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PAN AMERICAN SANITARY BUREAU:
ANNUAL REPORT OF THE DIRECTOR
SURGEON GENERAL HUGH S. CUMMING
(Retired)
FISCAL YEAR 1939–40

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INFORMATION

In presenting in the following pages the report of the work accomplished by the Pan American Sanitary Bureau during the fiscal year 1939–40, I wish to again voice my deep sense of appreciation to the national health authorities of all the American Republics as well as to the members of the Directing Council of the Pan American Sanitary Bureau for their invariable and most valuable assistance.

I wish also to take advantage of this occasion to express my gratitude to the Pan American Union and especially its Director General, Dr. L. S. Rowe, for the constant cooperation and assistance which have always been given. This was especially the case during the Fourth Pan American Conference of National Directors of Health. The increased space granted by the Union for the activities of the Bureau, under trying circumstances, has permitted the carrying out of work which otherwise would have had to be stopped or postponed.

HUGH S. CUMMING

Director, Pan American Sanitary Bureau
The personnel of the Pan American Sanitary Bureau, as elected at the Tenth Pan American Sanitary Conference, continues to be as follows:

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**SANITARY ENGINEERS*** ............... MR. WILLIAM BOAZ
MR. EDWARD D. HOPKINS

*Appointed by the Director.
GROWTH

On June 30, 1940, the Pan American Sanitary Bureau completed its 38th year of existence since its actual creation in 1902, and its 20th year of operation since the present Director assumed charge in 1920, when the Pan American Sanitary Bureau may be said to have undertaken in a more systematic manner the duties it had been previously assigned by various International American and Pan American Sanitary Conferences. The intervening period has been one of constant growth and expansion. This has been especially noticeable during the last two years, during which the work of the Bureau has more than doubled, both in volume and effectiveness as well as in ground covered.

SPACE

The most pressing need of the Bureau at the present time is adequate space for its growing activities. While the Director General of the Pan American Union has shown himself most sympathetic in the matter, there is little he can do until the new building of the Pan American Union is finally completed.

ORGANIZATION

While all the work of the Bureau is conducted under the general direction of the Director and the Assistant Director, and the immediate supervision of the Secretary, the rapid increase in its activities has compelled a tentative and rather rough grouping of its various functions and duties in a number of sections or units. Insofar as these have developed, they are as follows:

- Editorial (including especially the publication of the Bulletin and transactions of the Conferences)
- Epidemiology and Vital Statistics
- Legal
- Library
- Translating
- Accounts
- Distribution of Publications
- Files

Much of the above-mentioned work naturally overlaps and interlocks. The limited personnel has also made it advisable to combine various activities in one section. Altogether, however, this arrangement, while far from perfect, facilitates the handling of correspondence and expedites business.

In addition to the Director, the Assistant Director and the Secretary, the central office personnel in Washington included at the end of the fiscal year: 1 legal assistant, 1 editorial assistant, 1 statistical assistant, 1 librarian, 6 translators and stenographers, 1 health education expert, 1 file clerk, 1 assistant librarian, and 1 messenger. Some of this steno-
graphic personnel was, however, employed in a purely temporary capacity.

The field personnel during the fiscal year has included three permanent and three temporary traveling representatives, 2 sanitary engineers, 1 epidemiologist and 1 consulting bio-statistician. An increase in this personnel will occur in the near future when the Caribbean zone is organized.

DIRECTING COUNCIL

A meeting of the Directing Council of the Pan American Sanitary Bureau was called concurrently with the Fourth Pan American Conference of National Directors of Health, May 1-8, 1940. All the members were present with the exception of Dr. Atilio Macchiavello, of Chile, and Dr. Luis M. Debayle, of Nicaragua, who were prevented at the last minute from attending. The Honorary President, Dr. Jorge Bejarano, and one Honorary Member, Dr. Justo F. González, were also in attendance.

In conformity with precedent, an opportunity was given the members to participate in the transactions of the Conference. They were also able to stay for the Eighth American Scientific Congress, May 10-18, and take an important part in the work of the Section on Public Health and Medicine.

While the Council held only a formal meeting, at which the general health situation in the Americas and the work of the Pan American Sanitary Bureau were fully reviewed, there was frequent occasion during the stay of the members in Washington for an exchange of views with regard to salient problems on which it was desired to get useful suggestions. There seemed to be general agreement as to the success of the work already undertaken and the possibilities for development along other lines.

The unselfish service rendered by these distinguished representatives of the medical and public health professions is entitled to the highest recognition, and the value of their counsel can not be overemphasized.

The change made in the Constitution and Statutes by the Tenth Pan American Sanitary Conference provided very wisely for a rotating system, which will insure representation on the Council of all the American Republics. Candor compels one, however, to add also, especially in view of frequent changes in the upper health personnel, that it would be most desirable to supplement this change with a provision that the designation of the different members should be left in each case to the authorities of the country to which the vacancy has been assigned. This would insure at all times actual official representation of the country concerned, on the Council, and would prevent the occasionally embarrassing situation developing when members are no longer connected with governmental health work.
FOURTH PAN AMERICAN CONFERENCE OF NATIONAL DIRECTORS OF HEALTH

Among the international conferences of the American States the Fifth Conference, held in Santiago de Chile in 1923, occupies a rather significant place insofar as public health is concerned. At this meeting there were adopted a number of important resolutions which have influenced to a considerable extent public health progress in the Americas as well as cemented relations previously established in that field. Among the resolutions then and there adopted, the ones dealing with the following subjects may be noted: sanitary defense of national boundaries; principles and procedures in public health administration; creation of full-time trained public health personnel; declaring national health a Government responsibility; requiring continued recognition of hygiene and public health at Pan American conferences; uniform standards in the manufacture of foods and drugs; compulsory reporting of diseases; social problems; taking of decennial censuses; cooperation with the Gorgas Institute of Panama; medical service on ocean steamers; creation of conferences on eugenics and homiculture; measures to diminish the consumption of alcoholic beverages; changing International to Pan American in the names of the Sanitary Bureau and Sanitary Conferences; perhaps most important of all, suggestions for a proposed maritime sanitary code; and last but not least, creation of conferences of directing heads of public health services.

In accordance with the Santiago resolution, conferences of Directors of Health have since been held in Washington in 1926, 1931, 1936, and 1940. As may be observed, these conferences were originally held every five years. However, the schedule was changed by a resolution of the Tenth Pan American Sanitary Conference, providing that they should be held every four years, alternating with the Pan American sanitary conferences. These conferences have shown an increasing importance both in attendance and in the character and scope of the reports presented and the resolutions adopted.

The Fourth Pan American Conference of National Directors of Health, held May 1–8, 1940, stood out in the entire series because of various features, which may be summarized as follows:

1. Attendance was larger than at any previous meeting of the same nature. Only one country failed to be represented.
2. Other American countries, as Canada and Dutch Guiana, were represented for the first time.
3. Experts not connected with official public health organizations were brought in to discuss technical subjects of interest to the delegates.
4. For the first time at any of these conferences a health exhibition was held, to which a number of countries sent valuable material in addition to the display arranged by the Pan American Sanitary Bureau. This exhibition was supplemented by exhibits of a more commercial nature, collected and presented under the auspices of the Department of Commerce of the United States.
5. Definite constructive action was taken on various problems of immediate interest to all the republics, thus paving the way for further advances in the future.

6. A concurrent meeting of the American members of the Permanent Committee of the International Office of Public Health was held with the Director General of that institution, Dr. R. Pierret, in order to consider the reports which were to be presented at the meeting to be held at a later date in Paris. (This Paris meeting had to be indefinitely postponed.)

A good idea of the ground covered by the Conference may be obtained from the program, on which the following subjects appeared: Aerial Sanitation; Malaria; Serology of Syphilis; Nutrition; Public Health Personnel; Vital Statistics; Model Sanitary Code; Appraisal Tests for Health Work; Typhoid Control; Industrial Hygiene. It was both interesting and gratifying that practically all countries had advances to report, and in various instances really remarkable ones.

The resolutions adopted, all of them unanimously approved, permit one to appreciate, even if imperfectly, the seriousness and foresight with which the important health questions before the Conference were treated. (See Pub. No. 151, Pan American Sanitary Bureau.)

A number of new duties were imposed upon the Pan American Sanitary Bureau. Authorization was given the Director to appoint several important continuing committees: on Sanitary Code; on Malaria; on Training of Health Personnel. A new program was drawn for the Committee on Nutrition.

Other resolutions provided in brief: for a more liberal use of the institutions already available for public health training; stressed the importance of preventive medicine in medical education programs; commended countries which already have taken steps to place on a merit basis the public health career; approved appraisal tests for the evaluation of health work being done in the American republics and trial of these tests in representative cities; advocated more extended use of the procedures already put into effect in several countries to prevent the spread of disease through aerial navigation; suggested measures for improving the collection and use of vital statistics for public health purposes; favored conservation of forestal areas around water sources to avoid decrease of water supplies and prevent their contamination; recommended the creation of centers for the treatment of poliomyelitis patients; and advised standardization of methods for diagnosis, recording and treatment of venereal disease.

POSTAL FRANKING PRIVILEGE FOR THE PAN AMERICAN SANITARY BUREAU

The autonomous character of the Pan American Sanitary Bureau and the steady growth of its work, especially in the last few years, have for some time made it desirable for the Bureau to have the use of the postal
franking privilege in its own right. This necessity was recognized in a resolution adopted by the IV Pan American Conference of National Directors of Health, reading as follows:

The IV Pan American Conference of National Directors of Health recommends to all the American Republics that the postal franking privilege be granted to the Pan American Sanitary Bureau in its own name, thereby increasing the efficiency of said Bureau and facilitating the collection and distribution of vital statistics which are of great importance to all American nations.

