionia was

came from the grass point ~~times~~
beyond.

At dusk I set a line of mouse traps
in the grass.

Today I saw a hare running across
the snow and here noted a number
of fox tracks.

November 5, Friday.

Last night a slow rain, driven
by the strong wind rattled on the
sides in rufy all night. I went
out once and saw that our provisions
were secure and that we could not
get out. I was very very bad but

returned eight last night and five
this morning. I secured enough traps

In the cold rain this morning my
"mouse" was rather low but left a
shoe and a wash. I got the traps
at found five mice. we
to them of this badly eaten. Something
had robbed two traps of mice also.

Cold rain continued until mid-afternoon.
I was fully occupied until eleven with
specimens and then began writing and
was busy with it until late.

The clouds lifted about eleven
and rain came at more frequent
intervals. The wind shifted somewhat
to the south and it turned colder.
The rain has brought out the
contrast between the grass & snow of
the dense vegetation beautifully. Bigels
is in full leaf and all day and seen
the that just about the door. The
Dow stream, we saw two *Rhyacionia*
and a *Pteris* just north of the
house. I was intended to go for a grass
with me but was short of time
the water was low and it was well to
conserve it.

About four the rain checked and I
went out once more. Our my traps were
a rat and a mouse all very well kept.
The rat, a dark brown species was very
welcome as it is the first I have
seen. It was caught in heavy grass in the
house. I walked out for half an hour toward
the good country but saw little. I saw several
pipit or *Emberiza* flushed from the grass
and then away down toward the lake to come
so soon as possible and that was all.
Following in the sand are filled with glass
and water. Rain came at intervals
running across the flats with a strong breeze

It was impossible to come my glasses at all.

Returning to the cabin I built a small fire of dried cow chips to dry out their fur. The clouds lowered again about six and a ^{thin} gray mist drove across the tundra filling the air with moisture but in particles so fine that it made no sound on the ~~low~~ roof. A golden glow came beating down the ridges across the wind.

I had supper at dusk, a churrasco and some galletas and then turned in about seven thirty. It turned a bit colder at sundown and the wind increased to nearly a sixty mile gale that tore and whistled at the little house. Rain increased and down by the wind entered through crevices. I was forced to unroll my bed. Thanks to the cold fleas were less active and after killing Oct put on my bed I had little trouble with them.

The wind showed a tendency to swing more to the south.

November 6, Saturday
at daylight this morning I found the wind blowing with unrelenting force driving a cold rain that stung my cheeks that it was difficult to feel it. After a cleaning of the traps and a search and looked out my traps securing them again. These animals I suppose to be somewhat active even though the weather is very bad. Part of my traps I cannot find as the wind had torn down my traps and has blown the grass down over them. The thermometer this morning must have registered around 45°. The wind continued to blow in straight lines and the grass bent now about as if lightning struck overhead and the wind whistled for about periods of time.

Supper water has completely filled the water hole which was about eight feet deep with only a little feet in the bottom. The new water that has come in is in color and has a rather bad taste. Birds remain inactive during the forenoon for the *Cathartes* that I saw to be low in number.

Many nests or trees in this country are present with what remains a few birds.

When that started out in such
and the sea and a pale green in color.
This was the signal for the
of the birds as well as which let
down.

About eleven this morning the clouds
raised and at intervals it seemed that
the sun was about to break through.
After a hurried midday meal of roasted
meat, gallettes and tea, I started out
for the afternoon. Rain continued to fall
to slight extent but not enough to
wet me through. Heavy drops driven
by the wind stung my face and
hands sharply. Small ^{birds} took heart from
the respite in the weather: Brachyops
began singing, *Antrozoyfinches* were on the
alert once more and *Pseudolutes* and
Tropidalis twittered & called from the
grass. I saw freshly made tracks
of three species.

I crossed directly through to the
beach. On the outer dunes I had
an interesting example of the active
sand in the dunes. Though it had
rained steadily for two days and
though rain was still falling the
upper slope of the dunes obtained

rapidly while the wind seemed to
lift the sand. Instead of packing
sand and sloping normally in wet
weather the surface sand was
driven by the violent wind in
swirling sheets that came in a
steady stream sweeping the bare surface
of the dunes or rising to two or three
feet above them in drifting masses
that resembled in action *Spizella*
driven snow before a heavy storm.
The sand stung sharply and I
was careful not to get below the
higher dunes where it seemed would
receive it in my face. As the
rain wet my gun & clothing the
sand stuck to them and it struck
I protected the back of my gun
when my duck hunting coat to
keep it from becoming clogged but soon
the side of my body toward the
wind was plastered with fine sand.
Here I saw an interesting example of how
shifting dunes may overcome vegetation that
is beginning to tie them down. There were
considerable areas here where grasses had
made a good start and would eventually

have covered the soil. With the
with the present rain the sand clung
to the blades and stems until finally
they were weighted so that they were
blown over by the wind. More
and more sand accumulated until
finally the plants were completely buried
sometimes to a depth of a foot.
This action had occurred over extensive
areas. On reaching the outer beach
I encountered the full force of the
wind and found a most interesting
sight.

The sky was heavy, gray in
color with rapidly driving clouds.
Six lines of barkest came in
steadily but so violent was the
wind that its roaring drowned the
thunder of the clashing water. At
last a mile distant the rain
and the spray driven from the
water filled the air obscuring the
view completely. As well as
rolled up on the beach and
it brought with it a crest of
foam, as white and light as

boater egg that was left behind in
a sand window. In the sand as the
water receded in a band a foot
or more wide and at times six
inches deep. Blocks of this foam sometimes
a foot square broke away before the
force of the wind. The slide
swiftly away over the wet sand
wet and smooth from the receding
tide. As the masses of foam
blew rapidly along the friction
with the sand was taken away
so that they decreased in size
disappearing completely within a
distance of a hundred feet. I walked
along for some distance picking up
bits of the foam crests on the beach
with all the pleasure of walking in
loose snow or in drifted leaves.

Few birds braved the heavy wind
of this outer beach. A single sandpiper
flew up from the border of the surf.
I saw one or two *Cyprina* and
occasionally a jaeger blown past in
the gale. ~~Nothing~~ ~~more~~ No other were
noted in a distance of four miles.

I found many fish caught up,
a few of them curving, the others
strangely familiar in appearance.
Stopping to examine one I found
the familiar serrate margin of scales
of *Bleurostictus*, an old friend from northern
waters. I also found an *Eleutheron*
that had come in ^{land} with
the last stick and a Screamer
(*Chaunus cristata*). The latter was
an immature bird, though fully grown
that perhaps had become habituated
and had flown out to sea.

Leaving the beach I struck inland
and returned to the cabin along the
inner margin of the dunes. Hollows everywhere
were filled with shallow pools of water
and extensive marshes were filled.

A fine male marsh hawk ^{was} seen
and I killed it. Pintails were numerous
and passed constantly. I killed four
finding them in all quite a load.
At the lagoon I saw coots, pintails
and six fine *Mareca sibirica*. The
latter would be wild to permit a shot.
In a small grove at a water hole

I found a *Corcorax* nest containing
two fine eggs and collected them
carrying them to camp in my
field-glass case.

Reaching camp I catalogued my
specimens and secured a few
skins. Before dark I went out and
rest my line of mouse traps, many
were covered by water. I have
taken two specimens of a Brown rat
(No. 1129), known *Rattus pajaro*, that
seems to frequent the clumps of saw
grass. Beets are bad in spite of
the wet weather and have ruined
a number of things for me.
I worked in specimens until dark
ate a hearty meal and went to bed
at 9:15. Rain continued throughout the
night.

Nov. 7, Sunday.

This morning I turned out at break of
day. The sky was overcast but there was
promise of rapid change in the weather. My
traps held a few mice and I cared for them
first before going out.

About seven I went out through the
sand dunes to the south in search of
Geositta known here as *meivola* and

was fortunate in securing three. At a small fresh water pool I also encountered a little flock of waders and took a white-rumped Sandpiper and a Knot.

About eight the sky cleared and the sun came out. Save for pools of water everywhere the sandy dunes dried out once.

On the beach I found many oyster catchers that apparently have nests though I was not able to locate any. Gulls were few in number but large numbers of jaegers were passing in migration drifting along over the beach and I shot a number. Gulls & terns were far from common today. Two more *Alcedinophorus* had drifted in with the tide, one of them a fully adult male.

The bird was greatly incubated. I was also much pleased to pick up a specimen of *Puffinus*, the first I have seen.

The bird was wet but soon dried out and made an excellent specimen. There are no crabs in evidence along this beach but sand clams are very abundant.

These were found at a depth of six inches in the sand sometimes in groups of three or four together.

At noon I returned to camp and was occupied during the afternoon in preparing specimens. Toward night a storm of slight of pintail ducks came in from the south. Two lines of migration cross here as ducks were running up from the south with a few shorebirds flying up by the same while sandpeeps and jaegers were passing on their way southward. The two movements were distinct and easily detected.

At dusk I went over my trap line again and they had suffered a great expense made with the bodies of two *Physiculus* and two *Dafnia*, a fine meal. At 9:15 I found in.

Tonight was clear and I moved my bed outside to a high dry spot in the sand. Flies have been very bad in the woods and I was glad to get away from them. The night was clear and

fine and at last a minute enjoying
the strange constellations in the sky
overhead. Myriad frogs and toads have
appeared since the rains and were
croaking and calling from the ponds.
Occasionally I heard the strange call
of some bird. Above all came the roar
of the surf, still foaming on the sandy
beach. November 7, Marbury.

This morning I awoke at the
first streak of light to hear the pleasant
songs of *Blackyspiza* and the less
obscure though earnest efforts of
~~*Embomagra*~~ *Embomagra* and *Urupalis*. The sunrise
in the east was beautiful. From
5:30 until 8:30 I was occupied with
specimens. A fine long-tailed jumping mouse
with large hind feet had scented me in
my traps. I caught several plus as it
as it was still warm.

At 10:15 we were packed up and drove
on the road. pools of water stood everywhere
but fortunately in the sandy soil the
cart did not sink badly so that I had
no trouble. *Rhyacotis* was whistling
pleasantly in the dense, *Pitangus* were
chattering over the jungle line of a

rest in a little tree and small birds
were very active. great flocks of birds
were swimming over the country, frequently
coming up within a short distance of me.
Many were resting at the low
rocks on the flats. Within them I
saw one or two large white shorebirds.

Rain on the uplands had been
much heavier than about as at
least perhaps 100 millimeters had fallen.
After leaving the dense I found the
shallow depressions draining the
country filled with water in
some places quite deep. We passed
the *Teryn* Estancia and stopped
to thank the manager for assistance
extended in the use of the boat at the
coast. Rain was threatening and as I
left a few drops began to fall. The
fields were soaked and water stood everywhere.
In one plantation several *Eucalypts* had
been blown over by the wind. All of
them here have a shallow spreading
root system due probably to the height
of the water table in the soil; also the
sandy ground they are quite easily overturned.

I passed in at the Estero at
one about with my horse and
in good condition. You found that
the storm had been severe indeed.
Nearly 500 sheep had been lost as the
animals had recently been shorn.
The animals were driven to the mouth
as rapidly as possible for shelter
but some of the weaker ones were
unable to make it. Others had
sought shelter in the ~~branches~~ of
the canyons and were drowned
by the rising waters.

I was glad indeed to be back
and to see Mrs. Donaldson and Mr.
Harris who give me hospitality
welcome. Mr. Donaldson was
greatly interested in my collections
and wished to purchase the remainder
at once and exchange for clothing. Everything
was damp here the weather that
we had had: that stays in my
collecting chest had warped badly.
This afternoon was fully occupied
in this work and in cleaning up
was very glad to get rid of the last
of my skins. All the

Remnant of yesterday.
On the evening I walked out and
set two more traps. The storm
was threatening and it was rather
close and warm. Two stallions in
a small pasture were fighting, said
to be a sure sign of stormy
weather.

News was received tonight of
the triumph of the Republican Party
in the election at the States.
November 9, Tuesday.

This morning found the sky still overcast
with threatening clouds that portended
rain. I walked out early through the grounds
and shot another squirrel that I desired
especially for its skeleton. The birds were
common along the Encalypthus drive and I had
no difficulty in killing a fine male. From
here I walked on across to my traps
set for two turcos but found both plugged
with sand.

After working for getting out notes, and a
bite to eat I set out once more and
crossed out through the marsh. Both
~~near~~ the Jala and Coronally trees are
coming into blossom and the Quercus
is beginning to leaf out. The laticia

a curious tree with thick trunk and rounded top. The limbs are heavy and short and present the appearance of having been cut off at the ends. The roots spread out at the base to form a tremendous buttress or base that spreads out over the ground like the bottom of a huge vase.

On the route I killed an *Elania* and two *Machonias* and then crossed to the Canadians. Drainage from the recent rains has filled their channels and has flooded extensive areas of wet ground. Many more water birds especially Ducks are coming into the country and there is a considerable flight especially at night. The majority are composed of non-migrating Snails. Males of *Querquedula discolor* also are joining the flock.

Normally the beaches of the Canadians are burned each spring. This year ^{the} early falling of the channels has prevented this. As a result cover for marsh haunting birds is heavy and the birds are consequently

more abundant.

Today I was fortunate in killing a male *Heteractes* a most interesting duck. I was greatly interested in making some dissections for it this afternoon and in finding a *Stictia* air-sac something on the order of that of *Erismatura jamaicensis*. The bird certainly belongs in the *Erismaturinae*.

The duck population of the Argentine would seem to be concentrated in certain areas and will be subject to rapid decimation over in the next ten years. The regions ~~fast~~ favorable for ducks now are largely uninhabited but with the increase in human population the bulk of the ducks at least will be bound to disappear as there will be little space left for them. Their decrease will probably be more rapid than in the United States. With us & the broad northern areas of our continent offers extensive tracts unfavorable for human use. These maintain our wild fowl in their present numbers. South America has the main land masses toward the equator with comparatively small areas toward the southern latitudes that

May be preserved for ducks they are
much less in amount than with us
and the ducks will suffer in
proportion.

This morning I found two cots
nests containing large handsomely marked
eggs. But to my disgust was unable
to identify the owners certainly. As
I had collected three species of cots
within a hundred yards of the spot
it was useless to bring in the
unidentified eggs.

The afternoon was occupied in
preparing skins and in packing for
departure.

November 10, Wednesday.

This morning I was out at
fair and proceeded at once to pack my
bealted skins. They were still very
wet and will have to be handled
again. In the damp close weather
prevalent at present they do not dry
at all. I had expected to go to town today
and sent my outfit away but was unable
to get off myself.

I walked out and collected two or three
more birds that I wanted and took some
photographs. The Wattle, Casuarina & Eucalypt
all Australian trees are growing here in the
grounds in abundance. I was greatly
interested in the wattle as it is the
first time that I have encountered it.
It is a tree not unlike a Willow
oak of rounded top with gray
green & thick hard leaves having oblong
lanceolate in form with parallel veins.

The Horse Chestnut is just in bloom.

On this basis the season should
correspond to about April 20 in Washington.
However other vegetation seem further
advanced. This would seem to be
the height of the nesting season for the
passerines which at home would
not come until a month later. The
Marshes still preserve their cold gray
winter aspect as the new rush growth
has not as yet made any decided
start.

This evening Mr. Macdonald and I
walked down to the Canal and
watched a beautiful sunset. Strange
bird calls came constantly from the reeds

and of course for some to watch
and to learn more of the interesting
habits of the various species of the
marshes.

The disappearance of the great bands
of shorebirds here would seem to
have been accomplished between the
seventies and the nineties the period
in which the great migrant swarms
disappeared in the states. The two
apparently were simultaneous. I have
questioned many persons here all
of rather recent experience and none
have related having found great
flocks wintering here on the prairie.
The country here is not thickly
settled and on the whole there is
comparatively little hunting. Sheep
grazing and burning of the marshes
which have been carried on at a
maximum limit for 50 years would
destroy the insect food of several
species. Earlier there was burning
of the prairie also until the
high grazing grass was destroyed

to be replaced by the spearwags
now found. In all this would
seem to have been a great
change in the ecological conditions on
the prairie. Early accounts by
Audson & others should be looked
up to gain idea of primitive conditions
on the prairie. If present this
entire area is grazed to the limit
each year. Changes indicated above
together with heavy shooting during
the spring migration in the states
would account for the rapid
decrease in certain species. I am
beginning to be impressed with the
idea that the actual number
of individuals among many species
of the Lincoln is comparatively small.
There is no report of any species
in abundance save the golden plover.
The entire group would seem to be an
old one witness the many fossils and
to be on the wane. Without doubt
many species are doomed to extinction

November 11, Wednesday, Thursday

This morning I was up at 5 and worked until eight in my notebooks. Following this I swept and hove for a last look around the grounds before going into town. It was clear today but very warm. I have enjoyed my stay here to the fullest extent and shall not look upon it as one of my less interesting experiences during this work.

Worked out for one last look at the Ice Seal and then spent my time in enjoying the small birds that swarm about the grounds. At seven thirty the gully was ready and after tidying goods to my boots I was off. On the way out I passed long enough to photograph some

Cowbirds nests on the hill. On passing the low sand hills near the entrance I was more than well impressed with the fact that they were formerly on the land of an ancient beach at the junction was labeled with that on the ground about the margin. When that was the case

worked a beach line without doubt the low tracks now occupied by canals were long ago in and were marked by the muddy samples similar to those found at well at the mouth of the gully. ^{collected a snake} *Hydrophis dobsoni*

The pit to the south was high and the surrounding was high which in combination with the last made it very hard to the home. Proceeded back at 11:30 when I found my boots were ready. Some more outfit in there in it. After lunch I found up various things, made a couple of skins, replenished the supply of alcohol in my collecting tank and I was otherwise busily occupied until dark.

November 12, Friday.

Hot and clear this morning. I was out at 5:30 and by eight had bird skeletons hung out to dry, salted skins spread out to air and things in order for packing. Proceeded to prepare some but so and got other

things in readiness. About two
hours was a sudden shift
in the wind and the juncos
came up from the southwest. The
sky was suddenly overcast with
a greenish ^{white} streak following
the horizon. After a few preliminary
quits the bold water the
junco junco was in. The
wind howled and about the
end a few minutes there was
a heavy shower of rain followed
by hail and in less than
an hour the sun was shining
again. I prepared four boxes of
specimens for shipment and put
my notes in shape again.

Friday, 12 Saturday
last night it rained heavily again
but cleared this morning. I
went out west of town to a small
sage woods bordering some marshes.
The tide was low early this morning and
found a large migration of white
rumped sandpipers with a few yellowlegs

and Hesperian jacks on the water.
Hats & Bone. When I look down on the
sandpiper. All white-rumps are
greatly common. Some of the yellowlegs
were limping and on July 14
legs I believe however that shorebirds
are molested little here. They were
settled around the creek of course.
But here ducks and larger birds are
common and they are little molested.

The tall woods were composed
of trees 20 to 25 feet tall growing in
good formation. I found birds common
and then secured my first set of
winged cowbirds. Grass is growing
luxuriantly since the rains.

At noon I returned to town. The
wind here dies rapidly and I found
already that the clouds had gone
away though this morning the
wind had seemed bottomless.

The afternoon was occupied in
making up skins. Several of ants have
gotten into my bird skeletons. I might
destroy the working columns with
the flame of a candle and put some
in the room in the evening.

November 14, Sunday.

This morning I completed my Delta expense accounts as far as possible. This is the first opportunity that I have had to work on them. The rest of the day was occupied in working on notes and on letters.

A tremendous downfall of rain began during the night and continued throughout the forenoon. Over 100 millimetres of water fell; the streets were a mass of mud and the paths at the sides almost impassable. Toward noon rain ceased.

At five I waded and slid through the mud to the front when I made arrangement to secure a boat tomorrow. The water stood everywhere in great lots:

Many frogs are singing. There is one big headed green blotched with black toad like batrachian here that is very curious. The head is truly enormous and the mouth correspondingly large. When picked up or touched the creature snaps furiously with loud

squalling cries that are truly startling. It is really vicious too and bites ~~down~~ fiercely nuzzing or tenaciously to a stick or other object with savage grip. They are said to grow nearly as large as Bufo marinus and when of that size carry off young chickens etc. The call is a loud burring note like that of our toad.

November 15, Monday.

This morning the air was calm and the sky clear. I was out at five and at six was on my way down the river. The tide ebbed rapidly so that I made rapid progress without great effort. The banks of the river were low offering cut banks from four to 15 feet high. At short intervals beaches led off to the side. In the river and out along the shores which in the mangroves or swamps extensive tract of soft gray blue clay were left over, with a narrow channel of water winding

through the center of the river
and came out only for the first
time in the course of this work,
though the great bulk were *Pisidia*
judicialis. The birds were spread out
in little bands feeding busily along
on the mud flats. With them were
occasional greets and lesser yellowlegs
a few golden plovers. A few barn
Ardeonides were found in company
with *h. maculifrons*. An occasional
Ardeonides major appeared in the
river ahead or behind, a fisherman
companion on his way down to fish.
Corvina was greatly interested in
my operations and looped along
whenever I stopped to look at birds
waiting for me to catch up again.
He told me many things regarding
birds but I don't consider the information
valuable. At one of the fish drying stations
he left me. Corvina was hung in
long rows on racks in the sun giving
off an odor not only pleasant but
the place a harbor had been lifted.
The mud was cut in strips ^{2 1/2} inches
square and 24 to 30 inches long and

then rolled one side. It was
almost black in color and in our
land appeared as beautiful brown
mud. It is full in high water
for 200 yards, cut with
beaching, and is valued at ten pesos
a kilogram.

I passed out to the broad
mouth of the river and beached my
boat on the south side. There was
a slightly elevated shore here of
clay that in places was covered
to the depth of a few inches by
shells cast up by the waves. Bushes
or grass grew along the shore
but back from the shore of the
Bay (of San Antonio) leading inland
to extensive mangroves. There were broad
tracks of *Sarcopus* growing in soft mud
that was inundated in high water. The
curious squares found equal of mud
crabs of which I have specimens were
every where in great abundance.
It is strange that more large
herons were not gathered here.

The crabs as the animals are
meant to be many thousands, it is
probable that the cormorants eat
them though fish are abundant
in the river and the beaches.
Now looking out across broad tracts
of bare mud or sea innumerable
lumps of what seems to be clay. In
closer inspection they turn into
crabs, ~~forming~~ and innumerable
tribes. Many remain motionless for
long periods unless approached when
they scramble away seeking shelter.

In some spots of the numerous
holes which they enter sideways,
sliding in as though toward a
chute. Occasionally they approach
one another and join for a bit with
their claws holding one another
summing in covering surface, until
one suddenly retreats and slides
down a hole. The animals climb
readily up steep cut banks when the
sides are perpendicular. The small
sandpiper walked about without any
of the much attention to the crabs
though I wish that the birds took
care not to pass too near them.

As it reached my boat a large
line of long bones approached down the
coast, ~~which~~ ~~was~~ ~~below~~ inspection
revealed a dozen flamingos and
three cormorants. Without paying
attention to them seemingly I bent over
my boat with my back turned, cautiously
slipping some heavy boxes into my
gun. When almost within range
they flock became suspicious and
swerved to pass at the surprising
distance of 90 yards beyond hope of
killing. I bent up the necks of
three flamingos and a cormorant and
fired but with no other result than
to see the necks of what was their
rodies. The two birds in combination
sprung a beautiful comb of color.
The flamingos passed later but
further out at sea.

White-rumped sandpiper sometimes a
hundred at a time passed continually
all coming up from the south.
There was a steady flight for all
the forenoon. In all of what was the
good. The birds swept along

might only a hole but when I
was going soft water as they went.
In one small hole I encountered
Wilson's Phalaropes. They rose and circled
fast with soft whining calls and
I shot one. Some of the first Phalaropes
I shot came in also but out of
sight. An occasional flock of golden
plovers came by and I shot one. Well of
these birds I was following the coast
up from the south. The only explanation
available to me at present is that
in migration the birds come straight
down the Rio Paraguay and that
over water Buenos Aires to hit the
coast somewhere near Bahia Blanca
and then swing up along the shore
into the present region.

The Salicornia ground flats inland
were covered with a film of water
and as usual when in that
condition were difficult walking as
they were very slippery. In addition
one was liable at any moment to
sink in to the knees in some mud flat
boggy place. I walked across to

A small clump of trees where I
found a little colony of small birds.
Some *Agelaius thulius*, a pair of dock-tailed
Flycatchers, House Wrens and a number
of Brachospiza. This is the usual
population of such a place, a little
colony with the clump of low trees as
its center. Parasitic Cowbirds dropped in
for a minute or two but were soon gone.

Returning to the boat I found
that the wind had freshened from the
north. I rowed across then to
the opposite shore with considerable
labor. Here I found a low ^{muddy} clay
bank surmounted by an irregular
deposit of broken shells thrown up by
the waves. A pair of two sand
some cooi terns with a pair of
Flycatchers were the only birds that
I observed.

At 12 the tide was supposed to
flood. I found however that it was
still running out. I rowed in for
half a mile and then beached the boat
again. In 15 minutes the water began

to rise somewhat and I started back
with the wind blowing dead against
me. The force of the wind was such
that it checked the tide and after
a short flood period the water began
to ebb again so that I had to fight
both wind and tide. My boat was
unwieldy and I had two bars
that had been broken and other
patches together again. I was afraid
of a great stormy strength for fear
the bars would break and so found
the return journey slow and laborious.
Over three hours were required to
cover the trip.

On returning to the hotel I
prepared the bird specimens that I
had secured all once completing them
at 6:30. After supper I found
a coach left for Santa Domingo in
the morning was able to make
arrangement to have my baggage
taken over. At nine I began packing
and by eleven was in bed.

November 16, Tuesday.

This morning I was out at four and
showered and dressed. Drank a cup of
coffee etc. saw that my baggage was
properly loaded and at five I started
off in a galera or coach, arriving in
five hours.

A mist hung low over the open
country obscuring the view for any distance.
Later as the sun came up the fog
banked in the west like a low range
of mountains with a simulation of
projecting peaks that extended across
the horizon. The morning air was
cool and quiet with a burning sun
that promised heat later in the day.
Fortunately however a breeze came up
from the northwest that maintained a
cool temperature so that my ride today
was pleasant. The distance to Santa
Domingo was said to be 18 leagues.
The morning air was fresh and
I enjoyed the clear bright green of the
fields flooded in many places from the
recent rains. The long strip of trees making
the esteroa was jagged with its Evergreen.

was plainly visible. Not far from
town we passed a tala woods, of
low bushy trees. Now the trees are
filled with fresh green foliage. In
general appearance they suggest very
much the Osage Spruce, but
have a darker bark and less springy
limbs. These tala woods are of great
value as shelters for sheep during
heavy storms.

Canals and Cañados near the road
were filled with birds. Fifty flamingos
fed in a scattered flock at the border
of a canal with ducks, cormorants
and coots. The terns were everywhere
in evidence. In places hundreds of
cormorants fed or rested in close flocks.
On one marsh were Roseate Spoonbills,
gulls (*L. maculipennis*), and cormorants
were jostling together animatedly which
Taslovers. Blue ducks gathered in a close
flock rested on the bank behind them.

During the recent storms many sheep
have been lost through the alluvial
estancia. Two thousand of the animals
had died and the skins were drying
on the fence in long lines. The stock was

in piles over the good country, giving
of a heavy stock that I was
glad to have behind. The total loss
in the Province of Buenos Aires is
estimated at 300,000 animals due
to early opening of the wool in
the market. When the price became too
low. The cold rains and winds
of the early November storms wrought
havoc especially when there was
no wood to give shelter as is true
in many of the sheep estates.

Near the road we passed through
a scattered tala woods of several
thousand acres, one of the largest
tracts of their kind. The trees were
all small but probably to contain
nothing of large timber for fuel. There
were seen falling bundles of dead
limbs away, dragging them from
a rope attached to the saddle.
These fellows were laughingly referred to
as Carranchos.

Pipits (*a. corvina*) *Brachyopiza* and
several species of Blackbirds were abundant.
I saw six pairs and several odd males
at the estancia. I saw the first of them at

and down a sort of mounting flight
among the gulls. A few greates and
hessid yellowlegs were scattered along
and I saw one flock of golden Plover
where ^{Wood} ~~the~~ ^{debris} were scattered together.

The land was very level with
grass green and abundant forming
a healthy turf. There are potatoes in
the soil wherever. The country here
is all built in large estancias.
No wheat, or rather I without question
is the country with the stock of
the present abundant large bird life will
disappear.

The galera in which I travelled
was a light spring wagon with
high rear wheels and smaller front
wheels, the latter turning underneath the
body of the conveyance. The two pole
holes were attached by rollers
having steel chain traces. The harness
was made of bits and reins.
Two other horses were attached at
either side by means of chains hooked
in the ring in a saddle secured
tightly around them with a road

cinch. These latter were attached
by ropes ground a roller but had
two bits. They were driven by the hip
men. At a number of bridges it
was necessary to unhitch the outside
horses and pass with the pole team
alone so narrow was the passage.
On all we used 23 horses today in
getting through.

We stopped for dinner in a rambling
village where we had a fair
meal at an outrageous price.

Six leagues past Santa Dominga the
soil became poorer and more stony
and the grass thin and shorter.
Extensive stub woods were seen in the
distance.

Many oven birds nests were
scattered along parallel with the
top of fence post. I collected a set
of four. They blend in color with
the post but I trust in my confidence
birds. The birds seem to rely on the
stick walls for protection as they made
no attempt at concealment and flew freely

to perch on their nests.
Hundreds of glossy ibis were
scattered through the fuchs here
in low flocks. A Chimney was
seen rising at the end of a still
windy helpless bank.

The tractor's into blizzards at
5:30 a struggling little fuchs
with the visit the large church.
It was visible in a long distance
across the lake as it was about
without trees for shade. The
ground around in the fuchs of
a french orange who of which a
growing and had produced a clean
leaf in white and to have some eggs.
The last stretch in the
ground several very bad mudholes.

In a part of the gear broke and the
wagon bogged badly. It was necessary to
get and rearrange the harness in mud
free but we finally got through.
I ate this evening and then went
to bed at once.

November 17, Wednesday

This morning I was out before six
and after coffee and read completed
packing some specimens for shipment. I
gave the natives something to wonder
about by laboring for an hour at
mailing and around some boxes
preparatory to shipping them away.
The day was clear and cool with a
fresh wind from the north. Sections in
the interior of the little town were
dotted with remarkable white flower
blossoms. The country is here a
open ~~and~~ slightly rolling plain
with occasional plantations of trees
marking settlements. The road out of
the little town here was grassy
with turf grass forming a spongy like
turf. Among small trees at the
station I was surprised to note a few
box elders. The town here is small; fifteen
or twenty houses were scattered about
near the church.

At train time a little crowd gathered
at the station. Boxes and parcels were
brought in for shipment as baggage
cases and the scene became more

I noted a dozen rabbits crowded
into one cage with a number of
chickens.

The train left at 11:34 and in
a few minutes I was in station at
Quelco in the morning. After a
few minutes wait I boarded a
train direct for Buenos Aires on the
line passing through Dolores. There
was little change in the country over
a month ago when I came down
I saw that the grass was longer
and that a purple plant in the
ground large areas with a faint
wash of color. Many rains have
flooded broad areas so that water
was standing in many places.

Reached Buenos Aires at 6:30
and registered at the Hotel Paris.
Nov. 18, Tuesday.

This morning I worked on notes
until 9:30 and then called at the
Consulate for mail. Went next to the
American Express Company to arrange
for shipment of 5 boxes of specimens.
Then called at the Embassy to

arrange for free export on these same
specimens. I also at the National City
Bank and at Jorge Brown & Co where
I ordered a suit of clothes. Also
arranged for development of film.

The lunch I spent the afternoon
with notes and correspondence.
At five J. W. Messers called on after
his lunch I went with him to the
Plaza Hotel where I met the concierges
and absorbed various drinks.

Nov. 19, ~~Wednesday~~ Friday

Went out this morning again at
six and worked up notes to until
7:30. Completed transaction of shipment
of 12 boxes of specimens with them.
The shipment was forwarded in the
a/c. called Nov. 15 but I found that they
had already retained the waybills instead
of sending them to the U.S. Dispatch
Agent in New York. Purchased various
supplies today and was otherwise busy.
At 11:30 I called on Mr. R. W. Huntington
and received from him some information
regarding the country. Also made

own appointment with Mr.
Newberry and American who has
been here for many years. I called
on him at 10 AM, We had tea and
later he took dinner with me and
we talked until eleven. I secured
much valuable information from him
and enjoyed the talk very much.
Dr. Newberry came to the Argentine
as a dentist in the seventies, being
of an adventurous disposition he
made long trips up through the
country in different parts. Among
other things he gave some details
regarding the death of an English
"Mad. John" who was beyond what
Llunford thought. The doctor could
not remember his name. Dr. Newberry
in 1878 was in Salta purchasing mules
to sell in Bolivia. The Englishman
was there at the same time preparing to
go to Oran. He had an outfit and on
for two years with him and was
travelling alone though he spoke practically
no Spanish. Llunford had his money
with him in the form of English
Sovereigns and was going to

accumulate Bolivian money to
use on the road in payment for
his travelling expenses. So in
making many small purchases he
invariably gave his few sovereigns
to go out and buy whatever he
mind need and then kept the change,
sending out another sovereign for the
next small purchase and so on. Dr.
Newberry warned him that it
was not well to display so much
gold as people might think that
he had a large supply with him.
The doctor tried to prevail upon
Llunford to wait and travel on
with him but the naturalist pushed
on ahead. A few days later Newberry
followed on the same route. Llunford
travelled slowly as he was collecting
and the Newberry outfit gradually
caught up with him. Finally they
reached a little place at night that
Llunford had left that morning. But
then Llunford disappeared and they
never saw him. A few months later
Newberry on his return chanced to

stop at a little rancho off the
main road where a woman told
him of an Englishman - Dumford
who had come in there and lost
a few moments previous, getting
lost out of his head and who
had said that. Dumford's jeans
had taken him off the main
road into the hills and then
had robbed and deserted him. Not
for three years later an English
Mission came seeking Dumford's
Nebury directed them to the
place and the Englishman's bones
were shipped to England.

As Mr. Nebury's experience
covered the early development
the Argentine I was able to learn
from him valuable information as
to the prevailing conditions of the
region. At its natural condition
the low parts were covered with
a sward grass growing in bunches
and with Andropogon-like grass. On
higher areas were a scattered
bunch grass. The ground was

soft and when it rained was
boggy so that a horse would
sink in to his knees in rainy
weather. The grasses grow in many
places was tall. Though it was
more or less fern. As cattle were
put in conditions entirely changed. The
strawling of the stock made the
that drained the sloping country so
they afforded little water ways and
then packed the ground and made it
firm. Exactly the same thing is
happening in those parts of the Chaco
that I visited. In addition with
pasturing and burning these grasses
killed out so that in many places
the ground was almost bare and
this was no good for three or four
years. Then the present tall grass
growth began to come in and conditions
became as they are now. This change
in ecological conditions came in the
seventies, eighties and early nineties
the change extending with the
settlement of the country. In the
seventies it was considered unsafe to

go out three hundred miles from
Buenos Aires because of the Indians
and this conviction gradually changed.
Aires were undoubtedly a great factor
in destroying forest cover. The period
of this change then corresponds to that
of the disappearance of many of the
species of shorebirds in the state.

To sum up, Original Pampa
conditions would seem to be similar to that
of parts of great camp in Formosa. Some areas
were covered with reddish brown ambrosia-like
grass and others with sawgrass. The
ground was boggy and very wet. With
persecution and drainage these conditions
changed. The ground gets drier, cattle
paths afford drainage and there is less
standing water. With this change in
conditions and with fire the character
of the grassy vegetation changes completely.
See ~~attached~~.

It would be interesting to know
if many shorebirds appear in central
Brazil in migration.

November 20, Saturday.

This morning I was out at six and
completed expense accounts for the first
part of November. At nine I visited the office
of the American Express Company to complete
arrangements for a shipment of 15 boxes of Natural
History specimens to Washington. At ten I
went to the consulate and had some papers
attested and then to the bank to draw
some money. Met Mr. E. Neusser and Mr.
Stuart again. Received 132 Argentine
gold for each dollar U.S. (multiply by
2.2727 to obtain rate in paper.) This
is a very favorable rate and it is rumored
that it will go even higher perhaps to 1.50
also stopped in at Jorge Browns, to try
on a suit that I having made. Price
is to be 209 pesos.

In the afternoon I made a few last
purchases and then despatched my
baggage to the station. I wanted to send
a Christmas present to Margaret and
had to pay better mail rates on it to
get rid of it as it was Saturday afternoon
and the parcel post office was closed.

Following this I worked in developing
recently developed film until 6:00 closed
my suitcase, paid my bill and went to
the station. There I wrote to the U.S.
Despatch Agent sending last shipment
day bills and notifying him of the
coming shipment. This letter was
mailed and I got aboard train
at 10:40 just as it was pulling
out. Fare to Rio Negro 47.95.

It has been warm here in Buenos
Aires so that I went back once more
to B.V.D's for underwear. On this
afternoon I have been very comfortable.

My stay here was short this time and
with a multitude of errands and
the usual delays I have been hurried
down to get through. Was pleased
to be on the train and away again.

The train (Ferrocarril Sud) was
well made up for Bahia Blanca and
is one of the better class in the Argentine.
The sleeping car was commodious and
clean. I had a comfortable sleep as
the train was not crowded and so
was very comfortable.

At times I make the acquaintance

of Dr. Simoes who is an Argentine who
I had visited. He talks and speaks
English fluently. Dr. Mosher is District
Municipal at Bahria, Prov. de Buenos
Aires and has an estancia Santa Elena.
He said that he had over a thousand
sheep on his property and invited me
to come up in case I wished to
see a pair. Many are shooting them
off to get rid of them as it is believed
that they consume much grass. It
is usually stated that they eat as
much as a steer but Mr. Mosher
considered them as about equal to
a sheep, each one.

November 21, Sunday.

When I awakened this morning at
5:30 the train was passing rapidly through
level good country devoted to pasture and
grain fields with occasional houses and
scattered small towns. The whole countryside
was a pleasant green from the recent rains. English
sparrows were chirping as we stopped in
the station and at one small place
Pehuay I heard the pleasant whistle of
Phrynosoma marmoratum.

Beyond Pringles hills came in sight
to the south land in a short time we
entered rolling country that became
rougher as we proceeded. Outcroppings
of hard rock, strongly tilted appeared and
rolling hills were either low and were
covered with bunch grass in
scattered rounded clumps a foot or
more high. Small wooded hills occupied
small level tract at the valleys
of swift-flowing streams. At ~~the~~
head the hills were high and
abrupt and were bare of trees. Sierra
de la Ventura would be a good station
from which to work here.

Sparrowhawks were abundant here
and I saw many *Empidonax* *mitis*.
In flight this bird frequently turns up
to display white rufous wings and
the rest of the breast in a sudden
flash of color. I saw two within
pairs of *Phrynosoma* walking readily
through the bunch grass. In one
case they were together apparently a
male and two females.

Beyond here we came into more
level tracts again in which were
many broad grain fields. The next

development here in the Argentine will
consequently be colonization. It is
interesting in a way to find the
country so ~~rich~~ ^{rich} in ~~resources~~ ^{resources}. The usual
figures for total population is placed
at ~~at~~ ^{at} ~~the~~ ^{the} ~~little~~ ^{little} more than ~~three~~ ^{three} ~~million~~ ^{million}¹⁰
but I am credibly informed
that the actual figures is only
a trifle in excess of 2 million. Subtracting
the population of Buenos Aires from
this and the remainder is comparatively
small when the great extent of the
country is considered.

Continuing beyond the Sierra de la
Ventura was more rolling country
covered by extensive patches of bunch grass
or in places by broad grain fields.
Sheep and cattle grazed in the fields in
abundance. I saw many short-eared hawks.

The country became more level and
in places alkaline tracts appeared.
The growth was confined to Eucalyptus,
Sambucus *gallica* and *Populus*.
Bahia Blanca gave a distinct view of
grain elevators, storage tanks for oil, great
warehouses and other signs of commercial activity.

At 9:35 we arrived in a large modern station and transferred through a subway under the tracks to a train for Rio Negro. The first class coaches were crowded more with bundles than with passengers but in time all were arranged and we were off at 10:15.

While leaving the town extensive alkaline flats could be seen bordering the bay. I watched carefully for sand piper but saw none. Beyond we passed at one time an arid region toward the west. The land lay level and in many places was strongly alkaline. Large irrigation ditches cut through the country irrigating fruit grain and small crops. *Juncus* was ground extensively forined tracks.

For a time fields of wheat and some oats appeared, all dry farm grain. The straw was very short though the grain was beginning to head; unless this is another light fall of rain it will amount to little this year. I was told that the crop was 2 months late because of the backward season.

The cultivated areas were small and alternated with extensive tracts covered with scrubby plants from 1 to 3 feet high scattered over alkaline areas with the ground between nearly bare of vegetation. The things I saw of this type was the rough heart grey green and although their appearance was familiar as they resembled similar growth in the southwest. I failed to recognize what could almost recognize sage, greasewood, alfalfa and rabbit brush.

Beyond Alameda we entered a somewhat elevated slightly rolling region, covered with brush averaging 4 to 5 feet tall with occasional higher growth. The scrub was fairly thick though thin enough to permit passage. In places the the ground was bare, in other scattered covered with bunch grass. This growth continued with more less continuity until dark. In places the scrub was low and scant in other places.

At Rio Colorado we came down through some low rocky hills into the valley of the Rio Colorado itself, along

We followed as far as Fortin Uno
a distance of 80 or 100 miles.

Rio Colorado itself was a small
straggling town built beneath a
low escarpment making the flood
channel boundary on this side of the
valley. The English Sparrow, *Brachyiza*
and *Mimus tristis* were noted birds.
It would be a favorable point from
which to work.

The River itself was a winding
stream 150 yards wide with swift
muddy current. hard way under
irrigation along its bed and in places
the rough grass quite rank through
subsoil irrigation.

On leaving this valley we crossed
a broad somewhat rolling elevated
plain, in many places with scanty
scrub until finally we descended through
low, broken hills into the stream
bed of the Rio Negro. This entire valley
is dry and out of little rain in
fact the whole region from Bahia Blanca
to Rio Negro is the same. The vegetation
was much like that of the arid
subsoil especially in lower

regions, though here it would be
fairly abundant. But we call
them some of the states.

The wind this evening was fine
and we were out of the valley
in the air. The evening light faded
in the valley and we were out of it
but entirely dark with the night.
The sun was not yet set but the
wind blew cold from the west. At times
the air was filled with dust and
with it was a very dirty ride.

The train arrived at the station of
Rio Negro at 10:00 P.M. and I descended
to find the ground a mass of soft
mud from a passing rain. With six
others I climbed into a small coach
and traversed three kilometers to the
town of general Roca where I obtained
a bed in a room with two other
passengers at the Hotel Roscano. I
washed off some of the dust and
turned in at once.

