

the Guadarrama Mountains that separate Old from New Castle were visited during the meeting and afterwards there were other excursions to the Balearic Islands, the potash deposits in Catalonia, the Pyrenees, the important coalfield of Asturias and the iron ores in the neighborhood of Bilbao.

The Spanish government and the municipalities of Madrid and of the towns that were visited in the excursions extended splendid hospitality to the members of the congress. There was a royal reception at the palace, a gala theatrical performance, a municipal garden party and a banquet at which the speeches, twenty-seven in number, commenced with the fish course. This was followed by a charming exhibition of national costumes, dances and singing, in which the performers were all amateurs.

In spite of these attractions, time was found in the different sections of the congress for valuable discussions on matters of current geological interest.

There were a number of contributions on recent physical methods of studying the configuration and economic possibilities of the rocks of particular areas by electric, magnetic and gravimetric methods, and observation of the propagation in the earth's crust of artificially produced

The pyritic deposits of the south of Spain, to which reference has already been made, were the subject of important papers, and the greater part of two days was devoted to the discussion of the question as to whether they were formed by replacement or owed their origin to magmatic or pneumatolytic intrusion or deposition. Considerable attention was also given to the part played by Hercynian and Alpine movements in mountain building, more especially in Spain.

Perhaps, however, what was of the greatest interest to the British representatives was the consideration of questions of African geology in connection with the proposed international geological map of Africa on a scale of one in five million, which was resolved on at the previous congress at Brussels in 1922. A number of representatives of British African surveys were present as well as those of France, Belgium, Spain, Portugal, Italy and Egypt. It was gratifying to note the progress that has been made in the interval. A geological map of the whole of South Africa has been recently published on a scale of one in one million, and one of Egypt on a scale of one in two million and of South-West Africa on the same scale. Maps of the Anglo-Egyptian Sudan and Somaliland on a scale of one in three million, of the Gold Coast on one in one million five hundred thousand and Gambia on one in five hundred thousand and of all the remaining British African colonies or mandated territories, Nigeria, Uganda, Kenya, Tanganyika, Nyasaland, British Bechuanaland and Northern

Rhodesia, as well as of Southern Rhodesia, on a scale of one in two million, have been prepared and work on other parts of Africa is well advanced. The map of the whole of Africa on the scale of one in five million will be prepared under the auspices of the Belgian government as soon as all the materials are ready.

Of permanent value as a conspectus of the geology of Spain are the excellent guides, some nineteen in number, to the excursions. Many of them are published not only in Spanish but also in French, English or German, or more than one of these languages. At the same time the municipality of Madrid presented the members of the congress with a well-illustrated volume on the Quaternary rocks of the Manzanares Valley by José Péres de Barradas.

The greatest achievement of the congress, however, was the re-creation among geologists from all parts of the world of the atmosphere of friendliness and cordiality that prevailed in the days, which now seem so remote, "before the war."

THE SECTION OF VOLCANOLOGY OF THE U. S. GEOLOGICAL SURVEY

THERE was established on July 1, 1926, a Section of Volcanology in the Geologic Branch of the survey. Mr. W. C. Mendenhall is chief geologist directing the activities of the Geologic Branch in Washington. Mr. T. A. Jaggar at the Hawaiian Volcano Observatory is volcanologist in charge of the new section. The Section of Volcanology is empowered by act of Congress to operate volcanologic surveys, measurements and observatories in Hawaii, including subordinate stations elsewhere, and to provide and maintain laboratories and quarters for the work, and to print reports.

This establishes a government service for continuous observation of volcanic action in the United States and its dependencies, with headquarters on Kilauea volcano. In immediate effect it enlarges the scope of the Hawaiian observatory so as to create experiment stations to study volcanism in California and Alaska, these making their reports to the Hawaiian headquarters for publication and comparison. Hitherto the Hawaiian station has been the only permanent American volcano observatory.

Lassen National Park, where was staged in 1914-15 an eruption in the northern California mountains at Mount Lassen, and where there were other eruptions from 100 to 250 years ago, has been selected for the second. This second volcano observatory will be in charge of Mr. R. H. Finch, associate volcanologist, who has been first assistant at the Kilauea station since 1919. His task is to establish an earthquake laboratory modeled on the one in Hawaii, equip it

with seismographs, man it winter and summer and make studies also of slow movement of the mountain, of weather controls and of underground temperatures as shown by the springs and gas vents.

