When was last check sent?

Check #200 sent 7 Sept 1911

When were films sent? Sept 11-1911

When was commis-

sion notified about (Bartsch's effect?)

Find no record of this
To the Secretary, Smithsonian Institution.

Washington D.C.

Culbren L. Z., Sept. 15, 1911.

Dear Sir: This is merely to let you know that I returned on the 13th of my trip along the coast of San Blas, which was quite successful botanically speaking, except for the loss of my pocket lens.

I went as far as Cape Tribuna, about 280 miles east from Colón and stayed for 13 days at Port Obaldia exploring the surrounding forests, the character of which was found to be quite different of even those around Nombre de Dios.

My collection at Port Obaldia consists of 151 species, mostly trees or shrubs, most of which new to the Panamanian flora and many new to science. Also a good number of land-shells and a few other zoological specimens were obtained, and a good start made for a vocabulary of the Chocó language. My ethnological observations tend to undo certain assertions contained in Mrs. Bell's paper, and many rectifications to the nomenclature of the coast have also been made.

In my next letter I hope to send you a full report, as well as my accounts to date. My funds are exhausted and I shall not be able to undertake any new expedition until a remittance is made. I am also in urgent need of the films ordered in my last letter,
and which should be sent by mail and not by express, so as to avoid delay. I received the plates to day and had to pay $1.00 in fees and duty.

I beg to mention, at the request of the Chairman's secretary, that there are here quite a number of boxes, as well as letters and other mail matter, addressed to Mr. Paul Bartus, who does not seem to be on the Thames. What disposition should be made of these things?

By this same mail, I send 13 parcels containing part of the collections made lately. The balance will go by next steamer. In five parcels, I have also remitted directly to the Forest Service 14 samples of wood, duplicates of which are kept here to be sent in freight to the Smithsonian Institution.

Respectfully,

[Signature]

A. [Signature]
Sultra 6 31, September 18th 1911

To the Secretary, Smithsonian Institution,
Washington D.C.

Sir:—In accordance with your instructions, I have the honor to report as follows upon the progress of my work during the few weeks:

I left here again on August 21st, reaching Tato, or Nombre de Dios, on the following day at noon. My object in going there was to wait for the gasoline yacht that carries the mails along the coast, one about every two weeks. As I found out that I would have to wait at least two days, I immediately engaged two men, to continue my exploration of the very interesting country surrounding Tato. On the 23rd I made a complementary excursion along the ridge that leads inland from the "Loma de la Glorie", a really "glorious" locality from the point of view of botany, rising just back of Tato, between the Nombre de Dios and Tato Rivers. On the 24th I went by sea to the "Rio Indio de Tato", which empties into a spacious bay west of Nombre de Dios. There I observed a very remarkable feature of the mangrove formation and also met for the first time in Panama with Macao palms, the investigation of which has been especially recommended by Mr. F. F. Cook, our Director, on the group. One is the Rapia palm, a species characteristic of the wet swamps, and the origin is to be sought on the western shores...
of Africa, as is that of the Ditis palm, also a common species of the same genus. The Ditis has been traced from Brazil all along the Spanish main up to Honduras and in Nicaragua it penetrates inland as far as the mouth of the Rio Toa in the Lake of Granada. Unfortunately, this plant was not in condition to be collected.

The Manicaria racemosa Gaerth., another palm of rather curious habits was also found to grow at Rio Indie. Seemann cites it only from Southern Darien, but my investigations show that it grows commonly at the mouth of rivers all along the San Blas coast. It seems to be a near relative to Phytocarpus, the Ferrugin. Palm, and I expect this is the main reason why Prof. Doutt is anxious to be provided with good materials for study. His wishes are nearly satisfied, as I have been able to collect a leaf, flowers & fruit, and also to take the necessary notes on the station and general characteristics of that palm. Unfortunately, my pictures were a failure, as were all those I took that day (small).

The third palm is a Boterocaryum, the species of which is not determined. Seemann collected specimens which he attributes with doubt to that genus and this is the only indication we had heretofore of the presence of the same in Panama. We have now sufficient materials to get to definite conclusions. This species is covered all over with murderous thorns and it is quite an undertaking to approach it. The natives call it pina-pina, an expression of the Cuna language, as I find, which means "little by little," or "slowly," and referring without doubt to the precautions to be taken to approach that palm.
on our return trip, we were surprised at sea by a heavy squall, escaping to go to the bottom only by desperate efforts. The sea is here densely set with shoals among which it is difficult to find a way even in calm weather. Our tiny dugout, about 12 feet long, was for a good hour the play-thing of the infuriated waves and but for the strength and cleverness of my two native helpers, it is doubtful whether I should be here to report on the incident. I do not wish to comment on my various emotions and feelings, but since I have been thinking how frequent such hairbreadth escapes occur in the life of a sea explorer and how easy it would be for one of us to write sensational stories without referring to our imagination and without looking for the ridiculous and impossible situations too often described in certain magazines which profess to keep up a high standard.

On the 25th at noon, the "transformed" Boston pleasure yacht "Elsmere", now the Panamanian mail steamer, arrived at Tato and I immediately took passage on her. Among the passengers, she brought Mr. Christopherson, a teacher of Natural History at the Clinton High School, who had asked me repeatedly to employ him during his vacations. Although I had in no way given my consent to his coming with me, it would have been a little hard to disappoint him, and moreover it expected his services would be of use. I was not in situation to pay him a salary, but as I had to dismiss my servant on the g. 20th, I thought there would be no objection to paying Mr. Christopherson at the rate of $20 a month, besides his transfer.
tation and other living expenses, his employment being limited to the present trips.

On the same day 25th the "Union" resumed its voyage, arriving at nightfall at Sta. Isabel, which is, as I explained in a former letter, the last "civilized" settlement along the coast. It is a negro village, and the only evident sign of civilization are in fact the presence of a Panamanian Police Inspector, Schools for boys and girls that are elementary under all respects, and a "commissary", where tabasco liquors constitute the principal article of commerce, being mostly fermented for coconuts, ivory nuts or talita. To the

risk of offending your feelings, I cannot resist to the desire of giving you a testimony of the high standard of civilization current in this its last foothold along the coast of San Blas, in the form of the following "Decree no. 2 of February 12th 1911", put on the walls of all public edifices in the Town:

"The Police Inspector of the district of Sta. Isabel, in use of his legal attributions and considering

that it has become very necessary that the young ladies and ladies of this town acknowledge fully that the present times are of progress and of civilization, and that all habits and customs indicating retrogression should be forbidden.

decrees

Art. 1. It is expressly forbidden to said young ladies and ladies to transit through the streets "carrying with them their breasts uncoveredly". Those shall be covered with a waist or a handkerchief.

Art. 2. Any person that in any way should go against the present ruling, shall be punished by a fine of 5 pesos the first time and twice that amount the second time.