Almost simultaneously with this recommendation, a bill to the same effect was introduced in the Congress of the United States, became law on the 29th of June and was signed by the President. The Bureau, therefore, was authorized to use the franking privilege as of that date. This will doubtless be of interest to the health authorities of the other republics who may desire to obtain a similar concession for the Bureau from their respective countries.

HEALTH EXHIBIT

A resolution of the X Pan American Sanitary Conference recommended that a health exhibit be prepared in connection with the XI Conference to be held in Rio de Janeiro in 1942. The Pan American Sanitary Bureau decided to present an exhibit of this nature on the occasion of the IV Pan American Conference of National Directors of Health. This exhibit was planned and assembled under the direction of Mr. Rigoberto Ríos-Castro, Chief of the Bureau of Health Education of the National Public Health Service of Chile. In addition to a display showing the origin and development of the Pan American Sanitary Bureau, the exhibit contained the interesting contributions of several Republics, among them Argentina, Chile, and especially Mexico and Venezuela, illustrating particularly certain modern aspects of health work: social service, maternal and child welfare, rural sanitation, food inspection, anti-venereal campaign, etc. The United States Public Health Service, the Department of Labor (Children’s Bureau and Bureau of Home Economics), the Departments of Health of the District of Columbia and of the State of Virginia, and various national organizations such as the Tuberculosis, Social Hygiene and Dietetics Associations, took part in the exhibit. A similar exhibit, but of a commercial nature, was presented at the same time by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce. The IV Pan American Conference of National Directors of Health, recently held in Washington, approved a resolution congratulating the countries which contributed to the success of the exhibit and suggesting that their example be followed and extended in future Conferences.
PAN AMERICAN HEALTH DAY

One of the resolutions approved at the Fourth Pan American Conference of National Directors of Health provides that the Bureau shall make arrangements for holding every year a Pan American Health Day. This will serve to unite annually all the American Republics in a solemn act, emphasizing their community of ideals in the protection and promotion of one of the fundamentals of public defense and good citizenship. The national health authorities of all the Republics have been consulted about the matter, and a number of answers have already been received. While different dates have been suggested, including the birthdays of the illustrious Finlay and Cruz, the consensus seems to be that the most appropriate date for this celebration would be December 2nd, which is the day when the First Pan American Sanitary Conference opened its sessions and thus began an era of fruitful cooperation among the Republics of the Western World.

TECHNICAL COMMITTEES OF THE PAN AMERICAN SANITARY BUREAU—NUTRITION—MALARIA—MODEL SANITARY CODE

In the performance of its duties as central coordinating agency of the health organizations of the Western Hemisphere—especially from an international standpoint—and in conformity with the provisions of the Pan American Sanitary Code, the Pan American Sanitary Bureau has initiated from time to time, and especially within the last fifteen years, various activities, some of them dictated by conditions prevailing at the moment. One of the most far-reaching of these measures was the creation by the VIII Pan American Sanitary Conference in 1927 of the position of Traveling Representative. Formal recognition was thus given to a Pan American phase of health work actually in progress since March 1923. The duties assigned to these experts dealt originally with standardization of quarantine procedure and campaigns against infectious diseases, specified in the international conventions—and particularly plague. However, these Traveling Representatives have also interested themselves in other problems, and especially public health administration, whenever their services have been requested by national authorities in this capacity. They have thus had occasion to participate in the formulation of plans for sanitary organization and in the preparation of codes for various countries. Recently, the detail of field sanitary engineers has resulted in active participation by these men in the solution of problems in their specialty in various parts of Latin America.

Again responding to the demand imposed by the increasing development of health services in all of the Americas—with the consequent expansion of the functions of the Bureau—these services have been
amplified by virtue of resolutions adopted by the Pan American Sanitary Conferences, creating technical committees, to which there has been entrusted the task of formulating on a continental scale plans for work in their respective fields of action.

Committee on Nutrition.—The first of these committees, the Committee on Nutrition, was authorized chiefly through the efforts of Prof. Justo F. González, of Uruguay, by resolution of the VII International Conference of American States (Montevideo, 1933) and of the III Pan American Conference of National Directors of Health (Washington, D. C., 1936). A very good idea of the accomplishments of this Committee may be formed from the report presented at the Bogotá Conference (see Publication No. 140 of the Bureau). At the IV Pan American Conference of National Directors of Health, new and very important duties were entrusted to the Committee, including preparation of a series of balanced menus keeping in mind low cost and nutritional value, and establishment of Pan American standards for vitaminized foods. A sub-Committee of the members of the Committee at present in the United States, namely, Drs. F. V. McCollum, Justo F. González, and W. H. Sebrell, has been organized to consider in a preliminary way these various points and submit definite recommendations as to the best manner of undertaking the task.

The Bureau has under consideration the publication of a rather voluminous manual on nutrition prepared from the standpoint of the tropics by one of the experts of the School of Tropical Medicine of Puerto Rico.

Committee on Malaria.—A resolution of the X Pan American Conference (Bogotá, 1938) created the Committee on Malaria, an organization which may fulfill a very necessary and useful mission in the campaign being waged against one of the principal scourges of the tropics. Tentative plans for the beginning of this work include standardization of nomenclature of anophelines through identification at a small number of strategically placed laboratories; establishment of a uniform method for making malaria surveys; and standardization of dosage of antimalaria drugs, and especially of proprietary medicines.

Committee on Sanitary Code.—At the IV Pan American Conference of National Directors of Health (Washington, 1940), another technical organization was created: A committee charged with the duty of formulating the groundwork for a standard Sanitary Code. There is no doubt that, in an effort to modernize sanitary legislation, it must necessarily or unquestionably be a useful digest which, while incorporating the indispensable principles which provide for the legal protection of sanitary conditions, may also serve as a general pattern or guide for those countries which are endeavoring to solve this question.
and must reckon with the almost inevitable changes in situations from day to day, based on the teachings of the past and of present-day experience.

The work of these technical committees, which complement the work of the Traveling Representatives and Special Representatives of this Bureau, will greatly augment facilities for assisting the national health authorities with their problems either in the expansion of work already undertaken or in the initiation of new services which they may have under consideration.

FELLOWSHIPS AND INTERNSHIPS

As stated in the last annual report, a limited number of young medical graduates of Chile were brought to the U. S. to complete their internship in the hospitals of the United States Public Health Service. This venture proved most successful, and it has been decided to extend it now to a number of other countries. Similar positions have therefore been offered, through the national health authorities, to graduates from Brazil, Colombia, Cuba, Ecuador, Guatemala and Honduras.

An appropriation made recently available by the Congress of the United States will also permit the offering of public health scholarships to a small group of qualified individuals recommended by the national health authorities. Preliminary correspondence on this subject with such authorities has already been initiated.

INTERNATIONAL EPIDEMIOLOGY

No major epidemics were reported during the year 1939 in any of the American Republics. Data with regard to the diseases and conditions of greatest importance and interest are given below.

The epidemic of influenza which occurred in Puerto Rico toward the end of the fiscal year (June-August, 1940), resulting in tens of thousands of cases, should not be overlooked. Incidentally, this furnished the opportunity to try the new influenza vaccine prepared at the Rockefeller Institute.

In accordance with the provisions of the Pan American Sanitary Code, the health departments of most of the American Republics send regularly reports to the Pan American Sanitary Bureau with regard to quarantinable diseases. In addition, special reports on yellow fever were promptly remitted from Brazil and Colombia, and on plague from Argentina (by cable), Brazil, Ecuador (littoral zone), the United States, Peru and Venezuela. All information thus received is incorporated in the "Weekly Report" of the Bureau, which is immediately sent to all of the American Republics and to institutions elsewhere which may be interested. When circumstances require it, the radio or cable is used to notify those countries which are in danger or which are most directly interested, as well as the International Office of Public Health.
The Bureau likewise receives periodic reports on communicable diseases from Bolivia, Colombia, Cuba, Chile, Ecuador (plague and smallpox), El Salvador, the United States, Guatemala, Haiti, Mexico, Paraguay, Peru, Uruguay and Venezuela. Information about the other Republics is derived from their official reports.

Cholera. This disease has not made its appearance in any part of America for several decades.

Plague.—In 1939, as in other years, there were cases of plague in some parts of Argentina, Bolivia, Brazil, Ecuador and Peru, and it also appeared in Venezuela. The infection has been detected in certain wild rodents in the interior of Argentina, Brazil and the United States. Argentina, Brazil, Chile, Ecuador, Peru and Venezuela maintain national anti-plague services. In the United States a special unit carries out investigations of rodents and their parasites in various western States. In general the most that can be said of the plague situation in America is that it is constantly fluctuating, showing higher figures in certain parts and lower in others.

In Argentina the mortality from plague fell from 15 C in 1938 to 5 C in 1939 (Provinces of Mendoza, San Luis, Jujuy, Tucuman and Salta). However, this decrease was followed by a recrudescence in the first six months of 1940, an approximate total of 52 C and 31 D being registered in that period among confirmed and suspected cases. The Provinces chiefly affected seem to be Santiago del Estero and Cordoba. Both the bubonic and the pneumonic forms have been observed, as well as infection among rodents. The disease has not been reported in any Argentine port since 1936.

In Bolivia the plague situation is more encouraging, to judge by the reports for 1939, which show a total of 21 C, occurring chiefly in the Departments of Tarija, Santa Cruz, Chuquisaca and Potosi; this figure compares favorably with that of 1938 (300 C). Furthermore, no cases have been reported for the first half of 1940, as compared with 17 C in the same period in 1939.

