be found accidentally on the skin of a bat. This consideration makes it seem best to assume that Kolenati's figure was taken from the type of *metallescens* and that the comb was overlooked in 1856, but it is obviously desirable that a name whose application is as uncertain as that of *P. metallescens* should be safely tucked away in synonymy if that is possible. Fortunately there is an easy way of doing this in the present instance.

It has been assumed that *P. metallescens* was collected in Egypt from *Rousettus aegyptiacus*, and this assumption is fully justified by the information given by Kolenati in 1856, but the basis for it is entirely destroyed by the additional facts he gives in 1863, for it then appears that the flea was a single specimen not collected from the bat but from a skin of the latter—an essential difference—and therefore by no means necessarily in Egypt, so that there is no longer any reason to assume that the flea was Egyptian.*

In these circumstances it is entirely possible that the flea was from central Europe and belonged to the common form of *Archaeopsylla* found there, and there is nothing whatever in the two descriptions that forbids this assumption. I therefore assume that the flea was a specimen from central Europe that had accidentally been transferred to the skin of the Egyptian bat, and I place *Pulex metallescens* Kolenati 1856 as a synonym of *Archaeopsylla erinacei erinacei* (Bouché) 1835.

References.

Jordan and Rothschild (1920), "On the species and genera of Siphonaptera described by Kolenati," *Ectoparasites*, **1** : 61–64.

Kolenati (1856), *Die Parasiten der Chiroptern*. Brünn.

Idem (1863), "Beiträge zur Kenntniss der Phthirio-Myiarien," *Horae Soc. ent. ross.*, **2** : 11–109.

Rothschild (1911*a*), "Liste des Siphonaptera du Muséum d'Histoire Naturelle de Paris, accompagnée de descriptions des espèces nouvelles," *Ann. Sci. nat., Zoologie* (9), **12** : 203–216.

Idem (1911*b*), "On the Bat-fleas described by Kolenati," *Novit. Zool.*, **18** : 48–56.

Melitaea merope captured by a Frog.—While wandering in the damp hollows at the top of the Simplon Pass on July 14 I saw an example of *M. merope* alight on a stem of *Vaccinium*. On the instant a large frog sprang at the butterfly and simply engulfed it. These damp hollows on the Simplon are full of these large frogs and I think they must be regarded as really formidable enemies of butterflies. They are probably the principal enemies, for there are very few birds at that altitude.—J. G. Simes ; 75, Queens Road, Loughton, Essex.

* Mallophaga have a much closer attachment to their host, both in life and after death, than have normal fleas, yet I possess specimens of Neotropical Mallophaga taken from the skin of an Ethiopian host.

MALLOPHAGAN SYNOPSIS XVIII.
GENUS *FALCOPHILUS*.

By Wolfdietrich Eichler, Dr.rer.nat.

The genus *Falcophilus* was described by L. R. Guimarães, in his paper "Novos Generos de Malófagos Parasitas de Falconiformes," which appeared in 1942 (*Pap. avulsos Dep. Zool. S. Paulo*, **2** : 241). *Falcophilus* is synonymous with my genus *Vulturiphilus*, which I had named in an article on Peruvian Mallophaga which has not yet appeared because of the war. I used the name *Vulturiphilus* as a manuscript name on p. 59 of my mimeographed *Phthirapterarum Mundi Catalogus* (annex to *Acta Mallophagologica*) and mentioned it as belonging to the Cuculiphilinae when erecting this subfamily in 1944, in my paper "Notulae Mallophagologicae. X. *Anseriphilus* nov. gen. und andere Neuerungen bei Amblyceren Federlingen" (*Dtsch. ent. Z.*, 1943 : 60). The following species should be referred to the genus *Falcophilus*.

1. *alternatus* Osborn 1902*a* (*Ohio Nat.*, **2** : 175, pl. xi, fig. 1) on *Cathartes aura* Linn. (probably subsp. *septentrionalis* Wied.)

This species is the genotype of *Falcophilus*.

2. *coragypsis* nov. spec. on *Coragyps atratus foetens* Lichtenst.

The types of my new species, which would have been the genotype of *Vulturiphilus*, were collected by E. Titschack on March 31, 1936, near Hacienda Huayuri (South Peru) on "Gallinazo." They are numbered WEC 1700, and will be deposited in the Hamburg Zoological Museum.

When my specimens are compared with *fasciatus*, they show a broader and more flattened forehead. The abdominal hooks on the seventh tergite of the male average 13 on each side and are irregularly situated.

I have seen some other specimens from the same host which undoubtedly belong to the same species, namely :

