spines, smaller hairs, and small triangular and larger round glands. The surfaces of the body bear hairs and scattered spines and numerous small and large glands.

Adult male light yellow; eyes black. Length, including style, '85 millim., extent of wings 2.25 millim. Antennæ

10-jointed; joint 10 the longest; joints 3-9 subequal.

Halteres short, expanded in the middle, bristle fine, with a large hook at the end. Legs long, slender, with numerous hairs. Tibia twice the length of tarsus. Claw very long and slender, one third length of tarsus. Digitules hair-like, short. Style very short, acuminate. The last segment of the body bears on each side of the style one long hair and several shorter ones. The other abdominal segments also bear several short hairs on the lateral margins.

Hab. Ypirauga. In galls on leaves of a plant of the

family Solenaceæ.

But few of the galls contain insects, and it is probable that they are made by other insects and appropriated by this Dactylopius. This species is accompanied by an ant (Cremastogaster?).

[To be continued.]

LI.—Descriptions of new Species of Japanese Land-Shells. By G. K. Gude, F.Z.S.

AMONG a number of Helicoid land-shells received from Mr. Hirase the following appear to be undescribed:—

Arnouldia ceratodes, sp. n.

Shell imperforate, trochoid, smooth, shining, dark corneous; spire depressed, apex obtuse, suture impressed. Whorls 5½, increasing slowly, the last not descending in front, at first keeled at the periphery, becoming rounded towards the mouth. Aperture oblique, lunate; peristome thin, straight, acute; margins distant, upper descending slightly, columellar margin slightly expanded above, the umbilical region sunk.

Diam. maj. 5.5, minor 4.75; alt. 4 millim.

Hab. Kashima, prov. Harima. Type in my collection.

The new species is allied to A. stenogyra, A. Ad., but it is darker and considerably larger and more deeply sunk around the umbilical region. Six specimens were received.

Arnouldia nanodes, sp. n.

Shell imperforate, depressed conoid; under the microscope seen to be very finely striated and decussated with close faint spiral lines, the latter a little more distinct and wider apart below; thin, dull above, a little shining below, pellucid, pale corneous. Spire depressed, apex obtuse, suture impressed. Whorls 4, increasing slowly, the last angulated at the periphery, tumid below near the mouth. Aperture oblique, securiform; peristome thin, straight, acute; margins approaching, the upper forming an obtuse angle with the outer margin at the periphery; columellar margin vertical, slightly expanded above.

Diam. 2.25, alt. 1.5 millim.

Hab. Kioto. Type in my collection.

The nearest ally of this form appears to be A. obtusangula, Reinh., but that species is perforated and is composed of $5\frac{1}{2}$ whorls. Six specimens.

Crystallus sulcatus, sp. n.

Shell perforate, discoid, smooth above, very finely striated below; shining, pellucid, corneous. Spire depressed, suture channelled. Whorls 4, rounded, increasing slowly at first, the last widening rapidly, not descending in front, sunk round the umbilicus. Aperture nearly vertical, roundly lunate; peristome thin, straight, acute; margins distant, upper arcuate, columellar margin slightly dilated over the narrow umbilicus.

Diam. maj. 4, minor 3.75; alt. 2 millim. Hab. Kioto. Type in my collection.

Two specimens only, one of which is imperfect. This species is allied to C. microdiscus, Reinh.

Crystallus velatus, sp. n.

Shell narrowly perforate, discoid; under the microscope seen to be faintly striated and decussated with excessively fine spiral lines; shining, pellucid, corneous. Spire depressed, suture impressed. Whorls 4, a little rounded, increasing slowly, the last not descending in front, sunk round the umbilicus. Aperture slightly oblique, narrowly lunate; peristome thin, straight, acute; margins distant, upper arcuate, columellar margin slightly expanded over the narrow umbilicus.

Diam. 3.5, alt. 1.5 millim.

Hab. Kioto. Type in my collection.

Allied to the preceding, but that shell is more elevated in the spire, the aperture is more widened laterally, the umbilicus is a little wider, and it is devoid of spiral sculpture.

Microcystis Hirasei, sp. n.