November 22, Monday.

This morning it was clear that day turned
warm though I did not find it unpleasant

at nine I called on Mr. Saiz,
an American who has the Foro Agency
here and secured valuable information
regarding the country.

At ten I visited the comisario
de policia and made myself known.
The rest of the day was busily
occupied from 6:30 a.m. to 8:00 p.m.
in book and notes of various kinds
and in official correspondence. Beyond
one or two minor errands I did not
leave my room here to eat.

In the evening I walked out far
enough to find a way out into
the country and then returned.

Dinner here comes at 8:30 p.m.
are unhealthily hours especially since
I wish to turn in early. This however
is the customary time for the
both class Argentine to eat. For one
who desires to turn in early it
is rather inconvenient.

There is much movement and
the hotel is very crowded. I am
promised a room alone tomorrow.

November 23 Tuesday.

This morning I was out at six and
had coffee at 6:30. I left the hotel
at once and went south to the
Rio Negro a distance of about three
miles returning at twelve.

General Rocha is a small town
of about 1000 possibly 1500 inhabitants,
with houses built of thin
mud bricks. There is considerably
land under irrigation here and
ditches lead through the town
itself. One ditch lined on either
sides by a fine grove of poplars
has been made the center of a
boulevard. Aside from these things
are few trees in the village, which
has dry sandy streets and little or
no shade. In appearance it is such a
place as Gallup N.M. or some of the
small towns east of Phoenix, Ariz.
The region is one entirely different from
those I had visited here before
in South America and proved of great
interest. From the general aspect of

the country I could imagine that I had been transported into some part of the lower Sonoran or low upper Sonoran in the one of the Southwestern states. Extensive flats of sandy alkaline soil extend to the south towards the river a distance of over thirty miles. The place tracks had been cleared and put under water in alfalfa fields or vineyards. The soil appeared productive and the crops were doing well. A very good wine is made here and I observed that there is one extensive spring producing fine heavy lines of grapes in the night ditches and I saw an occasional hedge of Tamaria gallica. The broad flats were covered with an open growth of desert shrubs that in general aspect are similar to those found in similar areas at home. I found a crossbush with certainty while another shrub seemed Baccharis closely. Many were covered

with heavy spines. The ground between these shrubs was bare of vegetation. In many places the soil was strongly alkali-like. The surface was scrubby and certain tracts that had been cleared were being leveled with scrapers preparatory to putting water on them. When the wind came up clouds of dust swept across the country obscuring the view.

At the Rio Negro I found a broad swiftly running stream of water heavy with grayish white sediment. The actual flood plain of the stream was of gravel fine and smooth, well mixed with sand. On the opposite shore an escarpment 300 or 400 feet high with level summit and steep talus slopes marked the limit of the movement of the stream in that direction. The slopes were white or cream colored changing to gray below and in places

tinged with terra-cotta. Small
channels led out from the main
river and little lagoons of quiet
water lay along side. Shown in
places held muddy or sandy clay.
I searched here for shorebirds but
found nothing I saw one lesser
Yellowlegs.

Vegetation along the stream bed was
sawyer and hawser and willow
trees of fair size were scattered over
the bottoms. A purple-flowered legume
something in the order of Glycyphiza
covered large areas in the bottoms.
Sheep, cattle and horses were
pastured in here.

Cottonwoods would do very well in
this region.

I found the animal life varied and
interesting. Guinea pigs or Cavias
abounded through the brush on the
dry flats. Their ~~mounds~~ burrows were
usually placed under clumps of bush
where the land was elevated a little.
As I came they scampered toward
their holes often passing when just

within the shelter of the roots. Their
holes open in the ground directly or
in the sides of banks and are not
marked by any ^{pronounced} mound of earth.
I shot two ~~specimens~~ I both smelling
young and found that their hair
pulled out readily.

Birds were abundant and of varied
species. I found tracks of species developed
to fill the niches occupied by ~~the~~
thrushes and wrens of my country. Each
species proved strange and interesting.
The first bird that I shot, a
heavy-billed gray jinch (*Phrygilus*?)
proved to be one that I had never
seen before.

I returned to the hotel at noon
with six species of birds new to me
in addition to the cawies, known
here as elsewhere by the name of
~~Quises~~ ~~or~~ ~~Quis~~. Quis or Quis.

The afternoon was occupied in
caring for this material, work
that filled the time until dark.

November 24, Wednesday.

This morning before dawn I crossed again to the river returning at noon. The sun here is very hot but as the air is dry it is not uncomfortable. Thus far the sky has been cloudless and the whole landscape lies under the strong glare of the sun. The days are appreciably longer in this latitude. And it is not dark now until after eight o'clock.

A large deer is common in the desert brush but is very shy. I have seen tracks of ~~others~~.

Also.

This morning I walked down along the flood plain of the river for some distance but still was unable to encounter any shorebirds. I believe now that it is too hot for them in this region and that they are now farther south. I inquired regarding Charles's several fenders and was told that they occurred at times.

Unless I find shore birds more abundant in the western part of the province of Buenos Aires I will begin to believe that their main wintering ground is near the base of the Andes in Patagonia. This supposition is borne out by the dates of occurrence in which is commonly accepted as the winter home, as the birds are reported as most common from February to April. At a time when they are beginning to migrate north. On this supposition the birds passing south in September & October would arrive in Patagonia in spring would pass the summer there and would return north with the coming of colder weather in fall.

Today I collected some new species and also took specimens of some of the commoner more widely distributed things. The afternoon was occupied as before in making of the

This morning I called again on
Mr. Singer to see what he
has seen *Sambucus* most commonly
in spring on Buenos Aires.

The evening was quiet and
beautiful. The moon rose as the
sun went down making it about
as light as day.

November 25, ~~Wednesday~~ Thursday.

This morning I left the hotel
before seven and drove to the low
hills north of town. My way
led across a level flat, dry
and somewhat more arid than that
found south of town but of the same
general character. A huge irrigation
ditch is being put through here to
carry water from the river to some
point below.

Vegetation across the flat was about
of the same character as that noted
below town. I crossed two or three
dry arroyos with steep cut sides
and level bottoms; along these shrubs
were somewhat higher. A *Pussanilla*

like finch was feeding in loose flocks
along the flats here and about
town. The valley of the Rio Negro
on this northern side, is bounded
by low hills of rounded outlines
and rather level tops, composed
of water worn gravel and sand.
Standing valleys led up between the
ground with great masses of
desert shrubs. A yellow flowered
shrub with bright green bark (#805)
was in blossom making a
gay display against rather a sombre
background! It was abundant.
Crosote bush was common also and
displayed the same woolly seeds as
are found in our plants. On a north
slope of dry hill near the top I found
two or three plants of a turkey head
cactus as big as my two fists.

The quiet and heat common to
these desert areas prevailed on the
flats. When I remained quiet there
was hardly ~~any~~ sound to be heard.

an occasional hawk loomed away
or some small finch chirped at
a distance. Little lizards, were common.

On entering the hills I observed
3 tracks of a large bird and
surmised correctly that they were
those of the Mountain Quail.
Before long I had three of the finch
birds. They were shy, at times but
when they rose within range
were not difficult to shoot.

Quails were fairly common
but collecting them was difficult
as the shrubs & ferns that
they frequented were so thick that
I could not strike them with
my net.

A handsome little crested Flycatcher
the size of a Kinglet proved a great
surprise to me as did the wren
like *Darrancolors*, a clay-brown
Trachophona.

On looking into an old stick
nest I saw the head of a

snake in the dim interior. Apparently
the creature was safe from attack
but it took only an instant
to insert the barrel of my gun in
the tube like entrance to the
nest and tear off the lip. The
snake was a very slender species
with a much elongated head.

I reached the hill by noon and
cared for my specimens at once.
A skeleton of *Chelidonyx* that I had
in my window for a few minutes
was carried off and destroyed
by children. Later work. At 10 o'clock
on day I spread some plant shut
out to dry for a few hours,
found my back and a rooster
scratched in the papers before I
could get at him.

At 6:30 I walked out and set a
line of mouse traps. Along the arroyo
and in the shrubs everywhere holes of
the cavity are abundant but I
saw little or no signs of their mammals.
24 traps were set.

As I was about to leave I
discovered a nest of the barramundee
and on digging it out secured
two fine eggs.

At dusk a fine snake was collected
When first seen the animal was
suspected by the tail to the side
of the barramundee. In the sand it
was almost helpless and could
barely wriggle along. It vibrated
the tail rapidly on little stems
producing a low buzzing. When
threatened it jerked the body about
but did not actually strike.

The ground color of the animal was
sulphur yellow with broad cross
bars of black. Each black band was
about 1/2 inch wide. Each black band
crossed the dorsal band of purple red
On the tail the colored bands passed
clear around. Elsewhere the throat
was plain white. A long streak of
dark green-blue grey passed down the
abdomen.

The walk ~~was~~ took with the
full moon high in the air was

full of the charm of the desert.
A bird or two called in the
distance and a glow from the
sunset remained in the west.
Far in the distance was the
long escarpment marking the other
side of the river valley.

November 26, Friday.

This morning I went out early and
took in my traps. I saw only one
mammal a tiny possum.
Mice cannot be very abundant here
as I do not see their tracks in the
sand. Several traps had been sprung by
large tenebrionid beetles nearly two inches
long and in two instances the insects were
in such condition that I was able to
preserve them. Another trap contained four
legs from a large spider, that no doubt
was greatly surprised when the spring
struck him.

I walked out over to the gravel hills
beyond and shot three or four birds
including a Martinia and then
returned to town early. The remainder
of the day was occupied with the specimens
and notes.

I have caught the snow cold that is going around now and having been thinking genuine to get rid of it.

November 27, Saturday.

This morning I left the boat shortly after five and walked south to the river. The sky was heavily overcast in the morning but the sun shone at intervals. It was cool and pleasant today, with much less heat than on the days previous.

Birds remained rather quiet in early morning until the sun came although about six o'clock they revived up somewhat. I killed a marten and some Chested Pteroplectids on the way down. *Mimus* "modulator" and *M. trivius* were in full song this morning. I find both quite similar to our *M. polyglottos*. Dead passed through the dry brush an occasional Jack Rabbit leapt away well ahead of me or a carry darted across some little fishing crew at hand.

I picked up the head of a small mammal at a small legend on the river bottom I stopped at evening and ate a piece of dry bread and some dried salmon-bills. While here I shot two fine specimens of *Dinellio* swift - "*microsus*" *sinelli*, to my great delight. Later I saw a few more and they all shot fine. In all probability they had ranged over from the rock escarpment across the river. The little palayemian boat swallowed *Ptychocheilus palayemius* was common but hard to hit in the wind. A *Martin* *Oryzopsis* was swimming close in the face of a cut bank. The river bottom here has a massive growth of low willows in some places and occasionally isolated trees or little groves of another large willow. Occasionally I came to broad gravel or sand bars, and such channels running out from the main stream were common and

small pools and lagoons were
ground of many fishes. No show-
birds were observed however
strongly conditions seemed favorable
for them.

Flocks of male Wigeon Maraca
situated along the stream
stream of and the side channels
and I saw one occasional *Himantopus*
or co. orant fighting the current.

Small birds were common. I
shot two robins (*P. semirostratus*)
in the willows and a little yellow
breasted brown backed fly catcher
was abundant in the willow
growth. *Parachanna* were very com-
mon. *Himantopus* were common.

Flocks of the Barranca Parrot
Cyanocitta stelleri were very com-
mon and I shot one. It
was some time before I secured one.
They resemble meadow larks in general
appearance.

One on the bank was preparing
to shoot a male *Cinnamon* teal when
a male *Andean* bobbed up and

shot him. I shot one. It was the
back of a minute to a minute
I changed in to secure my prize
before he flew away. On
checking it I was gratified to
find the familiar air track in the
neck and thus to verify my
belief that this structure occurred
in the vulture as well as in the
North American species. The bird was
in beautiful plumage and I
of the cold wind I stood admiring
it for some time.

Then I waded the lagoon and
dressed at the opposite shore.
A female pintail with brood
of young was encountered here
and I shot four of the ducklings.
This necessitated another swim
and I returned with the four
young, but by the feet in my mouth.
Swimming there is more pleasant
than in the streams and lagoons
of northern Argentina where it was
necessary to keep one hand on

my feet and toes to maintain
that some small feet would
not bite them off. The water
was cool and pleasant and
after returning my birds I
washed up / I felt and then
scrubbed myself well.

From here I showed back toward
town, not caring to shoot more.
As I fed, probably 30 birds. I
walked for a distance along a
channel bordered by cut off willow
grove where I had an occasional
sight of a Pint-billed grebe or a
Widgeon.

I returned to town at 12:30
etc and then was braced in the
afternoon and evening with my
birds. Did not turn in until
after eleven after I had finished
my last specimen. Fortunately there
was electric light here in the hotel.

November 28, Sunday.

This morning I was occupied in
getting my note books I in shape
and in doing some writing. I
have been collecting steadily all week
and had gotten to kinds all four in
the afternoon. I was out for a time in
a car with Mr. Singer. Broad
land areas along the Rio Negro here are
in alfalfa and grapes and some
rich and productive. The land has
been greatly irrigated and is smooth and
even and with the view of the
fields presents a fine prospect of lines
of irrigation borders the irrigation
ditchy while houses were scattered
about. In other land were soil
stratification of desert where water was
not available. No irrigation of the
soil appeared rich and fertile and I
was told that it was held as high
as 700 or 800 gross a hectare. These
crops of alfalfa are cut each year
through the land on is very small.
Good vines are made here and then
to me very productive apiary.

November 31, Monday

This morning I crossed the desert again into the hills of the north penetrating toward farther than I had gone previously. In the early morning birds were somewhat scarce as if it was cool but as the air warmed they were more in evidence.

After entering the hills I traversed a broken country where low rounded gravel hills bordered a winding valley. The soil was of sand and gravel with many shrubs but little as other sections. Mesquites & saguaro shrubs were well around with yuccas. I found a few clumps of a berry like cactus and carried a specimen back with me to the detriment of my fingers. In a few places flat topped buttes were capped by a loose conglomerate that resembled reality. Following steep clay slopes over a soft sandstone

as the wind blew all fine material was blown up the slopes of the hills was fine very difficult. Very sandy arroyos were common but there was no road. The animal life was most abundant in particular scorpions were seen every not far save at very long intervals.

I found blocks of fossilized trees in two places. One block had shelled apparently from fossil action so that slabs of broken bits lay scattered about on the ground. The fine grain of the fossil wood was easily apparent. This was very hard and when struck gave off a ring like that of cork. Occasionally I passed tracts of loose sandy clay apparently containing much lime that seemed more like sand than the soil and that they resembled huge ant hills. Scattered over the surface of these were lime crystals in small fragments of curious formation. gypsum

Some areas were very heavily
brushed of mid-*Ch.*; in other parts
birds were fairly common and
some several pairs of a I named
with a rattling call like *Ch.*
torquatus. The birds were in pairs
and frequented brushy ground.
A very heavy *Ch.* flycatcher
was seen in the brush. I secured
also a small black flycatcher
with prominent white in the wings
I thought that I had about
exhausted possibilities in this region
but secured at least four species
not seen previously.

The afternoon was occupied in
caring for specimens.

I tried to re-bore most of my
Aur shells here as I have heard
within exploding in my gun.
The shells themselves apparently are
defective and will not stand much
pressure.

I also secured *Apuntia hickleni* Rose a
species with flat papery spines.

December 30, Tuesday.
This morning I saw a pair of
Ch. that were very dark brown and
came on in the night and that
as I had slept with a dog which
spoke they were concluding was
dead who crouched with head,
heavy wind from the north till
midnight. We went out at 5:30
and at a quarter of six left
the river, the high wind helped
collecting somewhat but large birds
were in evidence along the
protected side channels of esteros
in the river bottom. I encountered
two flocks of *Cyanospiza* fatigues
and was able to get a shot at
one. Two barrels of *Ch.* yielded
five fine birds, which I kept in the
ground preparing and admiring them.
Two of the shells that are seen
here I got. The brush came flying out
and I killed one. I suspect that
they are an introduced European
bird. They have the general aspect of
a Jack rabbit but are *Ch.* birds.

I have seen them often but find
them scarce, as this lake was big
and plenty of work the measurement
of total length and then sat down
and skinned out the body with
my pocket knife.

I reached the river bottom proper
at 7:30 and sat down for a few
minutes to eat a piece of bread
with some dulce de membrillo. The
spot was the border of a long
channel with high banks on
either side. The shut out the
wind. Large willows grew in this
little depression and the ground
was covered with grass. The
sun was warm and pleasant and
I reaped far from the desert within
sight. *Brachypteryx* sang and hoarse
screams chattered. The chattered
Pteroplocheus gave its liquid notes
from the brush near at hand. Near
by I saw one monarch butterfly.

From here I followed down along
this channel. Three Pied-billed
grebes were shot. The males

appeared very large and strong to
me. I paid well for the birds. Another
rule was in the large grass.
I shot an *Amegilla* a big
kind of warts and from it ~~collected~~
shot *Amegilla* and *Amegilla*
at a shot. Ruddy ducks and a
pair of canvasbacks were seen here
as well as pintails and a mallard.
Here I stopped and secured
my birds and then crossed the
channel to go on. With the
large birds I put them in a bag
that I had a heavy load
especially go to market against
the wind. A *Peromyscus* bed
was also shot with the heavy gun
as well as some small birds.

The afternoon was a gray one as
the weather had been requiring
some time for the weather staff.
A sand storm came up during the
afternoon so that I looked behind
me down. At 7:30 I was
glad to turn in for sleep.

cent. Wednesday,

This day I remained at the hotel and first of prepared my expense accounts for November and did some figuring in allotment of money.

This with some official correspondence and a raft of notes occupied the entire day.

A strong wind blew nearly all day with dust storms at intervals so that I worked most of the day behind closed doors.

In the evening I met Sr. Jorge A. Pico, Ingeniero Agrónomo, of the Ministerio de Agricultura and obtained information from him regarding the country. He tells me that he has seen many Plover in Santa Cruz in the time of summer and that with the coming of winter the birds pass farther north. That these birds range in summertime above and all through 1000 metres in suitable localities. Sr. Pico is well informed regarding Argentina as he has travelled

extensively. He was firm in his belief that snipe & Plover were scattered north at this period and that later in winter they came south.

He also describes to me an extensive forest deposits on the Rio Santa Cruz about 20 leagues from the mouth.

December 2, Thursday

This morning I got out at six thirty and went down into the dry hills north of town again. I was in search especially of *Colaptes cafer* as I desired more specimens and after an hour and a half of searching secured them. I had the shot that had some defective summation today that fired a split second later than normal, in other words shells that being fire, which did not lead to accurate shooting and led to missing some easy shots. Here I find the birds most common in the dry hills near the mouth of little valley that open out into the flats. Here they range back and forth passing out

in the flats and working back
inland. The flocks that I find
here seem to be composed mainly
of males that are not breeding.
At the same time pairs of breeding
birds are scattered out over the
flats toward the river. The presence
of these birds is betrayed by
their tracks in the sand. When I
pass they hide, though occasionally
some wary birds will flush
60 to 100 yards behind me and
fly off behind some hill. When I
find tracks I walk back and forth
along the valley two or three times
until finally the birds take alarm
and fly. They rise with a roar of
wings and pass over the tops of
the low hills, into the next valley.
They are found usually in little
flocks of two to four or five.
Frequently as they flush they give a
low note resembling cheep. I
whistles call and sometimes give
this alarm note toward rising.

A few are calling now a low
mournful whistle wheet whee whee
on the order of the call of *Rhyacotis*
ajacis. It is less musical than
the ground the birds run rapidly
with head and neck erect and tail
drooped like a quince hen. The
flight is direct and the birds are
easy to kill as they almost
invariably offer quartering shot.
A slight wound is sufficient
to bring them to ground, when they
may run a short distance or may
crouch with eyes half closed waiting
whatever fate may overtake them.
Even when wounded slightly they are
easily killed as they seem to give up
immediately. I note that the heart in
all these ~~specimens~~ ^{specimens} is very small in
proportion to the size of the bird.
All of these ~~specimens~~ ^{specimens} of *Junco* that
I have handled thus far, *Noturus*,
Rhyacotis & *Calopezus* have an offensive
smell of the body cavity when freshly
killed. *Calopezus* yields quantities

A soft unformed clay, with a
very soft odor. The birds in
stirred in the air as they rise
a fact that gives them the local
name of "carogones".

They spend much time in taking dust
baths in the fine soil presumably to
rid themselves of vermin and
have the feathers filled with dirt
constantly that comes out when
they are handled. One two that I
shot fresh had such baths, rows of
mallophaga occupied slender
fathers of the nest, apparently a
place of safety from asphyxia as
the insects crawled down immediately
into the mud fathers of the dead nest.
I travelled through originally
broken country today but found
small birds rather scarce. The
region crossed was one of small
open ground hills with valleys
between that toward their heads
were narrowed by dry arroyos. I
found several West crossing I

a coarse loosely jointed cream colored
sandstone which I take to be the
rock exposure at the top of the
cliffs on the opposite side of the
river. In several places I found
broken logs of petrified wood some
partly imbedded in soil. This
material shatters readily apparently
from frost.

That noon I returned to the
hotel and was occupied in the
afternoon in caring for my birds.
December 3, Friday.

Today I rose at 6 and left
soon after for the river. Dr. Gilley
landlord was already out and took
me for a cup of coffee.

The morning was sharp and cool
with no wind. I found that the
small bush birds were out on the
top twigs of the bushes enjoying the
warm rays of the sun. One encountered
some species not seen previously while
others appeared in greater abundance
than usual.

This apparently is the height of the late spring season here. I find many of the desert shrubs in flower and the small birds are nesting commonly. Some of the small species of juncos are still in migration however and I note more or less movement among. A *Passerella* like finch of which I have specimens has been found in small numbers throughout the dry flats north of town. Now it has appeared in abundance here near the river. The black flycatcher with white wings is also migrant. Ducks in part have finished their breeding; today I saw flocks of Widgeon, Cinnamon teal and Pintail. Various white winged young of the Pintail were taken. *Progne subis* and *Micropus similis* seem to be somewhat in migration also.

A hare that I think is the European species introduced here is common across these flats and ranges also across the hills in

the barren area north. Foxes and skunks, a small striped lizard is common and a *Agave*. One specimen of a large species. Insects are beginning to appear in some numbers. I have bees plus that resemble species from home, a few butterflies about and a very big wasp so abundant on our deserts.

I crossed this morning directly to one of the side channels and stopped for a time to cut a bit of beech. The water in this channel was rather alkaline and I did not drink much of it. The two species of eels were common and I was interested in watching them for a time. While eating a dinner I ran out on the opposite bank where I was able to identify it with a strange note. That I had heard frequently in the canals at Los Angeles.

Small quails were abundant here and I shot them, one molting the

wing feathers. I had no soap, but
cut a flock of Anas and but
scarcely by a change of feathers.
Water of Hall. Duddy Duck. In
all of them for birds they times
the water was cold and exhibiting
this morning. At times however I
had trouble in swimming through
the water roots that clogged
my movements.

Openings of willows a foot in
diameter were common here. In
places they grew on gravel bars
where there was no ground
vegetation at all. I was going
to the pond to the bank. I saw
three trees of *Juniper* and *Juniper*
and *Brachyglottis*, in occasional
groups. I saw also the
birds.

The water bird life here is plenty
and I have been studying
the storage of
these birds.

Returning across the flat I
collected an occasional bird
and to secure two more I
went to the pond. I had
seen a *Juniper* and I
saw one and went to catch it.
I was glad to have it as soon
as it was eaten.

I have found one large land turtle
in the gravel hills, nearly a foot long.
When I picked the animal up and
shooked it it voided about a fourth
of tea cupful of dark brown water. This
animal I talked out to take home with
me but it escaped. In the individual
leaves in the garden at the hotel.

Dec. 4, Saturday.

This morning and part of the
afternoon I was engaged in packing
skins, alcoholics and skeletons.
The remainder of the day was occupied
in writing. I wished to complete this
work today to have time for a field trip
tomorrow but was unable to do so.

December 5, Sunday.

This morning I completed my packing and then spent the rest of the day in writing some letters and in various odd jobs.

Towards evening I walked out through the town.

Here I have met Dr. Jorge A. Pico of the Argentine Dept. of Agriculture a well-informed man. He tells me that many shorebirds are killed for food near Buenos Aires and that a good many are sold. This happens in the most thickly settled parts.

He says that interest is being aroused now in bird protection through a society for the protection of birds that had children. The whole matter however is still in its infancy and a period of education is needed before it is time to talk of international cooperation in such matters.

I left General Roca at 9:00 P.M. in a coach for Rio Negro. My baggage had preceded me and I purchased

a ticket at 9 a.m. and after some confusion had my baggage checked. The train arrived soon and was on way again at 10:15. I secured a berth in the sleeping car but so much dust was flying that I was forced to keep the windows closed and so did not sleep well. About midnight the train stopped for the night in Neuquen and after an interminable amount of switching I was able to get up and get some fresh air.

December 6, Monday.

This morning I was up but did not intend to see Rio Negro after leaving Neuquen. Neuquen itself although a small place is of comparatively deep settlement and is the seat of government of the territory. Much of the scrub near town has been cleared and it is not a very favorable place for field work save as it offers ready access to the highway and Neuquen rivers.

The railroad line followed west for a distance along the Rio Negro

when were circled hills of all ages
and the crops. The line then
ascended to higher levels and continued
climbing steadily toward the westward.
The flats on either side were covered
with low scrub brush, appearing on
sandy gravel, a desert area
bounded by flat topped steep sided
buttes showing exposures of level
bedded sandstone.

Murtineta sinuata were abundant
through here. Small individuals
or little parties of two or three were
noted at frequent intervals and occasionally
I saw flocks of 30 or 40, all adults.
The birds when at ease appear
more graceful and less stiff and
stiff than when alarmed.

Three or four shears were observed
near Simulosa.

On the train I met Mr. Murtin
a geologist from Washington who
is from here temporarily for the
standard oil and had a pleasant
journey in his company.
At Kelamati 1097 Murtin

producing it will have been sent
on a high level plain where there
is absolutely no indication of oil.
The finding of the oil deposits here
was wholly the matter of luck.

After here I saw a nest of *Buteo*
erythronotus placed on the top of
a *Stephanomeria* when it rested on
the series. The parent was seen resting
on some low bushes nearby.

Beyond K^o 1300 rainfall
is apparently heavier as grassy
vegetation, clear-cropped by sheep
appeared in the open spaces
between the bushes, so that the flats
presented a fringe of gray green instead
of the barren gravel exposures noted
further eastward. Mockers of the
modulator type were noted in numbers
through here.

At K^o 1330 the hills became more
broken leading back to low mountains
and a little later I had a
sudden view of the snow capped line
of the main Cordillera a welcome

sight as there are the first
mountains that I have seen
on this expedition.

We arrived at Zapala the
present terminus of the railroad at
12:30.

The altitude at General Roca
is between 900-1000 feet. I estimate
Zapala at about a thousand
metres.

After securing quarters at the
Hotel Zapala I called at
the ~~Police~~ station and then
secured my mail. The afternoon
was occupied in correspondence.

December 7, Tuesday.

This morning I went out north of
town through the country. I find
that Zapala is a small place of thaty
or lute houses placed on a level
flat with broadly sloping ridges of low
elevation surrounding it. A valley
leads down to the eastward. The place
is on the summit of the water shed of
the ~~honey~~ and ~~Nequen~~ rivers and
consequently there are no streams near

the country is dry but has some
than lowland.

This morning I walked out over
a series of rolling ridges with
scattered bushes and yellow flowers.
The bushes were ~~some~~ ~~of~~ ~~the~~
bushes growing in scattered clumps.
The composition of the flora was distinctly
different from that seen at
General Roca and also to some
I made a preliminary collection of
the shrubby plants for comparison
with those that I saw at Roca. In
this collecting I have
collected with reservations as if it
probably that I have overlooked some.
In general however I should say
the differences to be noted are those
of separate two life zones. A species
of cactus has appeared here that I did
not find below. A species that covers
low ground like grass is 1 foot or two feet
in diameter. The stems are placed very close
and have heavy spines. The clump appears
innocuous but I found that it was
necessary to avoid them in walking as
the heavy spines pierced the soles of
my shoes readily. The tall yellow

Arctic is about here also.
On the bottoms of the valleys were
with carpets of grass indicating
rain but no vegetation seen here
on the surface. The soil was
filled with rocks and stones.
So the forest had a beautiful
view of the snow capped mountains
the mountains being steep and well
apparently to about 2000 inches. The
slopes were steep and abrupt with
no trees apparent. The distance however
was about 20 leagues and the light
refraction bad looking so that I could
not be sure. I had seen more than
half way down the abrupt slopes.
I examined four small valleys
searching for plants at which I
might find shorebirds but found
all dry as small birds were not
abundant but were scattered over
the slopes in small numbers. I
encountered a junco with brown
and black tail. I have not seen
before and a fine *Melospiza* ^{*Melospiza*} ^{*procyon*} ^{*procyon*}
in the wings. *Arachspiza* was fairly
common. I walked about 12 miles

but returned with a comparatively small
number of birds.
The snow was fairly common and
I picked up two shells of the small
doubtful *Arachspiza* *Pictus*
A *Pictus* a name that appears in
several places names in this vicinity
is *Pictus* M. birds. I shot a considerable
number of birds of this species. I shot one
in this region as a first pair.
At noon I returned to the
camp for my birds. At six I walked
out camp but a bit of snow was
seen but here is less a bit of
evidence of the back country. There is a
small stream running and here in part
with two falls *Arachspiza* in some
abundant rock for it with a stream
falls between. My camp was this side
but I am going to occupy it also.
I have seen *Arachspiza* *Pictus* *Pictus*
at 9:30 a.m.
The sky today was clear except
scattered light clouds. The wind
blew strongly from the west and at
night was actually cold. I was
satisfied with the birds.

December 8, Wednesday.

This morning I went out at a quarter of six and took in my traps. I had 4 mice of two species in 22 traps. Ants were working on the specimens already and had damaged me badly. All of them which were trapped under little clumps of thorny bushes. No holes or runs are apparent as they are covered by wind blown sand. Clumps of heavy bushes hold the soil with their roots and form little hollows as the wind blows the sand away on all sides.

After a hasty breakfast I continued down to the valley below town. Here I found a broadly sloping valley with a loose sandy soil ground with grass. A little stream two feet wide ran down the center with many meanders cutting some three or four feet below the surrounding level. The water was clear and seemed good.

Clumps of heavy bunch grass

were scattered over many of the slopes and a spring had made firm little mats on the ground. On the slopes above were occasional little shrubs. The valley however on the whole was evidently watered almost at once I encountered a rattlesnake and caught a young one. And a few minutes later I shot an *Arremonops fallax* Plover. Birds were fairly common. I walked on down to a high knoll in the valley and in a bushy sand ground area was pleased to encounter a fine male *Geophylax*. I shot a hen here also.

The region was heavily pastured and the grass was cropped close. The soil in many places showed an impregnation of alkali. Lower down the water seemed to sink and disappear in the sandy soil.

On my return I flushed a gallinule at a tiny spring which

did not secure it.

Insects are becoming abundant and I secured some specimens today. A *Byrrhidae* named *Theridion* with red is common. I find many things in some of the boxes.

At noon I returned and was busy until seven with specimens.

December 9, Thursday

The forenoon today was hot as there was little or no breeze. Later a wind came up from the west and I had to close the cover of my room to keep out the dirt that eddied in in a cloud. In some ways it will be a relief to get out of this region so that I can clean the sand out of my collecting outfit.

Thanksgiving day came and passed without my realizing it until today. I suppose that it was two weeks ago.

This morning I crossed again to the valley below and continued

up a lateral road to the top of the escarpment at the opposite side. On the way over I killed two pair miles of *Hemicorys umicivorus* and sat for a few minutes in the warm valley of early morning examining their odd forms in great contentment. I certainly in calling that journey to mind it is times like these that remain in memory when days afield are called to mind and one may regret the many discomforts encountered in travel.

The slopes of the valley are sandy lined water courses but in little spring holes in several places. There is a small running stream in the ~~main~~ valley but the lateral ones are dry.

I found that the rock exposure showing on the opposite side was a dark lava that was exposed for a few feet at the top of the hill with a steep talus slope with many broken rock fragments below. The top of the hill was level and extended some

I did not realize what it was
at first and turned my flashlight
under my bed to see if some dogs
or one of the numerous pigs
had not entered and was chewing
the mattress in moving about.

Here at Lapala I was free of
the pest of flies that I encountered
at general Boca and there are
no mosquitoes and strange to relate
few fleas.

I had today a somewhat curious
instance of temperature control. About
noon the thermometer was interestingly hot.

At this time I killed a *Brachspiza*
centurus major and *Leichspiza*. The temperatures
respectively were 106.5, 106.6, and 106.4.

I thought at first that my thermometer
was not recording properly so all
are more or less about normal. It

apparently it is easier for *Brachspiza*
to hold temperature in a dry desert
than when it is more humid.

A *Thalassidroma* that I shot had the throat
closed slightly with blood so that *Brachspiza*
was difficult. The bird though

wounded. This second time I
saw it to the temperature recorded
steadily from 10.00 to 11.00 and then
dropped to 10.00.

December 10, Sunday.

This morning I was considering
packing some specimens and then
spoke of our light field outfit
for a trip of a few days to the
high 14 degrees. Without and
I saw that some of the specimens
can date stage. I reported by the
government was supposed to show
today but after I was ready
of record, that it had broken
down and the expected piece for
the machine had not come yet
and it would not leave until
after the next train on Saturday
possibly not then. I made tentative
arrangement to go out in a sulky
or two wheel cart but abandoned
this after some news received in
mail which cast some doubt on
the amount of money available for
expenses. Under the circumstances

it seemed best to get back further east and a objection to remain in this country. I reported it cable to the office requesting instructions and would it to the Congress and business aims to be placed. It is impracticable to get messages in daylight in the country here. The afternoon was occupied in notes.

J. B. Meritt, jr. of the geological survey came in on the train. and we had a pleasant evening.

December 11, Saturday.

Last night a strong gale came up from the ~~west~~ west and by times without abatement all day today. Clouds of dust filled the air and everything took a white. In the forenoon I was occupied in repacking my outfit once more and in preparing some more for final shipment by post strap over Cerro and then for safety. There is a young Peruvian's head

near that of some of my things & purchases but without success. My train left at 2:10 and I had my five pieces of baggage checked and on board I left for Lima ahead of time.

The trip down presented no novelty. Clouds of dust filled the air and swept across the landscape at Miraflores. I put half an hour's walk about that. Could only fight the wind without seeing much. Was glad to get into my again.

December 12 Sunday.

This morning I arrived in Bahia Blanca at 9:30 and registered at the Hotel Cooperativa. The day was occupied in writing some letters and in notes. So much surprise I found it cool here as I had expected hot weather.

Bahia Blanca has impressed me very favorably and seems far ahead of the provincial towns that I have

seen in the mountains. The sheets
are read and the various findings
good so that the place offered
possibilities and of a date in this
any respect. The hotel is on the
at the point of the main plaza
so that it is centrally located
a large building. It is a very
good hotel with no pretensions
of luxury. Many of the stores are three
and four stories high.

December 13, Monday

This morning I took a train at
6:20 and rode down to Ingeniero
White as the port here is called. I
walked out on the docks just and
found that of five ships that were in
there were American. From here I
convinced out across the flats toward
Puerto Militar. The name Bahía Blanca
is suggestive and as I had for the
time forgotten Darwin's description I
was expecting to see a beach of
white sand. Instead I found a
expanse of sand flats barely above

low level that was cut by many
channels and reaches that descended
from the water inland. The name
"White" was undoubtedly given for
the expanse of alkali. Darwin has
I worked out along the water's edge
experiencing considerable difficulty in
getting through as some traces
of ichu were that I had to ride.
The area was favorable for mudling
shorebirds and I noted a fine
band of *Stip. rufipes* *Scirpus* and
one Golden Plover. The plants were
scarcely more in the area.

The higher ground here, that was
a foot or so above high water mark
was covered with two or three
kinds of *Chenopodaceae* plants
interspersed with *Cruciferae*.
The ground was wet in many places
but I found the clay firm and not
boggy. *Brachypiza* and a little long
tail *Brachyphala* with an orange-spotted
throat swarmed in these low bushes
but other birds were not common.

with my best shell of killed a
small black finch with a yellow bill
that I have not seen before.

Today I captured one of the few
wooded swamps with many brown
comps that I have seen in the
Napo & Napuer. The insects are
very wild and difficult to secure.

The land near the bay is
~~absolutely~~ level and slopes very gradually
to the water. When I had a good
distance where I could not see
the water itself. The ships at anchor
seemed to be resting in the midst
of the low shrubby vegetation that
extended all about me. Low islands
were visible in the distance and in the
distance I could see Puerto Velasco
where a Japanese Squadron is at anchor.
This region seems to be one of river
to port. Bahía Blanca itself lies
at a somewhat higher level and
at a short distance behind the town are
low bare hills. The port has been

formed by building up a peninsula
of rock and with the Velasco the road.
In the little town of Ingeniero White
high tides evidently sweep in along
the straits. It is evident the region
of the is about 1000 Kilometers from
the port. In the last years the two
worlds encroached upon. At noon
I returned to town and spent the
afternoon in caring for my specimens.
I found my room very hot & the
of the hotel I saw a broad view of
the city. The country beyond stretches
down and flat with only a few
occasional houses and a few
estancias.

At the very end of the peninsula
the best view in town of the sea
is the afternoon.

December 14, Tuesday.

This morning I was occupied in
making some necessary purchases and in
writing. I find it very difficult to

buy cotton here for use in packing specimens
or making skins. There are two
absorbent cotton sold in the dry state.
Cotton of an ordinary grade in rolls is
unknown. As material for packing I
buy a glazed cotton known as guata
of a very poor grade. This comes in
two colors white and black and sells
at a peso a metro.

I shipped 3 boxes of specimens via
Expreso del Plata to the Museo Nacional
to be held until my arrival in Buenos Aires.

About ten this morning I chanced
to be in the neighborhood of the depot
and as I knew that the ticket office
was open I went in to buy a ticket to
Carhué in order to forward my baggage.
The train left at 1:30. The ticket agent
however was horrified at the prospect
of selling a ticket so far in advance
for as he explained another man came
on at 12:20, it was this second man's
business to sell tickets for this afternoon
train and I would have to wait and
buy from him!

I walked through the market here

this morning but found no game
on sale.

At one thirty I left via Ferrocarril Sud
for Carhué. The level country about the
city was dry with the grass already
turning brown. In the distance I
could see the range of hills above
Sierra de la Ventana. We approached
this and continued along the
western base as far as Saavedra. At
Lonzquist the mountains were near.
The slopes were steep and bare with
no arboreal vegetation visible though
small trees probably occurred in the
canyons & gulches. The track crossed
occasional arroyos containing small
streams of running water. The country
was rolling. Broad pastures alternated
with extensive fields of wheat and occasional
the country side appeared uninhabited save
for widely scattered estancias. One or two
of these had extensive plantations of
trees and all appeared prosperous. The
population of Argentina is given ordinarily
as over 10,000,000 but men who

are in a position to know assured
me that there are no more than
800000 inhabitants. Of these over
a million and a half live in the city
of Buenos Aires. The country in
General is thinly populated aside
from the scattered towns and it
is usual to ride for miles in train
or coach with only occasional houses
in view.

At Saavedra I changed to another
train which left in a few minutes.
The country between Buenos Aires
was green and well watered. We
passed occasional little stretches of
prairie. I saw 30 golden Plover
in two scattered flocks.

I arrived at Carhué at 7:35
and went to the hotel Frances a
rambling one story affair that appeared
very off. However I secured a good
room with no difficulty by getting
quarters alone.

Met. driving T. Brown 44 Saavedra
Buenos Aires by English travelling
parliament on the train.
Had my baggage sent over from the
station and had some installed in my
new place.

December 15, Wednesday.

This morning was clear but with a
very hot sun. I was out before seven and
went west of town to a large lake
lago Epiqueu. This body of water is
35 kilometers long by 20 km wide in the
widest part and occupies a shallow
depression without outlet. The water
is strongly mineralized so that it
is practically a saturated solution
of salts. There is said to be much
potassium in it. The water has rather
an oily appearance when disturbed
and has a high density so that
objects float readily. As the lake water
is bad and the alkaline shores
have an evil odor as usual in
such places the water is not fit for stock
but has high repute for its medicinal
properties in baths especially among those
afflicted with rheumatism. During
January, February and March large
numbers of people come here for the
baths and there is a considerable
congregation of the afflicted. The strange

is mated always with the abundant
grasses. I saw No. 10 for los Baños.

Rain is fairly abundant here and
the fields that I traversed were
green knee high with weeds. Practically
all edible vegetation however is kept
down by stock leaving only weeds
and the heavy clumps of bunch
grass which I find more slender
grasses with heavily pointed slender
seeds that pierce through my
clothing as I pass. Another
broad leaf grass has ~~stowed~~
blades so that it is difficult to
handle. In spite of the green
appearance of the country and the
abundant luxuriant vegetation which
the stock especially ^{among the} was
seen.

The soil near the lake was grayish
in color and was a clay, mixed
in places with sand and containing
much lime. An arroyo carrying a
small stream of muddy water forms
small marshes of ground with cattails

and scirpus. Along the banks of
this marsh I noted one or two rock
exposures with a lime rock heavily
tinted. A flowing well at a little
rancho contained water strongly
impregnated with sulphur and
a little spring was highly mineralized
apparently with bicarbonate of soda.
Water in wells is said to contain
salts almost invariably so that it
is not good to drink. I find it
soft and excellent for washing
however.

The town cemetery stands on the
shore of the lake with the usual
vaults decorated with spires and crosses.
I thought at first that it was
some bathing beach as it stood
alone a mile distant from the settlement.
As the cemetery was large I judge that
Cochise is old.

I walked down along the arroyo
to the lake shore, then backed the
marsh and followed down the other side

Among the brush ground some flocks
of the Carrogers of the mountain with
flocks of lesser yellowlegs and a number
of greater. Some Wilson's Phalarope
and a Pectoral Sandpiper which was
golden Plover passing downwind. The
birds were feeding or resting in little
open mud bars among the reeds
where they were protected from the
wind rather in unusual situation
for these birds of the low areas
my previous experience. They were
rather wild and I noted a number
with broken legs so that evidently
they have been shot heavily.

The shores of the lake were
low with rolling country behind,
there was no ^{marsh} vegetation of any extent
and any ⁱⁿ growth of tall cover
was entirely absent. From the carriage
I could make out thousands of
small white-headed birds swimming
on the surface and walked down
to find that they were grebes

Podiceps californicus: I had noted that
they might be phalaropes. One flew
a large bay of the mouth of the carriage
where I was then 5000 swimming
in loose bands or drifting with
the wind. The birds were beginning
to mate and I watched their curious
antics with much interest.