It is well known that in the northeastern part of Brazil there are certain rural foci which are responsible for practically all of the deaths from plague occurring in the Republic. This situation has improved, however, showing a decrease from 95 C and 39 D in 1938 to 81 C and 24 D in 1939. The distribution according to States was as follows: Alagoas, 40 C, 8 D; Pernambuco, 33 C, 13 D; Ceara, 3 C; Sao Paulo, 3 C 1 D; Paraiba and Baia, 1 C and 1 D in each. In the city of Rio de Janeiro there have been no cases of human plague since 1928. For 1940, only 7 C and 2 D have been reported (Alagoas and Pernambuco), occurring in the first two months, as compared with 43 C 9 D in the same period in 1939.

Ecuador, on the other hand, showed a considerable increase in plague, with a total of 304 C—and this figure may not be complete—as com-
pared with 56 C and 21 D in 1938. The figure for 1939 includes 242 C registered in the Province of Loja up to October 15; 59 C in the Province of Chimborazo from January to May; and 3 C 2 D in Guayaquil (as compared with 36 C 20 D in 1938). No cases were observed in other coastal regions. In spite of this increase, the eradication of plague in the port of Guayaquil, accomplished with the cooperation of the Pan American Sanitary Bureau, represents a triumph for the public health service of Ecuador, the last case reported there corresponding to April 14, 1939, and the last infected rat to March, 1939. The disease continues in endemic form in certain foci in the interior of the Republic, and has probably existed in the Province of Chimborazo since the year 1913, without being accompanied by epizootics and despite the absence of X. cheopis. No cases of plague either in humans or rats have been observed in Guayaquil or any other point in the coastal zone during the first six months of 1940. The theory advanced by a Commission of the Medical School of Quito that the human factor (pharyngeal carriers of the germ) might play an important part in the transmission of the disease was not confirmed by a much more extensive investigation carried out by the Chief of the National Anti-Plague Service, with the collaboration of Dr. Murdock of the Pan American Sanitary Bureau, in the Provinces of Loja and Chimborazo.

In Peru also a considerable increase was noted during 1939 (130 C 51 D) as compared with the previous year (59 C 31 D). The distribution by Departments was as follows: Lima, 39 C 19 D (1938: 42 C 28 D); Libertad, 35 C 18 D (1938: 11 C 1 D); Piura, 33 C 4 D; Lambayeque, 12 C 8 D (1938: 5 C 1 D); Cajamarca, 10 C 2 D (1938: 1 C 1 D); Ancash, 1 C. The infected ports were: Pacasmayo, 7 C 3 D (only one case in the city, the rest in the country); Chancay, 5 C 2 D (only 2 cases in the city); Salaverry, 1 C; Huacho, 6 C 2 D (all in rural zones). In 1940, according to information received for the first six months (134 C 50 D), the disease increased (same period in 1939, 60 C 18 D), human cases occurring in the port cities of Pacasmayo (6 C 1 D), Huacho (9 C 6 D: 5 C and 4 D in the city proper); Puerto Chicama (1 C 1 D); and infection among rats in Port Salaverry and Port Eten.

For the first time since 1937 a case of human plague was observed in the United States, in Salt Lake City, State of Utah, in the interior of the country. Infection was also found among wild rodents and their parasites in seven other western States, more or less the same as the previous year, and in the Territory of Hawaii: California, Idaho, New Mexico (for the first time; this is the region farthest east and south in which the disease has been found in the United States), Montana, Oregon, Nevada and Washington. During the first semester of 1940 one case of human plague was reported (June 10) in the town of Emmett, Idaho, in the interior of the country.

Important from an epidemiological point of view was the confirmation
of the presence of plague in Venezuela, in the State of Aragua, in a very isolated region. From December 7, 1939, when the outbreak began, until January 4, 1940, when it was extinguished, 11 C and 8 D were registered. The disease had not been reported in Venezuela since 1928, when it was observed in the State of Miranda, bordering on that of Aragua, although there appear to have been sporadic cases in the same region since then. The Pan American Sanitary Bureau cooperated on request of the Venezuelan health authorities in the study of this outbreak, sending Drs. J. D. Long and N. E. Wayson to the scene as quickly as possible.

Summarizing his recent observations on the epidemiology of bubonic plague in the Americas, Dr. Long reports: "Three especially violent outbreaks of pneumonic plague occurred during the year in Ecuador. These outbreaks, apparently, were due to initial cases of bubonic plague which developed secondary pneumonia, and thus infected a number of persons before isolation measures could be established. In Peru, no sylvatic plague (plague in wild rodents) has been observed despite careful search and investigations. Large migrations of rats due to changes in crops were observed, with resulting increase in human cases of the disease. Another new factor found is that rats dead of plague have been found floating in irrigation ditches, thus explaining the stubborn endemicity of the disease in certain rural localities, and its unusual and unexpected appearance in hitherto uninfected localities, due to the fact that these dead rats are eaten by live ones, who in turn become infected. In the Argentine, the plague that now occurs is rural plague due to infection in the ordinary domestic types of rats that are found in and near houses in rural districts. While infected wild rodents have been found in the Argentine, the weight of evidence available would seem to indicate that they are more or less incidentally infected through occasional contact with domestic rats, and that the disease is not kept alive among them as they are extremely susceptible to the disease and rapidly die of it. In Brazil, where it has been thought that sylvatic plague has existed for some 30 years or more, it is apparently being demonstrated that the infection comes from domestic rats in houses in rural districts. The extensive epizootics that have occurred among wild rodents are apparently due to an undetermined virus, or to a pasteurella, not plague, that is highly virulent for many rodents and other animals. Infected wild rodents are rarely found, and then usually in relation to rats in or near houses. Certain disease entities clinically very similar to plague in human beings, but with a very low mortality, are now being studied in order to determine the cause, and thus avoid confusion in the diagnosis. In Venezuela, such plague as exists seems to be rural plague due to infection in domestic types of rats that infest the rural houses and their immediate vicinity. No evidence of sylvatic plague infection could be found."
A complete review of the historical and epidemiological aspects of plague in the Americas is now in process of publication in the Bulletin of the Bureau.

Typhus.—On the whole, judging by the reports received, the typhus situation in America showed an unfavorable tendency during the year 1939. In Bolivia, where the disease is endemic in the Departments of La Paz, Potosi, Oruro and Cochabamba, with frequent epidemics, 224 cases were registered in 1939, as compared with 167 in the previous year. Morbidity for the first half of 1940 totalled 498 cases, including 208 in April in the Province of La Paz, indicating an increase for 1940. In Chile, where typhus is likewise endemic, and where it occasionally appears in epidemic form, 1,420 cases and 254 deaths were reported in 1939, as compared with 829 cases in 1938. Among the principal ports, the disease was observed in: Valparaiso, 60 cases and 4 deaths (1938: 38 cases and 6 deaths); Antofagasta, 35 cases and 3 deaths (1938: 18 cases and 1 death); Puerto Montt, 6 cases; Talcahuano, 6 cases; Valdivia, 3 cases; Arica, 1 case; and in Taltal, Lota, Iquique and Coquimbo. According to reports for the first months of 1940, from 8 to 10 cases weekly were still being registered, and the port cities of Antofagasta, Valparaiso, Talcahuano, Iquique, Valdivia and Taltal continued to be infected.

In the United States typhus morbidity also increased, with a total of 2,995 cases and 146 deaths in 1939, as compared with 2,294 cases and 137 deaths in 1938. The highest figures, as in earlier years, belonged to three southern States: Georgia, 1,129 (1938: 956), Texas, 538 (1938: 497), and Alabama, 472. Among the principal ports, the highest incidence was recorded in New Orleans, La., with 25 cases, New York, 24 cases, and Los Angeles, Cal., 21 cases.

By a strange coincidence the number of cases of typhus reported in Guatemala in 1939 was exactly the same as the number for the previous year (234), although the resulting deaths increased from 40 to 52. For the first six months of 1940, 227 cases and 45 deaths have been reported, as compared with 74 cases and 22 deaths in the corresponding period of the previous year; this would seem to indicate a large increase in the disease for 1940.

The only report on typhus in America which, if not encouraging, is at least not pessimistic, comes from Mexico, with a total of 300 cases and 76 deaths recorded in 1939 in the State capitals, ports and frontier towns, as compared with 331 cases and 67 deaths in the previous year. Although the disease was present in a great many States, Tampico is the only port of any importance in which it was reported (1 case). For the entire Republic, only the preliminary figures are available for the first semester of 1939, and these show 498 deaths in not less than 20 States, with the highest mortality in the States of Mexico (80 deaths), Puebla (79), Zacatecas (58), Oaxaca (55), and Guanajuato (41). At that rate the number for the entire Republic for 1939 would hardly differ from that of the previous year (935 deaths). The reports for the first three months of 1940 from the
ports and frontier towns show 77 C and 26 D; this likewise does not promise any considerable change in the typhus situation for the year in question, although it should be said that the disease has not been recorded in any major port.

In Peru also, the 1,656 C reported in 1939 represents an increase over the 1,137 C reported in 1936. The Departments chiefly affected were Cuzco (596 C), Puno (336 C), Ayacucho (276 C), and Apurimac (179 C). The disease is quite widely spread throughout the whole country, although in other Departments the figures were lower.

*El Salvador*: 2 D were reported in San Salvador in 1939, and 1 D in the first semester of 1940.

In the *Panama Canal Zone* 3 C occurred in 1939.

The recent confirmation of typhus in countries which have been hitherto entirely free of the disease should be noted. Eleven cases of the rat-borne type were observed in *Venezuela* in 1939, all of which occurred in the river port of Ciudad Bolivar. In 1940 the disease has also appeared in Valencia (8 C in the first five months). In *Cuba* human endemic rat-borne typhus has been reported in the Province of Pinar del Rio, and one case was registered in Habana. In *Ecuador* a series of positive Weil-Felix reactions observed in 13 workers and peasants from Quito and the surrounding country from Dec. 1939 to Jan. 1940, confirmed the belief that typhus of the endemic type exists there.

