

LETTERS TO THE EDITOR.

Greenland geology.

IN the seventh volume of Heer's *Flora fossilis arctica*, just issued, my distinguished colleagues, Professor Heer of Zurich, and Herr K. F. V. Steenstrup of Copenhagen, seem to be at cross purposes with me, regarding the positions and Eskimo names of the localities where the collections of fossil plants discovered by us were obtained; Mr. Steenstrup giving the spot one name, and I another, while, owing to this misapprehension, the exact latitude of at least one place is differently entered in our respective papers. For instance: we apply the name of 'Kudlisaet' (Kitludsat) to spots at considerable distances from each other, and do not quite understand the same place by the word 'Unartok.' Heer, who has, however, never been in Greenland, notes (p. 203) that "nach Steenstrup fällt Ujarasuksumitok von R. Brown (*Flora foss. arct.*, ii. p. 452) mit Unartok zusammen und der Name beruht auf missverständniss." Again: Steenstrup, in the admirable memoir appended to Heer's work, mentions that "*Philosophical transactions*, 1869, p. 445, and *Transactions of the geological society of Glasgow*, vol. v. p. 36], war es hier [at Unartok], dass er und Whympfer im Jahr 1867 versteinerungen sammelten. Meines erachtens rührt der name Browns 'Ujarasuksumitok' von dem umstande her, dass der Grönlander ihn missverstanden und geglaubt hat, dass er gefragt würde, woher er (der Grönlander) wäre, worauf er eine antwort gab, die ungefähr bedeutet 'Ich bin aus Ujaragsugsuk'" (p. 247). I do not doubt for a moment that Mr. Steenstrup may be right; and his general accuracy forbids me to assert that he is wrong. My acquaintance with Danish was in 1867 (as it is still) trifling, while of Eskimo I was all but ignorant. And even with the greatest care, it is always difficult to arrive at the exact designation of localities in Greenland. However, Mr. Tegner, who accompanied us, was familiar with Eskimo, and of course, as a Dane, with Danish; and the names attached to my map and paper referred to were arrived at, after repeated cross-questioning of our native boatmen, and of Paulus, the intelligent Eskimo catechist at Unartok (Unartok), who wrote them down in a note-book, at present before me. Curiously enough, in a note in the hand-writing of the late Chevalier Olrick, so many years governor of North Greenland, the place is called 'Ujarasaksumitok,' which naturally led me to believe that this was a synonyme of Ujaragsugsuk, under which name it is also designated by Dr. Rink, in my edition of Danish Greenland (p. 349). 'Ritenbenks Kolbroff' I regarded as the same place as Unartok, for there coal was being mined; while Steenstrup seems to consider it the same as Kudlisaet. The latter spot, after a series of very careful, and, I am certain, accurate, meridian altitudes, I place in Lat. $70^{\circ} 5' 35''$ N., while Nares puts the Ritenbenk coal-mine, so called (Kudlisaet), in Lat. $70^{\circ} 3' 4''$, which convinces me that this spot is what I took to be Unartok. At my Kudlisaet there was, in 1867, no coal being dug. Anyhow, in the 'Geological notes on the Noursoak Peninsula, Disco Island, etc.' (*Trans. geol. soc. Glasgow*, vol. v. p. 55), I have so fully described these localities, that no future explorer can mistake them. But as many may see Heer's work who may not be able to consult my humble brochure, I ask permission to make these explanations in the columns of a scientific journal, which, as the mouthpiece of American geologists, tak's cognizance of far-away Greenland also. Moreover, as one might suppose, from Mr.

Steenstrup's (inadvertently, no doubt) mentioning that Nares and I differed two minutes and thirty-one seconds ($2' 31''$) in our latitudes of 'Ritenbenks Kohlenbruch,' that there was some *inexcusable roughness* in the use of the sextant and artificial horizon, while in reality we observed at *two totally different places*, the matter is, though not of great scientific or geographical importance, in a manner personal to myself, if not to Sir George Nares.

ROBERT BROWN.

Streatham, London, Eng.,
Sept. 24, 1883.

Human proportion.

In a review of my lecture on 'Human proportion in art and anthropometry' (*SCIENCE*, ii. 354), the accuracy of certain statements contained therein is questioned. Permit me space for a brief reply.

The critic says that the implement in the hand of the Egyptian figure is a *crux ansata*, the symbol of eternity, and not 'a key.' But M. Charles Blanc, whose description I was quoting, says 'la personnage tient une *clef* de la main droite;' and the expression is warranted, as it is, in its symbolical sense, spoken of by Egyptologists as 'a key.'

His next assertion is, that the Doryphorus of Polykleitus was not, as I stated, 'a beautiful youth in the act of throwing a spear,' but a spear-bearer of the body-guard of the Persian king. The latter functionary, however, wore a long robe, termed the 'candys,' extending from the neck to the mid-leg, and could not have been selected for a model, which necessarily required a naked figure. Pliny (*Hist. nat.*, xxxiv. 8) says, 'Idem et Doryphorum *viriliter puerum fecit*,' etc.; and many other allusions in classical writers confirm this view.

The last and most surprising criticism is the statement that my assertion that prior to the time of Phidias, the face, hands, feet, etc., were carved in marble, and were fastened to a wooden block, is "a complete misunderstanding of the nature of the archaic *ξόανα*, or wooden statues, which in Greece preceded those made of stone or metal." Now, the *ξόανον* was simply a wooden statue. (Cf. Pausanias, vii., 17, 2, *τοσάδε ἦν ἄφ' ὧν τὰ ξόανα*, etc.) It was succeeded by a more elaborate invention, known as an *acrolith*, from *ἄκρος* and *λίθος*, *stone-ends*. Pausanias describes one of them (ix. 4): "The statue of the goddess [the Plataean Athena of Phidias] is made of wood, and is gilt, except the face, and the ends of the hands and feet, which are of Pentelican stone." See also Quatremère de Quincy, *Monuments et ouvrages d'art antiques*, vol. ii., *Restitution de la Minerve en or et ivoire de Phidias au Parthenon*, pp. 63-123; also Müller, *Handbuch d. archaeol. d. kunst*, § 84. Dr. William Smith states the case concisely (*Dict. Gr. and Rom. mythol.*, vol. iii. p. 250): "Up to his [Phidias's] time, colossal statues, when not of bronze, were *acroliths*; that is, only the face, hands, and feet were of marble, the body being of wood, which was concealed by real drapery." ROBERT FLETCHER.

Washington, Oct. 8, 1883.

[The most common of all the Egyptian symbols is an emblem in the form of 'a handled cross,' symbolical of 'life;' but both the nature of the object represented, and the reason of the symbolism, are equally unknown. To call it 'a key' is certainly wrong, as the Egyptians had none; and by archeologists it is usually designated by the conventional term '*crux ansata*.'

That the word 'Doryphoros,' *ex vi termini*, cannot mean 'a youth in the act of throwing a spear,' as Mr.