

offspring of two animals clearly distinct may of themselves be perfectly fertile, it is not proved that this fertility extends to a second generation.

There is one other point which I must be allowed to mention before quitting the subject. It will be seen that the two birds exhibited differ remarkably in plumage, although of the same parentage, sex, and age; for they were born and killed within a day or two of each other. The larger specimen almost exactly resembles his father, but perhaps his colours are not so warm or brilliant. The smaller bird is of an appearance altogether distinct, and the almost uniform mottled grey of his breast and belly would make it perhaps difficult to guess his parentage. I can account for the divergence only in this way, that the Domestic Duck from which these birds are descended was of that almost whole-coloured variety which is not unfrequently seen in farm-yards, and that, while one of her grand-children shows nearly the typical plumage of the hybrid between the Wild Duck and the Pintail, the other takes after some progenitor of the variety I have mentioned. Whether this will serve to illustrate the peculiarity I have above mentioned, and also a curious fact alluded to by our Secretary in a late communication on some Hybrid Ducks bred in the Society's Gardens, wherein it is stated that the produce of a cross between *Tadorna vulpanser* and *Casarca cana* present a character "scarcely deducible from either,*" I do not say. It is not, however, difficult to see what use may be made of this singular circumstance by those who advocate the views of Mr. Darwin; but into any consideration of the question I forbear to enter, contenting myself merely by noticing the fact.

6. REMARKS ON THE ANAS (ANSER) ERYTHROPUS OF LINNÆUS. BY ALFRED NEWTON, M.A., F.Z.S.

The determination of the species established by Linnæus has always been held by naturalists a matter of so great importance, that I have no scruple in occupying a portion of your time this evening with a few remarks respecting the bird which, in the 12th edition of his 'Systema Naturæ' is designated by the name of "*Anas erythropus*;" especially also as one of his editors (the late learned Professor Retzius), though noticing the "mira circa hanc avem confusio," has, in my opinion, failed to give a satisfactory solution of the difficulty. It will be, I think, universally admitted that the names employed by Linnæus, when, as in the present instance, they are drawn from any physical character, are remarkably apposite. This consideration of itself should have served as a warning to ornithologists against their imagining, as many have done, that he could possibly mean to apply the name "*erythropus*" to a species like the Bernicle Goose, with which he was sufficiently familiar, and to which it was in no degree suitable.

* Proc. Zool. Soc. 1859, p. 442, Aves, Pl. CLVIII.

It will, perhaps, be convenient to examine first on what foundation "*Anas erythropus*" was established.

In the 12th edition of the 'Systema Naturæ' (Holmiæ, 1766) we find (vol. i. pars 1. pp. 197-8) the species as the eleventh in order of the genus *Anas*, and the account given is:—

"*A. cinerea, fronte alba.* Faun. Svec. 116." [I omit all the synonyms borrowed from other authors.] "*Rostrum rubrum. Pedes rubri.*"

Now these latter characters clearly can have no reference to the Bernicle Goose, even if that species were not elsewhere included as *Anas bernicla*, var. β .

Turning then to the edition of the 'Fauna Suecica' cited (Stockholm, 1761), we have (p. 41) as follows:—

"116. *ANAS erythropus cinerea*; fronte alba. Fn. 92.
Anser cinereus ferus, torque inter oculos et rostrum albo, erythropus.
W. Botniensibus Fjæll-gås. Habitat in Helsingia, Lapponiæ alpi-
bus."

To this succeeds a description of the male, which I admit is open to objection; but the matter, in my opinion, is rendered conclusive by the description of the female, which, in the edition of the 'Fauna Suecica' here referred to, and published fifteen years previously (Lugd. Bat. 1746), is alone given. It is this:—

"Rostrum sordide carneum, frons alba. Caput, collum, dorsum, cauda cinerea; pectus et abdomen candida: maculæ in sterno nigrescentes: Pedes sanguinei."

It is, therefore, plain, that by *Anas erythropus* Linnæus did not intend to designate the Bernicle Goose, but a bird known in his time to the Swedes of Westro-Bothnia by the name of Fjæll-gås—i. e. "Fell" or "Mountain Goose." It accordingly remains to be seen what that species is.