**Smallpox.**—This disease was reported from most of the American Republics in 1939, the only exceptions being Costa Rica, Cuba, Chile, Dominican Republic, Haiti, and Panama. Nevertheless, with but a few exceptions the incidence of smallpox in America in 1939 decreased as compared with the previous year.

In *Argentina* only 5 C occurred, as compared with 56 in 1938 and 80 in 1937, not including in the figure for 1938 the unofficial data regarding an outbreak which lasted from December, 1937 to May, 1938 and affected 15 localities in the Department of Humahuaca, Province of Jujuy (about 349 C).

In *Bolivia* 288 C were reported in 1939, as compared with 229 in 1938. The disease appeared in almost all the Departments of the Republic. During the first six months of 1940 189 C have been reported, with highest incidence in the Department of La Paz.

The total number of cases in *Brazil* for 1939 is not known, although 49 C were observed in the river port of Porto Alegre (1938, 8 D) and 2 C in Recife.

The greatest increase of smallpox was seen in *Colombia*: 2,787 C and 76 D, as compared with 869 C and 49 D in the previous year. The disease affected many Departments, and the following ports: Barranquilla, 1 C; Cartagena, 4 C; Santa Marta, 10 C; Puerto Berrio, 11 C 1 D;
Puerto Wilches, 2 C; Tumaco, 2 C; Puerto Tejada, 2 C. Judging by the 1228 C and 36 D registered in the first six months of 1940, the situation up to that time had not improved a great deal.

In Ecuador 14 C and 6 D were reported in the littoral zone in 1939, as compared with 18 C 7 D in the previous year, when the outbreak began. Of the 1939 series, 5 C and 2 D occurred in Guayaquil (5 C 1 D in 1938).

In Mexico the smallpox situation has not varied greatly. 253 C and 78 D were registered in 1939 in the State capitals, ports and frontier cities, figures which are close to those for the previous year, 270 C 41 D. Among the ports affected, the most important is Tampico, where an epidemic broke out in January and was brought under control in March (24 C 4 D), after the vaccination of 115,583 persons among a population of 120,000 inhabitants. Other ports affected were Guaymas and Manzanillo, with 1 C in each (these are both on the Pacific coast). For the entire Republic, only preliminary reports for the first six months of 1939 are available, showing a total of 1,419 D in 23 States, with the highest mortality in the States of Michoacan (400), Guanajuato (388), San Luis Potosi (223), Hidalgo (101), Zacatecas (56), Querétaro (49) and Aguascalientes (34). At that rate the total figure for 1939 would be lower than that for 1938: 3,253 D. For the first three months of 1940, the information received from ports and frontier cities indicated 8 C 4 D, with no infection in any port, which gives reason to expect a great improvement for 1940 as a whole.

In Peru the smallpox situation improved in 1939, with a total of 177 C as compared with 248 in 1936. The disease affected no less than 18 Departments, chiefly Huancavelica (45 C), Cuzco (24 C), and Apurímac (21 C).

The highest incidence of smallpox in America, although with much lower figures than in the previous year, again belonged to the United States, with a total of 9,877 C and 34 D, as compared with 15,111 C in 1938. The greatest number of cases occurred in three States of the interior: Indiana, with 1,445 C (1938, 1,559); Iowa, 1,057, and Oklahoma, 873. The disease was observed in three of the principal ports of the country: Portland, Ore., 56 C; Los Angeles, Cal., 18 (76 in 1938); and San Francisco, Cal., 1. It should be observed that the great majority of cases occurred in States west of the Mississippi River.

In Venezuela, 3,839 C 148 D were reported in 1939 (in 1938, 256 D of which 247 were from alastrim). Caracas accounted for 170 C 11 D, and the town of Coro for over 1000 C 13 D (in February 1939). The disease, mostly alastrim, extended to three of the principal port cities: Maracaibo (5 C 1 D in 1939; 12 D in 1938); Puerto Cabello (5 C; 1938 16 C); and Ciudad Bolívar, river port (4 C 1 D). It is to be expected that the situation will improve, in view of the intensive vaccination that
is being carried out. Preliminary reports for the first five months of 1940 show 163 C, mentioning Puerto Cabello (1 C alastrim) as the only port infected.

*Guatemala*, with 11 C and 2 D in 1939, shows the greatest decrease in the incidence of smallpox in America; the figures for 1938 were 60 C 50 D. This improvement has continued, perhaps on even a greater scale, during the first six months of 1940 (4 C 1 D). In Honduras the disease assumed a mild form in the fiscal year 1939–40, and only 28 deaths were reported. The disease was also reported in *El Salvador* in 1939 in the Department of Santa Ana (1 D), and it may exist in Nicaragua.

**Yellow Fever.** During 1939 yellow fever (jungle type) affected four countries, chiefly Brazil and Colombia. In both, however, the disease showed a decrease as compared with the previous year: in Brazil from 256 deaths in 1938 to 126 in 1939. The highest mortality occurred in the States of Espirito Santo (103 D), Minas Gerais (13 D), Rio de Janeiro (3 D), and Para (3 D). One case was reported in Amazonas and one in Baia. For 1940, only the report for January has been received; 28 D in Espirito Santo and 1 D in the State of Rio de Janeiro. In *Colombia* the mortality from yellow fever was reduced from 15 in 1938 to 8 in 1939. Most of these deaths occurred in the region west of the Magdalena River in the Department of Antioquia, where the disease had not previously been reported. It should be added that one of these cases was contracted in the Municipality of Puerto Berrío, a port on the Magdalena River. On the other hand, hardly any cases have been reported in the region of Villavicencio, Intendencia del Meta, since August, 1938. During the first six months of 1940, 5 D have been reported for the whole country as compared with one in the corresponding period in 1939. Intensive preventive measures have been taken in both of the countries mentioned; in Brazil nearly 1,500,000 persons were vaccinated against the disease in 1938 and the first six months of 1939, and in Colombia, between June, 1937, and April 30, 1939, about 52,562 persons in the region affected. A certain ineffectiveness noted in some of the vaccine used in Brazil (56 C and 14 D from yellow fever among 136,000 persons vaccinated from 7 days to 14 months earlier) seems to have disappeared.

Reports from *Peru* give one case of yellow fever in the Department of Loreto for 1939; from *Bolivia*, 2 C during May, 1940, although full information has not yet been received as to the locality. The disease has been reported previously in recent years from both countries. The Republics of Argentina, Bolivia, Brazil, Colombia, Paraguay, Peru and Venezuela maintain yellow fever services, including laboratories. The Venezuelan Minister of Health and Public Welfare remarked in his report for 1939 that “All the physicians of the State of Bolivar... are agreed that each year... clinical cases are observed
which could well be classified as jungle yellow fever. The physicians of Valera have supplied information leading us to believe that the disease exists in that region, which stretches from the city of Trujillo to Lake Maracaibo." In Costa Rica two suspected cases observed in 1938 in the southeastern part of the country, which was beginning to be cleared for the cultivation of bananas, gave rise to some alarm. However, a study undertaken during 1939 among the Indians of the region in question, by the Department of Health and Social Welfare in cooperation with the Rockefeller Foundation, revealed no positive seroreactions. Another investigation in April of 1940 also revealed no immunizing faculty among the individuals examined. This confirms the conclusion reached in 1937 that there has been no yellow fever in Costa Rica since 1910.

Other Diseases

Poliomyelitis.—An epidemic of poliomyelitis occurred in Colombia in February 1940. Up to March 28, when the last case of that outbreak was reported, 106 C and 8 D were observed, chiefly in the Departments of Valle del Cauca (77 C 7 D), Cauca (15 C 1 D), and Santander (14 C). Almost all of these cases occurred in the interior of the Republic. The outbreak extended, nevertheless, to the ports of Buenaventura and Puerto Tejada. The Pan American Sanitary Bureau collaborated in the campaign, responding to the appeal of the Ministry of Health, Labor and Social Welfare by sending two of its traveling representatives, who remained in the infected region until March 25. In May and June 1940 the disease was again reported: 26 cases and 4 deaths in Valle, Santander, Huila, Boyacá, Antioquia, Caldas and Tolima Departments. Aside from a small outbreak three years ago in Cucuta, there had formerly been no epidemics of poliomyelitis in Colombia, except for isolated and almost always mild cases. In the United States the disease increased considerably, from 1,705 C 487 D in 1938 to about 7,343 C in 1939, with quite severe outbreaks taking place in various parts of the country. In Brazil an epidemic of serious proportions occurred in the city of Rio de Janeiro, from August to November, 1939, with a total of 230 C 20 D. It is said that the disease has existed sporadically in the State of Sao Paulo since 1917, with occasional outbreaks, as in Santos in 1938 (January-July, 30 C) and S. Paulo (1939: 61 C 6 D). It also appeared, although in a lesser degree, in some of the other American Republics, among them Cuba (15 C during June-July, 1939, in the Province of Habana, 12 of which were in the city of Habana); Venezuela (8 C 1 D in Caracas in 1939); Argentina (2 C 1 D in February, 1939, in the Province of Entre Rios; 5 D in the city of Buenos Aires, in 1939, from either poliomyelitis or polioencephalitis); Guatemala (4 C in the town of Zacapa); and Chile.

It would not be amiss to mention here the human type of equine
encephalomyelitis. In the United States the first cases were reported in 1937; the disease in animals has been found in quite a number of countries, including Argentina, Brazil, Cuba, Mexico, and Venezuela. Also of interest is the recent confirmation of the fact that the grey mouse Mus musculus is the host of the virus of coriomeningitis.

