January 1,1929.

Dr. Henrique Aragão mentions the possibility of male mosquito infection through feeding on contaminated honey. If this works out it should be possible to preserve the virus in mosquitoes without danger to laboratory workers.

January 2. Dr. H.Rocha-Lima calls at office to discuss various matters. I meet Dr. Alcides Lintz at the DNSP and learn that our contract for 1929 with the state of Rio is all ready to be signed and that our contract for 1928 was passed as a law of the land by the 1828 legislature. Dr. Lintz says there has been no yellow fever in the state of Rio for more than four months. Although he does not say so in so many words it is quite clear that he wishes to implicate that his service in the state has been far superior to that of the DNSP in the Federal District. It is indeed difficult to understand the optimism existing regarding yellow fever in a place which suffered so much in the past from the disease. Dr. Lintz for example is undoubtedly ignorant of the monthly distribution of deaths from yellow fever in the period previous to the work of Oswaldo Cruz. Also he does not properly appreciate the importance of todays case reported from Anchieta, a suburb of Rio in the Federal District in direct contact with numerous populous centers of population of the state of Rio.

January 3. Dr. Muench, Br. Aragão and I go to Braz de Pinna and meet Drs. La Fayate Freitas and Dr. Rodrigues. Dr. Freitas shows us a child who undoubtedly has been having a mild attack of yellow fever and a woman who is ill but with such vague symptoms that no thought of yellow fever would be entertained were it not for the cases already confirmed for the neighborhood. Dr. Freitas says that he believes that a large number of cases of yellow fever of an undiagnosable type is occurring in the native Brazilian population.

Dr. Fraga state that the contract is almost ready to be signed for the yellow fever service and that the only modifications to be made are in regard to postal and telegraphic franks. The copy will be ready tomorrow. Dr. Fraga marks our trip north for the Andes leaving Rio on the 20th of January, in spite of the recent cases of yellow fever in Rio. Dr. Fraga insists that a signed contract be drawn up between the government and the Foundation as the Minister of the Interior condiders such contract essential to guarantee payments beyond the term of the present government.

Rarmen -m Ny January 4th.

Dr. Aragão suggests that a large amount of serum be secured from the Sara Rivas case in Bahia to determine whether mild cases give the same protection to monkeys that severe ones do.

HD+

I cable New York asking for authority to sign contract for yf service. I get hold of Mancel Dantas and Henrique Dias of Braz de Pinna as they are leaving HSS and take them to OC where HA bleeds them. Mancel Dantas is a black boy from Bahia who had a febrile attack with congestion of the eyes two days after being vaccinated. Henrique Dias is the uncle and roommate of the Portuguese who died from yf at HSS removed from Braz de Pinna a couple of days after Xmas.

Dr. Fraga says contract is not ready yet. He enquires about the possibility of fellow-ships this year. I explain that we are now on a budget and that the most that can possibly be arranged will be one fellowship and that even that one depends on the failure of candidates already under consideration to qualify. Dr. Fraga offers his personal help on our accounts with the Federal Government which have fallen into Exercicios Findos and suggests that I submit a list of these accounts to him. Our trip to Recife is still marked for the 20th of this month.

January 5th.

Miguel José Sant'Anna died of yellow fever in Bahia.

January 6th. Sunday.

Dr. Muench and I meet the Andes and get package of Virus of Chicken Sarcoma from Burt for the OC in Bello Horizonte and then drive out to HSS.

January 7th.

Dr. HA reports that monkey injected with blood of woman in Braz de Pinna has fever as has also the first transfer from this monkey.

Dr. Raul Magalhaes of Minas is in town. He seems quite optimistic regarding yellow fever and does not believe that anything will happen in his state.

January 8th.

I am informed from confidential sources that a woman from the Rua Prof. Gabizo died at the Santa Casa with the diagnosis of gastric ulcer but that autopsy showed characteristic lesions of yellow fever. This case is not being notified to the health department.

January 9th.

