

sea. In time of heavy flood, when the rush of water was sufficient to wash out the sand bar, the river flow carried down not only the additional amount of material for which the rapid current furnished the necessary carrying power, but also flushed out more or less gravel from the gravel bars that had formed along its course, as well as that which had accumulated behind the sand bar at the mouth, and carried it all out to sea. The sand bar was also subject to attack from the ocean side, by heavy storms at sea; these storms not only furnished the means of destroying the sand bar and for the time being opening the mouth of the river for the free transportation into the sea of the gravel and diamonds accumulated behind the bar, but also served to distribute the diamond-bearing gravel along the coast, to the northward in the case of a storm from the south or southwest, and to the south-

ward in the case of a storm from the north or north-west. In this way the diamonds were carried many miles both to the north and the south of the mouth of the river. The carrying capacity of the storm water for the diamonds was increased by the fact that the turbulent water along the shore line was heavily charged with suspended sand, and the buoyancy of the diamonds in this sand-water was proportionately increased, because of its higher specific gravity.

Once deposited in the sea, the diamonds and gravel, under the influence of storms, ocean currents and wave action, were not only distributed up and down the coast and washed up on the shore line, but the constant riffling action of the waves supplied a concentrating action, with the result that the larger stones were deposited close to the river mouth, while the smaller ones were carried farther up and down the coast.

## SCIENTIFIC EVENTS

### ANTHROPOLOGISTS AT THE WELLCOME MUSEUM

*The British Medical Journal* reports that a reception for the members of the Royal Anthropological Institute and other bodies interested particularly in African races and culture was held at the Wellcome Historical Medical Museum on October 10, Dr. Henry S. Wellcome, the museum's founder and director, acting as host. After making a tour of the museum, which includes an exposition of the healing arts as practised among primitive peoples, the visitors were addressed by Lord Lugard, formerly Governor-General of Nigeria, and now British member of the Permanent Mandates Commission of the League of Nations. The interest which had been shown in the welfare of subject races during the past few years, said Lord Lugard, was one of the most remarkable phenomena of the twentieth century, but in reality it had been growing ever since the abolition of the over-sea slave trade. In his own acquaintance with the lawless savage Lord Lugard had found that in fact tribal organization exercised an effective discipline, and created a strong patriotism for the local community and an unswerving loyalty to the chief. Tribalism had its own code of civil and criminal law, and had evolved among other things a system of land tenure. He emphasized the need for that first task of the anthropologist, the study of existing institutions among primitive peoples. To that end Dr. Wellcome's extremely interesting museum, illustrating the practice of medicine throughout the world from the earliest ages, makes a great contribution. Lord Lugard linked it with the ethnological museum in the Lateran Palace at Rome, which showed in contrast the earlier conditions of primitive savagery and the

achievements of to-day, thanks to missionary effort on various lines, including educational and medical. Such collections conferred great benefits on both the white man and the black, and would assist in solving the problem of race relations in the future. Professor J. L. Myres, president of the Royal Anthropological Institute, also expressed to Dr. Wellcome the feelings of gratitude with which anthropologists regarded one of the most stimulating museums in the country. It was a museum where the objects themselves were of extraordinary interest; but what gave them their peculiar value was that they were all eloquent in their selection, arrangement and description of the continuity and development of one of the noblest of applied sciences that mankind had at its disposal. Other speeches were made by Dr. C. S. Myers, director of the National Institute of Industrial Psychology; Dr. H. J. E. Peake, vice-president of the Royal Anthropological Institute, and Mr. T. A. Joyce, deputy keeper of the department of ethnography in the British Museum. Dr. Wellcome, in a few sentences in reply, explained how, soon after he began collecting, the idea of assisting research workers and students took possession of his mind, and he gradually formed a museum which visualized, as a museum should do, within its particular sphere, the failures and mistakes as well as the successes of the past.

### WILD LIFE IN CALIFORNIA

In an effort to preserve accurate records of the distribution of wild life in the Lassen Park area of California before further changes incident to its conversion into a public domain take place, the University of California Museum of Vertebrate Zoology has published a report extending to 595 pages.

