

leaves lying exposed on the open ground may be under favourable conditions for temporary shelter, I much doubt whether they are fitted for a more permanent refuge. As winter advances they get beaten flat by the rains, and most of the time are wet and uncomfortable underneath, however dry they may be on top.—JOHN H. WOOD, Tarrington, Hereford: April, 1913.

*Echinophthirius phocæ*, Lucas, in *N. Mavine*, Shetland.—On Dec. 20th, 1912, on a young common seal (*Phoca vitulina*), killed at the head of Ronas Voe by Mr. James Peterson, I discovered after much searching a small scattered colony of *E. phocæ*. These lice were firmly attached to their host in the thicker fur across the shoulders. So deeply embedded were they that only the abdomen appeared when the coarse overlaying hairs had been pushed aside. *E. phocæ* is a remarkably stout creature, holding most tenaciously to the surface of attachment. Like *Ixodes* it is best treated with oil before being pulled off, as in this way the legs, head, and rostrum escape mutilation.—JAMES WATERSTON, The Manse, Ollaberry, Shetland: April 11th, 1913. 3.

*Docophorus megacephalus*, Denny, in Shetland.—This interesting species, which has apparently never been recorded since its description (1842) from an immature individual taken on *Uria grylle*, has during the last three years occurred to the writer plentifully on its original host in various localities in Shetland. Dissection of the ♂ indicates affinity with *D. merguli*, Denny, rather than with *D. celedorus*, N. The name *megacephalus* is happily chosen, and the broad head is even more remarkable in the immature stages than in the adult. Although Denny's description leaves something to be desired and the type is immature, there need be little hesitation in accepting the name he proposed for the *Docophorus* infesting *Uria grylle*. No other *Docophorus* occurs regularly on this host, and the type in S. Kensington which we have seen is sufficiently characteristic.—JAMES WATERSTON.

## Review.

TRANSACTIONS OF THE CARLISLE NATURAL HISTORY SOCIETY, VOL. II. 1912.

This volume does the greatest credit to the Carlisle Natural History Society, for out of the eight papers contained in its 256 pages seven are directly connected with its local fauna and flora. To the entomologist it is of exceptional interest, as considerably the greater part of the volume is devoted to insects—55 pages to the *Coleoptera*, and 90 to the *Lepidoptera*. The former paper is by Mr. Frank H. Day, F.E.S., and is a continuation of the first part of the List of the *Coleoptera* of Cumberland which appeared in Vol. I. The other is by Mr. George B. Routledge, F.E.S., and also forms Part II of the *Lepidoptera* of Cumberland, the first part having been devoted to the Butterflies. The present part includes the *Sphingidæ*, *Sesiidæ*, *Zygænidæ*, *Bombycidæ*, *Notodontidæ*, and *Noctuidæ*. Both lists have evidently been carefully compiled, although as might be expected the localities of, and the notes on, the *Lepidoptera* are much more voluminous than in the case of the *Coleoptera*. The printing and "get up" of the volume leave nothing to be desired.—G. T. P.