April 25. To Cabo. Dr. Edison not returned. Benedito Pina not at work and is fired.

April 26. To Olinda. Received 70\$900 of Dr. Alencar money of Amaro Santa Anna who died in the post.

Receipts	of	pharmacy	8 \$ 500
_			5 8 500
Casket			85 \$ 000
Direitos			3 8 000

Contents of trunk of Amaro:

1	straw hat	1	eyewash
2	bottles of Brillantine	1	fountain pen
1	soap	1	pen
1	arithmetic	1	green handkerchief
1	watch (Omega)	1	pillow
4	neckties	1	sheet
1	cap	1	whitecoat
3	drawers	1	shirt
2	Dolmas kaki	1	pair of socks
1	trousers (Casimir)	1	pair perneiras
1	toothbrush	1	paper box with
4	collars		Vales cigarro
1	police badge	1	pair of shoes
2	handkerchiefs		-

1921

May 7. Passage Itapura Recife to Bahia 55\$700.

May 8. Maceio. See Kenneth Kirk again and receive from him a mosquito net loaned to him at Porto Calvo. (I was at Porto Calvo investigating some suspect yellow fever cases with the help of the local medico of the State Dept of Hygiene. We had checked upon 4 cases sufficiently to feel assured that they were yellow fever. We had returned to the hotel and were idly talking when two men rode up on horseback. One was palpabily a Brazilian but the other with his long frame, clear skin and blue eyes might have been English, Scotch, Scandinavian of American. I spoke to my colleague who understood no English, and at the sound of my voice, Kirk, for it proved to be he, asked, "Are you an American?" Pleading guilty we were soon on rather intimate terms and I learned that he was a S.O. of Brazil employee,

heart loose and foot free; drinking the water as he came to it and taking no thought of mosquitoes nor mosquito nets. The hotel keeper who was about 100% African in origin found a net for him that night and I left him mine the following day for his further travels in that section. Following this incident I wrote to Mr. Boetens of the S O suggesting that all men sent north should be properly instructed regarding choice of drinking water and the use of mosquito nets.) Kirk later left S.O. in Rio and finally contracted TB after marrying a Miss White of White Steamer Car fame.)

May 9th Arrived in Behie. Find Dr. LW Hackett already here with a Mr. Campbell of Wrane Valve Co.

May 10th We go to Peri-Peri, close to Bahia to see a hookworm post with Dr. Jansen de Faria.

May 11th To Santo Amaro With Dr. LWH, Dr. Jansen and Dr. Barroso Chief of P.R. (Dr. Barroso later had difficulties with Dr. White over C.F.A. work in Bahia)

May 12th Visit Medical Faculty of Bahia. The buildings are superior to those of Rush (1921) but there is little practical or laboratory instruction.

Cantin

May 13. Almocamos on Vatapa at the home of Dr. Jansen. Having lunched well we started to the city in the "bonde." The car being empty we took a front seat and then both Hackett and I stretched out with our feet in the opposite seat and got all set to digest our load of vataka. Directly a Brazilian with his wife and child took seats behind us and the following conversation ensued in Portuguese between husband and wife

Husband, "Do you know the nationality of these men in front of us?"

"Nao, Nao Sei."

"They are North Americans!! I know because they have their feet in the seat. The North Americans are the only people in the world who will sit in one chair and put their feet in another." This rather irritated Dr. Hackett who made some remarks aloud to me fortunately in English.

May 14th Hackett and I embark on train for Propris on the San Francisco River. We were the only passengers in the sleeping coach and the only possible prospects for tips both for the sleeper and dining car attendants. Needless to say we got good attention even to being consulted hours beforehand what we wished cooked

a

for the next meal.

May 15th Arrive in Propria late in the afternoon. Everyone congratulates everybody else over arriving on schedule and on the cars having been derailed only 5 times on the two day trip. It seems that this is a record! (It is nothing short of marvelous to observe how rapidly and easily these train crews put coaches back on the rails.) The hotel proprietor claims that mosquito bar is unnecessary as there are hardly any mosquitoes in Propria. His rain barrel however is full of larvae and we order nets placed!

