GEOGRAPHICAL FIELD STUDY IN ITALY AND THE ALPS

IN connection with a summer trip abroad, Professor W. M. Davis, of Harvard University, proposes to spend June and the greater part of July in northern Italy and the Alps, studying certain geographical problems. He would be pleased to have associated with him a number of advanced students, already somewhat practised in field study. The districts proposed for examination and the general itinerary (subject to change) are as follows: The foothills of the Apennines near Ancona (about June 1); the non-glaciated valleys of the Apennines in the neighborhood of Faenza (about June 5); the basin of Florence (about June 10); the Mediterranean coast, between Pisa and Spezia, between Spezia and Genoa, west of Genoa (about June 15–20); the divide between Mediterranean streams and the headwaters of the Po, north of Genoa (about June 22); changes in river courses in the headwaters of the Po (about June 24); glaciated valleys and lake basins in the Alps (Como, Lugano, Maggiore) (about June 25–30); the non-lacustrine valleys of the Dora Baltea and Dora Riparia (about July 2–6); glaciated valleys of the French Alps near Grenoble (about July 8–15).

It is desired to treat the problems above outlined, and such other problems as members of the party may desire to take up, in accordance with the methods of systematic physiography. The method preferred involves the consideration of *structure, process and stage;* that is, each district is to be regarded as a solid mass, made up of certain geological structures (composition and attitude of rocks), standing at a certain altitude with respect to baselevel, and advanced by certain erosional processes to a certain stage of physiographic development. The possibilities and the limitations of verbal description are to be carefully considered.

It is not intended that the members of the party should travel continuously together. The party may be joined and left at any time, as agreed upon. It is requested that any person who desires to take part in these studies should send to address given below, at Cambridge or in Italy, a statement of his qualifications and (in case he does not hold a university appointment) a letter of introduction from the professor of geography with whom he has recently studied.

If his qualifications appear sufficient, word will be sent giving place and date of *rendezvous*. On meeting, some local problem such as above indicated will be taken up, its general nature will be set forth, the methods of treating it will be discussed, and two or three days will be spent in the field with such members of the party as are there gathered. Professor Davis will then go on to some other locality, leaving the party to continue local study of their problem for several days. At the end of that time they will overtake him at a new locality, where a report will be made on their first piece of work and (with such new members as there join the party) a plan for a second piece of work will be developed; and so on as long as desired, but not later than July 20.

Professor Davis does not desire to assume any responsibility as to arrangements of travel, hotels, trains, etc. Each member of the party is to make his own traveling arrangements and to pay his own traveling expenses. At the same time, while members of the party are together, it is expected that plans of travel will be made in common. A general reunion is proposed about July 18, in or near Grenoble, for the presentation and discussion of the various studies. The languages of the Geographical Congresses (French, German, Italian, Spanish or English) may be used. Professor Davis may be addressed as follows: care of W. J. Turner and Co., Naples, until May 10; care of Sebasti e Reali, Rome, until May 20; care of Kuster and Co., Turin, until June 30.

SCIENTIFIC POSITIONS IN THE PHILIPPINES

THE Bureau of Science of the Government of the Philippine Islands at Manila announces two vacancies in the chemical laboratory: one

at a salary of $2,000 per year for candidates with the doctor's degree, the other at $1,600 a year open to those with a bachelor's degree. The bureau desires candidates from the leading American universities where chemistry is well taught. The training should be the usual thorough one in the preparatory studies such as physics and mathematics, and in general inorganic, analytical and organic chemistry, together with a course in organic preparations. The research work for the doctor's degree may be either in inorganic or organic chemistry.

Candidates who are thoroughly equipped, who are accurate and painstaking in their work, who have the proper technique and capability for individual investigation, will have opportunities for promotion to vacancies occurring in positions above them. The salaries in the division of chemistry range from $1,600 United States currency per year, through intervals of $200 and $250, to $3,000 per year.

The laboratory is fully equipped with all modern apparatus and with a complete scientific library.

All information in regard to these positions can be obtained from the Bureau of Insular Affairs, Washington, D. C.

Two positions in the biological laboratory for men thoroughly trained in bacteriology and pathology are vacant in the Bureau of Science, Manila. One of these is at a salary of $2,500 United States currency per year. and it is desired if possible that the candidates should have had training in the principles and technique of serum preparation and therapy, and it is hoped that the successful one shall acquaint himself with the serum work carried on in the Bureau of Science and become capable of operating the serum section of the biological laboratory. The other position is for an assistant in bacteriology and pathology, and candidates must be capable of doing original work and must have the degree of doctor of medicine.

The opportunity for the study of tropical diseases is unsurpassed, and the candidates, through the diagnostic work in the hospital and in the government prison, will have every opportunity to study a great variety of tropical infections and parasites.

The outlook for promotion is good, as vacancies occur in upper positions in the laboratory. The salaries range from $1,600 to $5,000 United States currency. The bureau publishes the medical section of the *Philippine Journal of Science,* so that all research work can be promptly edited.

All information in regard to the positions can be furnished from the Bureau of Insular Affairs, Washington, D. C.

SCIENTIFIC NOTES AND NEWS

At the meeting of the National Academy of Science held in Washington on April 23, members were elected as follows: Edwin Brant Frost, director of the Yerkes Observatory, University of Chicago; William E. Storey, professor of mathematics, Clark University; Edward F. Nichols, professor of physics, Columbia University; W. F. Hillebrand, chemist in the U. S. Geological Survey; Wm. B. Clark, professor of geology, the Johns Hopkins University; Whitman Cross, geologist, U. S. Geological Survey; E. G. Conklin, professor of zoology, University of Pennsylvania, professor-elect of biology, Princeton University; Theobald Smith, professor of comparative pathology, Harvard Medical School; Simon Flexner, director of the Laboratories of the Rockefeller Institute for Medical Research. Foreign associates were elected as follows: Svante A. Arrhenius, director of the Division of Physical Chemistry of the Nobel Institute of the Academy of Sciences, Stockholm; Joseph Larmor, Lucasian Professor of Mathematics at Cambridge University; Ivan Petrovic Pavlov, Imperial Institute for Experimental Medicine, St. Petersburg; Hugo Ritter van Seeliger, professor of astronomy in the University of Munich, and Th. Barrois, professor of parasitology in the University of Lille.

At a meeting of the council of the Boston Society of Natural History, held on April 15, it was unanimously voted that the Walker grand honorary prize of one thousand dollars be awarded to Dr. Grove Karl Gilbert, of the United States Geological Survey. This