shagreened; wings small, finger-shaped, reaching but little beyond the middle of the abdomen. Axillæ just meeting at the base of the scutellum, the latter a little longer than wide, sub-triangular, the tip narrowly truncate and the posterior angles microscopically dentate and black. Abdomen slightly longer than the head and thorax, pval, at the sides of the second segment with a small black tubercle which bears two long black setæ. Legs rather slender.

Female.—Length 1.2-1.3 mm. This sex differs by its smaller head, the eyes being much closer together on the front, and the lateral ocelli nearer to the eye margin. The mandibles are stouter, distinctly bidentate, and the antennæ are wholly black except the upper part of the scape. The flagellum is sub-cylindrical, but little flattened, nearly one and one-half times as long as the scape; the joints wider than long, the last pointed and twice as long as the penultimate. The legs are darker especially the middle tible.

Described from one male and three female specimens collected at Austin, Texas, during May, 1900.

A. xerophila is related to A. neomexicana Ashm., but differs by its much shorter scape.

The species was fairly abundant on an arid hill-slope near Austin at the time the types were collected. They were moving actively about in the bright sunshine on the bare parched soil, where other insects were very scarce. Associated with them was found the closely related *Henicopygus subapterus* Ashm.

A Gigantic New Biting Bird-Louse.

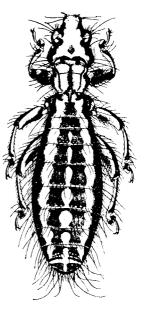
By VERNON L. KELLOGG, Stanford University, Calif.

Gigantic is a relative term; a gigantic new vulture would mean several linear feet of bird, but a gigantic new Mallophagan found on a vulture means but several linear millimeters of insect. As in the fifteen hundred or more species of *Mallophaga* so far known the average or modal length is hardly two millimeters, a species measuring nearly eleven millimeters is truly a giant among its fellows. In 1903 Mr. Charles P. Lounsbury, government entomologist of the Cape of Good Hope, took half a dozen specimens, which "appeared to be all of the creatures present on the body of the host," of a very large biting bird-louse from a GriffonVulture, *Gyps kolbi*, shot at Nelspruit in the Eastern Transvaal. The specimens represent a species hitherto un-

known to us, and the largest Mallophagan species so far described. The next largest is Læmobothorium loomisi Kellogg, length, 9.7 mm., from the Canada Goose, and the next Lipeurus ferox Nitzsch, length 9 mm. from the albatrosses.

Lemobothorium gypsis n. sp.—Fig. 1. Three females from a Griffon Vulture, Gyps kolbi, taken at Nelspruit, Eastern Transvaal. Description of female. Body length, 10.5 mm.; a strongly-marked species, readily distinguishable by its size and by the unusual projection and narrowness of the clypeal portion of the head. Head with conspicuous protuberant pre-ocular regions, and sharply defined elongate narrow clypeal region; the temples strongly marked and angulated; hairs large and numerous

and conspicuous on pre-ocular and temporal lobes; on anterior margin of clypeus two long hairs in each angle and numerous short ones in marginal region; before each eye a single strong hair, and behind eye a distinct row of short, stiffish even spine-like hairs along lateral margin; strong black brown cuticular markings along all lateral margins except antero-lateral angles of clypeus; the black brown marking projecting in and curving so as nearly to set off the pre-ocular lobes; occipital margin strongly, but narrowly, black-brown. Prothorox shieldshaped, with fringe of short hairs along anterior margin and long strong hairs in anterolateral and medio-lateral angles; also numerous hairs along postero-lateral margins; posterior margin broadly and shallowly emarginate in middle producing two distinct, backward-projecting, obtusely-angled points; strong black lateral marginal markings, widest in middle and tapering out anteriorly and posteriorly. Metathorax like an abdominal



segment but twice as long as the true first abdominal segment; strong black lateral marginal border containing a few pustulated hairs. Legs with many strong hairs and with strong markings. Abdomen with strong black lateral borders and each segment with a pair of dorsal, paler, large blotches; these blotches nearly fused on the median line in segment one, but separated on all other segments by a medial uncolored space of curious sub-elliptical or vase-shaped outlines, these spaces larger on the wider segments, and successively wider in proportion to their postero-anterior length as one examines the segments from before back-

ads: three or four pustulated hairs in the posterior margin of each abdominal blotch, and many hairs, long and short, along the lateral margins of the whole abdomen.