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It is at present very difficult to state the exact affinities of the last family with any certainty as regards other previously known groups, whether *Helioporæ* or others.

ADDENDUM.—When this paper, now translated with some corrections and additions, was first published in the 'Proceedings of the Swedish Academy of Sciences,' 1873, I was not aware that Dr. Duncan had, in 1872, published his views on the Tabulate Corals in the Reports of the British Association for 1871. On several points there is some diversity between his opinions and mine; and I have in some places added my reasons for deviating from his conclusions. M. G. Dollfus, who also lately proposed a new classification of the Palæozoic corals (*Comptes Rend.* March 1875, p. 681), agrees with Dr. Duncan in keeping the *Monticuliporæ* and others amongst the corals, notwithstanding their Bryozoan characters.

II.—On the *Colydiidæ* of New Zealand. By D. SHARP.

MY object in this paper is to describe, in as brief a manner as is consistent with utility, the new species of New-Zealand *Colydiidæ* which have been sent me by Captain Thomas Broun, of Tairua, and by Mr. T. Lawson, of Auckland, by the hands of his brother, Mr. R. Lawson, of Scarborough. These species are eighteen in number; and in addition to them six previously described species are known to me. These are:—

1. *Enarsus Bakewellii*, Pasc. A very distinct and remarkable form.

2. *Bolitophagus antarcticus*, White. This species should be referred to the genus *Ulonotus*, Er.; with this latter name *Pristoderus*, Hope, is, according to Mr. Pascoe, synonymous; but Mr. Hope's name may be with advantage dropped into oblivion, as it has not been accompanied with any characters by which it can be recognized, and its place in classification was erroneously indicated.

3. *Tarphiomimetes viridipicta*, Woll. This is closely allied to, and congeneric with, *Ulonotus Brouni* here described, and should be classed with it and *Bolitophagus antarcticus* in the genus *Ulonotus*; concerning which name I may here remark that the characters with which it was associated by Erichson were but insufficient, and no species was described; so that I

should have almost preferred to use Mr. Wollaston's *Tarphiomimetes* had it not been objectionably polysyllabic.

4. *Tarphiomimetes Lawsoni*, Woll. This species may also be at present classed in the genus *Ulonotus*, though it is aberrant from the sides of the thorax being without notches.

5. *Tarphiomimus indentatus*, Woll. With this *Ectomida lacerata*, Pasc., is specifically identical, as I judge both from the descriptions and from information received from Mr. Pascoe.

6. *Biloma insularis*, White, which is at present correctly associated with the generic name given to it by White.

I have included in the eighteen species I have described a very interesting insect allied to *Aglycyderes setifer*, West. Though *Aglycyderes* has not yet been referred to the Colydiidæ, it appears to me that this may at present be done with advantage.

Thus the number of species of Colydiidæ at present known to me from New Zealand is twenty-four. This number, though large, will undoubtedly be much increased (more than doubled I have no doubt, and highly probably even quadrupled); and it is pretty certain that, like the Atlantic islands, New Zealand will prove to be very rich in species closely allied to *Tarphius*; the genus *Syncalus*, indeed, here described, is especially close to the European and Atlantic *Tarphius*. I anticipate that some very interesting comparisons will be suggested when the New-Zealand forms of the family are better known, as I hope may soon be the case.

The Colydiidæ form one of the less specialized of the Coleopterous families. Many species appear to feed on the woody tissue of phanerogamic plants, others on dry cryptogamic products, while others, again, are found amongst much-decayed leaves and woody matter in dark woods. Other species, on the contrary, prey on the larvæ of wood-feeding Coleoptera; and these species are often slender, elongate, and subcylindric in form, to enable them to penetrate the burrows formed by their victims. It is probable that New-Zealand species will be found of all these groups.

Ulonotus Brouni, n. sp.

U. oblongus, piceus, supra variegatus, inæqualis (et in elytris tuberculatus), subtus setulis brevissimis tenuissimisque adpersus; prothorace lateribus bis indentatis; antennis, tibiis tarsisque rufoferrugineis, clava, tibiisque in medio nigrescentibus. Long. corp. $4\frac{1}{2}$ m. m.

