

Rua Clarissa Indio do Brasil 36

Rio de Janeiro, Nov 5, 1929

(Tues.)

Dear Prof. Hitchcock,

I wonder if you are
nearing home by this
time. I hoped to find a

letter from you at the
consulate, but there was

nothing. American

Consul, please tell Miss

Hiles, is now on Praia

Flamengo, Rio de Jan.

(not mingo)

instead of on Avenida

Rio Branco. But they as-

ured me at the consulate

that mail would be

sent there, though addressed

to former place.

It is still raining, has rained most of the time since I landed. I have one pressful drying, including two things I did not get before, *Olyra micrantha*, very common on upper slopes but all past when I was in Brazil before, and *Panicum racemosum* (or perhaps *uvulleatum*). This is the sand binder on the coast outside the bay. It was all sterile last time. Sunday by searching a mile of it I got 10 specimens with panicles, nearly all I saw. My

first specimen of *Pasp. decumbens* spoiled my key. The first glume on the two splets of a pair are not alike, one is elongate as in others of the group!

The Southern Cross came into the bay after midnight and was at anchor at dawn, so we missed the impressive entry. My chum and I were out at daylight but fog covered all but the nearer peaks. We landed about 8 o'clock and Dona Maria Bandeira awaited us. We recognized each other

while we were still on deck,
she on the quay. She has
an automobile now, and
the Evanses having but
12 hours in Rio I played
truant, left all but my
hand baggage and we
all went off with Dona
Maria. I had been told
by State Dept to call at
Embassy here for free
entry permit, so did not
suppose I could get my
baggage out that day
anyway, but I learned
next day that Mr. Meyer
of the Embassy
was at the custom
house to get out my

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baggage. I was sorry, but
the one day in a lifetime
with Mrs. Evans to ride
around this wonderful
country was not to be
missed. We had planned
to hire a car (the Evanses
had). After taking us to
the Jardim Botânico and
over the famous drive
Avenida Niemeyer to Alta
Boa Vista, ^{Dona Maria} she brought us
back down town where
we had lunch and
then to the bank for
money. I thanked very
McLachlan bank for

advising me to take some money besides the draft I bought from them. The man said there might be delay in cashing it. I took the draft with a letter from the N.Y. bank on which it was drawn recommending me to Banco Brasil. After long consultation I was told they couldn't cash any of it until they had written or cabled to N.Y. and received an answer. So I went to Nat. City Bank of N.Y. and cashed a \$50 ABA traveller's

check. Mrs. Evans had another traveller's check which they demurred over, but finally a young man newly from N.Y. appeared and they seemed to take his word for it so we got our money. Then Dona Maria took us to station for car up Pão da Assucar and left us. It was not a clear day so the Orgãos nits were not in sight, but the view was glorious anyway. After that there was only time to buy

picture postals and return
to Southern Cross. Poor
George said he wouldnt
have to walk the deck
for exercise that night,
we had walked him
miles. ⁹ Dona Maria had
stopped here with my
hand baggage on the
way out Thursday morn-
ing. The pension is run
by a Russian, Miss Zoe
Brandt, whose father was
once ambassador from
the old Russia. She is one
of the dispossessed, poor soul.
The place is clean, haven't
seen a single cockroach.

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The rate is 300¢ a month, room, cafe (an orange and banana with it!) and evening dinner. That is about \$1.25 a day, very reasonable. The baggage is stacked up under shelter at one side of the patio and I was allowed to take an old table into the patio to put my plants in press. I used the patio for drying the one day there has been sun. My room has running cold water. A hot bath is 2¢ (about .25). I am keeping clean by means of my wash bowl as yet, I'm squeamish about

Brazilian bath tubs, even ⁱⁿ so
relatively clean a bathroom
as here. The meals are excellent
with vegetables, which I never
had before, except as garnish to
meats, save at houses of
missionaries. I hope Mrs.
Mexia will like it. Of course
it isn't convenient, no place
to put things except a small
wardrobe, but things in
Brazil never are convenient.
It took me some time to
find out where and when
the Villager lands - 7:30
Monday morning. The
agent will take me out in
the launch, the boat does
not come to the dock. I
shall be glad to turn over

$\frac{17}{22}$ of this awful baggage to Mrs.
Mexia. I was glad to see
from her passport that she
is quite young, only 49. I'll
take advantage of my extreme
age to let her look after
baggage. I feel as if I'd had
my fill of it. Tell Miss
Niles the "jinx" followed me
to the end. As I said Mr.
Meyer took my passport
Friday and went down to
customs to get my bag-
gage, saying it wasn't neces-
sary to have the keys or for
me to go, so I went on to
the missionaries here to
whom I had letters, to learn
what to do about my draft,
etc. when I got back

here 20 pieces of baggage had
been delivered instead of 23
(one my cabin suitcase). I went
back to Mr. Meyer and we took
a taxi down (the way I've had
to spend money for taxis is
a crime) to customs. The customs
list said 20 pieces for me.
I had checked up ship's list,
21 in baggage, 1 trunk and
suitcase in cabin. Mr.
Meyer and I began to hunt
and found 2 in one place
and one in another, all
plainly ticketed with my
name. Mr. Meyer had
them brought out, then
list had to be changed (not
locating 23 apparently the

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customers men coolly
made it 20, what they
could find!) and Mr. Meyer
turned these over to a
carregador. About 6 that
evening the two trunks
were delivered, but the
suitcase the man wanted
to give me wasn't mine.
Miss Brandt came and
explained for me, and
then comforted me by
saying they would probably
find mine and deliver
it, next day or maybe
Monday, but "this is
Brazil!" It did come

Saturday about 10, so I joyfully started out with my portfolios for the first time - wasn't raining either, though everything was so water soaked the steep slopes slipped under foot. It was a holy day - All Souls, the Bras decoration day, so Dona Maria (whose father, the doctor who attended me when I had grippe, died last Feb.) was not at the Jardim. Her mother is away with relatives for a few weeks so Dona Maria is free to

go to Pico da Bandeira with us, to my great joy. The season is not advanced. I saw plenty of *Pharus*, none with panicles yet, some is true of *Lariscis*. I am hoping we shall not be too early for Pico da Bandeira. I haven't been able to see Dona Maria ^{since}. I went out yesterday morning, but she gets to work at 11, and I was to call on Ambassador Morgan at 11, which I did. He was very kind, gave me a letter to minister of Agric., to whom he said I ought to pay my

respects. I am impatient
of all this calling our
officials in the middle
of the day. However, it
rained all Friday and
all yesterday. But I have
to appear in trim condition
so have to take a taxi.

Dr. Waldemar Schmitt said one
should always take a taxi
to any officials' for the im-
pression it makes. I said
I was afraid the official
wouldn't be looking out
the window to see my
grand arrival. However
in the rain it is the only
way not to be appear be.

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dragged. A Dona Maria
told me the last pkg of
grasses we sent had
been opened at customs
and obviously mixed up.
She left them for me to
straighten. She said pkg
for the Jardim had never
been opened before, but there
has been much smuggling
of silk and customs officials
are getting "very bad" like
our prohibition officers who
make a show by attacking
small fry and letting the
privileged bootleg as they
please, I suppose. I am

going out to see her this morning and call on Senhor Morais this afternoon, Ambassador Morgan made to appointment for me. I want to go out to see Sr. Sampaio and I hope Sr. Editha Suthlage, but I don't want to put off "paying my respects" to Sr. Pacheco Leão and Sr. Campos Porto. Sr. Kulilman is transferred to the Florestal and Dona Maria has his place, so she is not free to give all her time to ~~masses~~ masses now. I want to see Sr. Sampaio

before we go to Pico da Bandeira because it was in Espirito Santo (whence we ascended) that he got *Olyra Sampaiana*, and loc. "Reve" is not on map. I've just found it in Guia Levi (Ry guide I bought first day).

By help of Senhor Braga, Bras. Protestante to whom I had a letter I deposited my \$2000 (16820# changed at Nat City Bank, with 34# Bras. tax to pay) at Banco Brasil and have letter of credit on banks in interior. Banco Brasil is clearing house for all the banks of Brazil. It took half an hour of Senhor Braga's

time and an hour more
of mine to secure this. I
cashed 2 contos (about \$250)
so am conscious of my
money belt. The letter of
credit doesn't fit this belt
and I had to make
another out of a bag. I
had hoped I could open
an account and have
a check book but that
isn't done in Brazil
apparently. — Going to Jardim
Bot. — to be continued.

Very best wishes,

Sincerely

Agnes Chase
Here are Bras. air mail
stamps for you. Had an awful
time getting them with no letter to put
them on!

Moss

Nov 5 4 pm.

continuaçãõ

Dear Prof Hitchcock,

Through Dona Maria
and her car I've cleared up
all my calls - it almost
persuades me to be a
wisher for an automobile.

This city is so frightfully
time consuming. First I

straightened out the
mixed grasses, ^{mentioned} labels
dumped together in the
middle, but all there.

I showed D. Maria the
piece of type of *Trisetum*
brasilense and told her
the author was a Trappist.

2
She is a devout Catholic, two of
her sisters were, so I do not
mention my Protestante
friends to her. She had
acquired some informa-
tion about how to get to
Pico de Bandeira. I men-
tioned wanting to call on
Dr. Campaio and she said
she would take me out
in her car. When I went
by street car before it took
two hours - it is away
inland at São Cristovão.
She stopped to let me
deliver my letter to Dr.
Morais (from Waldo
Schmidt). I promised to
send him a set of grass

Nov 5 4 pm

rusts etc. My sending a set of my grasses to Jardin Botanique certainly made a hit and I've promised to do so again. I enclose a note for Mr. Swallen about duplicates from N. Amer. Dr. Sampaio speaks about as much English as I do Portuguese, but D. Maria interpreted. I had to listen again to the story of my adventure at Oliveira. A Mr. Gorham on the boat, after being introduced by Mr. Evans and learning I'd been in Bras. before asked me with a grin if I'd been at Oliveira. He knows Dr. Ralfs. I hope

that accounts for it and not
 that Liu "afamada" as the
 crazy women eating grass.
 Dr. Sampaio opened a pkg
 of the last lot we sent
 him. Specimens are laid
 in folders of firm white
 paper, not fastened in any
 way, but label and another
 museum label are pasted on.
 He had not received the
 report of his last sending -
 I left the letter for Mr. S
 to sign. Dr. Sampaio is a
 delicate looking man about
 Standley's size and age, with
 a scarf wrapped round his
 neck this cold day. He
 called Mr. Vidal who

had collected *Olyra lamparans* and he told me which way to go from Reeve. It grew in the matta (woods). Vidal has not been up Pico de Bauderia. Dr. Editha Smithlage is in Amagoras. I hope she will be back before I leave in May. I missed her last time. Coming back D. Maria dropped me at ^{down in the city} ministry of Agriculture, and went back to her work - she had given me full half a day (Bras. day beginning at 11). I presented my letter for Sua Excelencia but the flunky pointed to a notice that his ex- gave

audience on (quintafeira
5th day, Thursday)

So I asked for Dr. Campos Porto
who is now asst. secy. When
I handed him my card I
said "Lembra me o sen-
hor?" He did, when he
saw my name and was
most cordial, but my
Portuguese did not keep
up with that first sentence.
He introduced me to another,
whose name I did not
catch. He knew me by name
he said. Then a few minutes
later Dr. C-P and I were called
into the presence of Sua
Excellencia (who could only be
seen on Thursday). He was

kind and polite. I understood enough Portuguese to know Dr. C. P. was telling him of my giving a set of my Bras. grasses to Jard. Bot. (which is under ministry Agric). Wasn't it a wise thing for us to do! When Sua Ex (Castro his name is) asked me if I wanted anything of him I felt very happy inside to say "Nada, senhor, meo departamento disse-me fazer o homage ao minister da agricultura da Brasil." (I'd been getting that ready). He smiled most complacent.

ly and bowed. I do want
a letter in Portuguese telling
whom it may concern
what I'm at, but Dr. C-P
can give me that. He is to
be at Jardim Bot tomorrow
at 10, so am I, and with D.
Maria to interpret I hope
we can make arrange-
ments for Pico da Bandeira.
Dr C-P may come, too. The
route I had picked out on
the map is not feasible.
We can go up through
Espirito Santo, stopping at
Reve where Chyra camp.
came from, but the best
ascent of the pico is from

Espera Feliz, just across the
Minas border. Miss Rolfs and
I went to Caparaó, the station
beyond. After a visit of about
10 minutes with Dr. C-P and
the man whose name I
failed to catch, Dr. C-P called an
attendant, sent him down the
elevator with me - I didn't
~~know~~ why till he called
a motor car. I supposed he
took it for granted I always
used a taxi and I played the
expected part, but discovered
I was being sent home in
Dr. C-P's car! Assist-secy
of Agr at home doesn't do
that for me! It is agreeable
to feel I am welcome at Jardim
Botanico. It reminds me of

my cordial welcome at Vienna
in 1922. - So, in spite of con-
tinuous rain, things are
progressing. But I wish it
would stop raining. I ~~did~~
delivered the things I brought
for the missionaries, our rainy
days. I've just looked in phone
book and find Berlitz school
here. If it still rains tomorrow
after I've been to Jand Bot I'm
going to Berlitz and take a
dose of Portuguese each day
it rains. A young Russian
who lives here and who hand-
led my baggage for me when
I got out what I needed
was so fair I spoke to him
in German after agonized
efforts to say what I wanted

in Portuguese, and he answered. I remarked that I thought he was German but he said he was Russian. Sunday evening he watched me put plants in press in the patio and I told him about Lange-dorf and that we exchanged plants with Bob Gard, Petrograd. (I didn't say Leningrad - they are obviously Whites here.)

Last night while I was eating dinner a man who dines at another table - an American I was told, but his English shows he is not American-born - told Senhora Brandt that Pilsudski had led an army into Polish parliament and was evidently going to become

dictator if not king. Miss Braudt said a king is mooch better - look at Brazil. The discussion was interesting, the man saying Brazil had an exceptionally wise king who did much for the country, but one president (didn't catch his name) had done more for progress in 5 years than all Dom Pedro had done. But she was unconvinced - France, all the countries, would be much better if they had a king. Poor soul, she is kind to me and brave to work for her living when she obviously wasn't brought up to do it, but her bitter scorn often appears: "you pay them and

then you have to say 'Do me a favor.'" ("Faca favor" begins practically ~~begins~~ every sentence demanding anything) And I remembered that Brazilian slaves revolted over 100 years ago, though many remained to be peacefully freed in 1888. It struck me that revolted slaves and workers who had wrought a revolution alike demand "please" when they work for one, even when they are paid, too. ^{Getting away} (she has been here 5 years) from the hated Bolsheviks, she still has to say "facá favor" to her servants and tradespeople. Tough luck, she ought to have gone to U.S. where "niggers know their place" and where workers that preach revolution

peaceful or otherwise are imprisoned
like Mooney, or electrocuted like
Sacco and Vanzetti, and where the
murderers of strikers are declared
not guilty, like the Penn. ~~state~~
mine policeman who killed a
Pole this year, and the men in
North Carolina who killed Ella
May, who composed workers'
songs.

I am wondering what
is happening in the world. On ship-
board I learned from radiograms
of Briand's resignation. The new
cabinet with Briand as minister
of foreign affairs wasn't definitely
settled when I landed. I ordered
Nation and World Tomorrow
sent to Amer. Consul for me.

I hope I shall get a letter
from you soon. I wonder if
you had time to look up in London
the questions I sent you there.
Very best wishes, Sincerely yours
A. G.

