

mented areas, whether these form margins, bars, or spots. This appears to me the only explanation of the vagaries of "abrasion." Restricting the meaning of the word to fair "wear and tear," this certainly would not follow so exactly the boundary-lines of pale margins, serrations, and spots. And yet it is a common thing—especially among small Asiatic Woodpeckers—to find feathers in which pale margins, indentations, and spots have been cut out as cleanly as if eaten by a parasite which preyed on the unpigmented fibre only—the "abrasion" apparently stopping directly the darker colouring is touched.

#### XXIV.—*On the Tail-feathers of the Grebes.*

By W. P. PYCRAFT, F.Z.S.

THOUGH it is popularly supposed that, in addition to their many other peculiarities, Grebes are tail-less, it is very difficult to find any definite statements on the matter. References to this point, of a more or less general character, are, however, fairly numerous. And of these the following may serve as instances:—

Dr. Sharpe, in the recent edition of the 'Naturalist's Library' (British Birds), says that the Grebes may be distinguished, among other things, "by their obsolete tail, which is not visible." In Yarrell's 'British Birds' Grebes are said to have "no true tail." Macgillivray writes: "tail a slight tuft of minute downy feathers, scarcely distinguishable." Mr. W. R. Ogilvie-Grant, in the 'Guide to the Bird-Gallery of the British Museum,' describes the tail as "inconspicuous, being a mere tuft of downy plumes."

I have, unfortunately, been unable to make my investigations on this subject as complete as I had hoped to do; and this is because I have had to content myself almost entirely with skins. Of fresh specimens, indeed, I have been able to examine only two examples of the Dabchick (*Tachybaptus fluviatilis*), one of which was kindly furnished by Dr. P. L. Sclater.



I may say at once, that, so far as my researches go, there are no Grebes which are absolutely tail-less, though Mr. W. L. Selater, relying, no doubt, on previous authorities, in speaking of the Podicipedidæ, states that "the members of this family can be always at once distinguished from all other birds by their curiously lobed toes and by the absence of the rectrices" \*.

Whether Dr. Sharpe, in making the statement that the tail-feathers of the Grebes were "not visible" merely meant to imply that these feathers were too small to be distinguished from the rest of the body-feathering, or whether he meant to imply what Mr. Selater has definitely formulated, I cannot say. But tail-feathers, all the same, are definitely present.

In the Dabchick (*Tachybaptus*), the only Grebe of which I have been able to examine a freshly killed specimen, the feathers are not only extremely short, but they are also degenerate in character and reduced in number; further, they are peculiar in their relation to the supporting pygostyle.

Semiplumous in character—that is to say, the vanes are discontinuous—and not, apparently, exceeding eight in number, they are arranged, not in a continuous series, or, after the fashion of normal tail-feathers, in a close series and lying in the same horizontal plane, but, on the contrary, are set in the form of a horseshoe, of which the free ends are directed upwards, and so lie alternately in relation one to another.

In the matter of length they are not to be distinguished from their respective coverts, and these are barely longer than the normal contour-feathers of this part of the body.

