that there are many unsolved questions in this nearly virgin field, and because of this and for the further reason that our cities still continue to enlarge, thus increasing our needs for sanitation, the opportunities in this field, especially in our rapidly growing west and middle west, are legion and because of these facts advance in most of the positions is comparatively rapid. This training enables a person to guide in a scientific manner such important movements as tuberculosis control. the establishment of milk depots, school inspection, the proper collection of vital statistics, proper housing, public health organization, in fact any question dealing with or intimately associated with matters pertaining to the conservation of life.

In this new field, we find sanitary biologists, sanitary engineers and sanitary chemists working together for a solution of such problems as providing a safe water supply and sewerage system, controlling epidemics of disease, enforcing proper care in the handling of food materials, in short, attempting the best solution of the particular public health problems which confront any given community.

There is no subject of greater interest to people in general than that of their own health and they recognize that this is closely related to questions of public health, for on the subject of disease and death we all meet on common ground. Because of this interest, the subject is much discussed, and it is not surprising to find much misinformation afloat because persons often appoint themselves authority pro-tem in social gatherings, and give decisions which have no background of fact or wisdom. A short time ago I heard from a reliable source that a man in a public health position said that typhoid carriers could be detected by blood cultures and from another "authority" came the statement that a T-bone steak, in the bottom of a well, was responsible for an outbreak of typhoid fever which occurred in the community in which the well was situated. Later I received a graphic description of how hordes of typhoid germs sallied forth from the carcass of a horse which was in a river bed, and calmly awaited unsuspecting persons drinking from the stream.

Unscrupulous persons, either in their desire for publicity or in order to "grind an axe" of their own, take advantage of this desire on the part of the public to be informed on health matters, by uttering half-truths or deliberately trifling with facts, to such an extent that wrong ideas gain

ground and it takes much time to eradicate these false impressions. By such unscrupulous persons, the march of progress is materially hindered. Politicians and others with no knowledge of public health matters and not appreciating the gravity of their deeds sometimes depose good men or so curtail their powers that they are unable to discharge their duties efficiently or to serve the best interests of the community.

It is over a half century since the theory of spontaneous generation or abiogenesis was finally overthrown, and while no one at the present time believes that eels can arise de novo from mud and slime or that mice can be generated from dirty flannel and corn, the idea is still current that decaying material and the consequent evil odors; poor plumbing; the "catching" of cold; etc., per se provide a suitable environment for generating disease-producing microorganisms. Nothing could be further from the truth, for a study of biology teaches us that between the living and non-living world we have one of the best defined barriers in nature, and that no living material, not even the humblest bacterial cell, comes into existence without the intervention of preexisting life of the same type.

Again quoting from one of our monthly state health bulletins: "Removing health departments from politics; selecting the right man, paying him the right salary, and permanent tenure of the position will do much to correct existing evils. There is no official of more importance to any community than a conscientious and capable health officer. The conserver of the health of our people is a benefactor of the race and worthy of the highest honors in the gift of the state."

In closing allow me to quote Disraeli and express my strong sympathy with his ideas: "The public health is the foundation on which reposes the happiness of the people and the power of the country. The care of the public health is the first duty of a statesman."

J. E. Rush

DEPT. OF BIOLOGY AND PUBLIC HEALTH, CARNEGIE INSTITUTE OF TECHNOLOGY

## THE SECOND PAN-AMERICAN SCIENTIFIC CONGRESS AND ITS SECTION OF ANTHROPOLOGY

In accordance with the resolutions of the First Pan-American Scientific Congress, held in Santiago, Chile, December 25, 1908, to

January 5, 1909, a Second Pan-American Scientific Congress will meet in Washington next December under the auspices of the government of the United States. The congress will open on Monday, December 27, 1915, and adjourn on Saturday, January 8, 1916.

The executive committee of the congress is as follows:

William Phillips, A.B., third assistant secretary of state, chairman ex-officio.

James Brown Scott, J.U.D., secretary, Carnegie Endowment for International Peace, vice chairman.

William H. Welch, M.D., LL.D., president, National Academy of Sciences, honorary vice chairman.

John Barrett, LL.D., director general, Pan-American Union.

W. H. Bixby, Brigadier General, U. S. A., retired.

Philander P. Claxton, LL.D., commissioner of education.

William C. Gorgas, M.D., Sc.D., surgeon general, U. S. A.

