

this institution, where it is found to give highly satisfactory results. Photographs of  $\eta$  Orionis which have been made with it exhibit the elongation of the star, although the distance between its components is only about 1". The newspaper report to which Sir Howard Grubb refers, that a patent was granted for the invention, is without foundation. The Messrs. Clark have never patented any of the improvements made by them in optics, and have had no intention of deviating from their usual practice in this instance.

EDWARD C. PICKERING.

Harvard College Observatory, Cambridge, U.S., March 26.

#### Life of Fleeming Jenkin.

I HAVE read with singular pain a paragraph in your notice (signed with the initials of one whom I admire and respect) of my *Life of Fleeming Jenkin*. To accuse a man of falsehood in private life is a strong step. But I must explain to your reviewer, I might lie to him all day long and not be so disgraced as if I put one single falsehood in a book. For the making of books is my trade by which I live; I supply them on honour, and the public gives me bread for them in confidence. Your reviewer will perhaps more readily understand what he has done (I am sure in ignorance) if I supply him with a parallel. To say that a man of science was a liar would be highly disagreeable; but if I were to say he had falsified an experiment, and to say so publicly in print, I should be curious to see the expression of his face.

I dwell upon this because it is plain your reviewer scarcely understands what literature is, and I fear others may be equally at sea. On the merely personal matter, that I am supposed to tell a deliberate falsehood on my own authority and about my dead friend, I will make but one remark. Hasty reading is the fit precursor of hasty writing; in no word have I indicated that the certificate in question was "worthy the name"; and the terms of the document are at the reviewer's service to-morrow, if he be curious.

ROBERT LOUIS STEVENSON.

March 28.

#### THE HITTITES, WITH SPECIAL REFERENCE TO VERY RECENT DISCOVERIES.

##### III.

THE conclusion has been already expressed that the Hittite inscription of the Tarkutimme seal is, in the main, ideographic, and that the phonetic element is supplementary; that, in fact, regarding the figure of the king as part of the inscription, the sense is fully given without taking into account the phonetic element. Some scholars and investigators have, however, taken a different view. This fact, together with the alleged resemblance of some of the Hittite hieroglyphs to characters of the Cypriote syllabary, has had much influence on certain recent attempts at deciphering the Hittite inscriptions. With regard to the alleged analogy of the Hittite and Cypriote characters, it may be allowed that the derivation of the latter from the former is in itself by no means impossible. As yet, however, the evidence of such derivation which has been presented is certainly inadequate: to a great extent it is little better than visionary. Moreover, if, from closeness of resemblance or otherwise, satisfactory proof of the derivation had been given, it would by no means necessarily follow that, when all or any of the Hittite inscriptions which we possess were sculptured, the Hittite writing had become already so far developed that the hieroglyphs generally, or in great proportion, had acquired distinct syllabic values. As to how far resemblances between the Hittite and Cypriote characters give evidence of essential connection or derivation, the reader may perhaps satisfy himself by inspecting the list given by Dr. Isaac Taylor (*"The Alphabet,"* 1883) and reproduced by Prof. Sayce in Wright's *"Empire of the Hittites,"* 1886, chap. xi. More extended lists have been

<sup>1</sup> Based on Lectures delivered by Mr. Thomas Tyler at the British Museum in January 1888. Continued from p. 540.

given by Captain Conder (who follows to a considerable extent in the track of Prof. Sayce) in the plates of his *"Altaic Hieroglyphs."* But, as it seems to me, in neither case have the Hittite characters been always given with such essential accuracy as is desirable. This remark applies more especially to some of Captain Conder's figures, notwithstanding his observation in *"Altaic Hieroglyphs,"* p. 35: "A careless reading and confusion of distinct emblems must lead us wrong; and for this reason exact copies are indispensable." But, even if this objection be waived, the evidence must still be regarded as inadequate. As to "the subject of the inscriptions," Captain Conder remarks that it "is exactly what we should have expected. They occur on statues of the gods, and they are invocations only" (*op. cit.* p. 149). Now that the inscriptions "occur on statues of the gods" is certainly not true with regard to most of those which are known to us, and as we have them. The "doorway inscription" in the British Museum and the inscriptions from Hamath are connected with no statue whatever. In other cases, where there is a statue, or large figure in relief, it is by no means to be assumed that the figure is always that of a deity. But, as a specimen of what Captain Conder finds in the Hittite inscriptions, I may give his "free rendering" of the first two lines of that very ancient inscription in the British Museum of which I have just spoken as the "doorway inscription." I give Captain Conder's "free rendering" rather than his "verbatim translation," as likely to convey a less unfavourable impression:—

"1. Prayers of the Monument of Set. Powerful words for the living fire, the Most High . . . the divine. . . .  
"2. . . . to . . . (pour?) Tammuz, Aa, living fire, Most High descending (propitious?) Thee strong Set . . ."  
(*"Altaic Hieroglyphs,"* p. 194).

With respect to utterances of this kind it is not necessary to say much more than that they certainly have not the claim to consideration which would result from a connected and congruous rendering. Such a rendering might have been adduced as giving some answer to the position that evidence is wanting as to the Hittite hieroglyphs representing, in the main, syllables either in the Accadian or Altaic language, or in any other language whatever. Then, as to the inscriptions being concerned mainly or exclusively with theological prayers and invocations, the analogy of the Assyrian inscriptions—which the Tarkutimme seal with its cuneiform legend itself suggests—would rather lead us to expect that the subject-matter of the inscriptions is usually success in war, with allusions to the gods, and prayers and thanksgivings, chiefly in relation to such success. And this more realistic view is in accordance with the heads of oxen and of asses, with the clubs and the swords, and other symbols of equally materialistic character which appear on the inscriptions. Moreover, somewhat more than a year ago, the British Museum fortunately obtained an engraved stone of unquestionable antiquity, giving evidence in accordance with that of the seal of Tarkutimme, and tending to show that the Hittite inscriptions are in the main ideographic or pictorial.

The allusion just made has reference to a circular hæmatite seal from Yuzgât, in Asia Minor, which was added to the antiquarian treasures of the Museum in October 1886. Yuzgât is not very far from both Boghaz-Keui and Eyuk; therefore the discovery in this locality of an important Hittite antiquity can scarcely excite surprise. For the present, the seal is named, most conveniently, from the place where it was found, "the Yuzgât seal." This seal resembles the seal of Tarkutimme in being circular; and the two seals agree also with reference to there being an inner circle which divides the figures or characters round the circumference from those in the central space. The seals differ, however, in size, the Yuzgât seal being much the smaller. The latter seal, moreover, is not bilin-