**Verruga Peruana.**—Cultures and subcultures of blood samples from the Province of El Oro, Ecuador, sent to Peru by Dr. Murdock of the Pan American Sanitary Bureau, showed the morphology and mobility typical of the bacilliform Bartonella, while inoculation of monkeys produced the nodules characteristic of verruga peruana. The disease had earlier been reported in endemic form in the region of Zumba, Province of Loja, causing only a small number of cases with occasional mild outbreaks. In Colombia, there have been reported recently 1 case in the City of Bogota and 7 cases (May 1940) in the Department of Nariño. The total of deaths from bartonellosis in this Department in 1939 is estimated at 1,448.

The wider distribution of various diseases which were formerly believed to be limited to certain regions constitutes a problem which must be given serious attention. This has been the case with typhus, bacillary dysentery, undulant fever, and jungle yellow fever, is happening with Carrion's disease and American trypanosomiasis, the latter having been recognized by this time in a majority of the American Republics; and may happen tomorrow in the case of other diseases such as tularemia. In the United States (Texas) both the Triatoma gerstakeri and the Tr. heidemanni have been found infected with Tr. cruzi in the natural state.

**INTERNATIONAL MOSQUITO PROBLEMS**

Some and occasionally considerable alarm has been aroused by the reports of the ravages caused by Anopheles gambiae in Northeastern Brazil. The situation was reviewed at length in the 9th and 10th Pan American Sanitary Conferences. It was also dealt with at the 4th Pan American Conference of National Directors of Health, at which the Brazilian Delegate was able to furnish reassuring information as to the success of the campaign against the dangerous mosquito undertaken by the National Department of Health with the cooperation of the Rockefeller Foundation.

Recently the former Consulting Entomologist of the Pan American Sanitary Bureau, W. H. W. Komp, has called attention to the occurrence of An. darlingi, another dangerous malaria vector, in British Honduras and Guatemala, i.e., in countries where its presence had never been reported before. In view of the potentialities of this malaria carrier the situation should be kept in mind and the existence of the darlingi in neighboring countries investigated.
PUBLIC HEALTH PROGRESS

It is only pertinent to place on record here the encouraging progress achieved in practically every field of public health throughout the Americas. The increase in health budgets, the opening of new hospitals and research institutions, the strengthening of health administration, the increment in trained personnel, and the promulgation or modernization of sanitary legislation, offer ample testimony to this effect. There is still everywhere plenty of room for improvement, but the first, which are also the hardest, steps have been taken, and substantial advances are already in evidence.

One of the greatest difficulties often met in public health work consists in frequent changes in the responsible personnel, with the inevitable alterations in policies and occasionally disorganization and uncertainty. It is pleasing therefore to see an increasing tendency to provide greater stability for health officials, thus carrying into effect a principle often endorsed by the Pan American Sanitary Conferences.

Not the least gratifying feature of the situation is the general freedom from pestilential disease of all important sea and air ports, permitting uninterrupted communications among all the American Republics.

INTERNATIONAL OFFICE OF PUBLIC HEALTH

The Director attended in November, 1939, the meeting of the Health Committee of the League of Nations in Geneva, which incidentally was the last one held by that organization.

Because of the war, the Permanent Committee of the International Office of Public Health in Paris has been unable to meet. In order to remedy at least partly this situation, at the request of Dr. M. T. Morgan, President of the Committee, the Bureau lent its cooperation in calling in Washington, simultaneously with the IV Pan American Conference of National Directors of Health, a regional session of the members representing American countries on the Committee. Delay in the mails prevented the notification of the different countries in time, and no official delegates were appointed to attend the regional meeting. The meeting, therefore, had to assume the form of: (1) attendance by the Director General of the International Office of Public Health of Paris, Dr. R. Pierret, at the sessions of the IV Pan American Conference of National Directors of Health; (2) participation by him in the discussions of subjects in which the International Office is most directly interested such as the international convention on air navigation; (3) distribution of the reports and other material brought over by Dr. Pierret; and (4) a plenary session on May 9, at which the report of the Finance Committee on the 1940 Budget for the Office was approved and
appreciation of the visit of the Director General to Washington expressed.

Advantage was taken of the presence of Dr. Pierret in Washington for an exchange of views on the interchange of epidemiological information in the most effective and rapid way.

When the war situation seemed to threaten an interruption in the epidemiological service of the Paris office and the Bureau was approached about the matter, the Director advised the President of the Office of its willingness to undertake it temporarily, for the period of the emergency. No need for this finally arose, as the Director General of the Office was able to re-establish his headquarters at Royat.

VIII AMERICAN SCIENTIFIC CONGRESS

The Bureau lent all possible assistance in the organization and operation of the Section on Public Health and Medicine of the VIII American Scientific Congress, the Director of the Bureau acting as Honorary Chairman of the Section and the Secretary as Assistant Secretary. Attendance was also urged in every practicable way. It was generally agreed that this Section had the largest attendance at the Congress and the papers presented reached in many instances a high degree of excellence. A number of them are now in process of publication in the Bulletin of the Bureau.

CARIBBEAN CONFERENCE

Senior Traveling Representative John D. Long was assigned to attend the Second Meeting of the Inter-American Caribbean Union in June, 1940. At this Conference a number of rather important resolutions were adopted, including one favoring the establishment of a Caribbean and Gulf sector of the Pan American Sanitary Bureau, as mentioned elsewhere.

CATASTROPHES

Immediately on receipt of news of the disastrous earthquake which had devastated the port of Callao, Peru, and some suburbs of Lima, the two representatives of the Bureau in that vicinity, Dr. Anthony Donovan and Mr. Edward D. Hopkins, were ordered to place themselves at the disposal of the national health authorities. The offer was accepted, and inspections of emergency housing projects were made and a written report with blueprints on desired sanitary arrangements was given to the engineer in charge.

VITAL STATISTICS

For years the Pan American Sanitary Bureau has emphasized the value of efficient vital statistics systems from the standpoint of public
health. A regular section of the Bulletin is devoted to this subject and periodic compilations of available data are published, using to a large extent the material collected through questionnaires circulated every year among health and vital statistics officials.

Through diplomatic channels a request was received for assistance in the organization of a statistical office in the Ministry of Public Health of the Republic of Uruguay. The Department of Commerce of the United States was kind enough to lend the services of one of its experts, Dr. Forrest E. Linder, in the capacity of consulting biostatistician of the Pan American Sanitary Bureau. Dr. Linder arrived in Montevideo on December 18, 1939 and remained there until June 26, 1940. His principal task consisted in the organization of an office to compile medical and vital statistics for the Health Department, which involved the designing of adequate forms, and issuing of a manual of instructions for clerks. In addition, Dr. Linder made a number of recommendations and suggestions regarding the future development of vital statistics in the country. The most important of these deals with the adoption of an expanded death certificate which will provide more complete data.

On his return trip to the United States, Dr. Linder was requested to stop at Lima as the Peruvian health authorities had made a similar request. Dr. Linder was able to spend only five days in Peru, devoting his time to visiting the principal statistical offices in Lima, and studying the vital statistics work in charge of the Health Department and the National Statistical Bureau.

Another stop was made by Dr. Linder at Port-au-Prince, July 9-11, to discuss with the Under Secretary of Health the organization of the Haitian census now under consideration.

HOSPITAL SURVEYS

Considerable attention has been given in recent years to the improvement of hospital service throughout Latin America. This was emphasized in a paper presented by the Secretary of the Bureau at the meeting of the American Hospital Association at Toronto, in September 1939. On that occasion much consideration was given to the establishment of closer relations among hospital workers in the Western Hemisphere and possible organization of a Pan American Hospital Association.

Since that date the Bureau has been able to cooperate with two different Republics in the study of hospital problems. At the request of the Social Insurance authorities of Peru, the Bureau was fortunate enough to secure the services of Assistant Surgeon General S. L. Christian, of the U. S. Public Health Service, to make a survey of local conditions and recommend a plan of organization for the new and excellent hospital built in Lima by the Social Insurance Fund for its beneficiaries. Dr. Christian stayed in Lima from October 4th to
November 3rd, 1939, and as a result of his study was able to submit definite recommendations on the various phases of the problem which have application not only to the Lima hospital but to the other institutions under construction or planned by the Social Insurance authorities for various parts of the country (see *Bulletin* for March, 1940).

At the request of His Excellency the President of the Republic of El Salvador, the services of another qualified expert of the U. S. Public Health Service were obtained for a general survey of the hospital situation in that Republic. Dr. O. E. Denney remained in El Salvador from April 15 to May 10, 1940. On completion of his detail he presented a complete plan embracing a reorganization not only of the hospital system but of health administration in general (see *Bulletin* for August, 1940).

**POLIOMYELITIS**

At the request of the national health authorities of Colombia, Dr. James P. Leake of the U. S. Public Health Service was detailed in March 1940 to cooperate in the control of an epidemic of poliomyelitis on the Pacific coast of Colombia. Dr. J. R. Murdock was also sent from Guayaquil to assist Dr. Leake. The number of cases was estimated at over one hundred in the various localities affected. Headquarters were established by Drs. Leake and Murdock at Cali, in the Department of Valle del Cauca, but trips were made to Palmira, Puerto Tejada, Popayan, Buenaventura and Bucaramanga, both in the same Department and neighboring Departments of Cauca and Santander, as in all these places cases had occurred. Drs. Leake and Murdock were able to furnish recommendations as to control of the disease and treatment of residual paralyses.

**GENERAL FIELD ACTIVITIES**

Senior Traveling Representative John D. Long has continued in general charge of field activities. Practically all countries represented in the Bureau were visited by Bureau representatives during the fiscal year. Dr. Long traveled a total of 46,245 miles, and visited Argentina, Brazil, Chile, Dominican Republic, Ecuador, Haiti, Panama, Peru, and Venezuela, devoting his time principally to discussing health questions with the national health authorities, especially from an international standpoint, and furnishing advice on such matters as were brought to his attention.

