LETTERS TO THE EDITOR.

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Hyksos-Hittites.

In the Times of October 28 there appeared, under the signatures of Prof. J. M. Mackay, of Liverpool University, and Messrs. Percy Newberry and John Garstang, a letter on an important archæological subject, entitled "Etruscan and Hyksos—a Hittite Clue." The object of this letter appears to have been to prove a culture-connection in the second millennium, B.C., between the Etruscans in Italy, the Kheta or "Hittites" in Asia Minor and northern Syria, and the mysterious Hyksos or "Shepherd Kings" who invaded Egypt, and usurped its government between the

thirteenth and eighteenth dynasties.

The subject is, of course, one of considerable interest, and the theory is a suggestive one, but readers of the Times would hardly guess from the tenor of this letter that the theory enunciated in it has been well known to all archæologists for the last fourteen years at least! In fact, the theory was adumbrated by several workers in the field of Oriental archæology before it was finally thrown into a concrete form and placed before scholars by Father A. C. de Cara, in the year 1889. As expounded by this learned Jesuit, the theory is simply repeated by the three writers of the letter already mentioned; hardly any original additions are made, and these are not of a character to command the adherence of students. For example, it is suggested, though not definitely said, that the well-known company of immigrants from Asia depicted on the walls of the tomb of Khnemu-hetep at Beni Hasan was a party of "Hittites." Unluckily, however, these people are Semitic in feature, and the name of their chief, Abesha, is, judging by all analogy, Semitic. Now we are quite certain that the features of the Kheta, and their names also, were non-Semitic. This Prince Abesha, the writers of the letter say, "is entitled the ruler of a foreign (mountainous) land-the Sinaitic deserts, it has been conjectured, to the south of Hebron, where Hittite and Semite had intercourse and intermarriage in the age of the Patriarchs." Here an unwarrantable assumption, and even this is not original, has been made, for there is no proof that the "children of Heth," who in the Bible are said to have lived near who in the Bible are said to have lived near Hebron, are of the same race or nation as the Hittim of northern Syria, who are certainly to be identified with the Khatti of the Assyrian records and the Kheta of the Egyptian monuments, who were undoubtedly the builders of the great sanctuaries of Boghaz Köi and Eyuk, and to whom the inscriptions commonly called "Hittite" be-

The writers of the letter also show confusion of thought in the following matter. After stating that in the statues of Queen Nefert and Amenemhāt III. a clear Mongolian or Turanian strain is visible, and noting that "she wears on her head a horse-shoe-like attire, he a pigtail to his wig, they go on to say that the statues which the Hyksos made or usurped are Mongoloid, "Turanian on a Semitic stock, Hittite-Semite." The conclusion seems to be that these "Mongoloid" Hyksos had appeared in Egypt, and had assumed its government before the reign of Amenemhat III., but the statues referred to are well known to belong to the reign of Amenemhat, and were usurped by the Hyksos; therefore we have no proof whatever from the statues that the Hyksos were Mongols, and from this it follows that the "Mongoloid" Nefert and Amenemhāt III. cannot be proved to be Hyksos-Hittites. Further, the idea that the statues of Amenemhat's reign are Mongoloid at all is a pure matter of opinion, on which many archæologists would differ from the writers of the letter. The horse-shoe headdress of Nefert is an ordinary Egyptian woman's wig in the fashion of the twelfth dynasty, and Amenemhat's pig-tail is no proof that he was a Mongol; it might just as well be argued that Frederick the Great was a Mongol

because he wore a pig-tail.

three writers who thought fit to send a communication to the Times on an important archæological matter should have been, as it appears, totally unaware of the long priority of another writer in the whole field of which their letter treats.

Telegraphic Disturbances in Spain on October 31.

On Saturday, October 31, the telegraphic communication was interrupted almost from morning until late at night. The first sign of the perturbation was observed at 9h. 3om. in the morning (W.E.T.) in the form of continuous currents along nearly all the lines that start from Madrid. At first it was thought that some leakage from a cable in the vicinity of the Central Office was the cause of the phenomenon, but on making inquiries it was ascertained that the same occurrence was observed in Cordoba, in the line to Málaga. At the same time the cable from Vigo to Emden was rendered useless, and at Lisbon the phenomenon was observed at some moments in which the situation was normal at Madrid. The maximum intensity took place between 12h. 3om. and 15h.; at 21h. the phenomenon had nearly ceased.

During the first hours of the evening the currents were continuous for periods of twenty to thirty minutes in some of the wires, for instance, in those of Vigo; at 22h. the current in the Coruña wire was continuous during 3m.; at 1h 45m. of November 1 the current was also continuous in the Bilbao wire. At 3h. 20m. the cable from Cadiz to Tenerife in the Canary Islands remained perturbed so strongly that the clerks made the contact with the earth

to avoid the discharges.

At 19h. communication between Madrid and Burdeos was re-established; information received at the Central Office stated that the cable from Senegal to Noronha was disturbed. In Spain, in some lines running approximately east and west, the phenomenon was not observed, namely, in the coast of Andalusia, from Málaga to Almeria, but in the line from Málaga to Granada, which runs roughly to the north, the perturbation was very marked, also in the more north-easterly line from Granada to Murcia. These three lines are approximately of the same length. In the centre of Old Castile, in the transversal line from Aranda to Ariza and to Valladolid, nothing abnormal was observed; meanwhile, in the general line that runs north-south, the disturbance prevented all communication. In the provinces of Cuenca and Extremadura, the lines of which run approximately east and west, the communications remained undisturbed.

The night was clouded, so that nothing could be seen of an aurora borealis, even if a display occurred.

Augusto Arcimis. Instituto Central Meteorológico, Madrid, November 3.

The November Leonids.

THERE appears to be little prospect of a brilliant recurrence of the November meteors on about November 15 next, though the moon will offer little impediment, being past the last quarter. The parent comet returned unobserved to perihelion in the spring of 1899, and is now far on its outward journey, beyond the orbit of Jupiter, so that any meteors appearing this year must be at a vast distance from the supposed derivative body. There is evidence, however, that minor groups circulate along the orbit, and that these are sufficiently condensed to produce pretty rich showers in certain years, as in 1879, 1888, &c. The system or stream is no doubt a continuous one, for every year at the middle of November some meteors of the swift, streaking class are seen shooting from the radiant in the "Sickle." It is obviously necessary, as a means to increase our knowledge of the shower, to watch for the display annually, and to record the time of its maximum and the observed horary number of its meteors.

The position of the radiant has been frequently determined in past years by eye-estimated meteor-tracks, and it now remains to obtain some further photographic records so that this feature may be more precisely ascertained. It is curious that the mean place of the radiant resulting from So much for mistakes. It is a matter for surprise that | eye observations of meteors is nearly two degrees west of

NO. 1776, VOL. 69]