

accompanied by the trenching of the gorge, about 150 m. beneath the floor of the trough. The cliff of the Lorelei and the narrows and rapids in the river beneath it are caused by a heavy quartzite bed.

THE WANDERING OF LAKE NOR.

SVEN HEDIN gives an interesting account of the apparent recent wandering of Lop (lake) Nor on the level floor of the Gobi desert in Central Asia (Peterm. Mitt., XLII., 1896, 201-205, maps), confirming the views of Richthofen as against those of Prshevalski. The desert basin contains a great accumulation of waste from the surrounding mountains; coarser and steeper sloping around the margin, finer and dead level in the central depression (790 m.); here the aneroid observed from place to place varies only with the weather and season. The chief river is the Yarkand, coming from the west, and at high water in the late summer bringing much silt; this tends to drive the lake to the southeast. The winters are prevailingly calm; but in summer the wind is generally from the northeast, often stormy, drifting the surface sand and bearing so much dust as to darken the sky (hence called Kara-buran, or black storm); this drives the lake to the southwest. The resultant of river and wind action is a southward migration of the lake, but from a comparison of various records, Hedin concludes that there is an intermittent shifting back and forth, according as this or that part of the plain is aggraded. Further account of Hedin's perilous journey across the region of dunes is given in the London Geographical Journal of October.

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CURRENT NOTES ON ANTHROPOLOGY.

THE INDIANS OF THE NORTHWEST COAST.

IN some recent publications Dr. Franz Boas has added to his valuable contribu-

tions to our knowledge of the tribes of the northwest coast.

The eleventh report of the British Association Committee is altogether from his researches. It gives notes on the shamans, and a description of their beliefs and customs; also a study of Tshimshian houses, the growth of children and linguistic particulars.

In the 'Internationales Archiv' (Bd. IX.) he reports a number of songs from the Kwakiutl Indians, giving the music, the original words and both a literal and a free translation.

From him also there appears an article on 'The Indians of British Columbia' in the Bulletin of the American Geographical Society (No. 3, 1896). This describes their general appearance, their relationship and the details of their ordinary life.

All this material is at first hand, drawn from his personal studies in this field of ethnography.

THE TEMPLE OF TEPOZTLAN.

THE 'Bulletin' of the American Museum of Natural History for November 13th contains a short article by Mr. M. H. Saville on a ruined temple near Cuernavaca, Mexico. His description is accompanied by several plates and introduces a remarkable relic, hitherto unknown. He states that it is 'the only aboriginal structure still standing in Mexico to which we can probably assign a positive date.' This he thinks can be done by the hieroglyphic inscriptions on its stones, which read the year 10 Tochtli, 1502 of our era, in the reign of Ahuizotl. He acknowledges that the ruins look much older, but he does not mention the possibility that Ahuizotl may have merely inserted his tablet in a wall constructed long before. Both descriptions and plates are interesting.

ANCIENT AND MODERN UMBRIAN SKULLS.

IN the 'Atti' of the Roman Society of

Anthropology (Vol. IV.), Prof. L. Moschen discusses the craniology of the Umbrians. Previous writers (Nicolucci, Calori, etc.) have asserted that the ancient Umbrians were slightly dolicocephalous or mixed. Moschen claims that there are no undoubted skulls of pure blood Umbrians of antiquity, and therefore that these older studies are of little or no value. He undertakes to study the true modern type, following the general terminology of Sergi. They present a large variety of skull forms, with a prevailing tendency to mesocephaly and leptorhiny. He divides his series into eight principal varieties or forms, the ovoids and ellipsoids predominating.

It is difficult to draw any racial conclusions from this study.

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NOTES ON INORGANIC CHEMISTRY.

THE question of impurities in atmospheric air is one that has been investigated by many chemists and from many standpoints, and one upon which much light has been thrown in recent years. One of the most important phases of this subject cannot be said to have yet approached a solution. That air in crowded rooms, and especially exhaled air, is poisonous is well known. The 'black hole of Calcutta' is but an extreme case of what we have all many times experienced in poorly ventilated audience rooms. These evil effects were early attributed to an excess of carbon dioxid, which was certainly present. When it was shown that carbon dioxid of itself is not a poison, a certain mysterious 'effluvium' in exhaled air was conjured up, but its nature eluded investigation. The reduced proportion of oxygen has also been considered a cause. None of these explanations, however, can be considered satisfactory. That the unpleasant effects of crowded rooms could be due to nitrites in the air has also been sug-

gested, but never sufficiently investigated to give a satisfactory answer. A contribution to this phase of the subject has been made by Mr. George Defren at the Massachusetts Institute of Technology, and published in the *Technological Quarterly* (9: 238). His work was mainly confined to the determination of the quantity of nitrous acid (or nitrites) in the excellently ventilated rooms of the Institute Laboratory. After a brief summary of the work of previous investigators, Mr. Defren gives an account of his own experiments.

The method first used was to expose pure water in porcelain dishes for from one to nineteen hours, and then estimate the nitrites absorbed by Griess' reagent. In every case nitrates were found. The quantity was dependent on the time the water was exposed, and on the nature of the work being carried on in the room. The burning of illuminating gas seemed to occasion the formation of nitrites; whether this is due solely to the incomplete oxidation of the nitrogenous constituents of the gas, as Mr. Defren believes, or to a direct union of the nitrogen and oxygen of the air, may be an open question. The second method used was quantitative and consisted in drawing air into large bottles, adding water and analyzing after twelve or more hours. The amount found was small on clear days (as low as .014 part nitrous anhydrid in 10,000 parts air), but was increased by the burning of gas and the presence of the people in the rooms. The largest amount found was .07 parts in 10,000. Exhaled air was tested by blowing through water, but no trace of nitrites was found, contrary to expectation. Mr. Defren suggests that nitrites present would, by the large volume of oxygen present, be oxidized to nitrites, or even decomposed to nitrogen. A test showed that even air containing nitrites, when drawn through water, gave no reaction. On the other hand, water in