Dr. John R. Murdock devoted his time chiefly to the control of bubonic plague in Ecuador, principally in the port of Guayaquil, and Peru, pneumonic plague in the Province of Loja, and poliomyelitis in Colombia. In Guayaquil he also cooperated in an effort to improve sanitary conditions and especially in arranging possible means of obtaining a supplemental safe water supply. While in Lima, he also assisted...
the Peruvian authorities and Dr. S. L. Christian in the organization of the new Social Insurance hospital. Dr. Murdock sailed for the United States on April 1940, in order to attend the Fourth Pan American Conference of National Directors of Health and the Eighth American Scientific Congress, and from May 28 to the end of the fiscal year has been on leave of absence.

Dr. Anthony Donovan spent the entire year on duty in Peru and Ecuador, visiting different places in both countries, but spending most of his time in Lima working with the National Antiplague Service and completing a study of all the plague foci in the country since the introduction of the disease in 1903. He also carried out a more intensive study of the Cafete Valley. Advice was furnished by him on yellow fever vaccination to the doctor in charge of yellow fever control in Peru, and 26 Panagra employees were vaccinated by him in Lima.

Dr. Henry Hanson left Bolivia, where he had been studying health problems, on July 18, and was on duty at Paraguay, with some interruptions, from August 4, 1939 to June 2, 1940 acting as technical adviser to the Minister of Health to whom he submitted a plan for reorganization of the National Health Department, after a study of the leading health problems. Advantage was also taken of his stay in the country to make some malaria and mosquito surveys. In addition, under instructions from Senior Traveling Representative Long, Dr. Hanson has been gathering information for a Pan American geography of malaria, and has visited Buenos Aires; São Paulo, Brazil; and Uruguay.

Senior Sanitary Engineer E. D. Hopkins divided his activities during the year among Chile, Peru, Bolivia and Ecuador, his work embracing various phases of sanitation and sanitary engineering, including in Chile: assistance in giving a sanitary engineering course in the National University, and in the organization of a school for public health workers, and in the operation of the Sanitary Engineering Bureau of the Ministry of Health; studies of water treatment plants and distribution systems, garbage collection and disposal in various cities; and studies of oyster production. In Bolivia, he submitted a plan for the organization of the Sanitary Division and studied the water supply of La Paz, and mine sanitation. In Guayaquil, he prepared a report on the improvement and enlargement of the milk pasteurization plant and of the water supply. In Peru, recommendations were made for the organization of a sanitary engineering department in the Ministry of Health; the Engineering School of the University was assisted in the establishment of a sanitary engineering course, and after a detailed study of different mines and mining camps a draft of minimum standards for mine sanitation was prepared. He also obtained for study thousands of mosquitoes in the above-mentioned countries.

Chief Sanitary Engineer William Boaz visited during the year Brazil,
Haiti and Mexico. In Brazil, he visited from July 1st to November 16, the cities of Salvador, Cipo, San Antonio de Jesus, Areia, Itabuna, Jequié in the State of Bahia; Aracaju in Sergipe; Maceio in Alagoas; Recife and Olindo in Pernambuco; São Luis in Maranhão; Manaus in Amazonas; and Belem in Para. Most of his time was spent in inspection of water supply systems, both municipal and institutional, and in conducting at Belem a sanitary engineering course for health officials of the northern states of Brazil. His stay in Haiti lasted from November 19 to December 4 and from December 25 to February 7th. This period was devoted to different health problems, especially water supplies and sewage and garbage disposal in the main cities. Some time was also given to mosquito control and milk supplies. On completion of his duties in Haiti, he submitted a very detailed report to the Under Secretary of Health. After attending the Fourth Pan American Conference of National Directors of Health and reporting to the Bureau in Washington, Mr. Boaz proceeded to Mexico on June 5 principally for the purpose of studying some phases of oyster production in Tampico and Guaymas. On request of the national health authorities of Mexico, he joined a commission of the National Health Department in a survey of sanitary conditions along the border with the United States.

Dr. Atilio Macchiavello, former Director of Health of Chile, was appointed Epidemiologist of the Pan American Sanitary Bureau on July 15, 1939. His services began in Montevideo where he gave a series of lectures before the personnel of the Ministry of Health. From August 1939 to January 1940, Dr. Macchiavello devoted his time to a study of plague and epizootics in northern Brazil, including various regions in the States of Ceará, Pernambuco, Paraíba, Alagoas and Bahia. The results of Dr. Macchiavello’s research have been embodied in a series of papers on the following subjects: feline epizootics; plague in Brazil; a non-plague rodent epizootic. Interesting conclusions to be noted are: that feline epizootics in Brazil, while not identical, belong to the same group as those previously described by other workers in Europe and the United States; changes in the course of rodent plague may be seen when it appears in localities where feline epizootics prevail. In regard to plague in northeastern Brazil, it was established that its endemic condition is maintained by migration of domestic rats as a result of climatic factors and search for certain foods. No evidence was found of the presence of primary sylvatic plague. Another interesting finding was the identification as plague of the local condition called ingua de frio, or febre do caroço. Dr. Macchiavello devoted some time in Montevideo to assisting in the preparation of a Sanitary Code, having been appointed a member of the Committee in charge. On completion of this duty he returned to Brazil to continue his studies of plague.

On the request of the national health authorities of Venezuela, Dr.
Newton E. Wayson, of the U. S. Public Health Service, was assigned in the capacity of Traveling Representative of the Pan American Sanitary Bureau, to make a study of an outbreak of plague (11 cases with 9 deaths) in a rural community, La Florida, State of Aragua, about 30 miles southeast of Caracas and 37 miles from La Guayra by airline, approached from Caracas partly by highway and partly by mule trail. Dr. Wayson personally inspected the area immediately involved, the countryside adjoining and the villages and countryside between this area, Caracas, La Guayra and Puerto Cabello, confirmed the diagnosis of plague and studied the facilities available for examination of rodents in the Institute of Hygiene and methods employed for the examination of rats. Towards the end of Dr. Wayson's visit, Dr. John D. Long arrived on February 7th and remained until February 15th conferring with the national health authorities on the situation. A report with recommendations was submitted to the Ministry. Plans were made for the organization of a National Plague Service, and arrangements for training an employee in laboratory technique in connection with plague were completed in Peru.

A BEGINNING OF SANITARY ZONING

For a long time the Pan American Sanitary Bureau has had under consideration a distribution of its services and personnel in such manner as may increase its efficiency and also enable it to handle with all possible speed the requests for cooperation received from the various Republics. Plague, because of its international aspect—mentioned in all international, including Pan American, sanitary conventions—has been the subject of considerable attention on the part of the Bureau for several years. This, however, has not excluded consideration of other problems, as is well demonstrated by the appointment of Sanitary Engineers who have dealt with problems of their own specialty, in several countries, and also by the attention given by Traveling Representatives, and especially Dr. Long, to questions such as sanitary legislation, health organization, etc.

With the increase of quotas, approved by the X Pan American Sanitary Conference at Bogotá and by the VII International Conference of American States at Lima, and already ratified by the majority of the Republics, there seems to be justification for going a step further and mapping out tentatively certain geographical divisions or zones which will promote the efficiency of the work. At the recent meeting in Washington of the Directing Council of the Bureau and the IV Pan American Conference of National Directors of Health, and at the second meeting of the Interamerican Conference of the Caribbean, a favorable attitude was shown toward this rearrangement of the activities of the Pan American Sanitary Bureau.
Provisionally, it has therefore been decided to create a Caribbean Sanitary Zone which, for the time being, will embrace the countries bordering on the Caribbean Sea. For the present, there will be assigned to the Caribbean Zone a Traveling Representative, a Sanitary Engineer, and perhaps other personnel, such as nurses, etc. It is of course up to the national health authorities of the Republics concerned to call at their own discretion for the services of this personnel. Until circumstances suggest otherwise, headquarters of this Caribbean Zone will be located in the city of Panama which, because of its splendid communication facilities as well as geographical situation, lends itself admirably to this purpose.

CULTURAL RELATIONS

One of the activities to which the Bureau has constantly given more attention in its own special field has been the maintenance and expansion of facilities for the interchange of knowledge and ideas among the health workers of the American Republics. It is through the development of cultural relations of this nature that present ties may be strengthened, new ways of cooperation found, and comity promoted. For this reason every possible assistance and collaboration has been given to all legitimate enterprises, aimed at similar purposes. One of the most promising achievements of this character has been the creation in various countries of organizations trying to furnish a more solid and permanent basis for the growing movement of inter-American approximation. A Division of Cultural Relations has recently been organized in the State Department of the United States, and medicine has naturally come within its scope as have other sciences and arts. Full cooperation has been given by the Bureau to this Division, especially through a Committee on Medicine and Allied Sciences on which representatives of the most prominent medical and allied organizations of the United States are serving. A special joint session was held on May 9th of the Delegates to the IV Pan American Conference of National Directors of Health and the Members of the Directing Council of the Bureau with the Members of the Medical Committee of the Conference on Inter-American Relations of the United States, to discuss possibilities of interchange of professors and students in the various fields of medicine and allied sciences.

BULLETIN

The Bulletin at present includes the following sections: Articles; Reviews; Editorials; Queries; Notes and Comments (Vital Statistics, Hospital Movement, Changes in Personnel, etc.); Library; and Tables on Disease Prevalence. It may be pertinent to review editorial policies. Broadly the purpose of the Bulletin is to review sanitary developments
throughout the world, but especially in the Americas, permitting health workers in each Republic to keep abreast of the work performed elsewhere and put to use such parts as may have application in their own country or field. The Bulletin has thus become a repository of material unavailable elsewhere which permits one to follow the inter-American health movement throughout the years.

Most of the text is naturally in Spanish, but Portuguese and French papers are also systematically included. Of late more attention has been given to the publication of material in English, in order to familiarize readers in the United States with public health and medical advances in the other American Republics.

