

termining accurately the areas where earthquakes have occurred and mapping them so as to indicate the intensity. Such maps would bring out clearly the evidence available from the past as to the need for special precautions, and by keeping them revised new regions of activity would be adequately mapped. There is also a demand for regional information from the insurance companies. At present, in view of the lack of knowledge as to earthquake probability, they have little on which to base their rates. Too high rates or too low rates are disadvantageous, both to the companies and to the public; as in the former case insurance will disappear with a decrease of earthquake activity, and too low rates will be disastrous to the companies should a great earthquake occur. The kind of maps indicated would be of great value in averaging the probability, based on past occurrences over a region. While these maps would not be an entirely satisfactory guide, they would give the only information we have at the present time.

It should not be forgotten that earthquakes may occur where none have been observed before in this country, as our knowledge covers a very short period, geologically speaking, and earthquakes are geological phenomena. Experience in Europe points to the recurrence of earthquakes in places where they have occurred before, and this must be our best guide for the future. There is a great deal of information available, but the task of putting it on maps has yet to be undertaken. The Coast and Geodetic Survey has been gathering material for such maps and hopes to begin their production before very long, and then revise them from time to time. The geologist will find it necessary to reconcile these maps with the geological formations, so that we are again brought back to the need for the topographic map. This illustrates how all these problems are tied together, and emphasizes the fact that mapping based on accurate control is becoming more and more necessary as time goes on.

E. LESTER JONES

U. S. COAST AND GEODETIC SURVEY,
WASHINGTON, D. C.

SCIENTIFIC EVENTS

DUTCH EXPLORATION IN CENTRAL BORNEO¹

AN expedition has been at work in East Central Borneo during the past summer under the leadership of Captain D. W. Buys, with a view to exploring the only important area in the great island still remaining unknown. The undertaking has been promoted by the "Indisch Comité voor Wetenschappelijke Onderzoek-

¹ From the *Geographical Journal*.

kingen," formed some years ago for the furtherance of scientific exploration in the Dutch East Indies, which has already much work to its credit in Ceram and elsewhere. The field chosen lies between the upper course of the Kajan river in the north and the headwaters of streams flowing southwards to the Mahakam, and falls mainly within the administrative subdivision Beraoe. The upland region which gives rise to numberless tributaries of the above great rivers, as well as to the smaller Kelai on the east, has hitherto been quite untouched by white men, lying considerably north and east of the routes of Nieuwenhuis, Molengraaf, and Lumboltz, though its eastern and southern fringes have recently been touched by a military patrol under Lieut. Soeratman and the American Gilbert, as well as by the Dutch geologist Witkamp, who is a member of the present expedition. It was hoped to carry out an accurate survey of as large a part of the area as possible, besides geological, botanical, zoological and ethnological researches. Under the last-named head a search was to be made for archeological remains from the Hindu period, and also for cave-dwellers of whom some rumors have been heard. After a full consideration of the best line of approach to the unknown area, that by the Telen river, the largest northern tributary of the Mahakam, was decided on, and the first report of progress describes the ascent of this river in canoes under considerable difficulties due to heavy rains and the obstacles caused by the many rapids and the rock-strewn bed of the river. Efficient service had however been rendered by the Dayak boatman under the energetic direction of the native chief Beng Wung. By the end of June the party had ascended the Telen almost to its source, and had thus reached the threshold of the unknown area, while various side trips had been carried out by the geologist Witkamp and the botanist Enderst, the former of whom had ascended the Wahau, a northern tributary of the Telen, to its source. To the east was a flat or gently undulating mass of eruptive formation, with a series of Tertiary rocks resting against its western edge. West of the river no elevations of importance were seen. Emanations of marsh-gas were observed, but no sign of oil. Above the Wahau the Telen has a widening course through a level plain, with cut-off bends connected with the river only at high water. Here the surface is formed of recent alluvium and sand, but higher up the Tertiary strata come to light in the form of shales, grits and conglomerates, with beds of lignite interspersed.

