proved, and with its geologic implications, certainly the nebular hypothesis is of the past.

Without description of the Chamberlin-Moulton conceptions of the birth of planets and satellites the geologic implications must be briefly considered. Instead of an initial and incandescent globe of full size, surrounded by envelopes of heavy vapors, the planetesimal theory builds the globe by the slow accretion of cold particles (planetesimals). The surface of the slowly growing globe always remained comparatively cold. And when the earth was very much smaller than to-day the physical conditions were similar to those of the present time, with sea and land, storm and sunshine, and perhaps abundant life of lowly forms.

This new theory provides a new foundation, and one much needed, for geologic science. Very few problems in geology can be analyzed without final reference to the origin of the earth, or of its primitive condition. A large part of our geology has been grounded on the conception of a fiery globe, with cooling and solidification of the surface producing the first rocks. In consequence of this universal belief in a once molten earth many problems in geology have remained unsolved and held in suspense. The planetesimal theory greatly helps in the explanation of the fundamental questions in earth science. (See SCIENCE, Vol. 64, pp. 365–371, Oct. 15, 1926.) It is not surprising that some geologists are so committed by their thinking, teaching and writing to the idea of a superheated and liquid earth that they fear cold and solidity. And the new theory was developed west of the Hudson River!

Dr. Chamberlin's work was original and constructive, although to erect his greatest structure he had to destroy an old one. Many of his conclusions in geology are collected in the three-volume treatise, Chamberlin and Salisbury's "Geology," 1904–1906, which remains the most suggestive and authoritative American text-book.

Dr. Chamberlin's absorbing interest in science is shown by his leaving the attractive duties and honors in the presidency of a great state university in order to build a strong department of geology, and have opportunity to devote the years of his maturity to teaching and study.

He was a man of large and handsome physique. With a sensitive nature, he was somewhat reserved and properly dignified, yet urbane and affable. His honors were mostly from the institutions in the area of his life work and from those who knew him best. He was a seer honored in his own country.

The great personal influence of Dr. Chamberlin is perpetuated through the legion of successful and eminent men who found inspiration and training in the great school of geology that he founded and conducted with the efficient assistance of a corps of able associates. Among them were R. D. Salisbury, R. A. F. Penrose, J. P. Iddings, S. W. Williston and Stuart Weller. As time went on, a number of younger men were added to the staff, including his son, R. T. Chamberlin, who keeps the honored name identified with the science of geology.

H. L. FAIRCHILD

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SCIENTIFIC EVENTS

THE FIFTH INTERNATIONAL BOTANICAL CONGRESS, CAMBRIDGE, 1930

AT the Fourth International Botanical Congress held at Ithaca, N. Y., in 1926, an invitation from British botanists to hold the next International Botanical Congress in England was accepted. It has since been decided that the Fifth International Congress shall be held at Cambridge from August 16 to 23, 1930, with excursions during the following week.

An executive committee of British botanists has been appointed to make the necessary arrangements for the congress. The members of this executive committee are Dr. F. F. Blackman, Professor V. H. Blackman, Dr. E. J. Butler, Professor Sir John Farmer, Professor F. E. Fritsch, Professor Dame Helen Gwynne-Vaughan, Dr. A. W. Hill, Professor Neilson Jones, Sir David Prain, Dr. A. B. Rendle (treasurer), Professor A. C. Seward (chairman), Professor W. Stiles, Professor A. G. Tansley, together with Mr. F. T. Brooks and Dr. T. F. Chipp (secretaries).

The subscription for membership of the congress will be one pound (£1), which should be paid to the treasurer, Dr. A. B. Rendle, British Museum (Natural History), London, S. W. 7. Early notification to the treasurer of intention to attend the congress is particularly requested.

As at present arranged the congress will be organized in the following sections: Paleobotany, Morphology (including Anatomy), Taxonomy and Nomenclature, Plant Geography and Ecology, Genetics and Cytology, Plant Physiology, Mycology and Plant Pathology.

For each of these sections a British subcommittee has been appointed, by which the program for each section will be arranged. The chairmen of these subcommittees and their addresses are as follows:

PALEOBOTANY: Professor A. C. Seward, Botany School, Cambridge.

MORPHOLOGY (including ANATOMY): Professor F. E. Fritsch, Danesmount, Tower Hill, Dorking, Surrey.