Sunday Nov 10, 1929

Dear Prof Hitchcock,

Yesterday Dr. Buttercount called and took me to the Estacão do Serviço de Industria Pastoral, in Ministry of Agriculture, and miles from any of the other parts of the ministry. It has been to this with animals and Est. Agronômica with grass plots, crops etc are like our Arlington, Bell, and the place beyond College Park - Beltsville - which our Dept Agr. has. The grass herb of Dept Agr. is in the place visited yesterday. The specimens are well preserved and labeled, but so

far as I went the identifications
are mostly incorrect. The
botanist on the staff, responsible
for the naming, is lame
with a broken leg so I
did not see him. I sug-
gested that Dr. B. send the
whole lot to Wash. to be
named and returned. He
accepted gladly and said
we were to help ourselves
to part of the material. I
had that in mind. Most
of what I saw is from
Southern Brazil, which
I shall not see. It will
enrich our Brazilian
collection and be a great
help to our "colleagues."

When the building I saw
being prepared at Deadwood
is completed the herb. will
be moved to that station.
I said to send the grasses
next May or June, for I
knew you and Mr. Swallen
would not have time
this winter for them. There
will be the equivalent, I
estimate, of 2 of our herb.
cases, but many specimens of
same species. As I said
in my last letter, Dr. B. needs
lacks books of all sorts. Yes-
terday he showed me his
typed copy of Hackel's keys
in Engler & Prantl's *Pflanzenfam.*

and among other typed
excerpts, the typed copy of
keys to genera from your
Grasses of Ecuador Peru and
Bolivia! You can sympathize
with such sincere desire to
accumulate necessary liter-
ature. The list I send is one
he made up (when he was
prof. at São Paulo I think)
from a price list our Div.
Publications sent him in
response to request for
some specified publications.
He says it is very difficult
to buy outside Brazil through
the Ministry of Agric. and
that if he orders through
book dealers here they

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make little effort to get
scientific papers and then
double the price. Can't you
explain to Div. Publications or
someone higher up that the
publications requested are
for a bureau of the Brazilian
Ministry (dept) Agriculture.
The gift will be known up
to the minister himself (even
my set of grasses to Jardim
Bot is) and ~~create~~ ^{further} par Amou
can good will. You see
Dr. B is a Frenchman used
to the libraries of Paris - now
wonder he is pretty desperate
here. Beside his official work
he is doing "biometrics" at

home, he showed me quantities of plotted curves and proudly displayed a very fine binocular recently bought for him.

He is young - under 40 I should think - and is going to a great deal to advance Brazilian agriculture. Can't US Dept Agr. afford to send him Journ. Agric Research and Experiment Station Record.

He gave me a carbon copy of a typed copy of the elder Gaillard's "phytogeography" we'd call it. Its definitions of Bras. terms for habitats will be a great help to me.

- I stopped for warming cafe and to change driers.

It has stopped raining just now after pouring all night, but is still lowering. I do hope the sun will come out and let me dry up my great stack of driers. The Pico da Bandeira excursion is all arranged. We leave Wednesday 8 p.m. with Dona Maria, probably Dr. C-P, and a man from Jardim Bot. And we go up from Espirito Santo side as I wanted to in the first place. This is longer but is unspoiled while the Minas side is "devastado" Dr. C-P said. Miss Rolfs and I camped in burned and down timber much as we find in Idaho and cattle trails were what

led us astray. From the nearest town on up we go by auto-mobile, then horse back, stay over night at a fazenda and probably camp one night. Returning I plan to spend several days, maybe a week or more in Espirito Santo (Noro Mexico, too, probably), but Donna Maria must return direct for her mother will be home about the 21st. She came because her mother is visiting a married sister. Her father, the kind doctor who attended me when I had grippe and refused pay, died last Feb. Dr. C. P. will have to return direct also.

I learn that a complete set of Ule's plants are at

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the Museum Pac. Will you
please ask Miss Miles to
copy the Ule numbers and
names from our Mtz
list (with other mus lists in
your bookcase, left hand
pile, shelf with key books)
and check in red or blue
as on that list. ^[see * next page] I'll look
them up at the Museum
before I leave next May.
Miss Baudouin says it is
difficult to use the herb
at Museum, that Dr. Sampaio
is reluctant to allow it, and
gets out covers himself, not
allowing one to go to cases
himself. (reminded me of

Florence, Italy). I hope it is only
jealousy between ^{Nat.} Museum and
Dept Agric (we know something
of Nat. Mus. disagreeableness
too!) and that Lampais will
let me at the Ule graces.

I doubt if he has Mez's names
for them. [Besides, please have
Miss Niles look in type index
* for species checked in red
and give species Mez's
name is referred to if not
left valid.]

I failed to bring franked
envelopes - have but 2. If
Miss Niles will mail me
10 or 15 for embassy mail
it will save postage on

big letters. I hope I shall
find a letter from you
at the consulate tomorrow.

If it isn't pouring I'm
going up Corcavado this
afternoon. A gigantic bronze
figure of the Christ (a copy,
I think, of Christ of the Andes)
is being erected at summit,
and ascent is only allowed
on Sunday (when workmen
are not going on) at 2 pm, but
one train. It is always
raining in Serra do Caparaó,
we are told - and Miss Rolfs
and I found it so - so there
is no one hoping for fair
weather on our coming
trip, but I do hope it isn't too

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early for lots of grasses. I'll probably receive pkg 1 at consulate tomorrow. It is ready. Please ask Mr.

Swallen to open it and air for a while near steam-pipes. Ask him with each bundle to open and then stick the franked tag with number in the pkg.

Wednesday 10 am.

"Down to Jehenna, or up to the Throne,

He travels the fastest, who travels alone!"

Mrs. Mexia's boat, due yesterday, but which I was told by the agent, after waiting an hour for him one day last week, to meet

at 7:30 this morning is
expected Thursday - and
we had arranged to leave
for Serra da Caparaó Wed-
nesday evening. There
has been such an awful
lot of time consumed by
this doubling the expedition
- nothing that is in any
way Mrs. Maria's fault, but
certainly he travels the
fastest who travels alone.
Of course it will save expense
eventually. There is another
train Friday, but that
charter Maria's
time.
I am going to
leave pkg 1 at the con-

relate. I hope I'll get a
letter from you. Tenha
paciencia seems to be the
motto of Brazilians - it
is terribly hard for a
American to adopt it.

Very best wishes, I hope
you are safely back in
Washington and feeling
well. I have not had a
letter from you for two
months. I know mails
are slow, but I hoped you
would send a letter here
from Europe. Very best

HITCHCOCK AND CHASE LIBRARY
Smithsonian Institution

wishes,

Amos

AC

Bitancourt, Agesilau

off title in Jan 8, 1930: Encarregado
da Estação Experimental de
Agrostologia Deodoro [Rio de J.].

Minister of Agri Lyra Castro

See Letter (oversize) from B to AC (in Rio)
8 Jan 1930 To Consulate

IAN

Date

where are papers of
George Black. ?

Other Data

Date of Photo

Present Position & Address

Tuesday Nov 12, 1929

Dear Prof Hitchcock,

A letter from Miss
Niles says you arrived in
N.Y. Oct 25. I hope you
had a smooth voyage
and that you arrived
feeling well. I suppose
my letters to you at
New marked "Hold" will
be coming back for a
month.

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Smithsonian Institution

I went to find Bob
yesterday, distressed by
delay of Mrs. Mexia's boat,
and was met by Dana
Maria with the news that

her mother is to return next
Monday, so she couldn't go
to Serra da Bandeira and
neither could Dr. C. P. be-
cause there is a bill be-
fore the Senado in regard to
Jard Bot, which was to
have come up last week
and didn't. He can't leave
for it is his measure to
reorganize the Jard Bot.
(Doesn't that all sound
natural to U.S. Dept Agr.) So
letters have been prepared
for us to the fazendeiros
and Dona Maria wrote
out the schedule of trains,
both day and night,
and we shall go so.

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(Gó is Portuguese for alone) We shall probably go by day train to see the country, leaving 5:40 am, Sat. Staying over Sunday and batuzzing at the junction in Esp. Santo. Or if boat comes early Thursday, so there will be time to get baggage and pack we can go Friday, but that will hardly be possible, even with kind Mr. Meyer's getting the baggage it isn't likely to get out here till late.

This is first clear day for a week. Yesterday in the drizzle I worked till 5 at

Jard Bot, sorting up Kuhlmann's Amazon grasses. K is at the Florestal and just left his grasses unlabeled except for slips with loc for the greater part. Many have nothing. There Dr. Maria said to lay aside, that Dr. Ducke would discard them. I am to take duplicates of all and there are 2 collections of Panicum coarctatum Döll! and quite a lot of bamboos. Not all are Amazon, I forgot some Stachys. It will be a good haul for me - good collecting on rainy days. But today I go across the bay. Best wishes. Yours sincerely
Agnes Chase

Chronicle of excursões to Serra da Caparaí

Left Rio Nov 19, 5:40 a.m. Train ran around the bay, Avicinnia mangroves before reaching Merity where Cuyler and I botanized in Jan 1925. Passing the mangrove marshes, long stretches of low ground full of *Pasp virgata* group, *P. millegrana* commonest, and the one with long pyramidal panicles (no terrible name as I recall our list); *Erianthus* with lovely silvery-pink

panicles, quantities of *Typha* forming pure stands, grassy stretches again with *Androp. bicar* *ris*, its bushy tops just fluffing out, *Echinochloa sabulecola* (*E. crugalliacuspa*) I think, very tall,

rather infrequent, another *Echinochloa* with long reddish runners extending into water, with colony of *Panicum chloroticum* nearby. Dry slopes full of *Imperata* (shorter panicle sp), some *Androp. leucostachys* (probably); Jaraguá (*Hyparrhenia rufa*) becoming abundant at north end of Est. Rio de Jan.

After leaving bay region much sugarcane grown to Macaé on coast and north, Campos being a big town, center of sugarcane industry. Many carloads of cane, most red to crimson, and most of the children chewing cane. Oxen or bullocks and wooden-wheeled carts used for

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hauling. High very rugged mountains in dis-
tance throughout. Entering Espirito Santo the
ground rose, *Olyra mucronata* and climbing bam-
boos bordering woods, the hills covered with coffee
trees or weedy second-growth matta; not much
original matta left. Land cleared by burning
and hacking down as much as possible. Old
big logs seen lying in coffee plantations and
stumps of palm among corn (milho). A cucur-
bit ~~was~~ with yellow flowers, ^{about 4-5 cm. across} and small leaves
shaped like those of hop-vine seems to be first in-
vader of burned areas. Clear from Rio to end
Panicum barbinode covered moist fields and
waste ground and *Melinis minutiflora* the
steep red clay ~~slopes~~ slopes, its characteristic heavy
odor everywhere. *Pan maximum* also abundant.
"Para" grass is *Capim de Angola* in Brazil. These 3 African
grasses are the dominant grasses of the whole
region, *Melinis* reaching clear beyond Sta Bar-
bara de Caparaé, up the cleared or partly cleared
lower slopes of Serra de Caparaé. We reached Sta-
penerim at 20:10 (= 8:10 pm) and stayed over night. We
had had 20 minutes for dinner about 6:30, the first
real Brazilian meal Mrs. Mexia had had, rice,
fajã (black beans), farinha soaked in fat, meat, egg.
~~and~~ We left Stapenerim at 6:10 am. (Nov. 20). Passed
good Jaraguá pastures, many cattle, Pasp.

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virgata group (millegrana most prominent)
and *Trichachne insularis* standing untouched
in grazed land, mostly of *Axonopus compressus*.
Hills, where cleared, mostly in coffee. Reached
Alegre 10:18 with all our baggage, one U.S.D.A.
case (Al's) and 5 pieces of Mrs. M's, besides ^{our} hand-
baggage. We had a letter to Sr. Mario Almeida.
While Mrs. M. stood guard over the baggage at
station I set out to find Sr. Almeida. He is a
comprador de cafe and I found him in his
ware house, piled with coffee sacks. He said it
was impossible for the senhora to climb Capara's
and after trying desperately to make him under-
stand in my poor Portuguese that we were
going and only wanted him to help us get a
motorcar to Rio Pardo, I went after Mrs. M.,
whose Spanish is usually understood - they
nearly take it for bad Portuguese. We hired
a boy to stay with hand baggage and went
back to Sr. Almeida. A deafening jabber with
half the town taking part went on for an hour.
The road was impassable to Rio Pardo and it was
not nearest place to the mountain anyway. An
outlooker who knew the region said Santa Barbara

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de Caparaó was nearest, and a caminhão could make the trip. Finally Sr. Almeida said he would make arrangements for that afternoon if he could, now he must go to Almosã. So we went to the very pretty little town park to wait an hour, where, at her request, I gave Mrs. M. lessons on grass structure from grasses there. We couldn't get a caminhão (motor truck) that afternoon, but could next morning, so we went to a "hotel" and Mrs. M. had noon meal, while I got baggage transferred to coffee warehouse ready for morning. Then we went botanizing (I'd been prospecting while Mrs. M. finished her meal). It wasn't much till we finally struck a bit of original woods (matta) where I found *Olyra Sampaiana* Hitchc. with tubers on its roots as related in fragment of letter sent. I had intended to stop at Reeve (type loc) on return to get it. The plants were found in two small colonies only, up a steep jingly slope and at its base. Relatively few were had inflorescence, I got about 10 specimens, about all the good ones I saw. I had been collecting some time before I found this. I dug some good sterile plants, cut off tops, wrapped base in big leaves and hurried back to Alegre to send them

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to Jardim Botânico to plant. I hope they reached
there in good condition. Then I started out again
and collected one or two of every grass for Esp.
Santo locality. O. samp. was the only good thing
except 2 specimens of Paep. I think is Döll's *Paricum*
resquiglume (aff. *larger* etc). The caminhão left

about 6:30 (it was due at 6) cost 150\$ with all
our baggage. The long ride to Santa Barbara de
Caparaó was delightful, though terribly rough,
through the hills with pale blue mountains
in the distance. We followed mostly Rio de
Caparaó, a beautiful stream with rapids and
one large slanting waterfall. Arriving at
Sta Barbara about 11, the driver, to whom Dr
Almeida had explained our object, explained to
the storekeeper (also hotel keeper and chief man of
the place). More talk by every man in the
place. Impossible for senhores, terribly
hard for men. It would take many days.
We said we were going to the camps above
the mata, if it took too long we would
not go to the Pico de Bandeira. By dinner
time (almoço I mean) he would see if he
could arrange. The man was a Syrian and

* In crossing the river, twice our pack mules' panniers got into the water. "Our duds" I thought in dismay, "Our food is soaked" Mrs. M. wailed. But food didn't get wet.

very intelligent. In afternoon I went botanizing, got *Panicum partrichum* (Chiriquense) again and some other *Panicums*, not much in all. We were to leave early next morning with 4 men, a guide and 3 others, one Antonio Timal has de Cunha in charge, a man of confidence being godfather of the Syrian's children! We got off on mule back with our pack mule at 12:30! * Stopped about 4:30 at the house of Vincento Barros, with a fearfully dirty Italian wife. ^{let us hang our wet things in the kitchen, it was raining of course.} She gave us hot milk and we made a good meal from our own supplies. [We brought 3 long loaves of bread, 4 cans sardines, 1 Minas cheese, about 2 lbs, 1 small roast chicken, 6 hard boiled eggs, rice, ^{about} 1 lb, beans very dirty same, large can of olives, sugar, salt, coffee, mate (Paraguay tea) matches, candles, a large tin box of crackers and a tin of gelade de abacaxi (pineapple) the last two I had.