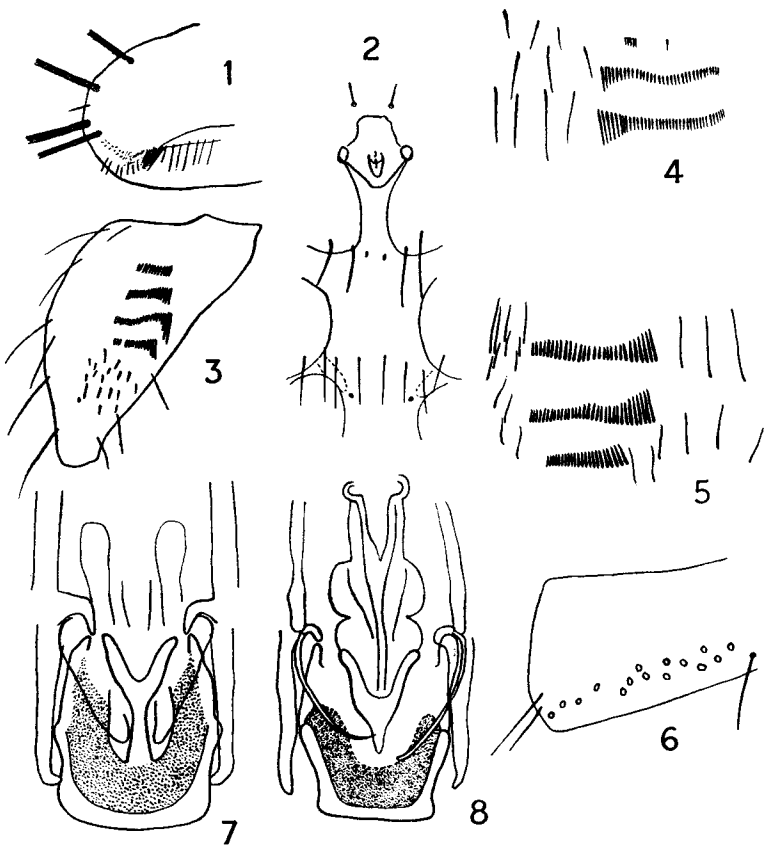
(*a*) Slides WEC 457, 458 and 1562 on "Zschulo" at Pandi (Cundinamarca, western side of Eastern Cordillera, Colombia) ; *W. Fritzsche*, in Hamburg Zoological Museum.

(*b*) Slide WEC 2204 on "*Cathartes urubu*" (= *Coragyps atratus*) at Iquique ; Berlin Zoological Museum.

(*c*) Slide WEC 2388 on "*Cathartes atratus*" at San Bernardino (Paraguay), –.viii.1904 ; K. Fiebrig S. V., in Berlin Zoological Museum.

When comparing all my material I find that the combs on the underside of the hind femora may sometimes be 5 instead of 4 (one specimen had 5 on the left and 4 on the right leg). Fig. 4

shows the combs of the underside of the third sternite of a female with three rows of spines; the short first row is rarely to be seen in most of the specimens. Fig. 5 shows the arrangement of the combs on the fourth sternite as it is normally to be found; in some



FIGS. 1–8.—(1) Underside of right temporal lobe of female *Falcophilus coragypsis* nov. spec. (slide WEC 1700*c*) drawn from above. (2) Sternal region of female *Falcophilus coragypsis* nov. spec. (slide WEC 2388). (3) Underside of left hind femur of female *Falcophilus coragypsis* nov. spec. (slide WEC 1700*c*) drawn from above. (4) Underside of right side of third abdominal segment of female *Falcophilus coragypsis* nov. spec. (slide WEC 1700*c*) drawn from above. (5) Underside of right side of fourth abdominal segment of female *Falcophilus coragypsis* nov. spec. (slide WEC 1700*c*) drawn from above. (6) Underside of right side of seventh abdominal segment of *Falcophilus coragypsis* nov. spec. (slide WEC 2388) drawn from beneath. (7) Male genital armature of *Falcophilus coragypsis* nov. spec. (slide WEC 457). (8) Male genital armature of *Falcophilus fasciatus* (slide WEC 1242).

cases the first row may be divided, or from the outer side may be inserted a short row of spines between the second and third regular combs.

Guimarães (1942, p. 244, figs. 10–13) described and figured specimens from the same host (from São Paulo and Rio de Janeiro) under the name of *alternatus* Osborn, and Peters has referred to this name specimens from *Coragyps atratus atratus* Meyer from eastern U.S.A. I think that these authors did not have *alternatus* Osborn but my above-described new species. I have not seen true *alternatus*, but the specific difference is obvious from comparing Osborn's figures (e.g. of the male genitalia) and from the difference in host.

3. *cathartae-papae* Nitzsch, 1861 (*Z. ges. NatWiss.*, **17** : 518) on *Sarcorhamphus papa*.

I have not seen specimens of this species, renamed *breviceps* by Giebel in 1874 (*Insecta epizoa* : 279), but it has been described and figured by Carriker (1903, *Univ. Stud. Neb.*, **3** : 180, pl. viii, fig. 4) under the misdetermination *fasciatum* Rudow.

4. *fasciatus* Rudow 1869 (*Z. ges. NatWiss.*, **34** : 403) is from *Vultur gryphus* Linn., but Giebel wrongly gave the host as *Sarcorhamphus papa*, and this mistake has been copied by all later authors. Piaget (1885, *Pédiculines Supplément*, 152, pl. xvi, fig. 6) redescribed the species as *zonatus*, and Harrison (1916, *Parasitology*, **9** : 36) gave the new name *fasciaferum* to Rudow's species which he thought to be preoccupied by *Menopon fasciatum* Scopoli (described as a *Pediculus* and now in *Cuculiphilus*).

I have seen specimens from this host (slide WEC 1242 of the Hamburg Zoological Museum, collected in 1903 at Arica, Chile, by R. Paessler) which I identify with Rudow's and Piaget's species. They are very similar to *coragypsis*, but the abdominal hooks of the seventh tergite of the male are only 6 to 7 on each side, arranged in a straight line. Also the male genital armature is different, as shown in Fig. 8.

The description of *Menopon gryphus* Giebel does not fit this species and *gypsis* is probably not a *Falcophilus*.

5. *punctatus* Gervais, in Gay 1849*a* (*Hist. fis. Chile*, **4** : 104). As Hopkins has pointed out in a note which he is about to publish and to which he kindly permits me to refer, this species is not a *Laemobothrion*, as authors have followed Piaget in stating (compare my Mallophagen-Synopsis. III : Genus *Laemobothrion*, 1942*d*, *Zool. Anz.*, **137** : 52–63), but a *Falcophilus*. Unfortunately we cannot but agree with Hopkins that a closer identification of the species is impossible unless the type should survive, because no proper host-record is given (". . . . on hawks, and I think I have also collected it on a condor").