

nature, full of information on the habits of a multitude of North American insects, good, bad, and indifferent, as to the characters borne by them. There are also several excellent woodcuts; yet we fancy some of these are old friends. In future numbers we hope to see more originality in this respect, because the constant reproduction of the same illustrations in different works, engenders a suspicion, with those uncharitably inclined, that the text may be sometimes written up to the illustrations, and the latter not made subservient to the former, as ought to be the case. We shall watch the progress of this journal with appreciative interest. The list of names of those who have promised occasional contributions includes most of the leading American entomologists.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

A Museum Conference

You did me the honour, about two years ago, of inserting an unsigned communication pointing out the extreme desirability of a conference of officials connected with museums and galleries of art throughout the country. At the time the subject received a good deal of attention from various quarters, and the numerous advantages which might be derived from such a meeting commended the suggestion to all who wrote on the subject. No one, however, ventured to make a practical move in the matter at the time, and the subject consequently dropped.

Further consideration and growing experience have deepened my conviction of the utility of the conference scheme; and as I have reason to believe I am not singular in that experience, I desire now to see some effort made to bring the question to a practical issue. With this view I shall be glad to co-operate with other museum officials who feel inclined to take part in the preliminary work of organising a conference of those interested in museums and art galleries. As to where, when, and how the conference should be held, I do not wish to offer a single suggestion which might anticipate future consideration. Neither do I consider it necessary to occupy your space with any statement as to the great and manifold advantages which ought to accrue to our scattered exhibitional institutions by a union such as might be formed. These are surely too manifest to every individual who has to do with any museum, especially in the provinces.

I hope this question will now be taken up heartily and energetically by all interested; and while I would beg that you may give space for the suggestions which others may wish to make through the medium of NATURE, I shall be glad to enter into correspondence with those who may address me privately.

Kelvingrove Museum, Glasgow

JAS. PATON

The Himalayan Ranges

I HAD not intended to notice Mr. Trelawney Saunders's remarks on Mr. Medlicott and myself as the authors of the "Indian Geographical Manual" (NATURE, vol. xxi. p. 96). As, however, Mr. Medlicott's reply (*ante*, p. 301) has been misinterpreted by Mr. Saunders, and as the latter has, in his rejoinder (*ante*, p. 347), brought a specific charge of omission which can, I think, be shown to be unfounded, against a portion of the "Manual" written by myself, I am obliged to take part in the discussion.

In Mr. T. Saunders's original paper (*l.c.*, p. 96) read before the British Association, two objections were raised to the views on physical geography adopted by the authors of the "Manual." The second of these objections referred to the limits of the Himalayan range, which we did not represent as extending west of the Indus. Mr. Saunders must have read very little of the "Manual," or he would have seen that this limit was not absolutely defined; on the contrary, at p. 518, it is expressly termed provisional. As Mr. Medlicott has shown, there is a good geological reason for the limit adopted; but another cause, of perhaps even more importance, is that this limit coincides

with the boundaries of the area described in the work. I cannot enter into the question here, but the fact is, there are just as good reasons for making the Himalayan range terminate at the Jhelum, if not even farther east, as for prolonging it beyond the Indus.

The first objection was couched in much stronger language. Mr. Trelawney Saunders had represented the Himalayas as consisting of two chains; we were accused of having adopted an "antiquated theory." No reference was given, but from the context it was evident that this "antiquated theory" consisted in representing the range on a skeleton map by a single line along the water-shed or water-parting (I will employ the latter term to prevent any risk of misconception). Mr. T. Saunders says (*l.c.*, p. 96) that they (*i.e.*, Mr. Medlicott and myself) "do not condescend to any reason for this conclusion." This is not quite correct. If Mr. Saunders had "condescended" to read the two and a half pages in the introduction of the "Manual" relating to the physical geography of the Himalayas, he would have found a reason on p. x.

Mr. Medlicott very justly pointed out that the reason for omitting the representation of a second chain was due to the irrelevancy of the question whether there are one or two chains to the matter in hand, that is, to the physical geography of India as related to the geology. Mr. Saunders has quite misinterpreted Mr. Medlicott's meaning when he says (p. 348): "Mr. Medlicott contends that the omission was due to the irrelevancy of the great range to the matter in hand." Of course Mr. Medlicott means nothing of the kind.

In his letter just referred to, Mr. Saunders writes thus:—

"But my complaint was based, not on my delineation, but on a trigonometrical survey, and it was caused by a *description*, not of the geology, but of the physical geography of India, in connection with a map of its hill-ranges, that has nothing geological about it. It is in this expressly geographical part of the 'Manual' that I find the greatest range of snowy peaks in the world omitted from a geographical notice and delineation of the Himalaya."

The italics are mine. Again no reference is given, but the remarks quoted can only apply to the description of the physical geography, accompanied by a skeleton map, in the Introduction to the "Manual." In this description the "geographical notice" of the Himalayas occupies barely two and a half pages. One would have thought that before writing the sentence I have quoted the writer would at least have read this small amount of letterpress. Yet I scarcely think Mr. Trelawney Saunders can have done so, or he could scarcely have overlooked the following passage at the bottom of p. ix. and upper part of p. x.

"Many geographers distinguish two parallel ranges from the neighbourhood of Simla to the eastward: the snowy range proper, formed of the highest peaks; and a more northern ridge, forming the water-shed between the Tibetan plain and the rivers running to the plains of India."

To save space I quote no more, but I am convinced that any one who will refer to the two and a half pages headed "Himalaya," in the Introduction to the "Manual," will see that Mr. Saunders is quite in error in saying that the main range is ignored.

As Mr. Trelawney Saunders has not understood Mr. Medlicott, I can only hope that the following explanation may be clearer:—

In his original paper and in that in the *Geographical Magazine* for 1877, pp. 175, 176, Mr. Saunders contends that the Himalaya south of the Sanpu and upper Indus consists of two "chains" (these are alternately called chains and ranges). The southern chain is formed by the line of great peaks, the northern by the water-parting between the drainage areas of the Upper Indus, Upper Sutlej, and Sanpu on the northern side, and various rivers running to the plains of India on the southern.

Now it is manifest that this division of the Himalayas into two chains is due to the fact that two different, and to some extent irreconcilable, definitions are adopted for the term "chain" in the two instances. Mr. Saunders's southern chain is a line of great peaks, but is not a continuous water-parting; his northern chain is a continuous, or almost continuous, water-parting, but is not a line of great peaks. It has never been shown that the two are distinct axes or lines of elevation; on the contrary, all the evidence we possess tends to show that both are due to one great fold of the earth's surface, and until these northern and southern chains are shown to be of diverse origin, it is perfectly reasonable to decline to accept the two distinct acceptations of the term "chain," and it is consequently perfectly correct