We passed through Aracaju (Sergipe) and Hackett had to laugh at the chief statue of the place which represents the figure of a man facing the Atlantic with his plug hat held high aloft in his right hand in greeting to Africa.

May 16 - We take river steamer for Piranhas. This trip is very beautiful the river which is wide and deep being flanked in many places by low lying hills. One of the most striking of these glories in the name "Pao de Assucao" The sail boats on this river are of a somewhat different type from that I have seen elsewhere. They are "turtle-backed" and "bat winged." The dome deck construction gives a maximum of protected cargo and living space and as most of the cargo is cotton or common goods little or no deck cargo is carried. The river is wide and runs in this part of its course almost straight so that little tacking is necessary; the winds are generally constant also which makes it desirable to spread as much sail as possible. This is done by using two large triangular sails on a central mast thus . Of course one or two smaller sails are also used. When these boats are seen at a distance, especially if they are carrying striped sails, as many do, the picture is not soon to be forgotten.

We arrived in Piranhas (named from the goracious large mouthed flesh eating fish so plentiful in these waters) and were taken by special train to Pedra. The special train was for the benefit of the military commander of Alagons who happened to be along. We took advantage of the facilities offered him. At Pedra we were entertained at the expense of the cotton factory by Sar Ioni. The big output of the factory is cotton thread.

March 17th Visit Falls of Paulo Affonso. (See account of trip July 1921) and thread factory.

March 19th Auto Pedra to Granhuns. Much rain fell by spasms during the day.

At about 1:30 PM I offered to bet that it would rain more than half a dozen more times during the day. Hackett accepted and set the definition of rain as being a precipitation separated from other periods of precipitation by the casting of a shadow. When night fell 5 rains had occurred but moon rose and cast the necessary shadows and we arrived in Garanhuns with 7 rains to our credit. Hackett disallowed the last two because the shadow was not cast by the sun.

May 20th Train to Ribeirao where we visit post.

May 21st Train to Recife. Last night LWH and I shept on canvas cots in the same room at the hotel. Before retiring I asked for more bedding but was told there was no more to be had. At 4AM I arose and dressed because I was cold! LWH whose badd is not so thin, hearing me moving about and learning the cause offered me his bedding which I refused. Today when the incident was mentioned to Mr. Batham of the St. Western of Brazil he proceeded to get out his record of max. and min. thermometer readings for the previous night. The minumum at Gamelleria, only a few kilometers from Ribeirso and at the same attitude etc. was 70 F.!!

May 22. Mr. C.R. Cameron, xxx consul and LWH to dinner.

May 24. To Caruaru a point of interest from مستواده ومها standpoint of pesta. Almost every year cases occur during the cotton gathering season: when the cotton comes to the warehouses the rats also come and bring about a closer contact between man and rat fleas. Shortly before Caruaru was to be installed I received a wire from Dr. Attico Seabra, our director in Maraghao, stating that he was on the eve of moving the hookworm post to Vianga but that bubonic plague had appeared there and asking for instruction. My reply was that all precautions should be taken but to go right shead and install work in Viayuna as planned. This was done and no ill results occurred.

When however the same situation came up regarding Caruaru, the matter was much more personal, but I abided by my previous decision and again disregarded the plague. Vaccine which is supposed to give some protection from about 12 days to 6 months after injection was available and all employees going to Caruaru were vaccinated, many under protest. Iffailed to take the vaccine at this time. Instead of going to Caruaru with the personnel, I went first to Maceio the capital of Alagoas. While in Maceio I visited the

Prophylaxia Rural and found that the Director was in Rio. However on his desk was a familiar package which with the help of a servent I plifered of some 20 tubes of plague serum, which is thought to give immediate protection of some days duration and which is also of value in treatment of early cases. From Macio I returned to Recife and almost immediately went to Caruaru. At Caruaru I took an injection of serum and another of vaccine. Paulo, the secretary of the Recife office who was with me took the same under protest. The following day we returned to Recife and found a telegram stating that the microscopist at Caruaru had come down with plague that day. (Paulo was white eyed with fear as we had worked the previous day in the same room with the microscopist but congratulated himself on having taken the serum and vaccine.) I proceeded to vaccinate Juliet and Damiana much to their pain. The microscopist received immediate injections of the Maceio serum and made a speedy recovery.