I bought in Rio. The rice and beans, salt etc I protested against, I knew there would be no time to cook them, but Mrs. M. is terribly afraid of going hungry. The men took their own food and we finally gave them the rice and beans, the coffee, salt and sugar got wet and melted - I had not wanted the cafe. Oh, yes Mrs. M. had bought some

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carried fruit to eat on the train and there was
about $\frac{1}{2}$ pound of that left, very good. Antonio
and the rest dispersed to their homes in the
surrounding region. No one showed up
till after 9 next morning, ^(Nov 23) we were packed
and ready. Two men had backed out, it
was walking from now on, and two
more had to be found. Finally the guide
and I started, ^{about 11} Mrs. M. to follow with the An-
tonio and the two when they came. It was
drizzling and after about 4 ~~or 5~~ kilometers
we entered the rain forest with everything
soaking above and below. We were to camp
at a cave. We reached it about 4:30. It
looked very inviting at first, ^{being dry} until the
guide commented on the pulgas (fleas)
then I saw the dusty earth was alive. I
got back into the rain and began to col-
lect while the guide burned dry palm
leaves over the ground. I went back and
warned Mrs. M. as they came up. It was
raining hard now and I supposed we
would have to stand the surviving fleas.

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I went back to the flea-infested shelter to put my plants in press, but Mrs. Mexia disappeared up the trail with Antonio and by the time my grasses were in she came back to tell me she had made camp for us, and there was a tent of "alligator skin" (a waterproofed silk, I think, strung between two trees. It was in a relatively flat place - far Brazil - but the slope above it would drain down, so we dug a trench on the up side. She had a sleeping bag with down comforts inside and waterproof outside, and she helped me make a bed out of my ground cloth, and blanket, with rubber poucho tucked in around the bottom. Her alligator skin poucho closed fairly well the windward end of the tent, and we peeled off our wet clothes and got into the dry ones which had been rolled inside the bedding. It was nice and snug in spite of heavy rain. We ate bread and chicken in bed. Of course I was cold during the night but slept some. We got back into our wet clothes at daybreak (Sunday Nov. 24) the men appeared

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with ^{hot} black coffee after a while - we had eaten and were ready - and at 6:30 we started, still raining but not hard. This was rain forest in very truth, the trail, where there was any, a deep sponge, or running rivulet, and every thing dripping water. In spite of the exertion of climbing it was cold. Serra da Gramma which I climbed with the Rolfs was the only rain forest I had seen before. Every thing was covered with ferns, from little filices to tree ferns. It was wonderfully lovely in spite of the discomfort and weariness. The trail had not been used for two years, the guide said, and he had to do a lot of cutting. It was very steep most of the way and very little going down across ravines, for which I was thankful, we seemed to lose very little by descending. Mrs. M. Lagget, she can't climb fast, she said. I stayed near her or ranged between the men and her, for I am terribly afraid of losing the trail, and it was exceedingly obscure in places.

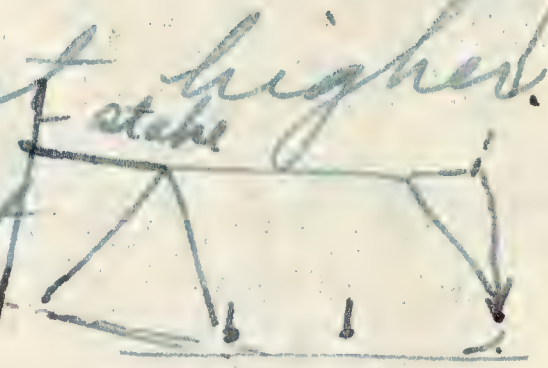
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My idea of following a trail is to keep in sight of
the men ahead. I am as afraid of losing
the trail as Mrs. M. is of going hungry, and
was scared several times when the
men were too far away to answer
shouts. Mrs. M. had no nervousness
in the matter. When we reached the
bamboos your my heart rejoiced for
that meant the camp soon. But this
was really the hardest part of all for
it was terribly steep, the bamboos (*Clus-
quea trini*) tripped and caught us and
showered us with water, though it
had stopped raining and hope deferred
maketh the heart sick - it was up and
up and up, stumbling and crawling
for an eternity. My knees got so
wobbly I almost went on all fours,
my big knife serving as a good claw
on one front foot. Mrs. M. lagged more
and more to my dismay, but at last
about 3:30 we struggled out of the
bamboos and saw the men resting

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on the camp. I shouted for joy and old
Antonio grinned and said something
about "muito corajoso" for senhoras
to make that ascent. He said no women
had ever done it before and very few
men. [The way to the Pic da Bandeira is
from Caparas in Minas, the way Miss
Roefs and I should have gone if we
hadn't got lost, but Sr. Campos
Porto said the Esp. Santo side was un-
spoiled, while the Minas side was devastated
— and I knew it was burned and
down forest.] We had a league still to go

[a legua is any distance in Brazil] to reach
the caseta, where we were to find shelter.
It was still climbing up the rocky camp,
but grasses all about rejoiced my
heart though my legs were wobbling
horribly. After about 2 km. of slow
going, the men away ahead, Mrs. M.
said she was too sick to go on, she had
nausea, and would have to stop. It

was then after 4. I hurried after the men
shouting my head off to stop them, and told
them the other senhara was sick and
they would have to put up the tent for
her. We got her up somewhat higher. They
set up the alligator skin tent



strung on a rope tied from a point on
a big boulder to a stake driven in the
ground, all done very hurriedly because
they had to get to the caseta before
dark. One of them started a fire. I drag-
ged up firewood, dug a trench, their
being a long slope above us and got
water. Mrs. M. recovered and made the
tent more secure and laid out the
beds - she certainly is an experienced
camper. It began to drizzle and we
shed our wet clothes - after I had a
glorious fire going in the lee of the
boulder - ate more bread and chicken
and the last of the candied fruit. It
was dark by that time. It began to

blow like fury, we were on an exposed shoulder of the mountain. We were afraid the tent would "come down". Then I noticed the firelight seemed very bright and I got into shoes and soaked raincoat, (shedding my dry sleeping garment) and got out to investigate. It was a beautiful fire but was too ardent to be safe in such a wind with all the brush I'd broken and piled near by for firewood, so I dug the clumps of mud and grass and threw on it, pulled out the biggest log and beat the fire out and finally left a little smouldering fire that I hoped would be alive in the morning - it wasn't. Mrs. M. got out later to refasten the pouches to end of tent, so we both had a great night of it. The men were to come back in the morning and take us and our stuff on to the caseta, but it rained unceasingly and they did not show up. I tried to we got into our

wet clothes, after I had ¹⁴ ~~wring~~ ^{wring} them all as
hard as I could (I have much stronger hands
and wrists than Mrs M. has) and after we had
eaten in bed. ^(Nov 25) I tried to make a fire but
after using two boxes of matches and a
candle had to give it up. Every twig of
my firewood was soaking wet. We
left our things in the tent and started collecting
in arm loads. The dominant grass of the
campo here is a ~~Decussata~~ ^{Calamagrostis} ~~(?)~~, a beauti-
ful sturdy thing with drooping purple
panicle. (I think I got it in 1925 on Caparas)
Danthonias (2 sp I think) are next, Androp.
^{Androp (Schizopyrum)}
lateralis (?), Panicum superatum Hack., Pan.
aff. brevis, Calamagrostis scarce, Axonopus
in dense clumps, a Bromus, scarce, Chus-
quea pinnatifolia in bloom, Briza calotheca
common - nothing startling, but all,
I think, will be new records for Esp. Santo
for my Grasses of Brazil. I collected several
sets for Mrs. M. too - it is too discouraging
sloshing around in the cold rain without
gathering something. We laid our arm loads

down by the edge of the tent and about 10 o'clock
 stripped again and got into the relatively
 dry clothes, sat on our bed rolls and, after
 eating a bite, started on the plants. We
 were just well under way when we
 heard the shout of the men. They had
 come to take us to the caseta. They
 wouldn't wait for us to put plants in
 press. We had made all that effort to
 get plants and neither of us wanted to
 abandon them - we were in perfect
 accord. They said the rains would have
 raised the rivers, we couldn't go back
 next day as we had planned - we
 had crossed Rio Caparao, ^{twice} on rocks
 and poles with aid of a haul of a
 man coming up - the men were all
 barefoot. All right we would go to the
 caseta the next morning early, but
 would remain in the tent that night. The
 guide got excited and said we might
 lose our lives - but what is life without

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the plants we came ^{for}, and we didn't believe
it anyhow. They went and we got back to our
plants and worked till dark - mine all in well
before and, ^{I put} several sets in for her. She is about
as slow a person as I ever saw (except my
eldest sister and Yon Van Eckertine). I had
deepened the trench at noon for the whole
mountain side was a running river,
but it hadn't been windy, only incessant
rain all day, and the tent seemed all right.
But after we'd eaten in the dark and laid
out our beds, Mrs. M. doing most of that,
it began to blow and pour. She stripped
to the skin and went out to make the
tent more secure, retie the pouches, which
I held from inside. She certainly has nerve
when it comes to facing cold. We finally
got into our beds and listened to the tent
flapping and billowing, hoping it would
hold - and it did. But after a few hours
we found we were lying in puddles - I
had been for some time but knew no
way out of it and she was asleep. When
she awoke her flash light showed our
trench was overflowing. We dug it out

with pick and knife and huddled in our wet bedding. Her sleeping bag had slipped toward the rock and was soaking wet at the foot as well. At dawn we went on putting her plants in, hoping the new would come early. They did, about 9. We got into our still wetter clothes, wrung out, left the tent and what we couldn't find, and set out in the cold driving rain up the rocky camp. Mrs. M. had several times said this seemed to her like Alaska, on the slopes of Mt. McKinley where she spent a month. Staggering along, we couldn't see 100 ft ahead of us hardly. I suddenly recognized the trail as one I had been over. I asked if we were in Minas. Yes. My heart sank, we were going to that awful hut where Miss Rolfs and I had spent a night. Some distance further on we looked down on the place, but besides the old hut was a stable or some such shelter and a mud house. O joy. We had been told there was a woman there. Drenched half-frozen and muddy and dirty

this blessed woman met us with a clean
 basin of hot water and a dry clean towel.
 Then she brought us cups of hot milk. The
 sympathy and kindness of it just upset me
 and I couldn't keep from crying. I was sur-
 prised and ashamed - neither of us had
 whimpered or whined at all. I tried to
 make believe it was a cold in my head.
 The hut had mud floors and the room
 they gave us had a platform built about
 half way between floor and roof. A fire
 was built on the floor. It was terribly
 smoky because all the wood was
 wet. We strung our ropes and straps
 across this tiny room above the fire
 and hung some of our things to ~~dry~~ ^{dry}.
 We were given dinner of rice and beans
 and salt mutton and olives (of all things!),
 and in the evening more rice and beans
 and just as we were going to bed the
 kind senhora called us again to the kitchen
 (next our room with ~~doorway~~ but no
 door between) and gave us hot milk with

new(?) Dauthonia. But the clouds were settling down and soon I couldn't see 100 ft. I was afraid of losing the trail if I couldn't see the house in the little valley and had to give it up and collect within sight of it. Mrs. M. collected, too, and we put her plants in till dark. Antonio had snagged the side of his foot somewhere (how bare feet could ever endure that climb is beyond me) and it was inflamed and painful. He put some boiled leaves on it, refusing to take Mrs. M.'s advice to soak the foot in boiled water. But it was so painful he asked if we would put medicine in the water for him. "Put a drop of iodine in the water" she said. So I told him to boil water, keep his hands away from the sore. When the water was hot I put in the iodine and gave him my germicide soap to rub over the sore. I tore up one of my muslin bags (made to ship plants in), put unguentine on a piece and

bandaged the foot. The next morning it was much better. I put on more Unguentine and fresh bandage, and the last day he was going barefoot back to Sta Barbara with no sign of a limp, but before saying good by he remembered his foot, said it was very bad and begged for Unguentine. We gave him a bandage with a little square with the Unguentine folded inside and he went off happy with his medicina. ¶ The family in the mud house on the mountain made me think they must be very much what pioneer Americans were, living in sod houses. The floors were earth, everything was smoky from the fires, yet things were clean. I wiped dishes and the dish towel was clean, she dipped the dishes into boiling water after washing them, and dipped water from the container (standard oil can of course) with a separate can, not the one

they drank out of. Her lovely sturdy brown baby was kept in a big wooden box, with a dry quilt in the bottom. She fed him milk and bathed him in a big basin beside the day "stove." I wished for more Portuguese. I strangely suspect that she has somewhere been to a mission school. There were no images in the place now I recall either. My cold was developing and I shivered all night. My blanket (now dry) had slipped half off the bed and poor old Antonio "borrowed" it, passing through from the kitchen - the outer door was from "our room." I waked and looked for my blanket in distress and shivered the rest of the night and had sore throat and cough worse by daybreak. We had come up from the cave campsite in one day, the men reaching this mud house the same day. Going back ought to be quicker and I was very anxious to reach Virgata Barras and

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not camp out again. Mrs. M. prefers outdoors
to native huts. We had everything packed and
ready by 7 and after listening to the men argu-
ing for half an hour we set off up the
trail. When the trail forked, one going to-
ward Ponto Crystal, where Miss Rolfs and I had
gone, the other to the right, we stopped and
waited. The men didn't come and Mrs. M.
took the Ponto Crystal trail. She was a long
way off when our host appeared on
horse back and motioned to the other trail.
He was able to make her hear, and lent
her his horse to climb the long steep
hill. She offered to let me ride part of the
time but I was anxious to have her
fresh enough to keep up going down so
we wouldn't have to camp out. (It isn't
that I like flea-infested native houses, but
my bedding wasn't half enough to keep me
reasonably warm.) ^{When we were} Over the big hill the man
took his horse and left and we climbed
down and up and down the rocky cañons,
collecting some, to where we had left the
tent. Pico da Bandeira stood out gloriously

in the sunlight, we hadn't seen it before,
 though it towered over our camp. The
 herdsman at the hut said it could be
 climbed on horseback, he had taken his
 wife up. These people live near Caparas,
 Misias, and had come up for the summer
 grazing. I wish we could have climbed the
 peak, but neither of us was now fit to do
 it on foot and we had no horses. After
 taking down the tent and hunting for lost
 articles we started on. I going top speed and
 Mrs. M. lagging. ^{When she caught up and we entered the bamboo zone} I had ^{it} fallen and struck my
^{was 10:30.}
 hip on a rock, ^{and} so that added to the difficulty
 of the descent - you know how you slip
 and slide down a steep trail tangled in
 bamboo, wet shoes hurting worse every
 minute. I collected a pretty Festuca,
^{new} several Panicums, Schuanthus, and a
 lot of ferns for Mrs. M. - still trying to
 speed her up, but to no effect. The river was
 higher than when we came up. The guide
 felled trees to make ~~bridge~~ foot logs for
 us. I had lost my voice by this time
 and the guide did try to speed things up,
 but it was after 4 when we reached the

flea-infested cave. I begged to go on but he said it would be dark before we were out of the matta. So there was nothing for it but to camp. While they were setting up camp under Mrs M's direction I tried to cross the stream alone on my wobbly legs and fell in, getting soaked nearly to the waist. The men made a fire and I huddled by it. They cut down two "palmettos," slender palms using the leaves to floor our tent. They heated water and I drank a lot of it and Mrs. M. somewhere found a bottle and filled it with hot water for me to buy. About dusk while Mrs. M. was making our beds and I was trying to get warm by the fire with my blanket around me, the men brought us some cooked heart of palmetto - perfectly delicious. Then we went to bed. I had a hard time getting my breath and passed a miserable night, but it didn't rain, and we got started by 7 or so in the morning (Nov 29), reaching Vinzents Barras a little after 10. The horses now had to be sent for - we would have to wait till

tomorrow here. I urged (in a whisper! having no voice) that we go on today. The guide had some bowels of mercy and when Antonio went into the house he told me he would get me to Santa Barbara that day. Antonio returned and said we couldn't and Antonio was "in charge." I said we would pay tomorrow's wages if we got to Sta Barbara today and Antonio began to think it might be managed. Finally they got one pack mule and we all walked to the first river crossing - I had insisted we could walk if necessary. The river was high and we crossed in a dug-out, ourselves and baggage, 3 loads. Then we waited more than 2 hours for the ^{animals} horses to be brought, one pack mule and 2 riding ones, the men walking except the guide who stopped at his home and caught up on a beautiful little bay mule. We made the second crossing by dugout and walked the last mile or so to Sta Barbara, getting there a little before dark. We had a good supper, after

interminable waiting, a big basin (2 1/2 ft diameter, which is the bath tub of interior Brazil) of fairly warm water each, and I slept. Nov 30, Saturday we spent drying plants - our main supply ^{of birds} had been left at Sta Barbara - and putting last collections made on way down and morning's walk into driers. Sunday Dec 30 I left

6:30 am on the caminhão, with a family who were moving, for Teads on the railway, just caught the train and reached Rio 8:30 yesterday Dec 2. My grasses all came through in good condition.