Shell perforate, depressed-conoid, very finely striated, decussated with microscopic spiral lines; thin, shining, pellucid, dark corneous, whitish below. Spire depressed, suture linear, faintly margined. Whorls $4\frac{1}{2}$, a little rounded above and below, increasing rapidly, the last twice as wide as the penultimate, not descending in front. Aperture a little oblique, lunate; peristome thin, acute; margins distant, upper depressed, columellar margin a little dilated over the narrow umbilicus.

Diam. maj. 9.75, minor 8; alt. 4.75 millim.

Hab. Kashima, prov. Harima. Type in my collection.

Three specimens received. This new species is intermediate between *M. rejecta*, Pfr., and *M. Doenitzei*, Reinh. Three other specimens (apparently immature) I also refer to this form; they measure barely 6 millim. in diameter.

Trishoplita cretacea, sp. n.

Shell deeply umbilicated, conoid, irregularly striated, indistinctly and minutely granulated; chalky white under a deciduous thin yellowish-white cuticle. Spire elevated, apex obtuse, suture impressed. Whorls $6\frac{1}{2}$, rounded, increasing slowly, the last descending very shortly in front, obsoletely angulated at the periphery, becoming rounded and a little widened at the mouth. Aperture oblique, elongate-rotundate; peristome scarcely thickened, expanded all round, the margins approaching, columellar margin broadly reflected over the deep but rather narrow umbilicus.

Diam. maj. 15.5-17.5, minor 13.5-15.5; alt. 13 millim.

Hab. Inga, prov. Hoki. Type in my collection.

The nearest ally is T. mesogonia, Pils., but that species is much smaller and possesses only $5\frac{1}{2}$ whorls. The twelve specimens received are all decorticated, but some have patches of the cuticle adhering.

Plectotropis conica, sp. n.

Shell deeply and perspectively umbilicated, conical, finely striated, the striæ decussated by very fine wrinkled spiral lines; from pale fuscous to reddish brown, paler around the umbilicus; the thin deciduous cuticle is raised transversely

into membranous lamellæ, which are rather long and not much interrupted at the peripheral region, but becoming shorter above near the suture and below near the umbilicus. At the periphery the cuticle is produced into conspicuous triangular membranous scales. Spire elevated conoidal, apex prominent, acute, suture impressed. Whorls 6½-7, increasing regularly, the earlier rounded, the later ones more or less flattened above, the last rather tumid below near the mouth, descending very shortly and slightly in front, acutely keeled. Aperture oblique, subcircular; peristome thickened and reflexed, pale rufous; margins approaching, the columellar a little reflected over the umbilicus, which is deep and perspectively widened, exhibiting the larger portion of the penultimate whorl.

Diam. maj. 18-19, minor 17-17.5; alt. 11-11.5 millim. Hab. Izuhara, Tsu-shima. Type in my collection.

The only known species to be compared with this form is $P.\ trochula$, A. Ad.; but the latter is much smaller and more depressed, the umbilicus is narrower, the cuticular lamellæ are much more interrupted, the spiral sculpture is much finer, and the aperture less circular.

LII.—ASIATIC TORTRICIDÆ.

By the Rt. Hon. LORD WALSINGHAM, M.A., LL.D., F.R.S.

[Continued from p. 341.]

HENDECANEURA, gen. nov.

 $(\tilde{\epsilon}\nu\delta\epsilon\kappa a = \text{eleven}; \nu\epsilon\hat{\nu}\rho o\nu = \text{a nerve.})$

Type (\$\frac{2}{9}\$) Hendecaneura impar, Wlsm.

Antennæ simple, or scarcely pubescent beneath. Palpi slightly recurved, median joint roughly clothed above and beneath, terminal joint short, exposed; projecting to scarcely more than the length of the head beyond it. Head slightly tufted anteriorly. Thorax smooth. Fore wings, costa slightly arched, \$\frac{3}{9}\$ with a narrow costal fold at the base, termen slightly impressed below the rounded apex, tornus rounded, dorsum very slightly convex. Neuration, \$\frac{3}{9}\$ 11 veins (9 absent, coincident with 10 or 8): \$\frac{9}{9}\$ 12 veins all separate; 2 from middle third of cell; \$\frac{3}{9}\$, \$4, 5, and 6 more or less assembled towards the termen; 7 to termen. Hind wings



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