fifty-three reported that they were at their minimum and any further withdrawals for military duty or by retirement or death would mean inability to maintain their programs.

From the data and comments obtained from the inquiry the following conclusions were drawn:

(1) Any further depletion of the instructional staffs of the medical schools will result in a serious breakdown of students of medical training. Already there is a definite deterioration of the quality of instruction in one fourth of the medical schools.

(2) The qualifications and educational preparation of trainees selected and assigned to the medical schools in the future must be kept high if even reasonable standards of academic performance are to be maintained under war conditions.

(3) If the present trend continues, consideration may have to be given to possible modification of the accelerated program to maintain proper instruction of medical officers for the Army and Navy and of physicians for the civilian needs of the future.

PERSONNEL PROBLEMS IN GEOLOGY

THE Office of Scientific Personnel of the National Research Council was established in 1941 primarily to aid in solving problems of scientific and technical personnel in connection with the activities of the National Defense Research Committee. During more than two years of its existence the office has handled successfully a large number of cases, chiefly in the field of physics, but also in other fields of science and engineering. The director of the office is Dean Homer L. Dodge, of the University of Oklahoma.

The needs of the Office of Scientific Research and Development and the availability of physicists and mathematicians have changed with the progress of the war. Therefore the Office of Scientific Personnel can now give more attention to fields other than those involved in the Office of Scientific Research and Development, some of which fields are suffering manpower shortages and can profit from the methods developed in this office for handling personnel problems in critical fields. The Geological Society of America is cooperating with several other scientific organizations to maintain the Office of Scientific Personnel for the remainder of 1943 and at least several months of 1944. During this time the effective machinery that has been built up by Dr. Dodge will be available to all geologists and their employers in the adjustment of wartime personnel problems.

The work of the Office of Scientific Personnel has been chiefly of two kinds: (1) placing qualified scientific and technical workers in positions connected with the war effort, and (2) taking steps to secure the deferment of scientists and technicians who can make their best contribution to the war effort by occupying civilian positions calling for their special skills. The office can serve in the first capacity to the extent that needs for geologists are reported and available geologists register. This service will be developed to meet the demand.

With respect to deferment problems, recent developments have made it uncertain how the office can best function. In the past, Dr. Dodge has assisted employers of physicists and mathematicians by writing letters to local Selective Service boards and state directors and by advising with officials in the National Selective Service Headquarters. Out of this work developed the National Committee procedure which is described in "Activity and Occupation Bulletin," No. 35, and which Dr. Dodge had hoped would be extended to include geologists in the near future. Instead, an entirely new procedure has been developed by the War Manpower Commission to be administered by the U. S. Employment Service.

The Division of Geology and Geography of the National Research Council has appointed a Committee of Geological Personnel, of which the chairman is W. B. Heroy, who is located in Washington. The primary function of this committee will be to coordinate personnel activities of the several geological societies; Dr. Dodge's office will consult with this committee in cases affecting geologists.

The Geological Society of America will prepare mimeographed statements of further helpful information as it becomes available. Those who have specific questions not answered in the present notice should address the Secretary, Geological Society of America, 419 W. 117th Street, New York, N. Y.

TERCENTENARY COMMEMORATION OF THE INVENTION OF THE BAROMETER, 1643–1943

A TERCENTENARY Commemoration of the Invention of the Barometer was held at the University of Toronto on October 19. There were afternoon and evening meetings.

Under the patronage of the Canadian Branch of the Royal Meteorological Society, the Royal Astronomical Society of Canada, the Royal Canadian Institute and the University of Toronto, two sessions were devoted to four papers indicating the origin and development of the barometer, discovered by Evangelista Torricelli in Florence in 1643.

The afternoon meeting was held in West Hall, Professor C. A. Chant presiding. The first paper was presented by Professor Louis C. Karpinski, of the University of Michigan, representative of the History of Science Society. This paper stressed the fact that Torricelli put together mentally the "force of the vacuum," 32 feet of water when the pump fails as

given by Galileo, the weight of the air as determined by Galileo, and the pressure and resistance of the air and "various other fluids," as discussed by Galileo in connection with projectiles, arriving at the idea that if water was held up to 32 feet, mercury would be held up under the same pressure to 30 inches, as mercury approximates 14 times the weight of water.

Dean G. S. Brett, of the department of philosophy of the University of Toronto, dealt particularly with the philosophical aspects of the "horror of the void" and the effect of the creation of a vacuum on contemporary thought.