This species is very closely allied to *Tarphiomimetes viridipictus*, Woll., but is larger, and has the indentations at the

sides of the thorax considerably deeper, and the setæ of the under surface much finer. The surface of the thorax and elytra is very similar in the two species (the green nodules of *T. viridipictus* being, I judge, not constant in colour); the surface of the thorax is very uneven, but still without distinct nodules; the elytra bear numerous nodules, which, however, are not very distinct, and their colour is a patchwork of sober green and grey, with a little black intermixed.

Three individuals sent from Tairua by Captain T. Broun.

Ulonotus asper, n. sp.

U. piceo-ferrugineus, marginibus dilutionibus, antennis pedibusque rufis; oblongus, subdepressus; prothoracis lateribus trilobatis, lobis duobus posterioribus angustis, et bene separatis; elytris crebre asperatis, ante apicem tuberculis nonnullis sat elevatis. Long. corp. $3\frac{1}{4}$ m. m.

Antennæ, including the club, red. Thorax transversely convex, with the surface rough, and showing some indistinct depressions; the front angles acute and prominent; at the sides in the middle is a broad and deep indentation, and in front of the hind angles there is a second rather smaller indentation; the part separating these two indentations is narrow; and the third or posterior lateral lobe is, though very prominent, very narrow. The elytra are pitchy in colour, with the base and the margins pitchy; their surface is very dull, and is densely covered with very rough granules, and a little before the apex there are three or four not very distinct tubercles on each; the lateral margin is finely and densely serrated. The legs are entirely red; and the under surface is nearly destitute of any pubescence or scales.

Tairua; a single individual sent by Captain Broun.

This species in its form resembles *Tarphiomimus indentatus*, Woll.; but it cannot be associated with that species, on account of the minute basal joints of the tarsi. It much resembles a small *Endophlæus spinosulus*; and, as in that species, the surface on its protected parts is covered with a peculiar pale exudation.

Coxelus dubius, n. sp.

C. oblongus, angustulus, parallelus, piceus, antennis pedibusque rufis, supra dense breviterque hispidulus, subvariegatus, subtus breviter griseo-setosus; tibiis extus hispidulis. Long. corp. $2\frac{1}{2}$ m. m.

Antennæ short, red, 11-jointed, the basal joint scarcely visible from above; second a good deal larger than the following ones; third small, but distinctly longer than the following joints, the fourth to eighth being small, ninth small but

transverse, tenth broad and transverse, eleventh short and not quite so broad as the tenth. Eyes bearing a few short coarse setæ. Thorax about as long as broad, nearly as broad as the elytra, only slightly narrowed behind, and the sides very little curved towards the front angles; the surface a little uneven, bearing short coarse setæ or scale-like hairs; the lateral margins densely fringed with such setæ. Elytra apparently rather coarsely and closely sculptured, but their sculpture rendered indistinct by the dense short setæ with which they are clothed; these setæ are a little variegated in colour; there are no tubercles or depressions. Head with rather long cavities beneath, directed backwards, so as to be parallel along the inner margin of the eyes; sides of the thorax near the front angles slightly depressed, so as to indicate the rudiments of cavities for the protection of the antennæ. Legs red; tibiæ armed externally with fine short setæ.

Sent both from Auckland and Tairua by Mr. Lawson and Captain Broun.

Obs. This species departs somewhat from the European *Coxelus pictus*, by the more elongate antennal cavities and by the slightly concave front part of the surface of the undersides of the thorax; but its general structure seems to be so similar to that of the European species, that I think it would be premature to characterize it at present as a distinct genus.

Coxelus similis, n. sp.

C. oblongus, angustulus, parallelus, piceus, antennis pedibusque rufis, supra dense breviterque hispidulus, vix variegatus; tibiis extus breviter pubescentibus. Long. corp. $2\frac{1}{2}$ m. m.

This species is extremely closely allied to *C. dubius*, and only differs therefrom, so far as I can see, by the following characters:—The antennæ and legs are a little stouter; and the tibiæ, instead of bearing externally coarse setæ such as are seen on the elytra, bear only a few fine hairs; the base of the thorax is less depressed, so that the outline at the junction with the elytra seems less interrupted.

