

Terra will continue his geological work in Kashmir where the most recent mountain building has been going on. Dr. Hutchinson is leaving immediately for southern India in order to study the occurrence of relics of a Himalayan fauna. Mr. Lewis will resume his paleontological excavations in the Salt Range of the Punjab. The work of the expedition will be completed by February and will arrive in the United States in the early spring of 1933.

THE U. S. GEOLOGICAL SURVEY

THE annual report of the director of the U. S. Geological Survey states that the geologic work of the year included studies of many mining districts in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, and Oregon; of lead and zinc deposits in Virginia; of iron ores in Alabama and the Lake Superior region; of coal fields in Montana, New Mexico, Oklahoma, and Utah; and of oil fields and prospective oil and gas areas in California, Colorado, Mississippi, and Utah; besides general mapping and studies in many parts of the country.

Research work on fundamental problems of geology included special attention to the source rocks of petroleum, the structure and constitution of coal, and the systematic study of diatoms.

Investigation of mineral-bearing areas that might contribute tonnage to the Alaska Railroad was undertaken under a special appropriation of \$250,000 made by Congress after the visit of a senatorial committee to Alaska in 1930. Continuation of the regular survey work in Alaska resulted in the geologic mapping of nearly 6,000 square miles and the topographic mapping of 5,680 square miles.

The topographic maps originally prepared as an essential base for detailed geologic mapping have proved to have many other uses, and the general realization of their value is shown in the increasing funds made available by states and other federal units for cooperation in this work. The topographic mapping done during the year covered nearly 26,000 square miles. Ten states, the District of Columbia, and Hawaii are now completely mapped, and the percentages in the other states range from eight in Florida to 88.9 in Virginia. Of the continental United States, exclusive of Alaska, 45.2 per cent. has been mapped. Office mapping from aerial photographs by stereophotogrammetric methods was completed for the Zion National Park and nearly completed for the Bryce Canyon National Park, both in Utah.

The study of water resources included stream gaging at about 2,800 gaging stations in all the states, the District of Columbia and Hawaii and investigations of ground water and power or reservoir sites in twenty-five states and Hawaii.

The classification of public lands with respect to their mineral, waterpower and agricultural value resulted in net decreases of 932,166 acres in areas withdrawn as possible coal or phosphate land and of 54,100 acres in areas classified as oil-shale land and a net increase of 510,217 acres in areas classified as coal or phosphate land.

The appropriations made directly to the Geological Survey for the year amounted to \$3,141,740. Most of the states and several other government units cooperated in one or more phases of the work, the total amount available from all sources being \$5,115,087. The unexpended balance of federal money at the end of the year was \$206,412, of which \$150,000 was made available by the Seventy-second Congress for expenditure in the fiscal year 1933.

THE REVIEW OF SCIENTIFIC INSTRUMENTS

ON January 1, 1933, The Optical Society of America will transfer to the American Institute of Physics the duty of publishing *The Review of Scientific Instruments*. At the same time, the Institute plans to expand the journal and to coordinate it with the entire list of Institute publications.

Under the new plan, *The Review* will contain each month an added section of "Physics News and Views." In this section it is planned to give a non-technical discussion of important developments in physics. Other features will be editorials, personal and institutional notes, programs and news of society meetings, book reviews and a summary of the contents of contemporaneous journals of physics.

The new section will in no way displace the present contents. Scientific articles on instruments and methods will continue to constitute the major portion of *The Review*. The abstracts of instrument literature will be retained. These original features of *The Review* will continue to be edited by Professor F. K. Richtmyer and a board appointed by The Optical Society of America.

The enlarged *Review* will be sent not only to all members of The Optical Society as at present but to every member of The American Physical Society, The Acoustical Society of America, The Society of Rheology and The American Association of Physics Teachers as well. It is planned, in addition, to send it to every non-member subscriber to any one of the Institute's publications, namely, *The Physical Review*, *Reviews of Modern Physics*, *Physics*, *Journal of The Optical Society of America*, *Journal of The Acoustical Society of America*, *Journal of Rheology* and the new *Journal of Chemical Physics*. For the members and other subscribers, combination rates will be so adjusted that *The Review* will come to them along with the journals they now receive for the same price as