While small birds were common
there was little variety in species. The
mistle was abundant as was a light
Onchus furcatus and *Brachypteryx* was
common. I shot one *Phalaropus*
among the reeds and a *Chimango*
and a Saltland Plover and a *Serripes*
farther on.

When the clay soil was wet it
was smooth and greasy making
difficult walking. Shallow stagnant pools
gave off a strong stench of H_2S
and other gases.

The wind came up during the
forenoon obscuring the town and
the uplands in clouds of dust.

It continued all through the
afternoon.

At seven this evening I called
on the police commissary ~~with whom~~
I talked for nearly half an hour.

December 16, Thursday.

It rained heavily last night
and I woke this morning to find
the air saturated with moisture
and the heat under a heavily
overcast sky very oppressive.

I followed down the shore along
the lake shore in the area
traversed yesterday.

The greater part of the shore birds
had disappeared leaving only a
few lesser Yellowlegs and Wilson's
Phalarope. Along the lake however
encountered bands of White-rumped
Sandpipers. Apparently the others had
sped out to the pools in the ~~flats~~
I gather that there is considerable
shifting about of the shore birds in
their wintering grounds as

the weather changes. The conditions
in a way is similar to that
in the plains area at some time
the birds showed when rains
flood the country and afterwards
when it becomes more dry. It
is the possibility of wintering
in the marshes of the ~~marshes~~
apparently of the reduction of the numbers
of the permanent ones and
marshes would support many
dry years. This factor has undoubtedly
been an important one in reducing
the numbers of these birds with
the change in ecologic conditions that
took place in the 70's & 80's when
the marshy boggy prairie district
through fastening of subsequent drainage
became poorer and better drained.
Formerly the birds encountered suitable
country for their needs anywhere.
Now their range is restricted to what
pools and lakes remain. The factor
in their diminution has not been so
much heavy settlement as killing of

soil as the country side is
practically uninhabited and the
storkest of good pasture land are
immense. I believe as it does to
the slow drainage of the country
and the richness of the soil
due to the rotting of stock.
The Argentine species first studied
I think country as is true in.

All newly settled areas of similar
composition. Extensive agriculture
in the line came later.

The humid close atmosphere
this morning was so dense that
the suns of day spent the clouded
over constantly. Many toads
were out and I saw a few pair
and several of the species known
as the "Esquero". This toad is a
huge green toad-like animal
bottled with black with the
immense head that spreads out
as broad as the whole anterior
part of the body, truly a strange
and in a way hideous creature
when tormented it puffs out

with air and immediately forming
the tremendous mouth puffed
forward with a ~~shimmering~~
shaking squall ~~that~~ a snuff of
its jaws. The natives are afraid
of the creatures, some of course
claim that they are poisonous.
The skin is loose from the muscles
and may be puffed out with
air. That time I saw two skins
I saw them with a savage man
grasp and at the whole face to
be handled with caution. I judge
that with their large mouths they
eat almost any thing that comes
along: I have heard that they carry
off small chickens. The present
individual was surely containing eggs
ready for deposition. Here they are said to
be hard: but I have found them
common. The call is a toad like call.

Common toads similar in
appearance to ours. Bufo are abundant
here, so abundant in fact that at
night an ordinary entomologist has little

chance for collecting about the
light. Last night I then went
015 under a street light in part of
the hotel, six heffed about in
the dining room when they snuffed off
their lights that it rolled out a
rod I had then or soon in my room.
Others were encountered at every turn
in the passages or on the walks
where they heffed rapidly aside to
avoid being shot at.

Over the bushes of the marsh at
the arrays I found a curious
large water rat with interesting habits.
To escape the flood of East right there
mammals had been forced to raise
their nests. Stems of green accipens
standing 2-3 feet tall were bent over
and the ends firmly interlaced
both offer a support that would
not be swept down by the water
and to afford needed protection
above from short-eared bats and other
predators. The ^{nest} was ^{made} ^{of} ^{grass}
that made by night ^{of} ^{grass} ^{or} ^{leaves}

to rest upon. But was of a fine
strong construction. Beneath this
protecting mat was placed a ball
like nest of grasses & shredded bark
fibres. I thought that an
old rat would drop down into the
shallow water beneath to disappear
at once and hide in the very corner.
On the mats I usually found
springs ranging in size from those
usually found. On one nest I found
two young one third grown along
and I captured both. Finally I
found a nest in fairly firm water
and as a huge ^{male} rat dropped down
and swam rather slowly away
I shot it with the ^{gun}. The
creature though hard hit turned at
once to fight but came toward me
savagely. The fat was large and
broad so the animal swam readily
& showed their tracks in the mud also.
Along the shores of the arrays I
found also tracks of the Pigcatcher

and picked up one very good shell.
Thousands of the little crabs
were resting on the lake surface.
At least 20,000 were in sight
and they extended beyond the range
of vision. I would suspect they were
Flamingos also are fairly common
here.

Today I secured a nest of
the small Common, yesterday one
of Puffins.

Tropialis difficilis is common
here and I collected five today,
the first that I have seen. Strangely
enough the first two birds of this
species that I shot were immatures
a species that I had not secured
previously.

In the afternoon the breeze
came from the east and it turned cool
and pleasant.

December 17, Sunday.

This morning the air was cool
and there was a heavy wind from
the south that made hunting and
collecting difficult. I went south
of our camp, the line of Quercus-
laevis and Quercus agrifolia signs that
we had reached that Quercus was
beginning to walk on the Quercus of our
Many small Quercus were collected
today. There were fields of Quercus
and Quercus grain hills standing
on either side. On Quercus willows
had been planted, Quercus drainage ditches,
the Quercus Quercus Quercus was for-
merly thickly covered in Quercus
through the Quercus Quercus Quercus.
Highest rolling country was covered
with a Quercus grass growing from
one to two or three feet tall. In Quercus Quercus
the grass itself was fine and
softly Quercus Quercus Quercus Quercus
but Quercus Quercus Quercus Quercus
was Quercus Quercus Quercus Quercus.

There was one large Quercus

with a distance about which I
found I was quite correct. *Tamias gallica* is used extensively
for wind breaks through this country
and grows very well, forming heavy
hedgerows.

When the shelter of one of these
hedgerows today I found a number
of Minnich butterflies secure here from
the force of the wind. Apparently
they were new migrants, as their
wings were worn and broken.
This is the same species that I
observed in the Chaco last winter.

Trupialis streptopis was one of the
most abundant birds through here
and I collected several. The birds
were scattered everywhere through the
fields. I heard two the hollow
whistle of *Rhynchotus rufescens* but
the birds retreated as I came near
without taking flight.

I had trouble with a shell
breaking in my auxiliary again as I
was about to start on the return
which put an end to my collecting

for the season.
I today had encounters with a man
armed with a single barreled shot gun
who apparently depends his living on
hunting living the sort of nomadic
existence of which several places here
are or others that looked as if they
had recently and all birds here were
wild & hard to approach. The best
fellow was staying under a cabana
awaiting for his horse water to heat.
Cooking here is simple, two heavy
wires, two barrel rods or similar
materials are bent into broad
staples to form a grate.

A little fire is built
beneath and meat
and the water kettle placed
above.

There is considerable hunting done
this section. I note men & boys carrying
guns on horse back and often there
is a shot gun in the ^{pro-wind} *subris* used
in country travel. This hunting

reflected in the altitude of the ridges
which of solid size are wild
and difficult to approach.

At nightfall I went out
and set a line of mouse traps along
the arroyos. Very little sign was
evident and setting traps among
the spiny saw-buff glasses and
prickly thistles was disagreeably
work. Bails cully & gumbled from
the marsh and shot some birds
squatted or circled around my
head. The evening was grand and
cool with the sun sinking in a
cloudless west.

December 8 Saturday.

It still remained cool this morning
with rather a sharp wind from the
northwest. Drapping was almost
a failure as I secured only one mouse
in 23 traps. This small species apparently
feeds on grass seeds as I found
occasional little piles of seeds under
skulls.

I would soon try and try to

get another water set out without
success. I shot one mouse under
today and had the water for
it. As we were separating we were
hit by rain and with both cold.
The water was not very deep but the
soft slung mud of the stream
was apparently bottomless.

Many sheep are grazed in this
country in addition to cattle and
horses. Apparently many sheep are
killed by the rounded stones as I
saw their carcasses scattered about.

I returned early this morning in
order to get through and straighten
out some detail that has accumulated.
I had expected to leave Monday for
Pico but find that I cannot make the
same time by starting on the route on
Tuesday morning.

A pair of *Tortonia* of which I
saw specimens is abundant in the

water of the lake and apparently presents
good for the *Thomomys* *Algonquian*.
There is also a *Thy* perhaps an
ephyrid, a small species of which
specimens were taken 11/10 that
forms clusters on the alluvium and
when it is soft and wet these plants
are solid because they are water
filled sometimes for a distance of 5 or 10
feet. I note also specimens of *cast*
leaf stems along the alluvium
down.

December 19, Sunday.

This day I was occupied in getting
my note books in shape and some
detail work, began at 7:00 A.M. and
finished by writing a few letters at
7:00 P.M.

December 20, Monday.

Packed some specimens this
morning and then prepared up some
accounts to date, going over previous
accounts to have them in readiness
for my quarterly statement on Jan. 1.
Made estimates and abstracts of
expenditures and prepared a letter

to the office. Spent some time in
examining maps to plan for future
work.

The weather has remained cool
and pleasant for three or four days.
The sky has been overcast but
of the time but the sun has
shone daily. Thus far I have seen
no extremely high temperatures here
on the pampa though frequently
the humidity is oppressive.

The horses here are little
"bottom" when it come to travel:
For one thing they are all grass fed
and get little grain. On many
occasions I have seen a horse
that had been driven in a moderate
way stand and pant for half an hour
after with the perspiration dripping
on a steady stream from the head
and abdomen. The amount exuded
is almost incredible.

December 21, Tuesday.

This morning was cool and pleasant. I had my baggage taken to the station and about 15 minutes before the train was due a leisurely young gentleman slipped to open a ticket window and sell a few tickets. Left town via Ferrocarril Sud at 9:30 a.m. for Alta Vista. As we passed the very large south of town I strained my eyes for water but without detecting any. A short distance below two guanacos the first I have seen were noted in a pasture and a short while later flying with his attention on the train struck a telegraph wire heavily.

The country was rolling as we were approaching the base of the Sierra de las Ventanas. Immense areas of pampa here in this region that formerly were boggy and swampy affording suitable range for sheep have now dry pastured or cultivated fields with the former marshy tracks restricted

to occasional low swales or bottoms where drainage is slow. The result has been a destruction in fact the larger part of the habitat suitable for such stock farming rather than cultivation is to be blamed for the decrease in abundance of our mammals. As in other lands with New Prairie country stock farming was the first of the major agricultural industries to develop in the Argentine. As the industry grew the pampa was stocked as heavily as practicable. As outlined in my notes previously this resulted in churning and treading the ground and in an entire change of vegetation. Thus this change the bulk of the waters were crowded out and so were greatly reduced in number.

During the next 20 years the Argentine without doubt is due for a tremendous development. The Pampa is naturally a rich agricultural district and as the flow of immigration comes to the country many of the big estates

in which land is held at present
will be broken up into smaller holdings
in the course of this settlement though
few remaining Spaniards (the few
whom in fact are found. Only those
species are the yellowlegs that scatter
out in my Pampas bog or marsh or
that like the wild rump and sandpiper
frequent the coastal Pampas may
persist in any abundance.

Pasturing in addition to draining
the country has destroyed the former
high vegetation that grew here on the
Pampas in former times so that now
the winds sweep unchecked over
the broad plains. The borders of ponds
and small lakes are entirely gone as
the ^{more} succulent marsh grasses and rushes
are eaten down by stock in reference
to the ~~marsh~~ upland grasses.
As a result water birds are exposed
with little or no shelter to the full
sweep of the wind. (Note that I found
yellowlegs and Wilson's Phalaropes ~~at~~ ^{at} ~~the~~ ^{the} ~~coast~~ ^{coast})

making the shells of snails along
small barneys. I checked up later on
accounts of former tall heavy
(jungle vegetation).

At Alta Vista I change to a
mixed passenger and freight train on
Darragneda. The country between
the two points was quite level
and rather dry. Grass in the wetter
was eaten short by stock. Extensive
areas were in grain. Fields of oats
were ready to be cut, wheat was
in head but was not so far advanced.
Corn ran from 10 to 20 inches tall,
some of it looking very poor.

At La Zencada ~~Parícuta~~ was noted
through here, one Mysticis manibus
small scullend individual of ~~one~~
~~Parícuta~~ rythidynchos trupialis alphi.
One himmogardalis rythidynchos ran
out from the border of one ~~pond~~ ^{pond}
to the shelter of a grain field.
We passed occasional shallow ponds
but there was little attraction for

shortbirds. The country was open
with no trees and little settlement.

We arrived at Barraguan at 11:10,
where I found the usual dreary
little Bahian town. At the restaurant
at the station I asked for a meal
about. Was told that they were
prohibited from serving anything but
shot birds. Disposed to this I ordered
a "bife" and to my surprise was
served an excellent meal from friends
to coffee. On asking about it was
told that, oh well, the cook something
was things ready to serve and we
gave them, certainly on way out a
difficulty.

Here again, I tried to buy a
ticket in advance but had to
wait until called for from the train
to my. On ticket and dispatch
my baggage it cost a good 100
milligrams of baggage including some
boxes of specimens. I was allowed
50 kgs on a first class ticket. The

excess in each case amounts
to about $\frac{1}{3}$. The value of tickets
Fare is fixed at a rate of
4 centavos a kilometer.
Left Barraguan on 2nd June for
Rio de Janeiro.

I found the March Bulletin
was summer and was interesting.
I have read no milligram here
to eat, and wonder if it is possible
that they deposit their eggs in
the abundant thistles.

I am informed that the
water of La Foz de Iguazu at Foz de Iguazu
is bottled and sold in
drumstone as a purgative water. Data
on the composition of this water may
be obtained from the Instituto Biológico
Argentino (Dr. Oscar Silvio) Buenos Aires
and from Mr. Hevero Ducloux, Director
Professor de la Universidad de la Plata in
Buenos Aires. To me the water
appeared heavy and impure for such use.

October 21st here the wheat harvest
will come early while the majority
of the down land detriels are
breeding so that it escapes damage
by large flocks of these birds. The
country is as fertile as Catriló, the
wheat was ripening. Broad fields of wheat
extended by either bank so far as
the eye could reach with promise of
an abundant yield. Some of the
fields were still green while in others
cutting had begun. Beyond Catriló
the country became more level.
Great fields of alfalfa with fine herds
of cattle grazing in them alternated
with wheat. An occasional small
whirlin pool is some slight hollows
the only territory available for showbirds.
The entire region was built in broad
estates with no houses in the country.
Extensive development has come in this
region only within the last ten years
with the completion of this line of
the Buenos Aires Pacific extending

north from Bahia Blanca to Mendoza.
The coach and restaurant service
were excellent. Some along the
right of way were seen, but seemed
numerous. Large wheat warehouses
were noted just west of station.
Foot-catch and burrowing dogs
were common through this region.
Many *Procyon* *blepharophis* and on
occasional *V. milvina* were seen.
Procyon *fuscatus* and *Procyon* *domesticus*
were noted at the station with
a few *Belonchthonia* and *Melospiza*
noted in the country. Doubtful
the toll of birds seen.
Arrived at Rio at 9:55 and
stopped at some station hotel whose
name I did not get. Went to see after
a short time occupied in studying maps.
December 22, Wednesday
This morning I reached the
station to find that the time of my
train had been changed, fortunately to
an hour later. Rio seems to be a

Beyond Pico the country remained
level and flat, broad grain fields (wheat)
fringed with alfalfa. In many
places the grain had already been cut.
Pastures were now saved in hills & alfalfa
and the country was very dry. We
saw occasional shallow alkaline pools.
A few mountains beyond Boerf
the Calden route of which I had
heard, appeared suddenly and
remained more or less intermittently
in view. The soil was sandy throughout
and beyond in this boggy tract
rolling. As I proceeded westward
low hills appeared in places.
The soil was sandy and usually
dry.

Arrived at Victoria at 12:40
Presentment is a curious thing;
as I was packing in Carbine I
thought that with the many
changes I had to make on the trip
that I should probably have trouble
with baggage. On sending to the
depot all my stuff report came back
that only five pieces had arrived.

A journal in a minute, and I
was short a box and the bag
containing my camp bed. The box
was locked in Pucanuco, the bag
still unfastened.

Extremely hot here today and I found
the sun unbearable. Dinner served at the
early hour of 4 P.M.

December 22, Thursday.

This morning I was out with the
and started for the country of the
An a few spheres I was out among
country. The country was rolling, rising in
low hills of sandy soil. A few
small bushes were scattered about.
The great snowfield the next day
been cleared and was open. A
silvery gray low shrub growing in open
clumps covers extensive areas and
the flowers have a pleasant odor that
comes in quantity from large beds of the
plant.

Birds were very abundant much to my
surprise as from the appearance of

The country is not so high as
the mountains in such vicinity
in the mountains. I saw a great
many of the specimens of
the species that I had
seen before.

The water is now extremely dry
but I am informed that periodically
there occurs heavy rains that fill
the hollows with water forming
considerably little lagoons. This
is the condition that had been
described to me, that I had
expected to find. These such
circumstances may well have occur-
ed but now they are none. I found
one small pond in a low place but
nothing more.

There is plenty of water below the
surface here however and wells have
been dug everywhere. Some produce salt
water but many are very good.
Wind mills are being put up
very successfully and the wind
blows constantly elsewhere. A small
mill is drawn up by a horse

The new store of raw wool that he
can shift in Grand Caballo. This means
was required to show the water, he said
to side the house and some the quality
of the wool. Also that by hand could not
be formed by me.

I had the fortune today to find
a pair of hot-billed parakeets and
secured both. The I plant cotton was
abundant and I was surprised at
the quantity of the seeds.
There are cucumbers, the seeds of the
chico, a *Scaevola* species and
a small woodpecker with a white
line over the eye like the other
the place was suggestive of the
dry area of the cucumbers at
Laguna West in the Chaco Paraguayo.
At eleven o'clock I took the
road already as many hills as I could
reach. I reached a clearing at once
and was occupied in the afternoon
until 5:30 in the evening.
Yesterday I left a pair of shoes to
be made of leather, possibly with out buying
price. Was charged six pesos for the work.

The presence of the belt of timber here
in ~~Paraguay~~ is curious, May it
be explained on the ground that this
tract represents a former Chaco area
from the timber which possibly the Rio
Paraguay came south with Bahia
Blanca. With the changing the
course of the river the country has been
draind ~~that~~ the swamps have drained.
The young however in part has remained
the same.

December 24, Friday.

This morning I continued farther
out through the forested area here
at Victoria. The land has been divided
into small tracts and sold so that
eventually it will all be cleared. A
fields interspersed with woodland here
been planted with corn or other grain
but at present there is little attempt
at farming. Peasants living in little
houses near the fields but on the
whole do not appear very prosperous.
The method employed throughout
the Argentine in cutting hardwood
to be condemned. A man or boy goes

out and if dead wood is not to
found he knocks two or three limbs
from a living tree. This continues
until ~~the~~ larger limbs have all
been cut away leaving nothing but
the stump of the trunk. The tree
dies perhaps or may throw out
new limbs but being through by
the old wounds. It would be
much better to cut out the tree
entirely leaving room for growth of
others.

Birds were so abundant as were
today and I collected 20 between
6:30 and 11:00 with no trouble
whatever. Among them I found a
nest of *Taeniophora irupera* in a
hollow in a tree. Secured two species
not taken previously, a little chick
and a crested long-tailed *Tachycineta*.
While I encountered several old friends
seen previously in the Chaco.

The cactoid has a fine pinnated
leaf and a rough-barked heavy
short-limbed trunk. The trees grow

frequently 2 to 4 feet in diameter
and run 30 to 40 feet tall. The
wood is covered with many
small limbs in the top. The
wood has the appearance of
oak is dark in color but cuts
so readily as walnut.

The morning air was cool but
later it became very hot. The soil
everywhere is sandy reflecting the
heat so that without the constant
breeze the heat would be almost
unbearable.

The rest of my baggage turned up
today looking rather the worse
for wear. The paper labels
had become scraped so that the
destination was uncertain so
apparently the guard put them
off wherever he pleased. At 2 P.M.

In the evening I walked out
west of town to a curious
sand hill formation or meadow.
Great masses of sand were piled
up 50 or 60 feet high. Below them

was a low channel containing
a few pools of water in the wet
season. This is an extensive lagoon.
My husband tells me that at
the Rio Salado and other west of
here that sandpipers occur in abundance
especially during the rains. At times
the Rio Salado is filled with water
over a distance of 30 leagues and
the two streams drain to the south.

Dec. 25, Christmas Day.

This being supposedly a holiday I
slept until ten minutes of eight instead
of turning out as usual at 6:30. It
remained hot all day but with a
fair breeze that moderated the intensity
of the sun.

Today I busied myself with various
odd jobs that occupy the time. In the
afternoon I wrote a number of letters and
finally loaded some auxiliary shells.

Filled wood with storehouse here of the
houses is navigated among the waters as
stones and shingles remained open and
men seemed to be working as usual.

sward back of unit out and set a
line of mouse traps and this afternoon
shot him in the country near a little
water hole, enjoying the coast evening
air and watching the sun light
come in to night.

December 26, Sunday.

At daybreak this morning the thermometer
registered around 60° F. and I experienced
a pleasant sensation of cold. Having
had a "holiday" yesterday I went
out in the country this morning.
An old woman searching for coconuts
had stolen half my line of mouse traps
and I caught nothing in those
that remained. As she was a half
witted old head I could get nothing
out of her and finally let her go.
From here I continued on over the
crest of some sand hills grown with
vegetation north of town. These rolling
hills rose to an altitude of 100 in
places and gave a fair view of the
country. Broad stretches of forest lay
dark across the rolling slopes and
covered extensive areas. Victoria lay

in a hollow with sand all about
it. To the west I saw taken the
end of this line of railroad with forest
coming directly to the edge of town.
Hollows among the hills were widely
filled with water during the rainy
season.

The slopes in places were
covered with open thickets of
brush, while road areas were
covered with a species of bunch
grass. Birds were common through
and among others I secured a description
new to me, probably domesticus. Was
much interested in discovering that
the grey-breasted little grosbeak nests
in the abandoned ~~at~~ nests of the
Dicrochloa, an abundant site and one
that offers good protection. I have looked
for their nests for some time without
success but once I had the clue found
them in a short time. Also found a
nest of Mimus triviratus containing 4 of its
own eggs, 1 of M. bonariensis and an

of another cowbird that may or may
not be *Vadins*.

These small clumps of bushes in
the open country served as centers
for birds and I found little groups
about each one.

Insects were abundant. *Geothlypis*
swarmed in the grass, I saw
a number of Cicadas and collected
two strange Neuropteroids.

Returned at noon with quite a
collection of one kind or another.

The wind turned north during the
afternoon so that it was hot and
dewy. The water here has
an evil taste and gives me an
indigestion that I hope to overcome
before long. A fine shower bath however
makes up for other shortcomings of
this hotel. Wells operated by windmills
afford an abundance of water and
I am able to bathe daily, quite a
luxury for the Argentine.

December 27, Monday.

This morning I left town at six with
a sulky and driver. These sulkies in common
use here are light two-wheeled carts often
with the body suspended to the frame by
strong coiled springs. Every movement of
the horse is transmitted directly to the
cart giving a constant jarring shaking
motion that I find very unpleasant.
It is necessary before starting to make
sure that the contents of pockets, etc.
books, etc. are all secure, as otherwise
they will inevitably be shaken out and
lost. Some of the sulkies however built
have a small body behind so that
a considerable load may be carried.
In spite of their drawbacks they are
a convenient means of travel over
bad roads as they are light and
can be taken where a four-wheeled
vehicle would be useless. They overturn
rather easily if cranked too sharp and
today I saw a boy with a sulky
loaded with wood overturn in the
same road just after we passed.

My driver, mostly, remarked "Caramba
how careless of him" and went on as
the boy crawled out, caught and
caught the mule that he was driving
I let it pass and we went on.

The morning air was cool
and refreshing; the drive with its
soft green leaves grew abundantly
along the roadside and when it was
in bloom filled the air with pleasant
fragrance. The "sombre toco", a
tree that is fairly common here has
stiff rather ~~stiff~~ leaves ~~that~~ with
prickles at the tip and the margin
curled. It grows sometimes to a
height of 20 or 30 feet with rounded
bottles forming a heavy clump that
extends close to the ground. Small
trees grow under shelter of the bigger one
and ~~base~~ occasional small shrubs of
this tree have been but did not collect
specimens.

About five kilometers out we stopped
in a side road, I left my cocheros
to sleep or to hold converse with

Chace travelers, with my self and my
companions as the principal items
and went on into the monte.

The forest here was of calden, and
algarroba with much dense bushy
growth of piquillin, Chañar and
Sombretos. In good spots were
occasional shrubs of a creosote bush
known as jarilla. The piquillin has
many short spines, small rounded leaves
and bears an abundance of oblong berries
smaller than currants, Parrots, plant
cutters and other birds fond of berries
prefer these shrubs though the berries
are still green; ^{when ripe they are said to be good to eat.} The Chañar growing
at times to be a fair sized tree being
a grand plum like drupe. An eight-sided
columnar cactus four or five feet tall was
common. The openings between the
trees were covered with a bunch
grass bearing a fluffy seed head.
The grass of this grass but cover
the ground on all sides with
the arches of their stems, a circumstance
that often rendered it difficult to find
birds that fell in fairly open places a

they dropped through the soft stems of
the grasses and lay matted below.
The beds of sandbars were abundant
everywhere on the ground.

The soil here was loose and sandy
and everywhere was extremely dry.
The roads were extremely treacherous.
There is practically no water in this
camp at all at present.

One of the first birds that I shot
was the handsome crested yellow
grosbeak ^{*gubernatrix cristata*} that sang its cheery song
from the tops of other trees. The
plant-creeper (*Phylloscopus*) was abundant
and I heard its strange squawking
from all sides. The Gold Plover
looked birds were abundant and
frequented the heavy ~~grass~~ ^{grass} ~~in~~
in the Chaco last winter. I found them
in the heavy ground cover of the
Caraguata. Mockers (*M. trichas*) sang
and called all over hand. Hawks
are rather rare and I see no
buzzards. The big woodpecker *Chrysocolaptes*
is fairly common.

The ~~four~~ hours we had collected

so many birds so I could save
for and had made many notes.
At dawn I returned to camp and
was busy until dark at night in
the morning with specimens and
writing. As the rainy season here
comes at nine I had plenty of
time for work.

December 28, Sunday
This morning I went out at
2 in rain in my sulky. The night
had been close and hot and I
found it a welcome relief to get into
the fresher air of the country.
This morning we had two horses
hired in the thick and the other
pulling by a roadside tug attached to a
saddle. I went farther out into a
broad stretch of marsh today.
But found it less interesting than
that examined yesterday. The region
had been cut over in part and
had been burned. The growth consisted
of scattered Calceol and algaroba
trees with many stumps and little

no watergrowth. Birds were abundant
but in smaller variety than
in the thickets and heavier growth.

This wooded area here is being steadily
cleared, leaving broad areas of open
pampas. As the tree growth disappears
the greater part of the present
abundant bird life will go with it,
leaving only those individuals
capable of existence in open country.

I find occasional small lagoon
beds through the prairies but
all now arid. An occasional one
is permanent but is so small
that it supports no water bird
life.

Today I secured a good lot
of birds including one *Chondestes*
maculosa a species that I had
not taken before. A sparrowhawk
dropped onto a tree with bird
in paw, I saw and carried it
off. I shot one *Melospiza melodia*
today but missed it. I judge
that the swallows must have

struck the bird as the head and
neck were entirely gone.

About noon the wind came off
this time from the south east and
I was more comfortable. Yesterday
the heat was intense with a
north wind that I find very
enervating. It has stormed heavily
further west.

December 29, Wednesday.

There were two or three sudden
dashing showers last night and
this morning the sky threatened
overcast. The country is so dry
however that the water that fell
disappeared almost at once. I flushed
by Pintail from a small pond that
I examine every morning for shorebirds,
the only water bird that I have noted here.

This morning I penetrated through
an extensive area of bushy marsh
and found birds very abundant.
Almost at once I flushed three
of the curious *Hydrochelidon*
and secured them with no difficulty.
A trifle later a male flushed

and I dropped him with a
shot from the gun. It had
had four of these interesting birds
was also lucky in securing
specimens of a little brown breasted
finch that I wanted badly a
young mocker recently from the
nest was taken and the same.

The country to the eastward
here is slightly rolling. So the
west it is becoming hilly rising
in grassy ground shoulders or
in barren meadows that
continue as far west as I see.

The Vizcachas is fairly
common. Through the pine
forest here and frequently I
discover their holes. I know them
as Vizcachas. Usually there
are from five to twenty or
thirty holes belonging to one
group within a few feet of one
another, many of them without
being communicating. The openings
are often large and covered

The creatures have the curious
habit of piling on sticks & small
limbs and throwing them about
their nostrances to their homes
and occasionally other odd facts
are encountered also. At times as
I passed I heard a low growling
coming from them but as yet
have seen none of the animals
as they are nocturnal and I have
lacked time to hunt them.

The puma is said to be
fairly common a little farther out
and to do much damage by
killing sheep. Vizcachas are destroyed
by carbon bisulphide.

This afternoon was more
comfortable than the past few days as
there was a pleasant breeze. At
last a sudden rain came up
and 40 millimeters of water fell in
half an hour, with some hail.
Streams of muddy water ran in
the street and the walks and
low places everywhere were flooded.

At the time I was in the "lobby"
of the hotel and by judicious
observation was able to see myself
under a spot where the ceiling
did not leak. As the water
descended in streams I wondered
whether or not my room was affected
but later when the dampness
moderated I found all dry and
clear.

Within an hour a great
chorus of batrachians began and
continued all night though
previously not a one had
been in evidence.

December 30, Thursday.

This morning was cool and pleasant
though later in the day it turned off
hot and sultry. I walked out
early to two small lagoons to look
for shorebirds but saw none. Pools
of water stood everywhere and the
boze surface of silt and mud
was packed hard and firm with water.
The small lagoons mentioned were
greatly augmented in size. I was

interested in noting that the usual
movement of small birds to and from
water here was entirely lacking. Only
a Chimango or two, probably in search
of frogs flew up as I came near.
The other birds now found abundant
in water in small pools scattered through
the marsh and had no necessity to
travel far for water.

At the borders of the lagoons
was a great collocation of small
frogs or rather toad-like batrachians,
head-like in form but with skins
nearly smooth. These were calling
loudly a clear prolonged note
that carried for some distance. Females
were engaged in ~~repeated~~ depositing
eggs and mating pairs were observed
everywhere. Occasional females still
articulated, puffed themselves up with
air and panted about on the
surface. Occasionally one when frightened
would attempt to dive but would be
unable to go below the surface because
of the distended air-sacs. Others more

sensible expelled the air and went
below easily. Yesterday, most were
than water - hangs by, not one of
these creatures was to be found
yet now they were present in abundance
and more, were already depositing
whitened eggs. In a dry country
such as this water disappears quickly
either by sinking into the loose
sandy soil or through evaporation.
There is need of constant re-supply
of water in order to produce young.
One male "fox" that I captured
called continually while in my
hand. The protractor air sacs of the
body were full with air, with
a head ^{expanding} ^{the sides of the body were} ^{inflating}
by compression of muscles, these
sacs soon deflated and the air
driven forward to distend a large
pouch like sac under the lower jaw.
With this ~~same~~ ^{instant} the movement
in croaking call was produced. The
throat sac ^{protruded} $\frac{3}{4}$ inch in diameter
light yellowish white in color & then deflated

I was surprised they in bringing
catalogs and notebooks of St. Luke
and in other similar calls.
About three in the afternoon a
golden heavy cloud came up from
the west - kind to half past four
there was a tremendous down-pour of
rain. Water ran in a swift stream
down the steep, falling to small rivulets
in the sand, and washing up gullies
at least 100 miles and far above the
water into every crevice. The ceiling
of my room dripped steadily. I put
my notebooks and papers in my
dry chest and rolled up my
bedding in the mattress to keep it
reasonably dry. I saw a time it
appeared I thought this might be a time
but suddenly the storm passed and
the rain ceased. Little ranches in
the outskirts of town were inundated
and some were blown over. One of
several whose house stood in a
slight hollow, so that a part of

found the floor and chairs, etc
and other household articles scattered
around like ducks was commenting
The fact that her cage had leaked.

December 31, Tuesday.

Will be out and sleep this morning.
Ponds of water from the rain of
yesterday stood everywhere.
I walked out and saw birds again but
saw no Shrikes at all. The number
of Sialia was greatly augmented.
I spent the forenoon was occupied
in packing some specimens for shipment
and in preparations for departure.
They were completed just in time to
leave for the train.

Hotels here in these small towns serve
no clubs each one with its little following
of regulars who gather in the evening
about six and visit in conversation
over glasses of Vermouth and bottles of
dry Afters Dinner. Meals
here are simple, dinner at 12:00
supper at 9:00 P. M.

I left Victoria at 4:30 with the
Eurocarrit West. At all the little
way stations frogs were heard croaking
and calling. In this region is the
center of a great wood industry
and piles of wood cut in shorter
lengths were seen at many of the
stations while long lines of logs
were marked "strange shments"
for the wood cutting only, a wood
industry ready to be ready as well.
This ~~is~~ industry is located only
between 600 - 700 kilometers from Buenos
Aires only. It is from this wood
brought in ships from San Francisco
via the Humboldt Canal to Buenos Aires
sell in competition with the native
product.

The journey this evening was cool
and comfortable. I sat in the center
until nine and then turned in.

Accounts Current, Oct 1 - Dec. 31, 1920

<u>Debits</u>	gen. exp.	acc. emp.	total.
Expenditures as per abstract	1392.30	55.00	1446.31
Deposits to credit of Treas.	24.97	0	24.97
Bal. now due. U.S.	1045.89	110.00	1155.89
Total.	2462.17	165.00	2627.17

<u>Credits</u>			
Bal. due U.S. from last account	2462.17	165.00	2627.17
Accountable warrants	0	0	0
Total	2462.17	165.00	2627.17

Bal. now due U.S.	Deposit	outstanding checks	available balance
1180.86	2627.17	1446.31	1180.86

Abstract of Expenditures.

1920.			
Oct. 18	7.	A. Wetmore (exp. Oct. 1-16)	211.99
Nov. 1	8	" (Sal. Oct.)	228.33
" 20	9	" (exp. Oct. 17-31)	103.40
" "	10	" (exp. Nov. 1-19)	119.46
Dec. 1	11	" (sal. Nov.)	228.33
Jan. 3	12	" (exp. Nov. 20-30)	80.50
" "	13	" (exp. Dec. 1-31)	245.96
" "	14	" (sal. Dec.)	228.34
			1446.31.

Exchange sheet # 6. 3440, ^{attached to acct. Oct. 16-31, 1920} shows. 1321.85
 Expended to Dec. 31, 1920 1302.34
 available. 19.51

1921
January 1, Saturday.

This morning I was out early to observe the country. I found that the line of the Furocaral beds runs through higher drier country than the Province than the two lines of the F.C. and that I have traversed the country was level to slightly undulating with only occasional ridges in sight.

The hills were green but with the appearance of midsummer as grasses were spring, weeds growing rank. Corn here was in the tassels in marked contrast to that noted near Victoria.

At Siupacha and succeeding stations I heard the familiar rattle of the Condor and from Chivilcoy and on the complaints of Palangus.

Birds here in the Argentine north of Patagonia are abundant, equalling or exceeding the situation in the central Mississippi valley. Many are in sight from the trains as *Larus maculipennis*, terns

Chimango, various blackbirds, Pitangas,
Columbids, Brachyptera, etc. *Zenaidura
macroura* takes the place of the
mourning Dove seen so commonly
with us. Being especially abundant
in dry country.

The pampa however was cultivated
or in pasture. In some neglected
pastures thistles ^{in season} were growing higher
than the backs of the cattle.

My observation is that male
grunting was a tendency to develop a
fulness of the lips near the center,
especially in the lower lip which
often is slightly protruded at parting.

I arrived in Buenos Aires at
10:00 to find a taxi cab strike on
and vehicles difficult to secure. The first
cab I hailed wanted 5 pesos to take
me to the hotel so I took him gently
and secured another for less about
double the proper rate. Registered at the
Hotel Paris.

The air was cool and pleasant a
marked change from the heat I have
experienced recently.

The street of Buenos Aires seem
strangely quiet without their usual
constant double stream of traffic.
For the first time I have heard the
hum of the subway.

Worked in afternoon on quarterly
accounts.

In the evening looked up
Gerardo Fernandez Blanco, Experto en
Libreria, Directorio 4154 bought a
few pamphlets on birds. Rode out
and back in subway my first
trip by that means of transportation.
The cabs were new and clean
and transportation reasonably rapid,
a great improvement over the old
cabs. I bought a ticket for \$12
that punched by a guard at the
gate and then finally gave it up to
the guard where I descended to the
street.

January 2, Sunday.
Day occupied in writing and reading.

January 3, Monday.

This morning I called at the consulate for mail, and was busy with a number of odd errands until noon. In the afternoon I was at the museum from ten to six, and saw a long talk with Dr. Dabrowski. I find that he is now agreed with me that there are many show birds in Paraguay.

Jan. 4, Tuesday.

Called at the consulate again this morning to certify to accounts and then out to the bank to cash some checks. Exchange has gone down a trifle as I secured only 1.29 today. This afternoon I worked again at the National Museum.

Jan. 5, Wednesday.

Packed up alcoholics this morning etc. and was busy nearly all the afternoon in getting part of a shipment to the express office and in calling on some people.

Jan. 6, Thursday.

Legal holiday today "Reyes" and very cloudy. Was occupied all day in writing

studying maps, planning itinerary, etc.

Jan. 7, Friday.

Completed arrangements for departure today. State officials called to see me at the museum for a time in afternoon. They had card approval today.

Departed this shipment of specimens through American Express Co. 6 boxes in lot, including U.S. Hospital agent of pet. W.

The sky was overcast in the evening and several thunderstorms passed with a heavy fall of rain.

I was fortunate in getting my baggage to the dock through the customs, and to board the steamer between steamer. Customs examination was more or less superficial though the inspector was inclined to hold up a dozen rolls of Kodak film that happened to be in top one of my chests.

Left Montevideo at 10.00 in the steamer to Montevideo of the submerch line. A cool breeze blew soft from the east in wind. The sea was calm from the dock. A tea took us slowly and

from the house and out down a
narrow lane with steps being to
look on either side. In a short
time as the morning brightens
made our way out under our own
team until the first street
lights marking the regular channel
was in sight. The daylight's light
slowly and gradually as I still
jinxed our way out of sight.
I then had up a good view and
conspicuous with small but clear
colours, far in pursuit only.

Jan. 3, Saturday

This morning I was out at
six o'clock - the sky clear and the
cool and bracing. We were passing
near a sandy shore with
mountainous hills in sight
in the distance. In our comments
were noted in the water and hills
hours continuously. I had a great
morning and part of the night.
We made a start at 7:30 and
after a short wait my chest

came off and I put my
baggage through the baggage. Here
again the Inspector was inclined to
hold up my pocket film but finally
let it pass.

Hotel were rather crowded owing
to summer crowds from the
continent. I finally secured a room
at the Hotel Colon rate \$1.00
a day which at the present exchange
rate is about \$7.25.

At 7:30 I called on Mr. David
J. D. Myers, U. S. Consul, who I found
did know Hills Beck when he was
stationed at Punta Arenas, Chile.
From there I went to the National
City Bank where I had a letter to
Mr. M. H. Day, introduced myself and
drew some money. Exchange rate
is 1.29 at present which makes
a peso worth \$1.57 U.S.

At four in the afternoon Mr. Robert
W. Jermison, Vice-Consul accompanied me
on a visit to Sr. Federico Alvarez,
author of a little pamphlet on
Exterior de las Aves Arqueológicas, which

is the only publication of any importance
in the fields of this country, and is
published in Uruguay. Dr. Alvarez
formerly connected with the Dept. of
Agriculture here is now retired and
lives at Guayaquini 17.

The address was in a suburb
known as Pocitos, one of the prettiest
quarters of the city, situated only
half an hour from the business part
of the city. I found Dr. Alvarez a
man about 20 years of age
~~with a friendly air~~ This man he
is carrying on further studies with
birds and is accumulating further
notes for publication. I enjoyed a
pleasant hour of conversation with
him and talked with him
and two charming young daughters.
I saw him and learned something of the
country and the laws protecting
birds.

Dr. Jemison took dinner with
me and later on returned to Pocitos
for some of the birds known as
the battle of Flowers.

A section known as the "Pocitos"
two blocks long above the beach
was set aside for his purpose.
The seeds of the broad
leaf were numerous and
were young, leaves and roses,
Kaisias and other flowers at
reasonable rates. The young
collected going to the Birds
Society. Autos passed back and
forth and crowds through the
girls were throwing flowers at
the pretty girls and carrying
long rolls of colored paper!
Many Argentinians and Brazilians
came here for the summer season
which is now just beginning.
The influx of tourists however is said
to be smaller than usual and
Uruguayans are inclined to feel the
blame for the increased loss in
the steamers flying to Montevideo.
As it is noted I am crowded and
not papers are selling double their
usual price.

January 9, Sunday.

His morning after a sound
night's sleep, I went out and
went out in a car to the
outlet of the town toward the
north end. I **Buceo** in
large cemetery I left the car and
went there followed the track
as far as the arroyo Carrasco.

I found just jutting points of
rock, sandstone with dykes of
quartz or quartzite or exposures
of quartzite alone with small
Utricular brachys between them.
The country behind was rolling
rising 30 to 50 feet rapidly and
then more gradually inland. It
was some degree of thickly settled
and some cottages were seen.
Finally beyond Carrasco had a
band of beach alone with a
broad area of sand dunes inland.
Many waters were out near
enjoying the clear pleasant day.
The air was cool and there
was a steady breeze that forced

immigrating. Near the city, then
went out searching the ^{vicinity} of the
by the receding tide in pits of
sand or partly buried *Chitons*.
Large numbers of a small *Chiton* like
brachys but found cast up by the
waves but otherwise shells nowhere
The exposure of white sand showing
clearly.

These broad stretches of sand
beach seemed favorable to *Wagons*
but I encountered very few and there
of two native species, *Asquaticus*
Collaris and *Asquaticus*. At the
mouth of the little stream was
a small lagoon where were
congregated *Puffins*, a few gull-billed
terns, *harporhynchus* and
Sminthurus with many Cormorants.
These gulls & terns were wild as
were a few ducks that I encountered
and I found empty shot gun shells along the
beach where they had doubtless been
dropped by hunters.