Dr. Muench and I spend the forenoon mapping Braz de Pinna. Dr. Almeida de Mello of Pará is now in charge in Braz, Dr. Rodrigues being occupied in Paquetá. Dr. Almeida took Dr. Boyds course in malariology and talks knowingly to us about cleaning up ditches to prevet stegomyia bredding.

Monkeys from Braz cases are still running fever.

Today for the first time I meet Dr. Aragao, an uncle of Henriques, who is a clinical inspector of suspect cases of yellow fever for the health department. He says that two Germans had died in Birbaums house in Anchieta before Birbaum was diagnosed and that a man had died in the same house with Mrs. Stael, Rio Comprido, a few days before she became ill.

Dr. Mauricio de Abreu says that copy of contract was sent to me today. Cable received from NY authorizing signature of the contract.

Tribunal de Contas approves opening a five thousand conto credit to pay fifty per cent of expenses in the north and six thousand contos for the Federal District.

The Globo carries a telegram announcing yellow fever in Pari.

January 10th.

Dr. Muench and I spend forencon in Braz de Pinna mapping. Dr. Rodrigues gives me his census list to copy. A girl at 26 Rua Guaporé has fever and is bled for HA.

HA reports that monkeys from Mancel Dantas and Carmen still have fever. He says that monkey injected with mosquito feces shows fever today; monkey bitten

- н тов ИЧ By the same mosquito is yet without fever. (If fecal contamination is the rule the absence of itching in old residents will explain part of their apparent immunity.

Dr. Fraga confirms the news of yellow fever in Pará and adds that a case has occurred in Manaos. I assure him that Muench will sail to take charge in Belém on Saturday the 12th. I finally receive copy of proposed contract. CF says that he probably cannot go north on the 20th as planned.

HSS has suspect typhoid case from R. Prof. Gabizo 118. If confidential information of Jan.8th is correct this case may well be yf.

January 11th.

Dr. Paul A. Lewis, of the Rockefeller Institute arrives on the American Legion. Dr. Lewis is a brother of Dr. Marian Lewis of my class at Rush and Cook County Hospital. Dr. Lewis sees five cases of yf at HSS, calls of CF and HA. Vaccinated by HA at Manquinhos.

January12th.

Dr. Muench sails of Itaquice for Belem; Dr. Lewis accompanies him as far as Bahia. I wire Dr. Davis to infect monkeys of Sunday to have material available for special preparation for New York when Lewis arrives.

January 13th.

To HSS in PM. Return Dr. Rodrigues his census of Braz de Pinna at his home in Olaria. Existence of focus of yellow fever on Ihla Paquetá confirmed.

January 14th.

Wire received from Reife of suspect case there and of illness of Dr. Crawford.

Dr. HA is informed in detail of the technique used in New York for drying the yellow fever virus.

Secure information regarding carbon dioxide snow for the Bahia laboratory.

Dr. Tomaz Alves goes over the proposed yf contract and decides that Foundation interests are adequately protected.

I meet Dr. Chagas accidentally on the road to OC and am surprised to have him inquire of me about how much yellow fever exists in Rio. It would appear that part of the campaign to keep yf out of the papers has consisted in keeping cases out of the OC Hospital where information is given freely to the press. Dr.CC says that he will see CF and arrange for more cases in OC. CC reports that the Brazilian virus is no longer in the laboratory of OC.

Dr. Costa Lima has been working with HA on the feces transmission of yellow fever. The first experiment showed that transmission may occur either from the bite or from fecal contamination.

In conference with CF I notify of suspect case in Recife. CF marks our trip to Recife for the 10th of February. If CF goes north at that time I shall probably remain in Rio and arrange for Dr. Connor who is expected from Europe to meet him.

January 15th.

Captain R.A.Warner says that he has been unable since the beginning of the present outbreak of yellow fever to get the Navy to take any precautions on its own responsibility in regard to stegomyia breeding control. After discussing the possibilities, he says he will try to get the Brazilian Navy to install a laboratory for experimental work on yellow fever.