(Dec 3) Today I've been laid up for repairs, one foot I can't get a shoe on, changed driers and spread them in one ^(heavy) stocking foot. The Russian doctor who took the bickas out of my hands yesterday, treated my ^{little toe} foot today, not a bickas but an infected spot, the nail broken loose at base - from descending in wet shoes, of course. Mrs. M. stayed over at

Sta Barbara to get her plants dried and perhaps collect more in that region.

Here endeth the chronicle of Caparas. I'm very glad I've been there from the Exp. Santos side, but I'm mighty glad it is over. My cold is getting better - I had

a long soak in very hot water yesterday, after I'd been to Consulate to get letters, which took out most of the soreness, and my voice is back, though hoarse. I had a hectic time getting a

ticket ^{at Veados} and my trunk (collecting case) on the train in a hurry when I could only whisper. A young man who spoke English came to my assistance, bless him, and then when the train stopped at a place where food was sold alongside he came and asked if I had time to get any breakfast. I said no, and he went out and handed me up a glass of milk and two little cakes. A woman asked

"E seu filho?" [is he your son?] so kind he was. But he wouldn't take the money for the food, which was embarrassing even if he were wise as a son. He appeared again at Itaperun

eries where I was to get sleeper ticket and
 led me to proper place to get it. I failed to
 get dinner [evening] on the train as I intended
 to. I was waiting for someone to call out
 "dinner is now being served etc" or for the
 European way of selling tickets for place
 at table. I asked the conductor three times,
 on his rare appearances, about jantars, but
 all I could understand of the flow of
 language was "espero," ^[wait] and the third
 time "nada mais," nothing more. I
 was very hungry so rejoiced when about
 9 or later, children again appeared along
 side with food. I bought a chunk of bread
 with a chicken wing and gizzard in the
 left and felt better. The "nocturne" was
 put on at Campos about 10:30 and I
 washed some of the grime off and dropped
 into my ^{"lito"} inferior "flower berth" and slept in
 spite of the terrific rocking and lurching
 of the narrow gauge Leopoldina Ry. Dec 4¹⁹²⁹
 I'm lazy this morning didn't get up till 7:30. My

feet are less swollen and when the doctor has treated my toe again I hope I can get shoes on. I wore a slipper (gym. shoe) on one foot yesterday and heavy stockings on the other. I'll get off pkg 3 of grasses today if I can get shoes on to go to Conaculate.

I forgot the snakes. - While collecting *Olyra Sampaiana* in second colony at base of hill I saw a snake's body about as thick as my wrist, some 8 ft away. The tail disappeared in the brush; looking the other way I saw the head raised, the snake watching me as intently as I was watching him. I quietly stepped backward as if from the presence of majesty, respecting his privacy. The second was about 15 inches long, 5 mm. thick and cream color. The guide lifted it on his machete when he was setting up our camp the last night. He laid it down and pierced its little head with the machete.

Rio de Janeiro, Dec 2, 1929

Dear Prof Hitchcock,

As soon as I got back from Caparaé this morning I went to consulate for mail and learned from Miss Niles' letters that you had the first operation Nov 4 and the second (she cabled at my request) on Nov 13 "condition satisfactory." I am so sorry there had to be two, but she writes as if that was expected. It is such a relief to have it over - I know you and Mrs. Hitchcock feel that way about it, too. I hope the suffering has not

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been terribly acute - I know it must have been bad

enough. Now for renewed youth and strength! Dr.

Lowie, anthropologist, in "Are we civilized," which Sampson sent me to read on the boat, balances up advances with drawbacks. He says, among others, the average length of life has been prolonged and more men undergo prostate operations and more women those for cancer. Applies to the two of us, but I'm stranger today at 60 than I was ^{17 years ago} before my operation for cancer (and I never guessed it was cancer till you casually referred to it when Mrs. Rolfs died) - I have just got back

from the hardest physical feat of my life - and I am counting on your operation's reducing your age 15 or 20 years, too. Miss Wiles says you expect to be in the hospital two months. I hope you can sit up in bed part of the time and be comfortable enough to read.

Isn't it a blessing that Mr. Swallen can look after things as well as he does? The way that boy has developed since he came to us is remarkable, I think, - I wouldn't swap him now for a dozen Hatchkies - H & C are pretty good "developers" I surmise, but we couldn't

have developed what was it there,
nor have made a conscientious
botanist out of a youth given
to "bluffing," a vice pretty common
among "the younger generation"
taught by their elders!

Miss Niles says you have seen
your proofs and looked over our
markings. If you are sleepless
while in the hospital perhaps your
proofs will put you to sleep-
they have that effect at the office.

Miss N. writes of Mrs. Gill's death.
I am not surprised. Dr. Jaeger told
me she might go any time, and
yet it took pneumonia to bring
the end. For her own sake I am
not sorry, but I am for the
manual. I can make skeletons
and diagnostic sketches, but I
am no artist and could never
make plants live as she did.

I got in about 8:30 this morning.
Mrs. M.^{mexia} remained at Santa Barbara
da Caparas for a few days to dry
her stuff and collect more there.
That is the last semi-civilized
place on Rio Caparas. I shall
send you an account in a
day or two. I want to get this
off today. Miss Rolfe called
here yesterday. She is at Bennett
College (not far from here) and
leaves tonight. I went over to
see her after I got scrubbed and
bichas de pe taken out of my
feet and hands. The Russian
doctor who lives here took 6
francs around my fingernails.
I had operated on the palms
of my hands (Mrs. M's, too) and

Dec 2, 1929

on my feet, but I hesitated to go at my fingernails for fear of infection. The doctor soaked them in antiseptic for half an hour before taking out the mother and family. I took out 2 from my toenails, soaked the places with iodine, then bound them in sterile gauze with Lugol's tincture. Only one place hurts now.

I enclose a piece of a letter begun nearly 2 weeks ago. A second part got so sopping wet as to be unreadable, so I threw it away.

I meant to say Miss Rolfs was not in and is going again now. She leaves tonight.

With keen sympathy and very best wishes,

Sincerely
A.C.

Rio de Jan Dec 4. 9:30 am

Dear Prof Hitchcock,

I hope you are well
over the worst of the pain
now, a month from the
first operation, and that
you can sleep and have
a good rest.

I have a letter of in-
troduction from Ambassador
Morgan to a Frenchman in
Petropolis who knew
Glazian, I understand, and
who knows where "cette
de Morim" is, the place
Glaziophyton came from.
As soon as my feet are well
I'll go to Petropolis and see

him. I am sending the account of Caparas' trip, but you needn't wade through it unless you wish. As I glance over it it seems a wearisome account of hardships - I didn't mean it to be that but my many bruises and sores and itching remains of tick and flea bites seem to have guided my pen. Glad I had the trip anyway. It is annoying to be laid up with this foot, but I'm so tired all over I'm not as impatient as I should be otherwise.

I saw Miss Rolfe the evening after I arrived. She had been down two days (That's the last time I had a shoe on.) Her friend, a teacher at Bennett College, is returning to U.S. in about 10 days. I am going to send by her a little Russian linen dress that I think is about the right size for Aurelia. I'll address it to Mrs. Hitchcock. Miss Brandt, my landlady has quantities of lovely Russian work she is selling for her

Russian proteges here. She
had a sale and tea while
I was away and Ambassador
Morgan came and bought
a good deal. He is a dear.

Miss Niles said you were
to remain two months in
the hospital. That means
the holidays there and that
you can't go to Ad. meet-
ings. - Later

Someone is going out
and I'll send this letter to
mail. My toe is still in
a sling and I can't go out.
Very best wishes.

Sincerely

AB

Dec 5,

Dear Prof Hitchcock

I can't get a big envelope
without going down town
so I'm sending papers
in pieces - hope all will
arrive together, a piece
left out might leave
you in suspense as to
whether we were eaten
alive by bichas and
ticks. I could put on

my shoes this morning
and begin to feel myself
again. Went to Fred's
this pm and made
list Killip wanted.

Very best wishes

Sincerely

AC

Hargreaves, Minas Dec 21

The end of a perfect day

Dear Prof Hitchcock,

Dr. Rolfs advised me to stop off at Hargreaves (Argrayaves in Brazilian) and it has proved to be decidedly rich. Within a km I'd collected *Thrasypa thrasypoides* (I think) plenty of it in fine condition, *Pasp sanguinacotutum* and *P. lineare*, *Leptocoryphium* (last 2 new for me in Brazil). I ran from 10225 to 10265. Good things (new for me) are a funny looking *Panicum*, aff *olypoides*, *Panicum* of group next to *Dicaanth* (or perhaps *Dicaanth*), *Axonopus* (3 Cabrera may have collected it before). With such nice specimens I

lost my head and find, putting
in press, I got a lot of duplicates.
It was a comfort to get reason-
ably sized stuff after the gigantic
Paspalum of Vicosa which Liu
still drying. I had intended
to go on tomorrow morning
but with 3 presses I think I'd
better do some drying (Vicosa
stuff was in sun all day today)
and explore a bit more around
here and take 5:45 p.m. train.

I had intended to walk back
20 km and take train to here, but
I was loaded to capacity in 5 km
by 3 o'clock (started at 7, couldn't
get cafe earlier, but there was milk
so it was worth waiting for) and
walked back. I'll be glad to

get away from this *peirão*.
The *seuhara* is pitifully cor-
ruptive and the children
have the sniffles (handker-
chiefs unknown) and hang
over me while I change
driers and put plants in.
I finally asked the worst
case "faça favor" not to
stay in my room. Shocking
manners, ^(on my part) in Brazil. After
being at the Rolfs' things seem
worse than they would
otherwise, maybe.

The last night in Rio, *Nico*
Brandt had Dr. Gerald
Golden to dinner with us.
He is an English missionary
physician

situated at Annapolis, Goyaz.
He was in Rio to take his Brazilian exam. to practice. Very interesting young man, invited me to their mission station. He said June to Oct was best time to travel in Goyaz. it is rainy season now. I asked what the vegetation was like in winter. "There isn't much, everything is dried up by August" so I was reassured that I had not chosen the wrong season. Too dark to see.

Bello Horizonte - Christmas eve. The second morning in ^(Sunday) Nargreaves, I got more new for me, a very hairy *Eragrostis*.

5 Dec 21

E. polytricha (or ought to be) and
Sarp guttatum. I topped a hill
and came on a colony of the
lovely thing shimmering in
the sun - a lovely sight. The
two racemes leaning to one
side, almost appressed to each
other, were so exactly like the
drawing I made of the type,
I knew the species at once.

All afternoon I changed and
dried repeatedly - the sun was
at its best and left at 5:45 for
Metallurgica, next station on
the line, in order to get to
Cerro Branco, advised by Sr
Campos Porto. When I left the
train about 6:40 and saw
the station and three mud
huts I laughed to myself.

wondering what I'd get this
time - I'd thought the perucão
at Hargreaves pretty terrible.
I asked the station agent if there
was a perucão. Não. I explained
what I was doing and asked
where I could stay over-
night. His wife was standing
in the door. She invited me
into their tiny sitting room,
next the ticket office, saying
that if I cared to sleep on
the cot in that room I was
welcome. Oh joy! The place
was clean and the two young
people intelligent. My trunks
were marked Vicosa and
they asked if I was from the
school there. I unpacked
my presses in the freight

room and next morning
put them on a shed roof in
the sun. With the help of my
host I engaged a horse and
camarado for next morn-
ing. I said 6, impossible, he
would come at 7. Not later,
I insisted - he came just
before 8. We reached a
valley at base of mts, having
gone down and up over a
high hill and down again
and crossed a river, by 9:30.
I sent the boy back with
the horses from there, I to
climb the serra and return
on foot. I had a glorious,
fatiguing, joyous, harrowing
day of it. Just as I started

across the river I saw a *Chusquea* in bloom and wheeled the horse around to get it. He couldn't understand and between us we got the reins over his head and all tangled up. I called the boy to hold him while I got the bamboo and the boy was about as puzzled as the horse. This is the first bamboo, except *Chusquea pinifolia*, I've seen in bloom this time. Hargreaves is so near that I did not collect the same species again, or only 2 or 3, yet I got 29 numbers, a lovely little *Raddia* with pubescent spkts,

a Dec 21

that may be *R. Haehnei*, *Ich-*
nanthus bambuciflorus
(got it in 1925) a *Leptocarpium*
that certainly isn't *laevatum*.
I had written *L. molle* to *lau-*
atum I think. If this is *molle*
it is very distinct, but it is
unlike anything I remember.
X So are two *Panicum*. These

I got going up the mountain.
From a distance it looked
to be covered with low
brush. It was like the
chaparral of California
but less dense, 6 to 8 ft tall,
horribly tough and interlaced,
with quantities of the cat-
claw leguminous shrub.

The slope was very steep

all jagged rocks with the jagged edge my way. It was terribly difficult.

The little Raddia was in a ledge above a little waterfall. Millions of tiny gnats filled the air, got between my spectacles and eyes, around my ears and neck, stinging like red hot needles. They tortured me on the serra near Bello Horizonte ^{5 years ago.} ~~before.~~

The summit was almost as rough and finding ~~to~~ nothing up there I had-
it found climbing up I slipped and slid down-
ward to the more open

campo near the base, getting an Androp of saccharoids group, not saccharoidites, and a few other things. Knowing my capacity for getting lost I told myself I couldn't get lost this time with the mountain ridge on one hand and river on the other. When I judged I'd gone about the right distance (we had crossed the river lower down, just before I sent the boy back) and struck a trail which led to river edge I took off shoes and stockings, pinned up my shirt.

and waded - wow, but it is
excruciating to wade a rocky
stream barefoot. Following
a trail I came to another
crossing and waded again
before I realized I must be
back on the mountain side
of the river. Going out to where
I could see, I was, sure enough,
so I took off shoes and
stockings a third time and
waded back. I was com-
pletely turned round but
knew I must keep the
mountain ridge at my
back. I climbed a high
hill, hoping to see the Ry
in the distance, but nothing
but more high hills. But

13 Dec 21

I found *Pasp cordidum*
(referred to something else, I
think) an *Eragrostis*, *Pasp*
carinatum, an *Axonopus*.
I decided I hadn't gone
along the ridge far
enough and struck to the
right over two more hills.
Then I came on a bay
driving some mules and
he pointed down and away
to the right, and I finally
struck the trail we had
come in the morning. By
this time I was dead tired
and it seemed as if I never
would reach the end of
going up-up-up, there being

a deep valley between the ridge on which is Metallurgica and the Ouro Branco ridge. I got back about 6 and drank all the water in the filter. Then the kindly senhora filled a 3-foot basin with warm water for me in her bedroom and I had a bath and de-ticked myself. The bath and dinner refreshed me and I changed driers by candlelight, and put the day's collection in this morning at 6, leaving at 7:55^{am}. My hostess would not take pay for my keep, so I gave her my silver tumbler (bought

in Vienna) "para lembrar-me". I shall certainly remember her. I reached Belo Horizonte a little after noon. I wanted to get more money on my letter of credit before going west, there being no other branch of Banco do Brasil till Uberaba. The Rolfs reach here ~~to~~ tonight, to spend Christmas with friends at Isabelle Hendrix school (where I stayed 5 years ago). I'm going to ask them to carry back pkgs 7 and 8, to go to Rio by Prof Muller, with 5 and 6 left

at Vicosa. After getting my
money I went over to
Isabelle Hendrix, thinking the
Ralph might be there already.
Miss Putnam, the present head,
invited me for the day to-
morrow, morning service
at 7, breakfast and dinner.
I was glad to accept and
take a day off, I'm pretty
tired. I leave Thursday for
Diamantina, staying 2 or 3
days, and changing here on
the way back for Laura,
getting there about Jan 1.

