in November, and in 1882 the largest was 7·22 ins. in February. No rain fell from April 25th till October 10th, making a period of 167 consecutive days without rain. The fall of rain in the year was 30'06 ins., being 1'38 in., 12'57 ins., and 7'97 ins. larger than the falls in 1880, 1881, and 1882 respectively; and the mean fall of rain for the three preceding years was 22'55 ins. The number of days on which rain fell was 71, in 1880 rain fell on 66 days, in 1881 on 48 days, and in 1882 on 62 days.

JAMES GLAISHER.

NOTES BY MAJOR CONDER, R.E.

I.

PROFESSOR SAYCE ON THE HITTITES.

The Religious Tract Society have published an interesting little book by Professor Sayce on the Hittites, which will no doubt aid to instruct the general public, though it contains nothing new to scholars. With the greater part of its contents I am fully in accord, but there are occasional statements which should, I think, at once be questioned before they become widely adopted, in the interest of exact archaeology; and I hope that these lines may meet Professor Sayce's eye, and induce him to explain or to reconsider the points in question.

When Professor Sayce states that the Hittite monuments are still undeciphered, he, no doubt, expresses his present opinion. In that case he must be supposed to have withdrawn the claim which he made in 1884, to have deciphered and translated several of the texts, as given in a lengthy article in 'Wright's Empire of the Hittites.' To these translations he makes no reference in his present volume. When, however, he says that 'Major Conder's system of decipherment has not yet obtained the adhesion of other scholars,' I may be allowed to remark that at least two scholars have informed me that they believed me to be right as to the language, and these scholars perhaps better acquainted with Turanian languages than any others in England. In his last letter one of them says of my recent paper in the Quarterly Statement that it 'marks a distinct advance, and places the comparisons on a firm foundation.'

Professor Sayce makes other statements as below:

Page 12. 'Hamath and Kadesh on Orontes being their most southerly points.' He, apparently, is unaware that Sir C. W. Wilson discovered a Hittite monument at Damascus.

Page 15. 'The Hittites were a people with yellow skins and Mongoloid features' (repeated p. 101 yet more strongly). This is what I have always urged. Why, then, dispute the probability that their language also may have been Mongolian? It appears, however (p. 134), that 'the
Vannic may belong to the same family of speech." Now, as regards
Vannic, we have the opinion of a good Akkadian scholar (Bertin,
"Languages of the Cuneiform Inscriptions"), that Medic, Vannic, and
Akkadian belong to the same family of ancient agglutinative speech.
Professor Sayce makes no further allusion to Georgian in his present
work, which is perhaps due to the fact that no known Hittite name or
word has ever been found comparable with Georgian.¹

Page 15. The Amorites are described as having "white skins, blue
eyes, and reddish hair."² Yet, when we turn to Mr. F. Petrie's list, we
find the Amaur described as having "red" skins; and the blue eyes are
attributed to the Kheta. It is by no means certain that the colours have
retained their original hue. The only people marked as "white or
yellow" in Mr. Petrie's list are the Shairdana, and the red hair is not
attributed to the Amaur. Some Kheta are described as having "green
hair"! It is certain that in some cases the colouring is merely decorative,
and in others faded.

Mr. Tomkins quotes Mr. Osborn as making the Amorites blue-eyed,
but this seems, according to Mr. Petrie's list, to be a mistake. The hair,
according to this description, was black ("Times of Abraham," p. 85),
and the complexion sallow. My own belief is that the Amorites were a
Semitic tribe; but, at all events, the idea of a fair people in Palestine
rests on no real foundation.

Page 46. The Patinians are said to have been a people of "Hittite
descent." I am not aware of any authority for this.

Page 49. The Assyrians are said to have used the name Hittite "no
longer in a correct
sense." Yet they only say that the town of Ashdod
was Hittite, and there is no historic improbability in the existence of
Hittites in this part of Palestine in very late times. Surely the Assyrian
scribe knew better than we can know.

Page 6. Professor Sayce adheres to his favourite term, the "Hittite
Empire," but has explained it to mean little more than a confederacy such
as we know from the monuments did exist between the Kheta and other
tribes. The "forgotten Empire," however, is now disappearing, the
Lydian and Medic Kingdoms being the real authors of the Asia Minor
civilisation, and the Medic and Lydian races being of the same stock with
the Kheta. Herodotus probably knew more about Asia Minor than we
can hope to learn by theories unsupported by the evidence either of
literature or of inscriptions. He knew of non-Semitic Syrians, of
Lydians, Carians, and Medes, before the Aryans came from Greece and
from Persia; but he knew nothing of a "Hittite Empire," nor do the
cuneiform or Egyptian texts mention any Hittites save in Syria.

¹ The sounds for king and country in Hittite appear to have been Ko and
Me. In Georgian, the word for king is Mephe, and for country Obai, which
evidently do not aid us.

