embracing an upright growing *Serpula* was dredged by the 'Porcupine' in 1869. The station was not preserved, but a box contained a large number of stones the numerous species encrusting which were, with the one exception of this *Cellepora*, identical with the deep-sea fauna of Polyzoa with which I am so familiar in the Shetland seas; and there can be little doubt but that the species was taken within the British area. The species along with it were *Amphiblestrum trifolium*, *Escharina Dutertrei*, *Ramphonotus minax*, *Megapora ringens*, *Anarthropora monodon*; "*Schizoporella*" *ansata*, *Alderi*, and *sinuosa*; *Porella bella*; *Escharella abyssicola*, *laqueata*, and *microstoma*; *Hemicyclopora polita*, &c.

EXPLANATION OF PLATE IX.

Fig. 1. *Micropora impressa*, Moll: a living zoœcium.
Fig. 2. Ditto: a dead zoœcium.
Fig. 3. Ditto: operculum.
Fig. 4. Shell of *Ditrupa arietina* (Müller).
Fig. 5. Segment of this shell magnified, to show the perforations of *Terebripora ditrupæ*.
Fig. 6. *Terebripora ditrupæ*, sp. n.: upper portion of a zoœcium.
Fig. 7. Ditto: oral aperture of zoœcium.
Fig. 8. *Escharina Dutertrei*, Audouin, the deep-water Shetland form.
Fig. 9. Ditto, its operculum.
Fig. 10. Ditto: variety taken in company with the last.
Fig. 11. Ditto: ditto, its opercula.
Fig. 12. Ditto: oral opening of a specimen from the Antrim coast.

XXXII.—*Three new Spanish Insectivores.*

By Angel Cabrera.

Among a number of Spanish small mammals lately arrived for my private collection there are a few apparently new forms of Insectivores that I now propose to describe. Some of them are also represented in the Natural Science Museum of Madrid.

Talpa cæca occidentalis, subsp. n.

Characters. A small form of *T. cæca*, with a flatter, but not lower, skull, and very hairy tail and feet. Width of fore foot considerably greater than its length without nails.

Colour. Brownish black, the hairs being dark silvery grey with deep brown tips. Middle of under surface without the last colour, the general hue becoming dark silver-grey. Hairs of the tail very long, black; those of the feet very

dark brown. The fur is very glossy, showing silvery reflections in certain lights; if wet, it exhibits a brilliant metallic lustre, green on the upper surface, dark purple on the belly.

Skull. Similar to that of typical *cæca*, but the brain-case, although rather high (more than 9 mm.), is flatter on the upper surface, so that, viewed from behind, its greatest breadth appears above the middle horizontal line of the skull, as in *T. c. levantis*.

Measurements (type in flesh). Head and body 102 mm.; tail 24; fore foot, breadth 17·6, length (s. u.) 15·5; hind foot (s. u.) 15·5.

Skull: greatest length 31·5; basal length 22·5; zygomatic breadth 11; breadth of brain-case 15·2; palatal length 14; upper tooth-row 13·5.

Habitat. Guadarrama Mountains, Central Spain. Alt. 1200–1300 m.

Type. Adult male, from La Granja (Segovia), collected by Sr. M. de la Escalera, September 1906. No. 122, collection of A. Cabrera.

Remarks. By its smaller size this mole is easily distinguishable from the Italian and Asiatic forms, in which the head and body length exceeds 120 mm. It therefore appears to need a subspecific name.

Crocidura russula pulchra, subsp. n.

Characters. A small, long-tailed shrew, like *C. mimula* in size, but with a longer tail and the typical skull of *C. russula*.

Colour. Upperparts pale sepia, with a very slight reddish tinge, and showing bright silvery reflections on the back. Ventral surface ashy white. The hairs are everywhere dark slate at the base, and this colour appears externally on the underparts. Tail sepia above, dirty white below.

Skull. The skull and teeth are identical in form with those of *C. russula russula*, but a little smaller.

Measurements (type in flesh). Head and body 71 mm.; tail 41·5; hind foot (s. u.) 12; ear 8.

Skull: greatest length, exclusive of incisors, 18·9; breadth of brain-case 9·1; greatest antorbital breadth 6; interorbital breadth 4·2; upper tooth-row 8·4.

Habitat. Eastern Spain, Valencia. A specimen from Minorca (Balearic Islands) in the Madrid Museum belongs probably to the same form.

