along a radial consequent valley through a notch in a limestone rim.

LE TOUR DU MONDE.

THE illustrated weekly, published by Hachette & Co., Paris, under the above title supplies so many excellent illustrations well reproduced from photographs taken in various parts of the world, that it deserves mention as a contributor to physiographic knowledge. The volume for 1895 contains, among many others, a number of admirable pictures from the inner Sahara, portraying the escarpments, dunes and wadies with remarkable effect of glaring sunlight; of the lakes of Bavaria, both within and without the Alps; of tropical and polar scenes. The text is generally narrative and descriptive, with much about peoples and their customs, entertaining rather than strictly scientific; and some of the pictures bear evidence of touching up or even of invention by the too facile hand of the Parisian artist; but the volume as a whole is as instructive as it is attractive.

THUNDER STORMS AT SEA ARE NOCTURNAL.

THE greater frequency of thunder storms in the winter and at night around the coast of Scotland has been shown by Buchan. When thunder storms occur in New England in winter they are generally observed along the coast and after nightfall, as has been shown by records of the New England Meteorological Society. Now Meinardus, of the *Deutsche Seewarte* at Hamburg, finds even the thunder storms of the Bay of Bengal to have a distinct nocturnal maximum (Annalen der Hydrog., 1895, 506–511). It has been suggested by Grossmann and others that the cause of this contrast with thunder storms on land probably arises from the dependence of the maritime storms on instability produced by radiation and cooling of the upper surface of cloud sheets, which proceeds best at night, especially in winter nights; while local storms on the land arise from the overheating of lower layers of air close to the hot ground, and this condition has its maximum on summer afternoons.

CURRENT NOTES ON ANTHROPOLOGY.

THE ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN.

ON January 21st this institution held its annual meeting, when its President, Mr. E. W. Brabrook, delivered the address of the occasion, reviewing the work of the body during the past year. It presents an encouraging list of papers on the leading branches of anthropologic study, and notes the advancements which have been made in the popularity of this department of learning. The establishment of a professorship of anthropology at Oxford proves that that famous University is no longer the house of refuge for effete ideas, as was once charged against it. The speaker referred to the Galley Hill skeleton (see SCIENCE, 1896, Jan. 17), and from a close personal inspection of it declares that "the balance of probability lies in favor of its authenticity." He adds some strong words on the unity of the anthropologic sciences, refuting the narrow views of Topinard, who, in direct conflict with his great teacher, Broca, would confine it to the study of physical types.

The address is one which will foster and develop the study of man in its true sense.

CANADIAN ARCHÆOLOGY.

A VALUABLE archæological report, prepared by Mr. David Boyle, appears as an Appendix to the Report of the Minister of Education, of Canada (also printed separately). It covers 79 pages, a number of which are devoted to the exposition of 'primitive industries and working methods.' Several earthworks in the province of Ontario are described, with illustrative plans and surveys. Some rock paintings are mentioned, especially one at Lake Mas-

sanog, the figures from which are reproduced, and the suggestion advanced that they indicate Huron-Iroquois influence. A number of pipes of clay and stone and arrow heads of unusual shape are figured. The timely warning is given that of late years the manufacture of fraudulent specimens of this character has notably increased, and collectors should be on the alert. To detect these 'fakes,' Mr. Boyle recommends the use of a lens of low power by which it is easy to distinguish where the partination has been destroyed.

D. G. Brinton.

University of Pennsylvania.

SCIENTIFIC NOTES AND NEWS.

BATRACHIANS AND CRUSTACEANS FROM THE SUBTERRANEAN WATERS OF TEXAS.

In advanced sheets from the Proceedings of the U. S. National Museum, Dr. Leonard Stejneger describes a new genus of batrachians from an artesian well at San Marcos, Texas, and Mr. James E. Benedict describes a new genus and three new species of crustaceans from the same well. Dr. Stejneger gives some interesting details regarding the new species of salamander-like batrachians which he calls *Typhlomolge Rathbuni*. "The animals, by their want of external eyes and their white color, at once proclaimed themselves as cave-dwellers, but their extraordinary proportions, absolutely unique in the order to which they belong, suggest unusual conditions of life, which alone can have produced such profound differences. The most startling external feature is the length and slenderness of the legs, like which there is nothing among the tailed batrachians thus far known. While the normal number of fingers and toes is present (4 and 5), it is worthy of note that not only is there a great variation in the relative length of these members, but even the length of the legs in the same animal may differ as much as two millimeters. Viewed in connection with the well-developed, finned swimming tail, it can be safely assumed that these extraordinarily slender and elongated legs are not used for locomotion, and the conviction is irresistible that in the inky darkness of the subterranean waters they serve the animal as feelers, their development being thus parallel to the excessive elongation of the antennæ of the crustaceans, of which I have been informed by Mr. Benedict. The external gills at once suggested that these animals might be only larvæ. The fact that one of them contained large eggs, and that another expelled three eggs after being caught, was no positive proof to the contrary, but in conjunction with the affinity of the species to other forms known to have persistent gills throughout life it makes it absolutely certain that we have to do with an adult and final animal."

THE FOREST RESOURCES OF THE UNITED STATES.

In a recent circular prepared by Dr. B. E. Fernow for the Division of Forestry of the U. S. Department of Agriculture it is stated that the forest area of the United States (exclusive of Alaska) may be placed at somewhat less than 500,000,000 acres. This does not include much brush and waste land which is, and will remain for a long time, without any economic value. This area is very unevenly distributed; seven-tenths are found on the Atlantic side of the continent, only one-tenth on the Pacific coast, another tenth on the Rocky Mountains, the balance being scattered over the interior of the Western States. Both the New England States and the Southern States have still 50 per cent. of their area, more or less, under forest cover, but in the former the merchantable timber has been largely removed. The prairie States, with an area in round numbers of 400,000 square miles, contain hardly 4 per cent. of forest growth, and the 1,330,000 square miles—more than one-third of the whole country—of arid or semi-arid character in the interior contain practically no forest growth, economically speaking. The annual value of forest products is estimated at over $1,000,000,000, which makes the industry next in importance to agriculture, exceeding in the value of its products the mining industries by more than 50 per cent.

CAPE COLONY GEOLOGICAL COMMISSION.

We have already announced the appointment, by the government of Cape Colony, of a Geo-