This report, which represents almost two years of observation in the field by 12 members of the staff of the museum, is based upon a total of 3,592 specimens collected for study, including 496 reptiles and amphibians, 1,601 mammals, 1,453 birds, and 34 sets of birds' eggs, for the most part with nests. In drafting the report consideration has been given to 387 different kinds of vertebrate animals, from meadow mice, water dogs and humming birds, to bear, beaver and the California condor.

The strip of territory included in the survey is 24 miles wide and 124 miles long, or an area of 2,976 square miles, ranging from an altitude of 300 feet or less in the Sacramento Valley floor, to the great basin platform at an altitude of 5,300 feet, and the top of Mt. Lassen at 10,451 feet. The north line of the area runs roughly from a point 12 miles north of Red Bluff on the west side of the Sacramento River, to a point about seven miles north of Red Rock Post Office, just inside the California-Nevada boundary. The south line runs roughly from Tehama on the Sacramento River, to the California boundary about where Smoke Creek crosses the boundary.

During recent years the University of California, in the development of a faunal survey of the Pacific Coast and of California in particular, has made intensive studies of six other prescribed areas of the state.

Support for the study as well as the first field observations in the area came from a friend of the university, Miss Annie M. Alexander. The report was edited by Professor Joseph Grinnell, curator of the Museum of Vertebrate Zoology; Joseph Dixon, economic mammalogist, and J. M. Linsdale, research associate. Other collectors who added to the field material were Adrey E. Borell, Hilda W. Grinnell, Richard Hunt, Louise Kellogg, Chester C. Lamb, Tracy I. Storer, Harry S. Swarth, Walter P. Taylor and Leo K. Wilson.

The objectives kept in mind during the survey of the area were: what kinds of land vertebrates are present, the frequency of observed occurrence and relative abundance of these kinds, the local or habitat distribution of each kind, the factors which determine the presence and habitat distribution of each kind, the annual cycle of activity of each kind in the section, and a method of analyzing vertebrate animal communities and successions.

Explanation is made that the work has been published by the University Press, not as a popular guide, but as a scientific record of the wild life of the area for the use of naturalists and students.

#### REGIONAL REORGANIZATION OF THE U. S. BIOLOGICAL SURVEY

FIELD workers of the U. S. Biological Survey engaged in cooperative campaigns for the control of

injurious rodents and predatory animals will be grouped, effective on January 1, 1931, in four regions, according to an announcement made on November 11 by Dr. Paul G. Redington, chief of the bureau. The Secretary of Agriculture has approved this regional plan of organization.

The grouping, with each region in charge of a supervisor, will coordinate more closely the work of the bureau throughout the country. Each supervisor will be in contact with the state leaders in his region, and also with the administrative heads of the bureau in Washington.

The new regional supervisors are men who have had wide experience in the wild animal control work of the bureau. James Silver, with headquarters at Washington, D. C., will supervise Region No. 1, comprising all states east of the Mississippi River, including all of Louisiana. Mr. Silver is at present leader of the bureau's eastern rodent control district, which occupies approximately the same area as the new region.

Region No. 2 will be supervised by Leo L. Laythe, with headquarters at Denver, Colorado, and will cover the states of Montana, Wyoming, South Dakota, Colorado and Utah. Mr. Laythe is at present state leader of predatory animal and rodent control for the Biological Survey in Colorado.

Region No. 3, with headquarters at Portland, Oregon, will include the states of Washington, Oregon, Idaho, Nevada and California. Ira N. Gabrielson, at present state leader of rodent control for the Biological Service in Oregon, is the new supervisor.

Don A. Gilchrist, leader of predatory animal and rodent control for Arizona, will be in charge of Region No. 4, comprising the states of Arizona, New Mexico, Oklahoma, Arkansas and Texas with headquarters at Phoenix, Ariz.

The new regional supervisors will each spend some time in Washington before the first of the year to acquaint themselves with the policies of the bureau that will be effective when the change is made.

#### THE SECOND INTERNATIONAL CONGRESS FOR SEX RESEARCH

THE house of the British Medical Association in Tavistock Square, London, was opened for the second International Congress for Sex Research during the week of August 3 to 9 and provided admirable facilities for the meeting. The general reception for delegates preceded the official opening of the congress and provided opportunity for meeting delegates from the various countries.

Arrangements for the congress were ably handled by a British committee of some thirty-five members