Wire reports that Crawford is better.

January 16th. To HSS and OC. Inform HA that Beeuwkes also found monkeys dying of yf without fever and that NCD has had the same experience in Bahia.

January 17th. Wire to Crawford, Recife, and Burke, Bahia, to increase personnel if necessary. Learn that the government opened our credit for five thousand contos yesterday.

January 18th. HA and I go to Braz de Pinna and bleed Carmen, Djanira and Gecilia. Dr.CF asks for supply of convalescent serum.

Tribunal de Contas approves action of government in opening credit for cooperative service.

January 20th.

Dr. Andrade calls and submits draft of malaria contract with the State of Rio providing that the RF take over the administration of the service and containing certain other disagreeable features. Considering the fact that only one year ago the service was turned over to the State at their request I refuse to consider this proposed draft. It seems very difficult for state and other officials to get the idea that the Foundation is not a business concern and to learn that after a proposition has been made that it can be accepted or rejected.

January 21st. Meet Dr. Vilela of Bello Horizonte. He previously worked with Chagas on Chagas Disease and contracted it himself. His heart is I understand in very bad shape and he finds it necessary to limit his activities closely. Dr. Vilela says that Dr. Pimentel, dean of the University of Minas Geraes is anxious to get in touch with the Foundation with regard to the future organization and development of their project.

Impossible to get rooms for Mrs. Muench in Petropolis. I suggest Therezppolis and vaccine both of which are refused.

January 22nd. Carmen (Braz de Pinna) monkey died of generalized tbc. Lt.Col. TT Behrens of the aircraft survey of Rio called and was advised to have his foreign personnel sleep in the uninfected districts of Rio. Regis, Lott and Torres fellowships approved. of Ramport + Hoet

## January 23.

January 24th. Mrs. Parsons is requested to learn details of Cabral family looking them toward payment of funds on account of Miss Iracemas death. To HSS and OC. Dr. Penido reports several cases with vomiting and

fever in Braz de Pinna.

January 25th. Funds transferred for the last payment to the Faculty of Medicine project in Sao Paulo.

Contract with DNSP signed in the presence of Dr. Mauricio de Abreu and the photographer of the Associated Press. beginning of Cooperatery Jewia

Loaned Dr. Sinval Lins, of HSS, Klotz'article in Delamar Lectures.

January 26th. Visit HSS and OC/ Leave bloods with HA for drying. At HSS Lins demonstrates large number of cases to be not yellow fever. HA and I discuss need for further laboratory facilities in the study of yellow fever in Rio HA says he is going to urge the DNSP to install another laboratory and that the RF might install one here with largely Brazilian personnel.

Monkey infected with mosquito feces only died today of typical yf. Attend at night in Nichteroy the presentation of the plans for the January 26th continued.

NEW REGIONAL HOSPITAL which is Dr. Lintz chief hobby at the present time. A thoroughly tiring and uncomfortably hot evening was spent by all who attended. Lintz says that he has had no cases in the state for four months and eight days!!!!!! He seems particularly pleased that no further cases have occurred in Nilopolis. We discuss the possibilities of extensive spread later in the season particularly after Carnival-I point out to him that with CF denying the existence of vf in Rio which he as Chefe of the Prophylaxia Rural of the State of Rio and therefore a subordinate of Fragas could not advertise the true conditions to his people and advise them not to come to the Federal Capital for Carnival. He agrees that this is so!!!!!

O JORNAL publishes the terms of the yf contract.

January 27th.

HM reports the fourth case for Belem. To HSS and find case from Nova Iguassu. Thus the bubble bursts after four months and nine days!

January 28th.

I write to Dr. Burkedthat the increasing of Epiphanios albuminuria regularly during four days looks very suspicious of yf and that cough may have been due to congestion only. (Epiphanio is NCDs assistant in the laboratory.)

January 29th.

The funds for the yf service in the north were made available under

'credito extraordinario, decreto 18560 of January 15th, 1929.

