OBITUARY

IN MEMORY OF ROBERT KOCH

PRESIDENT HOOVER called on the nation on March 21 to join in honoring the memory of Dr. Robert Koch on the occasion of the fiftieth anniversary of his discovery of the bacillus of tuberculosis. The proclamation read:

Fifty years ago, on March 24, 1882, Robert Koch, a German doctor, startled the medical circles of Europe by announcing he had discovered the germ that causes tuberculosis.

The steps he took to prove his opinion, and the clarity with which he explained those steps, made his report not only a classic in medical literature but established a technique in medical research that ever since has been a boon to civilization in its fight against disease.

Next Thursday the fiftieth anniversary of Robert Koch's discovery of the tubercle bacillus will be commemorated throughout the world. Unstinted honor will be paid to the memory of the famous man who, almost single handed, directed the feet of nations toward the path of victory in the relentless, though silent, war against the destructive forces of nature.

In the United States the benefits of Koch's discovery loom large in light of the fact that the death rate from tuberculosis is now but one fourth what it was in 1882, and the search for a specific cure, as yet undiscovered, goes steadily forward along the lines he mapped out.

Because of his priceless contributions to human welfare it is fitting that we, as a nation, do him honor, and that each community acknowledge its debt to Robert Koch by commemorating in an appropriate manner the occasion of the fiftieth anniversary of his discovery of the tubercle bacillus.

A MONUMENT FOR LUDWIG BOLTZMANN

Some time ago I received a letter from the physicists of Vienna, an abstract of which I am translating herewith:

The Mayor of Vienna has agreed to dedicate a grave of honor to Boltzmann and has agreed to bear the cost of caring for it. Indeed the remains of Boltzmann have already been buried in this tomb, which is situated in the most beautiful and most prominent place in the new part of the municipal central cemetery. While the city bears all the costs—as an exception, even the costs of transfer—it is thought that a monument commensurate with the importance of Boltzmann should be erected.

You will understand without our going into details, that with the present situation in Austria only a small part of the sum necessary for the monument can be collected there. The costs of a monument amount, even with great economy, to about 8,000 to 10,000 Austrian shillings (\$1,150 to \$1,430). We know that the memory of Boltzmann is still alive in America, as he had been active at the University of California and as some of the influential physicists in American universities and

perhaps also in American industry, are students of Boltzmann, directly or indirectly.

Our request is now, whether you would use your influence with the scientists mentioned above and possibly with others, who appreciate Boltzmann's work, to help in the realization of our plan.

Are there in America large associations (The American Physical Society or The American Mathematical Society, for example) who would be inclined to make the erection of the monument possible through larger contributions?

May we ask you, if this action is successful, to act as receiver of gifts and keep them until the present exchange difficulties in Austria are over—or the bills for the monument come due? If you wish, this letter may be made public.

This letter is signed for the Chemical-Physical Society by Professor Arthur Haas, and for the heads of the Physical Institute of the Universität of Vienna, and of the Radium Institute of the Academy of Sciences in Vienna by Professor Gustav Jäger, Stefan Meyer, Felix Ehrenhaft, Egon Schweidler and Hans Thirring.

The treasurer of the Johns Hopkins University has kindly consented to accept contributions for the erection of the Boltzmann Monument: Checks may be made payable either to him or to me. Of course, I expect under present conditions only small contributions from individuals, and might perhaps suggest \$2.00 or \$3.00 as a reasonable amount.

K. F. HERZFELD

THE JOHNS HOPKINS UNIVERSITY, HOMEWOOD, BALTIMORE, MD.

RECENT DEATHS

Dr. CLIFFORD RICHARDSON, consulting chemical engineer, from 1900 to 1910 proprietor of the New York Testing Laboratory and earlier superintendent of testing for the Barber Asphalt Paving Company, died in Paris on February 28, at the age of seventy-five years.

CHARLES LIVINGSTON BULL, formerly taxidermist at the U. S. National Museum, author and naturalist, died on March 22. He was fifty-seven years old.