Sent from Auckland by Mr. Lawson.

SYNCALUS (nov. gen. Colydiidarum).

Corpus crassum, convexum, setosum. Antennæ 11-articulatæ, clava triarticulata; retractiles. Prothorax lateribus subtus impressis. Coxæ sat distantes. Tarsi 4-articulati, articulo basali sat elongato, subtus setoso. Facies generis *Tarphii*.

I propose this generic name for two species which have extremely the appearance of *Tarphius*, but differ therefrom by

the 3-jointed antennal club and the more elongate basal joint of the tarsi. I have little doubt that these insects have the habits of *Tarphius*, and will require to be sought among the dead leaves and decaying vegetable matter of the New-Zealand woods and forests. The two species before me, though they look extremely like one another at first sight, show on examination structural differences that leave me no doubt that numerous other species will be found in New Zealand. *Enarsus Bakewellii*, Pascoe, is a very interesting allied form; but its appearance indicates very different habits, its tarsi have the second and third joints much more developed, and I believe the trophi will show important differences.

Syncalus optatus, n. sp.

S. oblongo-ovalis, convexus, piceus, antennis pedibusque rufis; setis elongatis, erectis adpersus, et cum pube depressa inæqualiter vestitus; tibiis setosis. Long. corp. $4\frac{1}{2}$ m. m.

Antennæ short, red, with the basal joints pitchy; first joint elongate and exposed; third longer, but much more slender than second; fourth a good deal shorter than third, but longer than fifth; eighth small, but transverse; ninth and tenth abruptly broader; ninth not quite so broad as tenth, both of them strongly transverse; eleventh joint large, about as broad as tenth. Labrum large and exposed; last joint of maxillary palpi elongate and rather slender. Antennal cavities directed straight backwards along the inner margin of the eye. Eyes large, convex, without setæ. Head coarsely sculptured, so as to appear covered with flattened tubercles. Thorax with the sides a little rounded and narrowed towards the front; the anterior angles acute and prominent; the sides behind the middle almost straight, so that the well-marked hind angles are about rectangular; the base on each side much sinuate; its surface is covered with an exudation which conceals the irregularly distributed tubercular sculpture; and it bears some erect setæ. Elytra very convex, without tubercles, sprinkled with numerous long upright setæ, and also bearing some fine, greyish, depressed setæ, which are distributed in irregular patches; the sculpture (which apparently consists of rows of coarse punctures) is concealed by an exudation. Tibia bearing externally a row of long setæ. Tarsi with the basal joint about as long as the two following ones together; the second and third are small; the fourth is slender, and rather longer than the other three together.

A single mutilated individual sent by Mr. Lawson from Auckland.

Syncalus hystrix, n. sp.

S. brevis ovalis, convexus, piceus, antennis pedibusque rufis, setis elongatis erectis adpersus; tibiis sine setis exsertis. Long. corp. $3\frac{1}{2}$ m. m.

At first sight this insect seems to be exactly similar to *S. optatus*, except that it is much shorter in form; on examination, however, some very important differences are seen. The ninth joint of the antennæ is here scarcely more than half as broad as the tenth, the eyes are much smaller, the last joint of the maxillary palpi is broader, and the tibiæ are without erect setæ. I think, if the surface were denuded, it would be seen that the punctures on the elytra of *S. hystrix* are much coarser than in *S. optatus*; for on a denuded spot I perceive one or two very coarse punctures.

A single individual has been sent to me by Captain Broun.

EPISTROPHUS (nov. gen. Colydiidarum).

Corpus transversim convexus, rugosus, prothorace magno, basi ad elytra haud applicata. Caput in thoracem receptum. Antennæ 11-articulatæ, clava biarticulata. Prothorax lateribus subtus valde excavatis. Tarsi subtus setosi, articulo basali quam secundus longiore. Tibiæ extus dense ciliatæ, pro tarsorum receptione subimpressæ. Coxæ posteriores sat distantes. Abdomen breve.