The seismographic laboratory at the Hawaiian station is placed in charge of Mr. Ronald M. Wilson, topographic and geodetic engineer. Mr. Wilson becomes geodesist and mathematician to the Section of Volcanology, as aide to Mr. Jaggar in physical investigations, and will specialize in tilt measurements and change of ground levels in relation to tide-water, and in horizontal movement determined by precise triangulation. Of late years work in Japan, California and Hawaii has proved that these slow movements are of enormous importance in relation to earthquakes and volcanoes and that they have forecasting value.

Another officer in charge of the clerical and disbursing work of the Section of Volcanology is Mr. Richmond B. Hodges, stationed at the Hawaiian laboratories. Mr. Hodges has served through the grades of junior and assistant clerk in the Washington office of the U. S. Geological Survey. He will have charge of the records, files and accounts at the Hawaiian observatory, and of part of the drafting and editing.

Mr. Jaggar made reconnaissance of the Lassen district in 1925 and 1926. The Topographic Branch of the U. S. Geological Survey, Colonel C. H. Birds-eye in charge, is now at work making a topographic administrative map of the Lassen Park and surrounding country of the National Forests. This map will be of great importance to the volcanologists. Furthermore a monograph on the recent eruption of Lassen, by Drs. Day and Allen, of the Geophysical Laboratory, excellently prepares the field for permanent studies of volcanic energy there.

For the present the program of publication of the section of volcanology is to issue weekly reports of earth shakings, tilts, temperatures and other volcanic phenomena observed at all stations occupied. These are given the local press in the vicinity of each observatory, and are collected every week in the Volcano Letter for wider distribution. In the *Monthly Bulletin* of the Hawaiian Volcano Observatory will be published the fuller illustrated reports from each station, in this as in other things the Hawaiian laboratory becoming the mother station.

The third observatory of volcanic action planned is naturally in that wonderful region almost unknown, the Aleutian mountains and islands of Alaska. That land will be reconnoitred for the purpose in 1927, and among the many volcanoes there belonging to the United States one will be selected for laboratory study winter and summer. Financial aid to supplement the small work that the government funds can do will be essential to any thorough research in that country.

T. A. J.

THE INSTITUTE OF CHILD GUIDANCE

THE Commonwealth Fund has announced the establishment on July 1, 1927, of an "Institute for Child Guidance" of which Lawson G. Lowrey, M.D., will be director. The chief purposes of the institute, which is the outgrowth of the experience gained in the operation of the fund's five-year program in the field of prevention of juvenile delinquency, will be four:

1. To make possible further study and research in the field of mental hygiene for children, with special reference to the causes and methods of treatment of behavior problems.
2. To provide facilities for the training of psychiatrists and graduate psychologists in practical child guidance work. Annual fellowships for this purpose will be offered through the National Committee for Mental Hygiene with which the institute will be affiliated.
3. To provide field training in child guidance for students in psychiatric social work at the New York School of Social Work and the Smith College School for Social Work. Both of these institutions will be affiliated with the institute and will offer a number of fellowships in psychiatric social work provided by the fund.
4. To afford adequate clinical facilities for the thorough study and treatment of children presenting problems in behavior and mental hygiene. Cases will be accepted from parents, schools, and from various co-operating agencies.

The institute will be operated under the direction of an administrative board to include Frankwood E. Williams, M.D., medical director of the National Committee for Mental Hygiene; Porter R. Lee, director, New York School of Social Work; Everett Kimball, director, Smith College School for Social Work; William A. White, M.D., director, St. Elizabeth's Hospital, Washington; C. Floyd Haviland, M.D., chairman, New York State Hospital Commission; Mildred C. Scoville, executive assistant, the Commonwealth Fund; Barry C. Smith, general director, the Commonwealth Fund, and three other persons from the social and educational fields presently to be appointed. Under the directorship of Dr. Lowrey, a complete staff of psychiatrists, psychologists, psychiatric social workers will be provided.

With the establishment of the institute, the Bureau of Children's Guidance, at present operated by the New York School of Social Work, will be discontinued and other modifications of the fund's present program will be made. The National Committee for Mental Hygiene will discontinue, with the completion of the demonstrations now being conducted in Cleveland and Philadelphia, the operation of demonstration child guidance clinics. The committee will, however, maintain a field service staff which will offer advisory service to the community child guidance clinics (now six in number) already established as the result of