sank down in a few hours. A lighthouse built in 1873 at a cost of $40,000 was undermined and fell in 1882; it was rebuilt a mile inland, but in 1888 was removed two miles further east. The winds cause a continual change in the form of the sand dunes. Landmarks are thus blown away; hollows and ponds replace hills, and breaches in the sod near the few houses are carefully repaired to prevent the thin soil from being blown away. Wild horses of a small and hardy breed roam over the island in separate herds, each led by an old male. They numbered about 300 in 1828; 400 in 1864; 150 to 250 now. Their numbers have sometimes decreased by starvation caused by the burial of pasturage under the drifting sand; and they have not infrequently been eaten by the inhabitants. The unbalanced condition of the smaller imported fauna is curiously illustrated. English rabbits were introduced at one time and soon overran the island; but they were exterminated by rats that came ashore from some vessel. The government then sent cats to the island, and these, after extinguishing the rats, became so numerous that dogs and shot guns were brought to destroy them. Rabbits were then imported once more, and again became numerous; but were exterminated a second time by snowy owls.

The absence of ledges and boulders suggests that this strip of loose sand is only the vanishing remnant of a long bar, formed by wash from some larger island of glacial drift, now destroyed.

THE PHYSICAL FEATURES OF MAURITIUS.

'THE physical features and geology of Mauritius' are described by H. deH. Haig (Quart. Journ. Geol. Soc., London, li, 1895, 463–471). In crossing the lava slopes of the island, one comes without warning on immense ravines, worn to depths of over a thousand feet by the rapid streams, fed by the moist trade winds. There are few lakes; two occur in old craters, besides various shore lagoons and many marshes and pools among the newer lava beds. Long caves leading underground streams are very common in the fresh lavas. One extensive tubular cavern in solid lava, like a great railway tunnel, measured thirty feet in width and height, and was followed for a mile and a half without reaching its end; bubbly lava drops remain on its roof and walls. The writer accepts the current explanation that these caves are caused by the continued flow of the still molten central part of a lava stream after the surface has hardened and after the supply from above has ceased. Where cavern roofs have partly fallen in, the remnants form natural bridges, of which there are many examples. The most remarkable old cavern now appears as a strange dry ravine, a mile and a half in length, with vertical walls eighty feet high; the roof, having for the most part fallen in bodily, now lies on the floor of the ravine, where the ripple-marked lava surface may still be seen; but every few hundred yards parts of the roof still remain as bridges. In one case a cavern roof was burst upward by the rise of its torrent, fed by the heavy rainfall of the hurricane of February, 1876.

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CURRENT NOTES ON ANTHROPOLOGY (XVII.).

THE CRADLE OF MAYAN CULTURE.

THE results of Mr. Mercer's explorations of the caves of Yucatan (see SCIENCE, p. 766) corroborate in a noteworthy manner the studies of the Mayan MSS. and art relics. The cave-hunters discovered no trace of a culture lower than that of the historic Mayas. These, therefore, came into the peninsula already semi-civilized. The acute analyst of Mayan art, Dr. P. Schellhas reached some years ago the same

conclusion, and repeats it with added evidence in the Internationales Archiv für Ethnographie (Bd. VIII., Heft. III., 1895). The cradle of Mayan culture, he maintains, was south of the peninsula of Yucatan and in the interior. The subject which leads up to his statement is offered by the decorations on some ancient earthenware vases from Guatemala, which are described and portrayed.

Basing an article on a similar series of pottery from the same district, Dr. E. Seler, in the Verhandlungen of the Museum of Ethnography of Berlin, points out that throughout western Guatemala, Quirgua probably included, the fictile art and the decorative designs have such close analogies that all this territory must have been under the immediate influence of the cultured nation whose highest products we see in the remains at Copan. The question now presents itself, was it about Copan, in the extreme east of the Mayan territory, or about Palenque and Ococingo, in its western extremity, that this culture had its origin?

ANCIENT MEXICAN HIGHWAYS.

In a lecture delivered last August before the German Anthropological Society (reported in the Correspondenz-blatt, September), Baron von Brackel described several highways constructed by the ancient inhabitants in western Michoacan. They are six or seven feet wide, laid with unhewn large stones, the surface slightly shelving so as to shed the water freely, protected by stone facing, both above and below, where there is danger of the banks giving way. Their direction is almost rectilinear, and evidently the deep ravines and water courses were crossed by hanging bridges, as the road continues either side of them. The paving was so thoroughly done that many miles of it are in perfect condition.

Although in many parts the stones have been taken away for modern constructions, the speaker believed that it would not be difficult to trace out and map the whole system of these highways. As far as he had accomplished this, they appear to center toward some distant point, which he thinks may be the Bay of Maruata, on the Pacific coast. The vicinity of Coalcoman, where these highways are especially noticeable, is rich in copper and other minerals, and the idea suggests itself that these paved paths were built to facilitate the transportation of such materials to the seashore.

D. G. Brinton.

SCIENTIFIC NOTES AND NEWS.

HARVARD COLLEGE OBSERVATORY.

Prof. E. C. Pickering announces in circular No. 3, the discovery of a new variable star of the Algol type. The star B. D. + 17° 4367, magn. 9.1, whose approximate position for 1900 is in R. A. $20^h\ 33^m.1$, December + 17° 56′, appears to be a variable star of the Algol tpye. On July 18, 1895, Miss Lousia D. Wells found that no trace of this star appeared on the photograph I 4359, taken with the 8 inch Draper telescope on September 26, 1891, exposure 16 m. On 71 other plates taken from June 30, 1890, to October 5, 1895, the star appears of its normal brightness. On December 12, 1895, at $10^h\ 42^m$ Greenwich Mean Time, Prof. Arthur Searle, who had watched this star on several nights, found it more than a magnitude fainter than usual. During the next half hour it diminished about half a magnitude more. Meanwhile, a photograph taken with the 8 inch Draper telescope, I 14036, confirmed the diminution in light. Unfortunately, at $11^h\ 15^m$ G. M. T., clouds covered the region, and the star, although carefully looked for, was not seen again that evening. The change in brightness appears to be rapid and the range of variation to be large, exceeding two magnitudes. The nearest bright star is B. D. + 17° 4370, magn. 7.0, which follows 14^s and is south 1′. The variability of B. D. + 17° 4370 has been suspected by Espin (English Mechanic, Vol. LXII., 334) and also independently by Mrs. Fleming in 1890.