THE AMERICAN MUSEUM EXPEDITION TO GREENLAND

CAPTAIN ROBERT A. BARTLETT, who commanded the steamship *Roosevelt* in which Admiral Peary

sailed in 1908 for the North Pole, left Bregus, Newfoundland, on May 10, in the 100-foot schooner *Morrissey* for New York. The ship will be taken to a Staten Island shipyard to be outfitted for an expedition to Greenland in quest of specimens for the new Hall of Ocean Life in the American Museum of Natural History. Permission for the expedition to land in Greenland has been granted.

Harrison Williams is financing the trip, which will be directed by George Palmer Putnam, treasurer of the publishing house of George P. Putnam's Sons. H. C. Raven, zoologist of the American Museum, will be their representative.

Others in the party will be Knud Rasmussen, Danish explorer and authority on Eskimo habits and customs; Robert E. Peary, 18-year-old son of the discoverer of the Pole, who will go in the capacity of engineer; David Binney Putnam, 12-year-old son of the director, who accompanied Professor William Beebe on his expedition to the Sargasso Sea; Edward Manley, amateur radio operator of Marietta College, Ohio, and Carl Dunrud, who will try roping walrus. There will also be an ichthyologist, a taxidermist, an artist, a motion picture photographer, surgeon and the usual ship's crew.

The *Morrissey*, built in Canada of oak, is the usual Newfoundland schooner type. Diesel engines will be installed in her and her entire hull will be covered with two-inch greenheart sheathing as protection against ice floes. Everything is expected to be in readiness so that the expedition can leave by June 10.

A special effort will be made by members of the party to gather specimens of the narwhal. No specimen of this animal exists in any American museum at this time, it is said. They also expect to get Greenland sharks, walrus, seal and various Arctic bird groups.

The advisory committee of the expedition, in addition to Mr. Williams, includes Cleveland E. Dodge, Fitzhugh Green, Colonel E. Lester Jones, Junius S. Morgan, Henry Fairfield Osborn, Jr., George H. Sherwood and Frederic C. Walcott.

AN INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

THE basis of a general international organization for industrial standardization was laid at the Third International Conference on Standardization, by unanimous agreement upon the draft of a constitution for the new international body. At this conference the national standardizing bodies in eighteen countries were officially represented, Hungary and Australia alone being without delegates.

The proposed constitution of the new organization, which is to be called the "International Stand-

ards Association," states the aims and objects of the association as follows:

To lay the groundwork for international agreement upon standards by providing simple systematic means of interchanging information on the standardization work and activities in the different countries.

To develop general guiding principles for the assistance of the national standardizing bodies.

To promote uniformity among the standards of the various national bodies.

It is the intention of the International Standards Association that its work shall include the approval of international standards and the administrative machinery herein set up is so designed that it may be readily extended or modified to include the approval of such international standards when sufficient experience has been acquired.

The members of the International Standards Association are to be the central national standardizing bodies existing in the different countries, one for each country, accepting this constitution. The chief executive body is to be the "plenary assembly," composed of delegates of all the national bodies, with the final authority resting with the latter. Provision is also made for an "administrative council," with control of finances and administrative matters, but with advisory powers in important questions.

The conference recommended that the seat of the new organization be in London, final decision to be made by the first Plenary Assembly.

The conference appointed a committee of seven to formally submit the proposed constitution to the twenty national standardizing bodies, and to arrange for a Plenary Conference for final ratification and organization. The countries represented on the committee are: Belgium, Czechoslovakia, Germany, Great Britain, Sweden, Switzerland and the United States.

During the sessions of the conference, informal negotiations were opened with the International Electrotechnical Commission (an international body now functioning in the specialized field of electrical engineering) in regard to a unified organization, and the committee of seven will undertake to secure joint action in the final organization which it is expected will be consummated when the Plenary Assembly is held.

CHEMICAL WARFARE SERVICE CONSULTANTS

THE following chemists were recently appointed consultants to the United States Chemical Warfare Service:

John J. Abel, Johns Hopkins University.
Roger Adams, University of Illinois.
Gellert Alleman, Swarthmore College.