The Police Inspector

H. Rafael Chavez

The Secretary

H. Francisco Alarcon
We left Sta. Isabela again at about 1 am. on the 26th, entering a region not yet visited by the and, in fact, terra incognita, as far as its natural productions are concerned. We followed first the northern shore of the peninsula of Mandinga, the interior of which has never been investigated by any white man and is full of wonders according to the natives. There is a very extensive lake, emptying partly in the deep bay of Escritanos, partly through a branch of Rio Sta. Isabela. This lake, a paradise for alligators and mosquitoes, is hidden among precipe hills, densely covered with forests, and in which there are deep caves. The mention of these by the captain of the "Urnio", made me ask if there was any tradition about the negroes who form the bulk of the population having ever lived in underground habitations. Here again, as on former occasions, this fact, cited by Mrs Bell in her paper on "The republic of Panama and its people," was absolutely denied. As the tradition has it, the forefathers of the present negro population were slaves escaped from Porto Bello. They founded a large village in the upper valley of Sta. Isabela, and in the middle of hostile Indians who later drove them to the coast, along which they gradually extended westward. They sustained a perpetual warfare with the Indians but seem to have been very little bothered by the Spaniards, who had enough to do protecting Porto Bello and the road to Panama City. Little by little these negroes drove away the Indians from their coco plantations along the coast as far as the Sta. Catalina River, east of Rio Escritanos. And they are still encroaching to day. But the Indians object being thus displaced and, up to about 1835, there were frequent fights between the invaders and the legitimate occupants of the land. The former would go along the coast, scare away the families of the latter, and steal their coconuts and their canoes. Then the Indians would
reach the negro villages from inland, marching along the foot
of the hills, and sack and burn them. At Toto, the people place
the last attack at 1884 or 1885.

After reaching the Punta de San Blas, we entered the very
dangerous Archipelago of the Mandingas, or of San Blas, where
hundreds of shoals and islands, mostly diminish, are scattered,
to the great inconvenience of navigation. We never would have
gone through, it being night time, without the help of several
experimented San Blas Indians, who were on board as passenger.
Among them was Charles Robinson, the supreme authority
on this coast as representing the Panamanian Government.
As a boy about 6 years old, Robinson was taken to the States by
a trader, receiving there a good education. He came back when
about 20 years old, to live in his native village, Marga
.The Republic of Panama invested him with the authority of a
chief, but there seem to be another supreme cacique, whose
title is hereditary and who lives, it is said, at Algandi: in
every village there seem to be two factions, the one supporting
Robinson, the other Tmajaquinda, the hereditary chieftain;
the former well inclined toward strangers, the other quite
adverse to them. And this is what makes it so difficult
for a foreigner to penetrate among them. On account of
the factional spirit, the Indians west of Algandi acknowledge
the Panamanian flag, while those farther down the
coast, including Algandi hoist the Colombian flag as soon
as any large vessel approaches their shore.

We reached Marga at dawn and did not stop there
long enough to go ashore. My first intention had been
to stay there, but Charles Robinson could not be made
give his approval to the plan, not because he was formally unwilling as I could well see, but because he felt uncertain about the feelings of his people. For botanical purposes, I realized that Port Orford would do just as well, if not better, so when we arrived at Nargana I had already made up my mind to go on to the end of the yards arm.

Nargana is a large village on two small islands about 300 m. apart, and fronting the mouth of the Diablo R. or Tiguana. The big houses are closely packed together and cover the whole surface of both islands. Each house is about 50 m. long by 10 m. broad, with a gable roof 10 to 12 m. high at the middle ridge. That roof, covered with palm thatch, is supported by posts that divide the interior in many square yards, each of which is occupied, as it seems, by one family. These squares are disposed in two lateral rows, separated by a common passage just under the highest part of the roof. The side walls, made of split palm trunks, bamboo and other canes or sticks and not over 2 m. high. The doors are at both ends, just under the gable and very low for an American or European of average size, as the San Blas Indians themselves are seldom over 5 ft. high.

I was not able to investigate much of the details of the interior arrangement of the houses: so far it could be judged, each of them shelters from 14 to 20 families, with an average number of 5 individuals each. This type of house is not general on the coast; at Urmila for instance, it was found that each family
had its own above.

The Nargana Indians own most of the innumerable coconut-palm-covered islands around their village, and their cornfields, ricefields and other plantations are on the mainland along the Tiguala River. Their village is the only one where priests, of the Roman Catholic Church, are allowed, and one of them, Father Gazo, has resided there for many years, but I was told with few practical results. Father Gazo seems to be quite familiar with the Tule or Luna language, and it would be worth the while for the Bureau of Ethnology to investigate about the possibility of obtaining from him the necessary elements for a thorough study of that language, the place of which has never been clearly settled. I have been myself one of the advocates of the theory that there is a close relationship between the Indians of the Central-American coast of the Atlantic, including Panama and the Chibcha stock, but I am sorry to confess that the personal observations that I have been able to make on that trip go strongly again an idea that rested mainly on Pinart's very unreliable vocabulary.

At about 9 am. we sailed from Nargana, continuing our route eastward in close proximity of the coast. The day was a glorious one, cloudless and
full of the wonderful Tropical light. And the
country in sight, made more clear and beautiful
by the former could only awake the explorer's desire
to be given the opportunity to see it at shorter range.
At times the forest-covered hills reach to the shore,
at others the country is flat and open where large
rivers descend from the mountains. The divide bet-
 tween the Pacific and the Atlantic, however, is always
close to this coast, so that there is really no space
for the development of any considerable water system.
The numerous gaps that appear on the main ridge
indicate so many facilities of transit from the Atlan-
tic to the extensive drainage basins of the Bayano and
Chucunaque rivers. The highest, dome-shaped mountains,
scarcely reach 1800m. of altitude and many of the
passes must be below 300m.

Every time we have the opportunity to compare our
map with the details of the coast, we can convince
ourselves of the imperfection of the former. The
coast line is mostly wrong and the nomenclature
needs a thorough revision. Topographic mistakes
cannot very well be indicated in writing, so I will
cite only one case, and not the most important.
Pinos Island is drawn as an elongated body of land,
about twice as long as it is broad. In fact, it is
almost perfectly circular, so as to appear from
every side the same size and with the characteristic aspect to which it owes its Indian name Tukapak, i.e., Whale Island. The name Pinto Island is in no way due to the presence of pinto there. Pino in the language of the coast Indians means the Esparé (= Anacardium Rhinocarpus), a well-known tree of Tropical America, which forms the main element of the primeval forests of the Island.

As to the nomenclature of the several places along the coast, every indigenous name has its significance and the mode of their formation is very uniform, two circumstances that make it easy to discover any misspelling. Most of those named end in "gandi" and not a small number in "gana." This last word means "many" and is the plural suffix or post-fix, in the Tuna language. Thus Pino-gana means "a place of many Anacardii;" nargana is a species of palm, Nargana is the place where this certain palm is abundant, etc. Si means water or river and gandi is a contraction of "gana-di." Celi or Atgali means mangrove. Atgandi is the river of the many mangroves. But many of these names cannot be translated as they are written in the map. Thus, we should have:

Pingo-gandi = river of many Anacardii, instead of Atgandi.
Portugandi = River of many partridges, and not Portugandii
Napagandi = " " " calabashes, " " Navagandi
Cuigandi = " " " Casavilloria trees " " Cuigandi

Further we should have
Azachucena = Bay of the dog's nose, and not Anachucuna
Chitinaica = Mouth of Cacao River, " " Chotinaca
Chachardii = River of an unknown tree, " " Sasardi

and so on. I have a long list of local names and their signification, together with other cartographical corrections, which I will give complete later on.

The while 26th of August we travelled along the coast meeting many of the native dugouts and without getting tired of the ever interesting panoramas passing under our eyes. We reached Calendonia Bay before dark, from which place the sea is clear of shoals and islands to Port Ofaldia, our destination, which we reached at 18h30pm. the same day.