PROFESSOR D. H. MARSHAL, emeritus professor of mathematics and physics, Queen's University, died at Kingston, Ontario, on March 14, at the age of eighty-four years. Professor Marshal was formerly professor of mathematics and physics at the Imperial College of Engineering in Tokyo.

Dr. ALEXANDER DOUGALL BLACKADER, emeritus professor of pharmacology, therapeutics and pediatrics, McGill University, died on March 14. He was eightysix years old.

Dr. E. H. GRIFFITHS, physicist and formerly principal and professor of experimental philosophy at the University College of South Wales, died at Cambridge on March 3, at the age of eighty years.

The death is announced on February 29 at the age of eighty-one years of Dr. George Claridge Druce, curator of the Fielding Herbarium of the University of Oxford.

Dr. Adam Schwappach, formerly director of the Eberswalde Forest Experiment Station at Eberswalde, Germany, died on February 9, at the age of eighty-one years.

PROFESSOR A. OPPERMANN, director of the Danish Forest Experiment Station at Springforbi, Denmark, died on November 15, at the age of seventy-two years.

SCIENTIFIC EVENTS

INVESTIGATIONS OF LOCUSTS

THE French Committee for Locust Research, consisting of entomologists and chiefs of plant protection services in all the French African Colonies, has agreed to recognize the Imperial Institute of Entomology in London, according to the London Times, as the international center for the collection of data on the appearance and movements of locust swarms. This decision follows on the locust conference which was held recently in Rome to discuss methods of international cooperation in locust research, which was attended by British, French and Italian representatives. The Italian delegates agreed to recognize the Imperial Institute of Entomology as the international center for research, but the French delegates were unable to commit themselves without referring the matter to their locust research committee, which has now endorsed the decision of the Rome meeting.

As a result of this resolution, the Imperial Institute of Entomology will in future receive automatically all the information on locusts available in the French African possessions. This is being regularly transmitted by local authorities to the Algiers Regional Station. French entomologists will also cooperate in the locust investigations in the Timbuctoo area, which British entomologists from Nigeria hope to undertake. This area is strongly suspected to be one of the original sources of the present locust outbreak in Africa.

A general scheme of locust research, which aims at discovering the locusts' permanent breeding areas, is now in operation and is directed from the Imperial Institute of Entomology. This is financed partly by the British African Colonies and partly by the Empire Marketing Board, but, owing to the need for economy, the funds available have recently been reduced by half. Two locust research officers have been appointed. One is now in Uganda advising the government on problems of locust control, and particularly on the failure of poison bait. The other is studying the conditions under which locusts are breeding in the Sudan. Information on the movements of locusts is now being received from 16 empire and 25 foreign countries by the Imperial Institute of Ento-

mology and analyzed there in order to trace the origin of locust swarms, the routes of their invasions, and the probable causes of the outbreaks.

THE FIELD MUSEUM OF NATURAL HISTORY

THE annual report has appeared of Mr. Stephen C. Sims, director of the Field Museum of Natural History, Chicago. He states that despite the economic depression, which naturally has had serious effect upon the museum's finances as upon those of practically all similar institutions, so far as the public is concerned, the museum's services have been maintained with practically no curtailment.

All forms of educational work for both children and adults, such as the public lectures on science and travel, guide-lecture tours, etc., have been carried on as usual. The activities of the unit of the museum organization known as the James Nelson and Anna Louise Raymond Foundation, consisting of entertainments for children, extension lectures in the schools, and other forms of direct contact work between museum instructors and more than 300,000 children, have been increased. Likewise the circulation of some 1,300 traveling exhibits in about 400 schools has been continued without interruption.

Work on the installation of new exhibits and the reinstallation of older exhibits proceeded as usual. The scope of expeditions, however, was reduced and it was in this branch of activity that a large part of the necessary economies were effected. However there were sixteen expeditions in operation, both in America and foreign countries, though most of these were on a smaller scale than those of previous years.

Details of contributions of both funds and exhibition material and lists of the institution's 5,341 members are contained in the report.

The number of visitors during 1931 was 1,515,540, exceeding all previous records. Adding the numbers of children reached by activities conducted outside the museum by the Raymond Foundation and the Harris Extension, the total number of persons directly reached by the museum's educational influence