Type. Adult male, from Valencia, collected by Sr. José M. Benedito, January 1907. No. 117, collection of A. Cabrera.

Remarks. I think it best to treat this form as a subspecies until the true relationship of the different shrews of the *russula* group is made out. It is noteworthy that almost all the southern forms of this group (*cypria, monacha, caudata, pulchra*) have a remarkably long tail.

Neomys anomalus, sp. n.

Characters. Smaller than typical *N. fodiens*; tail rounded, its lower surface without a keel of hairs.

Colour. Upperparts glossy brownish black, the hairs being dark iron-grey with reddish-black ends. Underparts white, slightly washed with yellowish under the neck; the white sharply separated from the dark colour on the sides. Hands and feet white, the latter with a blackish patch running from the heel along the posterior half of the external border. The long hairs fringing the foot white. Tail bicolor, brownish black above, white below; the hair on its lower surface long enough to mask the scales, but not to form a fringe as in *N. fodiens*; it is only a little elongated about the end, hardly forming an inconspicuous terminal tuft.

After a long immersion in alcohol the colour of the dorsal surface of the body becomes a dark reddish chestnut.

Skull. Compared with *N. fodiens*, the brain-case is higher and less rounded, its anterior part being not convex, but forming a smooth slope. The occiput is also flatter in its upper part. The teeth show no peculiarities.

Measurements (type, after a short immersion in alcohol). Head and body 73 mm.; tail 60; hind foot (s. u.) 17·5; ear 8.

Skull: greatest length, exclusive of incisors, 20·5; breadth of brain-case 10; greatest antorbital breadth 6·2; interorbital breadth 4; upper tooth-row 9·6.

Habitat. Central Spain. I have seen specimens from Salamanca and Madrid provinces.

Type. Adult male, from San Martin de la Vega (province of Madrid, on the Jarama River), collected in December 1892. No. 1140, Museum of Natural Science of Madrid.

Remarks. This *Neomys* is not alone in the lack of a hairy keel under the tail. The same peculiarity has been found by Mr. Charles Mottaz in another new form from the Vaud Alps, Switzerland. Mr. Mottaz has kindly sent me a specimen (skin and skull) and an unpublished description of his animal, and from comparison it results that both the Swiss and the Spanish forms, although similar in the tail-structure, are very different in other points. In the same season the

hair of the Swiss form is shorter and greyer than that of *N. anomalus*. The brain-case of the skull in the former species is rounded and somewhat globular, while in the Spanish animal it is flat in the anterior part and about the occiput, the entire outline being not evenly convex, but nearly angular.

Owing to the absence of hair-fringe on the under surface of the tail, *N. anomalus* has hitherto been confounded by Spanish naturalists with *Sorex araneus*, a species that I have never seen in the Peninsula. Under that name the specimens in the Madrid Museum were exhibited.

XXXIII.—*On Four new Pill-Millipedes from the Malay Peninsula and Siam.* By A. S. Hirst (British Museum, Nat. Hist.).

[Plate X.]

The four forms which I describe below as new seem to be somewhat closely allied to one another. Their copulatory feet present much resemblance and the walking-legs in all four species are furnished with three spines above the claw. Three of them come from the Malay Peninsula, and the remaining one from Siam. *Z. anthracina*, Pocock, from the Malay Peninsula, *Z. impunctata*, Pocock, from Penang, and *Z. semilævis*, Pocock, from South Tenasserim, are also members of this species-group. The legs of these last species were described by Mr. Pocock * as being provided with two spines above the claw; in reality, however, they are provided with three.

Zephronia rugulosa, sp. n.

Colour (faded, in spirit). Head, nuchal plate, and the first tergite dark brown or black : tergites dark brown, the anterior borders yellowish brown and ornamented with several small dark spots †; the last tergite with irregular dark spots.

Head. Anterior region of the head marked with fairly numerous punctures, the posterior part sparsely punctured. The anterior border with a single tooth.

Nuchal plate with sparse and fine punctures.

First tergite convex anteriorly, the usual angle being almost

* Ann. Mus. Civ. Genova, ser. 2, vol. x. no. 30, p. 5 (1890); Ann. & Mag. Nat. Hist. ser. 6, vol. xvi. p. 413 (1895).

† These spots are probably due to bad preservation.