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These are very common in the still waters, and mud, in all parts of the State. They are usually about the size of a large horse hair, and are from one to six or eight inches in length. In color they vary from pure white to nearly black, and hence we probably have several species. The vulgar notion that they originate from hairs which fall from horses and cattle, and become animated in the water, would seem to be too absurd for contradiction; and yet, absurd as it is, people are to be found who believe it."\*

The same popular opinion is prevailing in Europe. Gordii have been noticed in the body of insects, also, by an American entomologist, Dr. Th. Wm. Harris, who says: "I have taken three or four of these animals out of the body of a single locust."† They have been found, by others, within the cricket, (*Acheta abbreviata*).

We saw a specimen, six or seven inches in length, caught in the clear waters in the vicinity of Richmond, (Va.) Several others were detected by Dr. Leidy in the neighborhood of Philadelphia.

Finally, we may mention several specimens of Gordii from Oregon, brought home by the U. S. Exploring Expedition.

Gordii, therefore, are spread all over the Western hemisphere.

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The Committee on the following paper, by Dr. Leidy, reported in favor of its publication in the Proceedings.

*Corrections and Additions to former Papers on Helminthology published in the Proceedings of the Academy.* By JOSEPH LEIDY, M. D.

BODO, *Ehrenberg*.

1. BODO HELICIS, *Diesing*: Syst. Helm. i, 45.

*Cryptobia Helicis*, *Leidy*: Proc. A. N. S. iii, 101; An. and Mag. of Nat. Hist. xix, 209.

*Cryptoicus Helicis*, *Leidy*: Journ. A. N. S., new series i, 67.

VERTEX, *Hemprich et Ehrenberg*.

1. VERTEX MARGINATUS, *Diesing*: Syst. Helm. i, 229.

*Prostoma marginatum*, *Leidy*: Proc. A. N. S. iii, 251. Rarely more than 3-5ths line long. Abundant in ditches below the city of Philadelphia.

AORURUS, *Leidy*: Pr. A. N. S. iv, 230.

*Characteribus reformatis*. Body cylindroid, broadly and strongly annulated. Tail long, spiculate, and inflexible. Mouth simple, round, unarmed. Female generative aperture posterior to the middle. Male with a single spiculate penis.

1. *Sub-genus*. STREPTOSTOMA, *Leidy*: Pr. A. N. S. iv, 230.

*Characteribus reformatis*. Annuli very broad, distinct, and few in number. Mouth large, circular; buccal organ (*oesophagus*) and gizzard pyriform. Tail very long, and ensiform.

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\* Natural History of Vermont, 1842, 8vo., p. 170.

† Report on the Insects injurious to vegetation, 1842, p. 155.

1. STREPTOSTOMA AGILE, *Leidy*: Proc. A. N. S. iv, 230.

2. STREPTOSTOMA GRACILE, *Leidy*: Proc. A. N. S. v, 100.

*Oxyuris Diesingii*, *Hammerschmidt*: Isis von Oken, 1838, 354, Taf. iv, fig. vi.

*Oxyuris Blattæ orientalis*, *Hammerschmidt*: Naturwis. Abhandl. von Haidinger i, 284, Tab. x, Figs. 4, 7, 13—15.

2. *Sub-genus*. THELASTOMA, *Leidy*. Pr. A. N. S. iv, 231.

*Characteribus reformatis*. Annuli few in number, broad. Oral annulus papillaform. Mouth small, circular; buccal organ long, cylindrical; gizzard pyriform. Tail spiculate, moderately long.

1. THELASTOMA ATTENUATUM, *Leidy*: Proc. A. N. S., iv, 231.

2. THELASTOMA APPENDICULATUM, *Leidy*: Proc. A. N. S., v, 101.

*Oxyuris Blattæ orientalis*, *Hammerschmidt*: Naturw. Abhandl. von Haidinger i, 284, Tab. x, Figs. 10—12, (♂ 8, 9, 20?)

3. THELASTOMA LABIATUM, *Leidy*: Pr. A. N. S. v, 101.

4. THELASTOMA ROBUSTUM, *Leidy*: Ib. v, 101.

5. THELASTOMA BREVICAUDATUM, *Leidy*: Ib. v, 208.

The larva of a lamellicorn insect, from which this species was obtained, Dr. J. L. Le Conte informs me, belongs to *Scarabeus relictus*.

6. THELASTOMA GRACILE, *Leidy*.

*Oxyuris gracilis*, *Hammerschmidt*: Naturw. Abh. v. Haidinger i, 287, Tab. x, Figs. 21—25.

7. THELASTOMA DILATATUM, *Leidy*.

*Oxyuris dilatata*, *Hammerschmidt*: Ib. i, 287, Tab. x, 26, 27.

