SCIENTIFIC EVENTS

AMERICAN PROPOSALS TO THE INTERNATIONAL GEODETIC AND GEOPHYSICAL UNION

THE following two items have been submitted to the International Geodetic and Geophysical Union by the American Geophysical Union and will appear on the agenda of the union at the meeting to be held in Madrid, Spain, from October 1 to 10:

Item I.—Discussion of the desirability of expediting the topographic mapping of all land areas of the world, as well as the mapping of the configuration of all oceanic basins.

Explanation.—A knowledge of the geographic location of all topographic features and of the configuration of the ground, both on land and in the depths of the sea, is essential in carrying on the various branches of the geophysical sciences. This is especially true in geodesy, volcanology, seismology, meteorology, terrestrial magnetism and scientific hydrology. It is scarcely necessary to go into details in this explanation of the proposed item for the agenda, as to the scientific values of topographic maps. Every one engaged on geophysical investigations has had experience which makes him familiar with the ease with which work can be carried on where good topographic maps are available, and the great difficulties which are encountered when he has to try to work in regions which have not been topographically mapped.

Aside from the scientific value of topographic maps there is a tremendous practical value. The great problem of the human race is to discover, develop, utilize and conserve the products of the land and the sea, which furnish the means by which people are kept alive. The world's population is increasing from year to year and consequently in the future greater amounts of supplies must be extracted from the earth and the sea. It would appear to be the logical method to pursue to make topographic maps, even though in some parts of the world they might be rather crude, in order to furnish a knowledge of geographic positions and the configuration of the ground. These surveys should be followed by investigations to determine the resources of each portion of the earth, both land and sea. These resources, for the land areas, would consist in soil fertility, forests, waterpower, irrigable lands, lands that may be drained and minerals of various kinds including oil and coal. With all this knowledge plans based on sound economic principles can be outlined which would make it possible to use the resources of the world in a rational way without depleting them to such an extent that future generations would suffer. Similarly, the resources of the different oceans could be determined and utilized in a rational way, and the information gained from a knowledge of the configuration of the oceanic basins would shed a flood of light upon geophysical sciences in general.

After discussing this item, the Union may decide to pass resolutions commending those countries which have already completed or nearly completed their topographic maps and urge that the unmapped areas of the earth should receive careful attention of the nations to which they belong. The oceanographic work already accomplished or being undertaken by the different governments should be noted and commended, and all nations should be encouraged to increase and extend their work in oceanography.

Item II.—Discussion of the advisability and methods of promoting international cooperation for the advancement of oceanographic and the cognate sciences of geophysics upon the basis of the International Council for the Exploration of the Sea.

Explanation.—It is worthy of note by geophysicists that, in the foundation upon which the future superstructure of geophysics is to be raised, there must be a knowledge of the configuration of the oceanic basins, and of the functions of the ocean and the properties of its waters.

The International Council for the Exploration of the Sea purposes, upon acquiring the oceanographic exploring vessel of the late Prince of Monaco, to extend its operations into the intercontinental oceans, thus passing out beyond the confines of the continental seas in which its labors have already resulted in important advances in the geophysical sciences.

The question proposed to be discussed is whether the International Union of Geodesy and Geophysics, in its aspects as an alliance among those earth-sciences whose interests are promoted by oceanic exploration, such as geology, seismology, volcanology, geodesy, meteorology and terrestrial magnetism, should seek, by resolution addressed to the International Research Council, to invoke international cooperation in supporting the prospective undertaking of the International Council for the Exploration of the Sea.

REORGANIZATION OF THE BUREAU OF MINES

UNDER an order approved by the Secretary of the Interior, the following-named technical divisions and offices of the Bureau of Mines have been recognized:

The Division of Mining Experiment Stations, with administrative control of the stations at Pittsburgh, Pa.; New Brunswick, N. J.; Columbus, Ohio; Minneapolis, Minn.; Salt Lake City, Utah; Tucson, Arizona; Seattle, Wash.; St. Louis-Rolla, Mo.; Birmingham-Tuscaloosa, Ala.; Reno, Nev.; Berkeley, Calif.

The Division of Metallurgy, charged with the conduct of researches in physics, chemistry and engineering connected with the metallurgy, ore dressing, reduction and refining of the ferrous and major nonferrous metals; specifically of iron, steel, copper, lead, zinc, aluminum, gold, silver and their alloys. This division will be under the direction of the chief metallurgist who will have administrative charge of the field studies now being conducted at Miami, Okla.; Moscow, Idaho; at the Massachusetts Institute of Technology, and at the Bureau of Standards; together with the cooperative studies on oxygen enrichment of air blasts.