Those inclined to comparisons with the organs of other similar international bodies are apt to overlook certain essential points. The circulation of the Pan American Sanitary Bulletin is much larger than that of its international contemporaries, and its subscribers form a far more heterogeneous group. The Pan American Sanitary Bureau also finds itself in a different position with regard to contributions for its monthly organ. Practically all the original material used by such organizations is that presented at the rather frequent meetings of their governing bodies or submitted in the form of voluminous reports by their various standing committees. On the other hand, both the Pan American Sanitary Conferences and the Pan American Conferences of National Directors of Health are held at much longer intervals, and all the papers offered at these meetings are published as separate Proceedings.

In order to make up partially for this omission, the editorial staff of the Bulletin prepares from time to time articles dealing with subjects that are deemed of special or timely interest. Some of these have embraced rather extensive studies of such matters as infant mortality in Latin America; plague; diphtheria prevalence in tropical regions; measles; use of health surveys; schools of hygiene; medical education; cultivation of cinchona; public health legislation; child welfare activities throughout Latin America; malaria prevalence at high altitudes; a compilation of public health treaties ratified by the American Republics. The whole Section of Queries, probably the most popular of the Bulletin, presents first-hand, and often exhaustive analyses of subjects of immediate value on which the latest information is desired. In addition, periodic reviews are prepared on the various subjects of most interest to public health works in Latin America, to keep readers informed of most recent advances. An effort is made to include even journals from small places in such reviews. The reason is twofold: they often contain valuable material unavailable elsewhere and recognition by the Bureau encourages workers engaging in research under considerable difficulties and far from scientific centers in an unpropitious environment.
The main consideration in publishing an article in the Bulletin is its immediate value from a public health standpoint. Another factor is to exhibit at all times the general "Pan American" viewpoint, and not favor any particular country or geographical section. Material showing local psychology, might not be of great interest elsewhere. On the other hand, annual reports of the National Departments of Health of the various American Republics are fully abstracted for publication. In this way the activities of each country are made known to the other Republics, and all realize that their work is receiving consideration on the part of others.

It has always been, and will continue to be, the practice to use to the fullest extent material from the Public Health Reports and other publications of the U. S. Public Health Service, the American Journal of Public Health, and other journals of tropical medicine and hygiene; the Journal of the American Medical Association; and especially journals devoted to such subjects as cancer, tuberculosis, children's diseases; nutrition, and hospitals, etc. This material, although taken from American periodicals, when published in Spanish becomes practically original material. This reaches Latin America practically in no other way but through the Boletín de la Oficina Sanitaria Panamericana (Bulletin of the Pan American Sanitary Bureau). Much of it is reproduced from our Bulletin by Latin American journals, it being universally recognized that the United States leads by far the world in this field. The up-to-date material thus furnished so far on control of communicable diseases, milk, water supplies, rat-proofing, nutrition, mental hygiene, quarantine measures, fumigation, tuberculosis, malaria, sewage disposal, anti-venereal campaigns, yellow fever prevention, nomenclature of causes of death, vital statistics, scientific medication, health organization, diagnosis, is basic and has a definite and actual practical value for the health worker everywhere. As thousands of letters are received annually by the Bureau, a very good idea may be formed of the material most in demand.

Theoretical writings or material of a doctrinary nature are seldom given space in the Bulletin, preference being given to papers embodying actual experience, covering research or work done, and possessing practical application. On the same principle, educational material intended for the general public is published only if possessing readability, certain novelty and general appeal. Often contributions received are not suitable for the Bulletin or its readers. Many of them set forth clinical experiences having no bearing on public health. Sometimes the author is seeking publicity in foreign organs in order to gain support for his views in his own country. At other times, there is a professional controversy involved, and this might bring about the publication of an
article in defense of practices or views that the local Department of Health does not advocate. For that reason and whenever there is room for doubt, the usual practice is to refer it to the National Department of Health for approval. All expressions liable to be construed as reflections on constituted authorities or governmental policies are scrupulously barred.

Circulation.—The circulation of the Bulletin has increased to over 9,300, and the number of towns covered has reached an all-time high of over 4,100. The mailing list is revised annually to discard names of people who are not really interested in keeping up with public health advancement.

Inquiries.—One of the most useful sections of the Boletin is that of inquiries, constantly resorted to by important organizations and scientific workers. Due to the great number of inquiries received, only the most important or those considered of the widest interest can be published. No phase of work of the Bureau has shown a more steady and marked development, requests for information being increasingly received both from the United States and Latin America. During the year 1939, replies to queries on the following subjects were published: acids (barbituric, mandelic); anthrax (transmission by shaving brushes); arsphenamine (administration); biological products (legislation); biometry (anthropometry); bread; brucellosis (treatment); cancer (campaign); catastrophes (public health activity); chenopodium (toxicology); child (hygiene, trailer units; protection; institutes); ciguatera; clean ports (requirements); commissioned health service; contraceptives (control of); creolin (composition); culture (dysenteric amoebas, bartonella); death (causes of); diabetes (treatment); dinitrophenol; disinfection (barber shops, correspondence); drugs (analysis, course on, sale); diphtheria (immunization, campaign); education (public health, sex); encephalomyelitis (equine); eugenics (institutions); focal infection; gonorrhea (pyretotherapy); guarana; health units; hernia; higuerón latex; homeopathy; hospitals (emergency, equipment, isolation, maternity, mental); housing (low-cost); laboratory (technique, books on); lambliaisis; leprosy (treatment); legal medicine (journals and schools); life (economic value); mate (bibliography); milk (phosphatase test; stations); mosquitoes (bibliography); nursing (books on, training for); nutrition (analyses, courses, inspection, social aspects); organic wastes (reduction); Pan American Child congresses; pharmacy (practice); pinto (etiology); plague (books); pneumonia (sulfapyridine, treatment); popular restaurants; pre-marital certificate; rabies (vaccination); sanitary engineering; school ventilation; smallpox (Paul's test); sterilization; sulfanilamide; surgery (training); thyroid (assay); tuberculosis (bovine, sanatoria); vital statistics; vitamin C; Weil-Felix test.
Editorials.—Editorials published during the year 1939 included, among others, the following subjects:

Pan American Health Day; Rapid Diagnosis of Diphtheria; Discovery of Cinchona; Fluctuations of Disease; Newer Aspects of Sanitary Engineering; Health Factors in Housing; History and Etiology of Pinto; The Two Rivals: Disease and Health; Medicine in War Times; Public Clean-up Days; Nutrition in its Individual, Collective and International Aspects; Public Health Progress in Venezuela.

Reprints.—The reprints issued during the fiscal year included:

No. 138. La Enfermería Sanitaria, 10 pp.
No. 139. Mate, 8 pp.
No. 140. Alimentación, 22 pp.
No. 143. Educación Sexual Destinada a los Padres, 9 pp.
No. 144. Estudio de Ciertas Cuestiones Relativas a las Vitaminas, 14 pp.
No. 145. Lo que Debemos Saber sobre Cáncer, 6 pp.
No. 146. A las Madres, 2 pp.
No. 147. IV Conferencia Panamericana de Directores Nacionales de Sanidad: Acta Final, 9 pp.
No. 149. Half a Century of Medical and Public Health Progress, 20 pp.
No. 150. Medio Siglo de Adelanto en Medicina y Sanidad, 22 pp.

PHARMACOPOEIA

No definite action has as yet been taken as to official adoption of the Spanish Edition of the U. S. Pharmacopoeia in any of the various countries in which the matter is under consideration or has been favorably recommended. Its contents have been put to practical use in several Republics, especially in those revising at present their national pharmacopoeias or issuing new regulations for drug control. The last Convention of the U. S. Pharmacopoeia (May, 1940) invited the Delegates to the 4th Pan-American Conference of National Directors of Health to attend its sessions and adopted a resolution which will extend to medical and pharmaceutical associations and colleges of medicine and pharmacy of all the American Republics adopting officially the U. S. Pharmacopoeia the right to be represented at future Pharmacopoeial Conventions. It has been of late the policy of the Pharmacopoeia authorities to issue ad interim Supplements which will bring the text up to date. The first of these Supplements was already incorporated in the Spanish Edition of the Pharmacopoeia. An Epitome of the
Second Supplement has been translated into Spanish and will be published in the Bulletin of the Pan American Sanitary Bureau and later distributed among purchasers of the Spanish Edition of the Pharmacopoeia.

The first series of 24 articles published in Spanish in the Bulletin under the title of "The Pharmacopoeia and the Physician" has been completed and collected in a very attractive volume of 273 pp., sold at cost by the Pharmacopoeia authorities. It is expected that the second series of these important papers on scientific medication will be likewise translated into Spanish and published in the Bulletin. The Pharmacopoeia authorities are certainly entitled to credit for this practical and unselfish demonstration of a cooperative Pan American spirit.

BIOLICAL STANDARDS

On request from various national laboratories the Bureau has obtained from time to time through the National Institute of Health of the United States reference standards for biological products as well as bacterial strains for the manufacture of such products.

A resolution adopted at the X Pan American Sanitary Conference at Bogota in 1938, urged the Bureau to take the necessary steps with the Health Section of the League of Nations, enabling the Bacteriological Institute of Buenos Aires to manufacture or serve as depository for international standards for biological products. Steps to this effect were promptly initiated by the Bureau. The authorities of the Buenos Aires institute, however, pointed out their inability to act for the time being on the matter. The problem became aggravated when the Copenhagen Institute which acted as distributor for some of these standards was compelled to suspend operations in this field in the spring of 1939. Taking cognizance of the new situation a resolution was adopted at the VIII American Scientific Congress urging that the problem be solved in so far as the American countries were concerned through the Pan American Sanitary Bureau acting in cooperation with the Health Services of the United States and Argentina. Preliminary steps were again taken and the United States Public Health Service offered the services of the National Institute of Health to tide over the emergency. Further action has, however, been deferred on receipt of information that the Hampstead Laboratory in England has assumed the distribution of the reference standards. In the meanwhile it is felt best to wait and see how the new plan is working.