The results of pathological examinations reported here at the present time are somewhat confusing. On investigation I find that Dr. Fialho is in Sao Paulo and that autopsies are being performed by Dr. Bonifacio Costa, who is not a pathologist, but who is preserving tissues from all cases for final diagnosis by Fialho. Fialho was previously offered a good position in São Paulo and rumor has it now that he has gone there to see what can be arranged. It is believed that CF and he have had a set-to regarding the diagnoses made or disclosed here.

NCD letter to FFR of Jan. 17th reports incubation period in monkey of fifteen days.

Globo reports HMYinterview in Belém in which he is quoted as saying that the RF is using the same methods as OC used in the old days with the exception of those which OC would have abandoned before now were he still alive, Dr. Tomaz

comment was simply that HM lost a mighty good opportunity to keep quiet.

CF. Mays that HSS has two diagnoses on some cases; that he receives a

confidential list from the Hospital each day which is sometimes quite different from the list prepared for public consumption. CF says that it is necessary for political reasons to keep the newspapers and the public from knowing the true facts in the case. His present statement of conditions to me is based on Dr. Sinval Lins' fear that I might pick up a positive monkey on one of his grippe cases.

CF shows me correspondence from Dr. Eduard McClure, transmitted throughtdiplomatic channels from Berlin, in which Kuczinski offers for a consideration to come to Brazil and demonstrate his methods of culturing the organism of yf. I tell CF what I have heard regarding previous work of Kuczinski but am forced to

admit that I know nothing of his work with yellow fever.

CF and I discuss the crying need for more laboratory work on yf . in Rio. He says that he gave the OC eighty contos last year for the purchase of monkeys but that he does not care to depend on their laboratory in the future, Just as he the laboratory of the OC, he now the laboratory of the OC, he now the laboratory of the OC, he now the laboratory in laboratory in Bahia.

CF asks for vaccine material from our laboratory in Bahia.

The laboratory of the OC, he now the laboratory in Bahia.

For asks for vaccine material from our laboratory in Bahia.

The laboratory of the OC, he now to laboratory in Bahia.

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The laboratory of the OC, he now to laboratory in Bahia.

The laboratory of the OC, he now to laboratory in Bahia. found it advantageous for the DNSP to install its own pathological laboratory instead of depending on the laboratory of the OC, he now expents to do the same with yellow fever but can do nothing until the present rush is over. Fraga says that our lab should have been here in the first place.

January 30th.

Mr. Carl Dietsch takes through material for New York. Loaned Dr/ Mattos "Conf. Africaine" for Dr. Sinval Lins. To HSS and OCI. Secured 88 ampules of vaccine for Capt. RAW.

January 31st. DR. Juan Barros Barretto called up and asked for permission to quote NCDs results with flight range of stegomyia.

Feb. 1.
To HSS and find a heavy run of cases.

Advise Mrs. Muench of the local situation and advise Therezopolis.

To Therezopolis for the day. HA happens to be going also and makes our trip rather pleasant by showing us around. Learn that Mrs. Leuzinger is his sisterinlaw.

Correio reports the first case from the city of São Paulo, from the section called Alto de Mooca.

I learn from trustworthy sources that there have been at least 12 deaths this year in Anchieta due to yfe that most of these, in fact all but two have been buried with other diagnoses to avoid the displeasure of the family at being forced to permit autopsies; that compulsory autopsies have

been used to force other diagnoses rather that yellow fever. Nilopolis is flooded so that it is impossible for the guardas to get

about from one house to another. Suruhy is known to be infected.

Feb.4th.

Called Dawson and notified him of the availability of vaccine. To HSS. See ALBB of Bahia at DNSP/

antonio buz de Berros Barretto Feb. 5th.