In connection with this serum the delicate question arose as to whether the limited supply of serum should be made available to cases in the community or should be held in reserve for possible cases in our own personnel for whose presence in the plague area we were directly responsible. Our answer to the question will not be noted here.

May 26 Dr. Hackett leaves for Rio. (It was on arrival in Rio from this trip that LWH developed his case of "measles" (dengue?) during which he wrote his famous autobiography which appeared in the builtein of the I.H.B.) Meet Dr. Souza Aramjo for the first time. It was he who called down Dr. João kenha Machadofor working in the laboratory without a coat and whistling while at work, "Coisas dos Americanos." I received his visit in shirt sleeves rolled to the elbow. Meeting him at a coffee house Dr. LWH began to expound on the situation revealed by the federal census and among other things mentioned that there were 18000 mucambos*in Recife. "How many" asked Dr. Araujo taking out his notebook. "Eight thousand" replied Dr. Hackett giving me a warning glance to not correct him.

June 4th Mr. A. Rice, H.C.Fraser, Rebcol and I leave Recife on horseback at 2 PM; dine at Tiuma; change horses; and ride to Floresta dos Leãos, where we sleep from 3:30 AM to 5:30 AM. Then back to Olina where we arrive at 1PM too tired to eat. At 3 PM start to Recife to get Ford to go to Morenos with Drs Servulo Lima Waldemar de Sa Antunes. Inauguration of post, Dinner, Singing and dancing occupy us till almost

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midnight then return to Olinds. Needless to say I failed to swaken the following morning. The ride was estimated at 126 kilometers in 23 hours, much of it at a gallop. Fraser and Rice would not admit they were even sore from the ride.

June 11th Itasussce' for Maceio.

Sunday June 12. Re Posse do Governador. Foot-ball game in the P.M. Governor proceeds to make sport of the Portuguese used in my note to him regarding cases of yf in Porto Calvo. I say nothing but feel like asking him to write a note in English!

June 13th Conference with Dr. Fernandes Lime and lunch at the Palace. Again I get scored for my poor Purtuguese and finally tell the governor as politely as possible and with a smile on my face, that in order not to disturb him with my "foreign" Portuguese that our future negotiations well be carried out through a Brazilian doctor who speaks good Brazilian Portuguese. (And so it has been. I have not since seen Fernandes Lime.)

June 15th Return to Recife

July 1st Cabo to Alogados 30 minutes in the rain. Score 2 dogs, 2 blackbirds.

July 2nd Rice's leave Recife for good. Zoetsma in town.

July 4th Famous 4th at Santa Isabel Theater; dinner at Fraser's. Fraser's trousers lost, much rain, late dinner. Fraser finally goes in my trousers 50% too big for him.

July 6th Start for Paulo Affonso. Jule and I and the Ford go by train to Gamellaria and remain over night with the Batham's. Two glasses of milk to drink.

July 7th Mr. and Mrs. Bethem and FS & JS go to Garanhuns on train. Cold and wet.

July 8th Caravan consisting of one Ford with Bathams and Sopers and one Oldsmobile truck with 2 chauffers and food and drink sets out for Santa Anna do Ipanemia. Trail is lost but later found. Rain slows progress and finally about nine P.M. both cars settle in sandy gravelly liquid and remain in spite of 3 hours hard work by all hands. The First sleep in the truck the chauffers on the truck seat and Batham and Isin the Ford.

Spanens

Morning light reveals our situation to be in the midst of a smell cluster of houses, the existence of which had escaped us in the darkness. The inhabitants bring hot coffee and help get the cars out of the mud. The place is called San Aŭtomio.

July 9th Through rain and cactus and catinga country with many goats we finally arrive at Santa Anna. A town of some size and much movement on fair day.

July 10 Rested in Senta Anna

July 11 Through more goat country to Pedra. Put up in Cotton Factory House.

