

long and slender in *Sticticarbo* (*P. punctatus*, &c.), and comparatively short and stout in *Microcarbo* (*P. melanoleucus*, &c.), while the birds do not show any difference in habits. On the contrary, in *P. campbelli* we find a difference in habit without any corresponding modification. In the sea round Campbell Island there are hardly any fish, and, according to Dr. Filhol, who spent four months on the island examining the fauna during the French expedition to observe the transit of Venus in 1874, the Campbell Island Cormorant lives on mollusca, which it scrapes off the immense patches of brown kelp which border the coasts. But no modification has taken place in the bill, which cannot be well adapted for its new use.

So also in the tail. It is long and stiff, and well adapted for its uses, which are—rising from the water, sitting on rocks, and probably as a rudder when diving. But in the sub-genus *Graculus* (*P. carbo*, &c.), there are fourteen tail feathers, while all the others have only twelve. This difference cannot be considered as adaptive, and could not have been accumulated by natural selection.

I am afraid that the conclusions here arrived at will not be acceptable either to Neo-Darwinians or to Neo-Lamarckians. For they show us that the study of even a single group, like the Cormorants, reveals several characters which cannot be explained by natural selection, or by organic selection, or by use-inheritance; for all these agencies preserve useful characters only; and considerable doubt has been thrown on sexual selection. It is too often the custom nowadays to think that we have discovered all the processes working in organic nature; that the doctrine of utilitarianism will, in some way or other, explain everything; and when any difficulty arises it is attributed to our ignorance, not of principles, but of details. These difficulties, however, must be faced, and I think that a close and impartial study of specific characters will destroy our complacency, and show us that there is some principle of definite variation at work which preserves non-adaptive characters.

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ROCHESTER, Friday.—Eagles are numerous at Pine Grove, and are proving very destructive to poultry. Mr. Jos. Chapple has lost 80 full-grown turkeys this season through the depredations of these birds.—*Argus*, 24/4/03.

AT Narromine, N.S.W., Mr. W. N. Warren found, when he received the locust-fungus for trial, that all the grasshoppers had been destroyed by Wood-Swallows, which came on the scene in thousands, and cleaned them out in a few days.—*Leader*, 28/3/03.