8. THELASTOMA LATICOLLE, *Leidy*.

*Oxyuris laticollis*, *Hammerschmidt*: Ib. i, 288, Tab. x, 28—34.

### LUMBRICULUS, *Gruby*.

*Acestus*, *Leidy*: Pr. A. N. S. v, 226.

*Characteribus reformatis*. Body filiform, cylindroid, hyaline. Podal spines in 4 rows, in fasciculi of 2 to 5, furcate. Upper lip simple, conoidal. Girdle none. Eyes none. Blood bright red.

1. LUMBRICULUS SPIRALIS, *Leidy*.

*Acestus spiralis*, *Leidy*: Pr. A. N. S. v, 226. Description from the young; found in the spring of the year.

*Adult*.—Body very long and delicate, filiform, cylindrical; posteriorly obtusely rounded. Upper lip compressed, conoidal. Annuli over 200. Podal spines in 4 rows, 3 to 5 anteriorly 2 to 3 posteriorly in each fasciculus, long sigmoid, furcate. Intervals of the viscera distended with globular corpuscles, which, shining through the translucent integument, give the annuli a deep greenish or bluish white opalescent appearance.

Length from 1 to 3 inches; breadth from 1.8th to 1.5th line. One of three inches in length had 276 annuli.

*Habitation.*—In the mud about the roots of *Pontederia cordata*, *Sagittaria sagittifolia*, and *Arum virginicum*, in ditches below Philadelphia. It is also often found coiled up in a remarkably close knot, among the outer decaying petioles of the leaves of the plants just mentioned. Months of August and September.

2. *LUMBRICULUS HYALINUS*, *Leidy*.

*Acestus hyalinus*, *Leidy*: Proc. A. N. S. v, 226. Description from the young in the Spring.

*Adult.* Body filiform, red in color, the posterior fifth yellowish, translucent. Upper lip sub-acute. Caudal annulus obtuse. Annuli from 120 to 180. Podal spines in fasciculi of from 3 to 8, furcate.

Whole length 2 inches, with usually 150 annuli; breadth anteriorly 1-5th line, posteriorly 1-6th line. One of 1 inch is about 1-6th line anteriorly, 1-8th of a line posteriorly.

*Habitation.* Found in ditches with the preceding, the anterior two-thirds of the body burried in the mud, with the tail rapidly vibrating like *Saenuris* or *Strephuris*. Months of August and September.

CHÆTODEMUS, *Genus novum*.

Body cylindroid. Upper lip very large and broad. Podal spines in 4 rows, fasciculate, aristate. Mouth large, inferior; pharynx capacious, œsophagus cylindrical; intestine capacious. Eyes none. Blood colorless. Increasing by segmentation.

1. *CHÆTODEMUS PANDURATUS*, *Leidy*.

Body transparent, colorless. Upper lip panduriform, broader than the body. Podal spines in fasciculi of 4, long sigmoid, aristate, divergent, 1-666th in. long, commencing with the oral segment. Pharynx oval; œsophagus narrow, cylindrical; intestine large, narrowing posteriorly.

Whole length of an individual of three segments 1 line; breadth 1-570th inch. Breadth of upper lip 1-500th inch. First segment of the body with 7 annuli; second with 5; the third with 9.

*Habitation.* Found in stagnant ponds and ditches.

*Remark.* Allied closely to *Æolosoma*.

STYLARIA, *Lamarck*.

1. *STYLARIA PALUDOSA*, *Lamarck*.

*Nais proboscidea*, Linn. Syst. Nat. 13th ed. vol. i, pt. 6, p. 3121.

Body cylindroid, colorless, transparent. Without segmentation from 15 to 20 annuli; one of two segments 40 annulations. Podal spines, 7 to 10 in each fasciculus, long sigmoid, hooked and bifid at the free end. Setæ commencing after the fifth annulus from the mouth, usually single, occasionally two, from 1-400th in. to 1-66th in. in length. Caudal annulus truncated, sinuous, fringed with short stiff hairs. Upper lip broad, emarginate, with a cylindroid, flexible, proboscidiform appendage from the 1-33d to the 1-25th in. long projecting from its notch, fringed with short, stiff hairs. Eyes two, transverse reniform, situated one on each side of the mouth. Mouth triangular; pharynx capacious, œsophagus cylindrical, terminating in the intestine at the third setous annulus.

Whole length from 2 to 4 lines ; breadth 1-6th line.

*Habitation.* In ditches and ponds in the neighborhood of Philadelphia.

2. *STYLARIA FOSSULARIS*, *Leidy*.