By the time this reaches you I
hope you will be quite well
again and gaining strength
rapidly. Very best wishes,
Sincerely AB

Pocos de Caldas, Jan 20 1930

Dear Prof. Hitchcock,

Today's collecting southwest of here was very much better than Saturday's on the mountain. I got 40 species, and only one repeated from Saturday - *Pasp. maculatum*, such gorgeous big specimens I couldn't resist them. And they smell so good, like cloves, when fresh dug that it is always a temptation to dig them. I got an *Andropogon* new for me - like a glorified *A. furcatus*, an *Aristida* (1-awned group) and *Panicum scabridum* aff *laxum* with pubescent spikelets - your *luticola*, I wonder. It grew in the wet. Also *Pan. emergens*, I think and ~~another~~ 2 of *Dichan- thoides*. What I really came to

this place for was to get the thing
which in the herb I've called (ad int)
Pasp. pocillator, call. by Regnell,
much overmature. I got plenty
of it, but I'm not sure it isn't
P. yaguaronense. If it is new
I have plenty for principal herbaria.
I got *Panicum versicolor* again -
beautiful thing. I hope tomorrow
is sunny, my drying is going
slowly.

What has become of the
grass paper for the Smithson-
ian? Has Mr. Maxon ever
done his part? Mr. Ellington
did not take Mrs. Gill's wheat-
field that I thought was so
good. He paid for it. I told

him I'd like to have it, it could
balance the drawings I made
for nothing for the paper, so
he gave it to me. I can't recall
what I did with it. It may
be in the Rand McNally Atlas.
If anybody comes across it
please tell him it is mine.

I don't suppose you will
get much done on the Manual
this ^{coming} spring. I am so sorry I
hadn't got farther along with it.
Any of my ^{suggested} additions etc. you
can leave for me to put in -
just mark the slips "ok."
São Paulo, Rua Bacher 42. Jan 25, 1930
yesterday I was ever so glad to get your
letter of Dec 31, telling me you
were beginning to walk out. It
was a long siege, but I hope you

are gaining rapidly now. Thank
heaven you are thin, incisions
are slow in healing where there is
fatty tissue I've been told. I do hope
Washington isn't doing its worst
in the way of winter weather -
maintaining a glare of ice, dan-
gerous to walk on.

I am careful and conserve
my strength. That Caparas trip shows
how strong I am. And I parted
company with my slow companion
which was the best way to conserve
my strength. I am glad you
are to be recommended for the
Bot. Congress. What will you be a
delegate of? I wrote you (wonder if
the letter reached you) that Mr. Coville
had chosen himself delegate to repre-
sent Agriculture (or maybe Pl. Ind.
I forget, but it was something much
bigger than his office) and Maxon
said he was going to represent
from Smithsonian. And then it
is claimed the ^{Internat} Congresses are

Jan 20, 1930

representative! But even though it isn't representative I hope you will choose yourself delegate of something. I am glad your camera behaved well. I shall be eager to see your pictures. So Dr Cotton couldn't keep up with you! We "old" agronomists can outdo most people yet. I hear that Prof. Muller (one of the 3 Cornell profs. at Lavras, age about 30) said it was mighty hard to keep up with Mrs. Chase. He was on the São Geraldo trip - the man who liked horseback no better than I did. We walked up hill and down a good deal, but I didn't know I was wearing him out. If Hubbard is going on with Trop Afr I wish he'd had a better master ^{to follow} than Stapp. The more I use Stapp's Trop Afr the more weak I find it. That *Courmelindium* or some such name, including Hachel's *Pan gabonense* and another

species is a mighty poor ~~of~~ genus
and I saw *Hens no* -- in Desert
(type of second species) and it is a good
match for Hackel's ^{type.} ~~species~~ I came
to São Paulo Thursday night and am at
the Kalb's, Mrs. Hummcutt's mother
and sister's home. They are ever so
kind. I leave Monday for Mato Grosso
-- had to come here to get train. My
trunk of clothes sent from Lavras
failed to arrive and I've been terribly
anxious, but I heard this noon
that it is here and will be out in
the morning -- today being holiday.
I have scraped acquaintance with
Dr. Hoehne and hope we can get
grasses from Inst. Biologica by
offering to name their collection.
There are a lot of *Usteris*. The naming
is appalling, at least of *Pasp.* I got a
collection near here -- Ypurunga this
morning, more natives left in
the weedy ground than I'd ex-
pected.

Will you please have Rev.
Paspalum sent to Dr. Frederico Hoehne
Instituto Biologica, Rua Consolação 27
São Paulo Brazil. Very best wishes
Sincerely AC

Lauras, Jan 7.

1930
A. S. H.
JAN 29 1930

Dear Prof Hitchcock
HITCHCOCK AND CHASE
Smithsonian Institution

I have just received your letter of Dec 11 and very glad to get it. Miss Miles was kind enough to cable me to my great relief. I had no idea that you were in such bad condition when you left Africa. You wrote what the Johannesburg doctor said. You took far greater risks than you knew. Thank heaven luck was with you, ^{as you say} and that the operation has been successful. I am glad you had special nurses and that you were treated well. I hope you are gaining strength rapidly and that you will feel like yourself again soon.

I am so glad you had good collecting in Uganda. Isn't it thrilling to get into a new region and get quantities of grasses you never saw growing before. Yes, my sister will do the mounting. Have Miss Niles phone her that you are sending the plants and paper. She has plaster but will want paste. I shall be eager to see the grasses. I hope they will not be put away in the herb. before my arrival. I shall be eager to hear about your trip, also, the ascent of Kilimanjaro and the rest. Was there a terrible bamboo zone to go through?

A letter was received from Mr. Maxwell today saying

they are leaving Monday next, 13th, probably. So I am going to a limestone region a day's journey to the northwest tomorrow returning Friday, to be ready to join the Maxwell's for Matto Grosso Monday. If you look on the map below the triangle of Minas, where Rio Tiete empties into Rio Parana you will see where the r'y enters Matto Grosso. From Campo Grande on this line we go south to near the borders of Paraguay, among the Indians. I shall not keep a gun in my hand" like Col. Dyott. When I heard Dyott at the Geographic Soc. lecture I concluded that he either was afraid of his shadow (like the eminent director in Mulford Exped) or was a vast humbug. At Bennett College in Rio I met someone from Matto

Grosso, mentioned a place I was going to there and she said Dyott had stayed at the mission. I said I'd heard his lecture and asked what they thought of him in Brazil. "Well - the missionaries didn't think much of him" was all she said. But Dr. Gerald Golden, the English physician said flat "Dyott is an absolute impostor!" I don't know how long this trip will take, a month probably. So far as I know no botanist has been there. Dr. Hurnicutt says it is exceedingly slow going up river to Cuyabá, so I shall return to Minas (or ~~the~~ ^{to} Casa Branca in São Paulo, close to the line - Dr. Campos Porto advised me to go there) and resume the itinerary I made out for

Jan 17, 1930

the triangle of Minas and
Goyaz and get into Mato
Grasso further north if there
is time. There are motor roads
but no railroads across to Cuy-
aba. I'll have mail held
here and then sent on to Uber-
aba, where Dr. Humeicutt will
despatch my extra trunks of
paper, etc. I'll go as light as
possible with the Maxwells
because we travel by motor.
This will give me a chance to
collect when they stop to water
the engine and the like. I am
very glad of this chance to go
and hope the Maxwells do
start Monday. They say here
that the Mis are rather uncertain

as to making starts. If it is too indefinite I shall go on as I first planned, but I hope that this trip materializes.

I have 4 bundles of grasses ready but no way to get them to the consulate. I may send a trunkful to Miss Braudt with key and money to pay a boy to take pkgs to the Consulate. I have sent 9 - the last taken back by the Rolfs from Bello Horizonte.

I am enjoying it here at the Humnicutt, good drying weather (even those big fat Paspalems have to dry in this sun), a bed with spring, mattress and feather

pillow. Mrs Mexia said these Brazilian pillows must be made of "spun lead." They feel like it. It is amazing how much I can eat of good food after Brazilian diet. I'm hard as nails now, had a very hard climb yesterday ^[Farin] and still harder descent and had to hurry to catch the train, but the fatigue did not hang over to today.

I am so sorry we did not get those shelves up in the room upstairs before you got back.

I asked Mr. Maxon several times, until it seemed wiser not to ask him "when" any more. (Mr. Caville is it the only one who gets balky if urged.)

With your African collections
and mine from Brazil the
herb will need to expand also.
How I wish we could go into
Agriculture - maybe we can
when the series of buildings
is up.

Central American Grasses
will be out in a few weeks
now, I suppose.

My Nations have not come,
not a single issue, so I've no
idea what is happening in the
world. I have been reading
a Dec issue of Literary Digest
here, mostly about Hoover's move
against a panic following
stock market losses. Wise move,
those "losses" were only gamblers'
losses, yet people might get scared
and cause bankruptcies. I'll write
before starting for Mato Grosso. Very
best wishes. Sincerely AC

Diamantina, Minas, Dec 29, 1929 Sunday

Dear Prof Hitchcock,

A. S. H.
JAN 23 1930

HITCHCOCK AND CHASE LIBRARY
Smithsonian Institution

This has been a diamond mine to me.

The old town is on a steep slope, the streets paved with uneven much worn stone blocks. There is a deep, ^{narrow} valley to the east and northeast and a long rocky ridge rises beyond. (My pen is nearly dry and I did not bring the inkbottle with me). I came up from Belo Horizonte on the nocturno, with in a dormitorio car, the only way to avoid staying over night at Curitiba. The journey east to Diamantina was by day, 8:30 to 3:30, fascinating all the way, wonderful grass country. Stations are so far apart I can't walk from one to another and take train back in places I'd like to - the one I want most is 36 km., but there is probably equally good some 12-14 km from here and I can get a train back at 3 pm. The afternoon I arrived I went out toward the ridge, getting only into the rocks near the base. It is badly grazed by mules and goats but I found 10 nice grasses, including *Pasp. scalare*! I think new for us, and *Pasp. arenarium*, first time, so

far as I recall, away from the coast. I wish
 I were ~~well enough~~ enough to know what these
 very rough rocks are. There are quantities of
 chunks of quartz. The ridge from here, from
 my window, seems to be stratified, at least
 it is in layers.

see book 20-10334

I couldn't find any
 that occurred to me lime-
 stone. I succeeded in breaking
 a piece to get a fresh surface, and it seemed
 to be crystallized. Some of it is over there like the
 limestone hills in Porto Rico. Some is sandstone
 for there is a good deal of sand, the soil (what
 there is of it) being sand and (quartz?) gravel and
 clay, the latter some places absent.

Saturday morning I climbed to the summit
 - a cross is on the highest point, and had a glorious
 day along the broad summit of the ridge.
 My numbers run from 10327 to 10369, but include
 several Ericaceae, taken for Dr. Saunders
 (you told her I would) with corresponding
 specimens for US Nat Herb. I still feel sore
 when I think of Standley's chucking away the
 lovely lot of Ericaceae I got before
 and all the others, except the ferns, Passiflora

and Polypogon as I had separated out myself
 and given to Maxon, Killip and Blake. These
 have never turned up, so far as I know,
 and Dahlgen had the impudence to tell
 the people at Jardim Botânico that it was
 useless to send Brazilian plants to US Nat
 Mus any more, that Standley was at
 Field. Brasil plants should go there. I told
 them Standley had never worked on Bras.
 plants, that US Nat Mus was where every
 body came to study collections. Dr. Robinson
 had messed up Ericaceae so horribly,
 and all his material is from Minas so
 my collections will be gone to somebody
 some day - anyhow Standley has gone
 and I know Killip will value them. I
 got a few little ferns, too. This is classic
 territory, Martens was here and Braunauer
 is cited by Ness again and again. I wonder
 if Martens had as good a time here as
 I'm having. The summit is practically
 unspoiled. I struck out for another cross
 some 3 km away. This and the town
 below kept me from seeing any way.

4
New for me was another silvery Carpalum -
there are at least 7 here, 2 Andropogons,
a Microsetum, a Sporobolus (aeneus or aff),
a most amazing big ^{new} Panicum, can't
place it in any group I have in mind, a
Pasp I know in herb, Nees sp, but can't recall
name of, simply - hairy greenish gray sp. etc.
I got a lot of it. If I'm right I think we have
only fragment of type; Hemicolepis, the third
species, not stenosus nor isocalycis, an
Elymus (2-toothed); another Panicum
Dichanthoides group probably. I set out a
few minutes after 7 (or soon as I could get
cave) and got back just before 6. This
morning I struck back up the reg-high
lands, deeply gullied in places - intending
to walk to next station 13 km and take
train. At ^{a little past} 5 km. I was loaded and it
began to rain so I returned the 5 km,
soaked to the skin (had a bath as Roosevelt
always puts in) and got pieces changed
and this new lot in before quarter (dinner)
a little before 6. Today's new ones for me

Dec 29, 1929

are: *Tristachya*, the hairy original one, I've
only found Hackel's ~~leucostachya~~ ^{*stachya*} before. an
Andropogon, *Panicum* (& *Pteropodium*) beautiful
thing; another *Panicum* scrambling in
brush along streamlet; *Arundinella* not
bispida (the common one), *Andropogon*
(& *Elyzack*); *Thurbergia* ~~*petraea*~~ ^{yes, it is new}, which I'd been
hoping for, it is well named *petraea*, grows
only in the stoniest places; a great big
beautiful ~~*Panicum*~~ ^{*trichosperum*}, probably(?) *Juncus*
group; *Arctida* with a great dense
panicle (possibly what I got near Olvina
in 1925); *Paspalum* another of *Eriocaulon* group
Eriocaulon woolly, but not the little woolly
one; *Manisuris*. I got again the new
Panicum ⁽¹⁰⁴⁰²⁾ from the ridge. I had seen it
among the rocks from the train, but
its diffuse panicle of small purple
spikelets had me guessing as to the genus.
I had intended to leave tomorrow but
there were things farther west I have not
yet got, I think, so I'll stay till Tuesday

6

and walk to next station and beyond
tomorrow and take train back. Buying
is more too good, but most of the plants
are thin and dry quickly. I have a big
press by the stove tonight. It is very
cold, I am sitting with my blanket
doubled around me, and feet at one
end at night. The bed is hard as the floor
but I sleep most of the night. My Christ-
mas rest - and American - balanced food
again - did me good. Yesterday's climb up
and down was pretty hard but I wasn't
exhausted.

