Tenth and shortest secondary only about 53 per cent. length of first and longest secondary. Tail feathers twelve, the central pair longest and the outer pair being shortest.

Dorsal tract, or *pteryla spinalis*, of six rows of feathers, expands to form a rhombic central saddle in which is situate a narrow elongated featherless space or *apterium spinale*. On each side of the *apterium* are six rows of feathers, but immediately beyond the saddle only four rows occur. Gular portion of ventral tract, or *pteryla gastraei*, giving rise to pointed contour feathers or hackles, longest on the posterior part, only after the post-juvenile moult. Prior to the moult, the contour feathers of this area are round-tipped.

At the post-juvenile moult the primaries, secondaries, and tail feathers are retained and are shed only some months later, but before the individual acquires china-white irides and a fully pigmented pharynx.

Inferior space, or *apterium meso-gastraei*, extends from anterior portion of sternum to the anal tract or *pteryla ani*. On the front of the tarsus are eight undivided scutes free of feathers. The head tract, or *pteryla capitis*, is extensive, the aural and nasal portions well developed with feathers, or bristles in the latter case, entirely covering the orifices.

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The Downy Plumage of the Australian Dabchick

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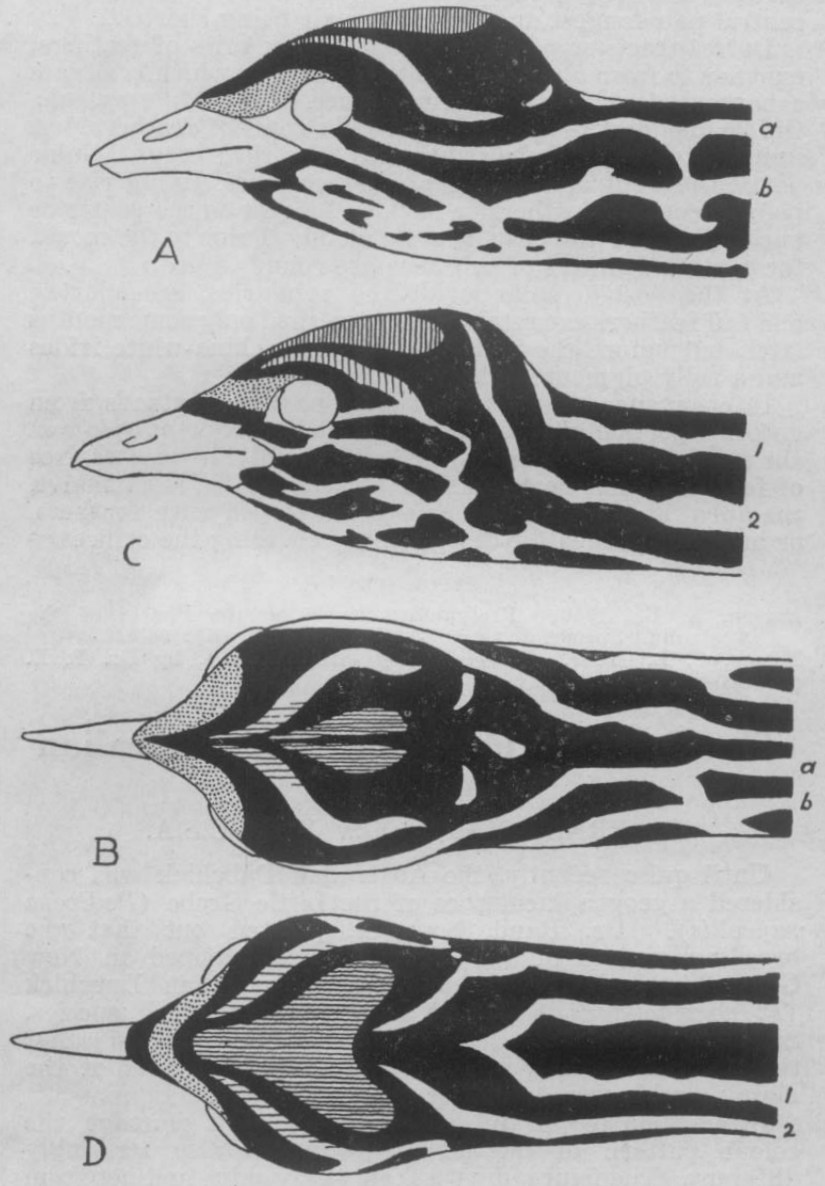
Until quite recently, the Australian Dabchick was considered a geographical race of the Little Grebe (*Podiceps ruficollis*). Dr. Rand, however, pointed out that the breeding ranges of the two forms overlapped in New Guinea, and that consequently the Australian Dabchick (*P. novæhollandiæ*) had to be treated as a full species. Subsequently, I showed (1943, *Emu*, vol. 43, pp. 3-7) that the zone of overlap included a considerable part of the Malay Archipelago.

In addition to the differences in the adult plumage, the colour pattern of the downy young is also strikingly different. The figure, drawn from study skins and not from live material, illustrates the differences better than any words can do. The most striking feature of *ruficollis* is that the white stripes of the hind neck converge on the occiput, whilst in *novæhollandiæ* they diverge, one of them



Heads of downy young of Grebes. See description at end of paper.

leading to the eye while the lower one joins with the white stripes of the throat. I have examined only two downy young of *novæhollandiæ*, one collected by Tom Carter at Broome Hill, Western Australia, on November 21, 1908 (American Museum of Natural History, no. 526245), the other collected by Palmer and Bryant near Batavia, Java, on March 13, 1909 (U.S. National Museum, no. 218771). The two birds seem to agree in all their essential features. Of *P. ruficollis*, I have seen eighteen downy young. The pattern is basically the same in all of them, although the nominate race is much darker on the head and neck—so dark, in fact, that the light-coloured stripes are barely visible. There seems to be some indication of geographical variations in regard to the connections of the white lines behind and below the eye. In two African birds, for example, the two white triangles above and behind the eye do not seem to be connected with the rectangular white line below and behind the eye. In the East Asiatic race, the white lines below the eye do not seem to come in contact with the bill.

Carefully-taken photographs of young birds would probably reveal such differences more clearly than the often poorly-prepared skins that are available for study. Nothing seems to be known on the pattern of coloration in the closely-related species *pelzelnii* (Madagascar), *rufopectus* (New Zealand), and *poliocephalus* (Australia). It would be interesting to obtain downy young of these species and compare them with the illustrations of *novæhollandiæ* and *ruficollis*.

The heads shown in the figure are—

A. *Podiceps novæhollandiæ* (Western Australia), seen from the side;
B. The same bird seen from the top;
C. *Podiceps ruficollis vulcanorum* (Timor), seen from the side;
D. The same bird seen from the top.

The stippled areas are silvery grey; the cross-hatched region is rufous.

Stray Feathers

Appearance of the Darter.—The Darter (*Anhinga novæhollandiæ*) is well named 'Snake-bird.' It swims so low in the water that its small head and long slender neck give it a definite reptilian appearance; even its call note, a rather sinister 'hiss,' adds to the general impression.

It is a comparatively rare bird in the Sydney district, New South Wales, but is occasionally seen at the Botany waterworks lagoon (*cf. The Emu*, vol. 42, p. 174). Whilst making observations at that locality on June 4, 1944, I was watching a Dusky Moorhen (*Gallinula tenebrosa*), which