The extraordinary little creature for which I propose this name has, so far as I know, no near described ally; but it displays in some respects an affinity with the *Tarphii*, and it should, I think, be classed in their neighbourhood. The head, by a movement of nutation, is so placed as to be protected by the front of the prosternum (as in the *Histeridæ*); and the antennæ are then received into the two very large, deep, and abruptly defined excavations of the thorax. The tibiæ are also a good deal modified for the protection of the tarsi; these, when turned back, are applied along the upper face of the tibiæ; and the outer and lower edge of the tibia is very densely ciliated. The excessively coarse and peculiar sculpture is much concealed by a dense exudation, which forms a covering very difficult to remove.

Epistrophus Lawsoni, n. sp.

E. niger, antennis pedibusque rufis, tuberculato-rugosus, setis breviusculis parce adpersus. Long. corp. 2 m. m.

Antennæ with the basal joint stout, and only its extremity visible from above; second joint stout and rather long, cylindric; third joint small, but more elongate than the small fol-

lowing joints; ninth joint small, but yet a little produced inwardly; tenth joint broad, strongly transverse; eleventh nearly as broad as tenth. Parts of the mouth small; maxillary palpi thick but very short. Eyes small, coarsely faceted. Antennal cavities not prolonged on underside of head. Thorax quite as long as broad, greatly narrowed behind, extremely convex transversely, especially in front; so sculptured as to appear covered with strongly elevated tubercles. Elytra narrowed towards the base, so that the shoulders are quite indistinct; sculptured in a similar manner to the thorax. Under surface with deep pits and depressions, the ventral sutures very deep.

A single specimen sent from Auckland by Mr. T. Lawson, in whose honour I have named this little species, one of the most interesting of those he has discovered.

Ithris gracilis, n. sp.

I. subcylindrica, angustula, rufescens, opaca; prothorace minus distincte trisulcato; elytris costatis. Long. corp. vix 3 m. m., lat. $\frac{2}{3}$ m. m.

Antennæ yellowish; first joint in large part exposed from above, second short and stout, third to eighth small, ninth and tenth forming a large broad club, ninth and tenth each strongly transverse, eleventh large. Head with the sides greatly elevated; its surface rather densely but indistinctly punctured, so as to be almost opaque. Thorax longer than broad, the sides straight and parallel, along the middle with a broad but ill-defined groove; and on each side of this central depression there is also another, but very obsolete, depression; the surface is densely and indistinctly sculptured, and is quite dull. Elytra each with three or four longitudinal costæ, and the surface between them densely sculptured, so that they are quite dull. Legs reddish yellow. Under surface dull, but only finely and indistinctly punctured, and with an extremely scanty and fine pubescence. All the pairs of coxæ are only slightly separated; the metasternum is elongate; the epipleuræ are narrow, and not accurately adjusted to the body; the tibiæ are considerably dilated at the extremity, and exhibit small but distinct spurs; the tarsi are slender, with the three basal joints rather short, and differing but little from one another in length; the first ventral segment, though not elongate, is distinctly longer than the second.

Auckland. A single individual, sent by Mr. Lawson.

Obs. This species is an undoubted member of the *Colydiini*; and as it displays pretty much the characters assigned by

Mr. Pascoe to his genus *Ithris*, I have used that word as part of its name. In many respects it approaches *Colydium elongatum* rather closely, and probably, like that species, lives in burrows in wood.

Bothrideres mæstus, n. sp.

B. niger, subopacus, antennis tarsisque rufescentibus; prothorace subquadrato, fortiter punctato; élytris apicem versus costatis. Long. corp. $4\frac{1}{4}$ m. m.

Nearly as large as *B. contractus*. Antennæ dark red; joints 3–9 small, 10 and 11 forming a broad club, the eleventh nearly as broad as the tenth. Head rather coarsely punctured. Thorax quite as long as broad, nearly straight at the sides, these not being rounded in front and only very slightly narrowed behind the middle; the surface is a little uneven, but has no distinct impression, it is rather coarsely punctured, the punctures about the middle being irregularly distributed. Elytra with the alternate interstices narrowed, and a little elevated towards the extremity, and bearing rather fine punctures. Underside rather coarsely punctured. Legs slender.