The Arroyo a small stream, with
rather swift current came down the

A depression in the dunes exposing
many low sandy bars in its course.
I followed along to a short distance,
looking for hollows but saw only
a few *Beloperla* etc. No *Beloperla*
that I know does not occur here however
the region in every way is suited
to it.

Two I drove out and
returned to a little village to get
something to eat though I had
been greatly interested in the birds
seen. I crossed through the
sandy dunes finding many small
pools of brackish water in the
hollows but no show birds. The
region is certainly known to attract
them in migration.

The sand-dune area here was
broad and extensive reminding me of
that behind Cabo San Antonio in Buenos
Aires. Here however the movement of the
sand had been checked by extensive
plantings of *Eucalyptus* and of *Pinus*
maritima. (Pine with needles in pairs
4-5 in long, cones 6-8 inches, cylindrical)

The little trees seemed to 30 years old
or so and formed dense groves of small
trees, effective windbreaks. These plantations
were scattered everywhere at short
intervals forming attractive bars
in and between rolling and
rather monotonous landscape. These
plantations had permitted the growth
of more or less of other vegetation
Grasses and *Sesuvio*. Among the
latter I noted a curious woody
Cottony bushes upon which
specimens were collected.

Curiously enough, for the first
time since our leaving with
this morning the *Carolinensis* but
was *Carolinensis* gulls and the
common *Pinus* *maritima* both
introduced species. The *Carolinensis*
was in the dunes along the beach
in places where the pines were
scattered in salt water.

I returned to Carrasco where
I secured food at a little hotel
and took a half an hour in the sun

until a motor bus left for town.
The road, well made, Macadam
of our rolling hills that rose
a hundred feet above the sea.
Extensive plantings of Eucalypt
had been made all through
here, living and otherwise
trees landscape.

Materials of fine ^{very}
pleasant city with broad streets,
good business buildings and an
attractive residential section. The
city is built on rising ground
above the water so that it
receives the breeze without
much heat from buildings. The
people appear prosperous and are
nearly all of unmixed white
blood, more so than in Buenos
Aires. American sentiment here is
strong and American are well received
on all sides. Exchange is bad but
still the stores are filled with
American goods.

Yesterday I went to the market
in the town in a little part attended
by D. St. Corallo, eucalyptus, eucalyptus,
China-berry, a vine of the white, purple,
Sumerus and some palms, flowers
and beautiful magnolias with flowers
six inches broad. Young ornamental
flowers were beds of very white, daisy
such as good in the hills of
Kansas, roses etc.

January 10, Monday.
Last night again was cool
and sharp. This morning I
called at the Consulate of mine
and was given a card to Roberto
Bardieri, Director of the Defensa
Agricola, 25 de Mayo, 579. I found
Mr. Bardieri a man of about my
own age, of Scandinavian type. From
him I received much valuable information.
The Defensa Agrícola organized about
ten years ago is active in combatting
pests and hindering agriculture in general.

have talk with him & gathered
what students are interested in
things regarding birds. Although the
lack of published information on
Uruguay is felt.

Received much good information
in the country.

At two in the afternoon I
saw Mr. Myers Consul, who gave me
a letter to Humboldt requesting
permission to collect birds. This
I took to Sandberg who reviewed
it with the minister. By the return
tomorrow. Incidentally he told me

that Antonio ~~de~~ O'Husich of
Punta Ballena in Maldonado had
imported and released many
foreign birds in his estates which
they had become naturalized. This
may become a source of many
extra-limital records later.

This noon I walked through
a market near the wharves or
Calle Piedras. I found no gamebirds

or small birds in sale whatever.
In one corner we were led
to cages where I noted many
kinds Melospiza undulata
and an Arremonops or two
with a miscellaneous collection
of foreign birds including Cardinalis
cardinalis of one of the Mexican
subspecies, Melospiza Long Thrushes &
Surdus merula from Europe, Cathartes
a white Cotinga Cephalopterus, & two
or three others that I did not know,
Paroaria cucullata & P. capitata,
two or three native Phainopepla &
Dryobates pygmaea and some birds
of the Corvus -

In the afternoon I met, Dr.
J. Devicenzi Director of the Museo de
Historia Natural interested in birds.
and his sub-director Arturo W. Otero
Brazil ethnologist.

In one of the plazas this evening I
found a very interesting fountain design
that is quite evidently local work.

The main group in the center of the fountain was made up of three small figures, one upright and two reclining of more or less conventional design. Another prominent feature is the other decorations like the samplaque on one side were a small armadillo, a tamandua and a partly submerged carpincho all finely executed. On the opposite side a jacaré of the slender-snouted species. At the border of the fountain on pedestals were figures of four birds, *Ardea cocoi*, *Cygnus melanocoryphus*, *Cairina moschata* and *Phoenicopterus* all well done. Sturtles half erect surrounding the main figure had water splashing from their mouths. The animal figures especially were finely executed and it was pleasing to note that the designer had chosen as decoration some of the curious types of native animals rather than other usual stereotyped forms of the Old World.

Collection of Museo de Historia Natural Montevideo, Jan. 11, 1920.

Anthus correntina. ♂, Barra de Santa Lucia, Dpto de San José, 19, VII, 1914. a. Remoleras. Above bird is almost black with prominent buff edging on feathers; markings below are bold and navy. ~~throat & abdomen~~ plain. wing tail.

Numenius borealis # 213 ~~one~~ very old mounted specimen marked from Uruguay without the date. ~~no other shorebirds from Uruguay in collection~~
Charadrius dominicus - Arroy. Manga (Mont.) 28. X, 1918. Alberto Remoleras. No other ^{na} shorebirds indicated from Uruguay.

January 11, Tuesday.

This morning I called on Sr. Remeras, whose address is Piedras 194, Malevidas. This house is within a block of the water front with living quarters above a little store. I knocked first, a little brass knob on the door and after a pause a voice called "adentro". I climbed two steep flights of stairs and met Sr. Remeras in a little room that he had arranged for a study. Remeras himself was small, dark of decided Spanish type. A small comb over 40 years of age. He told me that formerly he had done considerable work with birds and that he and his brother had gathered considerable data on the food of Uruguayan birds through actual stomach examinations. In addition much other data had been brought together regarding habits, dates of occurrence and other things of interest. All this data however had been lost, which sometimes during a journey to Brazil had been

met in a small room in building
at Santos. The list of ~~unpublished~~
books as published in a recent
number of El Hornero was made
up of ^{input} I could refer to the
which notes that had been found,
and in part paid rates from the Museo
de Historia Natural where ~~removes~~
formerly had been Subdirector. For
this reason no rates are available
and only the departments are
indicated in the ranges.

I present to ~~was~~ a position
in the Estadística Agrícola, Puentes
621 and ~~is~~ ^{is} working wholly
with insects, being interested especially
in the Carabidae. I gave him Chapman's
name in case he wanted to elude
North American material.

Dr. Armenteros tells me that
in the ~~the~~ agricultural districts
of Colonia and in San José that
there is a very good sentiment
regarding small birds as the ~~same~~
realize that they are of value and
are protected.

Wald called at the American
Legation when I met the Minister's
Secretary as the Minister was not
in.

After noon called at Dr. Armenteros
and went to his office. Went then
to the Museo de Historia Natural
where I spent the afternoon in doing
for later in birds. The building
is located in the business part
of town and is large and
pleasantly accommodations, though
occupied in part by the offices of
one of the local newspapers. The
collections of birds and mammals
are arranged in a long hall well
lighted. ^{Two} Behind this are smaller
rooms containing archaeological exhibits.
A small room at one side contains
a diptera or two and exhibits of nests
and eggs. Office rooms and library
are in the rear. The library seemed
to be quite extensive, though far behind
that of the Museum in Buenos
Aires which is considered the best in
South America.

The collection of mounted birds
occupied 10 cases or so when
the birds on stands at T boxes
were arranged on glass shelves.
The collection was fairly representative
covering ~~770~~²⁵⁰ species or so. The
arrangement was fairly good and
the exhibits were not crowded. Labels
gave scientific and common names
with a system of colored bands on
the labels indicated the part of
the world from which the birds came.
I saw many from Europe, all very
old. Birds coming from Uruguay
had a little rubber band pegged in
the Uruguay flag stuck in one
corner of the label while data was written
in the other of the sheet. I noted
a white-breasted Cormorant taken
below Montevideo during winter and
is barely possible that I saw one
myself on Sunday as I saw what
appeared to be a white-breasted
Cormorant far out but could not
make it out for certain. Most of
the birds were properly named.

The species numbering is numbered
or so from beyond in the cases of
the exhibition cases. Most of them
had been sealed up in paper &
kept out the weather.
At last I went over town &
made a few purchases. Was fortunate
in securing a copy of a Vocabulario
Rioplatense, Uruguayo by D. O. Gamada
published in Montevideo in 1870, price
2 pesos. This contains much local
names of birds and animals. Also
secured title of a
Diccionario Geografico del Uruguay
by Cresto Arago, Montevideo 1900
Diccionario Geografico de la Republica
de Chile by Francisco Solano Asta-Barnaga
& Cienfuegos. Santiago de Chile, 1899.
At last I called on Mr. D. J.
Wilson and talked with him regarding
various parts of South America.

Jan. 12, Wednesday.

This morning I worked for a time on notes and some letters. Shortly after eleven I called on Dr. Sumburg to learn that I should have to take other measures in order to secure a permit to collect birds which meant more delay.

Through Mr. Myers, Consul I made appointment with Mr. Jeffry, American minister which is as far as I could get today.

Was occupied this afternoon in writing and in studying some notes on shorebirds, proof of an article by Habbema for El Homero.

Jan. 13, Thursday.

This morning at 10:30 I called at the American legation and met Mr. Jeffry who took me to the office of the minister of Foreign Affairs, Dr. Buero where I presented a letter from the Uruguayan minister in Washington and through the secretary Mr. Baralge made an appointment to see the minister

tomorrow. Took a day off public audience when the Ambassadors were calling so that it was impossible to get ordinary naturalist. After dinner I worked for a short time on some letters.

Yesterday I cabled Dr. Chapman that I did not care to accept his offer of the position of ornithologist in Acereval expedition in the far east. The salary offered \$3500 a year was a good one but it would entail too many sacrifices in other lines.

Late in the afternoon I went out to the zoological gardens remaining until dark. ~~But~~ But car service here in Montevideo is very good for Latin America. The cars are small, but are fueled rapidly and run at frequent intervals. The fare system of fares is in force of 4, 6 or 8 centesimos according

to the distance travelled. There is not much regard to steps however and I find that usually I have to get on or off with the car in motion.

The zoological gardens are located in what is known as Villa Dolores, a tract of ground of fair size toward the outskirts of the residence section. The park is in the nature of an amusement park as well as a zoological gardens. Masses of artificial rock work have been built of cement stucco over frameworks of iron covered with wire netting. Paths lead over these through grottoes and over series of steps. In one glass enclosed building was a display of spring-jointed Mammals, two of them kept going by an attendant in charge. These represented everything from birds to life size human figures.

One *Ramphocelus* had been mounted in a cage with mouth open. When in operation it turned the head from side to side, twitched the tail and agitated an artificial tongue while it emitted a regular intervals a sweetly tinkling musical whistle that while pleasing was hardly to be likened to some small toy whistles to be heard.

The exhibition of birds was really fine. Several large outdoor aviaries had been constructed enclosing cherry, mulberry and native fruit trees and others that gave dense shade. These were filled with birds that had come and a sense of security and lived there more or less in seclusion in great contentment. Branches of grass topped with corn on the ground but still it was possible to observe the captives without great difficulty.

And one enclosure was three or
four golden plovers that whistled
occasionally at intervals, and an
equal number of buff-necked snipe.
Hens were well represented as
noted Syngnys, Casmerodius,
Leobachus ludovicianus, Ardea coccy
and Mycteria mexicanus.

There were many pheasants among
them a fine teal, and in
another enclosure an assortment
of Amamus, many Mycteria maculosa,
a few Notoprocta and a little band
of Crypturus that ran about with
murmured trilling notes.

Ponds harbored Cygnus melanocoryphus,
Phaenicopterus, Ajaia, Fabius, Exocentrus
and a few ducks. Fabius, Chijas,
and Phaenicopterus call frequently that
had escaped from the pond. I saw several
at will about the place. I saw several
part of the ground. I saw the cays
which hawk, Corsus and the
with a company of sea-lions

was a band of Peris dominicus
one of which came over with
crying notes and landing had
the sole duty to black-sheep fall
in the washing in zoo. With
this was a pair of Spheniscus
maculatus that had been a
while so that the surface of
its plumage was wet and
was not engaged in working
the water out of its feathers.
I noted in this bird which was
within a few feet of me that the
supper opening of the eye was
perfectly closed and that the
membrane, which was clear
and transparent so that it evidently
is used as a protection to the eye
in diving. The bird found the
feathers of the throat by gently
pulling them over the roughened
upper surface of an wing.
The display of small animals
was representative but less attractive
than the birds. They were

Distributed in small pens
arranged in rows with little
better houses made of canvas
many in form of funnels,
acrobatic stands or in fantastic
designs.

I was interested in watching a
pair of bison and in their
Horn Elk. A fine bull elk had
the great pair of perfectly formed
antlers, still in the velvet but
about ready to strip. The change
from north to south has affected
his development curiously. Uprights
were represented in rather small
numbers probably from lack of
suitable room. Nearly all animals
were in small outdoor enclosures
when they evidently remain
throughout the year as the
winter is not severe.

Sanitary conditions were excellent
as the ground was sandy and
well drained. Water in the

ponds was not with green
algae and this was from Elk
I believe a member of the city water-
I understand that this is a
magnificent lake.

All the evening there was
an exhibition of trained animals
in a little ring with a few
circus seats for spectators. A half
young children without performed
for several minutes during which
sheants puffing a huge pipe
and blowing out the smoke,
which indignity she resented by
trumpeting loudly. This
was followed by trained ponies
with a manly dressed as a
gencho, poncho, rawhide rope, etc
riding on.

The place seemed to be to afford
an amusement place as well
as an exhibition of animals.

I occupied some time in watching
the birds in the more retired places
of the park.

January 14, Sunday.

This morning at about 8 o'clock
I called at the office of the Foreign minister
and after a wait of an hour
saw him and explained my business.
He will give me a letter to the minister
of agriculture, which may get me
the needed permission to collect.

In the afternoon I attended to
a few letters and then went out
to the Prado, a large park in
the outskirts of the city. A
tract of rolling ground along
a small stream has been
planted in trees making a
fine resort with pleasant walks
and shaded benches. There have been
bought from everywhere through
the country's predominance. I
saw Casahuate with many native
trees and a few oaks and
hackberries.

Birds were fairly common but
were of few species. *Bombicids* and
Columba *juv.* were abundant with

Many English Sparrows. An occasional
Whitely Flycatcher, *Thalassidroma* ~~or~~
Verreauxi Flycatcher which 'Phaeoprogna'
taurus circled over the grounds.

January 15, Saturday.

This morning shortly after ten I
called at the office of the Minister of
Foreign Affairs. When after a short wait
I was given a letter to the Minister
of Industries requesting that I be granted
permission to collect birds. I had
to see the latter gentleman
and succeeded in bluffing a couple
of underlings who wanted me to turn
back not with into presenting my
card. The minister told me that
what I wanted would require a special
decree and that he could send it
to me on Tuesday next. He requested
that I send copies of any thing that I
published to *El Espectador* to which I
readily acceded.

Called at ~~the~~ *ambassadors* office but
found him out.

Called next at the office of the Consul
and conversed for a short time with
Mr. Myers.

In the afternoon I went for a
short time being then, we again
to the zoological gardens where
I met the Director Dr. Carlos A.
Torres and his assistant Mr. Bramos.
I spent a very pleasant afternoon
in going over the grounds with
the director and established very
cordial relations with him. He
told me that the grounds have
been under municipal management
for only about a year and formerly
the place was privately owned
amusement park which accounted for
some of the curious effects. The
post of Director is merely an honorary
one as it carries no salary and the
Garden is dependent largely upon
Receipts for entrance (entrance tickets
10 centavos, children 5) The force of
guards & caretakers numbers 35. New
buildings for antelope are being constructed
& other improvements made as rapidly

as money is available. The director
is anxious to enter into friendly
exchanged relations with the gardens
especially with ours at Washington.
I promised to take the matter up with
Hollister. Dr. Torres has two female
buffalo and is especially desirous
of securing a male. He has tried to
get one from Holland, but failed. He wishes
to exchange one even offer the
april-born among the animals.
I noted that in a collection seen
with some velvet had been mired
shed while in the European region
the antlers were about as in the
sk. These animals had dropped
their old horns in September & October.
The elk have from here 10 years and
are in perfect condition.

I found Dr. Torres very entertaining
and we discussed many zoological
subjects over a cup of coffee. He used
a physician by profession and had
served on the Faculty of the University

He told me that Dr. Baccinzi
Director of the museum was also
a physician serving without pay in
his capacity in the museum.
He told me of a report to introduce
the mongoose in Paraguay which
he described the dangers of such a
proceeding at which he was greatly
alarmed. I mentioned Plumbers Island
and was busy describing the club
of its aims for half an hour. Galt
was much interested. I have promised to
send him some publications.

Some of the specimens I found interesting
in the sections of *Procyon* individuals of
Crypturus tatanpa. As I approached
the bird crouched among some leaves
with the head away from elevating
the posterior part of the body until
the head was cascaded below it. At
the same time the tail and
feet counts were expanded so
that the whole movements in the
air were almost jerkingly. The
whole resembled a bird of prey
to cover with feathers. The bird
obtained this position for four minutes with
noisy!

January 16, Sunday.

This morning I was out reasonably
early too early to get coffee at the hotel
so went out to a dirty little
bacteria nearby. On my way stopped
in at a fruit store and bought some
apples, 2 for 25 centavos. They were
West coast fruit, selling here
for about the same price that they
brought last year in Washington.
The fruit was in excellent condition.
I rode out to Union and then took
a bus for Carrasco. From the hotel
I walked in some along the beach
crossing the Arroyo Carrasco and
continuing farther down. There were
many more people out today than
a week ago and I found the beach
rather frequented near the hotel. Lower
down there were few people but I saw
rode along at intervals. This had
tended to drive the birds away. Black-
backed gulls and cormorants were
common and I saw cormorants and

Salkhad. Several birds could find no
other show birds. Picked up a dead
Strucous teal and kept the skull.
Also saw one dead Larus dominicus
there was quite a bit of shooting
going on today. One man fired
several times at Black-backed Gulls
with a high power rifle. Finally
he shot at him as the ~~bird~~
rather close to me. I saw other
men with a shotgun and several
were shooting at marks with small
rifles. The guns however were all
I carried concealed.

On the back I found several
dead cutfish of various types. The
bony covering of the head extending
back to form a support for the
large dorsal spine. Along each
side of the body was a row
of strong bony plates each with a
black-like dorsal spine. The
pectoral spines were strong and bony.
I kept two as curios.

Subant. Along the beach was a
road area of grass and sand. Through
that sandy sedge that had a great
succulent footed leaf I saw
a great concourse of small fat-tailed
Cicadas ^(Protona) that were just emerging.
They flew up on all sides and
peeped with loud rattling
articulation and buzzed swiftly
and natively away to deep foliage
into some cover. Many structures
were flying in them. I saw
and I took rolled pieces of them
at every opportunity and through the
cicadas were as big in body as
this captures flew away with them
easily. Thirty chumungos were
found in one band swooping over
the vegetation after the insects.
While as I walked along grass
bushes, Martins and Fork-tailed
Flycatchers circled about almost
within reach of my insect net
eager to dart at the cicadas but
I frightened up as I passed.

I returned through the dunes
through a series of barchans
and finally crossed the river
again & follow it back inland.
Bellus rufipennis called and
collected from the rocks, a jackass
got out with a croak and four
big egrets passed overhead. Along
the stream I found minnows (*Gambusia*)
Columbids, many Collared Plover and
 terns. After wading about
through the dunes the stream
led into higher ground, becoming
deeper. Willows line the banks
here in addition to plantations of
Pinus muricata & *Eucalypt*.

Picnic parties were encountered
along the stream and in the
groves near the road. Some may
be called a nest but secured only
eight or ten big *Cypripedium* 8000 miles
long known as *Boya*.

At three I went over to Carrara
and secured something to eat. The

sun in the past was intensely
hot today and I was glad to rest
on the shade. Later I went down
to the beach and found a seat on
the sand where I could look out
over the water. Black-backed gulls
and *Trachurus* terns passed at frequent
intervals. In some rocks just off
shore four or five sea-lions had
hauled out. In sections they were
similar to ours.

There were many ants here in
the sand and I amused myself
by jumping them lightly in the
fine rain. They seemed to
have little sense of orientation as
usually instead of coming straight
up to the surface they appeared
two or three inches at a side
having dug along more or less
parallel to the edge of the sand.
At six I took a brief tour.

This time followed in along the
beach during a fine view of the
water and the evening sky. I
saw a flock of *Agelaius* at the

The route followed from Positos to
Parque Roco where there was such
a scramble of passengers for the
return trip that I had difficulty
in getting out of the car.
Being unable to enter the water
adjacent to the bathing beaches
then so that I had to cut across
to by the water.

Jan. 17, Monday.

Reported on notes, prepared an
expense account covering expenditures
in Argentina many up to my arrival
here and cleared up some other
detail. A note from the paper
says that my request for permit
to collect will be granted this week.

Jan. 18, Tuesday.

Working on detail of various notes
have notebooks about cleaned up
now and correspondence practically
up to date. Was supposed to receive
a letter from the Dir. of Agriculture today

From La Manaña)
N. Navides Wray
- w. 16, 1921.

Los pájaros de emigración

Solicitud para casarlos

El señor Alexander Wetmore, director del servicio biológico del Departamento de Agricultura de Washington, se ha dirigido al Ministerio de Industrias solicitando autorización para cazar pájaros de la clase de emigración, con destino a las colecciones que aquel instituto posee.

La autorización a que se refiere el pedido del señor Wetmore ha sido objeto de un tratado especial entre Norte América y el Canadá, no siendo difícil que a nuestro país se le proponga igual temperamento.

En la semana próxima se dictará resolución concediendo al señor Wetmore el permiso que solicita.

but it did not
arrive.
In the afternoon
I went out to
the Zoological garden
once more
was much
interested in
the notes of
Chasmorhynchus
nadicollis the
Herrero. (Bird size

of a magpie but
with short tail. Plumage white save
for primaries & secondaries with a slaty
gloss with greenish. Throat & lores bare
save for filoplumes greenish blue (under).
The bird sang on a age in a little
arbor and attracted my attention
by its odd note. For considerable
interval it gave a single loud call
that in the way resembled the stroke
of a hammer on a thin plate of
steel. At times this was varied by
a series of shriller more rapid calling.
At a distance these were not unpleasant.

but near at hand. soon shrill and
piercing from with an abruptness
and vigor that was almost inspiring.
I don't believe that I should catch it
if I were in the house.

In giving the first note the bird
opens the mouth slightly, inhales
and then gives the belonging note
at the same time opening the mouth
widely. As the note is given the
upper breast just over the furcular
spring swells suddenly, pulsates and
then drops back to normal. The
shrill repeated was accompanied
by an evident swelling ^{of the same part} with each
note. Evidently the sterno-tracheal
muscle came in play here in with
an up and down movement of the
trachea.

Another interesting thing noted
was that several adult male
wood ducks were in full eclipse
plumage.

A small hornigero, ant eater
was searching busily for food over
the lawn. Finally discovering an

ants nest it worked assiduously for
fifteen minutes. ~~Working~~ with it was
in the soft soil and at intervals
tearing open new earth with a
single stroke of one of its feet. The
tapir worked steadily. The animal
was preoccupied by its search for
food and paid no attention to guards
or gardeners who were within
reach enough to touch it.

Jan. 19, Wednesday.

This morning I called at
the office of the minister of Agriculture
I saw his subsecretary. Evidently
there is some hitch in the matter
of the proposed decree after doing
some explaining over the telephone he
sent me over to the office of
the minister of the Interior where I
met his subsecretary Mr. Vazquez after
some conversation I was told
that a letter to the Police of the
island would be prepared and would be
put in my hand on Friday.

worked in the same accounts and
sets in the P.M.

January 20, Thursday.

This morning I went for a time
but they called at the consulate
for mail.

In the afternoon I went out on
the water. Went at Punta Carretas below
the city. The coast was rocky
and with points of rock projecting
from the water of the shore. I did
occasional searches over the stones
occasionally flushing a cicada or
some other insect with wasps
with anxiety and captured.

Noted several a flight of
gulls (*L. dominicanus*) passed over from
the west travelling along the
coast to the east. These large
gulls are more common than I
would suppose.

Extremely hot today but cooler
this evening.

As I returned I walked along

A line of drift and limestone
blocks of several tons & a corner
split & unmineralized. Possibly they
had been killed by striking the
light on the point beyond.

January 21, Friday.

This morning at ten I called at
the office of the Minister of the Interior
and by noon had a letter to the
Chief of the Police of the Uruguay asking
them or rather directing them to aid
me in my work.

After noon I called at the consulate
for mail and then went on out to
the National Library. This I found was
located in a wing of the University
a large building, closed now for the
summer season. The library had a fine
assortment of books and I found
several things of interest. Met Mr. Arturo
Searce, Sub-director and talked with
him for a time.

The library was closed for the month
of January to permit cleaning up the
books but I was given every facility in

in examining books.

Returned to town at six, made a few final purchases and then spent the evening in writing.

Although I have seen wind at theabay I have had here I have enjoyed my stay in Montevideo very much. The days here have not been too bright have been unusually cool.

I consider the Uruguayans ahead of the Argentinians in progress. Strangers here are treated with more courtesy though there is a tendency to overcharge them heavily on the slightest occasion. All hotels raise their rates during the summer tourist season and the landlord here at the hotel is vexed because I will not allow a roommate.

Dr. José del Pezo Blanco - Focas de la Republica O. del Uruguay - Granada, Tip. lit. Paulino Ventura Traveset. Calle de Mesones, 52, 1911, ~~pp~~ Royal 8vo, pp. 1-28, 20 half tons.

(Conferencia con proyecciones luminosas dada en la Real Sociedad de Historia Natural, Sección de Granada en Abril de 1909, y en el Ateneo de Montevideo, en Septiembre de 1910.

An account of the sea-lion found on the shores of Potosí, Castillos, Cornilla y Hobos on the south coast of Uruguay. Based mainly on a visit to Hobos. (Between 1896 and 1908, they have been killed 20,694.

The animals visit the islands in the period from December to March, the lobo de mar arriving first and later the lomo de mar. lein marino (O. jubata) known as Lobo peluca. Also marino (O. ursina)

Hunting begins in June & ends in October.
During the winter season the animals
come ashore for shelter during heavy
storms.

Anales del Museo Nacional de Historia Natural,
~~1897~~, pp. 13-27

C. Berg.

1894, pp. 13-27. Descripciones de algunos
Hemipteros Heteropteros Nuevos ó poco
Conocidos.

1894, pp. 187-212

Figueroa, A.H., Enumeracion de los
Mamíferos.

lists 53 species with notes on
Distribution.

EXPEDICION CIENTIFICA A LA TIERRA DEL FUEGO

Plan de los trabajos

Mañana debe partir por vía Montevideo a Punta Arenas la expedición científica que bajo la dirección del profesor Dr. M. Doello Jurado envía la Facultad de Ciencias de la Universidad de Buenos Aires a las regiones australes del país. Es esta expedición la primera de su índole que con carácter oficial se realiza entre nosotros, y ya tuvimos ocasión, al anunciarla, de decir cuánta era su importancia. Se trata de aportar a la ciencia nuevos datos, de conocer el país, y de todo ello nada extraño sería que resultara el descubrimiento de nuevas posibilidades para la industria y el comercio argentinos. Como orientación educadora no puede ser mejor, ya que el estudio versa sobre lo nuestro; que resulta un poco depresivo que a veces en nuestras aulas pueda hablarse detalladamente de lo francés, inglés o alemán, mientras lo propio, tan lleno de interés, permanece entre sombras. La expedición científica de que hablamos realizará en este sentido gran obra patriótica.

Punta Arenas, según el plan de trabajo, será la primera estación donde se harán colecciones y observaciones de zoología marina y de geología; de allí la expedición partirá para Ushuaia o Río Grande de Tierra del Fuego, donde deberá encontrarse con un transporte de la Armada que, ya autorizado por el Ministerio de Marina, llevará a los expedicionarios a las regiones vecinas, en las cuales los más importantes estudios versarán sobre las condiciones físicas y biológicas de aquella zona. Naturalmente, estos trabajos se documentarán con colecciones de los animales del fondo y de la parte litoral, y en esta materia prestará muy señalada colaboración el personal del Museo Nacional de Buenos Aires, que va agregado a la expedición.

Las autoridades chilenas han sido informadas por el Ministerio de Relaciones Exteriores de la partida de esta expedición, y el cónsul general de Chile ha dado a los naturalistas argentinos toda clase de facilidades para el mejor cumplimiento de su cometido.

Según se nos informa en el Gabinete de Zoología de la Facultad de Ingeniería, la expedición dedicará especial atención a los fósiles terciarios de Magallanes, para completar los datos paleontológicos y estratigráficos de los terrenos cretáceo y terciario de aquella región. El Dr. F. Pastore realizará en particular estudios petrográficos y hará las respectivas colecciones.

El plan de trabajo, a lo que puede deducirse de esta rápida síntesis, es de gran importancia y de indudable utilidad para lo futuro. Van los expedicionarios movidos del amor a la ciencia y de patrióticos sentimientos, y no se les oculta que un viaje de tal naturaleza ha de ser abundante en incomodidades.

Desearíamos éxito; cuando cesa de aquellas regiones cunde el desorden y la subversión parece imponerse, bueno es que una expedición científica argentina vaya a decir que el pensamiento consciente del país no incurre en los abandonos que por otra parte se lamentan.

Jan. 22, Saturday

This morning I forwarded my baggage to the station central and pushed to town. I found the station a large structure well built but with a lack of guiding signs for the strangers. After spending about 15 or 20 minutes I finally located the ticket window and secured a ticket. Excess baggage is even more expensive than in the Argentine. But the allowance on a ticket is only 20 kilograms.

I found the first class coaches small but clean with comfortable seats. The train left the Ferrocarril Central del Uruguay at 9:10 and after the many variations always I found myself ~~about~~ in my first real field work in Uruguay with a feeling of lively interest for what was before me.

The train circled out past the bay allowing a fine view of El Cerro in the clear morning air with the bay in front of it. The way then turned

and gradually swung around to the southwest and then to the east. A rain last night had laid the dust so that travel was comfortable and easy. Although the air was hot there was a good breeze. The train made good time travelling 30-35 miles an hour at times.

The country toward was rolling, with fields and pastures green with grass. The general aspect I was that of eastern Uruguay and that the soil was thin underlain by conglomerate rocks that outcropped at frequent intervals. Fields of corn and potatoes alternated with pastures. Houses of mud with straw roofs were abundant. Corn varied from a foot high to that in the ear. I saw corn growing in small tracts now at this late season. I saw many ~~and~~ used in contrast to what I have noted in that part of the Argentine below the Chico.

Although green and pleasant the grass and vegetation in general was

beginning to show the brown of
late summer.

Large cuts are ground here and
saw the factory.

Melospiza *beulayana* were abundant
and from their color brought to the
spiral wood.

At Belmar de Esch we
approached a line of hills. The Sierra
de Minas, rising abruptly with triangular
outline. The lower slopes were covered
with gullies containing low thickets
of brush. Higher the bare rock was
frequently exposed and the slopes
were barren. The general appearance
was that of the Sierra de la
Ventura. Small streams flowed
in the gullies.

Birds were common. *Columbids*
had nests in the cross arms of
telegraph poles at frequent intervals.
Alcedo *parvula*, *Merula* *leucophaea*,
Strickus, *Columbula* *picus*, *Belanopterus*
and *Chimangos*, *Brachopiza* and
Eucalis *arvensis* were singing in
the little chert.

The train arrived at San Carlos
at 2:50 P.M. and I made a rapid
change to an auto for Pachuca. I found
with a Ford truck driven to one of
my two field clubs.

San Carlos was a small place
with some bushy arroyos near
by that looked interesting. The
road away along was rolling
hills frequently giving alternate views
of more level country beneath.
Arroyos were filled with thickets
and occasionally these extended
on the slopes of the hills.

The soil was poor and stony
and was used mainly for pasture for
sheep and cattle.

Birds were fairly common. I shot
white throats, *Merula* *leucophaea*
and bands of terns, sometimes 30
together gathered in little arroyos.
The country was well watered by
shallow streams of clear water.

Arrived at Pachuca at 5:40 P.M.
Registered at Hotel Arrate.

Jan. 23, Sunday.

This morning at eight I left Rocha via the short line of railroad for a day at the port known as La Palmar.

Rocha is a city of about 12,000 inhabitants well laid out with fairly broad streets paved with stone. The town lies in a broad valley with low rolling hills around. Larger ranges of low mountains are in sight to the northwest. The country is sparsely planted in the main save where plantations of Eucalyptus have been set out or where dense thickets of thorny brush mark the valley of some small arroyos.

The railroad from here to the port is a government project and it is now proposed to build a line connecting Rocha with San Carlos. The town is the most important in this section. The houses are of the usual type of brick covered with plaster and in most cases crowded together.

The hotel which is excellent is on the main plaza.

The train with a small crowd of pleasure seekers aboard left at 8:00 and straggled slowly along a meandering track toward the coast. The country continued rolling and open down to the coast. The soil was thin and rock exposures often with strata absolutely vertical were frequent.

At the coast itself there was a narrow beach area with a fine sand beach in part against which long breakers upon rolling. There is a small settlement of summer cottages and a hotel. A very good place for a vacation. I was tempted to come down here for a few days but decided finally that I could do better further on where I would be free from annoyance from the sea.

The train arrived at 7:30. I found a small circular bay almost covered by projecting points with only a narrow passage leading into it. A second smaller harbor had been made at one side by building out the projecting point with large blocks of cement for a distance of 100 or 300 yards. It had been told that there was a better bay here than at Montevideo and I was surprised to find it so small.

I walked east following the line of hard sand at the water edge and eventually went as far as Ceberras where there was a second small summer resort on a projecting rocky point.

In the protected portions the sand beach was broad and sloping, elsewhere, where exposed

it was steep and often abrupt, apparently. The sea comes in here with tremendous force during southerly gales. The breeze blew steadily from S.E.E. all day indicating pleasantly a heat that otherwise would have been intense.

Small arroyos cut through clay deposits to a depth of 20 or 30 feet all this month found some the dunes with broad sloping mouths. One of these was grown with thickets of brush and I followed it back, until it broke up into small gullies in the rolling country behind.

On the wind swept entrance the thickets showed the sloping exposure usual in brush swept by the trade the tops being bent down until the surface was as smooth and even as that of a carefully clipped hedge. Six or eight

shrubs most of them with
their rainy branches were sapanted.
With them was a candelabra
cactus like cactus bearing spines
with branching ferns and in
climatic. The ~~barro~~ ^{barro} ~~plow~~ ^{plow} was
sown with closely cropped
green grass broken by herbs
or narrow channels of water.
Round a turn at the
entrance where there was little
flow with steady winds small
birds appeared in abundance
herby & flycatcher, quiras, Zenaida dove,
a small *Sporophila*, and *Tanagra*
macrurus were common. The
latter was abundant. The latter built
its curious nests on the sides
of the clay banks where they
might pass unnoticed as construction
was of the small material as the
birds themselves. I shot my first
specimen of *Stephanothra* *delimitata*

an immature bird but in
good plumage. I was much
interested in examining the curious
structure of the inside of its
mouth (see notes).

All of the thickets were ~~about~~
impenetrable save where trails
led through because of the spring
character of the brush. Small birds
dwelt in these thorny masses of dense
growth in great thick without
the leaves I was then forming heavy
shade while the thorns afforded
protection. Doves and flycatchers sought
open limbs shaded just above
where they might rest in comfort. *Brachyia*
fed in the open grass as did
the quiras.

Returning to the track I explored
a smaller lateral arroyo. As I
came suddenly around I saw
the corner of the gully, I surprised
a big *Speotyto* *ret* resting on one
foot. When the sun struck me the side

of the great carcass of a horse
half submerged in a pool of water.

Returning to the beach I
piled up the loose blades like
scraps of a fungus in the
highest line of drift. Casual
search disclosed other bones and
I continued to find many
carcasses of *Opheosaurus mykeltianus*
collected a complete skeleton and
a good series of complete skulls
as well as many single bones.
The creatures had evidently been
killed during some heavy storm
last spring.

At one small pool of surface
water I suddenly spied other signs
of shore birds and was delighted
to identify a Golden Plover. True
pleased in fact I than as if I had
discovered some unknown species.
For the past month I have
expended considerable effort in
looking for migrant shorebirds

without success so that the
pleasant encounter was a pleasant
one.

Near Pedreras I worked up a
small gully searching for water
and found a small hole of
fair quantity.

I then ran upstream walking
along the drift and collecting
sticks and bones of *Opheosaurus*.

A tubinarian bird of the size of
a shear water, sooty grey in color
with a lighter shade across the
ends of the primaries flushed in
one small bay and flew with
steering flight directly out to sea
dipping up and down over the waves.

The train left at 4 and I
reached Rocha again at 5:10.

Could get my specimens at once
and prepared my baggage for a journey
tomorrow.

The Plaza here is much frequented
from 7 to 8 and again from 9 to 11 in
the evening.

January 24, Monday

A Ford car came for me at
seven this morning and at 7:15
I had my luggage aboard and
was off.

The morning was cool and fresh
with a fresh breeze. Thus far
I have found the summer weather
in Southern Uruguay very pleasant.
As the land is landlocked by a friendly
ocean. If this same wind blew
in winter however it must be
very disagreeable at times when
it is cold.

The road led across the
usual rolling country of this
zone. In Rocha itself I saw
Chusquea, apparently the same species
as that found in Washington. Was
in full bloom. Saffron in gardens
and also in blossom. The ground
was green with a grass
having a further proof that
had turned brown in the

summer sun. The general appearance
of the country was that of *Chusquea*
both in August or early September.
Occasional small tracks were planted
in corn but most of the country
was used for grazing. Sheep and
cattle were abundant but I did
not see the fine horses abundant in
the Province of Buenos Aires in the
Argentine.

As we left Rocha the country became
more thickly settled. Although houses were
scattered over the rolling hills.
Usually they were small structures
of brick covered with white stucco.
Some of some commanding hill
houses were constructed
of mud with thatched roof.
An occasional arroyo containing
water was found with dense thickets.
Eucalyptus groves were more frequent
than further west and the country
was open

found a bill of wood of green
of the Broad Legged Kingbird
Cassidix. I on this point
the a heavy headed bird was
common in the place forming
groves.

Arrived at San Vicente at 11
and went to a hotel.

There is considerable hunting
going on through the country now
in spite of the fact that this is
the closed season. I note that
cartridges & tumblers after have
shotguns with them and yesterday
saw one attempting to get a shot
at some doves. I see frequently
when some edible bird has been
killed.

In a store in Rocha are
displayed with single barreled
shotguns of American make (Winchester
I believe) of 9 millimeter calibre for
use with center fire shot shells that
can be reloaded. These are for use
with shooting small birds and
are similar to small bore

shotguns imported from Europe.
The shells are of two boxes 9 and
12 millimeters and are in especial
vogue in the north of the Province of
Buenos Aires.

Hunting in the back districts that
I have covered is about as it is in
the mountain country in the state.
More or less game is killed throughout
the year by persons resident in the country.
This afternoon I called at the Police
station and explained my business to
the Comisario. He gave me a card
that I might present if occasion demanded
it. I talked with him for a time
in order to get some information regarding
the country.

Reloaded some empty shells later.

San Vicente is a village of about
fifteen hundred inhabitants situated on a
rolling hill slope above an open valley.
The houses are small and are
crowded out to the incans rocky struts.
The hotel is a very fair one as such
things go in the country.

Afternoon with notes and specimens.

January 26, Wednesday

Heavy rain fell during the greater part of the night: this morning the sky remained overcast with fine driving mist in the air. After watching the weather for a time to see if another downpour was coming I went out east of town. The clouds remained heavy until noon but only occasional sprinkles of rain fell so that I had no need for the raincoat that I carried along.

The road followed wound along the top of a hill and then descended to this side. The track was washed and galled badly. About a mile and a half out I struck down through the fields to a large pasture that formed a dense forest in a broad level valley.

The pastures were closely cropped by cattle and sheep: not individuals

I encountered a little patch of corn or grass. The small gullies surrounding water but the country is so well drained that I had no difficulty in getting about in spite of the rains that had fallen. Small plots were frequently flooded with water; I looked carefully along these for shorebirds but failed to encounter any save a few *Belmontia*.

The pine forest was of great interest: the trees grew from 15 to 30 feet in height with heavy trunks 12-24 inches through spreading at the base. The trunks were rough in many cases from the old adorning bases of petioles of fallen leaves. When these had broken away were smooth areas. Below the dead was a halving area six or eight feet long where the petioles still accrued in abundance. The trees grew many ferns from creeping root stocks (see specimens).

Above was the crown with
long stemmed leaves bearing the
in either side of the main rib.
These palms bore a small
nutlike fruit in clumps from
a stem ^{2 or 3} in diam
having recently burst their sheaths.
Walking was easy as the ground
was level and had no patches
so that it was entirely good though
in the densest growth the trees
were found to be 30 feet apart.
The uniform size of the trees was
remarkable. I saw that cattle
& boys are used to milk and
that a bark is extracted from
the fine part of the trunk.
The ground is so rich the trees
grow very low and leaf reaching
only 4 or 5 feet. A lizard
appeared evidence of being killed
in wet seasons. Sub. white was
found near the surface. Everywhere
the ground was impregnated by the
urine of a crayfish.

Birds were present in large numbers.
The birds were in several specimens
and in pairs or groups. They were
seen to be with the calling
birds a number of species, which
(*Chrysomitris* or *Myiophobus*) called
called from the palm trunks and
a number of *Basileuterus* perched
lightly on the top of the palms.
Chimangoes circled overhead curiously.
A red-tailed flycatcher flew gracefully
before me and *Polioptila* *alpestris*
& *Sceloporus* *polygama* chattered among the
branches. At intervals of flight
Pipilo *maculatus* a species with
low chirping call notes. *Geothlypis*
called continually from above and
when they were joined in their
intimations by notes of an
occasional *Merula* *floridana*. A human
rinded passed and I picked up
my camera a part of the
sunlight just set. It was the work
of a moment to drag up a pile
of palm trunks, when it lighted the

and thus secure the nest, so
my disappointment it was empty.
Many other nests were visible
in the crannies of the leaves
but were never seen from our
barefoot nature.

I collected fifteen birds here
with ease before ^{my} returning and
had time to sketch the movements
of those that did not disturb.
Hevise spent evening watching cattle come
up and were greatly interested
by watching my operations.

A sharp light burst over the
clouds and light snow fell and
the sun came through at intervals.
The curiosity of the people is
increasing at times and as I came
in along one of the streets was
attracted by the boys
of my light ^{sketches} in my hunting
coat pocket. I went one to know
what it was carrying.