July 12 and 13 to Paranhas and to Jatoba inspecting RR Line.

July 14th To visit once more the Paulo Affonso Falls. Jule does not like the high bridge on foot. Visit to thread factory using power of Falls. (Some years later this factory was bought up by the British thread interests and dismentled to prevent it from influencing the price of thread in Brazil.

Batham and I stop to hunt duck, but after some time a cautious warning comes to move on since Lampeo passed the night with his band of bandits not far from the pond we had stopped at and had made people prepare him food. We return towards Pedra to find the truck which had had engine trouble and in so doing run into and through a group of men probably soldiers but of doubtful appearance. Sheared axle pin on Ford is fixed with foil from film but eventually the Ford has

to be towed and is towed into the River at

July 15th. Leave early with car and truck.

July 16th Cars brought in by two yoke of exen and repairs begin by local blacksmith. Nickel on fender for boys who can pick it off and hold it.

Santa Anna about midnight where it remains until morning. Hotel about 1 AM is pretty deed and

July 17th Santa Anna to Garanhuns OK

July 18th. Train to Gamelleira - Drink glass of milk and second glass at Betham's.

July 19th Train to Recife.

July 26th To Caruaril

hard to awaken.

Lampero

July 28th To Olinda

July 29th To Morenos - Drs Amilkar and Alencar NETO to dinner.

July 30. Dr. Alencar returns to Rio.

Aug 3rd. Vapor Acre for São Luis

4th. See James Sisters in Natal.

7th. Sunday - Forta rezo

8th. São Luiz

9th. Take Boat called Barão de Guaraja to Vermelho. Sleep in hammock over dining room table.

10th. To Vianna by canoe.

TRIP TO MARANHAO, August 1921

August 3. The Acre was scheduled to go yesterday but like so many things this side of the Equator was delayed and only left today. I am well supplied with Portuguese literature and plenty of work from the office. The sea is rather rough but the boat is the best I have been on of the Lloyd Brazilian boats. The food is actually edible and the service is not bad. There are a number of English or Americans on board. Spent most of the afternoon asleep in the lounge.

August 4. Last evening I overheard two passengers conversing in English and immediately spotted the woman for an American. There's no mistaking American slang when it gets this far from home. She is a gray haired woman of doubtful age, but well preserved and might be anywhere from thirty-five to fifty years of age. Her companion is an elderly man, very anemic and pale, and this anemia is accentuated by the snow white fringe circling his

head above the ears. The snowy mustache and goatee fail to conceal the fact that he is using artificial grinders upstairs and down.

The boat stops in Cabedello late in the afternoon but no one goes ashore. My cabin mate is a lad thirty-two years old but with a young outlook on life. He is from Ceara and his family runs true to type. Ceara is noted for families that rival in size those of the Jewish patriarchs. The eldest son of a family of 14, whose photographs he carries with him and proudly displays, he has known enough of the skimpy side of a large family to undertake nothing along that line himself. One brother is a doctor of medicine and another is a lawyer while this boy has gone into business for himself. The doctor of the family spent some two years in Acre--the Alaska of Brazil as far as isolation is concerned but very different in respect to climate. Here he was able to save thirty contos (about 7,000 dollars) and is now the company doctor for an agricultural company engaged in the exploration of matte, or South American tea, on the frontier of Brazil and Paraguay. With another 8,000 dollars which he expects to save there, he plans on going to Europe to complete and finish or polish his medical education. Then with a full German office outfit he will return to Ceara and set up in the old home town.

August 5. I entered into conversation today with the passengers suspected of being Americans far from home. The diagnosis proved to be correct. The woman states that she is seeing South America as a relaxation from the strain occasioned by the care for several years of an invalid father. The father having died, the daughter, being a widow with a competence, started from San Francisco along the coast, visiting Panama. uatemala, São Salvador, Guayaquil, Peru, and Chile, and then crossing the Andes muleback through the snow to Argentina. From Buenos Aires she travelled overland to Rio de Janeiro, visiting the falls of Iguassu and the capital city of Paraguay on the trip. She spent some time in Rio and but for lonesomeness would have remained there. She now has passage aboard the Acre to Manaus. From there she expects to go to Dutch Guiana, Trinidad, Venezuela, and Colombia. She is the possessor of a German name but is undoubtedly of Irish descent.

