

unusually severe winter on bird-life. To this end the scattered notices on this subject which have appeared in various journals and periodicals have been collected, and are supplemented by communications from private correspondents and by personal investigations. The result is the memoir now before us, in which the observations thus collected are arranged in a systematic form.

The southern migration in the autumn of 1878 was by all accounts unusually early and rapid. The outer Hebrides appear to have been almost cleared of their smaller birds. Visitors to Tyree in December remarked on the "extraordinary scarcity of common birds," and on the "unusual number of winter visitants." On the Solway Firth also "early notice of the coming winter was afforded by the arrival of vast numbers of wild fowl." Herr Gaetke of Heligoland reports that while in ordinary seasons the autumnal migration in that wonderful island often continues until the end of February, in the autumn of 1878 every migratory bird had sped past by the close of November.

Numerous other testimonies to these facts which are adduced by Mr. Harvie-Brown, leave no doubt as to the general effects produced on bird-life by the unusually severe winter of 1878-79, in which a January "colder than any for forty-one years" followed a December "the coldest of any for twenty-one years." The bulk of the memoir is taken up by a series of notes on the different species systematically arranged, a perusal of which is sufficient to show without doubt that the author's general conclusions are amply borne out by the particulars which he has collected.

*On Mining and Mines in Japan.* By C. Netto. (Tokio, 1879.)

THE substance of this pamphlet was given as a lecture by the author before the German Natural History and Ethnological Society of Eastern Asia, and it now appears with the above title as vol. ii. of the *Memoirs of the Science department of the University of Tokio*. It is mainly a discussion of the present state of mining and metallurgical industry in Japan, with suggestions for improvements by the introduction of machinery, the establishment of model dressing and reduction works, the formation of private companies, and more particularly the introduction of foreign capital, which is at present prohibited by the Japanese law. These points are treated in some detail, and the moderation with which the author expresses his conclusions shows a practical familiarity with the subject such as is likely to command the confidence of those persons who may be interested in the subject. It is however to be regretted that the author has not been fortunate enough to receive the co-operation of some of his literary colleagues in the production of the work in its present form, as the text, even by the greatest stretch of international courtesy, can scarcely be called English, and the directors of the University must certainly have been unaware of its character when they allowed it to appear among their Records. It is necessary to mention this, as an impression is to some extent current that the translation is of Japanese origin.

*The Automatic Multiplier: for Performing Multiplication without Calculation and without Writing down any Figures except the Answer.* By John Sawyer (London: George Bell, 1880.)

*The Automatic Calculator, for cwt. qrs. lbs. at per lb., Supplying the Cost of any Weight at any Price up to 11s. 11 $\frac{1}{2}$ d. per lb.* By the same.

IN NATURE, vol. xviii, p. 327, we noticed "Automatic Arithmetic" by the same author. We need only endorse the remarks we previously made with regard to the former work, and commend the present admirably compact and handy calculators to practical men who, after a little time spent in getting over the manual difficulty to beginners in

manipulating the vertical and horizontal slips, will find these works very serviceable as ready reckoners. Multiplication is reduced to a mere addition of digits: the earlier work facilitated the operation of division as well. We may add that the "Multiplier" is issued in three forms, *i.e.*, for multiplying 4 figures by 4 figures, 6 figures by 4 figures, and, as in the specimen we have, 8 figures by 6 figures.

#### 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.]

#### The Freshwater Medusa

THE explanation of the discrepancy between Prof. Allman's and my own citation of my article in NATURE, vol. xxii, p. 147, appears to be that Prof. Allman has unfortunately received a copy of NATURE differing from the majority of the issue of that date in the fact that it was printed off before the final corrections, sent to the office of NATURE on Wednesday, had been inserted. These corrections were made before the greater number of the issue was struck off, and I have only just ascertained, to my great surprise, that any of the uncorrected copies had been circulated. The error as to the marginal canal was also present in the proof of my paper, marked "uncorrected proof, confidential," which was circulated among the Fellows at the meeting of the Royal Society on June 17, but the error was corrected by me before the reading of the paper.

Accordingly, so far as any publication or the public expression of my conclusions is concerned, I have not committed myself to the erroneous notion that the marginal canal is absent, although in the course of my inquiry I did entertain that and many other provisional conceptions as to the structure of *Limnocoelium*.

I shall be glad to see some explanation from the publishers of NATURE of the curious and highly inconvenient phenomenon of dualism in NATURE which has mystified both Prof. Allman and myself.

E. RAY LANKESTER

[Premising that we are supposed to leave NATURE in the printer's hands ready for press at 2 p.m. on Wednesday, we have no difficulty in giving the explanation asked for by Prof. Lankester.

His revised proof was received by us on Wednesday morning, June 16, with numerous corrections, which were given effect to. After the paper had been made over to the printer on the afternoon of that day a postcard was received by the printer with an additional correction, which was also duly made. On the morning of Thursday, the 17th, the following note, dated "Wednesday afternoon," was received by the printer after the printing of the American edition had been completed and that of the English one had commenced:—

"DEAR SIR,—If there is time please alter in my diagnosis—  
'MARGINAL or RING CANAL obliterated or much reduced'  
into 'MARGINAL or RING CANAL voluminous.'

"Similarly please alter  
'RADIATING CANALS terminating cocally' into 'RADIATING  
CANALS opening into the marginal canal.'

"Truly yours,  
"E. RAY LANKESTER"

Although one-third of the edition had been printed off, the printer, knowing our anxiety to give contributors every facility for corrections, stopped the press, and made the alterations which were asked for "if there is time." Possibly Prof. Lankester has no idea of what is involved in stopping a steam press. However this may be, the press was stopped in order to carry out to our utmost what we considered to be Prof. Lankester's wishes, and we are astonished that he can have put any other interpretation upon what happened. Prof. Lankester's letter given above is undated, but it was received on July 31 at mid-day. On the 28th he wrote, stating that he had found there were "two issues of NATURE of June 17," and requesting us to "state this if necessary." This does not