To the west the cuts along reef show
a light colored sandstone with layers of
pink or reddish gravel and ^{thick} layers of
gray slate (?) not laminated like mica. This last
disintegrates into a fine dust (fuller's earth, is
it?) I am so glad I came to Diamantina.
I hope you are all over the pain by this
time and recovering your strength rapidly.
I am hoping for letters when I reach Laura.
Very best wishes. Sincerely Al
Love to our Grass Neck "staff"

Dec 30 - Another glorious day, 10407 to 10448
 with 2 more Andropogons I never saw
 before, ^{rare Styracche} ~~4~~ ¹ Crataegus, 1 Campulocus, Mesquite
 ferrugineum, another Panicum, a ^{colothus} ~~Poa~~
 with big spikelets like Triodia texana, a var?
 of Poa mesoclosterum with little spikelets, besides
 a lot ^{of species} I got in 1925. I haven't had such
 exciting botanizing since my first days
 in the woods of Indiana. I'd like to stay
 longer. After 7 km my press was bulging
 and it was 1:30 with 6 km to go in an
 hour and a half, so I couldn't circle out
 among the rocks or along little streams
 as I'd been doing, but kept along at top
 speed, but even so I got an Andropogon new for
 me and a little Leptocoryphium with scarcely
 hairy spikelets. Instead of one species, it seems
 to me now there are 3 of that genus. I grabbed
 some other things as I hurried and just
 made the train with an armful of grasses
 and no time to buy a ticket. I have 2 presses
 as thick as straps will hold and a big
 bundle out of press - thanks to the butcher

store. It was drizzling when I set out
this morning but cleared in a couple
of hours. It's hard to dry driers (especially
since I'm out all day!). When I got back
today I spread driers on the cobblestones of
the street in front and hired a boy who
looked after for 100 reis (1 1/2 cent) to watch them.
Chickens, cows and mules wander all
over. I've the promise of another boy to carry
my packages out to some rocks in the
suburbs. I'll change and dry out there
- if the sun shines, which happens
I'm short of paper for the day, about 10 sheets
and the day at Curitiba and I brought
a whole package and a day's supply in
the portfolio besides, and I've just made
slips out of a worn green cover - and I'm
almost out of clean clothes. In some places
the rocks are weathered in weird shapes, reminding
me of the "hoods" in Yellowstone, white like them, too.
And the vegetation is weird, too, just there. It is
a glowing fever garden nearly everywhere -
and think of *Cephaelis*, tossing its silver banner
and the golden *Mecostema ferrugineum* swaying
in the wind together and *Trochopogon* and
other beautiful things in sight all day.
Best wishes

Pozos de Caldas, Est. Nueva

Friday Jan 17, 1930

Dear Prof Hitchcock,

I'm in a German hotel,
clean, with waxed floor, run-
ning water (cold of course), a bed
with springs and feather (or
kapok) pillow. Aunt Lin in
position to enjoy it, for I had
an upset, vomiting etc from
before dawn till noon. It
made me change my plans. I
was going up from Casa Blanca
to S Jose de Rio Parks at 6, walk
some 14 km and take train
back, but I couldn't take a train
at 6 and gave up S Jose. Casa

Branca was disappointing. It is probably some years since Dr. Campos Porto was there. The campo is invaded by Melinis. I got a fairly good lot, about 25 species, but nothing I'd never seen before. [I didn't take weeds, only listed them.] I walked miles and miles getting them, and ate a big dinner on my return, having gone all day on black coffee and a bit of bread. It was the usual heavy Brazil-ian dinner - all protein and starch, but I thought I was inured to such food. Coming from Lavras to Casa Branca I

saw the most extensive stretch of river marsh (varzea) I'd seen yet, along Rio Mezambinho. I had to stay over night at Tucuty - no train goes through. Instead of going on in the early morning I went back (still earlier) to Areado where I saw a gigantic grass I'd never seen before. It is a *Panicum*, ^{105.75} forming colonies among *Panicum ~~provalense~~*, and of some group. It is 3-3.5 M tall - an awful thing to dig and to put in press. My big digger seemed to be a pan-

knife as I dug and dug. I
had a heavy load of marsh
grasses, a *Pasp. squellu* or *P.*
riedelii, I think, among them,
when the train came 11:45.
I had just time for bath at
Tangaty and took p.m. train
for Casa Branca, arriving
just before midnight. I
hadn't had anything to eat
all day but one bun and
6 bananas. After bragging
I was hard as nails and feel-
ing so glad I could stand
anything I'm taken aback
(as well as pretty weak) by this

5

upset. I planned to go ^{first} to
Vargin Grande on the S.
Paulo side of the river, but
feeling so punk I bought
my ticket to Pocos de Caldas
which is a health resort (not
for my health) and might
be expected to have decent
places to stay. At the station
I asked the porter if there was
a hotel where they spoke German.
Yes, he led me to a hotel auto-
mobile and a man came
in a minute and began
speaking German to me.
I understood all right and

answered but thought I'd
better explain before my
German gave me away. I
told him I was Americaner
but ^{had} asked for Deutsches hotel
because I wanted a clean one.
(Also I can ask tracks up the
mountain without having
all the town in to discuss
the crazy proposition). This
place is away out of town
near the foot of the mt., so
I'm in luck.

I'm washed up and
waiting for jaunter-bellows
as a driver.

Sunday 11 am.
I'm about all right again, but
am resting today (drooping plants,
marching, etc). Yesterday I climbed
the mountain and followed
the summit, dipping down
into ravines that looked
promising. I guess it has
changed a lot since Regnell's
day, it is all grayed. As I
understand it this is the place
where Regnell made the money
he left to Bot. Mus. Stockholm
for botanical exploration of
Brazil. I got some 25 species,
not taking weeds, including
that *Andropogon laxus* (can't
recall its present genus), new
for me, and a *Chusquea* in

fruit. Otherwise it was pretty
much like Faria (near Larras)
and Casa Branca. It seems
to be pretty much alike over this
whole stretch of country, as
I'll admit Vargem Grande which
is on the São Paulo side of these
ruts.

I made a curious discovery
yesterday. I found one specimen
of a queer woolly Poa near Belle
Horizonte in 1925. It is in herb
list as *P. gelida*, (because it looks
like hoar frost). I found one
more in Ouro Branco ruts.
On the rut here I found it
as part of a plant of Poa
pilosum! and found a second

one, but no more, though
I examined many plants of
pilocum. I surmise it is a
diseased or teratological form.
Glad I found it out.

Yesterday afternoon as I
was plodding back through the
town - I had followed the crest
a long way and came down
several miles away - a boy
with a cart (about what we
call a sulky) hailed me and
I had him drive me here. I
told him to come at 7 tomorrow
morning. I'll have him take
me to beyond railway station
and I'll strike for the camp.
I saw from the train a few

kilometers back. It looked better than I found this out. It is interesting to note the effect of grazing on the campos. None of the campos looks overgrazed, either, the ground is thickly covered with grasses and other plants, but in grazed campos *Aristida* is common, sometimes ^{and even in ungrazed campos} dominant, *Trachypogon* also ^(but common in ungrazed, too). The tall bunch grass *Axonopus* species almost disappear and so do most *Paspalums*. At Caca Branca a fence divided grazed from ungrazed and comparison was easy. *Axonopus*

opus fuscifolius and, in richer spots, *A. compressus* seem to thrive on grazing, making mats and sometimes a sod. *Aristidas* and *Trachypogon* are obviously let alone, but these ^{creeping} *Axonopus* show that they are closely grazed. The same is true of *Pasp. pilosum* though less eaten than *Axonopus*.

- Sunday night. It has rained all afternoon, worse luck, for my presses full need the sun. The swamp stuff from Areado is still in press. I had nothing to read with me, not even a Portuguese grammar and after doing my mending I used most of the afternoon

(as you might do ^{cross} word puzzles
or play solitaire under similar
circumstances) in concocting
the sketch I inclose. The metallic
blue and gold humming bird
dipping into a head of scarlet
flowers on the summit yes-
terday was exquisitely lovely.

I asked to have my mail
sent to São Paulo. I expect to get
there Wednesday and hope I shall
get a letter from you (or from
from Miss Niles) telling me that
you are gaining strength rapidly.
Mrs. Harricott asked me to stay with
her mother and sisters in São Paulo.
Mrs. Harricott is the kindest, most
hospitable soul.

A. S. H.
FEB 6 1930

With very best wishes,

Sincerely yours

Agnes Chan

An outline sketch of Minas Geraes

[17 Jan 1925]

A sky of brilliant blue with clouds of snow
And ancient rounded hills in living green,
With rust-red roads meandering below
And palm trees waving in a far ravine.

The summits gleaming silver, bronze and gold
Of wind-tossed grasses-waving spike and plume
A hummingbird, metallic blue and gold,
On whirring wings above a scarlet bloom.

Rua Baker 42, São Paulo.

Jan 31, 1930

S. H.
FEB 20 1930

HITCHCOCK AND CHASE LIBRARY
Smithsonian Institution

Dear Prof Hitchcock,

Off for Tres Leguat
5:30 - Feb 2

Miss Niles wrote the joyful news that you are back at the herbarium. I hope you will soon be good as ever and better than for the last year or so. You probably will not be playing tennis this spring, though, but I hope you can by fall.

I wrote Miss Niles that I was sending paps 15, 16, 17. Yesterday I took 18 to the Consul-ate here. He had held the other 3, so I took down the

special passport and two
letters with gold seals. Consul
was very nice - said he
would send them down to
Rio one at a time, their
mail pouch being small.

I have not heard from Miss
Brandt about those I shipped
to her in a trunk, but I am
assuming they trunk reached
her. I'd be heart broken if it
didn't for that was my
precious Diamantina lot.

I am still held up here
by the washout. The railway
said "probably a week"
when the track was washed

out and if the train goes Sunday
night, as I hope, that will be
just a week. I saw the
Maxwells yesterday. They said
they would be glad to have me
go with them to their station in
southern Mato Grosso. It is
2 days by carinhãs south
from Campo Grande. I'll come
back alone and go ^{the} western
border and botanize back
eastward. The Maxwells go
on the Tuesday train, I on the
Sunday (if it runs) and wait
for them at Tres Lagoas, giving
me two days to collect there.

It is terribly trying to one's
patience to be held up here.

The country round about is too cultivated and weedy to batanize here and it has rained every day. I collected at Ypiranga and had to dry the stuff in the gas stove oven. I had been hoping to go Thursday and now I hope to go Sunday. Dr. Haebue gave me a card permitting me to collect at the biological station at Alta da Serra an hour from here on the train. It rained torrents Thursday and yes today so I haven't gone. If it is not raining in the morning I'm going, but hoping to leave Sunday I don't want wet clothes, wet shoes and a pressful of wet ~~clothes~~ ^{grasses} to take along. // Dr. Haebue has given

Jan 31, 1930

me his publication with map
on Matto Grasses and two
others on plant geography.

I told him I had written back
asking that Pasp be sent him.

// Please send him Panicum and
Trop. Panicum, Schumacher etc
to Cereales and Puncetum.

I think it would be worth
while for Mr. Mayon to send
some papers. Haekne isn't par-
ticularly interested in grasses.
with Dahlgren telling people
~~to~~ it wasn't worth while sending
plants to Nat Herb anymore, Stand-
ley being at the Field, I think it
would be to the advantage of Nat
Herb to cultivate the few botanists
of Brazil. Dr. Haekne said he
would send the grasses for

us to name. I enclose memo
for a letter to him if you
think best to write. I wish
we could turn the grasses
to U.S. work away from Berlin.
I haven't mentioned that I plan
to prepare a Grasses of Brazil.
Haehne is Kuhlmann's brother-in-
law. It might stimulate K
into publishing a lot of supposed
"newer Arten" without trying
to look them up.

— Sunday morning

I went to Estação Biologica yesterday
morning. It is a beautiful preserve
of rain forest with good built-up trails.
Not many grasses, except climbing
bamboos. I got a *Chusquea* in bloom,
not *C. trinii* which I got in bloom
at Passos de Caldas. I got one of Mez's
allies of *Parr. cyaneus*. We merged it
tentatively (or it is in Swallen's key) with

Jan 31, 1930

Pan helobium Mez, but I think it is distinct. I got *P. helobium* at Pacos de Caldas. I also collected an *Axonopus* that I don't think I've had before. I restrained myself, so as not to have a lot of wet plants on my hands. It rained, of course, but not very hard. It rained all night and is still raining. Yesterday the Ry had orders to sell tickets for Sunday for the west, but order was recalled in afternoon. I'm going to find out this noon if I can go tonight or not. If I can't I'm going on tomorrow by morning train as far as the line is open and collect around there till Ry is running west. It isn't as thickly settled as here, anyway. If this were Bahia or

Please put photo with mine

Peruambuco I'd give up and go to Gagoz, but São Paulo is proud of its railways and this is a Paulista line. Mr. Kalb says that all possible is being done. The rains have been continuous. I think the line goes to Lins, about 3/3 across the state. My ³trunks of supplies have gone on to somewhere. The nocturno (the only through train) does not carry baggage. I sent my trunks down the day before to go on a day train. The chefe at baggage room said they are probably at Lins. I've lost a whole week - tough luck.

At Estação Biologica yesterday I looked over visitor's book after signing it. I saw Lyman Smith, Howard, Douglas Houghton Campbell, Harchberger, and a name that gave me quite a thrill "Marie Curie." She was here in 1926. Very best wishes,
Sincerely
AC

Tres Lagoas, Matt's Grosses,
Feb 5, 1930


Dear Prof Hitchcock,

I did get here at last
and have had two days col-
lecting, waiting for the Maxwells
who arrive tonight. We all
go on at 5:40 a.m. to Campo
Grande. If they don't arrive I
go anyway and wait (and
botanize) at Campo Grande.

I've had pretty good luck
here, some 54 species including
10 weeds, taken because it is a
new state for me. The campos
here is different from Minas
campos, level and only 313^m~~ft~~
alt. I have several species

I never got before, *Trichopteryx
flammula* for one. I saw the
big thing from the train in São
Paulo and was most curious
to know what the big golden
plumes were. I got a beautiful
Mesocotum, new for me, I think,
^{a *Sorghastrum* 2-3 M tall.}
an *Eleocharis*, and, last thing,
almost, today Hackel's *Eriochloa
cactarea* which is a *Paspalum*
(*P. pyriforme* C. Presl). If I'm right,
and I think I am - it has such
a funny swollen base, this
is new for Brazil. It was
described from Paraguay and
I've never seen any but the
type coll., one of Hassler's I think.
I had to come in early to get
plants changed, in press, and
trunks ready to go to be "despachado."

Mais tarde. - Trunks off. It was a
relief when I saw my three, sent
a week before, in the baggage
room here. The railroads in
this part of Brazil are pretty
good - of course they rock
and bump furiously, but
they are usually on time.
Coming here it arrived at
midnight instead of 7:30
and tonight it is 2:30 late
but I've seldom been more
than half an hour late in
Minas or São Paulo. When
the train passed the wash-
out I didn't wonder it took
a week. A great piece of em-
bankment and the culvert
below were washed out, the
big culvert pipes lying every

the rails sagging over the gap
which way. The new track
made a big half circle
around it. The low place
was filled with wooden
railroad ties piled cross-
ways , several tiers
of them and the rails
were laid on top. The
train ran very slowly.
Leaning out the window
one could see the whole
thing. Much of the country
looked like Illinois in a wet
spring, crops and trees
sticking up out of the water.
Coming west from São Paulo
the country gradually flattens

Feb 5, 1930

out (only relatively flat, however)
and the ^{Rio} Tiete flood-plain is
mostly broad. It is a beautiful
river, obviously in high water,
so many trees were in water
like the Illinois^{R.} in spring. The
country is all coffee and maize
mostly coffee - miles and miles
of it. It wasn't until about 2
hours west of the wash out
that I saw country worth
hunting grasses in. I marked
the station and may stop over
a day on the way back. As
the altitude lowered the country
became wooded, by dark it

looked almost like my idea of the Amazon jungle. Being more than 4 hours late it was dark long before we reached the Parana. It was raining and pitch dark, so I did not see a bit of this great river. The bridge seemed to me as long as that over the Mississippi at St Louis, but I don't know how much of it was approach. I hope to see it going back. For the last three hours the mosquitoes were a perfect torment. For the first time since I was sixteen I wished for long shirts. I had to double up like a jack-knife to wrap my legs in my short shirt. Hoehne's map gave Tres Lagoas region as

sub-xerophytic cerrado (camps with scattered low trees) and coming to hotel from station through the wet, my feet recognized sand instead of clay, by the lack of weight, and my heart rejoiced.