In the afternoon I went to
see the watching operations carefully.

For the first time in five days I
found it almost impossible to find
what the people were saying about
the killing of the birds. The people
were all out with me as usual
and I was not able to find out
what the people were saying about
the killing of the birds. I was not
able to find out what the people
were saying about the killing of the
birds. I was not able to find out
what the people were saying about
the killing of the birds.

January 27, Thursday.

The sky was clear this morning
and in early morning the heat of
the sun was intense. About 10 o'clock
a southeast wind moderated the heat
somewhat but it remained extremely warm
all day.

I went out south west to the
Barraços adjacent to the Laguna Castillos.
My way led down the sloping streets of
the town across the Barraços Castillos.
At the foot of the slope pastures and
hills began. I asked an old man here
for permission to cross through his
fields. He replied that I was welcome to
go but believed that I would pass
with quiet mind if I went on to
a road that turned off in the direction

decided so there were some wild cattle
below. I followed his advice and
went on: later I saw the cattle
a bunch of white-faced oxen ~~at~~
threatened to charge through the
fence as I passed along the road.

The hills appear fresh and green
after the rain. Grass is starting again
and little hills of corn, peas and
beans were thriving. The soil on
the slopes of the hills, where it
is not too thin is very good and
crops do well. Water flows in the
gullies and small streams were
running full. The ~~colleges~~ in general
country were well drained and
the condition was decidedly different
than in the pampas of the ~~Chaco~~
after the same amount of rainfall.
No time the country every where would
be covered with water.

Small quintas occupied the
land adjacent to the roads and
small ~~land~~ holdings held little tracts.
Within these were a vast number
belonging to larger estates. The poorer

people lived in ranchos with walls
of adobe plastered with mud: ~~at the~~
door was a thatch. More prosperous
farmers had brick houses covered
with stucco. These were on steep
slopes with flat roofs and even square
structures like roof cups. But the
usual type was round form dome in
ground level in front with a slight
projection and the steeper flat roof
between such.

At a favorable point I was in and
asked permission to pass some miles
to the lower country below. This was
readily granted and I was told
about a good bird in the quinta that
I desired. The quinta was typical
of the rural ones. A small field of
in some of potatoes of little produce
some fruit trees and a vegetable garden.
I killed two quinas and one wood
cock. Birds and then continued on down
to a large palmar having accomplished
a number of other young fellows who
came along to watch me shoot.

Birds were abundant and of good variety. I had as difficult a time securing all that I could care for.

As I had good light I was able to secure some photos of the palms.

Below the palms was a slightly lower area flooded in part with water forming small pools. Some were open and some grown with weeds and *Cardinalis* here known as *carlos*. The site was excellent for shorebirds but I found none but *terna*. Banks along the canals were grown heavily with brush.

One of my boys was armed with a bow made of a short piece of steel cable.

Our plovers have without question been decimated here by hunting as I hear constantly that they are excellent eating. It is almost useless to expect to protect them also in these back districts.

I started the boat at 12:30 shipping with proper time, had a sponge bath & then something to eat. As the weather the tables were set under a broad gap above now rain. I got a few grapes, looked for turtles, took out shells & specimens. The days now are growing noticeably shorter. At 7:15 it is dark! At more northern latitudes this tends to shorten the days.

Jan. 28, Friday.

This morning I visited the granite hill known as *El Cerro* or *El Cerro Navarro*. I had arranged to go the big lagoon below here but the man who was to take me failed me.

The day was cool and pleasant with the sky overcast most of the time. I could have found much more abundant than during my visit during the rain the other day. The gulls were grown beneath dense brush forming heavy cover. I followed along the path through this watching for birds

She was in two small swamps
Inn though I failed to encounter
anything of interest in them save
that a wood rail ran out
from one into the dense brush
where it eluded me.

Battus ~~was~~ common. A little
shaded pinings ~~was~~ wet ground
I encountered a large white species
with peculiar lifting flight
flitted away like a white throat
small series of varied color from
Columbian in the sun. In the
pampas I saw only as common
only a *hieris* and the monarch.

Fig trees are fairly common. Yesterday
I saw a very large one. Various
birds visit them to feed on the
fruits. Shrubs of varied species
were present in abundance many
bearing small cups. A small
lily like flower, ~~with~~ with white and
some with yellow blossoms springs
up everywhere in the grass
growing like crocuses.

All present I should say that the
zone here was low *Andro-sifarian*
prolific more or less by proximity
to the ocean. The formation is the
same in a way as in the Chaco
but I believe that the flora is
richer. In many ways this region
reminds me of the zone about the
coastal plain in Porto Rico.

Cyclarhis proved to be abundant.
I searched for a nest without
success. A *Loospiza*-like finch
on the side of a *Prosopis* was
seen. The first birds taken
proved to be fairly common. This is
one of the few species new to me I
have encountered as yet. Soon after
securing it I heard the familiar song
of *Vireosylva chivi* and shot a nice
female, apparently an addition to the
Wagnerian bird list. *Chimac* scolded
at me persistently and I found a
number of *Stephanophorus*. A peculiar
whistled call that reminded me of

Myrmochilus remained unidentified.
I distributed *Sycetastes* abundant
as did *Zenaidura* Doves and a number
of others. The morning passed too
quickly and I soon found that
it was time for me to return.

I have hoped to find some of the
allied shorebirds over these rolling
hills given over to the forest but
have been disappointed. Hunting is
carried on extensively here. I
sometimes doubt the value of
any attempt at protection though
perhaps as hunting is carried on
extensively. However such action might
serve to protect birds to some extent
near the larger cities. There is no
question but that the effort
where birds are doomed; showing as
such protection seems of little
use way at present of avoiding it.

It might be possible to remove
the *Colaptes* from the open list
and the substitute some smaller species
as the *Sturnella* or *White-rumped*

in the *Sturnella*. The only trouble in
submitting these species to the list is that
they fly in close flocks leading to
many mistakes. In addition to those
killed on sight.

My robin in the afternoon is
a great attraction and I have a
string of visitors attracted by its
chirp just the standard species
and make the standard comments. The
only new one was pulled off by a
chained boy who remarked that it
was certainly educated to be able to
write in English for me but difficult
it is to write in Spanish.

River leaves of palms are found here as
well as *Coccoloba*. I see much *Coccoloba*
which is in great numbers. The stems
are robust and when dried possess
considerable woody fiber. The *Stem*'s
of considerable importance.

January 29, Saturday.

I awoke at daybreak to find a
pouring rain so postponed a long trip that
I had planned for today. About nine the
rain slackened somewhat and I went

Went to the Cerro Navarro again. Rain continued until about ten and then stopped but I found the undergrowth saturated with water. Birds seemed rather inactive because of the wet leaves and vegetation but I secured a pair vivantly by noon.

I crossed down a broad slope with frequent exposures of granite and on the opposite side I found a small valley, newly wooded with small trees with a high ledge of rock beyond. A little stream falls down under the trees. I then secured two more *Vireo bog chiri* and found nests of *Chrysomitris* and *Columba picapuro*. In the amber shade of the thick a little sooty brown Hummerid came out to greet me and then hopped away at full color making so well with the background that frequently it had left a patch before I was aware that it had moved.

In this wet day I secured birds and

and during all of my stay as long as the water below the rocks and pipes became active. After a few attempts to secure a pair of *Chrysomitris* I was unable to do so. Today even the birds were scarce.

I returned to my home with the possession of an *Agelaius* bird. The particles of fresh and green after the rains had fallen. I collected some birds. At the afternoon the sky cleared and I saw some but not many. The weather was becoming breezy slowly or not at all.

January 30, Sunday

Woke this morning to find a steady rain falling and very much saturated with water. The down pour slackened about 7:30 and I went out again to the Cerro Navarro. For four days I have been trying to get as sully to visit a big lagoon below here but without success. I'm figuring now on going over to it in foot

As soon as the weather improved
I started.

Today & in the mist continued
at intervals until dusk. The undergrowth
was saturated and I was soon
soaked from my waist down.

I went directly to the little glen
discovered yesterday, explored it
thoroughly securing a Basilecterus
leucostephanus and an immature one
apparently Plan. amawochalimus, both not
taken here previously. From here I worked on
across the ridge, finding two other
small valleys filled with heavy growth
of trees. One hill had a cap of
granite of irregular form from
which I took a fine view of
the surrounding country.

There are many many more small
land holds here than in Argentina.
From the hill I could see little quantities
dotting the country in all directions.

I explored the grove & thickets
on the hillsides thoroughly today,
securing a Veniliornis that may be
epilogaster. I regretted that the weather

was not more favorable as there
are probably a number of species of
interesting passerines that I have
overlooked because of their sluggish
movement in the rain soaked bush.
The undergrowth had become so thick
collecting to me, I am not equipped
with sufficient tools to handle just
about specimens. Today I came on
the Uta that is closely allied to
the Uta of Porto Rico if indeed it is
not that same. I saw a grass near
Plyra. The avifauna I am inclined
to believe is enriched by a breeding
element of forest land that there
finds its extreme southern limit. There
is said to be extensive forest on
the Rio Caballero north of here
where I have planned to go next
but rains have put the roads in
such condition that it may have
difficulty in getting there. The only
hope that I have had of it is
70 which is more than I could expect.

January 31, Monday.
This morning I turned out at
a quarter of six and by strenuous effort
managed to get hold of a man
with a sully so that I left town
for the Laguna Castillos shortly after
eight. The horse was a small white
animal and on first glance I was
dubious as to his abilities. However
he proved an excellent traveler so that
we made good time. The sully was
the usual two-wheeled affair that
gotten a little less than usual.
The road led out over rolling
hills with frequent views of the
town and of broad palmers. Three
leagues out we came to a
lagoon of about a mile two
miles or more in diameter occupying
a broad basin back of the dunes
of the seashore. Sand rock with
vertically tilted strata was exposed
along the shore line. The lagoon was
nearly circular in outline; a
band of grassland extended back
from the shore for a distance of
a quarter to a half mile beyond
which was all but a dense

forest of low trees or mixed woods
of a broad lying at the base of
the dunes. A few spaces of grassland
is occupied by water & several the
scattered patches the band of forest
making a thick with a draft
of the lagoon. I also occasionally
projecting a point of clay was the
only mud bars in evidence. Grass
was cropped close by cattle sheep
and horses.

I worked out along the upper
end of the lagoon in the forenoon
after I waiting the starting hours I
secured permission to hunt. Bands of
Flamingos, black-necked swans and
Coccyzoid stood in the shallow water
or ranged in lines on the mud
banks, a beautiful picture. Several
in wet meadows were flocks of
Wood ibis with an occasional Pint
Gambell among them. Long-billed
stilt waded in company with
Marsh Wankers and Flamingos. I
traveled rapidly along the shore

Respecting other birds in my
scrub just suffices greatly to the
leagues of passing birds who wanted
me to still up of the base birds
that were flying over the water shed
of me. The taking part of my
experience of the birds of winter
in general in general would be
work up and then by the end of
my belly. I was rewarded in
finding a few individuals of the
two species of yellowlegs but nothing
more.

After exhausting possibilities of
finding inland birds searched
through some shallow marsh grass
ponds. A Redwing rose at a distance
and later dropped into the grass. I
walked over and killed it as it got
out a second time. Yellow-shouldered
blackbirds were common and I shot
three. They were composed of
adults and a ground young. I shot
a flock of Wood thrushes and was watching
them for a time at forty yards
crouched in the grass. At Lanesville

learn the flock rose gradually and
I aimed at one that I had picked out
in advance. The shell passed rapidly
and hit the bird a fraction of a second
as my surplus powder. The bird
dropped at the first discharge so it
did not give me full satisfaction. I
collected it just as time was
crossed into the next day and
later searching for this album.
Night herons were roosting in the
trees but all seemed to be
young or second-year adults. I kept
watching for birds in a light
plumage until finally I came out
empty handed. A Green Heron came
out squawking and was soon in my
hands.

Great white butterflies were abundant
in the brush. They flew with a
peculiar lifting flight and though
apparently sluggish & slow surely
eluded my net. They were found
in shaded spots under the leaves
of waterbury & I shot a few.

my driver finally engaged in putting
them a long while birds nest.
He had built a little square under
the nest and had pulled it out
with a stick. The insects seemed
dazed and made no effort to
sting. The nest was made ~~mainly~~ of firm
and strong, much heavier than in
our northern *Nepes*. It contained row
upon row of circular combs arranged
in tiers one above the other.

We returned to the estuary at
noon after a round of
meat I was given a plate
of meat and potatoes with a
cup of milk. After I went
down through the line of mangroves
to the south. The wood was heavy
and tangled. Much of the growth
was of *Limbo*; the broad heavy
base with the buttressed roots were
curious and interesting. The
wood is soft and fractious
easily. I saw a number of trees
that had been blown down by the
wind.

One of the first birds taken was a
Quercyruphys. Damages were
abundant and I shot a variety
of small birds. A *Prigamus* was
taken. After going down for some
distance I crossed to the
shore and returned there to the
estuary following the bank of
the estuary. I took a bag of
Ornithura seen at the end
I encountered banks of *Hammings*,
Black-necked *Sturnella* and *Colaptes*.

[The shores of the lake were
alkaline and evidently had been
covered by an effluence. The veins
of the *Limbo* I had found
grows with other plants in a
stratum a few dead coasts stream
along without paying particular
attention I picked up a living *Limbo*
maculipennis in a helpless condition.
Struck by its appearance I examined
it closely and was astonished
to discover the unmistakable symptoms

of the duck sickness! Tubercular
lesions in the breast with wings
loose at sides and legs too weak
to support it. There was a flow
of fecal matter largely from the kidneys
and the membrane nutritious
failed to react in irritating the
eye. A short distance farther on I
found a sterna tuberculosa in the same
condition. About 40 *Falco armellatus*,
10 *Dafila spinicauda*, and 2 *Belamphus*
& 2 *L. maculifrons* were dead in a
distance of a quarter of a mile from
the sand cause. Coots were out
in the water were unable to fly
from the same affection. Examination
of the birds revealed the usual
hardened inflamed condition of the
intestines with mottled lesions. Perhaps
this may serve to convince some
of the doubters who still adhere
to the smother theory at Great Salt
Lake. The distance would seem
rather great for the carrying of
smoke fumes.]
Returning to the sulky on

Monday for dinner. I was
chances were gathered in the
quarters to put on locusts. I looked
in vain for the golden Plover that
should have been with them.
The day had been fine with
a cool breeze and of warm sun.
I enjoyed the change in the
weather to the utmost.
Returning to the hotel I spent a
long hour in cataloging while
receiving a string of visitors
and to exhibit the take
and then skinned out my specimens
work that occupied me until ten o'clock.

February 1, Tuesday.

This morning, at daybreak the air was cool and quiet with a distinct feeling of fall in the air. The weather recalled that in Washington in September, and indeed the season seems about as much advanced as in that period in the north. The birds however are in molt in many cases suggesting late August to the first week in September. The present day might better be likened to one of the cool days that come in late August. I began work at six and was busied with the specimens secured yesterday until near noon. The last night was in my favor so that my birds had kept without trouble.

But this afternoon I was hindered with business and other preparations for the afternoon. I was completely dark and had to content myself with a few notes to date.

My stay here in the city has been very pleasant and in one day I regret to leave. The original name of this place by the

Way was San Vicente de Castillos. The
available maps the place shown right
is San Vicente. The name has been
changed however and the place is now
known locally as Castillos. Locating
with map usage I have marked my
specimens of San Vicente and have placed
Castillos on the back of the label. It
has seemed better to follow map usage
to make the locality intelligible as the
name Castillos may be pronounced
and may need explanation.

Was occupied with notes and final
packing until eleven fifteen.

There are many Mosquitoes here and
though people complain about them
as the Indians to think of being a
mosquito bug. I have been very
conveniently at night with a mosquito,
and it has been as bad as ever as the
sun went down.

January 2, Wednesday.

This morning my Cochus, Antonio who
came for me at the quarter of five and
by five o'clock we had our baggage
packed and were off. A heavy rain
had fallen during the night but

at daylight the sky was clear and
breezy so we had scattered clouds
during the afternoon. The morning
was cool and fresh so that I wore
a light sweater and a shirt and
coat. Later it became very hot.

My conveyance from a gardener
was a two-wheeled cart without
springs, set on six-foot wheels, with
a conical top. There were a set
across the front and a about two
feet behind. I sat in my baggage
comfortably. There were a set
across the shafts and two others
one on either side. The latter were
attached by straps and pulled by breast
bands of much better arrangement
than that used in Argentina. From my
brief observation I believe that horses are
truly here with more civilization than
in the Argentine. Sella Sosa are on a
man travelling about for any distance.
Men herd sheep on the back and the
horses are also mounted.

Our road led up a series of rolling
hills that terminated in a long way at

pitch leading to the summit of the
Cachilla. The track wound inward
not now to the summit of the
ridges making numerous curves
and sharp loops. The roadway was
pelted badly by the rains, in some
places to a depth of six or eight feet
and the driver had to watch his
course with care. Within the first
half hour we passed one of the huge
heart shaped trees which grow in a
shallow ditch and lay on its side.
These oaks have which were put
high with broad straight trunks.

The high body is balanced on two
wheels and has a sole / axle and
a curving top of sheet iron. Five
spokes of wood are fitted to the
and the driver sits on horse back
carrying the usual light pole
of the day.

Approaching the top of the summit
I had a fine view of a broad
expanse of open country. Small
tracks of forest lay in hollows and

the sides of the hills, while palm trees
were visible on the N.E. in the
distance. Good crops of sugar cane
many other valuable crops.
So far we were about twelve miles
without seeing the sea.

Descending the hill the soil
found the soil more sandy with
a poorer growth of many species.
Pines were widely and here
saturated replaced the small cactus
and pointed found near San Viento.
Cattle and sheep grazed in the
fields and grass was abundant.
The ~~road~~ stream more freely
marked as we progressed until finally
we were traversing open pastures
with clumps of trees as our only
guide signs.
We crossed one large barometer on
marshy tract with numerous pools of
water where I watched in rain
the birds. Across the rolling hills

Fork-tailed Flycatchers, very present in
great abundance. A shot or 2 with
long wings a few feet. In all small
colored birds. Wood swallows, red
winged blackbirds, enjoying the wood
and. Pelicans were common, at the
time I did not see them included
in view among them, one male
starting off accompanied by a band
of newly hatched young.

I set Pelicans we came to the
Cerro Abasco in the Arroyo Sarapiquí
about 20 miles north-north-west
from San Vicente. Here we made
a new camp under the broad shade
of a Coronilla, and while fruit rots
I used for his horses and preparation
"asado" I walked out along
the stream with the gun. There
was a broad plain here, green
with heavy clumps of saw-palms
six to eight feet tall. Through this
were scattered small grassy spots a
few inches to a foot deep. The
Arroyo Sarapiquí was a winding

stream of bluish water 20 to 30 feet
broad with its course changed into
masses of rocks beneath. Out to
just above was a small tract
of sand under shallow water. Under
the stream were deep and boggy.
Sand points appeared at intervals and
thickets of Coronilla willows and
other small trees grew along the
banks.

A Cocoi humming bird, slender
shape of one but a different color
of its wings and numbers
recently from the nest. A hummingbird
that I found with a long neck and
of deep-sea color. Returning with this
bird to camp a few miles away
I crossed the Arroyo Sarapiquí
through more good areas. A number
of small yellowish green birds here and
I shot one. Also secured Chloroceryle
amazonica & C. americana. A long
shiny ~~shiny~~ shiny, inches long was
shot that found its sleep in the sun

and with a hook jumped off
a cut bank into the water.
I caught it with a load of
cigars, but it disappeared.
Under the canoe I believe I could
not locate it. It was black
with the tail at least tinged with
yellow.

I believe I picked up a good
shell of the *Carpincho*.

The *Carpincho* is a red
fish-like animal. It is to be
found in the marshes and also seen in
the water, but I found apparently from
the description that a *Carpincho* is
found in Argentina
but I could not find it.

The sign was extremely hot. Returning
to camp we had some mutton
also roasted a quantity of eggs
the good fire with the usual
and bread. This finished I got
out my chest and prepared my
birds, working in the pleasant
shade with the *Columba* *juv*
singing at intervals a few feet above

my head and reaching every
pleasantly about me. I had expected that
I was not equipped. I remain here
for a few days. This work completed
I will make a start and about
you we proceeded.

The road led over a low hill
and down to the *Barra* *del* *Indio*
Muerte. A broad swamp with
low mounds draining into the water
are the low land being the water
season when many signs of the
country. There were many signs
there in the marsh grass. I
a street. The road passed with the
ground of my gun. They killed
nothing.

At seven we passed through
the little grove of willows to arrive at
the *Barra* *del* *Indio* *Muerte*. A few
yards away stood an iron cross
marking the spot where a man
had been killed in a quarrel a
short time before.
My reception at the *Barra* was

rather amusing. The boy who was
a low build, of a dark complexion with
a thatched roof. He was told that
could make a bed in an hour
and a half of gallop and that he could
get something to eat. The proprietor
asked "What are you, German, Italian,
or a hybrid fellow?" my nationality but
the statement was received with
much doubt. As thus arrived
later, they inquired of the proprietor
who I was. His courteous reply
was always "wise north-american"
— so, he says

It was told that there was a small
night bird that called him every
night and prepared my clothes
camp but the bird did not
appear. The light house was
blasted in preparing for bed. We
had supper of a vegetable soup
with spoiled meat served afterwards.
The galleys served some of Spain
quality. At the inland stations

there is ^{no} attempt to supply
under several times we were asked
we had any to spare with us
of cats and beauty and so on
then turned in after arranging
any mosquitoes to prevent entry of
mosquitoes and the immediate
flea and that insect that did not
buildings. My bed was set
cannell with gauze sacking with
a light straw mattress and I
found it very comfortable. A
passer surprised us as he came
from his stable & blankets in
your. As about with a good
of children would as far as way
and the whole part of the ship was
open so that it had five million.

February 3, Thursday.
Was out this morning at half
of day at four o'clock. A few
minutes we had the horses in
and were on our way.
The road was rough and getting

At this point we met the main
road between Pochi and haycans
and found the country better
than. Now hills were covered
with small bananas between.
The hills were small stones
or scattered patches of water. Puffins
were present in great abundance,
(I've taken apparently a juvencus)
Flocks of Myadestes mexicanus roosted
in the wire fences but the
Fork-tailed Flycatcher of yesterday
were represented only by scattered
individuals. I collected fifteen
birds along the road.

At 6:30 we reached haycans
A small straggling village scattered
over a low hill. One of the
miserable little places that appear
to have been located by the
apparent reason of nature. I went
to the Hotel General secured a room
and proceeded to clean up.
The rest of the morning was

occupied in caring for specimens.
The morning passed and I
but the day passed very fast.
Grass in the pastures is ripe and
dry, containing in bloom, swallows
and quiches gathered in scattered
flocks. Many Passerines were in
great and numerous flocks
were appearing in abundance.

In this country the game is
held as the property of the owner of
the ground. Thus Striches or Wrens
while protected may be legally killed
at any time by the owner or those
land they are upon.

On the afternoon I was occupied
in getting my notes in shape and in
cleaning some shells. Called at the
police commissary and in the evening
made an arrangement for a conveyance
to take me out to the Rio Caballero. Was
unable to get out tomorrow.

Feb 4, Friday
Was out at six this morning and
was occupied during the day in

preparing expense accounts, writing notes,
and in loading shells. It was quite
hot during the afternoon but with
a pleasant breeze.

February 5, Saturday.

At five-fifteen this morning I left town
in a coach drawn by four horses
aboard for the Rio Cebollitas. The morning
air was cool and pleasant and I
was pleased with the opportunity
to visit new country. We travelled
with making good time in spite of
rough roads. After miles out we
came to large banals, with two
big channels which it was necessary
to ford. My cochero was not walking
closely. The horses turned ~~which~~
struck a hole and two of them
fell but were up again instantly.
The water covered this kind of quats
and came into the high beds of
the coach. After travelling a
few yards in this manner we
were hopelessly stuck. After seeing
up the situation I left the man
to unhook his team and get a

rope with which to pull the wagon
out to higher ground; Remained 30 yds
above bank. Banals are used
where where I had put an
row to examine the channels of
the banals. At the outlet I
observed a ~~small~~ small flock
Pseudobuteo quinquatus a pair of
encountered previously but searched
none but without success. The
banals was simply a sawgrass
swamp through which ran
channels cluttered with water hyacinths
and other aquatic vegetation. Wet swales
were filled with thick woods, then
were no trees. Low water and was
proud of areas all of which are
covered with water during the
winter rains. Small birds were
abundant. A little Bonin's *Synalaxis*
with yellow-spotted throat was taken, and
a Porphyrio like finch with streaked breast
I saw a number of small Gallinagos
but did not get a shot at them.
By this time the evening was on high

and I climbed aboard me now.
We had another channel to cross
but made this without trouble.
From here I had a fine view of
the river valley. Rolling rocky
hills lay on either side with the
open valley between. The ^{margin} side of
the stream was marked by
a band of timber no where
broad in extent but still of
good size for the type of country.
I found the actual stream
bed ^{scarcely} below the general level
with steep banks bounding it.
The main river ran somewhere
through the bush - I did not get a
glimpse of it today. All through
the flood plain were little boughs
and winding channels filled
now with water and the recent
rains. The flood plain was green
with dense thickets almost
impenetrable save where cattle
trails cut through. Many of the

shrubs were stony and had short
leaves, twigs, creepers were abundant.
Many ferns were thick & tall & were
a species. I made a small collection
of plants.
I traced the river I came to
taller trees running 60 to 70 feet tall
among them a few palms. The
whole reminded me much of the
forests of the Chaco. Euphorbia
was common and of some found
the families Ericaceae & two species of
Baccharis, were taken and in
one place I found 50 or 60 Convolvulaceae
growing in a thicket. A little
Juniperus grew out and was taken
and later I secured a Hydrocotyle.
Wood cutters were busy cutting at
the large growth in many places.
At noon I returned to town with
20 birds and was occupied until dark
in caring for them.
On some ways I have been
disappointed in the forest and so I

tonight I tried some experiments
to test the luminosity of *Pouter* *dom*
proletus in *Pouter* *dom* *strata*. I had
killed one about 10 this am. Had
photographed it at 5 P.M. and preserved
the powder doms until 9: P.M. when
they were still soft & lay all
long as there was any light filtering
in the room. I could distinguish the
dome faintly by reflected light as
I could other light objects as my
hands, a white shirt, and a bit of
white paper. When I shut off all
light the domes were wholly
invisible. Though I waited for
ten minutes, till yellow my pupils
a second, I could detect no light
emanating from the domes.

I had ~~holding~~ that the domes are
luminous might hold that herms
with their phlegm patches ~~by~~ ^{by} ~~the~~
law abiding citizens ^{some} traveling at
night carry tail lights to prevent
rear end collisions with others
who business carried them aboard
after dark.

Feb. 7

Monday

This morning I left town again & five
coach and procured ^{the} ~~the~~ ^{the} ~~the~~
crushes or banados below town. The sky
was overcast with rain threatening but
fortunately it held off until afternoon. Heavy
rain had fallen during the night and
water had risen in the banados. I saw
water here all seems awry and I see no
trace of allali.

I had rubber boots and did considerable
wading. A few Gallinagos were encountered
just south of town had two. They
are larger and heavier as the wing
than of the northern Wilson Snipe and
do not make as spry shooting. In
fact they were below as that I own
mist my first one. I had supposed them
to be Pardalquayal but found them darker
than I had expected so was uncertain
as to their identity. The birds inhabited
little opening rich with grass where
there was soft black mud for them to
just over. (Brazilian)

Shortly after daybreak two *Barkham*
and pipum passed driving directly north.
In addition there was a small flight of

other birds. I noted solitary sandpiper
and greater and lesser yellowlegs, mostly
singly or two or three together at holes,
and these were found flying. Two
spotted sandpipers were collected and
single golden plover passed high in
sky flying swiftly. Blue-winged teal
and white-winged teal were passed
swiftly north or north west. Solitary
sandpiper & yellowlegs were moving down
the Rio Cibola so that their
course was easterly. Apparently the
last two species were seeking an
inland route, up the great river
Valley leading northward. The
hatter were coming down to pass
up along the coast.

At the beards I shot a long-billed
nighthawk and made some observations
on a small yellow-throated flycatcher.
Following this I drove on to the
river. If I had had a flashlight
I might have seen a spotted sandpiper along
the bank at that hole and I tried to
completely fail but failed to find it.
I drove back up the bank I started
for a few minutes to eat a lunch

that I had brought with me.
A few yellowlegs passed very low over
and I shot a number of birds of the
kind were all about. The large was
best and the small.

Dragonflies were abundant here but
I did not collect any as they were
very quick. I saw a beautiful
military hummingbird in and
near the river.
I followed along the river
a time and finally entered a tract
along the river. A narrow trail led
through heavy brush with low limbs
overhanging the water. I dropped everywhere
and I was being shown the best
every bush was a branch that I
was passing. There were sometimes small
birds when I fell in view.
The curious thing about birds of
the cañons were noted along the
river bank and at the margins of
small pools with great piles of
slimy in smoothly rounded gravel
piles where the muddy water
out is just at the pool a shot a

part of little Kingfisher and had
trapped the trap line.
much along the
to the river and followed the
margin of this to some open
places. I saw several Kingfishers
passed and a lot of yellowlegs
and yellowlegs. Phalaropes were seen in
some numbers. I saw grass grows
in great clumps in these marshes
leading to and forming a good
wood also. In within a
few yards of me; beyond them
were a pair of juncos, one of which
I shot. ~~Wetland~~ thickets, grass in
shallow water here and in these
birds were abundant. I killed a little
sparrow near to me at the margin.
Wood ducks ran along heavily
me and saw many Kingfishers
at house Wrens not was found in
a hollow fence post.
Returning I killed an ever high
kite from the coach along the
road.
On reaching town I found that

I had over twenty birds, several of
good size, so that I was occupied
literally until eight o'clock in the
evening carrying in a little of
after cleaning up a little of
ate and then I visited the
Club with some colleagues and
sat in the house drinking tea and
Omelette.

February 5, Tuesday.

A heavy fog lay over the
country this morning but it soon
lifted and the day was clear. A
heavy rain began yesterday afternoon
and continued for most of the
night. This morning the ground
was saturated and water stood
2 or 3 feet in every depression. In
early morning there was a small
flight of golden plovers all driving
toward the north, flying singly.
Solitary sandpipers and lesser yellowlegs
were scattered through the marshes
and I encountered one little flock of
16 pectoral sandpipers. All the birds

noted soon after daybreak were
trapped and were nesting. Evidently
a northward migration is well
under way, early in the year as
it is. I found something when these
birds pass the interval ^{between}
the trees their arrival at the
full crest of the tates. The
probability of their coming in
streams of birds to me constantly
thing I habits in the north.

This is especially true in the case
of the Yellowlegs and Solitary Sandpiper.
I have encountered about birds here
in fair numbers but not in bands
of any size. The birds are catbirds
and the 16 Petrels noted joined
the largest flock I have seen.

As we passed along the road
my eye caught a bird looking
eastward and I was pleased to
observe Mr. Thoms' *Trichostria*.
I now had two in my hand and
later secured another.

It worked over through the woods

looking for shrubs and they
passed up here or there in the
forest along the river. Here I
found dense growth of small trees
with occasional larger ones
some reaching 20 or 40 in height.
The lower some growth at the
tops of the trees. I saw the
son of making a hole below
which had choked out much of

the lower vegetation allowing view
so thick to lift but some the
I could see through. Crepuscular birds
muffled progress as I moved
slowly along narrow trails, frequently
stopping almost to the ground to
pass under low hanging limbs.

When were the consequences of field
work in late summer and early
fall in lowland parts. Mosquitoes
drummed about my ears biting
at every opportunity, Cobwebs of
beautiful design hung across the
trails so that they continually

Caught in my feet and limbs,
with disagreeable sensation. The
humid heat of the woods,
was only occasionally tempered
by breeze filtering in behind the
thick
Elephantopus scolded at me
from the high thick limbs, the heavy
leaves. *Cyrtolobus* came leisurely
along through the thin branches
while *Basilinna* - *semitrochiliformis* called
to me at intervals from below.
I encountered several "infidels"
Empidonax. An
was perched on the heavy growth
and a sharp call attracted
attention to two *Sciopeia*, two of the
forest haunting birds that I placed
in a secure
Beyond here I came to tracts
where wood cutters were chopping
out the forest. Fine patches of
grasses came in the openings
with thickets of smaller shrubs.
Palms were scattered through
the pines and forest mainly

40 or 50 feet in the air. Nearly
every one of these was
nest of *Myiophila monachus*
in its crown. One ~~nest~~ had
been cut down within a day.
I tasted the meat in the crown
and found that it had an
agreeable nut like flavor.
I worked out through this
region watching for nothings and
collecting some of the common
birds that I needed at noon
I returned to town.
On the afternoon I came for my
specimens and began operations of
packing.
In the evening I looked in at
a dance in the club. Dances
were popular, I noted a few like steps
and one mimet. A row of
mothers, aunts and small girls,
Chaperons for the girls, occupied
a row of chairs along one wall

Some of the other were male spectators
who did not dance. Between dances
the couple walked ~~around~~ in
procession around the hall in
the steps of a grand march.
~~The girls were from~~ Champagne
was my tap at a table at one
end.

February 9 Wednesday

This morning I began packing
specimens at 5:30 and had
eleven fifteen had my watch,
loaded in a coach and was
at Corralles. So at 36 hours if
I had not jumped and already the
ground had dried save for spots
standing in low places. The day was
hot but was tempered by a pleasant
breeze. The deep channels in
the woods along town were passed
without accident and we were
soon rolling along over the
level prairie and the opposite side.
All of this region is under water
during the winter months when
steady rains flood the country.

I stopped to photograph an *Arctostaphylos*
near the summit of Telegraph
Peak and to take some other pictures
that I desired.

A few solitary Sandpipers were noted
at pools of water with occasional
yellowlegs. A pair of Golden Plovers were flying
during the morning.

The broad prairie fresh and green
after the rains was dotted with
grazing horses and cattle. We passed
one group of men on horseback
herding a drove of sheep along the
road. No one travels on foot here.
Men on horseback, had a camp
and it is rare to see one on foot.
Every now through the grass were
scattered white and yellow crocus like
flowers. Deer tracks and burrowing
beets crested us and *Catanichia*
(*Samolites*) and Fork-tailed *Thryothorus*
lined the fences. The *Yellow* *Colinus*
sought the shade of the pine posts
at a little corral when we stopped.

To change horses. Mockers scolded at
me and a little flock of Molothrus
rufoaxillaris flew about with sweet vocal
calls that reminded me of the
notes of Guiraca years.

The breeze was cool and refreshing
in spite of the heat of the sun.
I was free from Acariasis and
by relaxation after two weeks of continuous
hard work in the field. As I rested
in the shade of a Cornus with Chlorothraupis
came in to feed at some cardinal flowers
and then darted away low over the
prairie. Geothlypis campetrorum perched
in the corral with a loud chick
which was followed by whistling &
chattering notes. As the bird called
it flashed one wing or sometimes both
to display the yellow lining. Molothrus
rufoaxillaris voiced its sweet trilled
whistled song to the more prosaic
bubbling of Molothrus rufoaxillaris.
Horses are used with more care
and understanding than in the Argentine.

They are driven with collars or
reast bands instead of the Chungo
saddles and they have more will
and endurance.

We came west to the river
when we drove into a flat boat
and were drawn across by two mules.
The boat is confined to a narrow
belt following the winding of the
river. Rarely was it half a mile
wide.

Beyond the river we crossed
two or three low ridges where the
road was rough and rocky.
The soil was thin and little
productive. On lower ground
beyond we came to a low prairie
rolling region of open pendulating
Juniper where horses were frequent.
At 5:30 I reached the small
town of Corral on the line of
railroad.

For five days I have ridden on the part
of my coche in friendly converse with
the doctores doctores I observed here

in the act of capturing a house.
Jesum

February 10, Thursday.

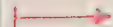
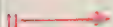

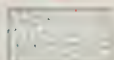
I had you thought in putting
up a mosquito net last night
and so slept completely without
insects. Warming without. My
night proved life and pleasant.

I arose at 5:30 and worked
for two hours on notes.

I will now visit in certain
places where proved to be superior
to those of antiquity in the country.
They are indeed and the food is
really good. It is of the same
character as that in the interior.
It is a nice dinner that is a fine
soup, vegetables, two thin dishes,
sometimes another a potato and
tea or coffee. The rates for rooms
are two to three francs a day. It
is sometimes difficult to get room
there as the people will run
to company and I find from 2 to
5 beds in a room.



REFERENCIAS

-  Voladora invasora
-  Voladora nueva
-  Materiales distribuidos
-  Zonas atacadas por desoves y mosquita

Luzinda shows ~~up~~ up from
the straits where they were fishing
in July 1890 while ~~the~~ ^{the} ~~fish~~ ^{fish}
pulled off in seed beds to show
the ~~collected~~ portions. ~~There~~ ^{There} ~~is~~ ^{is}
a rowing club you should
visit. I watched in ~~the~~ ^{the} ~~birds~~ ^{birds} but saw
none. The country near the railroad
was well populated. With 10
kilometers of ~~the~~ ^{the} ~~interior~~ ^{interior} more cultivated
areas evident. Plantations of
cassia, ~~the~~ ^{the} ~~for~~ ^{for} ~~the~~ ^{the} ~~landscape~~ ^{landscape}
and ~~the~~ ^{the} ~~with~~ ^{with} ~~the~~ ^{the} ~~also~~ ^{also} ~~seen~~ ^{seen} ~~everywhere~~ ^{everywhere}
in evidence.

I reached Marjanda at 5:30.
Registered at Hotel ~~Chao~~ ^{Chao} ~~Hotel~~ ^{Hotel}
the ~~field~~ ^{field} ~~of~~ ^{of} ~~minerals~~ ^{minerals} but ~~was~~ ^{was} ~~not~~ ^{not}
able to collect a good one.

It was cool in the evening, so
left as early as possible and went
at once to bed.

July 11, Friday.
Was out at sea this morning
and went ~~at~~ ^{at} ~~around~~ ^{around} ~~myself~~ ^{myself}
all night. Went ~~then~~ ^{then} ~~to~~ ^{to} ~~the~~ ^{the}

consulate for mail. Arranged to
ship a box of specimens through
the American Express Company
and drew money of the bank.
At 11:30 visited the consulate
when I received rather a lot of
mail from Buenos Aires. Was
occupied in the ~~evening~~ ^{evening} in going
over my correspondence and
in taking purchase of
supplies.

July 12, Saturday.
This morning I called on R. San ~~by~~ ^{by}
and talked with him and his assistant
for a time. Visited the Argentine Consulate
and then the American consulate.

In the afternoon at two I went
to the Argentine Consulate for a visa on
my passport which costs me \$2.00
Uruguayan. I saw the ~~consul~~ ^{consul}
Felix ~~Torres~~ ^{Torres} and notes. Packed in the
evening. Very hot.

Feb. 13, Sunday.

At six this morning I left
Montevideo via Socabril Central for
Rio Negro. As para Barudi the
country was rolling and rocky
with many small hills and
groves of trees. Beyond Barudi
you come to a Pampas area
resembling that of western
Buenos Aires. Though more
rolling, an excellent it was
well watered and had frequent
small streams bordered by
thickets meandering through it.
In places I noted low
hills and rock exposures.
Most of the land was utilized for
grazing with only occasional
fields of corn.

The day was extremely hot
and the wind & dusty. Few
passengers were aboard and I
found the only one to eat in the
diner. We had a half an adult
Bottura maculosa for chicken. A

inquired in ability to eat the
same composition to my with.
Yesterday I looked through
the main market but saw no
game for sale. There were chickens
and other fowl. At the bird
stand I saw a number of immature
birds, some appearing perfectly as
adults.

Dr. Sarrasin told me that
formerly batista were offered in
large numbers in the city market
but so called. That is but
more recently.

Reached Rio Negro, Rio Negro at
12:30. Secured room at Hotel
Fajardo. Purchased 1000 and shells and
then called at the Comisaria de
Policia. Later I worked in a

February 14, Monday.

Last night I slept very comfortably
under my mosquito bar. No net is provided
in most of the hotels but it would

to a great mistake to travel without
one, as mosquitos abound, and
whether they carry disease or not
are a just.

The night proved cool so that
I slept comfortably disturbed only twice,
once by a spider in search of
bedding and once by a maddess
that crept in with me.

At five I went out along the
Rio Negro below town remaining a field
until nearly noon. The town of
Rio Negro straggles out across
a broad flat, so that while it
is not large, perhaps 2000 inhabitants
it covers a considerable area.
The streets are broad and there
is a whole square given up to plaza
in which have been planted a few
rows of China berry trees.

The river is a large stream
here 250-300 yards wide with
fairly swift current of dark brown
water. The river now is run full

and here has steep banks
with few open heights or bars. The
shores are grown with thickets
from which most of the trees of
this suitable for firewood or posts
have been cut. The thickets
were dense and were grown with
a thorny woody stemmed creeping
legume, that the went a bit after
that crawled constantly on my
clothing. I thought this was no
Caraguanta. It was of the a probably
to secure some kind that had
killed. As we little thing of
found to my great delight a few
plants of goldenrod, in bloom, of a
type exactly like the common *Solidago*
that flower near Washington in late August
and early September. The plants
grew in a small clearing. The
flowers gave forth a pleasant odor
and in addition to collecting an
herbarium specimen I brought home
2 sprays of them as ornaments. I saw

the flower I secured a bottle of
the style of *Cyrtus rostratus* - with
of *Sp. A. 100* - some tracks of
various flowers. I believe that I
have some remembrance of a *Sp. A. 100*
in Port Rico also.

Butterflies of varied colors were
abundant.

The day was extremely hot.
I worked about slowly through
the brush finding small birds
common but rather silent. After
tea they became more active and few
were seen. Many were in full song.
Brachypteryx were especially common
and were not singing. *Chalcophaps*
cyathus was about the only species
I shot any quantity. Among the first
birds I shot was a pair of
Pseudoleucis *pinus* of which I
finally secured one. Later I shot a
pair of *Coccyzus melanocoryphus*
also a few additions to my
collection.

The soil in places was sandy.

At times passing down. Below
these thin water tracks of surface
that would small rather deep
brush borders beyond frequented by
green herons.

I had a bath in the river
which refreshed me greatly and then
returned to town. The heat is very
annoying making me want to move
slowly. The afternoon was occupied
in leaving for specimens etc. I
worked in very much of
managing these to keep fairly
comfortable.

Feb. 15, Tuesday.