TAXONOMY and NOMENCLATURE: Dr. A. W. Hill, Royal Botanic Gardens, Kew.

PLANT GEOGRAPHY and ECOLOGY: Professor A. G. Tansley, Department of Botany, The University, Oxford.

GENETICS and CYTOLOGY: Professor Sir John Farmer, Imperial College of Science and Technology, London, S.W. 7.

PLANT PHYSIOLOGY: Dr. F. F. Blackman, Botany School, Cambridge.

MYCOLOGY and PLANT PATHOLOGY: Dr. E. J. Butler, Imperial Bureau of Mycology, 17, Kew Green, Kew, Surrey.

As far as possible the program for each section will consist of papers given at the invitation of the sectional subcommittee; arrangements for general discussions will also probably be made by the sectional subcommittees.

THE GORGAS MEMORIAL INSTITUTE OF TROPICAL AND PREVENTIVE MEDICINE

DR. HERBERT CHARLES CLARK, director of laboratories and preventive medicine of the United Fruit Company, has been appointed director of the new Gorgas Memorial Laboratory of the Gorgas Memorial Institute of Tropical and Preventive Medicine, to be established on January 1 in Panama.

The institute has been established by act of congress as a governmental tribute to the public health and sanitation work conducted by the late General William C. Gorgas on the Isthmus of Panama, which made possible the construction of the Panama Canal. Dr. Clark, who spent several years under General Gorgas in the Canal Zone, will carry on research work to make possible a greater economic development of tropical America.

Congress last spring authorized a permanent appropriation of $50,000 a year for the maintenance of the institute. Latin-American governments have been invited to contribute, but it has been stipulated by congress that the total of their contributions should not exceed 75 per cent. of the total contributed by the United States. The participating Latin-American governments are to be represented with the United States on the board of directors. President Coolidge is honorary president of the institute and Rear Admiral Cary T. Grayson is the president.

The republic of Panama has ceded a site for a permanent building for the laboratory, but temporary headquarters will be established in a building newly constructed by that government for a medical school.

Dr. Clark is reported to have made the following statement:

The Gorgas Memorial Laboratory will be an active international coordinating center for research work in diseases which interfere with the economic development of the tropical countries in the Western Hemisphere. Its initial work will be the study of certain phases of malarial control that need development if big corporations from the temperate zone are to go into the tropics.

The greatest loss of labor in the coastal plains of tropical America is from malaria, which is the biggest economic factor among the diseases that belong down there. We expect to study the human carriers of malaria—people who, even after they have been treated and apparently cured, continue to carry the parasites in their seed stages.

We also intend to study the night habits of the mosquitos that feed upon human beings and which do the most in carrying malaria. We need to know more about how far they may go in their flight to lay their eggs.

We shall also work on two special problems in tropical diseases peculiar to Haiti and Colombia. We shall have visitors who will work on special problems, such as a study of various species of monkeys to see whether they carry any malarial or intestinal diseases affecting man.

THE BIOLOGICAL LABORATORY AT COLD SPRING HARBOR

AT the annual meeting of the Board of Directors of the Long Island Biological Association, held December 4, several matters of general scientific interest were reported. A policy giving primary consideration to research, including its active pursuit throughout the year by means of a permanent staff, has been formally accepted. Steps have already been taken toward carrying the policy into effect with the appointment to the staff of Dr. Hugo Fricke, formerly director of the department of biophysics of the Cleveland Clinic Foundation. The personnel of technicians and assistants has been increased, and equipment for research in biophysics, including work with X-rays and high frequencies, is being installed.

It is planned to receive scientists enjoying sabbatical or other leave from other institutions, who wish to carry on research at the Biological Laboratory at any season of the year. Such workers may apply to the laboratory for financial support during the period of residence, the aim being to aid them to take advantage of the opportunities of a leave of absence without too great financial burden. This plan will apply to American or European scientists wishing to spend part of the year in America, and part of the year in Europe, as well as to those wishing to spend the whole year at the laboratory. Dr. Felix Bernstein, director of the Institut für mathematische Statistik of the University of Göttingen, is the first to take advantage of this opportunity. His residence at the laboratory will begin in February, 1929.

The new policy plans a decrease in the number of students admitted to the biological laboratory at Cold Spring Harbor during the summer. Students in each