A single specimen has been sent me from Tairua by Captain Broun.

This species has the intermediate joints of the antennæ more slender and the club broader than in *B. contractus*, the legs more slender, and the thorax differently shaped.

Pycnomerus sophoræ, n. sp.

P. elongatus, parallelus, piceo-niger, subopacus; prothorace dorso impresso, impressione posteriorius minus distincte divisa; élytris sulcatis, sulcis punctatis, punctis distantibus. Long. corp. $3\frac{1}{4}$ – $4\frac{1}{2}$ m. m.

Antennæ distinctly 11-jointed, the eleventh joint a good deal narrower than the tenth. Head very coarsely punctured, with a very deep impression on each side in front, the outer margin of which is continued backwards close to the eye as an elevated fold. Thorax about as long as broad, slightly narrowed behind, coarsely and closely punctured, with a rather large impression on the middle, the posterior part of which is indistinctly divided into two. Elytra bearing deep broad striæ or grooves, at the bottom of which are deep punctures separated from one another by a long, raised interval; the interstices between the striæ are narrow, elevated, and impunctate. Underside closely and very coarsely punctured.

Sent from Tairua by Captain Broun, and indicated as found in the wood of *Sophora tetraptera*.

This species is variable in size; and the small individuals are often not so dark in colour as the larger ones. These smaller individuals therefore at first sight much resemble the following species, from which they can always be distinguished by the different impression on the thorax, and the more widely separated punctures of the striæ of the elytra.

Pycnomerus simulans, n. sp.

P. piceo-niger, parallelus; prothorace dorso longitudinaliter haud profunde biimpresso; elytris sulcatis, sulcis punctatis, punctis approximatis. Long. corp. $3\frac{1}{4}$ m. m.

This species is extremely similar to the preceding one; but the thorax has two not very distinct elongate impressions on the middle, the narrow space between which is without punctures; the grooves on the elytra are not so deep, and the punctures at the bottom of these are less widely separated from one another; the sculpture of the under surface is less coarse.

Also sent by Captain Broun from Tairua.

Pycnomerus minor, n. sp.

P. parallelus, ferrugineus, subnitidus; prothorace fere æquali; elytris punctato-striatis; antennis minus distincte 11-articulatis. Long. corp. $2\frac{3}{4}$ m. m.

Very similar in size, form, and colour to a *Rhizophagus*. Very closely allied to *P. simulans*, but smaller and paler in colour. The head is rather short; the fold near the eye very obsolete; the suture between the tenth and eleventh joints of the antennæ is indistinct. The thorax is longer than broad, slightly narrowed behind, with extremely indistinct traces of two impressions on the middle. The elytra are striated, and the striæ are coarsely punctured. The under surface is quite shining and moderately coarsely punctured.

Also sent by Captain Broun.

Obs. Pascoe and Leconte have proposed to distinguish the *Pycnomeri* with distinctly 11-jointed antennæ by the name of *Penthelispa*. Erichson, who pointed out this character, considered it unnecessary to make distinct generic names for the two forms; and the present species indicates the correctness of his judgment; for the antennæ are just intermediate in structure between the two forms.

Bitoma vicina, n. sp.

B. fusca, capite thoraceque brunneo-testaceis, elytris testaceis, an-

tennis pedibusque rufis; prothorace inæquali, haud costato; elytris minus distincte costatis, lateribus apiceque fusco-signatis. Long. corp. $3\frac{1}{2}$ m. m.

Antennæ reddish, the ninth joint scarcely larger than the preceding one, the tenth very broad and transverse, eleventh large, nearly as broad as the tenth. Head of a brownish colour, rugose, without distinct impressions. Thorax a good deal narrower than the elytra, not quite so long as broad, nearly straight at the sides, the front angles prominent; the surface bears some irregular elevations, so that it appears to be occupied by large irregular depressions; in sculpture it is similar to the head. Elytra rather depressed, of a testaceous colour, with some ill-defined darker marks near the sides, and a larger and more distinct one just before the apex; each elytron bears three or four costæ, and between these is coarsely sculptured; but the sculpture is made indistinct by some short rigid setæ. Legs reddish; tarsi rather long and slender.