I got started about 7:30 in the morning and after getting away from town and weeds I thought I had struck it rich. But the country isn't diversified. After collecting about as fast as I could for a couple of hours I went on for hours not adding on the average a species a kilometer. The same species were found throughout nearly. Today I struck out in the opposite direction and

added only 9 species, ~~4~~ of them
weeds. But I visited two of the
3 lagoas and only added *Panicum*
aquaticum and *Axonopus fissi-*
folius. But that queer *Pasp pyri-*
forme was worth all the
kilometers I tramped and all
I had to endure from midges.
They were worse yesterday. Lin
all lumpy around the ears
and neck. It is raining again
now (evening) but sun came
out long enough this after-
noon to dry my driers, so I
could pack them dried, ready
to change tomorrow night at
Campo Grande. The train leaves
5:40, reaches Campo G at 7, so I'll
have a whole glorious day to
see the country. I'll have to stay up
tonight to meet the Maxwells. Very
best wishes, sincerely AC

Camp for Grasses, Matto Grosso Feb 7, 1930

MUSEUMS AND
Smithsonian Institution

Friday

Dear Prof Hitchcock,

This is "outwest" in Brazil. I am im-
patiently waiting for my trunk, so I am
chasing them and get out. It is 10 minutes
of 8 and I've been standing around (and
pestering the hotel man) for an hour. To
save time I've engaged an auto to take me 15
km north toward (or to) some low mountains
to make back collecting. The Maxwell did
not arrive ^{at this point} Wednesday night - neither did
the train. There was a freight wreck ahead
(a train fell from the track in front is the
literal interpretation of what I was told) and
the passenger train arrived at 3:30 and I
heard it coming and dressed quickly
and ran to station, but no Maxwell. So I
left a note, which they may not get, and
came on at 5:40. The one primera-class
car was packed and it was hot - almost as
hot as U.S. summer, and I had slept very

little, but I did enjoy the ride in spite of it. There is more cerrado (open low woods of small gnarled trees or with quite a bit of brush) than what I have known hitherto as campo. *Tachyphogon* is dominant all the way across. We marked 2 places to stop on way east, one conforming place chosen from Hoehne's map. Trains only run 3 times a week so there is no way of getting train out and back the same day, nor of walking from one station to another - stations are ^{usually} 50 or more km apart.

The country is nearly level all the way across. We went from alt 313 m at Tres Lagras to 500 something here, but so gradually as not to be noticeable, like going west across Nebraska. There is considerable real matto (where I'll hope for *Olyras*) in places. — Feb 12. The Maxwells arrived yesterday the train 7 hours late. We expect to leave by *caminhão* tomorrow morning "early."

Matto Grosso has been yielding a pretty good harvest - but it is a strenuous life gath-

ering it. Friday, the day I started this letter: I went north. The auto kept me waiting 15 minutes and then stuck in the mud 15 minutes after starting, so I went on afoot. Hoehne puts north of Campo Grande down as "cerrado tipico". It is brushy woods of low usually gnarled trees, the brush almost amounting to as dense a growth as chaparral in places. It makes pretty hard going with lots of thorny and catclaw things. Saturday I struck out the Ry eastward, was caught in the rain 6 km out (I was on the way back) and was kindly given a ride on a handcar by a polite Brazilian. With the portfolio under my khaki skirt the plants did not get wet. Monday I set out as early as I could get cafe intending to walk 25 km to next station west, but about halfway I saw I wasn't going to make it by 3, the time the train passed there, unless I stuck to the railroad. So I gave it up, wandered out into the campo, the best campo I've seen here, and turned back when the Ry sign post showed I'd gone 14 km. I made a short cut across a loop of the ry coming home

(in the rain) so I did about 27 km - but not
by 3 o'clock. - I forgot Sunday. After getting
birds all dried I set out about 10:30 and
went east beyond the point reached
the day before. I've been doing from 15 to
27 km a day, so you see this isn't rich
collecting. But I've got some good things.

Eriochloa grandiflora; *Sorghastrum* new
for me, I think; Pasp of *virgata* group new
for me; Pasp multicaule, which I never
saw except in Bahia I think; *Gymnopogon*
biflorus Polg; Pasp *eriantha* group, and this
time *eriantha* itself, I guess; Pasp *plicatula*

group different from the several species already
collected; *Pasp. compressus* (Doll) that
isn't a *Panicum*. ~~In my list I had I put it~~
~~in *Thrasys*, but I think it goes better in Pasp.~~
I hadn't transferred it. Fortunately, I think
we have only a fragment of type of this.

Heteropogon, neither *coarctatus* nor *melanocarpus*,
Pasp. commutatum Nees! only 1 specimen, and
that along the Ry. It is that queer thing with
winged rachis like *dissectum* but with larger
spikelets with braver fruits. *Panicum quadri-*
glucum (Doll) Hitchc., *Pasp. stellatum*, several *Axonopus*

some I may not have had before; *Arctostaphylos*,
 at least one new for me, also an *Eragrostis*,
 several *Andropogons*, 2 new for me,
 and something in *Andropogoneae* I don't
 know the genus of. It is taller than I am
 with peduncled racemes like that *Andropogon*
laxus, but much larger and with glabrous
 spikelets. It is very striking, but I can't recall
 anything like it in the herbarium. Another
 puzzle is either *Panicum* or *Schrantheus*. If Pan
 it keeps into *P. procurrans* and it isn't that, though
 it does appear to be related. I have 100 numbers

from Campo Grande, none of the weeds or
 common things taken at Tres Leguas collected
 here. I list all ^{species} I don't take. I think that is better
 than filling up the herb. with *Syntherisma conjugatum*,
Pasp. paniculatum and *conjugatum* etc. Mr.
 Maxwell says that about 3 or 4 leagues south
 the "prairie" begins, so I am ready to jump
 from the *caminhão* any time it stops
 for water. I had such an enormous lot in
 press I spent most of yesterday changing and
 drying driers. I had received no word, but
 hoped the Maxwells would arrive. We met

every train from the east. Mr. Maxwell telegraphed both to Tres Lagras and Campo Grande and I asked at telegraph office both places but got none.

This is a big town, 10,000 men Mr. estimates. It sprawls over a lot of territory and the country is sadly weedy all around. It looks like "out west," with so many men on horseback, occasionally with the very full gathered trousers I've seen pictured and commonly with leather aprons deeply fringed. There are a great many Japanese here and Syrians.

The Maxwells went to Central. I had been at Colombo, having been told it was the best in town. I was sorry for the rest. The Maxwells suggested I come to Central (which is off farther than Colombo from town) and I did so. It is worth the \$7.50 it cost to move, this is so much cleaner, the rooms built along two sides of a long patio, with grape vines across it, quite the prettiest native hotel I've seen.

I bought a new tripod at a German photographer yesterday. It is the best I ever

saw - ought to be, it cost 65¢ (about *7). My old tripod which I liked so well got a game leg at Diamantina. One leg took to sliding together unexpectedly. I stuck my knife blade in it, but it was a nuisance. I asked this German to overhauled it, but he said he couldn't, so I bought one he had, in Deutschland gemacht. But I found its screw did not fit my camera and took it back. He had the screw cut down to the size of the Kodak tripod. I couldn't get it till this noon - then I had to wait some time. I went out to get photos today of crows, typies etc but it was 2 o'clock by the time I got out and then it threatened rain. I just got in before the rain with no photos. It has taken time to pack for the trip to Daurador and to do up my bundles of hay. I have 3 bundles sewed up of Math grasses so far and enough will come out tonight to make another fat bundle. The mosquitoes here are something awful, but not nearly as bad as this hotel as at Colombo. They kept

me dancing a jig while I changed dresses or
put plants in press at night. Then I went to bed
under the mosquito net, no matter how
early it was. These mosquitoes are only bad
at night - they are at me now a little, but
it is dark and raining. The Maxwells say every
one is excited over the coming election. Mr. Hun-
nicutt advised me to be back in Rio the first
of May, when the Senate meets, for the senate
declares the result of the election and confirms
the chosen president. Mr. Hunnicutt says the
south is ripe for another "revolution" (They call
these motions "revolutions", while we only call
outbreaks revolutions if they succeed.) What I
saw of the "revolution" in 1924, as I was leaving
for Pernambuco, made me think them harmless,
but I've learned the 1924 revolution went as
harmless as I'd supposed. The Kalbs had ^{recently}
moved into their new home (the house where I
stayed with them). The two factions of soldiers were
firing across this new part of town at each
other. All the people got out in a hurry. When
they returned a few days later they found the
soldiers had broken open the house and
looted everything - dishes, linen, everything,
furniture and all and left the house

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in filthy condition. Everybody seemed to
me to be seriously fearing a revolution. The
two ^{Kolb} daughters who returned from Parana
just before I left São Paulo said the
people there were fearing revolution too.
I had asked Mr. Hamnicutt what it was
about. His idea is about this: It is a struggle
between the Ins and the Outs. Each president
practically selects his successor. Bernades
selected Washington Luiz, the present presi-
dent. W - Luiz selected Julio Prestes the
well-advertised candidate. The Outs are
getting desperate. Getulio Vargas of Rio Grande
do Sul is the "Out" candidate. He visited Rio
de Janeiro arriving in an airplane and re-
ceived an ovation. If he is defeated it is
feared he will head a revolution and if he
is elected Mr. Hamnicutt said the Senate
may refuse to seat him, and that will
mean revolution. Just as I was leaving
Lavras a small detachment of soldiers came
with an officer and took all the guns
and ammunition they use for military
training ^{sponsored by government} in the mission school. It strikes

me that if the "Dons" wanted to stir up a revolution they couldn't do more toward that end than they are doing. All the public buildings and railway stations are plastered with Julius Prestes. There seemed to be no other candidate. The first I heard of him was a newspaper front page slogan "Brazilians will not be slaves, cost what it may they will be free" - Getulio Vargas, who has arrived in Rio by airplane. In São Paulo I saw rows of small posters of Vargas and city cleaners scrubbing them down. The Dons, if defeated, can claim it wasn't a fair election. Worse still the soldiers were parading about São Paulo and they are in evidence clear out here, as I never saw soldiers around in Brazil before. Mr. Maxwell says there was a carload of soldiers on the train they came on, going further west. He says that men are being drafted for military training. [I learned at Vicosa that the military training system of Brazil is worse than ours. All high schools, mission, private,

or state compulsory military training. Besides there is a draft by lot of a certain number of young men (or boys, I think it is) each year. The boys that go to school get their military diplomas and are free of further training. For this reason many parents make every effort to send sons to school, because the training in barracks is very bad for them. Those not drafted are in luck. American missionaries are careful to register their children as Americans. They told me of an English boy born in Brazil (not registered) sent to England when a child, visiting Brazil as a man and being arrested for not answering to draft. It doesn't seem as if Brazil keeps track of all male births as old Germany did for military purposes - all these swarming young ones born without benefit of clergy or law. Apparently the number to be drafted each year is not fixed - if additional men can be drafted now. Since it was the soldiers that got up the "revolution" in 1924 it

seems to me a crazy to to stop make
more soldiers and arm them and
especially to draft more, for what is to
keep them from going over to the "revolu-
tion"? There wouldn't be any revolution
if it wasn't for the soldiers. What I hear
particularly complained of is that the "soldiers
shoot without orders." Yet the government
goes on making soldiers. Out in this "con-
try" I have seen the first big poster of Vargas.
In hotel Colombo beside the familiar Prestes
poster is one showing Vargas on horseback

in characteristic high boots, belt, slouch hat etc
with droves of cattle in the distance, with
slogan "Getulio Vargas for president of the republic."

It seems a long time to wait for letters
till I get back to São Paulo about March 1 or so.
I hope I shall have several from you then.
I see you got my Capensis letters you learned
the tubers on your Olyra Sampaioana - the
specimens must be there before this. I hope you
are feeling well and strong by this time and
that you are having a happy time naming
up your African grasses. Stapf's keys are
terrible to work especially to Andropogoneae.
I wish to work especially to you and my
best wishes to you and yours.
A.C.

Campo Grande Feb 24 1930
Monday

Dear Prof Hitchcock,

I think I wrote you before
leaving for Durado Feb 14.
The "very early" start turned out
to be nearly 12 o'clock. The
drivers of camionhòas like to
travel in pairs, to help each
other in case of trouble, so
after Mr. Maxwell's was
packed and ready, about 10,
a merchant agreed to send
down a load and we had
to wait for that. It gave
us more places to ride, so
was an advantage to us.
Mrs. Maxwell and the baby

remained in Campo Grande till Mr. M could get a house in some sort of condition. The trip was supposed to take 2 days. We reached Durados at dusk Monday - four days. Mr. Maxwell had said "There are no dangers to be encountered in Matto Grosso, but there are plenty of hard ships." That fits the case - rain and mud and terrible roads and more terrible places to stop at night, swarms of midges and little black and white flies that nearly drive one crazy, and chiggers that raise blisters - nothing like so romantic as Indians

with poisoned arrows. I collected while the hammocks were being dug out of the mud, punctures repaired, etc (lots of etc) but the grasses of Campo Grande continue all the way down, 302 km. New for me on the way was *Panicum trachyspermum*, a *Panicum* (of Laxa group?) spikelets in racemes, much larger than *Laxum*, Boliv. and polygonat. It looks very like *P. herntonianum*, but has gls half as long as spikelets; a grass of Livida group, I think that one of Parodi's I once called *P. buckleyanum*.

last two.

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* tell him to look up E. matto grossensis Polg.

There, I got near a tiny lake where I saw two enormous birds, white bodies and black heads and necks; "tuyuyu" is the name. Also got Synthuyabense there and other things I hadn't yet found in Matto Grosso. Farther

south I got a fragile-panicled Eragrostis that keeps to Swallen's E. ^{paraguayan} viscinodis - awful thing to put in press, fragile as spun glass; Elyonurus chlorostachys possibly, green, anyway. I found Pasp schumannii again. I got 66 numbers on the way down, not or scarcely repeating species. Of course

the machines never broke
 down in the best spots. We
 were losing so much time
 I didn't want to ask the
 driver to stop, though
 I was distressed to pass
 some things new for me
 at Dourados. But as it turned out, I
 got all I had seen en route
 and missed collecting. At
 Dourados, the weediest ^{region} ~~place~~
 I ever saw except Illinois
 bottomlands. I got into a
 marsh (varzea) Tuesday
 morning and sloshed
 around in it several
 hours - most awful going.
 The vegetation, mostly sedges

and ^{an} enormous number
much like Eryngium of
Illinois wet prairies, Erianthus
etc. was high as my head
and very dense. The water
was from an inch or so
deep to at least 3 feet, for
I went in once to my
hips - I couldn't see where I
was going. The best find
resulting was Panicum
caaqueense Nees. undoubt-
edly, ^{and} new for Brazil, and
only collection other than
type, so far as known. I
think I told you a dupl
type of that was in Desert
herb. and it was quite

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different from species under
that name in Grasses of
Andes. My find was
tangled in a hummock
of grasses and sedges, ex-
ceedingly difficult to get
out, with its very slender
culm. I only found 3
specimens - all one plant.
I found a Chaetochloa ^{hassleri}
2 meters or more tall which
I recall in herb, but do not
remember name of. We
have it from Argentina.
A Syntherisma ^{balansae} as tall as
I am with tiny spikelets I
don't know at all, an

10959

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Arundinella with spreading
 whorled panicle-branches,
 and short awns. I don't recall
 it in herb. *Sorghastrum parvi-*
florum, new for me, I think
 in Brazil; a ^{*Purshella*} *Syntherisma*
 with awnless panicle - the one
 I'm calling *S. biflorum* Pilg is
 long-awned. I got all the
 species there which I had
 collected in Matto Grosso,
 making an enormous
 load to struggle out with.
 There was no rain all the
 time I was at Dourados and
 the blazing sun dried things
 beautifully. The next day,
 after plowing through
 weeds, higher than my head,