Should the need for such a service arise the Bureau would not hesitate to take up with the U. S. Pharmacopoeia authorities the question of distribution of U. S. Pharmacopoeia reference standards among the countries which have officially adopted the Spanish Edition of the Pharmacopoeia.
The Library of the Pan American Sanitary Bureau continued to grow during the present fiscal year. About 150 new journals and over 1,000 books and pamphlets were received. The Library now has over 4,300 catalogued miscellaneous publications, as well as several hundred others of a less strictly public health nature, and receives over 600 medical and public health journals. Through the cooperation of health department authorities and libraries, missing numbers of several official journals of national departments of health were obtained, permitting the addition of some older volumes as well as more recent ones to the Library's bound collection of such journals. The official publications of national bacteriological institutes, leading medical journals, and compilations of public health laws are also bound. Surplus copies of publications, including those presented to the IV Pan American Conference of National Directors of Health for that purpose, were distributed to outstanding medical and public health libraries, and many expressions of appreciation of this action have been received. Toward the end of the fiscal year the Library began the compilation of a list of medical and public health journals from Latin America, which will be ready for distribution in August, 1940.

FINANCES

The finances of the Bureau were placed on a more stable and adequate basis with the approval by the Bogotá Conference (1938) of a resolution increasing the maintenance quotas contributed annually by the different American Republics. Because of budget or other provisions a number of these, however, have found themselves unable to make as yet their payments on the new scale. This situation, however, promises to be straightened out in the near future.

Expenditures during the fiscal year amounted to $102,971.51 as compared to $80,351.47 in the previous fiscal year. A substantial increase in receipts was observed: $90,931.99 as compared with $64,877.21. The increased expenditures represent new activities undertaken by the Bureau and also traveling and other expenses connected with the meeting of the Directing Council and the 4th Pan American Conference of National Directors of Health in May, 1940.
PUBLICATIONS OF THE PAN AMERICAN SANITARY BUREAU

No. 1.—Prevención de las Enfermedades Transmisibles. 60 páginas.
No. 3.—Higiene Pre-natal. 7 páginas.
No. 4.—Higiene de la Leche. 10 páginas.
No. 5.—Ordenanza Modelo para Leche. 11 páginas.
No. 7.—Organización del Servicio de Sanidad Pública de los Estados Unidos. 26 páginas.
No. 9.—La Profilaxis del Bocio Endémico. 10 páginas.
No. 10.—Higiene de la Infancia. 6 páginas.
No. 17.—Conservación de la Vista. 8 páginas.
No. 18.—Colecta, Examen e Identificación de las Pulgas Murinas. 11 páginas.
No. 22.—El Cuidado de la Sifilis en la Práctica General. 33 páginas.
No. 23.—Meningitis Cerebroespinal Epidémica (Meningocócica). 4 páginas.
No. 26.—El Cuidado de la Sífilis en la Práctica General. 33 páginas.
No. 27.—Amígdalas y Adenoides (Vegetaciones Adenoideas). 6 páginas.
No. 28.—Tifoidea: Su Causa y Profilaxis. 4 páginas.
No. 29.—Conservación de la Vista. 6 páginas.
No. 30.—Tratamiento del Paludismo. 4 páginas.
No. 36.—Nomenclatura Internacional de las Causas de Muerte. 16 páginas.
No. 37.—El Diagnóstico Preciso de la Tuberculosis Pulmonar. 3 páginas.
No. 43.—Código Sanitario Panamericano. 23 páginas.
No. 46.—La Declaración Obligatoria del Embarazo. 10 páginas.
No. 47.—Los Censos en Sanidad y en Epidemiología. 16 páginas.
No. 48.—Higiene Comunal para el Pre-escolar. 5 páginas.
No. 49.—El Diagnóstico de la Fiebre Amarilla. 14 páginas.
No. 50.—Acta Final, II Conferencia Panamericana de Directores Nacionales de Sanidad. 18 páginas.
No. 52.—Summary of Proceedings, II Pan American Conference of National Directors of Health. 14 páginas.
No. 53.—Vacunación Antidiftería. 8 páginas.
No. 54.—A Lucha Anti-Larvaria no Impaludismo. 6 páginas.
No. 55.—El Problema de la Alimentación en el Uruguay. 9 páginas.
No. 56.—Inmunización Profiláctica de los Recién Nacidos con BCG. 22 páginas.
No. 57.—Epidemiología de la Lepra. 5 páginas.
No. 58.—Fumigantes. 21 páginas.
No. 59.—La Higiene Mental. 11 páginas.
No. 61.—El Problema de la Fiebre Amarilla en América. 10 páginas.
No. 62.—Control de las Enfermedades Transmisibles. 70 páginas.
No. 63.—Antirratización de los Buques. 40 páginas.
No. 64.—Tratamiento del Odorbitis. 11 páginas.
No. 65.—Health Suggestions for Travelers in the Americas. 16 páginas.
No. 66.—Acta Final, Novena Conferencia Sanitaria Panamericana. 20 páginas.
No. 67.—Los Censos en Sanidad y en Epidemiología. 16 páginas.
No. 68.—Tratamiento de la Tuberculosis Pulmonar. 9 páginas.
No. 101.—Ninth Pan American Sanitary Conference. 8 pages.
No. 102.—El Saneamiento del Suelo. 17 páginas.
No. 103.—Report of the Director of the Pan American Sanitary Bureau. 8 pages.
No. 105.—Fumigación de Buques con Ácido Cianhídrico. 14 páginas.
No. 106.—Snake-Bites. 10 pages.
No. 107.—Otras Sanitarios de Protección a la Infancia. 47 páginas.
No. 108.—Las Repúblicas Americanas ante las Convenciones Internacionales de Sanidad. 5 páginas.
No. 109.—La Lucha Antivenérea. 27 páginas.
No. 110.—Third Pan American Conference of National Directors of Health—Summary of Proceedings. 10 pages.
No. 111.—Venenos Antirrata. 4 páginas.
No. 112.—Tratamiento Anti-Leprotico. 14 páginas.
No. 113.—Pautes de Organización Sanitaria. 12 páginas.
No. 114.—Nomenclatura para Enfermedades Mentales. 28 páginas.
No. 115.—Servicio de Escuelas de Salud. 9 páginas.
No. 116.—Actas de la Tercera Conferencia Panamericana de Directores Nacionales de Sanidad. 396 páginas.
No. 117.—Pautes para Ayudar a los Apagado. 16 páginas.
No. 118.—Décima Conferencia Sanitaria Panamericana, Acta Final. 20 páginas.
No. 119.—Lepra: Epidemiología—Clasificación—Tratamiento. 17 páginas.
No. 120.—A Clasification de la Lepra. 5 páginas.
No. 121.—Final Act: Tenth Pan American Sanitary Conference. 13 pages.
No. 122.—Décima Conferencia Sanitaria Panamericana: Acta Final. 20 páginas.
No. 123.—X Conferencia Sanitaria Panamericana: Acta Final. 12 páginas.
No. 124.—Medios de Certificados de Defunción de Nacimiento Viáble, y de Defunción Fetal. 4 páginas.
No. 125.—Téxti Pan American Sanitary Conference. 14 pages.
No. 126.—Los Preventorios en la Lepra. 8 páginas.
No. 127.—Proyecto de Escalafón Sanitario. 12 páginas.
No. 128.—Actas de la Décima Conferencia Sanitaria Panamericana. 941 páginas.
No. 129.—Nomenclatura Internacional de las Causas de Muerte. 25 páginas.
No. 130.—La Enfermería Sanitaria. 10 páginas.
No. 131.—Mate. 8 pages.
No. 132.—Alimentación. 23 páginas.
No. 133.—Sociedades e Instituciones Científicas de la América Latina (Scientific Societies and Institutions in Latin America). 50 páginas.
No. 134.—Demografía de las Repúblicas Americanas. 16 páginas.
No. 135.—Educación Sexual Destinada a los Padres. 9 páginas.
No. 136.—Estudio de Ciertas Cuestiones Relativas a las Vitaminas. 14 páginas.
No. 137.—Lo que Deben Saber sobre Cáncer. 5 páginas.
No. 138.—A los Madres. 2 páginas.
No. 139.—IV Conferencia Panamericana de Directores Nacionales de Sanidad: Acta Final. 9 páginas.
No. 140.—The Pan American Sanitary Bureau and its Cooperative Work in the Improvement of Milk Supplies. 4 pages.
No. 141.—Half a Century of Medical and Public Health Progress. 20 pages.
No. 142.—Medio Siglo de Adelanto en Medicina y Sanidad. 22 páginas.
No. 143.—IV Pan American Conference of National Directors of Health. 8 pages.
No. 144.—Medical and Public Health Journals of Latin America (Revistas de Medicina y Sanidad de la América Latina). 51 páginas.
No. 146.—Reacción a la tuberculina. 6 páginas.
THE PAN AMERICAN SANITARY BUREAU is an independent international public health organization. It was created by the Second International American Conference (1901–1902), organized by the First Pan American Sanitary Conference (1902), and reorganized by the Sixth (1920). It is governed by a Directing Council elected, together with the Director, at each Pan American Sanitary Conference, and supported by annual quotas contributed pro rata by all the American Republics. The Bureau is interested primarily in the prevention of the international spread of communicable diseases, and also in the maintenance and improvement of the health of the people of the 21 American Republics. Under the provisions of the Pan American Sanitary Code (1924), it has become the center of coordination and information in the field of public health, in the American Republics. It also acts as a consulting body at the request of national health authorities, carries on epidemiological and scientific studies, and publishes a monthly Bulletin, as well as other educational material.