

Darwinism 100 Years Ago.

WHO was the first to propound clearly the idea of sexual selection as an important factor in evolution? "Darwin, of course," is the usual answer, even of those who, sneering at this great man, delight in pointing out that it was not he who first promulgated the improving effects of selection, and that all he himself did introduce was the subsection of sexual selection; according to them a baseless idea.

Recently I happened to come across the following statement by Friedrich Tiedemann, in his "Anatomie und Naturgeschichte der Vögel" (Zweiter Band, p. 13, Heidelberg, 1814):—"Very often there arise fights between the males for the possession of the females. . . . These fights, which take place also between very many mammals, seem to be very important for the conservation of a healthy progeny, since only the strongest and most vigorous males propagate the race, whilst the young and too old individuals, being weak, are conquered, and removed from the act of propagation.

Tiedemann, who flourished just one hundred years ago, was a zoologist with great and clearly expressed ideas, and the following quotations may be of interest to some readers of NATURE:—

"Metamorphosis of the Birds.' There is a metamorphosis concerning the whole life of the individual bird, from the moment of hatching to its death. There is further a yearly metamorphosis, culminating with the period of propagation; and a less significant diurnal change. Lastly, there is a metamorphosis due to successive geological epochs" (pp. 288-325).

"... With every larger geological epoch (Erd-Revolution) some animals have perished. . . . But it seems also that after each of such revolutions new animals have been formed, mainly—I suppose—through gradual metamorphosis and alteration of the previous remaining animals into new kinds (Thierformen), caused by new climatic and physical influences" (p. 322).

"... These fossil rests of birds testify to the age of the class of birds. But since all these remnants seem to belong to extinct kinds of birds, they can be taken as proofs that in the course of time the species is just as much subject to metamorphosis as the individual" (p. 325).

H. GADOW,

Cambridge, October 23.

The Stone Implements of the Tasmanians.

THE stone implements of the Tasmanian aborigines are frequently cited as an instance of the survival of an Eolithic assemblage into modern times. Having collected eoliths on the Kent plateau and similar chipped pieces of stone in South Africa, and having recently had the opportunity of collecting worked stones on an old camping ground of the Tasmanian aborigines, I feel impelled to make a few comments on this assertion.

The site that I visited, under the guidance of its discoverer, Mr. W. S. Smith, of Launceston, is about two miles east of that town. It is about ten acres in extent, and occupies rising ground at the side of a stream—a characteristic position, I am told. It is now sparsely strewn with flakes, among which trimmed examples are rare; formerly the reverse was the case, Mr. Smith having removed about 400 trimmed flakes. The ground was ploughed several years ago, so that a large number must be buried. Several such sites are known around Launceston, and Mr. Smith has a large collection from them. I have also examined the collection of the Rev. C. S.

Wilkinson and those under the charge of Mr. H. H. Scott, of the museum. Both of these are from various parts of Tasmania, but present the same general facies as those from the neighbourhood of Launceston.

If we accept the eoliths of the Kent plateau as typical, then these Tasmanian implements are certainly not true eoliths, for instead of being made from naturally broken pieces of stone, they are made from artificially produced flakes. They are not even comparable to the flake-eoliths of South Africa, for they include examples that exhibit a neatness of edge-trimming and resultant regularity of outline that is never met with among them. At the same time the bulk of the Tasmanian implements are characterised by an unskilful trimming and irregular outline that remind one forcibly of the eoliths, while they frequently exhibit characteristic eolithic shapes. The minority remind me strongly of a prominent element in some of those South African assemblages that approach nearest to the Aurignacian.

If we eliminate the more advanced implements from these pseudo-Aurignacian assemblages, then they resemble the Tasmanian assemblage, with this difference, that in the one the Eolithic resemblances are subordinate, and in the other they are predominant.

In order to convey an idea of the lowly status of the Tasmanian implements by the use of European terminology, one is therefore not justified in speaking of them as Eolithic. Pre-Aurignacian would more correctly indicate their position.

J. P. JOHNSON.

Launceston, Tas., September 25.

A Further Parasite of the Large Larch Saw-fly.

MAY I be permitted to add a brief note to the letter written by Mr. Mangan, which appeared in NATURE of July 24 (vol. xci., p. 530)? In the account of the examination of the parasites that have emerged this year from cocoons collected in the Thirlmere district, it was stated that 25 per cent. of the cocoons yielded specimens of an undetermined species of *Mesoleius*.

Since the letter was written, this new parasite has been identified by Prof. Otto Schmiedeknecht as *Hyperablys albopictus* grav. (syn. *Mesoleius transfuga*, Holmgr.). It is described by Mr. Morley in "Ichneumonologia Britannica," vol. iv., under the name *Euryproctus albopictus* grav. It has apparently never been hitherto recorded from *Nematus erichsonii*; it has been bred, however, by Brischke (*Schr. Nat. Ges.*, Danz., 1871) from larvae of *N. hypogastricus* and of *N. testaceus* in Prussia, and has also been bred, probably at Worcester, from *Camponiscus luridiventris*.

This species is readily distinguished from *Mesoleius tenthredinis* by the white colour of the first and the second coxæ and the dark tint of the third. The face in the female is marked with white, and in the male the white marking present in both species is broader than in *M. tenthredinis*.

R. A. WARDLE.

Department of Economic Zoology,
Victoria University of Manchester.
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LICENCES FOR WIRELESS TELEGRAPHY

A QUESTION of considerable importance is raised in certain correspondence which has passed between Mr. F. Hope-Jones and the Secretary to the Post Office in relation to the conditions under which the postal authorities are pre-