Port Ofaldia is a recently established frontier post of the Panamanian Government, situated more or less where the village of Armila, near Cape Telumo, stands on the Map of the War Department. It is approximately at 160 nautical miles to the southeast of
Colm and the ground on which it stands has been taken from the Armila Indians, notwithstanding their protests. But for the barrack, the schoolhouse and the residence of the officer in charge, it is an agglomeration of some 25 miserable huts and huts, inhabited mostly by Colomtian negroes and a few Panamanians deported there for being invertebrate drunkards. The armed force of 20 men is composed of 18 Colombians, 1 Spaniard and 1 American; it is to be borne in mind that this is a Panamanian garrison on the borders of Colombia! As these men of War are quite inactive, they all suffer with malaria or some other disease, and the remainder of the people, when in the village, spend their time in drinking bouts, talks and the celebration of their religious feasts, which occur 3 to 4 times a week.

Mr. Navas, the founder of Port Obaldia and its chief received us with every courtesy and did everything in his power to be of use to me during the 13 days I spent there or near by. The school-house was put at my disposal and as it was relatively sheltered from the nocturnal
rains, it was really a bore to have it, even if I
had to spend most of my nights fighting the ants!

I lost no time in starting the exploration of the sur-
rounding forests, the composition of which is remarkably dis-
tinct from that of those around Sta. Isabella or Nombre de
Diós. The Mimusops or Balata tree is still the dominating
tree, but certain orders, as the Moraceae and Leucaëae,
acquire here an unexpected importance. Among the first, I
discovered a new Castilla, which however does not yield rubber,
and I was given the opportunity to get acquainted with the
Galacto dendron or Cow-milk tree, as well as with several
other species some of which will certainly prove new to
science. Of the Leucaëaeae, represented in the Canal Zone
by one or two species only, I observed and collected six species,
a few of which have fine and valuable wood. I obtained
the fruit or pyxid of two monkey-pots tree and was surpris-
et to learn that the native figures absolutely the nu-
tritional value of the nuts, similar to the Brazil nut.

Many other highly interesting trees were collected, among
them a Sapotacea which must be undescribed, a new
Sapinum, the cerillo, economically important, etc. Referring
again to the nispero or balata tree, I have to modify
some of my antecedent statements: the Pan Blas Indians
do not occupy themselves with the extraction of the balata
gum. The Florida Porto Bello people simply feed the standing
trees, but the Balenque and Sta. Isabelia negroes fill the
same, converting them outright. At Porto Valdés, the
balata trade is carried on by a few St. Lucia negroes,
and the forests still hide large fortunes in that line.

The Younger Palm is also an important product of this district. A remarkable feature is that while around Tarot that palm assumes universally a creeping habit, it raises from one to seven meters in the forests of Armila and Port Ophaldon. I am not familiar enough with the Palms to decide whether we have to do with distinct species or if the difference in habitat is simply the result of distinct conditions of environment. But I was able to collect satisfactory materials, at least of the Port Ophaldon form and it is to be expected that Mr. BroK, our able specialist for this group, will succeed in solving the question. The Phytolacca-graves are here illimitated in extension and people the ground under the high forest trees to the almost complete exclusion of the underbrush. Indians & Negroes spend part of their lives in those forests collecting the nuts from the ground, the ones on the trees are generally too soft to be of any commercial value.

Almost daily I had opportunities to converse and get acquainted with Armila, Pits and Shiatinarque Indians, who were busy fishing along the coast. I found them a lot very superior to the so-called civilized negroes who leave shamelessly of what they can extract from the legitimate owners of the soil. All these Indians are healthy-looking, of low stature but strongly built. Their hair is not short and they are fearless. They dress like all the natives.
lie, with a cotton shirt, usually blue, and pants of the same color, but of stronger materials. When they have left, the form is much smaller than the head of the woman, on the top of which it is awkwardly perched.

At Alamiloa, the first Indian village west of Port Ochoa, I had for the first time the occasion to examine well a few women, being now in position to refute or modify several of Mrs. Bell's statements.

First of all, these women cannot be said to be ugly as a rule and many of them could even be called pretty, but for their cropped hair and the gold nose rings that is universally worn by them, being inserted at a very tender age. At Nargona I saw about 50 little girls congregated in the shed used as a church. It was pretty dark and while the intelligent little faces were only dimly distinguishable, the gold rings hanging from the tiny noses formed ting bright lines in the semi-darkness. These rings have all the same shape and weight and are made in the villages by native goldsmiths with gold collected in the alluvium of the rivers or bought outside. These rings are also in the trade. In their ears, the married women often wear large gold discs hung in the same way the earrings of our white ladies are, and their throat is adorned with a few rows of cheap beads or red coral. These, however, seem to be an exception, the neck being in most cases quite free. I had no time nor opportunity to investigate thoroughly their physical characters, but my impression is that both men and women differ in many details
of their body from the Santa Marta and Costa Rica Indians, both of whom I am very well acquainted with. So if the Cuna Indians belong to the Chibchan stock, the Guaymies, Britri and other affiliated tribes in Costa Rica, Nicaragua and Honduras do not. And if these latter are really the farthest remnants of a Chibchan migration or expansion, the links showing the route of said migration should be sought for in Southern Darien or elsewhere. My ideas on the subject have been wholly upset by all I have seen on the San Blas coast and I could not today say what I wrote formerly on the question.

These San Blas Indians are all small, and the body is usually developed in comparison with the limbs, being long and broad. The nose is very long and often aquiline. The head is mostly round and large. The color is between 3 and 5, or between dark reddish-brown & copper-colored, for the men, but commonly much lighter in women. When in a house at Armila, I witnessed the nursing of a baby about 3 years of age. The mother sat down with her lower limbs wide open & the child stood between the last. Then the mother lifted her short chemise and the child caught one of the breasts with both hands & proceeded to take his meal. I had plenty of time to compare the color of the uncovered pectoral face with my skin-color scale and could see that it was very close to 7, i.e. yellowish white. The woman was between 30 or 35 years of age.
At Armila, I had also the opportunity to observe the wife of the chieflain, who is evidently the village's belle. Besides wearing the usual nose ring and ear discs, her legs were encased in three bands, about 3 in. broad and made of beads of several colors. These ornaments must have been put on when the calves were still small, as these were now divided in two separate & bulging parts, as shown in the sketch (which is exaggerated). She had also a kind of broad cuff on each arm above the wrist, and a narrower one at the elbow, just as those seen in the accompanying pictures of Urganti women. The chieflain's wife had on her gala garments of applique work, both skirt and waist, just as those described by Mrs Bell. No woman was seen with painted face and all had beautiful, well kept white teeth.

At Port Ocheldia, the boys of the village we saw had a thin straight blue line, traced with jagua sap or dye, along the ridge of their nose, and a "tele," or medicine man of the same village had evidently range (acoke dye) on his prominent cheeks, but these were the only instances of face painting.