William H. Holmes, B.S., head curator, Smithsonian Institution.

Hennen Jennings, C.E., former president, London Institution Mining and Metallurgy.

George M. Rommel, B.S., chief, Animal Husbandry Division, Bureau of Animal Industry, Department of Agriculture.

L. S. Rowe, Ph.D., president, American Academy of Political and Social Science.

Robert S. Woodward, Ph.D., president, Carnegie Institution of Washington.

The organization officers are:

John Barrett, LL.D., secretary general.

Glen Levin Swiggett, Ph.D., assistant secretary general.

The headquarters are at the Pan-American Union, Washington, D. C.

The Pan-American Scientific Congress had its origin in the scientific congresses that had been held by the republics of Latin America prior to the congress in Santiago, and was established with the generous conviction that the United States should share in their undertaking. This conviction was splendidly shown in the unsolicited and voluntary action of the first congress in the selection of Washington as the place of meeting of the second congress, the main purpose of which will be to increase

the exchange of knowledge and bring about a better understanding of the ways in which the several republics can work to the advancement of science, the increase of culture and the promotion of trade, commerce and mutual helpfulness. In view of the fact that this second congress is to be held under the auspices of the government of the United States, it is earnestly hoped that our foremost scientists, learned societies and educational institutions will cooperate in every way possible in order to insure the success of the congress.

The nine main sections of the program of the congress, with the name of the chairman in charge of each section, are as follows:

- I. Anthropology, Mr. William H. Holmes.
- II. Astronomy, Meteorology and Seismology, Mr. Robert S. Woodward.
- III. Conservation of Natural Resources, Agriculture, Irrigation and Forestry, Mr. George M. Rommel.
- IV. Education, Mr. P. P. Claxton.
- V. Engineering, General W. H. Bixby.
- VI. International Law, Public Law and Jurisprudence, Mr. James Brown Scott.
- VII. Mining and Metallurgy, Economic Geology and Applied Chemistry, Mr. Hennen Jennings.
- VIII. Public Health and Medical Science, General Wm. C. Gorgas.
  - IX. Transportation, Commerce, Finance and Taxation, Mr. L. S. Rowe.

Each section is divided further into subsections. There are forty-five of the latter in all, each with a special committee and program. The deliberations of the congress will be based, in consequence, according to the subject-matter to be discussed in the various sub-sections. In addition to the general sessions of the congress, there will be joint sessions between the different sections and subsections. Several of the leading national associations of the United States, concerned with the investigation of subjects of pertinent interest to some of the sections of the congress. have received and accepted invitations from the executive committee of the Second Pan-American Scientific Congress to meet in Wash. ington at the same time and hold one or more joint sessions with a section or sub-section of corresponding interest.

The following persons will be members of the congress:

The official delegates of the countries represented.

The representatives of the universities, institutes, societies and scientific bodies of the countries represented.

Such persons in the countries participating in the congress as may be invited by the executive committee, with the approval of the countries represented.

All writers of papers.

All members of the congress shall be entitled to attend its sessions, to take part in the debates, and to receive a copy of such publications as the executive committee may issue. There will be no membership fee of any character.

The interest throughout Latin America for the congress is steadily growing. The executive committee is assured that all of these countries appreciate deeply the active preparations now being made in Washington for a successful meeting, and will avail themselves generously of this great opportunity for Pan-American solidarity of action in intellectual interests. Each of the participating Latin American countries, eighteen in number, has been invited to appoint a committee to cooperate with the executive committee of the congress and to make such arrangements as will insure the most generous participation of each country in the congress through the attendance of delegates and representation on the program. A feature of particular importance and appealing interest to the Latin American countries is that of the special Pan-American topics which will be discussed at the time of the congress in a series of conferences. The various sections of the congress, and in some cases the different sub-sections, have designated certain topics to be discussed in this manner. Each country has been invited to select its most eminent writers to prepare papers on these topics, one person for each topic.

Section I will discuss such subjects as relate to the origin, development and distribution of mankind into ethnic, social and political groups. Of particular interest are the topics which refer to the chronology of the American race and the evolution of its culture, and the complex of races and nationalities now constituting the Pan-American populations.

The chairman of this section is Mr. William Henry Holmes, head curator of anthropology, United States National Museum. Mr. Holmes is a member of the leading national and foreign societies devoted to research in the fields of archeology and anthropology. He was a delegate to the First Pan-American Scientific Congress, which met in Santiago, Chile, in 1908. Dr. Ales Hrdlicka, curator of the division of physical anthropology, United States National Museum, is the secretary of this section.

