

masses; as such, being a characteristic of vigorous young mountains.

Careful study of the ground made it clear that no artificial discharge could be made for the rising lake. As the impending flood could not be controlled, every effort was made to insure the safety of the people in the valley below by timely warning of the disaster. A telegraph line was constructed from Hardwar, on the Ganges at the edge of the plains, to Gohna, 150 miles within the mountains. In April, 1894, August 15th was set as the probable date of the flood. A number of suspension bridges were dismantled and removed. Safety pillars were set up on the valley slopes, at intervals of half a mile, and at heights of from 50 to 200 feet above the ordinary river level, thus indicating the probable limit of the flood, above which there would be no danger.

The lake back of the dam grew to be four miles long and half a mile wide. At midnight of August 25th-26th, during a heavy rainfall, the flood began. In four hours the lake was reduced to two miles in length and quarter of a mile in breadth; 10,000,000,000 cubic feet of water were discharged, cutting down the barrier 390 feet; advancing at a rate of twenty miles an hour at first, and ten miles an hour further down the valley, sweeping away many miles of valley road, completely destroying two bridges that had been left standing, because of remonstrances from local authorities against their removal, and leaving no vestige of many villages and three considerable towns; yet so fully was the danger announced that not a single life was lost.

W. M. DAVIS.

HARVARD UNIVERSITY.

CURRENT NOTES ON ANTHROPOLOGY.

THE AMERIQUE INDIANS.

THERE has lately appeared in Paris a book with the title 'L'Amerique a-t-elle

droit sous ce nom à un nom indigène?' by M. Franciot-Legall.

The question discussed is one which at various periods has risen in the Congrès Internationale des Américanistes, and derives its origin from the fact that somewhere in Central America there has been known a native tribe with the name 'Ameriques;' and it was argued that Columbus in his fourth voyage met this tribe and from it his associates gave the name to the land,—not from Amerigo Vespucci, as the geographer Waldseemüller says, or, at least, independently of him.

Some have doubted that there was a tribe so-called, but their existence must be conceded. They have been met by explorers of the present day—by Mr. Crawford, for example. Their affinity and precise location have, however, not been stated. These points have been settled lately by M. Alph. Pinart, who, as he lately informed me, secured a vocabulary of their tongue and found it to be of the Lenca stock, and their present home to be in the State of Honduras.

30TH REPORT OF THE PEABODY INSTITUTE.

THE last report of the Curator of this institution, Professor F. W. Putnam, shows it to be in a flourishing condition. Among the results of its field work are numerous specimens of chipped stones said by the Curator to be 'found in the glacial deposits of the Delaware Valley,' about the age of which deposits it is fair to say geologists are not agreed.

Mr. Gordon's researches in Copan are referred to, and the fact emphasized that the establishment of that city was far more ancient than the surface ruins and standing monuments.

The report closes with some excellent suggestions for a course of instruction in anthropology, comprising a group of studies some acquaintance with which is essential to

an anthropologist. It necessarily includes several departments, but in a period of three years a diligent student could be qualified for original research.

PLIOCENE MAN IN BRITAIN.

GEOLOGICAL readers are aware that the Cromer Forest Beds of eastern England are to be assigned to either the latest Pliocene or oldest Pleistocene. They are distinctly preglacial and contain remains of a sub-tropical fauna.

From an article in *Natural Science*, for January, it appears that Mr. W. J. Lewis Abbott has collected from these beds a series of chipped flints bearing 'a striking resemblance to the work of man,' and have been pronounced to be such by competent experts. One showed a plain 'bulb of percussion.'

As there seems no doubt about their deposition with the original strata, the only question remaining is their production, whether by the hand of man or natural agencies. There still remains some doubt even as to the flints from the plateau of Kent on this vital point.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

NOTES ON INORGANIC CHEMISTRY.

ON January 11th Professor Clemens Winkler, of Freiberg, delivered an address before the Deutsche Chemische Gesellschaft on The Discovery of New Elements during the last twenty-five years and problems connected therewith. He first considered the quantitative distribution of the elements, showing by Professor F. W. Clarke's tables that as far as concerns the outer ten miles of the earth, together with the atmosphere, one-half of all the material is oxygen, and one-quarter is silicon, and that these two elements, with aluminum, iron, calcium, magnesium, sodium and potassium make up over 7.5 per cent. None of the

remaining elements occur in as great abundance as one per cent. In the process of cooling of the earth, and subsequent geologic action, many of the less abundant elements have become somewhat localized or concentrated; as, for example, chlorine in the sea and in salt deposits, the heavy metals in veins and lodes. Were this not the case many of the rarer elements must have escaped detection. An instance of this is scandium, discovered by Nilson in 1879, of whose oxid but a few grams exist. This element, and gallium, discovered by Lecoq de Boisbaudran in 1875, and germanium, discovered by Prof. Winkler himself in 1886, possess a peculiar interest, in that the properties of each had been quite accurately predicted by Mendeléef in 1871. Their discovery was a complete confirmation of the principles of the periodic law. The mineral gadolinite, with others closely kin, has been a fertile source of investigation, and the list of 'rare earths' that have been discovered in it is apparently by no means complete. Erbium, holmium, thulium, dysprosium, terbium, gadolinum, samarium, decipium and ytterbium have been discovered by various observers, but the independent existence of several of these is far from certain. Of several supposed new elements the non-existence is more sure; such are metacerium, russium, jargonium, austrium, norwegium, actinium, idumium and masrium. The same may, perhaps, be said of the recently *patented* lucium, kosmium and neokosmium. (These last do not derive their appellation from *kosmos*, but from Kosmann, their discoverer and patentee!). Work by Auer von Welsbach on his incandescence light led him to the decomposition of didymium into neodymium and praseodymium, whose beautiful red and green salts were well shown at the Chicago Exposition. The last elements considered by Professor Winkler were argon and helium. These apparently do not as yet fall into