1) These 3 leg bands were found together, by three longitudinal bands, 2 lateral ones and one on the back or posterior part; in all other instances they lacked this detail.
In other women I had occasion to notice, the garments were of simpler materials. The innermost visible piece is a short skirt, red or blue, extending from the hips to the knee. The upper part of the body is covered with a loose sleeve, the sleeves of which do not reach the elbow. Over these two pieces there is a second skirt, reaching from the waist to the ankles. Both skirts consist of a piece of calico, each being 6 to 8 yards long. As stated, the preferred colors are red and blue, with white stripes or other designs. These details are more or less visible in the enclosed pictures, which are snapshots and so are unfortunately underestimated. It will be noticed too that the youngest girl has long hair, this being the only case I have seen, that the baby girl, about 18 months old, has already her mothering and that the youngest boy wears several rows of teeth. Larger boys seen elsewhere wore in their ears the same wires often seen in women, but they were never worn by male adults.

At Armila and Pito, the houses were smaller than those seen at Nargana and sheltered only one or two families each. There seem to be numerous local variations, not only in the way of building the houses, but also in customs, clothing and language.

It has often been said that it is impossible to travel from one coast to the other in the region inhabited by the Indians. From what information I have been able to gather, there is a wild tribe, hostile to both coast Indians and non-Indians, occupying the headwaters of the Bayamo & Chucumague Rivers and the corresponding part of the northern water shed. But the transit is free between Sta. Feilda and the
Mamani River to the west, and from Pito to the Mambrillo River to the east, travellers passing in one day from the San Blas coast to the southern watershed.

The language is the same, with slight variations, all along the coast. Besides collecting on my trip several hundred words, I have taught back a young boy-servant, with whom I am continuing the study of the language.

I wish to state me more fact about funerals, as Mrs. Bell's description seems to be not very clear. A big square ditch, about 3 x 3 x 2 m. is dug, and six stakes are planted at about 1.50 from the bottom at 2 diagonally opposed angles. On these stakes the hammock of the deceased, containing his extended body, is hung, and provisions are laid by the stake on the bottom of the hole. Then the grave is covered by an horizontal roof, the upper surface of which, on a level with the surrounding surface, is covered with a thick layer of earth.

On September 9th we started on our return trip which was almost free of incidents. Made a second short visit at Nargana and at Isabella, had the opportunity to take the isolated pictures, the first ever taken of San Blas women. The permission from the husband cost $1.25 and I am sorry not to have been more successful.
On September 13th I reached here again, all my collections in good shape, and satisfied to have succeeded relatively well in this first flying trip of a naturalist along the San Blas Coast.

I believe, Mr Secretary, that I have now given you the principal incidents and the leading facts of my recent expedition to the San Blas Coast. Of course, numerous notes and data, which I cannot reproduce here, complement the latter and I shall be glad to prepare them for further use if you deem it necessary. I have said enough to show that both botanically and from the point of view of ethnology the country just visited is an unexplored field of the greatest importance and as I believe myself peculiarly fitted for this work, being thoroughly acclimatized, well acquainted with the indispensable Spanish language, experienced in travelling and otherwise qualified by my previous botanical and ethnographic work, I think it a pity that I should go back to Washington with three months, there to follow my routine work in the Agriculture Department. I feel so much regret at the thought of abandoning soon the work so successfully started, that I have been thinking seriously in accepting a position which would allow me the opportunity of staying here, and my only
incentive in going back is that I will be put in position to work up myself the largest part of my collections and that the Smithsonian Institution will publish the results in a form worth of their value.

I have heard that a general exploration of the forests of South America is to be undertaken under the auspices of the Smithsonian Institution. If such should be the case, I wish to be remembered at the time of recruiting the personnel.

This has taken so much time to write that I have had no time to prepare my accounts. I hope to be able to send them by next mail. I have received a check for $200, for which a voucher has been returned. Also all the plates (15 dozen) and 20 rolls of 5x4 films, 6 exposures each. As it takes such a long time for these materials to come, please order at once 20 more rolls and 8 dozen Cramer plates 5x8. It would also make things easier for me if a new remittance of $200 was here about October 15th.

My next trip will be either to Nargana on the Pan Blas coast, or to Chape and up the Bayano river. I expect to be pretty much hampered by the rain during October and November. Mr. Hitchcock is leaving to-morrow for Chiriqui.
I mailed today 12 packages, containing nearly the balance of my recent collections. By a next mail I shall try and send my films and plates, although I fear the latter may get broken if going by first parcel.

I think I told you that my pocket lens was lost, or rather stolen, on the trip back from Ofalda. I feel very much the need of a new one, of the same makers and strength, but cannot specify letter. I do know only that it was bought at Bausch & Lomb's and paid for by the Smithsonian.

Please pardon the length and incoherence of this letter and believe me

very respectfully

[Signature]
Dear Professor Pittier:

I beg leave to acknowledge the receipt of your communication of September 18, giving a very entertaining account of your recent explorations, which will be brought to the attention of Secretary Walcott on his return to Washington. Meanwhile I shall give an opportunity to the staff to read your interesting observations on the Indians and plants of the localities visited.

I enclose a check for $200. as you request. A duplicate of your pocket lens has been purchased and is sent by registered mail, and the photographic plates and films have been ordered and will be sent immediately on their receipt.

The effort to advance the civilization of the natives of Sta. Isabela, as evidenced by the decree of the Inspector of Police of that district, has been noted with much interest.

Very truly yours,

R. Rathbun
Acting Secretary.

Professor H. Pittier,
Smithsonian Panama Expedition,
Culebra, Canal Zone.
October 31, 1911.

Dear Prof. Pittier:

I returned from the Canadian Rockies about the middle of October and have been gradually clearing up the business that accumulated during the summer.

I have read with interest your various reports and especially that of September 19, last, in which you express a desire to continue your botanical investigations for another year. I have given this careful consideration but find that it is impossible, for several reasons, to give you a definite response at this time. It may be several weeks before it is possible for me to do so. I shall, however, let you know as soon as the matter can be finally settled.

Very truly yours,

CHAS. D. WALCOTT.
Secretary.

Prof. H. Pittier,
Smithsonian Expedition,
Culebra, Canal Zone.
To Mr. Darcy:

Very good. Better follow up his request to make a note for the Taetana that he wants to go on with his work.

J.W.
SMITHSONIAN INSTITUTION
Washington, D. C., 1911

Refer to Bureau of AmEth.

Div. of Anthropology Plants

To be returned to Secretary's Office after noting.

Read with instant gratitude.

Read and forward copies for files.
Referred to the Head Curator, Department of Anthropology, for data for reply by Assistant Secretary.

Chief of Correspondence and Documents.

Copied 10-21-11
E.S.

[Please return this letter within 7 days, either with complete data for reply, or at least with sufficient information for a temporary answer.]
The Secretary—

Dr. True asked me to call your attention to Mr. Pittier’s statements (p. 20) about continuing his investigations.

Yours,
To file

3 Photos held by J.W.C.
McLanney

Noted by Mr.

Holmes -

Mr.
To the Secretary, Smithsonian Institution,

Dear Sir: Mr. C. S. Well, of the Forest Service, has transmitted me a copy of your note of Sept. 1st, to the Chief of said Service, written at my request but containing, very likely as account of the lack of clearance in my own explanation of the matter, a few misstatements that I wish to correct.

The wood collection that I have been forming consists of 5000 specimens incorporated in the general plant collection and every one of which has been sent to your Office, and of 20 sets of wood samples, one of which has been sent by mail, in sets of wood samples, one of which has been sent by mail, in immediate after collection, to the Forest Service, and the other is kept here, to be sent in freight with other heavy materials at the end of the campaign. The study of wood structure is better made on living trees and this is why a set has been forwarded to Dr. Well in fresh specimens. No part of the botanical collection has been distributed by me.