In addition to the chairman and the secretary, the committee in charge of the program of Section I includes the following representatives of important institutions, societies and other organizations devoted in whole or in part to the science of man:

F. W. Hodge, of the Bureau of American Ethnology, Smithsonian Institution.

Walter Hough, of the United States National Museum.

J. Walter Fewkes, of the National Academy of Sciences

Roland B. Dixon, of Harvard University.

C. C. Willoughby, of the Peabody Museum of American Archeology and Ethnology, Harvard University.

George B. Gordon, of the University of Pennsylvania.

Frederick Starr, of the University of Chicago. Albert Ernest Jenks, of the University of Minnesota.

Franz Boas, of Columbia University.

Hiram Bingham, of Yale University.

Warren K. Moorehead, of the Phillips Academy Museum, Andover, Mass.

A. L. Kroeber, of the University of California. Elizabeth Duncan Putnam, of the Davenport Academy of Sciences, Davenport, Iowa.

Alice C. Fletcher, of the Archeological Institute of America.

Stewart Culin, of the Museum of the Brooklyn Institute of Arts and Sciences.

M. H. Saville, of the Heye Museum, New York.

S. A. Barrett, of the Milwaukee Public Museum. George A. Dorsey, of the Field Museum of Natural History.

Arthur C. Parker, of the Museum of the State of New York.

C. F. Lummis, of the Southwest Museum, Los Angeles.

George Grant MacCurdy, of the Yale University Museum.

John R. Swanton, of the Anthropological Society of Washington.

T. Mitchell Prudden, of the American Ethnological Society, New York.

Clark Wissler, of the American Museum of Natural History, New York.

Pliny E. Goddard, of the American Folk-Lore Society.

Waldo Lincoln, of the American Antiquarian Society.

Sylvanus G. Morley, of the Carnegie Institution. Edgar L. Hewett, of the School of American Archeology.

H. M. Whelpley, of the Missouri Historical Society.

J. C. Branner, of Leland Stanford Junior University.

Mr. W. C. Mills, of the Ohio State University.

For this section some of the most distinguished scientists in Pan-America have been invited to prepare papers on the subjects described in the preliminary program, edition of April 15, a copy of which may be obtained on request to the secretary general of the congress.

The following topic has been proposed by Section I for the series of Pan-American conferences: "The desirability of uniform laws throughout the Pan-American countries for the protection of antiquities, the systematic promotion of anthropological research and the collection and scientific treatment of museum materials."

The Nineteenth International Congress of Americanists will meet in Washington during the same week with the Pan-American Scientific Congress, and joint conferences will be held for the discussion of subjects of common interest to members of the two organizations. This will be especially advantageous, since a large number of students from all parts of America, as well as from the Old World,

interested in these branches, will thus be brought together on common ground.

GLEN LEVIN SWIGGETT,
Assistant Secretary General

## SCIENTIFIC NOTES AND NEWS

At the Manchester meeting of the British Association for the Advancement of Science, Sir Arthur J. Evans, F.R.S., the archeologist, honorary keeper of the Ashmolean Museum, Oxford, was elected president for next year's meeting, to be held at Newcastle-on-Tyne. The meeting of 1917 will be held at Bournemouth.

A. GIBB MAITLAND, director of the geological Survey, Western Australia, has been elected president of the Royal Society of Western Australia for the ensuing session.

THE International Engineering Congress met at San Francisco from September 20 to 25. Major-general G. W. Goethals, honorary president of the congress, delivered the principal address.

The office of state entomologist has recently been established in Wisconsin, to take over the nursery and orchard inspection and administration of the laws governing insecticides and fungicides. It is to be independent of the University of Wisconsin, with headquarters in the state capitol at Madison. Professor J. G. Sanders goes from the College of Agriculture to be the first incumbent of the office and Dr. S. B. Fracker, instructor in the same department, has been appointed assistant entomologist.

Professor Ewald Hering, the eminent physiologist of Leipzig University, will retire at the close of the winter semester.

Dr. Charles K. Mills has resigned from the medical faculty of the University of Pennsylvania, where since 1893 he had been professor of mental diseases and of neurology.

Professor Anthony Zeleny, of the University of Minnesota, has this year leave of absence and will spend the time in research in physics at Princeton University.