At daylight I crossed the river to
the opposite side of the river (south bank)
taking passage in a rowboat piloted
by a small boy, who was very curious
regarding who I was. As departing
shot he and his companions called to my
knowing I was a mechanic able to
repair a phonograph. As the sun rose
suddenly, I noticed the colors of

Amos in the city as I described
The bank toward the river and then
had my attention attracted to the
banks, a flock of *Pseudis*, the
river along the opposite shore.
A few minutes later my curiosity
stimulated in regard to the *Pseudis*
the sun already above the horizon.
The current in the river is
strong. The water dark but not
murky. Many fish were in the
stream. Perhaps a real = 1000.

On leaving I proceeded down
the following the river bank.
The shore was steep up here I found
a red bank of bars but no shore
birds. After a short distance I
came to low muddy, a tangled
growth of *Sida* and other tall
plants. I was very much
surprised that *Pseudis* were
abundant. I saw several
birds in the water.

At the head of the
bayou I found a small brook
running swiftly passing below
the big willows. Above was
a dry shore grown with acacias
of some sort.

Half a dozen shots brought the
captivity of the *Pseudis* to me.
We covered for a few minutes,
I had just killed two cucks, and
he rather grudgingly gave me
permission to continue. Hunting rights
are jealously guarded in this
country so that collecting is
difficult. I have found permission
thus far mainly because I am an
American and a stranger. I would have
more difficulty were I to remain longer
in my place.

Birds were common today but
quiet. The combination of water
structure and their I could see
to be in the bayou.

near Washington. I secured
two more *Cercus* subspecies
2.0 which the present specimen
was placed to find a yellow-billed
Cuckoo in recent such as it
might represent in the north. I
was satisfied that it is a western
species and at C. a. *fulvica*
from this continent: as is often
the case when expecting something
new and scrutinized my bird
for a minute before its true
character caught my attention
and I identified it as what is
really was.

Parula warblers were moving in
the brush. House Wrens feeding young;
I slipped up on an immature
Pipit's bird field it with the
first. Its plumage was strange
but that until it was in my hand
I mistook it for ~~some~~ unknown
species. A *Hirundo* was shot in
the brush and I encountered
many other young of *Pipit*

Pipit was abundant among
the young marshes. I have
not to see the wood plant of this
continent. *Mitrochloa* at least of the
the variety in the north are
certainly absent. A curious *Myiophobus*
trichopterus or *trichopterus* in my
arm. It grasped steadily at my
fingers with its *apical* tibiae as
I put in the water. *Myiophobus*
secured a large falcon (see page
100) for the act of *Myiophobus*.
The insect had shown a dead
wing just as it put feet to
ground and slipped a wing
long a long it. It then began and
covered them with a milk like viscous
exudate from the tip of the abdomen. It
was *badly* engaged in feeding this
on the legs of the *Myiophobus* I collected it.
At Logans after a heavy rain I
hung some fresh sketches out to
dry. The carcasses were hung
in a tree adjacent to a field of

24 last, I walked back over
to long trail my narrow
family with it to experiment,
the water remaining against
the attachment, 7 or 8 ft below.
Another more camp, a minute
of my trip by candle light and
flashed in a minute & then to us.

Feb. 17, Thursday.

A champion scold and
about 10 ft. This morning I set
it I had suppose for the early
rain of which I was sure.
until he withers. his head in
consequence of his scolding. To my
shame I did not succeed with
upright head for I find the son
of a gun of which I was sure
near but I am a heart.
I passed hastily and crossed the
trail to take in my traps. In
24 traps I had only two mice
small grayish black species that

look exactly like house mice but
seem to be more wary and
care. Did not see in
I found them to cut in to
examine the holes they were made
in heavy grass at the back of
meat, but not from any other
side. A trail with white
from some distance.

Carrots give their curious
calls, ducks crows and
and the red ghostly calls
of *Empidonax griseus* and
the forest to the north. The
constant whining of a bird
which I could not see
but in hope of a red. Careful
examination showed nothing to
cause alarm although this was a
congregation of small birds
at the spot. No call of a bird
collected as they walked through
the traps, *Junco* *stans* *stans*

The timbo and the Pteropus of the
following a little band of birds.
Passing in a few moments
Bacillatans, Hurdus and several
others the first latter.

The same bird seen in
the wood of the hills above
to that of ground rising
to a hill was observed.
The following wednesday the
ground I returned to high
ground examining the bird
also nests of Pseudoscimus
white curiously. From one of
Hurdus a nesting Bay-winged
Doubtful which its parents called
a newly hatched one.

A walk across a very good
matted one a fine creek bed
they birds are heavy and
end strong. I find to be a
new at first for trying to fill
them with 12.5

returned early and was captured with
bird with chips. Heavy rain
fell during the afternoon.

The same bird is similar to
that in the creek. The birds are
less heavy than the last both ground

February 18, Friday.

Rain fell during the night and at
daybreak a fog lay over the earth.
Water stood every where in pools
and the heavy downpour. I put on
leather boots and went out again across
the meadow to the opposite side of the
river. The river was still rising
and I found much water standing in
pools in the pastures.

Two more mice were secured in traps
and today shot in my trap line.

There was a small marsh here
around which I have seen many
water birds and I explored this today
but the swamp was ground with a
thick dense so to be impracticable
standing in two feet of water and in part
was open ground with gleaming vegetation
and ground with grass.

Brazilian I saw flushed from the grass
and Kingbirds. Saw not many of the
bushes & there being been gatherings
were not the evidence of water in
the surrounding country has been
they out to know possible finding
numbers of what we lymphated
in the willows and saw a
number of I birds gatherings. Again
I appeared and just excited some
of the interest although the cause
of their anxiety. A young bird
of white plumage, it was as
large as a sparrow. The old birds
were almost as common as
as crows under similar circumstances.
I noted signs of *Myocastor coypus* here,
lines leading through the floating
vegetation but was not fortunate enough
to find any of the animal.

From here I continued on through
the brush. Birds came out from the
dark out of the thick of the thickets
to rest in the sun at the bushes.
Small crows were fairly common.

I shot two in ground plumage as
indicated by light colored legs. The
upper tail coverts I noticed that I had
thrustled ~~flushed~~ to the *Psittaculus*
fulvipes gathered in the summits of
Gothicis. I shot all the specimens
by W. Wilson.

The other bird secured differed little from
those taken on my previous. The bird is
distinctly that of early fall or rather of
autumn. A male *Gothicis* was not
yet mottled, & *psittacus* seems to be
still singing out *Brachypterus* and other
are silent. *Psittaculus* birds are
common. *Pipilo* are the only species
that are still breeding at present.

A large cicada is fairly common
in the *Brachypterus* where it calls
loudly but is difficult to secure. *Dryas*
flies are abundant. I found a
thousand or more medium-sized
bugs gathered in a close mass and
filled my cyanide bottle with them.
Cardinal flowers are abundant here.
Pineapples in low trees are many

Kalas. These bear small berries 4-5
mm in diameter with considerably
gulf surrounding a ring, and show
obvious strobili. The plants are
sterile. The trees
have low-hanging, many branches
and a trunk branching near the
ground. The foliage is glaucous in
color.

The Corvillo is abundant also,
appearing like locs with small cones
but it grows lower than most
of the other birds. Much trees standing
where they receive a breeze but
still in shade, perhaps of the
crest of some little hill at the
point of some stretch of water are
favored resorts for small birds being
the best of the day, little congregations
of perhaps 15 or 20 individuals
gathered here for a while. The birds
nest mostly in the shade created
by the dense leaves so that they
do not pass them by. Occasionally

the birds are with many ~~some~~
~~occasionally~~ - and all of the birds to
be greeted with a sudden note from
some stilled bird concealed above
me. Distinctly there is flutter and
confusion among the birds above
me. Situated came out to look about
with their gossamer notes, a pair
of songbirds flew down at me with
loud scolding calls while both ~~the~~
smaller and larger ~~condemned~~
of two less numerous fearful of
approaching in the great ~~clouds~~
of the ~~shaded~~ branches. A pair of
greatcatchers or a ~~both~~ ~~the~~
two very complete ~~the~~ groups. The
birds, whilst I sit ~~the~~ ~~the~~ ~~the~~
about and out of sight is found
and go chattering away among the
mosses seeking for good quarters. I
crossed a large stretch
of land today in the ~~last~~ ~~last~~ ~~last~~
but found the ground wet with

standing pools of water. Collected
flowers of *Juncus* *peruvianus* here. Collected
fruit in other *Juncus* species.

Ducks, coots and small birds
occupied eye and all such. I had
no success in collecting any of my
birds.

February 19, Saturday.

ending the weather cleared
and it was oppressively hot. I
rowed down the river through
thickets and open lagoons. The
shores of the Rio Negro here are
mainly *Sida* in the river but sometimes
I found rock exposures coming
directly to the shore. The hills
were of lava dark in color with
small fragments of quartz scattered
throughout. When rock
shows in the straits it appears
to a sheet.

Golden rod grows only in one
small place here. It is now
in full bloom and presents a fine

show. Cardinal flower is abundant
as is our native like plant that grows
in the open.

Two small acipitines. One very
young one to be seen in both
birds. Several other birds, but
what certain things to get in
page in my notes.

The morning was occupied
pleasantly through an infection.
It was ended with profusion.

February 20, Sunday.

I slept this morning until
eight. The hot weather of the past
week has been rather trying and
I took this opportunity to rest my
nerves a bit.

The day was occupied in getting
my notebooks in shape and I
have been busy in the field
after the past four days and had not
had time to work up my rough notes
finished labelling a lot of photographs
and worked up my expense account a bit.

Ministerio del Interior

Montevideo, Enero 21 de 1921.-

A LOS SEÑORES JEFES DE POLICIA.-

El portador de la presente, señor Alexan
der Wetmore, del servicio biológico del Departamento de Agricul
tura de Estados Unidos de América, para dar cumplimiento a una
misión confiada por las autoridades de su país, desea obtener
una colección de las especies de pájaros del nuestro.-

Los señores Jefes de Policía de los Departamentos que
visite, se servirán disponer lo den al referido señor las
facilidades que le sean necesarias para el mejor cumplimiento
de su cometido.-

J. J. J.

A small but sheltered spot. But one
good place for the pampas
grasses and a few suitable resting
places in which they may spend the
days.

The Ching-berry is one of the most
common ornamental shrubs here.
My train in February 22, ~~23~~ came at
2:00 and I went to bed. Among
the sleepers I noticed several in spite of
the sueros of my travelling
companion.

At Payandú the road came
into the valley of the Rio Uruguay.
The soil was a black fertile loam and the
country well cultivated. I had a
sight of the river here with wooded
shores before we came out again on
rolling upland pampa with ~~the~~ stony
soil and its slopes in pastureland.

The Rio Uruguay was a small
stream with a narrow band of shrubbery
on its shores. The aspect of the country

with swelling restricted to narrow
bands along the shores suggest
that of the Red Plains.

Some certain traits. Fork-tailed
specimens were abundant. I saw
many *Noturus maculosa*. On
sighting the bird swings down to
within two feet of ground then
judiciously throws the wings up
and drops heavily to earth. Two
or three hops or a little run
are taken to stop its momentum
though occasionally the birds fall
forward on the breast.

I noticed a band of 10 or 15
young ones in thick grass
singing away together under guard
of an old male.

Several *Quanoactes melanoleucus* were
observed singing notes just as our
low valleys.

Corn in many places was
ripe. Considerable quantities of
blizzard were observed.

At 11:40 the train reached
Cito. I had a hurried scramble
to get transportation for my baggage
and then went to the station.
There I held me up interrogated,
and then served. At the Rio
Uruguay I made bargain for a
couch for three weeks and

At 12:45 set out for Concepcion
in Argentina & Germany by
water in 20 minutes. There I
had to secure a change to
carry my baggage in the car
in which I had transported to the
Adriana as certain regulations
by law prevent performing this service
in that gentle way of transporting
the travelers from his pass.

At the Buenos Aires I was
met by my country and returned
without difficulty. Next night I
secured a train this afternoon

found there had been a change
in schedule & there was no chance
of getting out until tomorrow.
I stayed at Hotel Continental.
I remain here and am
waiting.

Concordia is a large town with
excellent shops and a well kept plaza.
In the evening many people were on
the street enjoying the air, in relief
after the heat of the day.

Feb. 23, Wednesday.

This morning I was vexed for
most of the time in making sure
that I could secure accommodations
in the train for Buenos Aires. Because
of recent strikes part of the train
service has been discontinued and
berths in the trains are much in
demand.

After contracting for a berth I
came back, wrote for an hour
and then had my baggage sent over
to the station. According to local
regulation a cartman is forbidden

to load his own cart, necessitating
the employment of a peon or changador
for this purpose. In other words the
hire of two men to do the work of
one, another pleasant method of
separating the traveller from his
pesos.

At eleven I had my baggage
checked and was installed on board
the train. As Companion in my
compartment I had Dr. W. Davies,
898 Avenida de Mayo, Buenos Aires
who had been north on a fishing trip.
The day was hot but I found
travel comfortable once we were
under way.

The season shows early fall here.
Much goldrod in blossom along the
track, and many monarch butterflies.
Left Concordia via Ferro-carriil Entre Rios,
10.30 a.m.

February 24, Thursday.

Arrived in Buenos Aires at 10:15
and went at once to the Hotel Paris.

Called before noon at the Consulate
for my mail. At 4:00 I went
in to see Mr. Dabene and talked
with him. One of his collectors
just returned from Misiones reported
that he did not kill many birds
as most of them were young or
mottling so that it was a waste
of ammunition to shoot them.
I made purchases of cotton, ammunition
etc.

February 25, Friday.

~~This morning I worked in my
and at~~

Later I called on D. S. Bullock,
of the Bureau of Markets who has
just come down and spent some
time with him, securing information
on Chile, etc.

Feb. 25, Friday.

Made further purchases this morning
and worked until 10:30 on
correspondence. At eleven I left via
F.C. and for La Plata, leaving at 11:00
& arriving at 12:00. Walked at once
to the La Plata Museum.

I found Mr. Carlos Bruch, Curator of
Zoology an active man 50 years of
age, small in stature but muscular
fair hair, blue eyes and sandy beard.
He told me that he was about
to retire as honorary curator to
devote his entire time to field work
and research. His address will
remain care of Museo La Plata.
He is working actively now in
Entomology.

He told me among other things that
30 years ago he shot most of his
shoubirds at a small pond only
a short distance ~~in~~ from the museum
building that Bartramian Sandpipers
came there in great abundance and
were killed by the hundred.

In the vicinity of Buenos Aires are
many large estancias where great
tracts of ground are owned by single
men. During the season of hunting
it is usual to have hunting parties

where the attempt is made
to see how many birds may be
killed. The brunt of this attack
falls now on the peridizes though
formerly the shore-birds suffered
when they were more abundant.

Mr. Bruch was very pessimistic
regarding the future of the
Argentine fauna as he believed
that the tendency was to kill
and eat everything. He corroborated

my own observations as the killing
of gulls here in the winter time
for use as food. Attempts at
game laws have been rather weak
and it will be some years before

any considerable advance in that
line may be expected. Mr. Bruch
considered any international agreement
as out of the question at present.

The Museum at La Plata is
an adjunct of the University
apparently as it adjoins the grounds
of the National University grounds,

in a park known as El Bosque.
The building itself is large
occupying space in an open
tract adjacent to the zoological
gardens. At present the building
is undergoing extensive repairs as
it has been in bad shape. The
roof has leaked spotting the walls
and there has been fear that
some of the floors might give way.
Because of these needed repairs the
building was entirely closed and
at first I was unable to gain
admittance, the porteros being very
stubborn when I insisted. The Director was
out but I found the Secretary
very cordial. He explained the conditions
but I told him that I was interested
only in the scientific aspects of the
display and that I would overlook
the disorder. I was able to see
the birds and mammals, fossils
and anthropological collections. Many

Cases were entirely covered to
protect them from dust and in
all paper I had been pasted along
the cracks of the doors to prevent
dirt from entering. The building
has a square hall in front
with a circular room behind.
Of necessity the outer exhibition
hall follows the curves of the
walls leading to considerable loss of
space.

The collection of mounted birds
was of good size and in addition
to native species contained many
from foreign countries, especially
Europe, all were mounted in
usual manner in conventional
perches ranged in shelves. As some
of the wall cases were twelve feet
high it was difficult to see
anything on the top shelves. The
collected ~~but~~ the ~~collections~~ of bird
skins was very small.
On the anthropological collection

are fine series of Indian skeletons
and several thousand skulls.

The collection of glyptodonts
and allied forms was magnificent
to my mind the finest thing in
the museum. I spent some time
in examining the variety of forms
exhibited by these animals.

A small wall case held a
few fragments of fossil bird bones.
I was told that the Ameghino
family retain much of the collection
of fossils that he made and that
it is packed in boxes and stored in
Buenos Aires.

The exhibition series of large bird
skeletons was fine. Dr. Bruch told me
that there were many uncleaned
skeletons in storage and that it might
be possible to arrange an exchange.
I left La Plata at 5:50 arriving
in Buenos Aires at 6:50.

February 26, Saturday.

This morning I visited the Casuarina again for mail and also called on Mr. D. S. Bullock. Made some purchases of supplies. Was at the Museum again for a short time.

Returned to the hotel and was occupied in cleaning up my outfit, repacking and in writing. I visited markets this a.m.

February 27, Sunday.

Made preparations to leave today for Guamini but shortly after eleven J. W. Peters arrived so that departure for a short time.

Since I have been here this trim "batutu" has appeared regularly on the bill of fare. One evening I ordered it and was considerably surprised to find that the bird brought me was a Bartramian sandpiper, as it was served, had

& fat intact. I kept the head. I have looked through the markets here but find no birds in display. On inquiry the dealers always say that it is against the law to sell such birds now and that they have none. Apparently hotels have hunters or dealers who supply them through the island season secretly as was formerly the case at Saipan. My waiter at the hotel tells me that just at the present time they can secure the "batutu" in fair numbers but did not know where they came from. Probably from some few hunters who know where the last few individuals range or stay in migrating. All are agreed that they are greatly reduced.

At one o'clock and I went to Chinles where we visited Mr. Stewart Pennington and saw his

collection of insects. Mr. Pennington
is desirable for exchange especially
in bugs or beetles. He has a
very good collection: one of the
best in the country I am
told. For letters he may be addressed
at Quilmes. Any specimens should
be sent to him at the Museo
Nacional, Peru 208, Buenos Aires, in
care of Mr. R. Dobson.

Mr. Pennington said that he
believed there would be no interest
in a treaty for the protection
of birds and that if there were
one in force it would not be
active as it would be inoperative.

There is a society here of
recent formation called the
Comité for the protection of
birds plants and children but I
have little information regarding it
save that it is active in the
schools. It will be however an
educative factor.

At 4:50 we returned to town.
Peter told me that he saw no
shorebirds whatever at Nahuel Huapi
which has definitely decided me not
to go there. He says that in
the Negro he saw the birds in
small numbers from September
until his departure but that at
no time were they abundant.
They frequented lagoons and marshy
areas in "Upper Saram". The
two yellowlegs and Baird's Sandpiper
were the most frequent.

February 28, Monday.

This morning I was occupied
in bringing my expense accounts
up to date, a job that occupied
me until noon.

In the afternoon I called to
see Mr. Bullock and Mr. Brady at the
commercial attaché's office. From Mr. Brady
I secured information regarding
Mendoza.

Had my gun & insect net
repaired and secured some
photographs.
Peter & I at Eduardo's in
the evening.

March 1, Tuesday.
This morning I was occupied in
completing my expense accounts and
my estimates on expenses.
The sky clouded over at noon and
it rained for a time, becoming very hot
and oppressive. Visited the post office
to send some mail.
Worked on notes until 3:30 in the
afternoon when I met Peter at the
Museo Nacional.

I talked for a time with Dr.
Berio and then went into Dobbin's
office. Was here until nearly five.
Peter and I spent the time until
midnight discussing our bird work
in the Argentine. We found no sharpshins
whatever at Nahuel Huapi. The birds
were only tolerably common in
Southern Rio Negro.

At dinner we ordered batatas and
were served two Bartramian Sandpipers,
price 1.30 Argentine. I kept a leg from
my bird and Peter preserved the skull
of mine.
Finished packing and went to bed.

March 2, Wednesday.
left the Estacion Constitucion at
7:30 via Fero-carril & passing
south through Temporal, Camelas
and Empalme Lobos. The day was
clear and cool & fine early fall
day. Golden rod tops in blossom
all along the track. I saw many
butterflies. Fields are beginning to
turn brown and the last crop
of alfalfa is being cut. Much
land is under cultivation through here.
I saw extensive fields of corn and
broad tracts of prairie stubble. Harvesting
is going on and a heavy crop of
wheat is being handled. Warehouses
along the track are full and piles of
bags are stored outside.

At Ezeiza two Bartramian Sandpipers
flushed near the track.

The early morning was sharp and
cold. About eight I saw two immature
Horn-tailed Flycatchers resting in the sun
on a wire fence resting against one another
like weaver finches for warmth. The
birds were seen as far as 25 de Mayo

in fair numbers but not close together.
Between De la Riestra and Berrando
I noted an area of low rolling
undulations with sandy soil marking
an old dune area. Below Daireaux
was a similar tract and I noted
several. This dune as far as La
Larga. These resemble the dune tract
at Los Yungles and to my eye appear
to have been formed on a
sea beach when this area was
being elevated. A similar tract was
seen at Carhué.

Between 25 de Mayo and Estero
were small lagoons near the track
in which grebes and lesser yellowlegs
were common. I saw one S. Otter
& sandpiper.

From Hale to Bolivar were many
small lagoons, with broad marshy
tracts; though here I saw about
100 each of the grebe and lesser yellowlegs
scattered singly or in groups of 3 or 4.
One solitary sandpiper seen.
Hale is a small place with a lagoon

It would be as a base from which
to work.

As the sun was setting we
came to the Laguna del Monte
and at 7:00 reached Guamini.
Registered at the Caracocha Hotel.

March 3, Thursday.

The morning air was sharp
and cool and though the sun
was not at fault it pleasant for
the entire day. At sunset I went out
in the field.

Guamini is a town of about
8000 inhabitants, perhaps less,
built compactly on a level flat
adjacent to a large lake the
Laguna del Monte. The street runs
directly down to the water and in
a few minutes I found myself
on the shore. The lake offers many
small indentations along its shore
lines and has slight elevations
rising as islands from its
surface. It is said to be deep
in spots but in the main is
shallow. At present the water

level is high and as it flows in the
lower part of town, brick structures have been
inundated and abandoned. The shoreline
is low in the main though occasional
bunches where there is exposure of a soft
lime rock are chalking with a beach
formed with bits of flint stone more or less
worn by the water. Elsewhere alkaline
flats being barely above the surface.
Tentacles inland. The water is alkaline
but is fresh enough for the use of
stock. Effluences raised on wet
mud near the shore and isolated
spots were strongly alkaline.

The country in the main is
divided into chacras some of which
appear never to be under water. I noted
old furrow marks extending out into the
shallow in several places. Occasional old
drabbling places are marked by groves of
trees, elsewhere the region is entirely
open. As usual much stock was
pastured near the lake. There was no
aquatic vegetation in the water.

Fish abounded, I collected a small

mud mallow in the shallows
When the species swarmed in schools
It is known as Mucarita. Fishing is
a considerable industry and thousands
of fishermen were common. at
one of these I secured specimens
of two other fishes the Pejerrey
and a predation known as the
cientudo. There are said to be two
other species of mud fish. The
Pejerrey is a species of much
importance and large quantities are
shipped to the markets in Buenos
Aires. The species is taken in set
lines at night each line carrying
from 200 to 500 hooks. (stopped)

In a farm in one house where
I had made and talked for a time
shore birds were common. The
White-rumped Sandpiper, greater and
lesser yellow legs were present in
some numbers. and I found in small
flocks of Buff-breasted Sandpiper. We
splashed the water & Hudsonian
Godwits and spent some time

in watching them. 8 birds were
distributed in numbers all along the
lake shore and I saw many
small gulls (*maculipennis*). A few
coots and Podiceps americanus were
noted in the lake and with them
scattered *Najila spinicauda*.

On a railroad cut I encountered
a little colony of three or four
Ouis and killed an adult female.
The saw grass which grows in
clumps from a heavy base is
now in flower. The yellowish
white plumes are supported on
stems above the main clump
and present a beautiful appearance.
The grass is known in the Chaco
as Paja brava. Here it is called
Cortader. While the stems is known
as cola de zorro. The stalks are
often 6 or 8 feet tall. The saw edges
of the grass are keen and I
have had many bad cuts from

it in searching for birds, the
clumps grow from a raised
base of roots (that is usual a
foot or so tall, but may rise to
two or three feet. The grass is
especially noted in wet weather.
It is appears to be "Lown Swain"
in the main, extending along
a draw to Zapala, Pedernales, Comuna
through the Chaco.

March 4, Friday.

This morning I was out at
day break finding the morning
air cold and sharp. I followed
out in the same direction as
yesterday. There is a strong
migration northward among the
shorebirds. Yesterday I entered many
in the outward journey. On my
return with ~~scarcely~~ save the
White-rumped Sandpipers had
disappeared. Today the same thing
happened. The birds apparently drop
in here from day break in through

The early morning hours but are
soon disturbed and pass on to some
quiet region. There is considerable
shooting going on. I have noted
two cripples among Buff-breast
sandpipers and a number among
Yellowlegs. The shorebirds are
subject to constant persecution as
this range in York's pen which
it is Smith's Hill several at a
single discharge which affects the
chiefly mind of the migrating fowls
but only by ~~unpleasant~~ regions
as in isolated lagoons may they
find rest. The larger species are certainly
doomed to decimation with no
apparent relief in sight ~~in~~ large
numbers of these birds must
winter farther south as here I am
near the southern end of the Province.
The lagoon area is one of the most
favorable that I have found for these
birds. This lessening in number may
be attributed in large part to shooting.
I saw four Wilsonian Godwits

but was unable to get within
range. White-rumped swallows
were present in flocks and often
sped all about me. Little black
centruks also migrated from the
south frequented the lake shore.

On a clump of golden rod
I found many mantids insects
even the cold air. The insects
just among the flowers or leaves
had found the fore part of the body
concealed the wings and abdomen
projecting and resembling some fly.
The creature is agile and
towards the thorax steadily backward
to seize any insect that may come
within reach. Butterflies, white
and yellow swarm over the fields
now. There are many grasshoppers.
The weather is typical of early fall.

March 5, Saturday.

Shortly after sunrise I went out
along the lake shore to the southwest
of town. The region traversed was similar
to that covered in previous days.

Projecting joints capped by soft lime
rock and indurated clay rising
4 or 5 feet above the water level attended
with shallow bays where the
water followed broad low depressions
near inland. On the joints the shore
was shelving, along the bays broad
sand flats barely rising above water level
extended for considerable areas. In these
places also inflorescences had risen.

Broad sand flats showed only occasional
patches of *Salicornia*. Above these
were extensive meadows of salt grass.
Fields that had been cultivated were
now grown with a thorny cactus
and other prickly weeds. Cattle
sheep or horses were fastened every where.

Fishermen lived in little houses along
the lake shore. A few houses had been
abandoned as the rising water had
covered the arable land pertaining to
them.

The morning air was cool, and

later though the sun shone from
a cloudless sky I found it pleasant
and comfortable walking. The wind
blew strongly from the south west
today raising waves in the lake
and blowing long winrows of
grass along the shore.

Almost at once I found
a little band of Godwits but
was unable to get within range.
Greater and lesser yellowlegs were
common and White-rumped
sandpipers abundant. I noted a few
Buff-breasted Sandpipers, ^{two or} three Bairds,
Tharus maculiferus and *Trucianus*
luna rested in flocks at the
border of the water accompanied by
many Cormorants. With them I
was surprised to encounter three
Larus dominicanus. Herons are lacking
here though fish abound. In
fact I did *Tharus ralloas* 1021
here in the western pampas.

All of these birds are very shy and
after a single gun shot of the shore
line for a mile is deserted save
for a few White-rumped Sandpipers.
The birds are persecuted constantly
with little or no hope of refuge.
As the country settles conditions
will become much worse.

I travelled a long distance today
watching the abundant shore birds.
A little flock of White-rumped
Sandpipers made a noise of the coast
making air song and chattering
frightfully among themselves in imitation
of the coming pairing season.
Little parties of Curlews newly
arrived from Patagonia fed along the
lake shore. Flocks of *Bygones*
skawked about fighting the wind.
When tired they alighted in the
open on the ground.

I saw for the *Bygones* frequenting
water birds are scarce here. The
Bygones and *Trupialis* ~~the~~

noted at Carhu are entirely
wanting and the Pifito are the
only common land birds. In a hand gun
a party of section hands returning
slowly to Sun at the noon hour
nailed a horseman who tossed
them his lariat and towed them
in to the village.

March 6, Sunday.

At daybreak this morning I followed
with Calang the shore of the lake.
The sky was clouded in the south
with apparently heavy rain falling
at a far distance. The breeze came
from the north east until about
noon when it suddenly settled into
a dead calm. The morning air
was cool, almost cold in fact and
I was not sorry when the sun
rose suddenly and began to warm
the air.

Conditions today were entirely
different from those of day preceding
when birds were represented by

Comparatively few individuals.
I saw Hudsonian Titwits passed travelling
north early in the morning and
I saw two hundred or so White-
rumped Sandpiper, these with a few
Great & Lesser Yellowlegs made up
the lot of shorebirds. There has
been a steady movement to
the north since my arrival
and apparently the bulk of the
birds has passed me. It is
interesting to note that no Golden
Plover have appeared. Apparently
they have gone on north.

I shot a Great Yellowlegs and
two Titlts and in a Cree the
lake shore for a mile we started
saw Golden Plover Costs and quabs
that swam out to open water as
I approached.

I tramped for a considerable
distance searching for small birds
but found only a few Pifito. Finally

I passed on to a little beach
along the railroad when I
secured a Myospiza, Four Arremonops
and greatly to my surprise a
Cov. bird.

At 9:15 I returned to the
hotel and cared for my birds.
In the afternoon I packed a
box of skins and two large
cans of alcoholics.

March 7, Monday.

The storm threatened this morning
and I found that rain had fallen
during the night. The sky was
heavily clouded ground the horizon
and after sunrise the wind shifted
suddenly to the south and a
strong gumpuro was on with the sky
dark and threatening me through
the way to the zenith and with
scuds of clouds driving before the wind.
The wind was cold but not unpleasant.
In two hours the gale was over as
suddenly as it had begun.

I followed south again along the
lake shore. The water appeared
gray and cold reflecting the heavy
sky above and waves rolled in
along the low shores. At the edge
of the sand I found a little flock
of eight godwits and after flushing
them two or three times managed
to get a group shot at only
eighty yards and by great good luck
drove me down. I was glad
indeed to waste for the bird.

From this point I traveled on
through the country traversed two
days before. The bulk of the shorebird
movement seems to have passed.
I found scattered greater yellowlegs
and white-rumped sandpipers along
the shore but encountered only one large
flock of the latter species. A few
Buff-breasted Sandpipers were seen.
Swallows were more abundant and
apparently there has been migration
among them. The bulk was Pygocichla

With a few *Brachyoceros* ~~specimens~~ among
them. I killed one ~~specimen~~ whose
identity I am uncertain as it is
a young bird. Two others of the
Leyth species seen.

Brachyoceros were common in little
flocks in the wood patches. With
them I found *Amuricus* whenever
there were heavy growths of thistles.
Many *Anthus caeruleus* were noted
& four *Don*. A few scattered bands
of *Centurus* passed travelling rapidly
along the lake shore. These birds
of *passerinus* noted - ~~barus~~
maculipennis was common & saw
many *Trucanus* *sema* and only
little flock of *chundra* black-capped *sema*
that I appeared to be *birmanicus*.
Pintail *go* in flocks along the
bay and I saw many *doob* and
stello. Birds were common but
very shy.

At dawn I returned to *Don*.
I look carefully for mouse sign

in the country but find none.
House mice taken in my room at the
hotel are more suff in color than
usual.

While preparing my specimens I
had the cans of *alcohol* ~~collected~~
and packed these for shipment.
Also prepared ~~two~~ more boxes
of specimens.

March 8 Tuesday.

At daybreak the wind was blowing
strong from the southeast with a
bit of cold that for a few minutes
made me think of heavier clothing.
The sky clouded swiftly as the
pamphs advanced with the sun
appearing only at long intervals.
About ten the wind checked and
it became somewhat warmer. The
sun shone during the middle of the
day but it remained cool and pleasant.
I followed east along the lake shore.
The main shorebird migration seems
to be over. I noted small numbers

White-rumped sandpipers and
An occasional greater yellowlegs
but gulls were the main
inhabitants of the shoreline. About
noon a flock of 200 white-rumps
came drifting in from the south
and performed complicated evolutions
over one of the bays. A flock of
12 Hudsonian Godwits dependent
of the carrying power of heavy
loads of embossed pouches allowed
me to approach within
75 to 78 yards before starting to
take wing and so a penalty
left three of their number behind.
I was fortunate in making clean
kills on one small group so
that there were no cripples to
be off with hanging legs or
limping flight. A blind flock
shooting at shorebirds as it
leads to much misery. If
possible I choose leads or
stragglers in shooting them.
An occasional lesser yellowlegs &

Buff-breasted Sandpipers were noted
but nothing else. Birds in
flight passed toward the north,
indicating migration movement.

Little bands of Centrites and
moved in also and I collected
a number.

On my return I attempted to
pass through a little clump of
thistles & weeds that I had
missed previously in following the
beach shore and found to my surprise
that it was tenanted by a blackish
flock of Brachositta with a
small number of Siptoris and
Synalaxis. Returned shortly after
tea with a good lot of birds to
care for.

At three thirty the specimens were
carefully packed and I proceeded to pack
a box of specimens and get my
outfit together, a process that
was complete at six.

Left Guamini via screwmail boat,
9:15 P.M.

March 9, Wednesday.

Arrived in Buenos Aires 9:05 a.m.
Visited the Consulate but found
very little mail. One letter from
Andrews mailed in New York Dec. 7
marked received in Buenos Aires

March 2, regarding Asiatic trip.
Found Peter here at the hotel
and made plans to go together to
Mendoza.

In the afternoon I visited the
Museo Nacional and spent some
time with Mr. Dabine.

Repacked my storage chest at the
hotel for shipment, made up two
parcels of miscellaneous papers & pamphlets
to be forwarded in official pouch
through Bullock at Embassy.

March 10, Thursday.

This morning I brought my
expense account down to date and
then certified to two expense vouchers
at consulate.

Enquired of Mr. Clausen for blanks
for Income Tax return and was told
that blanks had not yet been received.

Firma del Dr. Alexander Wetmore, Ph.D. - Alexan del Wetmore.

Ministro de Agricultura
de la Nación

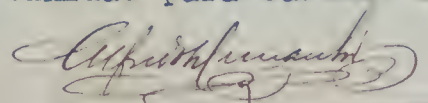
Buenos Aires, Junio 30 de 1920

A S.E. el Señor Gobernador de la Prov. de Buenos Aires
Dr. Jose Camilo Crotto
Presente

El Doctor Alexander Wetmore Ph.D., que entregará esta carta a V.E., es un funcionario de la Oficina de Investigaciones Biológicas del Departamento de Agricultura de los Estados Unidos de América, comisionado por aquel Gobierno para hacer estudios relacionados con la vida de los pájaros en la República Argentina, y que ha sido presentado a este Ministerio por el Señor Embajador Argentino en Washington, Doctor Tomás A. Le Breton.--

Ruego a V.E. se le concedan todas las facilidades posibles para el mejor cumplimiento de su misión que interesa en modo especial al Secretario de Agricultura de los Estados Unidos de América.--

Aprovecho esta oportunidad para saludar a V.E. con toda consideración



visited the National City Bank & drew
fund.

In the afternoon I did more writing
(and packing) and at 2:00 called
at the Commercial office of the
Embassy and saw Mr. Brady,
later I talked with Mr. Bullock
securing more information regarding
Chile.

On Thu. thirty I called on
L. H. Valette in charge of
the Division of Fish Culture, Division
of Ganaderia, Ministerio de Agricultura.
Address Sr. L. H. Valette, Jef. de la
Oficina de Pesca, Paseo Colón 982,
Buenos Aires, Argentina. Mr. Valette is
very well informed regarding fish and
game matters. He confirmed my belief
that according to existing law game
is the property of the owner of the land
and as such may be killed by him
at any season at will. He also said
that local divisions as even

Municipalities could modify existing
game laws making them more
stringent if will. It was his
opinion that international agreement
in the protection of birds could
be brought about by overtures from
U.S. provided that some ^{substantive} report
was available that gave definitely
the information that birds were
actually migrant between the
two countries.

Purchased further supplies.

March 11, Friday.

Secured visa and passport at Chilean
consulate this morning.
Purchased tickets for Mendoza, deposited
baggage. Also called at bank & drew
more funds.

Worked until noon on notes.

Left at three P.M. via Buenos Aires
Pacific. Weather hot & humid, sky
overcast and showers falling.

J.W. Peters and I were travelling together
and had a small compartment to
ourselves. Near Franklin we saw one

Fork-tailed Flycatcher and near Rivas
was seen to be a Podiceps member.
In this same region we traversed
a tremendous area of estancias,
at least 1000 plus were noted
including several broods of small
young.

The region traversed until
dark offered no change from the
usual scene in crossing the
level pampas in Northern Buenos Aires.
Occasional traps were cut up
in small fields, but in general the
land was held in broad Pastizales
with large pastures and stretches
in alfalfa.

March 12, Saturday.

At daybreak this morning we were
entering the arid section near Villa
Mercedes, with a range of the Sierra
Cordoba in view to the north.
The track swung around some
low rather rugged hills covered with
brush to enter San Luis and then

struck out due west. The region was dry and arid ground with a low growth of brush that was thick though. The ground beneath was fairly thick grass cover plants. There was much habra here with the other plants that accompany. The aspect of the vegetation was that of Raca, Rio Negra and was lower Sonoran. In most places the brush was from 6 to 8 feet high though occasionally it became depauperate down to two feet.

Near La Paz there was a small tract of water where I saw some shorebirds apparently *Sotinus flavipes*.

At Las Cañitas there was a slight change apparent in the aspect of the vegetation suggesting the approach of upper Sonoran but when we came again into growth typical of lower Sonoran. This occurred at No 291

When we noted Vinat, Chinan and Piquillin. At General San Martin were many figs.

Near Mendoza the track traversed a fertile irrigated area of vineyards and cultivated fields. The town of Mendoza when we arrived at 5:00 P.M. is said to have 60,000 inhabitants. We registered at the Grand Hotel. The region thus far appears to remain as lower Sonoran with indications of approaching upper Sonoran. Palms were common in the parks and we noted Janiers. Also one tree of a species of *Schinus*. (see sp.)

March 13, Sunday.

This morning Peter and I went out shortly after six and went out west of town crossing a broad flat, rising in gradual slope to the base of the Cordilleran foothills. Low isolated hills projected from the slope toward the base of the higher range in the

background. The flat was rough and stony cut by many dry washes, some broad and others narrow that in places gullied deeply. Creosote bush was abundant, an acacia was common. Other shrubs were an acacia with a south hooked thorn and a shrub with a holly like leaf and a fluffy composite like seed that came in toward the base of other foothills. This last may be from upper Sonoran elements entering from higher altitudes. The other shrubs I saw those found at Boca Bend may be called typical Lower Sonoran. There were many small barrel cacti and a few *Echinopsis*. The shrubs were all small averaging three to six feet tall.

The altitude at Mendocino is given as 756 metres. We were some distance least 100 metres higher. The altitude

when we collected may be placed at 2800 feet.

Birds were present in small numbers but were very shy. Two species of *Rhinocrypta* were noted, a large & *gnathaxis*, *leptosternum* and *Pseudoscissus gutturalis*. A *cinclus* that must have been *Nothoprocta* jumped from the flat. The region was dry and arid with no shade.

A flock of *Streptoprocne* circled over a hill and flushed *Hydropsalis* in the washes and found *Sceloporus* in the bushes. Peters killed a lizard similar to those I secured at Zapalar. After some search we found a little water hole and drank much needed water.

At noon we returned to town. The afternoon was occupied in caring for a few specimens.

In the morning I had a fine view of the steep and slopes of the foothills

That rose apparently to 4500 to 5000 feet.
The slopes were covered with short scrub
that in the bottoms of gulches showed
traces of grass. So the south we
had occasional glimpses of the snow
capped peaks of the main Cordillera.
Snow had fallen there recently and
came well down on the sides. Then
at the base of the foothills however
we found it extremely hot still.

March 14, Monday.

This morning I wrote a letter to
the Despatch Agent and one to the office
loaded a box of skulls.

At 10 Peters and I looked up
the Educational Museum of Menzies.
The building was a structure 150 by
60 feet or more standing ~~back~~ in a
little lawn with a ^{rough} fence in front.
The main hall was large and
spacious and contained mounted
exhibits of bird mammals, reptiles
& amphibians. The collections were
mainly local. The bird taxidermy
was usually very good and

these specimens were well spaced.
The room was well lighted and
the general effect pleasing. Skins
were kept in the lower portions
of the cases.

Dr. Carlos S. Rued was an energetic
man, young in years, large in
stature. The collections were in
large part the work of his own
hands. He kindly presented us with
a number of bats preserved in
alcohol. We found him well
informed as to the region about
here and in addition I secured
from him much valuable
information regarding Chile.

After some discussion Peters & I
decided to go first to Potrerillos
and Mr. Rued gave us a letter to
a man there.

Following this I purchased
some supplies and then packed

a box of specimens. In the evening we made further preparations to leave.

It was very hot here today. A heavy bank of cloud hung over the Andes indicating storms in the higher altitudes.

The altitude of Mendoza is given as 756 metres.

March 15, Tuesday.

We left Mendoza this morning via Ferro-carriil Trasandino at 7:50 a. m. The train was narrow gauge with small but comfortable coaches. All was clean.

The line followed out across the flats rising gradually until it reached the hogback below the main foothills at the Rio Mendoza. Below the track were many vineyards alternating with small chacras of maize or alfalfa. Many of the vines were hung heavily with ripening grapes. Some of the small houses were empty and deserted as since the earthquake of December last hundreds of people have left the district. I saw an *Ascarum*

in the paper to the effect that a man offered to build houses proof against earthquakes.

Above the track were the arid flats of sand and gravel grown with creosote and other scrub. Poplars and willows grew along irrigation ditches. There was no other tree growth outside of the towns. About thirty kilometres below Mendoza we entered the stream valley of the Rio Mendoza. The ascent here was rapid as at Potrerillos the altitude was given as 1355 or 1370 metres according to the authority.

The Valley was narrow and winding at first with steep barren rocky hills on either hand and the swift muddy current of the river below. A narrow tongue of typical low sonoran followed the stream bed extending well up on north facing slopes. At K^o 34 from Mendoza a finer sonoran appeared ^{on the upper bank} of south facing alluvial fans on the north side of the canyon in the form of

Small gray atriplex that at a distance ^{seemed to} formed a gray mat over the ground. At intervals higher up this atriplex appeared on the south side but the stream remained dilute low & moran to the broad valley at Potrerillos when is an extensive area of low moran coming a tract that passes on to at 5500 feet or more toward the base of the inner Pre-cordillera.