It appears by the note-books of the late Mr. John Wolley, which are now in my possession, that in all his researches he was able to find only two species of Wild Goose inhabiting the extensive district in Lapland which he so carefully explored, and of which part was comprehended in the ancient province of Westro-Bothnia. These species are known to the Finns, who form the great bulk of the population, respectively as the "Iso-hanhi" and "Killio-hanhi," the former signifying "Great Goose," the latter "*Mountain Goose*." The Iso-hanhi he had several opportunities of identifying as the well-known Bean Goose (*Anser segetum*); the other he found, somewhat to his surprise, to be, not, as he had been told by Swedish ornithologists, the Bernicle Goose, but a bird of about that size, and at the same time closely resembling, in plumage and other physical characters, the White-fronted Goose (*Anser albifrons*). Not to extend the present remarks, I may state briefly that he was not able to discover that the Bernicle Goose was known to any of the inhabitants of the interior of the country: a statement which is singularly corroborated by Mr. Dann's note communicated to Mr. Yarrell (B. B. iii. p. 73) in reference to the last-named species:—"A skin of this Goose was shown me by some Laps near Gillivara, who were ignorant of the

bird, never having seen it before. It was shot at Killingsuvanda." Accordingly, in the Catalogue of his Eggs sold by Mr. Stevens in 1856, he stated, under the head of "*Anas albifrons*," that "this interesting bird is the proper Fjell-gas of the Swedes, which name has, however, been applied to the Bernicle in their works on Natural History. The Lapland specimens seem to be of the small-sized race, which has been named *Anser minutus* by Naumann." I must here take exception to part of Mr. Wolley's statement, some Swedish writers being quite aware that the "Fjæll-Gås" was not *Anser leucopsis*, as, for instance, Professor Zetterstedt, in the account of his travels in Lapland * (vol. ii. p. 161).

In the Catalogue of his Eggs sold in the following year (1857), Mr. Wolley further identified "the only White-fronted Geese which breed in Lapland," with the *Anser finmarchicus* of Bishop Gunner, described in one of the notes (pp. 264-5) of Professor Leem's great work †, "as distinct from the larger White-fronted Goose."

I can only say that I entirely coincide with the views thus expressed by Mr. Wolley, while I also identify the "Killio-hanhi ‡" or "Fjæll Gås," with the *Anas erythropus* of Linnæus; and I here subjoin a concise summary of the principal synonyms of this bird.

ANSER ERYTHROPUS (Linn.).

Anas (Anser) erythropus, Linn. Syst. Nat. ed. 12 (1766), vol. i. pars 1. p. 197 (non Auct.).

Anser finmarchicus, Gunner, in Leemii de Lappon. Comm. notis (1767), p. 264.

Anser temminckii, Boié, Isis, 1822, p. 882.

Anser minutus, Naum. Naturgesch. der Vög. Deutschl. (1842) vol. xi. p. 365, tab. 290.

7. LIST OF BIRDS COLLECTED BY MR. WALLACE AT THE MOLUCCA ISLANDS, WITH DESCRIPTIONS OF NEW SPECIES, ETC.
BY GEORGE ROBERT GRAY, F.L.S., F.Z.S., ETC.

(Aves, Pls. CLXIX.-CLXXII.)

The present list contains an enumeration of the Birds lately sent to this country by that indefatigable collector Mr. Wallace, from Batchian or Bakian Island, including a few from Kaisa or Kiou Island; to these are added those that he had forwarded on a previous occasion from Amboyna and Ternate; thus embracing a hundred species found on four of the Molucca Islands. I am therefore induced to refer to the names of those species that have been recorded

* 'Resa genom Sweriges och Norriges Lappmarker, af Joh. Wilh. Zetterstedt.' Two vols. 8vo. Lund, 1822.

† 'Canuti Leemii de Lapponibus Finmarchiæ Commentatio, una cum J. E. Gunneri notis, &c. &c.' Kjöbenhavn, 1767.

‡ In Europæus' "Svenskt-Finskt Handlexikon" (Helsingfors, 1853), the word is spelled "Kallio" (vide page 42, sub voce 'Berg').