

products other than fuels and of mineral fuels produced in the United States in 1928.

ESTIMATED VALUE OF MINERAL PRODUCTS OF THE  
UNITED STATES, 1928

Metallic .....	\$1,260,000,000
Nonmetallic (other than fuels) .....	1,240,000,000
Mineral fuels .....	2,900,000,000
Total .....	\$5,400,000,000

These estimates are subject to revision and replacement by precise figures as soon as the Bureau of Mines can complete the canvass of mineral industries just begun to obtain accurate statistics for the year 1928. In this canvass the bureau is sending to every mining, quarrying and well operating company an inquiry soliciting a report on the output of each mineral commodity by each producing establishment. Early success in this undertaking is dependent upon the continuation of the prompt and cordial response on the part of the mining companies which has been the basis of success in this statistical endeavor through many years.

#### THE AMERICAN PHILOSOPHICAL SOCIETY

ACCORDING to a statement sent from the society the 435 members were asked on February 1 to put in writing their views as to how the society can best carry out its program of intellectual stock-taking which was announced on January 12.

In the letter, Dr. Francis X. Dercum, president of the society, asked four questions and in making the letter public also gave out a statement setting forth what the stock-taking purposes to accomplish.

"The project of an intellectual stock-taking is as large an undertaking as we care to make it," Dr. Dercum wrote. "I believe that we can never approach finality; but I also believe that the society, which numbers among its membership leaders in all fields of intellectual advancement, is equipped to perform a distinctive service in promoting coordination of scientific and social efforts."

The questions incorporated in Dr. Dercum's letter are said to hold closely to the four tentative questions made public at the time of the announcement of the society's plan for an intellectual survey. They are as follows:

What to-day is the world's intellectual need?

Is there a drifting apart of the purely scientific interests and the humanistic interests?

Is there a loss of perspective and of grasp of fundamental principles by reason of specialization in education and in thought?

How can these interests and these branches of indi-

vidualistic learning be coordinated into one program with one common purpose—the promotion of all useful knowledge?

The answers to these questions, Dr. Dercum believes, will prove an invaluable guide to the society in its stock-taking enterprise.

The present American members of the society, according to Dr. Dercum, are divided by profession into 26 groups representing as many branches of learning. These groups and the numbers of members in each is as follows:

Anatomists, 7; anthropologists, 5; archeologists, 3; astronomers, 25; authors, 6; botanists, 24; chemists, 36; classical and modern philologists, 12; educators, 20; electrical engineers, 11; engineers, 17; geographers, 6; geologists, 25; historians, 18; lawyers, 23; mathematicians, 13; men of affairs, 10; meteorologists, 1; orientalists and comparative philologists, 10; paleontologists, 8; physicians, 17; physicists, 32; physiologists, 10; political economists, 4; psychologists and philosophers, 6; zoologists, 30.

In explaining what the society hopes to accomplish by means of its survey, Dr. Dercum pointed out that "all through the ages scientists, humanists, theologians, economists and inventors have been adding to the world's store of useful knowledge but that due to a lack of coordination and loss of perspective this store of knowledge is not being fully utilized. For this reason this intellectual stock-taking is being undertaken to determine, by symposium and synthesis, how all this materialism, this specialization, economic and intellectual, these divergent scientific and social opinions, can be brought together for human advancement."

#### THE ECLIPSE EXPEDITION OF THE NAVAL OBSERVATORY

THE eclipse of the sun in May will be observed by an expedition under the auspices of the Naval Observatory, which sailed for the Philippines on January 28, on the naval transport *Chaumont*, from San Diego, California. Commander C. H. J. Keppler is in charge of the expedition, while the scientific work is under the direction of Professor Wilbur A. Cogshall, of the University of Indiana. Mrs. Cogshall accompanies him as scientific assistant. The staff of the Naval Observatory is represented by Mr. Paul Soltenberger, the technical supervisor of the observatory's time service and an expert observer.

Lieutenant H. C. Kellers, Medical Corps, U. S. N., surgeon, is also acting in behalf of the National Museum for the collection of specimens of fauna and flora in the vicinity of the eclipse site, as he did in Sumatra during the 1926 eclipse.