This was characterized by creosote bush, Piquillini, and Chataras with a second species resembling Larrea.

At Potrerillos we went to a large rambling old hotel with extensive grounds shaded by willows, cottonwoods, Populus and ash, an old estancia place used now for summer visitors in search of respite from the heat of the plains below.

After getting out our outfit and had a noon meal we went out and set a line of traps along the valley of a little stream

coming in from the south. Mouse sign was scarce but I set 48 traps up a small gully watered by seepage from an irrigation ditch.

From here we continued on up the flood valley of the stream. I shot an Upucerthia, an anaeretes and later a Semimimus and a beautiful pigeon that I believe is Mitrospiza melanosticta.

At six we returned to the hotel and catalogued our specimens. Darkness came quickly after the sun passed from sight behind the Andes.

Bellini noted at the station at Cachenta.

March 16, Wednesday.

This morning Peter & I went out early and took in our traps. On 48 traps I had secured 5 mice, all apparently the same species. The animal were secured in herbage along a little waste run from an irrigation ditch. Traps set among

the bushes on the higher dry slopes yielded nothing.

After coffee we went out down the river. The valley here falls rapidly and the current in the streams is swift. The valley is fairly broad but with sloping sides; extensive alluvial fans come down from steep gullies on all sides.

The slopes are covered with *Arceuthobium* bush, a species at least, & *Piquillia*, also the yellow flowered shrub found at Roca. The ground is open and very stony with very little herbage. Water is drawn off from the streams to irrigate fields of grain, potatoes and alfalfa, willows, and poplars with an occasional cottonwood growing along the ditches from the valley via growth. The fluffy headed spring bush seen first above *menziesii* is common.

Along the river in suitable places are sages grown with *S. sericeus*, a small species, and *Eleocharis*.

Among them are shallow pools. Clumps of the feathery headed saw grass grow along the river.

Birds were scarce. We followed up one valley with sandy soil then usual but saw nothing save two sparrow hawks. Returning to the river we encountered a few small birds and secured a number. I took a fine humming bird with second bill new to me, and two females of *Mitrospiza*. It was difficult to follow small birds in the thorny brush.

We returned about eleven thirty and I was occupied until nearly six in caring for specimens. ~~There~~ ^{From} the sky was overcast but if clear later. The sun was hot but a breeze that ~~came~~ ^{rose} up later made it cool in the shade. Toward evening it became quite cool. Peters encountered a small wave of migration late in afternoon.

March 17, Thursday.

Peter and I went out shortly after six this morning and ate a lunch on the banks of the Rio Muedza for breakfast. The sun was shining on the higher peaks illuminating the lower slopes with a ~~ruddy~~ glow in ~~contrast~~ beautiful contrast with the higher snow capped ridges at the summits. As we ate the line of shadow crept slowly downward until in half an hour the banks of the river were lighted. The early morning air had been chill so that the warmth was welcome.

Small birds ~~came~~ up into the bushes to enjoy its rays and rested with fluffed out feathers and drooping wings and tail.

We went three or four miles up the river. The stream was often led to 100 yards across with a rough turbulent current. The water was very muddy; its color distinctly red. The banks were dry without small

entering streams. A short distance above the station the valley narrowed again leaving barely room for the track besides the river. The slopes were grown with creosote bush of two species but at 5000 feet I believe the zone may be said to change to upper Sonoran. Possibly it may be found that lower Sonoran continues higher but two species of *Atriplex* came in here and the lower Sonoran elements are becoming dilute.

The slopes were rough and rocky as usual.

Returning we followed an irrigation ditch for a short distance finding small birds common. I killed a fine *Agriornis* that I have not seen before. Returned at noon with thirteen birds to skin. About five I went out near the hotel in search of some *Pseudochloris*.

I located the birds on some rocky benches but found them so wild that it was unable to get near them. I collected two more young Semimotus and a Melospiza. Return at dusk.

One or two bats have been flying about but we have been unable to get a shot at them.

It was much cooler today but still hot in the sun. Snow is disappearing on the low ridges above us.

March 18, Friday

Peter and I went up this morning along the small stream known as the Rio Blanco that passes the hotel. Like the Rio Mendoza it has much fall and a swift current but as it heads only at comparatively short distance away it has clear water. It ranges from 5 to 10 yards wide. From it the City of Mendoza derives its water supply.

We found birds fairly common but as usual rather wild. I secured

a few Pseudochloris today, also a Sporophila with brown under tail coverts not taken before. A quail shot on a steep slope proved to be ruffiniae and on the return I secured a Cinclodes in habits like a water thrush that I had not taken before. As all four species new to me were shot. On the return we encountered a flock of swifts with long wings and feathered tails and killed several; returning after dinner to get two more.

In a small side channel where a little stream of water ran down over rounded pebbles we captured several of the curious fall cat fish, eel-like in appearance with thin long slender bodies, and ranging from ~~two~~ to four inches long. The animals sought shelter under little stones or at the bottoms of tiny pools where they were secure from the force of the current. When held in the hand they had the curious habit of wriggling along frequently at a sharp upward

angle by aid of the roughened
opercles. With them were a
few strange flattened ^{Geoglycaeus} ~~Crayfishes~~,
with hard firm carapaces.

A few small lizards were found under
the bushes on flats but they were
not common. I killed one today.

March 19, Saturday.

Woke morning Citos and I went out
shortly after six and after the
usual delays succeeded in getting
away about 7:30 for home back
in a place toward the base of the
higher foothills known as El Salto.

The sky was heavily overcast with
gray clouds and the higher mountains
were entirely concealed. The trail
followed a road for a distance, turned
up a small gulch that opened
into a rough narrow canyon and
then ascended to some rolling rocky
flats above. We stopped in route
to shoot a few *Amorpha* and
then continued to the estancia.
The administrador received us

Cordially gave us coffee and then
he and his brother accompanied us
for a time to show us favorable
points in which to collect.
El Salto is located near the
base of the high intermediate
range known as the Sierra El Plato,
which rises rather abruptly to snow
capped tops. The valley at El Salto
was fairly broad; small streams
came down narrow side valleys
running with swift current. The
altitude at the ranch was given
as ~~1985~~ 1735 meters. We collected above
and ^{at short distances} below that point and as a
general altitude listed our specimens
as taken at 6000 feet. Small marshy
tracts occurred along the streams.
Above were ~~step~~ gravel benches
bordering steeply sloping hills where
a sandstone rock was exposed in
abrupt points. The slopes of these
hills were covered with Piquillin,
the feathery scrub shrub taken above.

Montezuma and at least two cross
bushes. A large atrophy was common.
The flats I called a *Rhynchospora*
lanceolata. We considered that
some of the *Silene* ~~was~~ *Sonorae* extended
up to 6000 feet at least.

Birds were fairly common but rather
wild. Between us we collected
45 of 28 species including a number
not taken previously. Several of a beautiful
long-tailed hummer *Tesbia sparganura*
were ~~seen~~ and others taken.
The small parrot *Amorophitia* was
common as was *Semimunda fasciata*.

Also took a *Phytoloma*, *trifurcata*
militaris a Swift with feathers
tarsus etc. At five we started
back reaching the hotel about dark.

W. B. Alexander with Blanchard
of the Dep. of Agriculture (Argentina)
had arrived at the hotel and
we spent a pleasant evening together.

March 20, Sunday.
Peter and I were very excited from
this evening on, caring for the material
secured yesterday. Most of my birds
were molting rapidly so required
some care in preservation.
The day was fair and the weather
cool and pleasant. The weather is
that of fall.

At five we went out along the
river below the hotel. I collected
what appeared to be a southern form
of the Chingols (*Brachyptera*) It is
quite different than the *Chingol* form
secured here.

March 21, Monday.
We went out at six and walked
below the hotel toward the Rio Grande.
In small streams at the hotel is
known as the Rio Blanco. Secured
several small birds along the flats
near irrigation ditches.
The plumed sand grass is common
near along the streams.

Alpuntia russelli, *P. ovata*, a ^{aethiops} *Cereus*,
Echinocactus, etc.

At 10:15 we left with Alexander
in the train for Mendoza arriving
at noon. Went to the Grand Hotel
where I found mail waiting for
me.

Occupied in buying supplies
and writing in afternoon. Called
on Mr. Ruck in late afternoon.

March 22, Tuesday.

Left Mendoza via Buenos Aires Pacific
7:30 a.m. and arrived at Junuyán,
Provincia de Mendoza at 9:40. The town
was located a short distance from
the railroad station but Peter,
Alexander and I who were travelling
together were soon located in a room
in the Hotel La Cosecha.

Peter and I looked over the town
a little and then called in the
Comisario.

After dinner we wrote for a time
in notes and then about three

went over to the Rio Junuyán.
Junuyán is located in an extensive
irrigated district, where corn, grapes
and alfalfa are grown. Considerable
area now devoted to hemp, cultivated
for its fibre. The region here is level,
with a low elevation of hills on
the eastern bank of the river rising
perhaps two hundred feet above the
general level. The region is well settled
as the soil is fertile and constitutes
one of the most populous districts
that I have seen aside from the
immediate vicinity of Buenos Aires.
There is more corn ground here than
is usual.

The Rio Junuyán was a small
stream of muddy water flowing swiftly
through one of many channels along
a stream bed cut in part 25 feet
below the surrounding level through
a soft sandstone.

We set a line of traps near
the river using soft corn and berries

of the Piquillin for bait.
I collected along the river
were broad with sand & gravel
bars but save for two Collared
Doves I noted no shorebirds.

Blackbirds were flocking in the
cornfields and many finches, mainly
English Sparrows and Brachypteryx
were gathered in the hemp fields
where men were engaged in harvesting
As the hemp was grown for fiber
to be used in making algarata
rope it was allowed to ripen
well. The plants were pulled up
and the heads beaten at the ground
to remove loose seeds, after which
the stalks were bound in small bundles.
Through this method of harvest
a good supply of fine seeds
was left in the ground in the
fields.
We collected a few birds & then returned.

March 23, Wednesday.
The traps were taken in. I saw
this morning. I had two mice of
distinct species caught under
bushes on alkaline flats above
the river. They were taken in
Piquillin traps. Part of my traps
apparently were set near a
bank den and yielded nothing.
The sky was overcast all
day and the air was cold.
To the westward of Pungato and
the Sierra de Plata, snow covered with
more snow than when we left
Potrerillo, - have been in sight but
today were covered with clouds.
We worked down along the
river looking for opportunity to
cross. Small huts or jacales
were scattered through chacras of
corn with occasional tracts
not under cultivation, covered with

growths of atriplex and scattered
Squillia. The altitude here is
about 900 meters, somewhat higher
than Mankya and the zone
lowland Sonoran.

Along the river were small
swampy tracts covered with
Eleocharis or occasional clumps
of Phragmites. Alkaline flats were
covered with salt grass with
occasional clumps of a Chenopodium
shrub. Clumps of trees or long
lines, mainly poplars marked
sites of older houses or the sources
of irrigation ditches.

The river Sonoyan here flows
almost directly north; during
the forenoon I saw one small
flock of yellow-legs and four golden
plovers all travelling directly north.
No others were noted. One or two
flocks of the black-brown-backed centurus

came in also and I had
an idea that the many ^{Hypobrycon}
seen were migrants. Colder
weather has evidently driven
many birds up from the south.
We collected a pair numbering
small birds. The bird was being
two Cistothorus taken in some
woods along a small ditch.

As noon we returned and
were occupied until dark in
caring for specimens. So cold
during the late afternoon that
we got out flannel shirts and
sweaters.

March 24, Thursday.
This time of us left at 7:15
the morning in an auto travelling
west toward the mountains.
The irrigated district here is
broad with many small
scattered houses. Poplars and

Willows were common. We
had some trouble at first in
a mud hole but after getting out
continued without further accident.
About 15 miles west we pushed
out into sloping flats that
led up gradually toward the
mountains. These were cut by
shallow dry arroyos and were
covered with the usual shrubs.
The transition from the black
clay loam of the lowlands to
the stony sandy gravel of these
flats was rather abrupt.

It had rained during the
night and the brush was wet
so that we were pretty well
soaked. The sky remained overcast
and the weather continued stormy.
There was the chill of fall in the
air and the leaves on many of the
poplars were turning yellow.

Birds were just from common and
we encountered few in the open flats.

There were some large
numbers of *Columbus, jimi*. We
had hoped for some of the high
country birds on the flats, driven
down by the storm, but the
only one I encountered was a few
~~of~~ *Pseudochlois*

Now we returned and remained
in for the remainder of the day.

March 25, Friday.

Stetson and I went out at seven
to a Cienaga south of town. We
followed out along a broad road
where poplars and Sumac lined
irrigation ditches to a cross road
that took us over to the region
that we desired to work.

A series of small streams fed
by springs come in toward the
river forming small marshes
or cienagas at intervals. The soil
has a substratum that carries

Such water and various wetlands carrying a great deal of water are common.

The marshes are ground with broad leaved cattails and occasional patches of phragmites. A small *Scirpus* resembling *olneyi* is common which with meadows are covered with *Eleocharis*. The marshes occupy depressions with more or less well defined banks and seem to represent an old channel of the Rio Uruguay abandoned now through a shift in the stream bed.

Highland bordering the swamps was cultivated in corn now ripening while less productive fields were used as pastures. Many areas were grown extensively with cockle burrs and large coniferous woods.

In the marshes were occasional small pools but most of the area was covered with swamp vegetation.

At one open pool we found two *Rallus sibilatrix* but feeding in the open and second then both.

Below here at a more extensive pool with soft mud bottom I was pleased to find greets and lesser yellowlegs resting in close banks apparently resting. A few cripples were noted among them.

But they were not collected here at present as hunters were occupied in shooting doves. Around these

small pools were many *Gallinago paraguayae* that flushed five or six at a time with much squawks. A few *Charadrius collaris* were seen also.

Small birds were fairly common and at one we returned with as many birds as we could care for in the afternoon.

As today was a church holiday Good Friday many gunners were

put shooting covers. *Canadas*
~~some~~ collected in large numbers
about the hemp fields. *Baird's gulls*
have come down from *Montezuma*
for the shooting.

In the evening we made the acquaintance
of Sr. Federico Dumas, who is a pioneer
in hemp culture at this place and who
had written the Dept. of Agriculture
for advice. Sr. Dumas was greatly pleased
at the assistance given him, as
bulletins & instructions had been sent
him that had enabled him to carry
out his work successfully.

March 26, Saturday.

Sr. Dumas drove us out in his
car this morning to the opposite
side of the cenaga work yesterday.
W.B. Alexander accompanied us.

The *Arroyo Claro* a small swift
running stream was forded at a
suitable point and we were occupied
for the remainder of the forenoon in
wading through the cenaga.

The air this morning was cool and
sharp with the sky overcast. The
water was cold. The cenaga

had ~~both~~ islands covered with brush
and sawgrass that grew very
thoroughly flooded during the rains. Else
where were growths of *Scirpus*
with occasional large clumps
of cut-tails or phragmites. The cut-tails
grew nearly 10 feet tall. The water
was only ten or twelve inches deep
though occasionally ~~deep~~ by channels
were crossed that were deeper.

Cowbirds were flocking in the
canals and I killed *Ph. s. s.* in
full molt. A flock of pintails came
over high but I failed to kill one
though after my shot a few others
came drifting down to us. In the
rushes and *Scirpus* we found many
Cistothorus and collected a number.
Yellow, shrike and blackbirds passed in
straggling flocks or occasionally alighted
in the tops of scrubby willows. In one
spot I found a little colony of *Cyanitis* a
brilliant little flycatcher and I collected three.
At the border of a cattail swamp a flock
of 15 or 20 *Podiceps* flushed together with a
flutter of wings. Greater and lesser yellowlegs
were common and I was pleased to find

A few Pectoral Sandpipers.

This evening it turned colder again.

Alexander was taken suddenly ill last night, a combination of indigestion and head trouble due to high altitude. Came near dying for a few minutes but recovered shortly after and was O.K. this morning. I went out with them to call a doctor and on the way saw a Barn Owl and a goatsucker.

March 27, Sunday.

This morning Sr. Dumas took us out south of town in his car across the Rio Junyain at a bridge south of town. While we were waiting for the car we walked out toward the factory. ~~and~~ Peters saw a small swallow that he wanted purchase a telegraph wire on the main street and showed it along to a point where it was over the road and then shot it with my pistol. His precautions in driving it out of a man's front yard were useless

as when the usual crowd had gathered we were informed of various other birds at hand that needed killing. At this point the ford came up and we climbed aboard.

The country traversed was similar to that described previously. level flats under irrigation were planted in vineyards ~~corn~~ and small truck crops. Occasionally small areas not sown were covered with the original growth of Piquillin and a large atriflex.

The river was rather high from recent rains and flowed swiftly indicating more drop in the base level of the country than was evident to the ~~right~~ eye. The stream has been too high for safe fording so that we have not crossed it though there is good collecting country on the opposite bank where it passes the town.

On the opposite side of the stream we found broad flats covered with Vinal Piquillin and atriflex with few ground between them. The soil was stony. A small arroyo contained alkaline water

shot two during the day. We
went on past the cienega into
an area of wood grown spaces and
cornfields alternating with wet
swales. The Marsh wren was
common here. Between us we secured
thirteen. I was lucky in taking
my first specimen of *Algochubus*.

It was colder again at night.

March 29 Tuesday

This morning we prepared what birds
we had on hand and then proceeded
to buy a few supplies and pack up.

The clouds lifted from the
mountains late this morning showing
a fresh fall of snow extending down
to the tops of the first line of foothills
at about 6000 feet elevation or
perhaps less. In the afternoon the
wind blew from the south with
rain threatening and it was cold
and raw.

At three thirty our luggage was
taken to the station while we went over
in a sully. The owner of the sully
hailed our trunks in a cart while

El Director del Museo
Educativo de la Provincia
de Mendoza

Certifico que los doctores señores A. Wetters y J. Lee Peters se ocupan de estudiar la avifauna de la República Argentina y que cazan aves con este fin únicamente.

Mendoza, 21 de Marzo de 1921

Carlos Bleed



Peter drove our conveyance. We were assured that the Antiquated animal hauling the sulky was my mansito and I so provided.

At 4:20 we left for Mendoza via the Buenos Aires Pacific. Arrived in Mendoza at 6:00 and registered at the Grand Hotel. Went out at once to get photos left for development and some minor errands.

Cold and raw tonight.

March 30, Wednesday.

Worked for a time on notes this A.M. and I arranged storage for some baggage. At 9:30 we called at the Museum and at Dr. Carlos Reusch's house but failed to find him. Spent a short time again in looking through the Museum collection.

At 1:00 P.M. we left via the Buenos Aires Pacific.

The sky was overcast and a heavy general rain had fallen over the desert country to the eastward. Light

April 1, Friday.

This morning I was out when the train arrived at San Pablo on the border between Catamarca and Santiago del Estero. The country was well and in its primitive condition was covered with low trees surrounding a heavy undergrowth of bushes. Creepers ~~dominated~~ the whole together in a dense mass.

This formation continued in places that he ~~had~~ ^{is} of succumint. Cut pieces. The trees ^{are} 30 or 40 feet tall with almost no jungle beneath them. Elsewhere the growth had been cut away and pasturing had killed out part of the jungle below. Considerable areas were cultivated in corn and near Succumint were large fields of sugar cane. The appearance of Altofofista was similar to that of the Chaco. The country was well watered and was drained by a series of rivers ^{100-200 yards wide} flowing to the east and southwest from ~~the base of~~ the mountains whose bases they were visible in the mist that hung over the earth. For the past six weeks or more the rainfall here has been tremendous and the low country shows the effects of heavy inundations that now are subsiding. The rivers however

~~are~~ carrying large loads of
muddy water and mud and
standing water frogs everywhere.

Above La Merced Orange and
Bananas were noted, can only.

Along the road bed of the Central
Cordoba were extensive fields of
Canna, and young plants of
the China berry (spring) sp. ag woods.

Buccos were noted at intervals
perched on the wires. The large
Kingfisher (torquata) flew along with
others, quails and *jacinopteris infusa*
were common through the fields.

The plant of Cabello was seen
at K^o 1203. (Also noted at Rio Negro
in Uruguay). At K^o 1209 I saw
a beautiful yellow fly and several *Pooecetes*
melanocera.

The train was delayed 5 hours
by a broken down engine so that
we did not reach Tucuman until
1:30 P.M.

Registered at the Savoy Hotel. Breakfast
& dinner for 12 pesos a day.

I worked on notes in the
afternoon and evening only going out
at four with Alexander but some
necessary errands.

At dusk a mist came on and
the air was saturated with moisture.
At seven a Bertramian sparrow was seen.

The Sierra de Cordoba and the
Mountains above Tucuman form a
chain sufficiently high to condense
the moisture in the clouds and
to cause a rainfall along the
region to the east. The Eastern
slopes of these mountains are
forested while in the Tucuman
ranges the western faces, above
Mthum Catamarca become suddenly
dry, arid and present the
barren character common to the
Mountains above Muzoga. The
Cordoba and Tucuman ranges are
separated by an arid gap between
Roccos & Dean Funes.

At night two peculiar looking Molossid
bats were circling about the patio and
a captured one was in a nice net.

Bertramian Plover flying north in pair
number as indicated by their calls.

April 2, Saturday.

This morning I went out to the
Sugar experiment station with Alexander
to meet Schly the Assistant Director.
We started out in a coach but the mud
was so bad that we were stuck before we
covered half the distance. The coachman had
a balky team that refused to pull so I
told him to turn back. As the way in I
made a bargain with the driver of a jinetera
who took us on.

Second information from Schulz regarding the country. Apparently it will be impracticable for us to get into the hills near Orizaba of the belated rains. Was unable to get back to town until about Jan. Called in Emilio Bustin but found that he was now in San Juan collecting mammals for Oldfield Thomas. Put his father.

Called then on W. M. Dinelli, San Lorenzo 256 but found him out. Learned that E. Huftin was away at present.

April 3, Sunday.

Worked all day working on expenses accounts for March and on my Accounts Current.

At four thirty called again on Dinelli but found him out.

Called then again at eight and met him. Found him a man of sturdy build, active and vigorous in movement apparently about 45-50 years of age. He is an engineer by profession having a post under the provincial government. His work takes him out through the country and he does collecting in all branches in a commercial way. He showed me eggs received in exchange from Shaw for young at Los Vacas, F. C. O. Gimmey then showed

Accounts Current, Jan. 1 - March 31, 1921.

Debits	Gen. Exp.	Disc. Comp.	Total
Expenses as per abstract	1594.27	55.00	1449.27
Deposits to Credit of Treas.	24.97	0	24.97
Bal. now due U.S.	451.62	55.00	506.62
Total	1870.86	110.00	1980.86

Credits			
Bal. due U.S. from last acct	1076.86	110.00	1186.86
Accountable warrants			
13842, dated Jan 3, 1921.	800.00	0	800.00
Total	1870.86	110.00	1980.86

Bal. now due U.S.	On Deposit	Outstanding checks	Unavail. Balance
531.59	1980.86	1449.27	531.59

1921	Abstract of Expenditures.	
Feb. 11	15	2.40
"	16	"
March 1	17	"
March 10	18	"
"	19	"
"	20	"
"	21	"
"	22	"
		91.27
		223.08
		223.08
		149.41
		188.58
		65.18
		223.09
		285.58

eggs marked Trudeau's Tern.
Oldenelli sets ordinary bird skins
at 1 peso oro each = 2.27 of
the paper money. He will collect
rough skeletons of birds at the
same rate if I send him a list.
I bought two skins of pigeons of him
marked *C. metropolia* ~~aguel~~ found they
were *Gymnophis* ~~morensis~~. His
identification of eggs may not be very
certain as I had gets material from
his pen.

Talked with him regarding the
country but learned comparatively little.
Today was clear and fine
through clouds were about the
horizon. I had a view of the mountains
which lie immediately west of town
and found them rising there to
about 1500 metres and well
wooded. Villa Rica was in sight
Not a good collecting locality.

April 4, Monday.

Worked this morning on notes
and some letters and began loading
shells. Peter away due to arrive at
9:00 a.m. but did not reach Tucuman
until afternoon. The railroad road beds
are in bad condition owing to the
constant rains and to the north communication
has been interrupted for some time until
today.

Rain fell again this morning and
the mountains were shrouded in
mist.

At last we went to call on Escobedo
but found that he was in his office
only in the mornings. Went then
to Bucaris but found the old gentleman
out. We met Mr. Bushin here and
later and from him learned that
Emilio Bucaris was due to return Sunday.

Later we went through the city
market. No birds got sale though
the hunting season found April 1.
Saw a small bird store nearby &
saw more Bobolinks said to have
come from near at hand.

Continued loading shells in evening.
More rain falling in the evening.

April 5 Tuesday.

This morning at nine we called again
on Dr. Lillo and found him in. We
spent nearly an hour with him. Dr.
Wriggell Lillo is a man of about 55 or
less of moderate height, slender build
with a slight stoop in his shoulders.
He has an abundant head of iron gray
hair, dark eyes and dark complexion.
Speaks in a low voice but clearly with
little expression in his speech. He said
that during April each year there was
a considerable flight of stone birds west.

that were lingered so long. He is
professor of Chemistry (in the University
and also Municipal Chemist. A new
Museum has been established here under the
government of the Province & Lillo has the
honorary post of director without salary.
The Museum occupies two rooms, one
above the other about 25 by 50 feet.
On the first floor we found an exhibit of
archaeological material, the most notable
being a series of Indian burial urns
from the drier part of the province.
Above were cases of mounted birds,
insects, plants and samples of wood.
The birds illustrated the more common
forms and were exceptionally well mounted.
The exhibits were all specimens, were
small but all were excellently arranged
and of good material.

At three in the afternoon we came
at Dr. Lillo's request and accompanied
him first to the museum as described above
and later to his house. The latter
stood at the edge of town in a
tract nearly a block square surrounded
by a stone wall 10 feet high. Within was the
main house a large structure, with
one or two smaller ones by the whole
shaded by trees. On the second floor
of the large house were Dr. Lillo's study
library and collections, in three large rooms.
The walls were lined with bookshelves

filled with books on scientific subjects, without doubt one of the most important libraries of the kind in the country. Among the ornithological work I saw the Brit Mus. Catalog, Gray's genera in three volumes etc. Mr. Uble had a small collection of birds, of good skins and with complete data. The local fauna was well represented with such fine Bolivian specimens from Jose Steinbach, Buenavista, Depto de Santa Cruz, Bolivia. Steinbach is said to have 4 or 5 Indian preparators who can neither read nor write but who have learned the marks for sexes and dates and label them. Skins accordingly.

In addition to the birds there was a large collection of plants. At 10:30 AM. having water I was busy in making labels and loading shells.

Peter and I discovered a small colony of Molossid bats put up a mosquito net over and secured five good specimens, greatly to the interest of other guests in the hotel.

Rain fell at night and then the wind turned to the south and it became colder. At 9:45 am exclusive flight of Shorebirds began and continued until 11:30. The bulk of the birds were

Lesser Yellowlegs with many Greater Yellowlegs and Bartramian Sandpipers and occasional Solitary Sandpipers. Once I heard Golden Plover. At times the calls of these birds came from all sides and again there was a lull. Occasional flocks seemed bewildered and pursued to circle in the mist over the lights of the city. In general they passed directly to the north. About eleven the flight slackened and by eleven thirty was about over. During this time I heard the notes of Bartramian Sandpipers from 30 individuals. Occasional two or three called at once but usually single birds alone were heard. They were passed silently there was no means of telling. Lesser Yellowlegs traveled in bands. I noted nine such and on 11 occasions heard small flocks of Greater Yellowlegs. Many flights however seemed to be in the majority and their flocks were larger. Solitary Sandpipers noted 4 birds.

At Tummyan, Mendoza the flight was directly north. If the line was followed it would soon bring the birds to the high mountains. A slight veer to the south east would however take them through the pass at the north end of the Sierra.

Cordoba. Here there is a broad plain
flat intervening before the Sierra de
Sucumán is reached following
free passage. It is probable that
some of the migrant birds from
Sucumán came by this route and
others directly north through the
eastern range central.

Parted April 6, Wednesday.
Left Sucumán at 9:30 via Ferro-
carril del Estado for Sapia. As far
as Sapi Viejo the way ran
through cultivated fields with
much corn and cane.

Above Sapi Viejo we entered a
rather rolling forest ground with
forest. It continued to Sapia
at about $27^{\circ} 25'$ south latitude.
 $65^{\circ} 20'$ west longitude. Arrived 11:15 a.m.

At Sapia we found beside the
railroad station a building operated
by a sin vergüenza of a Turk and
three or four little branches. The
 jefe del Estación maximo Krantz
offered us the use of a corner of
his baggage and freight room as
sleeping and cook quarters and
his wife a kindly basque built
in and ample hut timbered to
suit us as well as was possible
under the limited supplies available.

In such regions in the camp.
We settled our outfit, had
limes and then went out to
look the country over.

Sapia lies at about 2300
feet altitude in the neighborhood
of 30 kilometers north of the city
of Sucumán. It is within the
Department of Trancas, Province of
Sucumán.

We collected a few birds
and then set a line of mouse traps
along a shallow barranca near
the station.

April 7, Thursday.
This morning at very early
we took in traps. In about 30
traps I had one mouse and a
small opossum. Mice were common
along the barranca but mouse sign
was missing. The opossum was
taken at a small hole when it
had crawled out directly into a trap.
Bait use was seeds of a legume,
drops of a yellow bird seed &
baited. The beetles were not a
great success as they proved to be from
a capsicum.

Small birds were abundant along
a barranca and we returned a horn
with all we could care for.

April 8, Friday.

This morning we went out through the dry hills above the station as yesterday securing a good variety of specimens. The region here at Zafra is at the transiting point between the humid area at Quezumen and the drier levels to the north. The mountains here on the west break and recede in height allowing moisture laden clouds to pass without discharging their water so that though the days have been cloudy there has not been the felt of rain encountered at Quezumen.

The region is rolling with many small knolls and low hills rising in places to low bushes. The whole is covered by a low scrubby dry forest seen where occasional clearings have been made.

The larger trees are legumes, and trees of good scrub there are thorny and stiff leaved. In most areas however the scrub is open enough to allow passage without the use of a machete especially as creepers are not abundant. Heavy growth is not

abundant on the trees but the dense thorny limbs offer good cover for those species of birds that seek about under protection. The sombre tone is one of the few common trees that suffer heavy leaf spray.

The soil of the hills is of light buffy or yellowish clay that in many places is more or less mixed with sand. This clay on the hill slopes is cut by many barrancas, between large hills there become broad dry arroyos with steep sides and sandy or gravel bottom. On the higher slopes it was common to encounter barrancas about wide to jump at the top with steeply sloping walls often 20 feet deep. These were impassable save in occasional spots making passage difficult save along the bridges.

April 9, Saturday.

This morning we followed out along the Rio Zafra for a short distance and then went back through the dry hills. The river has a broad gravel bed but is confined to a shallow irregular

Stream of swift current that
is not more than 10 or 15 feet
wide. The short distance above
the railroad the stream disappeared
in the gravel bed to appear
again only in small irregular
channels or seeps. The water
though clear was too strongly
impregnated with mineral matter
to make good drinking. I
not much gypsum in the
soil and occasional bits of
quartz.
Wheat and small vegetables
were grown in small patches
along the stream.

April 10, Sunday.

A line of mouse traps baited
with raisins yielded nothing whatever.
Last night I caught a two-
toed or pocket mouse, as they are known
here in a gopher trap. These
animals are common and their
burrows marked by little conical
or rounded piles of loose earth are
seen frequently. As the ^{young} clay soil
the prairie seem to persist for
a long time after they have
been abandoned or the owner is
dead according to the many
holes opening in the banks of the

barrancas which maintain their
form in the steep cut walls
But are unsuitable as trapping
as shown. These same gopher
 workings are great erosion agents
in this country. Dry water washing
away them in suitable weather
cuts away the soil forming the
steep steep walled barrancas common
on the slopes. A little observation
shows that this is true as it
is possible to trace the beginning
of barrancas upon the old
gopher runs. The animals too
are said to be responsible for
washouts along the railroad
right of way that occur in
times of heavy rain.
This morning on looking into
a hollow stub I saw a large
gray mouse curled up asleep
with its nose in its paws. The
animal slept so soundly that
it did not awake until it was
touched.

April 11, Monday.

A line of traps set along a
large barranca yielded four large
gray mice. These rodents are
fair game common here and
little or no sign of mice elsewhere.

in localities suited for them.
Pewees are frequently many here
at night. They seem to be
subground sapsucker also that
allows heavy growth of weeds
and grass and shrubs of slightly
different character in some regions.
Some very grassy areas occur
at random throughout otherwise
dry hills.

Bought a fox with skull
factory and yesterday picked up a
broken deer skull.

April 12, Tuesday.

Weather here has been cool
and pleasant with the thermometer
at night about 65° F. Some of
the days are cloudy others with
sun but it is never too hot
for comfort.

The bird life is similar in
many ways to that of the Chaco.
The general run of the species
is the same with a few additional
species coming in. The region
grades off imperceptibly into the
higher part of the western Chaco.
A red flowered Epiphyte that
grows abundant on the tree
of the hill slopes, is attracting the
hummers and forms about the

only plant at which these birds
are feeding here though other
plants in flower are common.

April 13, Wednesday.
This morning we made the
last collecting trip of the day. Birds
have been abundant here and
of good variety so that it has
been easy to secure all that
could be cared for in comparatively
short excursions. A few
permitted larger trips would
undoubtedly yield more.

April 14 Thursday
Work day completed today.
I did no collecting but was
occupied in packing and with
notes. Went out for a short
time in the afternoon to take some
photographs.

Left Sapia at 6:30 P.M. and
arrived at Saji Viejo at 7:45 P.M.
Peter and I secured quarters at
the hotel Paris.

Weather recently has been cloudy but
we find here that the rain has ceased so
that the streets are dry once more.

April 15, Friday.

Walked out this morning to look
over the Cumbre above town. A fine clear
morning.

Was occupied the entire day in
writing up notes from Sajid and
in labelling photographs.

Saji Vija is a town of about
10,000 inhabitants. Altitude 1,000 metres.
The country surrounding the village is
largely in cane.

We had planned to work in the
field tomorrow but learned in the
evening that Emil Budin was coming
to visit us in the morning.

April 16, Saturday.

Continued in labelling photos etc until
Budin arrived at noon. Budin is a
Frenchman, of a little more than average
height, strongly built, but slender.
A man about 40 years in age. For the
past four years he has been working
for Oldfield Thomas, and has just
returned from a trip into Mesquiza.

He said that Shorebirds here were
more abundant in ~~spring~~ and
that though some stopped the
majority there noted only from
their calls as they passed at
night. The first half of April
carried the heaviest flight through

birds continued to pass during the
entire month.

As his opinion the open season for
game which opened early April 10
and closed May 1 was too early as
when it opened some of the Sijambu were
migrating which it closed at a time
when birds could be killed without
harm. The game laws were enforced
mainly against the hunters from the
city. Amos were instituted as a means
of revenue. Defractions were fined two or
three pesos for each offence which
added to the revenues of the local
government. As those living in the
country were in friendly relations with
the tax collector they were not molested.

Budin impressed as the most
active and energetic of the collectors
that we have met here, and
is unquestionably a good field man.

We walked out to the edge of
town and Budin showed us the
trail leading to the summit of the
Cumbre.

At two o'clock and I went in to
Suecamin with Budin to look over some
skins that he had on hand. I
bought 23 skins of birds from around
Najuel Huapi, comprising 14 species,
at three pesos each, a total expense
of 69 pesos. The money used in this

This is erroneous as these skins amounted
to 23.84.

Purchase was secured at ~~2.95~~ 20
that the 69 pieces equaled \$23.394.5.

At your party we went over town
for a few purchases. At this time
we saw the tremendous flight of
the migrating locusts that were watched
for some time. The insects were passing
to the northeast in a ^{continuous} stream a
block wide. The insects were flying
thickly about 50 to 100 yards behind the
air. ~~and~~ a distance of the whole
spelling above the city appeared filled
with smoke as numerous were the
locusts. In many places where the
insects had settled, bushes and other
trees had been stripped of leaves.

We left Tucuman at 8:30 but did
not reach Jaji Viejo ^{until 9:20.} owing to an
accident on the line that compelled
us to change trains.

April 17, Sunday.

This morning we left the hotel
at Jaji while it was still dark
and walked up to Boca Jona at
the base of the Cumbre, which is
called on our maps Sierra San Lavin.
The town lies at about 600 meters above
the sea (1968 feet) while the summit
of the Cumbre is given as 2300 meters.
From the town there is a long
slope covered with chaco of maize

and other crops that extends to the
base of the hills where the elevation is
about 4500 feet to 5000 feet.

Here where water is found we stopped
for lunch, about 2 1/2 miles out.
At Boca Jona we entered a narrow
valley fed by a small stream.
A fine growth of trees loaded with
parasitic plants covered the valley and
the slopes above with a heavy
undergrowth of shrubs and soft-stemmed
plants among them some large
bushes that I think I remember from
penetrating through the ^{jungles} of my
youth. After a short distance we
turned off in a trail that wound
abruptly up the ridge of a
cuchilla or sharp-edged hill.
The ascent here was abrupt but
the climbing not sharp as the
trail was broad and open. The
forest was of a typical rain forest type
with many swinging creepers and
growths of ferns.
Birds were not abundant and were
difficult to secure as two or three that
I shot fell far down the steep slope
where they could not be found. At
about 5500 feet I killed a *Platanus*
rupestris and two *Xylocopa* *lagopus*.
above a *Chloroceryle* that I shot
fell far below on a steep slope I

found climbing for it difficult as the soil was soft and slipping. Twice I slipped and fell for fifteen or twenty feet.

At 6000 feet I saw a *Piperaceae* but did not get a shot at it.

Myristicium *bracteatum* appeared here. *Parula* warblers were common all through the timber and I killed one *Sittacus*.

At about 6000 feet the rain just ceased on the ridge that we were following through in south east exposure it continued up to about 6500 feet. We emerged onto a broad rounded shoulder and at 6500 feet came to a strange alder tree that grew up to 30 feet tall and formed open groves. Yellow & other composites from blossoms. As the alder grows the leaves were turning brown and falling. The first tree appeared I just noted in this region. The effect was that of velvet wood in the north as we walked over the crisp leaves through openings in the trees.

About 6800 feet another tree appeared with close set dark green leaves. That in appearance at a distance suggested a cedar

Close inspection showed that it was not a cedar but that it had closely set elongate tapering leaves of curious appearance. The lower trees were small but at 7000 feet the tree grew 50 feet high and formed heavy groves. The shade above was heavy and the ground below open white. The ~~trunks~~ tree trunks with their bark scaling off in long strips gave a curious resemblance to certain cedars.

The open slopes through here were ground with weeds and grass waist high when we encountered *Brachyotus*, a little white-throated flycatcher, *Protophila maximiliani*, *Myristicium* and I shot one *Buarremon* *catenellus*. In one of the groves I killed *Amazilia tucumana*.

Above 7000 feet the groves were restricted to sheltered slopes or gulches. We crossed to the rear of the main timber and descended a short distance to water in a small gulch below an alder thicket where we ate lunch. Grass was brown here and the leaves falling. We sat in the pleasant sunshine admiring the panorama of water valleys spread out below us. The rocks and the country resembled October weather in the

and conditions in the Rockies in
Colorado. The slopes on the west
of the mountain were mainly bare,
of the soil but were grown with about
grass, small shrubs of clear
water ran in the gulches.

I am here now continued up
to the summit of the Cumbre at
about 7500 feet. In 5500 feet above
the town of Saji Viejo, steep slopes
and rounded shoulders were covered
with grass, no species growing in
bushes. On a small saddle
a mile or so beyond the summit
was a small lake a hundred
yards long. The water was green
and cloudy.

I am on the ridge here now
looked out to the west over a
broad valley with another Cumbre
rising to about the same altitude
beyond. Still farther was the huge
looming mass of the main
range rising to 4200 metres above
the sea, a huge rampart
of almost imposing appearance rising
as it did from a low level
of barely 600 metres. Snow appeared at
the summit of one or two peaks.
I killed *Phryganea abaraxis* as it
flew from the grass, also a small
beetle I did not know. A small

Pipit that I shot and lost in the
grass was almost certainly *Hellenes*.
Sanks were soaring over the
ridges; the afternoon was cool with
warm sun on the all the feeling of
fall was strong in the air. Banks of
clouds were up to the ridges
and then melted so that at times
the view was obscure and again
we could see far out across the
level reaches toward Santiago del Estero.
Saji Viejo and Tucuman surrounded
by squares of cornfield appeared below
us.

The mountain meadows were
full of hills of a large *Ctenomyx*. I
set a trap for the but failed to
secure it.

At 3:30 we started back collecting
birds as we went. The descent
once we were within the forest
was rapid. Darkness came on
rapidly and when we reached
Bofa. Long at 6:30 it was
entirely dark. At 7:15 we reached the
hotel.

Was busy until 11 P. M. in cataloging
specimens and in preparing for departure
tomorrow.

April 18, Monday.

Was out this morning at six and at six thirty as soon as it was light began skinning birds. Finished at 11:15 and finished packing.

Left Tafi Viejo via Ferrocarril del Estado at 2:00 and arrived in Tucuman at 2:40. Transferred at once to the Ferrocarril Central Cordoba. Made some purchases and then worked in notes until time to secure tickets. Peter saw me off at the train, but remained in Tucuman for another day to continue down to Buenos Aires.

April 19, Tuesday.

At 6:30 this morning I found the train near Pucos. The region from here down to Jesus Maria, Cordoba was level and dry covered with low scrubby forest containing much cactus. Large areas were being cut over for the wood which is used extensively as fuel. Forest consisted of *Chinar*, *Viguilina*, *Algarrobo* mainly.

Below Jesus Maria the country became more undulating and continued hilly to Cordoba.

Arrived at Cordoba at 1:00 P.M. and transferred at once to the Central Argentine station, a fine modern building.

Worked on notes, etc., the rest of the afternoon until train time. Left Cordoba via Ferrocarril Central Argentino at 5:20 P.M. arrived Rio Cuarto 11:00 P.M.

April 20, Wednesday

Left Rio Cuarto at 12:30 A.M. via B.A.P. and arrived at Villa Mercedes at 4:40 A.M. I remained in the sleepers until 6:00 A.M.

Left Villa Mercedes via Buenos Aires Pacifico at 7:00 A.M.

During my last trip through the many *Amphispiza* *millanii* and *Petes* *albicaudatus* have moved in the Pampa country west of Villa Mercedes, evidently migrants from the south. The Pampa land extends across the Rio Grande to the westward here.

Beyond this point there was little of interest. The country was now dry and the birds dusty. Sparrows and Burrowing Owls found the bulk of the birds seen.

Steward Mendoza found the season more advanced and leaves on the cottonwoods yellowed in dropping. The mountains were obscured in an Indian summer haze. The weather was warm but not uncomfortable. I made one or two small

packages and received considerable
mail.