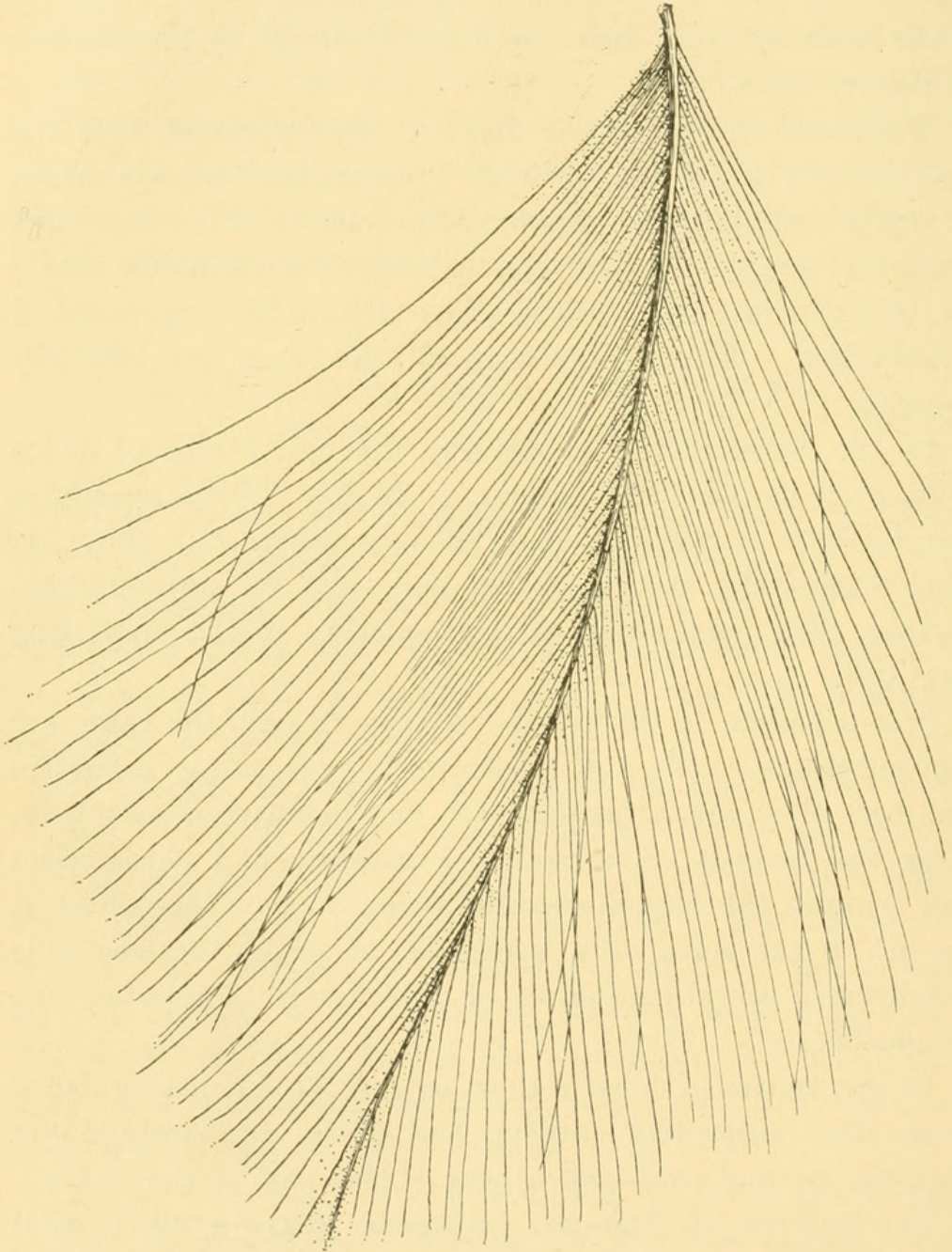
The feathers of *Podiceps griseigena* (text-fig. 29, p. 474) very closely resemble those of *Tachybaptus fluviatilis*, but are somewhat less degenerate, and hence I have chosen to figure them here. The only species of Grebe, so far as I have yet discovered, in which the tail-feathers have more or less completely preserved their normal character—a continuous

\* 'Fauna of South Africa: Birds,' vol. iv. p. 508.



vane—is *Podiceps rollandi* (text-fig. 30, p. 475). Herein the feathers, though greatly reduced in length, have a perfectly normal vane, thus shewing that the barbules of the

Text-fig. 29.