Her companion she met aboard the boat after leaving Rio. He is a doctor—a ship's doctor to be more explicit—who missed his boat in Rio and is trying to intercept it in Para. He can never be less than

sixty-eight or seventy years of age, but seems to be quite interested in the widow. When in her presence I asked him his age, he replied "Forty-five." Noting the look of surprise on my face, he assured me that he had been white headed since he was thirty years old, that it ran in his family. The widow then spoke and said that if the doctor was forty-five, that she was twenty-seven.

We arrive in Natal at five p.m. I go ashore for jantar after suggesting that we three Americans visit the Domestic Science school in Natal in the evening. Plans are made to meet on the dock at 7:30 p.m. What is my surprise to find the widow alone on the dock at 7:30. She was not real sure that I wanted the old doctor along and so she had slipped off and left him. Of course if I insisted we would take a boat out to the Acre and get him. No, I did not insist.

We went to the school and visited with the James sisters. South Carolinians, the elder came to Pernambuco some years ago as an instructor in domestic science in one of the missionary schools. Later, at the invitation of the State of Rio Grande do Norte, she had left the school in Recife with a leave of absence of two years to found the State School of Domestic Science in Natal. At the end of the two years, another leave of five years had been granted. Three years ago she returned to the United States to recruit her teaching staff and brought back with her a number of American girls. By the end of the first year, these had all deserted her, some going to Rio to work in business houses at increased salaries and others going into matrimony. The only one to stay with her is her sister, a graduate nurse, who has taken charge of the nursery. She seems to be very interested in this part of the work but feels very keenly the lack of medical preparation. The end of this school year will probably see her back in the United States beginning her course in medicine. (She is much more attractive than she was when I visited the school one year ago, and I do not believe that she would escape the bonds of matrimony very long in the United States.)

At ten o'clock we bid the sisters good night and go back to the boat. The widow sorrowfully goes to bed.

August 6. All day on the boat. The widow proposes playing poker. I insist that I do not know the game buthave no objection to learning with a hundred reis

limit. So we start with the deck stripped rather low. The first three times that I deal the cards my hand shows four of a kind. The doctor says that if we were playing for money he would think that I were a crook.

August 7. Ceara comes into view early. I go ashore to get a decent meal and to buy some lace for the frau and for the Boetsmas. In the city one finds more life in the cafes than in any other place in the north of Brazil, with the exception of Pará. In fact, my impressions here were those of my first days in Pará. One always takes a bath landing in Ceara but I think it is worth it to get a good meal.

The doctor's visit has no more than been made than the first-class passenger deck is crowded with lace sellers. However, the same lace can generally be bought cheaper ashore, and we are not tempted by the gorgeous display aboard. Ashore the vendors of lace are in the public market. There they sit on a wooden stool with a chair in front of them for their customer and their wares arranged around them in a circle in large wooden boxes. Handkerchiefs, night shirts for women, woven shirts for men, bed spreads, babies caps, doilies, and many things for which a mere man could never imagine a use, all worked by hand, are spread out for examination. Lace, lace, lace. While one is examining the goods at one of these booths, he is surrounded by from three to ten women, who in their dress show their extreme poverty, who importunately implore him to look at their goods. Each of them has a dirty cardboard box containing one or two pieces, the work of their own hands, which the dealers have probably refused to purchase. Crowding in among these are beggars, blind, halt, and dirty, asking an esmola por amor de Deus.

One goes through the entire collection, sorting and resorting the desirable pieces and asking prices. One does not pay much attention, however, to the prices asked. One lays aside what he wants, makes a mental calculation of what the material is worth, and says that he will give so much. No. No. No. For the love of God, the thing is impossible. The price of thread is so high, and everything is hand made, and it takes so many months to make what the senhor has chosen and the price paid the maker was so much more than the price offered. Very well. And the senhor starts away and begins looking at the material displayed in a neighboring booth. Customer! Come back! Maybe we can make an adjustment. And then

begins the haggle in earnest. Eventually a reasonable price is secured and the material purchased. Reasonable price! No, there is no reasonable price for the hand labor that goes into the making of these laces, but a reasonable price is one that gives a reasonable profit to the dealer who buys at the lowest possible price from the makers.

