

these Eastern Asiatics. The wood engravings, upwards of sixty, taken from the author's photographs and sketches, add much to the value of the volume.

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.]

Hoffmeyer's Weather Charts

I HAVE the honour to inform you that the issue of Capt. Hoffmeyer's daily charts of the weather from 63° E. to 60° W. longitude, and from 30° to 75° N. latitude, for the three months of last winter, are now complete. (See NATURE of June 25, 1874).

Capt. Hoffmeyer is anxious to know what chance there is of his being able to continue the publication. The number of copies already sold of the existing charts has not been sufficient to cover the expenses of production.

At the same time this Office has found that the rate of subscription (11s. per quarter) which it charges has fallen short of the cost, carriage, and postage of the existing charts.

I have therefore to request any gentlemen who are willing to subscribe to a future issue of the charts to send in their names to me as soon as convenient. The rate of subscription will be at least 12s. 6d. per quarter, and must necessarily be higher if the original cost of the charts at Copenhagen is raised above the price first named, viz., 4 francs per month.

Meteorological Office, Jan. 12

ROBERT H. SCOTT

A New Bird of Paradise from the Island of Waigeou, near New Guinea

I GOT to-day from Ternate the skins (♂ and ♀) of a Bird of Paradise from Waigeou, which came through natives into the hands of Mr. van Mounhenbroek there, who recognised it to be an undescribed species. He proposes to call it *Diphyllodes Gühelmi* i.e., because no Bird of Paradise has yet been named after the King of the Netherlands, under whose sceptre the greater part of the region stands, where Birds of Paradise occur. It is known that two species from Australia are named respectively after the Queen of Great Britain and the Prince Consort, that three are named after naturalists, and that the others have names according to their external features. This new bird is highly interesting, because it stands in a conspicuous way between *Diphyllodes speciosa* and *Cicinnurus regius*, but more allied to the former, and at the same time bearing some characters of *Diphyllodes respublica*; therefore linking these species together in a similar way as it does *Paradisaea raggiana* (one of D'Alberti's discoveries) with *P. sanguinea*, *apoda* and *minor*. I shall soon send (in the name of Mr. van M.) the description of the new bird to the Zoological Society of London, and intend to publish a coloured figure as soon as possible. But knowing the lively interest English ornithologists take in new discoveries in the group of the *Paradisæide*, I thought it advisable to give a short notice in your journal beforehand.

A. B. MEYER

Dresden, Jan. 9

Chappell's "History of Music"

IN a review of my "History of Music," in NATURE, vol. xi. p. 123, your musical critic takes me to task for having cautioned English readers against certain new theories which are to be found in the works of the late F. J. Fétis and in the "Tonempfindungen" of Prof. Helmholtz. I think those cautions very necessary, and perhaps, when your critic has studied the subject, he may think so too; but in the meantime he bows down before such names, and cautions me that if Fétis were alive he "would not be in my shoes for a trifle."

I should rather object to change shoes with the critic, but I may remind him that he seems to have forgotten his obligations to the readers of NATURE. However diffident as to his qualification to controvert me, and therefore hoping for a second Fétis to arise, it was at least his duty to test each of us by the autho-

rities which we quote, and to inform your readers of the result. He must know that two such opposite accounts cannot both be true, and therefore either the one or the other is not trustworthy. Fétis and I differ *toto calo*, even to the scales. I had supposed that a few of the extracts which I have adduced from Fétis's own works would have spoken for themselves and have convinced anyone who professes critical knowledge that Fétis was a pretender, and that he was unable to understand the Greek treatises which he had before him. Your reviewer, however, is far too staunch-headed to be convinced, even though Fétis assumes to correct Aristoxenus in Greek, and Josephus in Hebrew.

My own conviction is unchanged by the second, third, and fourth volumes of Fétis's History. I find the same system of charging error upon others when he alone is in fault, and the same inability to understand the books before him. For instance, he had Kosegarten's translation of El Farabi's treatise on Persian, Greek, and Arab music, written at the beginning of the tenth century, but he could not discover from it that the Persians had then no thirds of tones in their scales. Neither did he find out that the Arabs had then emancipated themselves from the Greek minor scales, and had an excellent two-octave major scale, with perfect thirds in it, and a major seventh. It differed from ours, but rather for the better. These two points are most important in history, for in them we trace the comparative civilisation from which those nations have declined.

As to Helmholtz's new musical theories, your reviewer complains that I have described his book as "hasty," when "it is the result of eight years' labour." I think ill-considered conclusions may, in polite terms, be described as "hasty." Secondly, that I have said, "Some very necessary experiments, such as those upon harmonics, were omitted." I am quite of that opinion, for I differ with him as to the existence of "over-tones," and I adduce proof that harmonics are *subsequent* to the principal notes, and not simultaneous.

My arguments are before the world, and I have found them supported by others, including two of the very highest authorities. Until they can be rebutted, I have nothing to withdraw, but have much to add to them.

The "Tonempfindungen" is not a book which requires more than ordinary intellect to understand; therefore such deep submission as that of your critic is not necessary. When Helmholtz informs his readers that thirty-three *consonant* vibrations between B and C cause the *dissonance* of that interval, he is literally telling them that white is black; and yet this critic would have us believe him.

WM. CHAPPELL

Strafford Lodge, Oatlands Park, Surrey

Origin of Bright Colouring in Animals

THOSE who are moderately well acquainted with Mr. Darwin's writings are not likely to feel that Mr. Murphy's criticisms (vol. xi. p. 148) upon them require any answer; but as many of your readers are probably not so well acquainted with these writings as they ought to be, I shall briefly expound the points raised.

1. Mr. Murphy himself admits that coloration may be as "variable within the limits of the same species" as is "any other part of the organism." In view of this fact, then, why is there any more difficulty in the way of our accepting sexual selection as a *vera causa*, than there is in the way of our accepting natural selection as such? Moreover, we must remember that animals have probably a much keener sense than we have of differences in form and colour among individuals of their own species.

2. Ornamental colouring is, as a rule, confined to the male, because, in Mr. Darwin's words, "the males of almost all animals have stronger passions than the females." I wonder that anyone can have read the "Descent of Man," and afterwards have asked the question to which this is the answer. Compare especially pp. 221, 222 (2nd edition).

3. I do not know on what "evidence" Mr. Murphy relies to "prove that the female is passive," in the sense of not exerting "any choice or power of selection whatever;" but I am quite sure that it must be something very great, if it is to neutralise the vast body of facts which Darwin adduces on the other side; for surely no one can doubt that "the elaborate manner in which the male birds and other animals display their charms before the female," is one of the strongest arguments we could desire to have "in favour of the belief that the females admire, or are excited by, the ornaments and colours displayed before