It is only fair that the collection of woods sent to the
Forest Service he added to it in all property, if Mr. McCullough's effort to collaborate with one in the preparation of a paper on the tropical trees of Panama. I intend also, to ask you later to have a set of all corresponding botanical specimens presented to the Forest Herbarium, as I have taken good care to always collect sufficient materials.

Very respectfully,

[Signature]
August 31, 1911.

For Mr. Benedict:

Professor H. Pittier announces in a letter of August 20th, from Culebra, Canal Zone, the shipment by mail of 5 packages of dried specimens, and 1 of alcoholic specimens, which he asks be opened and well cared for when received.

Respectfully,

H. W. DORSEY

Chief Clerk.

Mr. J. E. Benedict,

Acting Head Curator, Department of Biology,
U.S. National Museum.
To the Secretary,
Smithsonian Institution
Washington D.C.

Dear Sir:

I came back on Friday 18th from Nombre de Dios, after spending about three weeks in the exploration of the country, mainly, coastal plain interspersed with low, isolated hills, between the last named place and Puerto Escritanos, on the border of the Indian territory of San Blas. Your letters of July 26th and 29th, the first including a check for $200, reached me at Nombre de Dios. I was sorry to learn that my accounts were badly summed up, and I have made quite an effort lately to have every expense properly receipted and entered immediately in my notebook. I expect your balance account is O.K., but I shall not be able to send any monthly account until I return from the San Blas coast. I find that I have presently about $100 left, and I beg you therefore to send me another check of $200 by one of the next mails.

The country visited lately was found exceedingly interesting. The number of species collected is not very large, it is true, but most species are new to my collection.
On the back of Nuestra de Dios, or rather Tato, there is a heavily timbered hill called "Loma de la Gloria." From the American settlement, distant about one mile, I located about a dozen of trees in bloom, which I would then hunt with the help of my guides and fell. Two or three of them are absolutely new to me and I cannot even place them in their families; other appear to be co-types of species known only from Panama, and all are used in one way or other in the native industry. So I collected not only botanical specimens, but also samples of wood, and the mention of this reminds me that I did never mention the fact that I have taken such samples ever since I came down. There one set here and the fresh specimens of the other set have been sent directly to the Forest Service, as directed by Mr. E. D. Mead, the Assistant dendrologist, so as to be studied in their living condition. That collection of wood amounts presently to about 50 complete numbers (i.e. including a wood sample, leaves & flowers or fruits taken from the same individual) and though small, it is without doubt the largest one made on the Isthmus. I wish you would let it be known to the Forest Service that the wood samples are sent to them as requested by Mr. Mead, with the understanding that they are to be reported upon by myself and Dr. Mead, in a single paper to be published by the Smithsonian Institution as a part of the results of the present work. It would be advisable, I think, to take such step, so as to avoid future misunderstandings.
In my first visit to Númido de Dios, I made an excursion up the Fate Valley, interesting on account of its very extensive groves of Ivory-Nut Palms. I repeated the trip, extending it to about 52 miles into the interior, up to the foot of the high hills, without however reaching the upper limit of the Ivory Palm belt. That palm grows only on the river bottoms with rich clayey sands, and under the shade of many species of high trees, among which I recognized a *Hoaana*, a *Minuosa*, a *Coccoloba*, and several others as the *Iguanero*, *Almendro*, etc., not yet botanically identified. In these same forests I was lucky enough to find again the *Casera* or *Ramaguera*, incm. *Olmédia*, which B. *Seemann* in 1846, placed it with doubt in the genus *Olmédia*, but I think it will have to constitute a new genus. This tree is of a great economic importance among the Indians, who use the fiber to manufacture sails for their canoes, garments and mats to sleep upon. So says *Seemann*, but to-day the sails are made of common canvas and the garments from fabrics sold by the traders. Nevertheless, the tree is very interesting.

The gum of the *Nispero* tree, a *Minuosa*, is now exported from this country in very large and increasing quantities. The identity of that gum with the *balata* of British Guiana, extensively used for the insolation of electrical
Wires, was discovered about 6 years ago by a Mr. Wilson, a trader of the San Blas coast. Since the exportation of this new product from Panama has been on a rapid increase. I have studied the way the milk is collected and prepared. West of Mandiga Bay, the trees are felled in the same way the Castilla trees are, but I am told that the Indians fell the trees and tap them on the ground, a process that will bring a quick destruction of that useful tree.

In these same forests there are many interesting palms that I could not collect on account of their large size, and two cacao (Theobroma) species, one of which, a medium sized tree, seems to be new to science.

The coast belt, from Nombre de Dios and bay to Puerto Escritanos is an almost continuous Coconut Palm plantation, interrupted only at a few places by large estuaries and mangrove patches. Coconuts are, with the Benny nut, and the salata gum, the principal export products of the country.

The villages, rather numerous, are scattered along the coast, their thatch and cane huts regularly disposed in long parallel rows facing the beach. Some of these villages, as Viento Frio and Culebra, owe their existence to former manganese mines, to-day abandoned.

The whole zone is a negro country, settled originally by slaves escaped from Porto Bello. But as a general rule, these negroes are clean, laborious and rather
prosperms. Each family owns its house on the beach, and somewhere inland in the bush its rice fields, banana plantations and patches of cassava and yuca. These give them their food. The other necessaries of life are obtained from the sale of coconuts (selling to-day at $3.40 per thousand), iromuts and talata. Life is so simple among them and the requisites for food, clothing, pleasures, etc., so few, that the necessity for money scarcely exists. So even though labor is plenty, no large enterprise would be likely to succeed in this regim, at least for the present.

I took a good series of pictures, which I developed myself here. As soon as I have had one copy of each printed for identification, I will send them. I have only one roll of the last films left, and I spend part of the day going from one place to another buying all those to be had to take along on my trip to San Blas. I regret not to have received the plates ordered sometime ago. Please send at the earliest opportunity twenty (20) rolls 5 x 4, of 6 exposures each, and 2 dozen plates 5 x 8, besides those ordered. Each dozen should go in its own tin box, each being ready made and on the market. I also need 2 gross, or about 200, envelopes for negatives 4 x 5 (or 5 x 4), and about 100 envelopes 5 x 8.

By this same mail I am sending 5 packages of
dried specimens, and one of alcohol speciments. Please see that they are opened and well cared for.

Before ending this letter I wish to let it states that the present Nombre de Dios is about one mile east of the site of the old Spanish town, destroyed about 1590. The native name of the former is Tafo, a word that may be of African origin. The old town site shows only small mounds, remains of the houses. Excavations made through a few of them by a former resident Physician of the T. C. C. have brought to light a few interesting objects and the place would be worth searching thoroughly.

I am told that when Col. Gilbert visited the coast of San Blas, in quest of good sand for the building of the Tibet dam, he first fixed his choice on the deposit at the mouth of a river in the California Bay. He tried to buy the right of exploitation from the Indian chiefs. But one of them, very old told him: We cannot sell you sand. He who made it, made it for the past generations, for the present ones and for the ones to come. How could we sell that in which we have only a life interest? So Col. Gilbert had to fix his choice on the Tafo sand.

Respectfully yours

[Signature]
Dear Prof. Pittier:

I have your letter of August 20, and enclose herewith a voucher and check for Two Hundred Dollars ($200.00), as you requested. Please receipt and return the voucher to the Institution.