August 8. Aboard.

Sin Lung August 9. Bid the widow and the doctor good bye. Arrive on shore top side up. Baggage goes to be disinfected. This is done in a dirty little hole down by the water's edge. The baggage is all piled out in the street, just out of reach of the tide but not out of reach of the rain. The passengers are mostly there with their trunk keys, because all trunks must be opened during the disinfection. Everybody is peeved but everybody agrees that it is a good thing. But if a good thing why is it that the same thing is not done in the other ports of Brazil. Everybody agrees that the service here is too particular or that the service in the other ports is very lax -- and nobody seems to know which it is. At last the chief of the service arrives and the bag gage is piled into the room and the formaline disinfectors lit. After twenty minutes in the rain, the passengers es get their baggage in the rain.

August 10. Visit Dr. Costa Rodrigues and Dr. Cassion Miranda. Buy passage on the Barao de Guaraju from São Luiz to Barro Vermelho.

second During this visit to the state of Maranhao I was charged with the responsibility of visiting the Rockefeller Foundation's Hookworm Disease Post at Vianna and of preparing a report on the work done there. Dr. Attico Cabra was the chief of the Foundation's activities there. He had been taught to handle the necessary finances and keep accounts sufficient for a rotating fund and had been trained in making out the monthly reports of the Hookworm Disease Campaign. He had, however, no experience in preparing summary reports, which was one of the objects of my visit. I still have memories of sitting with him in the post in Vianna and laborously asking him in my very poor Portuguese for certain data, only to receive what became the standard classic answer, "so sommando"! (Only by adding!) And so we spent most of the time in Vianna only adding and preparing the report.

Bissio Verwelle, the port of and 1921 The boat to Viama left San Luiz during the middle of the night. São Luiz being one of the places in Brazil which has a very high tidal variation in water level. Fortunately, I went to the boat after dinner in the evening, expecting to have a cabin or at least a bed in a cabin, only to learn that the boat was not provided with individual cabins, but with one large enclosed space where the female passengers slept.

> The male passengers slept in hammocks, their own hammocks, which were suspended above the tables in the diw ing room. I had time to return to the hotel, borrow a hammock for the trip and return before the boat sailed. Never having slept in a hammock, my first night's rest was not too geod, but after the secret of sleeping on the bias so that the body lies level was discovered, I came to enjoy hammock sleeping very much.

The area between Sao Luiz and Vianna is naturally low lying country and is largely flooded during the rainy season of the year so that human habitations and towns are all located on the few bits of land

which remain above flood level during the half of the year when the water is high. The semi-isolation of this period is due to the fact that there are areas where the flooding is too deep for horse-back riders but at the same time in certain areas is too shallow for dug out canoes. This is the one area in my experience where I have seen the regular use of steers as riding animals. At the season of my visit, many cattle were feeding in flooded areas on vegetation which seemed to be growing at about the level of their backs. (I was to see similar feeding of buffaloes during the monsoon period of the delta area of East Pakistan many years later.)

The flooding of the land during such a long period precludes the year round utilization of garden produce and leafy vegetables and fruit were at a minimum. Bananas were available. Beri-beri is said to be very common - as a matter of fact, one of the local school teachers developed a case and was on the boat with me going back to Sao Luiz in search of a cure, away from Vianna.

On the last morning, while waiting for the boat header which was to take me to Sao Luiz, Dr. Attico Giabra finder River and I spent a couple of hours shooting alligators from a dug out cance. We sat on folding chairs in the center of the cance and were poled by men at each end. The arms we used were ancient vintage .44 Winchesters; we made no attempt to retrieve the animals we shoot, Dr. Mabra assuring me that the paranhas would quickly finish up any wounded and bleeding animal in these waters.