

but too brief "Chapters of an Autobiography," he said that, looking back, he was impressed by the fact that nothing suggested in later years had replaced or modified the Darwinian theory of evolution.

And now in conclusion, speaking at the close of the second half-century of our society's life, and speaking as one who owes more than he can express to the kindness and help received at these meetings, I can not do better than remind you of prophetic words spoken at Oxford in 1832. Professor Adam Sedgwick, respond-

ing after his nomination as president at Cambridge in the following year, said that the work of the association at the meeting which had just been held could not but tend "to engender mutual friendship, mutual forbearance, mutual kindness and confidence"; and, for the future, "he looked forward with full assurance to the happy results of this union between men of similar sentiments and similar pursuits, who possess one common object—the improvement of mankind by the promotion of truth."

## SCIENTIFIC EVENTS

### THE INTERNATIONAL GEOLOGICAL EXPEDITION

AN international expedition under the sponsorship of Princeton University will make a concentrated study next winter of the geological structure of the West Indies, it was recently announced by Professor Richard M. Field, of Princeton University, director of the expedition.

The U. S. Navy is cooperating in the project and will place a submarine at the disposal of the expedition. The submarine will assist the investigators in obtaining as nearly stable conditions as possible for under-water gravity tests. The U. S. Coast and Geodetic Survey, the Royal Society of Great Britain and the National Research Council are other national organizations cooperating with Princeton University in the expedition.

The data which the expedition will obtain during its ten weeks' stay in the West Indies are expected not only to aid in determining the relative stability of the islands and the manner in which they have been formed, but also to throw further light on the origin of the major inequalities on the earth's surface, particularly the origin of folding and faulted mountain ranges.

About 5,000 miles of submarine profiles will be measured and 30 or 40 gravity-at-sea stations will be established. The submarine will be used in this phase of the expedition's work. The new "three-pendulum" apparatus, which is the latest device for determining the difference in gravity at different points on the surface of the earth, will be used in the work of "weighing" the islands and the "deeps." The data to be obtained may also be of assistance in determining the location of earthquakes.

Land gravity stations will be established by the U. S. Coast and Geodetic Survey with the help of Mr. Hugh Matheson, of Miami, Florida. The plans also call for the drilling of bore-holes to determine the structure of the islands.

Soundings and charts which the expedition will make will be of assistance to ships navigating in the

West Indian waters in the future. The expedition will begin work early in February.

The personnel of the advisory staff and of the expedition is as follows:

*Navigation:* Rear-Admiral W. R. Gherardi, chief hydrographer, U. S. Navy; Hugh Matheson, Miami, Florida.

*Geophysics:* Rear-Admiral Gherardi; Dr. William Bowie, chief, U. S. Geodetic Survey; Dr. F. Vening Meinesz, Geodetic Survey of the Netherlands; Dr. F. E. Wright, U. S. Geophysical Laboratory; George W. Littlehales, hydrographic department, U. S. Navy.

*Tectonics or mountain building:* Dr. Arthur Keith, U. S. Geological Survey; Professor E. B. Bailey, chairman of the department of geology of the University of Glasgow; Professor Owen Thomas Jones, chairman of the department of geology, Trinity College, Cambridge, England; Professor R. T. Chamberlin, chairman of the department of geology of the University of Chicago; Professor Walter H. Bucher, professor of geology at the University of Cincinnati; Professor W. T. Thom, associate professor of geology at Princeton University, senior geologist, U. S. Geological Survey, and chairman of the petroleum committee of the National Research Council.

*Oceanology:* Professor Edwin Grant Conklin, chairman of the department of biology of Princeton University; Dr. Charles Fish, director of the Buffalo Museum of Science; Professor Ulric Dahlgren, professor of biology at Princeton University.

*Sedimentation:* Professor Alexander Hamilton Phillips, chairman of the department of geology of Princeton University; Professor Richard M. Field, associate professor of geology at Princeton University and director of the International Summer School of Geology; Ernest Dixon, of the Geological Survey of Great Britain; Maurice Black, fellow of Trinity College, Cambridge, England; Dr. Edward M. Kindle, chief of the division of paleontology, Geological Survey of Canada; Professor John Sandidge, of the department of geology of Princeton University.

*Marine Bacteriology:* Dr. Selman A. Waksman, microbiologist, State of New Jersey Agricultural Experimental Station, and associate professor of microbiology at Rutgers University.