² Prof. Sayce, in the "Academy," speaks of fair people in Palestine.
There is no native stock in Palestine which is fair, but there is a certain
admixture of Aryan blood in the country, probably of very recent origin.
Page 78. "The mural crown" is not known on Hittite monuments. The bonnets worn by the goddesses at Boghaz Keui are similar to those now worn by Tartar women.

Page 80. The "double-headed axe" was not peculiar to Hittites. It was used by Carians and by Etruscans.

Page 81. Professor Sayce calls the turned-up boot a snow-shoe, a mocassin (p. 140), and a Turkish shoe—three entirely distinct things. It was known to the Egyptians and Etruscans as well as to the Hittites.

Page 81. The hieroglyph for country represents "two or sometimes three pointed mountains." It only occurs twice, and neither of these cases have three peaks. Professor Sayce considers Hittite and Egyptian quite distinct systems, and states that in the latter animals are represented by whole figures, but in Hittite by heads only. Yet we have already two cases in Hittite of whole figures of animals, while heads of animals are not uncommon in the earlier Egyptian texts. With increased graphic power the whole figure seems to have been attempted, and the distinction is not complete.

Page 102. The pigtail (first noticed by the late Dr. Birch) convinces Professor Sayce of the Mongol origin of the Kheta, yet he never mentions the Mongol words recoverable of their language.

Page 111. "Tar or Tarku, 'the king,' who is the Zeus of Lucian." Professor Sayce does not give any reason for rendering Tarku "king." The readers of the Quarterly Statement will be aware (January, 1889), that this is a Mongol and Turkic word for king.

Page 117. The Sphinxes of Eyuk are compared with the Egyptian Sphinx. But on an Akkadian cylinder we have also two Sphinxes represented, and others in Etruria and Phoenicia.

Page 120. The lions of Mycenae are called "Hittite." To me it seems more likely that they were Pelasgic, and the Pelasgi must—judging from the word Tepoz, said by Varro to mean "mountains"—have been a Turkic people like Medes, Akkadians, Lydians, and Carians.

Page 129. Tarkon is said to be a "distinctive Hittite word." If so, the evidence of comparative vocabularies shows the Hittite language to have been Turkic.

Page 130. The four strokes for me on the boss of Tarkutimme are said to represent the "numeral four." We are not told in what language four has the sound me. In Georgian the sound is Oikkh. I have shown that this sign does not on the Hittite monuments represent a numeral, because it is a suffix. We have a plural suffix me, and this, I believe, is the true value of the sign.

Page 130. There is no evidence at all that the Carchemish monuments contain the names of any kings. As to the "King whose name ends—me Tarku," Professor Sayce has stated that Tarku was Jupiter (p. 111).
Page 132. Although Professor Sayce believes the syllabary of Cyprus to be derived from the Hittite, he makes no mention of the recovery of fifty sounds of the language thus made possible. Hence he has made no use of the very method whereby the study of cuneiform was first made possible and the Akkadian language discovered.

Page 135. Irkhulena, "the moon god belongs to us," is a funny name for a man. It seems to me more like Turkish Er, "man," and Khulin "great," i.e., "the hero" or Hercules.

Professor Sayce's volume therefore represents the Hittites minus their language, which language he has not attempted to compare with any other, though we have Carian words like Kos and Taba, Lydian words like Tegoun and Lailas, Etruscan words like Tarquin, &c., &c., comparable with the old Medid and Akkadian, and showing us an early Turkic people in Asia Minor to whom the Hittites were akin.

Curiously enough, Professor Sayce has since written from Egypt ("Academy," 19th January, 1889), to say he has a letter in what he thinks is a Hittite dialect, and that the "verbal forms are Akkadian." Should he adhere to this view he will, perhaps, withdraw his previous statement that "no scholar is likely to admit" a comparison of Hittite and Akkadian. He is also now inclined to believe in more than one "Hittite" language. In Asia Minor, in 500 B.C., I believe four languages were spoken:—(1) Greek; (2) Lycian (akin to Zend); (3) Phrygian (akin to Armenian); (4) Lydian and Carian (akin to Turkish). This is a distinction sanctioned not only by Herodotus, but by relics of these languages. Of these, however, 1, 2, 3 were later in reaching the country than No. 4.

When Professor Sayce claims to have "laid the foundation" of Hittite knowledge, it must not be forgotten that Dr. Wright first broached the idea in connection with the Hamath stones, and that Chabas and other scholars had written at length on the Kheta in 1866, Professor Sayce's first paper being ten years later. No one, however, would wish to dispute the value of Professor Sayce's contributions to the subject in many particulars.

II.

THE SO-CALLED HITTITE MONUMENTS OF KELLER.

The monuments at Keller, or Sinjarli, west of 'Ain Tab, at the north extremity of Syria, are mentioned in "Altaic Hieroglyphs," and photographs were kindly sent to me by Mrs. Barnes. They are given by Perrot in his "History of Art," in 1886, and have recently been published from the photographs by Professor Sayce; but one slab, of which I here give a copy from the photograph, seems to have escaped notice, and is very important, as it has a hieroglyphic in the corner, which none of the rest have.