ALBB called at the office and found Uchoa with me. BB interprets clause 8 of the new contract to refer to him in Bahia; refuses to recognize Burke as "full time medico". Believes that monkeys and lab material are to be imported at expense of RF according to caltuse 16 although this clause specifically mentions only clauses 10 and 11 and not 18. I call attention to the specific inclusion of the Laboratory in section 17. BB says that he receives nothing from the CR but that as representative of Dr. Fraga in Bahia he expects to continue to fiscalize the work of the CR-and that his cooperation with the CR has always been of the closest/ To hear him tell it to me it would appear that he is one of the closest personal friends of both MEC and AWB. He insists that we need his cooperation and I agree that without it we had better pull up stakes and leave. I also let him in on the secret that the CR has no money with which to pay duties on monkeys or any other laboratory material. BB says that he knows that certain people refused to accept the diagnosis of yf in Estancia even when such diagnosis had been

Mcmade by Rocha-Lima. BB says that he told Connor that if he did not changed to a weekly schedule that he, BB, would have to take over the service. (It is quite apparent that BB believes that in the past he has been in a position to get all the glory from yf control in Bahia with none of the work nor blame for failure and that he is not at all pleased at seeing his position changeing to that of passive onlooker.) I try to tell him that I see nothing but the opportunity of a lot of good hard work for all of us for the next three years; that after all this anticipated hard work it is entirely

possible that the result may not be what we hope for.

HA and I call on CF and discuss the need for more monkeys for the work in Rio. CF says that São Paulo case was a woman who had been isolated under a mosquito net on the Ilha do Governador but who decided not to remain there and took the train for São Paulo where she didd of yf. CF discusses the coming Congress of Hygiene in Recife in September and talks about going to the USA in Ogtober of this year!!!

Feb. 6th.

Special shipment of immune monkeys arrives from Davis without any shipping papers.

Wille notifies that German house does not wish to ship animals because of prevailing cold weather. I authorize the expenditure of funds to construct weather prosf cages for the animals but insist that they must be shipped.

CF says that he does not expect to open waccination stations to the general public but expects to reserve the availably supply of yf vaccine for foreigners, especially immigrants and foreigners living in known foci of the disease.

See Rosalvo Martins sent from HSS c 390 C.

Feb. 6th. continued.

HSS now has many empty beds and is receiving almost no new cases. Did the epidemic suddenly stop last Sunday?

Jimmie Muench answers to sick call. Drs. Machado and Warner called in.

## Feb. 7.

HA suggests that Davis make early captures of mosquitoes which have had blood meal in the house before being turned loose.

I ask Davis to send monkey material for the preparation of vaccine.

HSS received two cases yesterday noth of which died today. Four
cases entered today but all were from other institutions. (Does this mean
that only those cases are being removed to the Hospital which cannot be
kept at home?) Report has it that the situation in Nilopolis is bad.

## Feb. 8.

To HSS and DNSP. Complain to Mauricio that DNSP already has its CC14 but that we have not yet received our good s which were to come from the customs on the same day.

JMello insists that his main difficulty at the present time is the control of breeding in the roof gutters. He plainly needs more sleep than he has been getting. JM invites me to visit his zone.

## Feb.9th.

Dr. Mauricio says that our contract is not registered and that it will not be possible to begin paying operating expenses on the contract basis before the month of March.

HSS has three new cases today. Second case is reported from SPaule. Conference with CF regarding the chlorination of the Rio de Janeiro water supply. CF very plainly not interested.