In addition to this information a statement from the Navy Department says that the expedition this year proposes to set up its apparatus in the vicinity of Iloilo in Panay and will receive the cooperation of the Manila Observatory in selecting the exact site. The Manila Observatory, under the direction of Father Selfa, is known for its work in the meteorology of the Philippine Islands.

A tender will be assigned for the use of the expedition upon its arrival in the Philippines, and also an expert motion picture photographer and the necessary mechanics and helpers will be attached to the party from the Asiatic Fleet.

This year's eclipse, which takes place during the afternoon of May 9, is of exceptional importance on account of its long duration, the maximum duration of totality being over five minutes. Although wholly invisible in the United States, in fact taking place in the dark hours of the eighth of May, the eclipse stretches its beam of darkness over widely separate land areas from the northwestern end of Sumatra, across the Malay State of Kedah, across Siam and southern Cambodia, and finally over the middle group of islands of the Philippines between Luzon to the north and Mindanao to the south, including the important cities of Iloilo, the second in size in the Philippines, and Cebu, where Magellan met his death in his round-the-world cruise.

The observatory's expedition, in addition to special observations on its own part, is duplicating certain features of the program arranged for the party from the Sproul Observatory of Swarthmore College which will go to Sumatra. An interesting comparison of data is in prospect, if both parties are favored with clear weather. Several other expeditions are to cover the many phases of this exceptional eclipse. British expeditions from Greenwich and Cambridge are in prospect. Four German expeditions are planned, one from Hamburg possibly operating in the Philippines. Then there are Dutch, French and Italian expeditions in preparation and possibly one from Australia.

The corona effects of this eclipse will not repeat themselves for another quarter of a century. It is, therefore, the corona that will receive intensive study this year. Besides a study of the Einstein problem, the various programs contemplate spectrophotometry of the chromosphere and corona both in the red and in the ultra-violet, a study of solar radiation near and through totality, experiments to test the effect of totality on radio transmission, relative intensities of the lines of the coronal spectrum, improved measurement of the wave-lengths for the coronal lines with a spectrograph of high dispersion, examination for displacement of the dark lines of the outer corona with a slit spectroscope of high dispersion, a study of

coronal rotation with a falling plate spectrograph and interferometer and with a quartz spectrograph, and other features, including a special study of the shadow-band phenomenon.

#### THE HARVARD UNIVERSITY EXPEDITION TO STUDY TROPICAL MEDICINE IN YUCATAN

AN expedition which may throw new light upon the Mayan civilization started on February 1 for Yucatan from the department of tropical medicine of the Harvard Medical School and School of Public Health.

The immediate purpose of the expedition is to make a medical survey of the population of a section of that country. The Carnegie Foundation of Washington has appropriated funds and will bear a portion of the expense of the expedition.

The region selected is about Chichen Itza where is situated a famous sacrificial well of the aborigines. There are villages of mixed population in the neighborhood and others of practically pure-blooded Maya Indians. Little is known of the diseases of these people and it is hoped that the study may throw light upon the causes of the complete collapse of the Maya civilization which followed close upon the Spanish conquest.

The "Yucatan Medical Expedition" will have its headquarters among the ruins of the ancient city at Chichen Itza where, for some years, the Carnegie Foundation has maintained a station for archeological research. Mr. Sylvanus G. Morley, who is now on the ground, has charge of the station and of the archeological work being done there. Mr. A. V. Kidder, of Andover, made the preliminary arrangements with the Department of Tropical Medicine on behalf of the foundation.

The personnel of the Medical Expedition is as follows: Dr. George C. Shattuck, in charge; Dr. Joseph C. Bequaert, entomologist, and Dr. Jack H. Sandground, parasitologist, all of the Department of Tropical Medicine of the School of Public Health; Dr. Kenneth Goodner, bacteriologist, of the department of bacteriology of the Harvard Medical School, and Mr. Byron L. Bennett, laboratory technician.

#### THE ADMINISTRATION BUILDING OF THE DEPARTMENT OF AGRICULTURE

THE corner-stone of the main administration building of the Department of Agriculture in Washington was laid just before noon on Monday, January 14, by Secretary W. M. Jardine in the presence of Senators and Representatives in Congress and many of the members of the staff.

Secretary Jardine presided at the ceremony. In response to his invitation, Senator Capper and Representatives Haugen and Dickinson made brief talks,