Dr. C. Reed has gone to Cpti.
Registered at the Grand Hotel.

April 21, Thursday.

Left the hotel this morning at
5:00 transferring baggage stand here
to the depot. Passed my baggage through
the Argentine customs house and then
left via Ferrocarril Trascandino for Valparaiso.
It was still dark when the train
left the station. Day broke while we
crossed the irrigated section at the
base of the mountains and as we came
to the valley where the Rio Maipo
breaks out to the plain the same
rocks, red clay in color were dominating
the peaks of the Sierra El Plata. Shortly
after it was full day. The weather
was clear and fine all day, cool
and sharp in the morning but pleasant
in the middle of the day. The trip to
Potrerillos did not
differ from my previous visit save
that the scenery was more advanced.
Just below Canyon Amarillo at
an altitude of 2200 meters the creosote
bush began to pinch out though
to this point it had been abundant
and flourishing. The zone being equivalent
"Lower Binoran" or zone 1.

At that point zone 2. The next zone
higher began to come in. The general
appearance was that of the
dry hills above Zapala in Neuquen.
The vegetation was scant and
was mainly restricted to the valley
floors and to the less abrupt
slopes above. The mountain
masses themselves showed
merely bare rock surfaces and
exposures as yet too young for
erosion to make manufactured
permanent soil capable supporting
plant growth. These higher areas
could be worked zonally only by
a geologist!

This second zone vegetation continued
for some distance being characterized
by a dark green shrub (see specimen)
but the Rio Tupungati at about
9200 feet this dark green shrub
disappeared leaving only a small
cupressus scrubby plant and *Agave*
had as vegetation. This was
apparently the beginning of zone 3
which continued as far as the
summit of the pass. A small
small light of a gray *Crocinophorus*
type at about 2400 metres.
In plants the scrubby matted plant
disappeared so that it has *Coccoloba*
status. This was entirely gone occasional

alluvial fans facing northwest in
Zone 3 country. Should typical zone 2
vegetation but these were scattered
and of limited area.

Above Las Cuevas the scrubby
shrub again appeared.
Apparently Zone 4 (equivalent to
Caracolin) came in as scattered islands
as may be seen. Las Cuevas but was slightly
indicated. The higher zones (above zone
3) can be delimited properly only
by more careful study of vegetation
on the steep slopes. My road scan
out perhaps would show in a
survey of mountain peaks as I found
in Adirondack. The snow patches
of these mountains are evidently
Arctic alpine but the limits of
Hudsonian & Canadian equivalents below
could not be determined.

Birds were rather scarce. The track
followed the winding valley of the Rio
Mendoza which tumbled swiftly through
a channel cut in the rapidly descending
slopes. At Uspallata I noted a Sparrowhawk
Below things but Rio Blanco Sparrowhawk
was seen. Beyond here I noted occasional
birds but was unable to identify them.

Man has Cuevas. We traversed a
series of snow sheds covered with corrugated
iron. Beyond a long tunnel crossed
the Chilean frontier and we

emerged. It has Caracolin when
the train crew changed. The
scenery above had been fine. I
had a view of Aconcagua and
snow clad peaks were frequently
in sight. The valleys on the whole
were bare and flat.

The descent on the opposite
slope was rapid. The train
halted shortly in part from a
cog road that retarded speed on
the steep pitches. The my thickets
side we followed a winding stream.
The vegetation here was better vegetated
and scrubby vegetation of good
size was common. I was
unable to follow the zones however
as the flat growth was in the
whole of the mountain. Toward the
foot of the mountains however we
saw scattered small trees and
shrubs of small trees were common.
Arrived at Los Andes, Chile at
6:40. Here baggage was transferred
through cactuses and I had dinner
at La hotel. Left Los Andes at
8:15 via the Ferrocarril del Estrecho
a broad gauge railway equipped
with American coaches and locomotives
that halted at a press speed. At
11:30 I arrived in Valparaiso, Chile.
Registered at Hotel Royal.

April 22, Friday.

This morning I completed
expense account to date and then
called at the consulate. Mr.
Hutchman Coign gave me a card
to Dr. Miguel Latorre who told
me the printing was open now.
He introduced me to the Secretary
of the Intendencia of Valparaiso, who
gave me a card to the local
Police and a letter to Mr. Evelyn
Reed, son of Mr. Reed and brother
of the Mr. Reed of Mendoza.

I called at office of American
Express Company made arrangement
to ship some specimens. They
changed what Argentine money I
had, rate 2.50 making Chilean
peso worth about 1.13 U.S.

Called on Mr. Evelyn Reed and
was very especially received.
Finished packing ten boxes of
specimens in evening.
A very successful day.

April 23, Saturday

Mr. Reed called for me at nine and
took me to the Museum which
was opened especially for my benefit.
The Director was away but
I was treated very courteously by
the attendant in charge.

Mr. Reed (father) is responsible
for the founding of the Museum
of Valparaiso, Concepcion & Santiago.
The former was destroyed entirely by
the earthquake of 1906 but has
been rebuilt and has a good
lot of exhibits of birds, mammals,
fishes, minerals & ~~anthropological~~
material. Also a few living birds
& mammals & a library. Eventually
the whole will be placed in
a new building on a hill
above the ocean and a street
named in honor of Mr. Reed. The
site at present is occupied by
a botanical garden named in honor
of Dr. Reed. I returned to town and made a
few purchases of needed supplies.
Left at 2:40 for Vina del Mar,
after having secured passage in
a steamer of the Great Line for April
30. Had despatched my baggage
at noon but found that it had
not arrived. After waiting one train
for its return I at 4:00 to Valpo
and found it still at the depot.
Returned at 6:00 by Vina del Mar
secured a Ford and drove to
Concepcion.
It was pitch dark and a
driving rain was falling. At the

satchels of town. The driver
ran slowly into some piles of
road material but stopped without
damage. Beyond the road followed
a cliff in many places. The
lights were dim and a team
of two as we came rather near
the edge of a nasty drop which
I had not seen. ~~There~~
For most of the distance however I
was occupied in saying that my
baggage had not fallen but
I arrived at Concepcion at 5:00
and secured quarters in the hotel
of Victor Navarro.

This morning I visited one of the
large markets. Many *Notthoprocta* and
California Quail offered for sale but no other
birds. all were badly shot with large
size shot.

April 24, Sunday. The rain ceased during the night and
the day turned clear and pleasant.
I found that Concepcion was a village
of a dozen houses or more scattered over
the slope of a hill with the
Rio Concepcion running below.
I went out along the banks
of the river and then crossed by
a small island formed in the
mouth of the stream. The river

here is about 70 yards wide
and has clear water. ^{small} *Trus*
border it with small fields of
vegetables at short intervals of
considerable areas are covered with
a heavy growth of weeds. I found
a number of forming dense clumps
six or eight feet high at times. In
form like those of the Cherokee rose
in Texas. These clumps were
almost impenetrable. I found
to my sorrow when I lost a
badly wounded *Phytoloma* (large species)
in one.

Birds were abundant. *Quinga* *quinga*
and *Brachyfraga* ranged in small flocks.
I shot the large *Agelaius*, *Melospiza*
thenea and one unknown *Troglodytes*.
Also one *Anas*.

Many ^{persons} came out from town
for the holiday today and there
was much shooting in which every-
thing offered for sale I caught
to comments. This is the gun season
for hunting. The only game laws are
those that prohibit shooting during the
closed season. (Whether anything may
be killed.)

Dr. Edwin Reed and family came out in
the afternoon to look tea with me.
I secured four birds not taken previously
during the forenoon.

April 25 Monday

This morning I was out early and crossed the river to follow north along the highway. There was a broad sand, washed here that extended inland in many places in a series of broad dunes that ran back to low rolling hills. Small ponds and channels of water led through. The dunes and occasional hollows were filled with grassy vegetation.

The ground along the beach was dry and isolated in the extreme, relieved by a scrubby growth of vegetation in the hills partly concealed by some of the ~~ground~~ ^{rocks} of charcoal burners. The sand of the beach in places was mixed with gravel.

Gulls were abundant and in one place I found Fulmar & Collared Plover. The Hudsonian Curlew was noted.

I followed along the beach for about 4 miles and then turned inland across the dunes and climbed onto the range of hills rising 200 feet above the level.

The slope was covered with scrubby vegetation mixed with a spring leaved yucca and a cactus

that found dense growth in places difficult to penetrate. Some were common and a few were in the scrub I found a flock of Curassow and several pairs of them. The Dovecote finch was omnipresent. One of the shrubs was highly aromatic. At nightfall it turned quite cold.

April 26, Tuesday

The air was cold and damp this morning and frost seemed near. The sun rose clear but a heavy bank of fog rolled in at midday filling the valley. I went inland through some rolling hills where there was forest of fair size some of the trees reaching 30 or 40 feet on the slopes of rather steep and gullies. On the rounded slopes on either hand the scrub was small. Much of it was a prickly variety with straight thorns rather difficult to pass. The small plots in the bottoms were cultivated, clover was raised for grazing. Birds were common but not of great variety. The Dovecote finch

and *Brachypteryx* were found everywhere
often in small flocks. *Procyon* was
common and I found one flock
of *Troglodytes* and another of *Curacus*.
Besides from these species were few.
A long tailed *Myiarchus cinerascens* like
Trachophanes crept about in the
limbs of the heavy scrub and in
another place I shot two other
small *Trachophanes*. A little *Flycatcher*
was taken near a small stream.
Anaceryx eggs abundant and in
one valley I found a little flock
of *Sialia*.

Some rodent makes many burrows
in cotons, over the hillsides streaming
out dirt in little mounds with an
open hole above them. I have them
giving a little trilling call as I
pass but they fear how but smelt
to catch sight of me.

All of the birds taken now are
in full plumage and are heavily
feathered (so that I judge they
winter resident here). On the left Bird
I should be much more abundant
here during migration and in
winter.

April 27, Wednesday.

A heavy bank of fog came in
before daylight this morning but

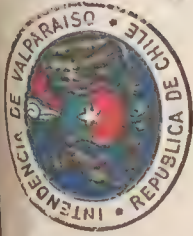
By 9:30 the sky was clear and
remained so during the day. The climate
and appearance of the country here
remind me strongly of parts of California
especially the better country of the
East of the San Francisco and the
Coast Range in the south. The hills
are covered with a Chaparral scrub,
the sun shines with the same subdued
light and the air is mild and
warm.

I followed out to the eastward
through some pastures and after
pursuing some quiches for a time
without success went up the
gully that I descended yesterday.
Almost at once a quack brought
out a *Scytalopus* and in another
minute I had the bird in my
hand. Birds were common as on
previous occasions but offered little
in the way of new variety. *Dicaeas*
and *Brachypteryx* ranged in flocks.
There was a considerable migration
of the grey flycatcher (*Myiarchus cinerascens*)
(some that I) so that I found them
everywhere along the road. I crossed
over a range of low hills and then
turned back along a large steep walled
valley with wooded sides. There was
water in the bottom in small amounts
and the descent to the level below rapid.

The region was, rather infrequent
and few without definite trails.
Almost at once I flushed some
Nuthatches and shot my first one
through the tree tops as it was
dashing away at full speed. Another
was killed as it came swiftly through
the trap. Several Valley Quail were
seen but I got no shots at them.
A few more small birds were picked
up but nothing remarkable among
them. In early morning I shot a
Glaucopteryx and it rested in the sun
on a few branches.

Returned at 12:13 and was busied
throughout the afternoon in caring for
my specimens.

April 28, Thursday
Worked out along the river
and across the rocky hills.
Some show bird houses, as this is largely
has been reported here but I failed
to find any. Collected a fair
number of small birds including
Junco, specimens of Parus,
Tachycineta and returned at noon.
The early part of the afternoon
was occupied in caring for specimens
and lunch in packing. There
is less fog today but the
morning is. Considerable evidence
of migration among the small birds



El Secretario de la Intendencia

de Valparaíso, ruega a las autoridades

dependientes de esta Intendencia, se sir-

van dar al Señor Alexander Wetmore, Ph.D., todas las facilidades que sean menester, en su calidad de empleado del Gobierno Lorte Americano, que efectúe trabajos de investigaciones científicas.

VALPARAISO, ABRIL DE 1917.



Pedro Cruz Pericó



Photo by Anson Boring
Spring, 1940

The Lathrop Road
and family before
my old hotel
at Coon, Wash.

Photo by Anson Boring
Spring, 1940

The Lathrop Road and
family before my
old hotel at
Coon, Wash.

A.W.

in the plants *Brachyotris* and
Duras were gathered in rocks
and with them a few *Pygmaea*.

April 29, Friday.

Completed my preparations for
departure this morning. At ten
Dr. E. Rud came and took me in
to Salpensa in his car. Arrived
Velpo at 11.45.

The ride along the beach was
very pleasant. I got a good
look at the rocks. Nothing else remarkable
except a *Caricobes* of a medium species
was common along the rocks.

Arranged for a shipment of two
boxes through the American Express
and then I purchased a steamer ticket.
Called at Consulate for mail and
also visited Genl. Phastoria.

Completed packing

At night I dined with Dr. Rud
who gave me a specimen of the
gen *Fernandez* hummer and some
birds & snakes in alcohol.

April 30, Saturday.

Had my baggage sent aboard the
steamer *Santa Elena* at ten
and went aboard about 11.30.
Steamer sailed at 12.00.

Sent the following cable last night
Plover

Washington

Sail through Grace Line with
Ellis. Funds sufficient return, including salary
to my twenty. Welton.

The birds I saw many
many *commissaris* and the gray
gull with whitish on the head.
Also a large gull. The bird
the size of *H. californicus* with red
gray in color with a white patch
in water *commissaris* or *primaries*.

May 1, Sunday.

Position at noon $28^{\circ} 06'$ South
Longitude $71^{\circ} 35'$ W.

During the day I noted a
sooty black petrel of dusky form
off the ship all day long.

At 4:30 a circling of the
ship seen at once circled about the
ship alighting on board. At the time
was seen 15 miles off shore.

May 2, Monday.

About noon we entered the harbor
at Antofagasta, Chile and about ten o'clock
went ashore in a row boat landing
at a small wharf. Antofagasta is
a small town built on a
sloping flat with a rocky

elevated beach below it.
I walked through the town and
followed along the coast to the
south, in three or four miles.
The beach was rocky in places
elevated with a many small
breeding in it. Occasionally small
coops were raised. The birds
were very numerous.
I stopped at a steep flat led
up to a series of abrupt
hills where many rocky
exposures were evident. The
soil was dry and sandy, in places
very fine. The entire country
was devoid of vegetation of any
character.

Traces of the same genus as
those obtained at Salparrisa ran
about over the rocks on the beach
but the *exultrata* like genus
confined to birds. I noted a few
flies but no other insects.

The only land bird seen was
a small *Chalcophaps indica* which
underneath, dark gray above, wings
blackish. Some, occasionally slightly
larger than the others were darker on the
upper surface becoming sooty black
on the fore crown. The birds were
fairly common about garbage piles
at the border of town.

ran about slightly at the ground, stopping suddenly with a flit of the wings, drawing themselves erect like a little hawk. Their habits they resembled other terns. I did not find them far beyond the border of town.

Water birds were common in the bay. Among them Pelecanus thagus, especially attracted my attention. I found it a brown Pelican with the appearance and manner of the other double pelicans.

A Cormorant black in color with breast and abdomen white was common. The birds passed in small flocks flying low over the sandy swell and up otherwise calm sea. I found many dead on the beach when I collected their skulls.

A black-backed gull - Larus dominicus was common.

A sooty gray gull with ash face of medium size was fairly common. Of the Hermann gull also. There was considerable variation in size among these and some lacked the ash face.

Booby white save for dark back and wings, dark variegated with lighter were noted.

Along the beach were considerable

numbers of dead birds cast up on high water mark. Among them were several hundred white breasted Cormorants and Shearwaters and I noted two Penguins. Some of these birds had been killed by oil on the water. I collected a small number of skulls. I spent some time searching for penguin skulls but found none that were worth keeping.

We left about 4:30.

May 3, Sunday.

About eight this morning we came in to the Magique, Chile and lay in the bay. A mile from shore I went ashore shortly after noon. The water here was not deep so that gull was plainly visible at the bottom.

The bay was a simple bay middle of a basin that abuts the ocean. The straits were irregular in many places narrow and shallowly dirt. It was said that small boats were safe here.

Met Mr. Brown the American Consul and then walked out along the shore to the northward. My path led past my camp where carts were hauling out rubbish from the city. Near children pigs, ground men, buzzards, can dogs and

logs worked in close proximity scolding
through the rubbish after every thing
collected in. The case of the humans
worth carrying away.

Now that dump and near
town the *Scaevola* noted at Antipodas
was common. Some of those and that
had a smoky gray for crown. The
bill appeared strong and heavy.

All cormorants with a white
patch on either side of the neck, grayish
limbs, gray shoulders and scapulars,
black flight feathers, face, feet & gular
pouch dull red was common in the
harbor. The birds dove and swam
about among passing boats, watching
eagerly to seize fish but showing
little fear. In resting on the water
they often raised the tail erect at
an angle of 25° or 30° . Others were
noted feeding outside the surf
near rocky points. When satisfied
they rested on the steep rocky
sides of the points pressing their
feathers.

The gray gull of the Nazarene gull
was common. A couple were
seen feeding along a sandy beach
where that bird followed the receding
waves down to feed in the wash
coming back all great *Scaevola* as
the water came back in again.

Others rested in flocks on the water outside
the breakers or gathered in little groups on
points of rock to rest in the sun. They
have a high-pitched gull-like call.

A few *Fregata dominicana* were
seen but the birds were not common.
Cathartes aura was common.

Many rested in rocky points or
walked along on the sandy beach
above the line of water.

A few boobies were noted, the species
white boobies and head, face black
gray, wings black, black black variegated
with white.

While resting on a high rocky point
I heard a loud call below and
after some watching made out a
Black *Alcedo* with light colored
feet and red bill. The bird was feeding
on a little sandy beach inside a
point of rock. It was preying
and I drove gulls aside as it
passed near them. The note was a
loud laughing call. ~~followed~~ The bird
followed down after the receding wave
and fed thrusting the bill into
the sand up to its eyes.

Among rocks watered by the
sea I found an interesting specimen
apparently a *Cinclus*, a bird the
size of a wood thrush, dark above
in color with whitest underneath and
pure white throat. I should a

of brown showing in either wing.
The birds fed in cliffs of the rock
summit in and out to avoid
the wash of the waves. After flight
they frequently perched on
in some point of rock but
crossed again at once among
the wet rocks when it was
difficult to follow and observe them.
A sandy beach ran around
around the projecting points of
broken rock on which the
saw birds heavily. I found that
the rock was of granite. It broke
down readily. The surface crumbled
in my fingers. As it approached
the country was entirely bare of
vegetation. The steep slopes of
the shore showed and
open with only rock exposures
to break their long.

May 7, Wednesday
About two this afternoon we
came in to Nollendo, Peru, an open
harbor with a heavy ground swell
the ship ran in near Elbe and anchored
for Saturday's destination. As we lay
at anchor there was no opportunity for
excursion.
Nollendo was a small city
piled together on the se shore
along a range of hills that ran
a thousand feet or more. The shoreline
was rocky and about cut into
steep cliffs against which the surf
broke constantly throwing high in
the air. A few very good
stones sandy or rocky extending
about two miles or more inland
to the steep pitches of the mountains.
The hillsides were taken in most
when our first land came in but
this soon cleared. The region was
desert but less arid than farther
south. I made out scattered
clumps of vegetation on the sandy
flats and along the ridges
even scattered lines or clumps of
dark shrubs.
Birds - water birds - were abundant
as we came to anchor. Lines of
white-bellied Cormorants came flying
from some rocky point of

The south - a flight that would
in volume until there was a
steady stream of the birds extending
southward as far as I could see
with the birds and ranging
northward in the same manner.
The birds flew in lines that
traveled. A breast of with an
end slightly in advance. These
bands often 50 to 200 in number
passed steadily on following the
coast flying with steadily beating
wings about above the waves. The
birds followed near the coast
swinging out past the ship to
fill the gulf to the northward
and coming in out of sight, then
appeared to rest at the water.
With the cormorants came a
few boobies, a species with white
head and underparts, dark bill and
dark back and wings, variegated with
lighter spots. Other boobies passed
the hundred yards in the air flying
in long straggling lines now the sea
aboard. That bird sometimes reminded
me of jaegers. Flocks of jaegers
all travelled northward along the
coast.

A few cormorants with grey
breast and feet & bills with the tips
black were flying about the harbor

but they were not numerous.
As we came in a large
Inca was seen in the harbor
about and graceful in movement,
beginning to pick up food from
the water surface. The white line
on the side of the head was prominent.
A dark-headed gull was common.
Head dark and wings mostly black, ring
around neck and underparts white, tail
white with a broad band of black across it.
The bill was tipped with red followed
by a black in which the white was yellow.
The size was that of *L. delawarensis*.
The birds came aboard with high
pitched calling, dropping to pick up bits
of garbage, or settled with black and
white on the lights. Many were
singing but in fall the highest light
was and dark band across the
tail were common.

One penguin
in a minute to swim along the
surface and then down to disappear.
A black-headed gull was frequent
in small numbers winged
in addition of what was
Pelecanus (P. thagus) Black-backed Gulls
L. dominicensis and Pacific Gulls
in June

May 5, Tuesday.

The sea a calm wave but a heavy swell. We were 100 yds from land at this time. I collected many fulmars, gulls, and other species. I saw a species of albatross - a species with dark wings & back, white tail & under parts, and a grey streaked head. I shot a large gull-like bird, mostly grey, for sport. With a few other birds either young was also seen. In water we saw in near land and boobies and white-breasted Cormorants, penguins in small flocks. I noted a blackish tubenose 14 inches long with light under surfaces to the wings and darkish belly scaling slightly about over the surface of the water. (Puffinus griseus) I also saw what may be a fulmar. A species and large as a large gull, mostly grey in color with a light bill.

Position of now Latitude 15° 01' South
Longitude 75° 40' West.

An afternoon we were 8 or 10 miles off shore running northward parallel to the coast. Hills from 500 to 1,000 feet high came down directly to the shore

in the main. Almost bare of vegetation. Occasional high rocky islands crowned with low, small projecting boulders and precipitous from the sea.

Thousands of white-breasted Cormorants were encountered, some resting on the water, others engaged in fishing. The birds flew in a long line across the path of the vessel passing but at least half an hour. The water was covered with them for long distances while the flocks singly appeared in the air, some near at hand and others far distant.

Other birds were present as well. Several hundred gulls was noted circling about the ship. We also passed several flocks of a sort of the size and type of forsters, grey above, white below with black crown. The birds rose with clattering calls and flew screaming for a few minutes and then settled again on the water. About four in the afternoon we passed Vrejas Island a long island lying near land with several projecting pointed hills. At first glance parts of the island appeared covered with

wings were slightly spread to
keep their momentum just above
the surface. More often the
wings were closed and the
birds entered the water like
huge stars each throwing up
a little spout of water a foot
or two in the air as it splashed.
In a few seconds or perhaps at
once the bird bobbed up as
lightly as a cork to rise
nearly vertically wing and then
more gracefully to circle up to
join its circling brethren above.
As they appeared in schools the
birds dove frequently a hundred
two hundred at a time until
one wondered that they did not
stick one another so close over
together did they enter the water.
At such times the water appeared
agitated as by some strange
storm. By and by the fishing was
over and the birds had the
leaving the bay to the Blue-backed
Gulls, and food remnants and a few
Franklin's Gulls.

About noon we were relieved
from Guarantim and passed on to
San Juan harbor. I went ashore
in a launch for 80 centavos
and went in to Lima and a

street car a ride of about twenty
minutes. The hills of San Juan
green and pleasant though anything
was dry and dusty and apparently
rain had not fallen for some time. The
weather was hot but not unpleasant.
The country side between Callao and
Lima was divided into small hills
fenced by mud walls four or five
feet tall and a lot of grass was
across the top. I saw corn
and cotton as the main crops
in at present, and saw bamboo
and banana.

Lima was rather a pleasant city
with many well stocked shops.
I ate lunch at the zoological and
botanical gardens where delicious
service. At the broad market of
a large building. The collection of
animals was good though small.
Lions appeared very old. Eagle
from South American fairs I noted
European white Pelican, Mexico partridge
Old world storks etc.

The show of trees and shrubs
was especially fine. All were bracketed
with labels and some fine shaded
walks with small grass covered
separating them.
Near by was the museum devoted
entirely to historical objects.

Returned to the ship at five
and we left shortly after five
in a heavy fog.

Several shearwaters came
and landed about 5:30 when they
were lured by the light. One
that I caught on the side
flutted about in an attempt
to alight on a lower deck,
but struck the side of the ship
and fell in the water.

May 7, Saturday.

Loss of sight of land this
morning and a quiet sea
no birds about.

Position at noon Latitude $8^{\circ} 58'$ South.
Longitude $79^{\circ} 28'$ West.

We were out of sight of land during
the day and saw but an occasional
shearwater, I noted no birds.

About noon we passed a flock
of shearwaters and a number of the
birds came blundering on board
attracted by the lights. They fell
sprawling on deck and then scattered
off half erect, stooping forward with
rapid backward steps. The obliquely
placed feet with the comparatively
slight flexure of which they were
able to make their quick start
and alight. The birds hurried away

some into dark corners, others in
attempt to clamber into the highest
passageways pulling themselves over
their own thresholds a foot
high by aid of their bills. I
occasionally one when disturbed
gave a ravenous squall delivered
with widely opened mouth. All went
hunting by biting savagely at
one another. I had six and in
all forty or fifty would have been on
board. When thrown over they
flutted round the water and
occasionally swung in toward the
ship again.

Mr. Miller brought me a small
blackish *Oceanodroma*, that also came
aboard about 9:00 p.m. At the time
we were about 10 miles off
of the island of Lobo Lobo, I was
by then we were abreast of the light on
that island. The bird flew quickly
in our hands without struggling.
I held it by the feet and watched
the wings fully and softly then the
resembling some great moth. The
extended wing has a curious
form. The inner secondaries were short,
becoming outward they increased in length
gradually passing over into the inner
primaries. The primaries then slowly
decreased in length to the base.

If the wing was that of an albatross elongated at the ends with a swollen center.

This bird # 6628 I skinned in the veranda room.

May 9, Sunday.

I could see this morning with land in sight in the distance. Mr. Jaggi the wireless operator had three more of the Petrels for me found in deck during the night. When handled they gave a loud chirping note. When I gave the same data as the one secured last night as apparently they were not seen at about the same time.

Position last night at 9:00 P.M. was $7^{\circ} 18'$ South. Longitude $80^{\circ} 31'$ West.

An occasional Shearwater the only bird noted today until now were off the gulf of Guayaquil when a few terns *Pomarine* were seen. The water here was muddy in places in other places the fresh water from some river at the head of the gulf not mixing evenly with the salt. The effect as the boat passed through these alternating straits was curious.

May 9, Monday.

This morning I was given a small black *Regulus* that came aboard at 2:30 A.M. At the time the ship was ten miles off the Plata Island, Ecuador. This bird was heavier & more strongly built than the little *Occipitis* and was more active. The difference in length of leg was remarkable. The song note that it gave off was much stronger than in *Occipitis*.

I forecast this morning and weather close and hot. One or two *Agelaius* with white breast and dark back circling about the ship.

Very warm and close during afternoon. 504 miles from Balboa at noon.

May 10, Tuesday.

Still warm this morning but with a good breeze.

No birds about in early morning. Sky overcast. no land in sight.

At 4:30 P.M. Latitude $6^{\circ} 23'$ North, longitude $80^{\circ} 12'$ West two Barn Swallows appeared and alighted on the ship occasionally rising to circle about. The birds appeared tired and worn out. I captured one and confined it in a small cage where it nestled contentedly after it had gnawed a perch for it.

May 11, Wednesday.

This morning at six we were in sight of land at Panama. I was given an Empidonax that was found dead in death about day break. It was supposed to have come aboard off Cape Mala Panama. an adult female, very fat.

As we came in to Balboa I released the Barn Swallow captured yesterday. The bird circled down to the water and then returned to the ship when it circled about until an hour later we were at the entrance to the canal when I dropped anchor in the harbor at Balboa. I noted several ~~several~~ Brown Pelicans and a few laughing gulls. I was astonished I note the latter species here but was fairly certain of the identity as you can see as that I saw the dark wing tips clearly.

A large gray-breasted Martin circled about the shipping as we lay near the dock in Balboa. As we entered the canal on this side I observed several Megascops flying back and forth and also two Little Blue Herons. The journey through the canal was an interesting break in the monotony of the long steam voyage.

The weather was fair and the land dry as the rains were over. On the western end above Balboa the conical clay hills reminded me of the Pajino formation of northern Porto Rico and it was strange to learn that the knolls were not found in a limestone formation. The working of the locks attracted much interest but was accomplished rapidly so that we were soon in the higher level of the canal.

The country on either bank was rather open, covered in places with low second growth forest. An gation lake former hills now showed merely as abundant forested islands. It would be of great interest to learn how the former fauna was pared with change in conditions. There must have been a great concentration of animal life on the hill summits in the face of the encroachment of the waters. Study of present conditions would be valuable. I noted a point known as Lion Island that must represent the old Lion Hill of former days. Strange bird when seen from tangle of vines and brush on the banks of the canal but it was difficult

to discover the birds making them.
An immature great Blue Heron
recently from its parents care was seen
in Culabra Cut.

Here also I noted a Hawk as large as
a Red-tailed, Brown above, underparts
buffy white, throat & upper breast slightly
fuscous, thighs reddish brown, under side
of tail buffy, ruff side dark. The bird
flew parallel to the ship for some
distance. Several "Anis
were seen, also a *Troglodytes*
and *Volatinia jacarina*.

Near Darien at the Pacific end of
the canal I saw a Brown Pelican,
an immature bird of large size.

There was no way of telling whether
the bird was the eastern or the
western form.

Cormorants were common.

At eight we came in to
Colon and had an hour anchor.

By ten P.M. the ship was working
out into the choppy swell of the
Caribbean sea.

May 12, Thursday.
No life in sight today. A heavy
sea is delaying the ship.

May 13, Friday.
At five thirty this afternoon
My *Sterna anaethetus* appeared all
following a course due north

May 14, Saturday.
This morning eight land on
the east marked Myti which
later the road of Cuba came
in view. The water shoals
rose in series of low
level terraces. The appearance
rather remarkable.

North of the seaward channel
I saw 1 other *Sterna anaethetus*
and one Booby.

May 15 Sunday.
Lat latitude $26^{\circ} 50'$ north and
longitude $74^{\circ} 12'$ West. I saw
several *Peccaris* over the water.

May 16, Monday.
A few small black Petrels over
the water.

May 17, Tuesday.
This morning at 11:15 A.M. when
we were opposite the Virginia Cape
about 70 miles off shore I saw and
restutata Gray back, dark crown & whitish
neck. At noon the position of

The ship at noon was $35^{\circ}40'$ North
 latitude, 77° West longitude. The
 gale was at a point about 30 miles
 north of Cape Hatteras. As usual
 it kept dead out at the sick
 only occasionally swinging in toward
 the boat.

May 18 Wednesday.

At eight this morning
 when we were opposite Barnegat
 about 20-25 miles off shore I
 saw 5 hoons.

At 9:30 I found a male
 Black-throated Blue Warbler on board
 hopping about among the wicks
 on the cover deck.

We docked at 2:00 P.M. but
 it was past four when all was
 through Customs.
 Transferred at once to the Pennsylvania
 Station.

May 19 Thursday.

Left New York via P.R.R. 12:15 P.M.
 Arriving Washington D.C. 6:20 A.M.

Accounts current April 1 - May 31-1921

Debits.	G. E. Dist. Surv.		Order. 2nd	
	1920	1921	Comp.	1921
Exp. as shown by abstract.		964.03	27.49	991.52
Ref. with Treas.				
Chq. # 53060. May 27, 1921	23.97	87.59	27.51	139.07
Bal. now due U.S.		0	0	0
Total.	23.97	1051.62	55.00	1130.59

Credits			
Bal. U.S. from last account.	23.97	451.62	55.00 530.59
Accountable Warrants.			
# 18236. Feb. 19, 1921		600.00	600.00
Total.	23.97	1051.62	55.00 1130.59

Bal. due U.S.

Abstract of Expenditures.			
	Voucher No.		
April 23	23	A. Wetmore	193.68
" 30	24	"	223.08
May 18	25	"	24.84
" 31	26	"	438.39
" "	27	"	111.53
			991.52

Expense

Salary

1920-21	amount	Total	allotment	amount.	Total	allotment.	
July	184.86	184.86	1000.00	228.33	228.33	2740.00	6060.00
August	237.22	422.08		228.33	456.66		
September	30.72	452.80		228.34	685.00		
October	315.39	768.19		228.33	913.33		
November	199.96	968.15		228.33	1141.66		
December	245.96	1214.11		228.34	1370.00		
January	240.68	1454.79		223.08	1593.08		
February	253.76	1708.55	800.00	223.08	1816.16		
March	285.58	1994.13		223.09	2039.25		
April	269.91	2264.04	600.00	223.08	2262.33		
May	387.00	2651.04		111.53	2373.86		
June	(7m Total) 25.62	2676.66					
1920 June	676.03	3327.07	700.00	220.00	2593.86	220.00	5946.55

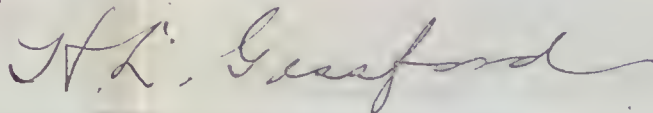
DISTRICT OF COLUMBIA
METROPOLITAN POLICE DEPARTMENT

RAYMOND W. PULLMAN
MAJOR AND SUPERINTENDENT

WASHINGTON, D. C.
April 15, 1920.

To the Immigration
Agent at Rio de Janeiro
or
Buenos Aires

This is to certify that the records of this
Department for the past five years show that Mr. Alex-
ander Wetmore, to whom this letter is given, has not
been arrested for mendicancy or any other charge, and
has not been held for mental observation.



Acting Major and Superintendent.

G-L

Good - Buenos.

Consulate of the United States of America
at Montevideo, Uruguay

January 8, 1921

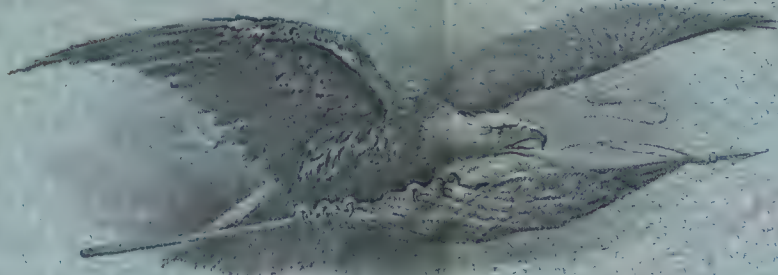
David J. Myers

No. 1. Consul of the United States
No. 2. of America.

21

10

No 62S



SPECIAL PASSPORT

The United States of America,
Department of State

To all to whom these presents shall come, Greeting:

Know Ye, that the bearer hereof,

Alexander Wetmore

a citizen of the United States, Biologist

for the Bureau of Biological Survey,

Department of Agriculture is about to proceed to
Argentina, Paraguay, Uruguay, Brazil, and Chile on official business

These are therefore to request all whom it may concern to
permit him to pass freely, without let or molestation,
and to extend to him all such friendly aid and protection,
as would be extended to like officers of

Foreign Governments resorting to the United States.

In testimony whereof, I Wainbridge Colby

Secretary of State of the United States of America,

have hereunto set my hand and caused the Seal

of the Department of State to be affixed at the City

of Washington, this 15th day of May

A. D. 1922 and of the Independence of the United States

of America, the 144th



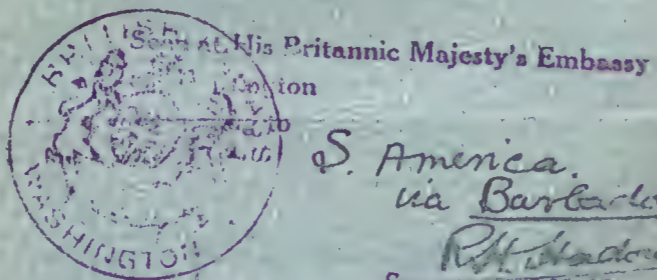
Wainbridge Colby

VISAS.

Visto en la Embajada de la Republica Argentina en los Estados Unidos de America Washington, D.C. Mayo 19, 1920

Juan Martin

Primer Secretario de la Embajada

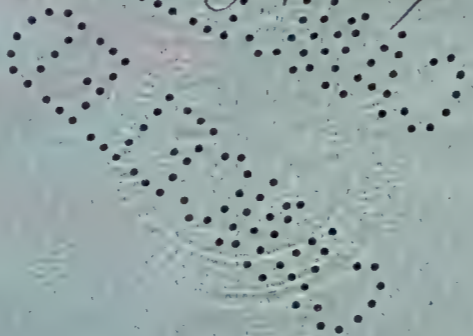


S. America. via Barbados. R.H. Adams Secretary of H. M. Embassy Washington

1920/27th May 27-5-20

LEGACION del URUGUAY WASHINGTON, D. C.

MAY 22 1920 Dcto. *Argandoña* per *Seto*



VISAS.

28 Maio 0

Carriato



220

4 000

ll

65

CONSULADO GENERAL DE LA REPUBLICA DEL PARAGUAY EN NUEVA YORK, ESTADOS UNIDOS DE AMERICA.

VISTO:

M. Ballau CONSUL GENERAL

FECHA, 27 DE Mayo DE 19 20 NÚMERO #5854

DERECHOS PERCEBIDOS. \$1.00 Cancel \$1. Sección 47.



AMERICAN CONSULATE GENERAL, Buenos Aires, Argentina.

JUN 30 1920

Louis Krauss AMERICAN CONSUL GENERAL No 548. No 200

VISAS.

Asuncion, Paraguay Aug. 27, 1920

Bueno (Good)

No. 131

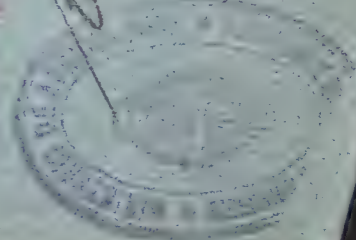
Harry D. Buley American Consul

why C. C.

Good for journey to Buenos Aires Argentina Samuel S. Dickson American Legation, Asuncion 5/10/1920

VALIDO por *una vez* para el *total* de *una* entrada en el territorio del Paraguay Buenos Aires

MAY 19 20



This photograph is a likeness of the person whose name appears on the passport.

Alexander Witmore

Description of Bearer

Age 34 years Mouth small
Stature 6 feet 2 inches Hair square
Forehead medium Hair dark
Eyes hazel Complexion fair
Nose short Face oval

This passport must be surrendered in person or by mail to the Department of State after each return of the bearer to the United States. It will not thereafter be valid for use in leaving the United States unless it bears the Department of State's endorsement dated within the days of the bearer's departure.

VISTO EN LA EMBAJADA DE CHILE EN LOS ESTADOS UNIDOS DE AMERICA WASHINGTON, D. C. Mayo 22 1920

Consul General *Comandante de Embajada* *5 de Mayo de 1920*



Rubens CONSUL GENERAL

Visas

Visto en esta
Resolución de la República
Argentina, Octubre 6/1920
Amulatac...

Visas
Good Buenos.

Consulate of the United States of America
of Montevideo, Uruguay

January 8, 1921

David J. Myers

No. 1 Consul of the United States
of America.

1930

ENCARGADO DEL
CONSULADO
MONTEVIDEO



Visto en este CONSULADO GENERAL de CHILE

Consul General



AMERICAN CONSULATE GENERAL
VALPARISO, CHILE.
GOOD APR 22 1921 BUENO
No. 582
Fee No. C. J. Deichman "No fee prescribed"

DIRECCION GENERAL
VALIJO POR BUENOS AIRES
A los señores de los Estados Unidos
del Brasil y de la Rep. del Uruguay
Buenos Aires



No. de...
No. de...
No. de...



Collectors:

Birds skins	1600
" " (acquired by purchase or gift)	25
Complete skeletons (Birds)	267
Parts of skeletons	63
entire birds in alcohol	188
Bodies, etc., in "	211
Mammals, skins & birds skulls	151
	<hr/> 2505

Birds Eggs, insects and other invertebrates
and plants in addition

Plants

175

Snakes collected. (detent. Dr. Amaral)

U.S.N.M.No.

63495. *Xenodon merremii*, Puerto Princesa, Pangasinan, Sept. 23, 1920
 6 *Lytrophis dohringii*, Laval, Buenos Aires, Nov. 21, "
 7. *Rhadinea anomala* " " " " 2, "
 8 *Lytrophis poecilognathus* " " " " Oct. 30, "
 9 (*Lachesis*) *Bothrops alternatus*, R^o 182, Formosa, Aug. 20, "
 63450 *Aporophis lineatus* (juv.) " " " " "
 1 *Lytrophis poecilognathus* (juv.) " " " " "
 63445 *Philodryas burmeisteri*, General Roca, Rio Negro, 7/25/20
 6 *Lytrophis semicinctus* " " " " "
 7 *Philodryas schottii* " " " " "

Mammals collected

Old skulls	30
Skins only	4
Skins + Skulls	105
Alcoholics	9
Skeletons	3
	<hr/>
	151

EL HOSPITAL

DEL PREMIO MAYOR SE DEDUCIRÁ EL 5 % PARA EL NÚMERO ANTERIOR Y POSTERIOR.—SE PAGAN LOS PREMIOS HASTA LOS SEIS MESES DESPUÉS DE LA EXTRACCIÓN Y NO SE OYE RECLAMACIÓN DE NINGUNA ESPECIE SOBRE PÉRDIDA, SUSTRACCIÓN DE BILLETES Ó CUALQUIER OTRA CAUSA QUE SE ALEGUE.

El sello indica el día del sorteo

LEYES: 12 DE JULIO DE 1856
12 DE ABRIL DE 1893
Y 18 DE NOVIEMBRE DE 1920

PROGRAMA

28 MILLARES CON 3.000 PREMIOS

28.000 billetes á \$ 5 o/u \$ 140.000
á deducir 30 % » 42.000

70 % de premios \$ 98.000

PREMIOS

1 premio de	\$ 20.000
1 » »	» 5.000
5 » » 2.000	» 10.000
8 » » 1.000	» 8.000
15 » » 500	» 7.500
37 » » 200	» 7.400
57 » » 100	» 5.700
141 » » 50	» 7.050
2735 » » 10	» 27.350

3000 premios sorteados \$ 98.000

LOTERIA DE LA CARIDAD
10 Febrero 1921
2ª ZONA SERIE 79
SE PAGAN LOS PREMIOS
EN MONEDA
DE PLATA DE CURSO LEGAL

Los pagos de premios están sujetos á los extractos de la Administración

MANEJARLO