I have read with much pleasure the account of your operations and of the interesting collections that you are making. I have, as you request, written to the Forester informing him of the shipment of the wood collection and of your wish that it is to be reported on jointly by yourself and Dr. Mell for publication by the Institution.

The twenty rolls of 4 x 5 films, six exposures each, and the two dozen 5 x 8 plates have been ordered and will be packed in tin boxes and shipped to you. The negative envelopes have also been ordered and will be forwarded to you by mail.

Trusting that you will meet with continued success.
and with best wishes, I am,

Very respectfully yours,

R. RATHBUN
Acting Secretary.

Prof. H. Pittier,
Smithsonian Expedition,
Culebra, Canal Zone.
Dear Sir:

I beg leave to enclose herewith an account for expenses incurred by Mr. D. F. MacDonald in connection with certain geological work in Costa Rica, presumably done for the Geological Survey, but the account for the expenses of which Mr. MacDonald has apparently transmitted to this Institution through mistake.

The only connection the Institution had with this matter was its authorization of Prof. Henry Pittier, who is at present engaged in botanical investigations for the Institution in the Canal Zone, to accompany Mr. MacDonald to Costa Rica for the purpose of indicating to him the localities where certain collections were made some years since.

Very respectfully yours,

F. W. TRUE.
Acting Secretary.

The Director,
U. S. Geological Survey,
Washington, D. C.
To the Secretary,

Smithsonian Institution

Washington D.C.

Sir: Without reply to my note of June 28th inst., I beg to enclose accounts for May and June, which I hope will be found correct.

I am sorry my expenses in Costa Rica ascended to such a large sum. But with the object to make effective the completion of partial data collected in that country during my residence, I had to make numerous trips, which would have been still more expensive but for the fact that I was received as a guest at most places. In San José, I disposed of the house of a friend, who is now abroad and had requested me to make myself at home, and had left orders to the purpose. I had also many invitations to dinner or supper, consequently the expense is in reality less than it would have been under ordinary circumstances, even though I was compelled to be very generous in the way of gratuities.
During my absence from the Zone, I had to keep my
servant at Culabra to aerate my outfit, dry plants and
so on, to small work. In May, I paid for his meals
only until I left, and then took other arrangements
with reference to his salary. From July 1st, I am to pay
him $25 a month, meals included, that is to say
about $7 less than I paid him formerly.

Since my return from Costa Rica, I have made nu-
merous excursions in the zone, with good results, and
also taken a trip to Nombre de Dios where I made
a rich haul of new and interesting things, regretting
only that the conservation of the material collected
should make it improper to stay but a few days.
The total expense of that trip has been about $25.

Returning to my account here is my balance
at date:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses May-June 237.13</td>
<td></td>
</tr>
<tr>
<td>Unaccounted for 43.15</td>
<td></td>
</tr>
<tr>
<td>Expenses from 1 to 15 July 49.61</td>
<td></td>
</tr>
<tr>
<td>Cash 72.01</td>
<td></td>
</tr>
<tr>
<td>Received to date 1100</td>
<td></td>
</tr>
<tr>
<td>Expenses to April 30, 698.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1100.00</td>
</tr>
</tbody>
</table>

Of course I am responsible for these $43.15 and
am still hopeful of finding where they have gone at least partially. As it is, I have now only about $70 available and the sending of a new check should not be delayed.

With the same mail, I am sending 7 parcels, viz. 4 packages of dry specimens and 3 boxes of alcoholic materials. I hope they will reach Washington in good condition. The outer envelope of the plant parcels should be removed, as the specimens are liable to have retained some dampness.

On the 19th inst. I started for a 5 days expedition up the Trinidad River, having engaged for that purpose 6 men and two boats. In August, I may go on a cruise along the San Blas coast, stopping at the principal points.

I have definitively renounced going back to Chiriqui for the present, as I have been able to convince myself that all plants and trees are on a vegetative period only, on the Pacific side, while many are flowering on the Caribbean side.

Respectfully,

[Signature]  

N. C. Titian
For Mr. Dorsey:

In examination of Mr. Pittier's account transmitted with his letter of July 17, I find he has made a mistake in addition of $10.00. Instead of $237.13, as claimed, it actually amounts to $247.13, for which I have given him credit. His account seems to be correct.

I have also given him credit for $6.50 covering some items from April 5 to July 12 which were omitted from his previous accounts, and to which Mr. Maxon called his attention in a letter dated July 7, 1911.

Mr. Pittier's account now stands as follows: He has received from the Institution, including a remittance of $200. in July and a transfer of advances to Mr. Maxon, a total of $1300; and including his accounts for May and June, together with the error in his favor of $10 and the $6.50, he has been credited with $951.73, leaving a balance due the Institution of $348.27.

Respectfully,

The Chief Clerk,
Smithsonian Institution. Accountant.
July 29, 1911.

Dear Sir:

Your report of July 17 is at hand. I presume that by the time this present letter reaches you, the Institution's communication of July 21, inclosing a check for $200.00, will have been received.

In relation to your statement of expenditures, the Accountant reports that you had made an error in addition of $10.00, so that instead of $237.13 as claimed, the account really amounts to $247.13, for which he has given you credit. He says also that the account seems to be correct. He has in addition given you credit for $6.50 covering some items from April 5 to July 12, which were omitted from your previous accounts, and concerning which Mr. Maxon wrote you on July 7, 1911. As your account now stands, you have received, including a transfer of advances to Mr. Maxon and the check of $200.00 sent you on the 21st instant, a total of $1,300.00; and you have been credited, including the errors above referred to, with the sum of $951.73; leaving a balance in your hands for expenses of $348.27.

The parcels you have sent on will be cared for as soon
as received.

The Institution fully appreciates the courtesies shown the members of the expedition by the officials at Panama and elsewhere, and has made formal acknowledgement to the Department, and it is with pleasure that I learn of the continuation of such courtesies to yourself.

Wishing you success in the work you are now planning,

I am,

Very respectfully yours,

F. W. TRUE.

Acting Secretary.

Professor H. Bittier,
Culebra, Canal Zone.

P.S. The photographic plates have been ordered from Lewis in New York and will be shipped to you in tin boxes as soon as received.
To the Secretary,
Smithsonian Institution
Washington D.C.

Dear Sir,

I just returned from my Rayano expedition, which was not quite as successful as I had hoped, on account of the extraordinary rain fall. By next mail, I will give you a full report, and touch a few other questions. At the same time I will answer Mr. Bruce's last communication with reference to my accounts. I went yesterday to Colón to get the duplicate of a receipt which seems to have been lost.

All considered, I think it would be useless, for several reasons, I shall explain, to ask the Agricultural Expost to continue my detail here for another year. But if you could obtain a continuance of time, say to the end of February or so, it would allow me to make a good investigation of South Panama, to visit the peninsulas of Oqueno, which is unknown botanically, and may be to wind up with a trip to Bocas del Toro. In my next letter, I hope to enclose a map showing what part of the country I have covered so far, and what should be done to complete my preliminary work.
If it can be so arranged, I will undertake the study of my collection and see to its prompt determination as soon as I am back in Washington, and when this is done to a certain extent, it may be possible to come back and undertake some complementary work.

By next mail I will also write Mr. Rockell on the subject and begin the expeditions of my last collected materials.

I sincerely hope you have been quite successful in your last work in the Rockies. As you may have seen, my investigations have been generally met with a fair amount of success.