ALES I call on BB at Itajuba Hotel; BB says that the CR is none too strong in Bahia; that it was he who protected the CR when everyone else was against it; that he is the Secretary of Walth of the State of Bahia; that the present contract was made without consulting him; that the CR may proceed to assume all the responsibility for yf including fumigation; that he will sit by with folded hands and watch the performance; that by right and by justice nothing regarding yellow fever nor any other disease should be done in the state without consulting him; that he could go to the state government and easily secure three or four thousand contos to eliminate yellow fever from Bahla; that OC did it for Rio and the south of Braxil during twenty years; that as a good Brazilian he is interested in the elimination of yf from all Brazil but that as an official of the state of Bahia he is only interested in its elimination from that state; that Bahia is the chave to the situation for all Brazil and without work in that state that all efforts in other parts of Brazil are useless; that he does not intend to be made an "idatta" by this contract; that he is the representative of the Federal Health Department in the State of Bahia and that as such he should have a voice in the spending of yellow fever funds supplied by the federal government for work in that state; that he, BB, was quite surprised that I had written to Burke that he should not have consulted ALBB about spending money for motorcycle and motor launch, although he admits that he had not felt offended when AWB purchased a new motor car in January without consulting him. BB says that the CR offended and insulted the entire medical profession of Bahia by sending Hale, a non-medical man to organize and direct the service in Bahia; that one of Hale's men was killed when he entered a room against the orders of a householder. BB admits that more than a quarter of a century has passed since the work of Redd's committee and that in spite of the knowledge made common to the world at t that time that neither the Brazilians nor the CR have extinguished yf from Brazil although all other parts of the Americas have apparently been cleaned, but insists that it is not necessary for Brazilians nor the Brazilian governmentato give stisfaction to anyone for such failure; that it is entirely their own personal affair. BB ridicules the suggestion made by MEC last year that the state organize mosquito services in the interior to be fiscalized by RF employees; if such services could be organized by the state they could also be fiscalized by the state BB says that the yf situation in Brazil is

is much more difficult than the RF has ever known or admitted; that he knows that MEC had plans all made to withdraw from Brazil last year; that he has been accused of receiving money from the RF at the time he defended it so well last year which accusation he denied with vehemence!!!! (He seems to forget how long I have been in Rio and may not know that the vouchers of the yf Service have been passing through the Rio office for some time. BB considers AWB's recent proposal to readmit barrels as very ill advised. However, he pictures the situation in Bahia as one of sweet contentment all the way round; he loves both Connor and Burke and they both love him. BB says he purchases sera and vaccines to the amount of 120 contos per year in Rio which he might well make in Bahia at a cost of thrity to forty contos but that he has ceded willingly his new seruminstitute building to the CR for their monkey laboratory.

After the above and much more we part the best of friends! An analysis

of the conference with BB shows a dozen veiled threats.

Feb. 10th. Sunlay.

See Glover case with Capt. Warner who suspects yellow fever. Onset clear cut yesterday at noon. High fever and high pulse with no congestion and no vomiting. Clearly not yellow fever.

Feb. 11th.

See Glover again. Not yf but report case to CF as suspect. G has slight albumen in the afternoon.

Feb. 12th.

See Glover. Not yf although has albumin. Temp 102 pulse 112. Dr. Thompson Motta sees Glover and agrees is not yf.

Feb. 13th.

Grearefully examined by TM-no diagnosis made but yf excluded.

Reb.14th.

Make arrangements to pay 20:920\$500 against power of attorney of General Cabral. Vaccinate Thompsons, Bawsons, Buchanans and Burt. Contract has been registered by the Tribunal de Contas.

Gwith many casts and reduced output of urine. Visit from Dr. S.Uchoa. I learn today that ALBB gave a modified tabella for the P.R. of Bahia increasing his salary to 4:800\$000 per month but not increasing the salaries of servants and other low salaried help/ His argument was that they were accustomed to living with low salaries but that he was not.

Glover has fewer casts and more urine today. See three suspect o cases close to OCI with Dr. HA and Penido. These look very suspicious but later prove to be malaria.

Dr. CC recommends a Dr. Fontes for work in Bahia at the instance of Dr. Castello Vianna and asks for the lean of four monkeys from Bahia.

( The above mentioned cases consisted of a Portuguese man woman child who were ill in the same house; the child had been quite ill but was improved to such an extent that she was up and about; the man was quite ill and was very congested with high temperature; the woman was complaining of abdominal pain, vomiting and fever; evidences of black vomit were to be seen on the floor and her interus was very definite. Dr. Penido made a diagnosis of yf on the woman and I on the man 'if it were proven that they did not have malaria!' When the ambulance arrived they had all fled only to return Sep from For 17 th to apr 1215. two days later with clear cut picture of malaria!)