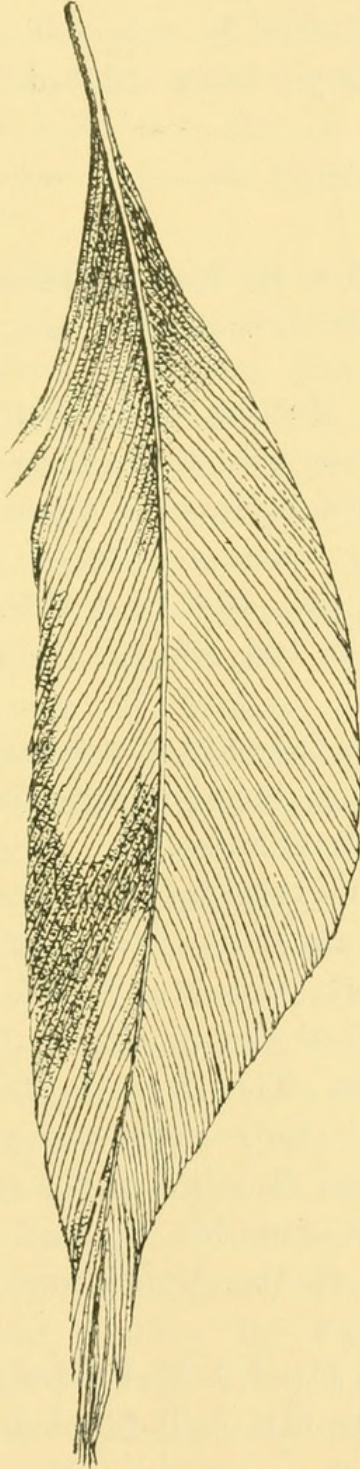
Tail-feather of *Podiceps griseigena*, shewing the degenerate character of the vane.  $\times 3$ .

feather have preserved their integrity. But from the dried skins which I have examined I have found it impossible to make out, satisfactorily, whether their arrangement with regard to the pygostyle is normal.



But the main purpose of this short paper is to shew that the Grebes cannot accurately be described as "tail-less,"

Text-fig. 30.



Tail-feather of *Podiceps rollandi*, shewing the continuous vane formed by the interlocking action of the barbules.  $\times 3$ .

although in some species the tail-feathers are extremely degenerate in character.



In conclusion, I would remark that it would be more correct to use the term "tail-feathers" than "tail," since the tail is really made up in part of the caudal vertebræ and in part of the feathers which those vertebræ support. These caudal vertebræ, as might be expected, are, in the Grebes, degenerate, the pygostyle being reduced to a mere rod.

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XXV.—*Proceedings at the Annual General Meeting of the British Ornithologists' Union, 1907.*

THE Annual General Meeting of the British Ornithologists' Union for this year was held at the house of the Zoological Society of London, No. 3 Hanover Square (by permission), on May 29th. The Chair was taken by the President, F. DuCane Godman, Esq., D.C.L., F.R.S.

The Minutes of the last Annual General Meeting were read and confirmed.

The Report of the Committee announced the continued prosperity of the Union during the past year, as regards both its membership and its finances.

The volume of 'The Ibis' for 1906 was the sixth and last of the Eighth Series under the joint Editorship of Dr. P. L. Sclater, D.Sc., F.R.S., and Mr. A. H. Evans, M.A. It contained 769 pages and was illustrated by 11 coloured and 10 uncoloured plates. The General Index to the Eighth Series of 'The Ibis' (1901-1906) was also published, and issued separately to the Members at the end of the year.

With regret the Committee reported the deaths of the following Members of the Union since the last Annual Meeting:—

Sir Walter Buller, Mr. J. J. M. Falconer, Mr. G. E. Foster, Mr. Septimus Hedges, Mr. J. T. Stephen, Dr. C. R. Whitty, and Mr. A. F. Wiener.

Nine Members had resigned, and the names of two others had been removed under Rule 6.

At the date of the Meeting the Union consisted of 402



Pycraft, W. P. 1907. "XXIV.—OH the Tailfeathers of the Grebes." *Ibis* 1(3), 472–476. <https://doi.org/10.1111/j.1474-919x.1907.tb04289.x>.

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