The evening meeting was held in the McLennan Physical Laboratory, with Director John Patterson, of the Canadian Meteorological Service, presiding. A comprehensive collection of modern developments of the barometer and ancient devices was on exhibition. These were arranged by W. E. Knowles Middleton, of the Canadian Meteorological Office, with the cooperation of Professor John Satterly, of the department of physics. Mr. Middleton gave an account of these various contrivances which remain to this day so essential for attempts to forecast the weather. Dr. Satterley gave a survey of the difficulties of development of the barometer as a precision instrument.

One classical experiment given by Torricelli in 1644 involved having the bowl of mercury supporting the mercury column large enough to hold water on top of the mercury sufficient to fill completely the tube holding the mercury. On lifting the tube to the point in the bowl where the mercury and water meet, the mercury drops almost instantly, and the water completely fills the tube that held the mercury. This experiment was successfully performed at both sessions.

President Cody, of the University of Toronto, presided at a dinner where toasts were given to the King of England, to President Roosevelt and to the three American delegates, including Dr. Andrews, of the Cleveland Great Lakes Weather Bureau, and Mr. Brumbacher, of Washington, members of the American Meteorological Society.

AMERICAN-SOVIET CONFERENCE

A CONFERENCE, sponsored by the National Council of American-Soviet Friendship, for which the following program has been arranged, will be held in New York City at the Hotel New Yorker on November 7:

PANEL: SOVIET SCIENCE AND TECHNOLOGY, 11:00 A.M.–1:30 P.M.

Chairman: DR. HAROLD C. UREY, professor of chemistry, Columbia University.

Sir Hubert Wilkins, explorer, "Soviet Exploration and Geography."

Dr. Carl O. Dunbar, curator, Peabody Museum, Yale University, "Advances in Soviet Geology and Mineralogy."

Dr. Charles E. Kellogg, soil scientist of the U. S. Department of Agriculture, "Soviet Soil Technology and Agriculture."

Dr. L. C. Dunn, professor of zoology, Columbia University, "Soviet Research in the Biological Sciences."

Dr. Selman Waksman, professor of microbiology, Rutgers University, "Bacteriology in the Soviet Union."

Dr. V. K. Zworykin, research director, R.C.A. Laboratories, "Soviet Developments in Electronics."

General Discussion.

PANEL: PUBLIC HEALTH AND WARTIME MEDICINE IN THE U.S.S.R., 2:30–5 P.M.

(the American-Soviet Medical Society cooperating)

Chairman: DR. WALTER B. CANNON, professor of physiology, Harvard University.

Dr. Hugh Cabot, Boston surgeon, "Russian Medicine Organized for War."

Dr. C.-E. A. Winslow, professor of public health, Yale University, "Public Health in the Soviet Union."

Professor Vladimir Lebedenko, Soviet surgeon, "Russian Advances in Military Medicine."

Soviet Motion Picture, "Experiments in the Revival of Organisms."

Dr. W. M. Stanley, Rockefeller Institute for Medical Research, "Soviet Studies on Viruses."

Dr. Alice Hamilton, medical consultant to the Federal Department of Labor, "Industrial Medicine in the U.S.S.R."

Dr. Wilder Penfield, professor of neurology, McGill University, "The Recent Surgical Mission to the U.S.S.R."

General Discussion.

THE TENTH ANNIVERSARY OF THE PLANETARIUM AND MUSEUM OF THE FRANKLIN INSTITUTE

THE Franklin Institute, Philadelphia, will celebrate on November 9, at three o'clock, the tenth anniversary of the opening of the Planetarium and Museum. The first session will be held in the Fels Planetarium, Wagner Schlesinger, director of the planetarium, presiding. The speakers will be James Stokley, General Electric Research Laboratories, first director of the planetarium; Colonel Philip Fox, Signal Corps, U. S. A., first director of the Adler Planetarium, Chicago; Demonstration of the Planetarium Instrument, Colonel Fox.

After an intermission the proceedings will be resumed in Franklin Hall at 4:15 in the afternoon, Charles S. Redding, president of the Franklin Institute, presiding. The program for the afternoon follows:

"Then and Now," The Honorable George Wharton Pepper.

Presentation by the president: Certificates of Honorary Membership to Philip Fox, Samuel S. Fels, Mary Curtis Zimbalist.