Tairua (Captain Broun).

Obs. Though this species at first sight is extremely similar to *Bitoma insularis*, White, yet it is readily distinguished therefrom by the absence of the distinct costæ of the thorax of that species.

Bitoma distans, n. sp.

B. nigro-fusca, opaca, griseo-setosa, elytris rufo-maculatis, pedibus fusco-rufis; prothorace fere æquali, haud costato, elytris duplo angustiore; his fortiter punctatis, haud costatis. Long. corp. 4 m. m.

Antennæ blackish red, with the two joints of the club black. Thorax rather longer than broad, greatly narrower than the elytra, slightly curved at the sides, the front angles acute but only slightly prominent; the surface very opaque and obsoletely sculptured, without distinct elevations or depressions, but with grey setæ arranged in an irregular manner, so as to give a good deal the appearance of depressions between them. Elytra elongate, less dull than the front parts, of a blackish colour, with numerous large but indistinct reddish marks, punctured with rows of crenate punctures, and with the alternate interstices very indistinctly elevated; the setæ rather long and distinct, though not abundant. Underside blackish, very dull. Legs infusate red.

Also sent by Captain Broun from Tairua.

Bitoma rugosa, n. sp.

B. fusca, griseo et albido variegata, antennis pedibusque rufescentibus;

prothorace subquadrato, basin versus angustato, elytris fere duplo angustiore, inæquali; elytris rugosis. Long. corp. $2-2\frac{1}{2}$ m. m.

Antennæ reddish; joints 3-9 slender, tenth abruptly larger, strongly transverse; eleventh large, quite as broad as the tenth. Head rather short, rather strongly constricted behind to form the neck, rugose. Thorax small, widest at the front angles, gradually narrowed towards the base, the front angles acute; the surface rugose, and occupied by several ill-defined large impressions. Elytra uneven, their sculpture coarse but indistinct, and their pubescence or setæ variegated, its most conspicuous parts being some small, white, slightly elevated tubercles. Legs reddish; underside nearly black.

Tairua (Captain Broun).

Obs. The facies of this little species is very different from the other species of the genus I know, owing, I think, chiefly to the form of the thorax; but the general points of structure seem to be those of the genus to which I have assigned the species. The European *Xylolæmus fasciculatus* is, I judge, according to Duval, similar in appearance to this species; and though *B. rugosa* does not possess the peculiarly slender basal antennal joints of *Xylolæmus*, yet it is probable that it may be ultimately considered to be as much allied to *Xylolæmus* as to *Bitoma crenata*.

Bitoma nana, n. sp.

B. fusco-testacea, supra testacea, elytris (præsertim in lateribus) fusco-maculatis; prothorace basin versus angustato, lateribus serratis; elytris æqualiter scabrosis. Long. corp. $1\frac{3}{4}$ m. m.

Antennæ with joints 3-9 small, tenth and eleventh large. Head short, yellowish, quite rough and dull. Thorax much narrower than the elytra, a good deal narrowed towards the base, the sides coarsely serrate, the front angles not acute; it is yellowish in colour, rough and dull, and with very indistinct large impressions. Elytra yellowish, with some indistinct dark marks on the middle, and a large one covering most of the side; their sculpture is very indefinite, but consists apparently of regular rows of coarse punctures, the interstices between which are narrow and interrupted; and they are hispid with short erect setæ. The legs are yellowish, short and stout; the femora somewhat infusate.

A single specimen, sent from Tairua by Captain Broun.

This minute species in size and form much suggests a *Latri-dius*. It appears, however, to be closely allied to *B. rugosa*, but is very readily distinguished by the pale colour and the more ragged sides of the thorax.

Philothermus nitidus, n. sp.

P. piceo-castaneus, angustulus, subdepressus, nitidus, fere nudus; prothorace parcius fortiter punctato; elytris punctato-striatis, striis apicem versus obsolescentibus. Long. corp. 2 m. m.