Respectfully yours,

[Signature]

Nov. 11th 1911.
To the Secretary, Smithsonian Institution
Washington D.C.

Dear Sir:

Diving to the ineluctability of the weather, I have had to stay here, limiting my work to short excursions along the railroad, and using the rainy days to order my arsenals, take certain pictures, etc. I shall leave, however, on December 22, my first destination being Agua Dulce, west of Panama. From there I intend to visit the districts of Mata, Ula, Canono, and, if my time permit it, to go as far as Ame-dio, coming back again at the end of the month.

My rather long stay at quarters has also put me in the position to begin packing, in view of my return to Washington in the near future. Besides preparing several boxes which are to go later as freight I have mailed yesterday 9 packages, one of land herbarium specimens, and eight of sundry objects also pertaining to the Panama collection. I hope they will reach you safely.

Respectfully,

[Signature]
Mr. Casey:

Please hold & let me know when Dr. Cook arrives in town.

Yours,

[Signature]

Mr. Adams — Nov. 28, 1911

As to the accounts, just as they come. Also let me have it back.

W.I.A. Nov 29, 1911
December 9, 1911.

Dear Sir:

Referring to your recent letters, concerning the continuation of your work in Panama, I have carefully gone over the matter but regret to say that I find that it will not be possible to continue your allotment beyond the month of January. I have had set aside, therefore, $200.00 to cover your expenses for the month of January, 1912. I am very sorry that it is not possible to comply with your wishes, but owing to the limited funds at command, I do not see my way clear to do so.

Very respectfully yours,

CHAS. D. WALCOTT,
Secretary.

Prof. H. Pittier,
Smithsonian Expedition,
Culebra, Canal Zone.
Dear Sir:

As I informed you, I returned from Chape and the Bayano Valley on the 8th. On the whole, and notwithstanding the heavy rains of the last two weeks, the results of that expedition are satisfactory. My 4 days' trip to the Upper Mamoni, however, was practically useless as to collecting, as I had to throw away almost every specimen and in my three days' navigation up the Bayano River, I had more rain than I have seen in the remainder of my sojourn in the Isthmus. We reached the Rio Diablos del Sur, and ascended it up to the limit of the canoe navigation, where we found an Indian house, empty, a near-by plantation of Plantains and bananas and the beginning of the track leading to Margana on the coast of San Blas. But here again, my plants were found rotten in the hotter, the navigation on the Bayano was impossible because the depth of the flooded river did not permit of poling, and the current...
too swift for paddling. We were within one day distance of the first Indian settlements. But on account of the above mentioned difficulties, and also of the impossibility of collecting plants, I reluctantly gave up my plan to visit these Indians. The botanical results may not have corresponded to the expense, and notwithstanding my ethnological ambitions, I did not feel justified in going farther.

Chips itself is in the middle of a savanna district and I had a very good opportunity to study their vegetation in detail. They belong to a type quite different of those of Shiriqui, being more "park-like", with a more fertile soil and apparently less wind during the dry season. The cordillera itself is less conspicuous, hardly reaching 1500 m. in altitude, with gaps 300 m. above sea-level at the bottom. A very interesting fact with relation to plant migration may be mentioned in connection with those two cuts in the dike; whereas two valleys, one on the northern slope and the other on the opposite side, are in close communication by means of a depression, the Phytolychas palm, or avocado palm, has penetrated from north to south, although never going very far down toward the coast. So that palm is found in one valley, and not in the next one, and its absence is a sure indication that said valley has
not penetrate to the core of the mountains or does not meet any of the valleys of the opposite side.

I collected 14 different species of wood. As I have stuck to my rule of not taking any of these without being able to also collect the corresponding botanical specimens, my work in this line has been greatly limited. October & November seem to correspond to a minimum of blooming among the trees, and my opportunities were few.

My photographic work was a decided failure so far it refers to the use of films. Of 18 exposures taken up the Bayamo River, I saved 3, the others being ruined by mildew. Plates are decidedly better, and I brought back a few very good natural size pictures.

With this mail or the next, I will send most of my last collections. I have also started with the packing of the wood specimens and other objects that will go as freight.

During the forced staying in-door of my last week at Chepes, I undertook the study of the technical process in the preparation by the natives of several kinds of palm oil, and also that of the cultivation of rice and of the several varieties of that cereal. I have about 10 of these, in original and natural size photos, and think this is the first attempt in this direction, at least in Central America and Panama.
I shall now proceed to answer the several notes that have been received during my stay at Elpis. On account of the absence of mail-facilities, they had to wait here for my return.

I received a check for £200, for which a receipt has been forwarded. Also a duplicate of my passport, some stationery and two copies of my book on the useful plants of Costa Rica. Please accept my best thanks for everything.

As I omitted the numbers of the submergers in my original account, I am unable to state to what item corresponds no. 17. This number may simply have been omitted.

Mr. Cabret, the captain of the "Union," on which we went to Port Orfordia, was kind enough to provide me with a duplicate of voucher 19. He remembered the item, but not the details, as his bookkeeper was ill at San Isidro. Enclosed goes the receipt.

In my account, I do not find any mention of an Hotel book on Aug. 25. But if there is a memorandum referring to it, it must be O.K.

At the end of my report dated Sept. 18th inst., I took the liberty of referring to my fitness for exploration work in the tropics. I also mentioned
the fact that I have been seriously considering a proposal to stay here in the employment of the Panamanian Government, with the hope to be in position to continue the work that is so well on its way presently and which I deeply regret to abandon so soon.

Since then, I have come to the conclusion that it would not be safe to accept such a position as the one mentioned above, and that I would be better placed in Washington to aid in the continuation of my work, either by effective participation or indirectly. It is also becoming urgent to coordinate the large amount of materials already collected, so as to make it possible to extend the future researches on every group in the same proportion. In your note of Oct 30th, you kindly express your willingness to help me in obtaining an extension of my detail for another year. I have reasons to think that this could not be obtained and besides, as just explained, I believe that the good conduct of the Botanical survey requires at about this time a thorough examination of what has been collected so far.

I would then respectfully suggest that you try
to obtain from Mr. D. T. Curt a prolongation of my
detail to the end of February, and also his agreement
to my working on the collection made as long as possible
after my return, or in other terms, for an indefinite
term. Later on, if you see it possible on the financial
side, I think it will be easy to obtain to be sent
here again, for short expeditions with a definite object.

On the enclosed map, I have marked in red the
sections of the country I have covered during my present
stay on the Tethmus. Yellow corresponds to districts
formerly explored by me for the British Indian Government;
most duplicates of the plants collected are in the Nat.
Herbarium. My program for the remainder of the
present campaign will be short visits to people
marked districts 1, 2 and 3, and a stay of from 4
to 6 weeks in the South Darwen district no. 4. It
will take about 3 months to do all this, and
I consider it as an indispensable complement of
my preliminary exploration of the Tethmus.

When I was at Washington in April last, Mr.
Swingle spoke to me about a projected general
exploration of the forests of South America, to be
unanswered under the supervision of the Smithsonian Institution. Should there be any prospect of such an undertaking becoming a reality, I should be glad to have a place in it.