I got into a bit of weedy campo and got a few more things - nothing like so many as in the marsh. The next day, Souza Ligia, Senhor Esthan and I went horse-back to Rio Dourados, 3 leagues (12 miles) to the south. We were to start early but Senhor Esthan (age 20, the Indian teacher) is also the dentist of the community, and a man came to have an aching stump extracted just as the horses were ready, so it was 9:30 when we got off. My saddle and stirrups were the worst implements

of torture I never endured. We reached the river about 2. I had stopped to collect only a few times for the grasses were the same as a whole as I had all the way from Campo Grande. The woods on the river margin were "devastado," and I only found a few things, *Olyra glaberrima*, *Panicum paritrichum* and an allied species, *Oplismenus* and a couple of ferns for Mr. Maxon. I wanted to start off and walk most of the way back, but Ligia is 16 and in Brazil it would never do to leave

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the youngsters alone to eat their lunch and follow. Esthan swapped horses with me and I rode back in relative ease. I noted that he rode most of the time with his feet out of the terrible stirrups, which were on a broad strap that turned one's feet in. It was about 8:30 when we got back. This 24 mile ride is probably the longest ^{in one day} I've ever had. Esthan's horse had an easy gait. The land is full of cattle. Whenever we approached

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a bunch the youngsters galloped their horses, and I latched the horn of the saddle, over my collecting portfolio, and galloped, too. I didn't brandish a whip in my right hand as Liza did. This Brazilian girl is contrary to all one's ideas of Brazilian girls. She is a student at Bennett college in Rio (Methodist), the daughter of a well-to-do physician. She wants to be a missionary to the Indians - and she is about as contrary to one's ideas of a missionary as to those of Brazilian girls. She is

very pretty (which is not un-
common in Bras. girls) with
hair bobbed, skirts above her
knees, stockings rolled below,
powdered, rouged and lip-
sticked like any little flapper.
She obviously enjoyed the long
journey by carruinhãs, stood
everything good naturedly,
washed at a horse trough
with the rest of us and pow-
dered her nose and reddened
her lips afterwards. She had
not been properly outfitted
for the journey, her silk
stockings and dainty
shoes were splashed with
red mud. After spoiling

2 pairs I induced her to wear
a pair of my heavy "Boysville"
stockings. Her parents, friends
of the Maxwells, asked them
to take her for six months.
She would give them no
peace and they think six
months will cure her
desire to be a missionary.
She is to return to Bennett to
prepare herself to teach the
Indians. I quite fell in love
with the girl. Brazil is going
to start moving if Ligia
is a sample of the young
Brazilian girl. But I sur-
mise that the fact that
her name is Wagner

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has much to do with her
independence and venture-
someness, though her
father is Brazilian born. - This
is a digression, but the girl
was as interesting to me as
were the birds and deer I
saw. - I wanted to return to
Camps Grande ~~Fluores~~ ^{Friday}
start to, I mean, and had
passage in an auto that
was "probably" to leave Fri-
day, if not certainly Satur-
day. (It didn't leave Fri nor
Saturday, but Sunday) Friday,
after waiting all morning
(drying plants and washing
my clothes) for another auto
to take us to the Indian

reservation, I went in the
 afternoon east to the woods,
 with no hopes, for the woods
 I'd been in were horribly
 spoiled. These woods were,
 too, but I found *Lithachne*
pauciflora, new for me
 in Brazil and southernmost
 record I think, *Streptochaeta*
spicata!, *Pharus*, *Olyra*
glaberrima, *O. latifolia*,
 and other things, a *Panicum*
~~affinale~~ ^{overly} *affinale*, and another
 of same group. ¹¹⁰¹⁴ These
 vine-like things tangled
 like yarn are awful to
 collect. Widges by millions
 stinging and both hands
 needed to untangle the

delicate culms, and a horrible
 nettle, 2 meters and more tall,
 branching all the way
 down, stinging worse than
Urticastrum (Laportea) sure
 to be somewhere in the
 tangled mess. Saturday
 we did go to the Indian
 reservation. They are anything
 but wild Indians. I took some
 photos, which I hope will
 turn out well. In the after-
 noon I went back to the
 torturesome woods, going
 farther (getting more
 bitten and stung) and got
 two more *Panicum* of
 the *Dichanthoides* group.
 My ears and face are still
 sore and lumpy.

Saturday night the auto man said we would start at 4 Sunday morning. Mr. Maxwell was coming back for his wife and another carrinhão load of goods. His hadn't all arrived when we left Campo Grande. We were ready at 4. At 6 we heard the auto (the man's house was near by) and at a little before 7 we started.

It was a good 6-cylinder automobile, 4 people besides driver and loaded with our hand baggage, inside and out. We passed 4 disabled carrinhãos on

the way. Mr. Maxwell, going to speak to one driver whom he knew found it was the carrinhão which left Dourados Thursday with my trunk on board. I was willing to pay anything if our automobile man would take it, so Mr. M. told him "I'd pay well" and, being a Pyrian, instead of a Brazilian, that induced him to add this heavy thing to all the other stuff on the running board. The senhora, as well as the others, had to climb in over baggage and closed doors. (He only charged 25¢ - about \$3.25 - not

bad when I was ^{no} at his mercy.)
It had not rained for several
days and the mud holes were
dry. They were still holes,
however, and we were
bumped unmercifully but
arrived before 9 p.m. The
whole distance in less than
14 hours. I leave tomorrow
morning for the western-
most ^{Ry} station, Porto Esperança.
Everything here has taken so
much more ^{time} than I counted
on. I shall not stop any-
where between here and Pto
Esperança unless ~~the~~ I see
a very promising place. I
hope the "revolution" will
hold off. Saturday next is
election day. Everybody out

here is for Getulio (the first name
 only is commonly used) the
 "Out" candidate. Soldiers
 are everywhere. The "govern-
 ment" (the Ins) takes the
 Woodrow-Wilson attitude
 that it is disloyal not to
 "stand by the president." (L'etat
 c'est moi, as Louis XIV put it)
 When the president says Julio
 it is disloyal to shout for
 Getulio. But they are all talking
 Getulio out here. I am won-
 dering if these drafted soldiers
 will actually fire on their
 own friends and relatives if
 there is an uprising. It will
 take some time for the

returns to come in so the
"revolution" isn't likely to
start for some time after
election. It may go off
half-cooked, however. All
the men out here wear
cartridge belts and pistols.
We passed 2 trucks of soldiers
going south as we came
north yesterday. It looks
as if the "government" is
piling up dynamite to be
set off.

In spite of rain, mud,
and all the rest I enjoyed
the trip south. It was
thrilling to see emus and
other strange birds. The

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emus were mostly in
small groups, often with
the cattle. Once we saw
19 (Mr. Maxwell's count, I
was too excited to count), 2
hens and the rest "little"
chickens only about two
feet tall. The Ceriema was
less common and I had
seen it before. Hawks
were many, the great
hawk, gavião, nearly as
big as an osprey, perches
on termite nests. I saw
small owls several times,
one by a burrow, but
the others on low trees or
fence posts. The guero-guero

(from its cry) a beautiful bird
allied to the plovers. I judge,
is very common. At
Dourados ~~so~~ parrots by
hundreds flew over at
dawn going from cer-
rados to the mata, and
in the evening they fly
back, roosting in the
low scattered trees of the
cerrado. As we rode back
from the river we dis-
turbed numbers of them
as we rode through the
cerrado. They are nearly
always in twos, the twos
nearly in groups. They

"talk" continuously as they fly.
 It waked ^{me} in the early morning
 and I'd get up to watch them.
 The flight is short rapid and appears labored.
 In the evening they passed
 so low sometimes that I
 could see them plainly.
 They are the green of Mr.
 Maxon's Loretta and very
 like her, so far as I could
 see. Mr. Maxwell says
 these are the ones commonly
 caught for sale, being good
 talkers. There are parakeets
 in the country too, but I
 only saw them captive.

We saw two deer on the
 way down, smaller than
 our mule deer, and grayish

brown. We saw two more coming back, also more *erinus*, but not so many as going. Armadillos are common. I kept sticking my foot into holes in the camp (while something was being done to trucks). I asked what made them and learned it was the armadillo. I saw the "shells" but none alive.

I hope to get back to São Paulo in about 10 days and look forward to getting lots of letters.

I have been making up my bundles of hay today. I have two from

Feb 21, 1930

the Douradas trip and one press still drying. One thing I forgot. Besides *Lasiacis ligulata*, of which I got good specimens at Douradas, I got another *Lasiacis* Saturday in the ridge-infested matta. I think it will turn out to be *L. sorghoidea*. The region south of here, especially south of Rio Brilhante to Rio Douradas, is the most fertile I have seen in Brazil. Things are so rank, like Illinois bottomlands, and the mud bottomlands, too, like Illinois. The land has been badly abused, grazed till *Aristida pallens* and other species, *Trachypogon*, and ^{perchance used} ^{and} composites higher than my

head, occupy miles and miles of country. Senhor João of the mission is starting planting of various things. Pennisetum purpureum (elephant grass) is luxuriant, so is paragua and alfalfa, ^{and peanuts}. The Indians gather mate (Paraguay tea) common to eastward.

7 pm.

I waded a mile through the mud of this town to see Mrs. Maxwell and the baby who are with the Baptist missionary here. This missionary told me the boat for Coimbra leaves tomorrow ^{connecting} ~~meeting~~ ^{with} train from here, then another in 4 days. I want a day or two at Pto Esperanca

but not four days as I am
 going to Aquiduaana tomorrow
 row, and two days later to
 Pto Esperanca. Two days there,
 then to Carumbá and leave
 there Thursday Mar 6, reaching
 S Paulo Sunday. Mr. Maxwell
 says that just over the
 divide of which Campo Grande
 is the highest point, it
 drops into low sandy
 region. "Aquiduaana is in
 this region so it might to
 have a different flora. Saw
 so tried of red mud. It
 rained most of today
 and it is like walking
 in lard or soft soap.

The Dourado trip did not cost nearly as much as I expected. It was 300⁰⁰ fare both ways and it cost me just that from Alegre to Santa Barbara de Caparas a run of 4 hours, 150 each way. The agronomist's wife refused pay for meals (cafe and janta) so I put 25⁰⁰ in the little boys bank for schooling. Little Erasmo tries to abrin the bank but can't do it. I paid 15⁰⁰ for the rattletrap automobile that took us to the Indian reservation and I'm send-

ing a wire mud-scraper mat^{12⁰⁰} to Dona Guilhermina, who gave me meals and let me pound my dirty clothes on the board at her well and iron with her charcoal iron. So altogether the entire cost has been about [#]44. It ^{I forgot the 25 for trunk} would have been much more if I had gone alone or made arrangements myself. The horse to river cost nothing, being a mission horse.

I hope Aquidnana will realize some of my dreams of Matt's Grasses. It hasn't been bad collecting

on the whole, but I haven't
found "Panicum" (Mussacetum)
arsatum, Ischaemum molle
and all sort of lovely things
described from Matt's grasses.
I have collected some described
from MG but I'm yearning
for sandy region.

I enclose letters to Miss
Wiles and Mr. Sheels asking
for them to send publications
and seeds to Durado

It is an awfully long
time without letters. I
hope you are feeling quite
yourself by this time. Very
best wishes,

Sincerely yours
A.C.

Porto Esperanca, Mato Grosso

March 2 1930 7:15 am

Sunday

Dear Prof Hetchcock,

I am waiting for the boat
for Corumbá due to leave 9
last night. It waits for the
train which was due at 2:40
^{pm.} yesterday. It is said to arrive
at 9 this morning, then the
boat goes. The "pontal"

(fresh water marsh) which
extends for many miles
eastward from Rio Paraguay
has given me pretty good
collecting - and most awful
torture. I have had two days

here, the first going east along
ry. which forms a causeway
across the marsh which I
waded into when I saw

something I wanted. New
for me are: Panicum the
bristly spikelet ally of *P. fasciculatum*
described by Mez; *fasciculatum*
itself (?); what looks like *fascic.*
var reticulatum, and another
ally; 2 Pasp of *virgata* group,
whales of things to dry; a
great Andropogon, which I
hope is *A. luxurians* Ekun;
Pennisetum nervosum (?), the
Pasp. Hackel called *var of*
ovale (which - dilatatum or
something else) which I have
in herb as *Pasp. paraguayense*;
it forms almost pure
stands in places along
Rio Paraguay; Panicum of
virgata group, what you call
P. tricholencoides I think;

Andropogon aff *saccharoides*; Trachypogon with enormously long
ligular-auricles - hope it is *T.*
macroglossus; Pasp. *fasciculatum*
(awfully glad to see that myself)
great colonies of sterile plants
along the river with rather
small flowering plants on
the bank; *Eriopogon argutus* (may
have had this in 1924-25). The
big things are so bulky I
did not take much collected
before in Matto Grosso. I got
very large plants of *Panicum*
~~*hypoleucum*~~ the place for it here
near Bolivia; *Borghastrium*
parviflorum; *Marrisuris fasciculata*;
Cenchrus myosuroides and others
I had had in Matto Grosso. The
first day, Friday, I went ~~west~~ east.

The midges and mosquitoes were something terrible and to go down into the marsh and stir up more of them, literally clouds of them, took all the nerve I had. I was in such torment I took to singing to steady my nerves. It occurred to me that if anyone saw me wading into the marsh and coming out in a cloud of mosquitoes and midges singing "The strife is over the battle won" he would have good reason to think I was crazy. One might think my singing might scare off the torments but it didn't, but it did ^{quiet} allay my nerves a bit. I'm so peppered with bites I'll be glad to get out of Matto Grosso. I hope

MARCH 2, 1930

Corumbá will repay the time it takes to get there. The mosquitoes are feasting on my leg now and distracting my mind. There is a German sitting here talking to me, too. He is going to Corumbá. I think he is from Paraguay. He and his son don't think much of Brazil, especially the Essen here. But this hotel is so much less filthy than the last one at Aquidauana that I'm satisfied.

I hope to leave Corumbá next Thursday, but if there is an earlier boat I'll take that, unless the collecting is very good. There were some good spots west of Aquidauana I'd like to stop, but there is no

stopping less than 3 days. This side of Campo Grande there are but 2 trains a week, so I shall not stop anywhere.

The German is asking prices of everything in U.S. and comparing them with Germany and here.

On board, 9:15 and the train has got arrived. It takes 18 hours to reach Curitiba, so we get there early in the morning, in time for a day's botanizing. I have my presses in the sun here on deck.

I said I hoped the mosquitoes were not so bad on the river. The German says they are *nach schlechter!* I have my mosquito bed net along. That is my life-saver. Most hotels have nets but they are mostly too

small. They say the train is coming!

Botanizing along the Parana river and washing the mud from roots in the river gives me a feeling of wide travel I haven't had before. It is 107 meters alt. at Pto Esperanca - I guess this water ^(It doesn't) goes over Iguassu falls, the map isn't quite straight in my head. It is a beautiful stream; just here it flows west, making a turn a few kilometers down stream. - In my letter on Downey I mentioned birds but forgot the toucan. We saw one flying quite close, nearly half beak. 6 p.m. It has been a wonderful day on the river. Just here *Parafasciulatum* stretches eastward almost to the horizon, but there has been much

* Mr. Clark says there is no fall, alt 107 must be error.

brush and some trees in the marsh. There have been distant hills both sides of the river - on the west side all the way. I looked at the map and see Rio Paraguay has nothing to do with Iguaçu - that is Paraná. I wonder where Paragua^{Rio} does fall.* I have seen many birds, gray herons, white herons, two tinamous again, near enough to see they are like storks. I saw a wild turkey and three jacaras (crocodiles) these pointed out by some young men. I heard them say "peru" and point and I saw the turkey. The river is about the color of the Potomac or browner, but is silvery now the sun is low. I have seen many small floating islands and one good sized one with small shrubs on it. and I saw a few cactus in the margin - I had seen two big ones east of Porto Esperança.