Antennæ about as long as the thorax, yellowish; the basal joint stout, second joint rather slender, but distinctly thicker than the following ones; 3-9 similar to one another in thickness, the ninth being only slightly broader than the eighth; tenth and eleventh joints large, very distinctly separated from one another. Head small, immersed in the thorax up to the convex eyes. Thorax about as long as broad, straight at the sides, which are a little rounded at the front, the hind angles rectangular; the surface bearing rather large but sparing punctures, and with a small and indistinct impression at the base on each side. Elytra with rows of distinct punctures, which become obsolete at the extremity. Legs reddish; front tibiæ rather strongly dilated towards the extremity.

Tairua. A single individual found by Captain Broun.

Obs. This species has exactly the appearance of our European species of *Cerylon*; but the two large and very distinct apical joints of the antennæ induce me to call it a *Philothermus*.

Aglycyderes Wollastoni, n. sp.

A. corpore superne hispido, antennis pedibusque rufescentibus, subtus nigricante; antennis articulis duobus ultimis subclavatis. Long. corp. 2-3 m. m.

Antennæ reddish, short; the two basal joints stouter than the following ones, joints 3-8 small and bead-like, tenth joint subquadrate, both broader and longer than the preceding joints; eleventh joint almost oval, quite as broad and two or three times as long as the tenth. Head very variable in size, abruptly constricted at the neck, the forehead rather convex; it is of a reddish colour and rugose, but hispid, so that the sculpture is concealed. Thorax transversely quadrate, straight at the sides, a little narrower than the elytra, the surface rugose and hispid. Elytra rather elongate and parallel, similar in colour to the head and thorax; their sculpture very coarse but indistinct, and consisting of rows of coarse punctures separated by narrow interstices, hispid, being clothed with both long and short setæ. Underside pitchy black; the metasternum coarsely but sparingly punctured. Legs red, short, hispid.

Several specimens sent from Tairua by Captain Broun; one of them was sent amongst a lot of Coleoptera found on *Cyathea dealbata*, one of the tree ferns.

Obs. The structure of the antennæ, as well as their insertion, seems to justify the location of this insect in the Colydiidæ. The anterior coxæ are very small, and their cavities completely closed behind; and this is the only character, so far as I can see, which would throw any doubt on the propriety of the association mentioned. Mr. Wollaston, in calling attention to the peculiarities of this important genus, has already suggested its affinity with the Colydiidæ. The New-Zealand insect I have here described approaches the *Aglycyderes setifer* closely in appearance; but it differs in the structure of the antennæ, as well as in its remarkably widely separated anterior coxæ. The Colydiidæ as a group is one of the less specialized of the Coleopterous groups; and it is not therefore surprising that we should find some of its members exhibiting wide and puzzling affinities. I am unable to see any close relationship in *Aglycyderes* with Bruchidæ and Anthribidæ; and if the genus be not accepted as an aberrant member of the Colydiidæ, I think there is no other course but to do as Mr. Wollaston has suggested, viz. to regard it as representing a distinct family of Coleoptera.

III.—*Eozoon canadense*, according to Hahn.

By J. W. DAWSON, LL.D., F.R.S., F.G.S.

WE may probably expect, for some time, to find enthusiastic mineralogists suggesting plausible theories to account for *Eozoon* by purely physical causes; for the doctrine of "plastic force" is not yet extinct in this particular case. Hahn's recent memoir is one of these efforts, and is certainly creditable to his ingenuity and boldness, more especially as it is quite at variance with the hypothesis advocated by Messrs. King and Rowney. It is, however, in my judgment, so improbable that, but for the sanction given to it by a translation into the 'Annals,' and for the new statements which it makes as to certain histological facts, it would scarcely merit a serious discussion. Yet it affords an opportunity to notice a number of minor points respecting *Eozoon*, which, though not overlooked by those who have studied it, have not been brought prominently forward, lest they should confuse the minds of geologists as to essential facts.

Hahn's explanation refers only to the specimens of *Eozoon* mineralized with serpentine, the only specimens which he appears to have studied. It does not apply to those mineralized with calcite, Dolomite, Loganite, or pyroxene, except in so far as the cases of these may be supposed to be covered by