Although I believe I have enough money left to take me to very near the end of December, I should be glad to have a check at my disposal no later than December 15, so that in case I should undertake my expedition to Bariloche by that time, the necessary funds would be at my disposal. (Check mailed Nov. 29, 1911)

Please have also 4 dozen of each 4x5 and 5x8 plates sent by mail at the earliest oppor-

Respectfully

[Signature]
To the Secretary, Smithsonian Institution
Washington, D.C.

Dear Sir:

In order to get provisions and to complete my outfit for the extension of my work in the Upper Bayano Valley, I came back from there after about ten days of fruitful preliminary excursions in the neighborhood of that town, arriving here Sunday 15th. As the regular gasoline launch was scheduled to make the trip on the 17th, and it was the only available safe conveyance for the transportation of my equipment, I had to come from there in a barge, or saibugent, and only reached Panama after having spent three nights and two days to travel the 30 (or 32) miles between the mouth of the Chopper River and Panama! To make things worse, when I arrived on the beach Tuesday morning, after having spent the night at the Exterior Hotel and having incurred in washerwoman expenses, I found that, notwithstanding the notice published in all newspapers, there would be no gasoline launch of the regular service until the 24 inst. There was nothing left for me but to come back to Culatra and wait in comparative idleness, since most of my working outfit is in the river. But last night I was informed that one of the launches of the Bayano Limited would probably be leaving for their place Saturday morning, so I went to Panama to-day and now all is settled and I shall leave tomorrow, probably reaching Chapé in one day and then getting three days of the season. I was expected to wait until the 24th, but I am exceedingly sorry for the loss of time, but could hardly have helped it.

By some mail you will receive four barrels of fine plants, containing mainly the Palms of my San Blas collection and who
I obtained thus far in and around Pacheca. However, two small panels with sundry objects that should be kept together for the present.

I received the plates, the films and the lens, for which all please accept my best thanks. Two more dozen of plates should be sent to us to be here about November 10th. Lately, I have experienced some difficulty with my films, losing many 5x4 exposures on account of those getting mildewed. Of course, the sooner they are developed and the better, and it is indeed a good thing that I can do it here almost without additional expense.

I am sorry to say that I had never been informed of the intention to build up a large collection of works in the Museum. Had I known that, I could have secured easily the larger samples necessary for exhibition purposes when I was at Nombre de Dios, whence they could have been brought to Colón through the T. C. E. agency. I fear it will be out of question to bring such specimens from all the trees likely to be collected in the Bayano valley. It would mean tons and tons, the transportation of which would cost beyond the means at my disposal. I will try, however, to bring large samples of the most interesting and well identified types.

Respectfully,

[Signature]
To the Secretary,

Smithsonian Institution

Washington, D.C.

Oct. 22, 1911

Dear Sir:

I beg to enclose my accounts for the three months of July to September inclusive, and I hope they will be found correct as I have taken unusual pains to keep good track on my expenses, and to secure vouchers for all important items.

I find that I have more money in hand than I expected,—very nearly $200,—so it will not be necessary to send a new check until about the 20th, so that I get it about November 1st.

Besides ordering my notes and doing some little collecting along the Panama R.R., I went to the post office to make arrangements about my trip up the Bayons R. I am leaving again tomorrow for the same place, around which I intend to collect a little, coming back as soon as my presses are filled, which will be by the end of the week.

I was very much disappointed when I found that all the plates sent were Cramer or Leed, instead of the Barten, Orthe, H & O 225, which I desired and you said had been ordered in New York. I really
need these plates for a special purpose and as they are not more expensive, but cheaper than the others and are to be had at J. L. Lewis, 379, 6th Ave., in New York, I do not understand why I should receive instead two other marks that in the special case do not suit my object.

Respectfully

[Signature]

(See note on back of envelope.)
Oct. 12, 1911

Dear Sir:

Replying to your communication of Oct. 2nd, I am authorized to explain that the 5 x 8 ortho. B and D 25 plates were ordered from J. L. Lewis, 379 6th Avenue, New York City. On the receipt of this order, however, Mr. Lewis replied that the plates desired were not in stock and that it would take three weeks to furnish them. For this reason the seed ortho. plates were substituted, as you were in urgent need of them.

Very respectfully yours,

W. W. Dorsey

Chief Clerk

Professor H. Pittier,
Culebra,
Canal Zone.
Dear Professor Pittier:

I beg to acknowledge the receipt of your communication of October 2d, enclosing your accounts for the months of July, August and September. These have been examined by the Disbursing Officer, who reports that they are correct, with the following exceptions:

There is no indication in the statement as to what Sub-voucher No. 17 is for, as the numbers go from No. 16 to No. 18.

Sub-voucher 19 is noted in the statement as "Aug. 25, Fares and freight to Pt. Obaldia, $23.50", but the sub-voucher itself is missing.

Sub-voucher No. 30: "Aug. 25, Hotel Book, $15.00", is at hand, but the amount was omitted from the statement, so that instead of being credited with $526.77, you are in fact to be credited with $541.77.
Dear Professor Pittier:

I beg to acknowledge the receipt of your communication of October 2d, enclosing your accounts for the months of July, August and September. These have been examined by the Disbursing Officer, who reports that they are correct, with the following exceptions:

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Sub-voucher No. 30: "Aug. 25, Hotel Book, $15.00", is at hand, but the amount was omitted from the statement, so that instead of being credited with $526.77, you are in fact to be credited with $541.77.

A check for $200.00 was sent to you on October 3d, and has probably reached you before this.
As requested, a book of vouchers is enclosed herewith.

Very truly yours,

F. W. TRUE.

Assistant Secretary
in charge of Library and Exchanges.

Professor H. Pittier,

Smithsonian Panama Expedition,
Culebra, Canal Zone;

P.S. A check for $200.00 was mailed to you on October 5th and I presume by this time has been duly received.
My dear Mr. Pittier:

I am just in receipt of your letter of September 24, regarding the collection of woods that you are making in duplicate, one set being sent by mail directly to the Forest Service and the other held, to be forwarded to the Institution by freight. When I wrote the letter of September 7 to the Forest Service, the one to which you refer, the situation was not entirely understood, but it has since been explained and I need scarcely say that the arrangement is wholly satisfactory. The relations between the Institution and the Forest Service are in every way congenial, and it is hoped that you and Mr. Well will secure the necessary material for a thoroughly satisfactory report on
the timber trees of Panama. The subject is one of great practical importance at this time.

I note what you say about presenting later to the Forest Service a set of all corresponding botanical specimens, and would say that such action would be entirely agreeable to the Institution.

Returning to the subject of wood specimens, I am not sure that you know the intention of the Museum to build up a large collection of woods, intended more especially to represent such woods as are available for marketing in this country. I mention the matter in order to indicate that whatever you may be able to do in this line will be of much immediate benefit to the Museum. It is desirable to obtain specimens of sufficient size, so far as possible, to show the qualities and appearance of the woods in a manner that can be appreciated by the practical man. The botanical identification is, of course, also very important.

With best wishes, believe me,

Very truly yours,

R. RATHBUN
Acting Secretary.

Mr. H. Pittier,

Culebra, Canal Zone.
My dear Mr. Pittier:

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the timber trees of Panama. The subject is one of great practical importance at this time.

I note what you say about presenting later to the Forest Service a set of all corresponding botanical specimens, and would say that such action would be entirely agreeable to the Institution.

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With best wishes, believe me,

Very truly yours,

[Signature]

R. Rathbun
Acting Secretary.

Mr. H. Pittier,

Culebra, Canal Zone.