Body of two segments, composed of 24 annuli in the first, 22 to the last. Podal spines 5 to 7 in each fasciculus. Setæ commencing after the fifth annulus, usually double, to 1-66th in. long. Upper lip broad, demi-oval, compressed, not emarginate, with a cylindroid, flexible, probosciform appendage the 1-33d in. long projecting from its summit. Eyes two, transverse, one on each side of the mouth. Pharynx capacious, extending to the 4th annulus ; œsophagus cylindroid, tortuous, extending to the 7th annulus.

Whole length  $4\frac{1}{2}$  lines ; breadth 1-6th line.

*Habitation.* Found with the preceding.

ANELCODISCUS, *Genus novum*.

Body cylindroid, smooth, posteriorly terminated by a cordiform, retractile acetabular disk. Mouth and anus terminal. Intestine simple, straight.

1. *ANELCODISCUS PELLUCIDUS*, *Leidy*.

Body cylindroid, colorless, transparent ; anteriorly rounded, obtuse ; posteriorly spreading into a cordiform disk for attachment. Disk retractile : when retracted, the body becoming dilated oval in the middle and the posterior part doubly intussuscepted.

Length 1-100th in. ; breadth 1-1000th inch.

*Habitation.* Parasitic within the intestine of *Stylaria fossularis*.

*Remarks.* From the translucency of the last mentioned worm, its parasite may be seen within the intestine attached to the mucous membrane by means of its posterior cordiform disk. While attached it alternately retracts its body with a jerk, and then lengthens itself ; in the former movement the posterior third of the body becoming doubly intussuscepted, so as to have the appearance of a double articulation. When detached the same movements take place, but in that of retraction the cordiform disk is entirely drawn within the animal's body. More details of this curious parasite I did not obtain, for, although I saw three, and removed them from the intestine of the *Stylaria*, yet their movements were so active I could not study them to advantage, and to quiet them I tried a minute portion of the vapour of chloroform, which instantly killed them, but at the same moment they underwent total destruction. Since then I have not been able to examine others.

GREGARINA, *Dufour*.

1. *GREGARINA SCARABEI RELICTI*, *Leidy*.

*Gregarina*, *Leidy*: Pr. A. N. S. v, 208. Found in the larva of *Scarabeus relictus*.

*EMEA*, *Leidy*: Pr. A. N. S. v, 125.

*Characteribus reformatis.* Body linear, compressed. Head continuous with the body, with two lenticular depressions upon each side. Mouth infero-terminal. Œsophagus styliferous. Eyes 4 to 6 anterior. Fresh water Nemertinea.

1. *EMEA RUBRA*, *Leidy*: Pr. A. N. S. v, 125.

Body contracting irregularly, reddish or yellowish flesh colored. Anteriorly and posteriorly obtusely rounded. Eyes two or three black spots, placed in a line behind one another, upon each side of the head: often irregular. First pair of lateral depressions opposite the interspace of the anterior two pairs of eyes; second pair just postero-lateral to the posterior pair of eyes. Œsophagus very long and tortuous, villous, furnished at its bottom with a single spine or nail-like tooth, and four others upon each side in a rudimentary condition, enclosed in a sac. Intestine becoming obliterated posteriorly.

Ordinary length from 1 to 6 lines; breadth from 1-8th to 1-5th line. Occasionally 10 lines long by 1-3d broad.

*Habitation.* In marshes, ditches, and stagnant ponds in the vicinity of Philadelphia.

*Variety a.* White, 2 lines long; 1-6th line broad.

*Habitation.* On the under side of stones in the Schuylkill River.

*Remark.* I have sometimes met with the largest sized females without the appearance of a developed ovum, and at others, those of from 1 to 3 lines in length, with from 3 to 18 large yellow eggs.

2. *EMEA DUGESII*, *Leidy*.

*Polia Dugesii*, *Quatrefages*: Rech. Anatom. et Zoolog. ii, 211.

DENDROCÆLUM, *Oersted*.

Characters same as planaria, with the head furnished with a hemispherical cotyloid cavity, capable of eversion into the form of a pediculated discoidal acetabulum.

1. *DENDROCÆLUM SUPERBUM*, *Girard*: Proc. Bost. Soc. Nat. Hist. iii, 265; Keller and Tiedemann, Nordamerik. Monatsb. ii, 2.

Body thin, plano-convex, translucent white, with the sides nearly parallel; anteriorly truncated, with the lateral angles slightly projecting; posteriorly obtusely angular. Cotyloid cavity of the head prominent, opening at the anterior truncated margin, when everted presenting the form of a circular disk supported upon a broad columnar contraction of the head. Eyes two, nearly globular, composed of a transparent vitreous humour enclosed at the postero-internal half by a black choroid. Œsophagus long, keg shaped; intestine delicately and minutely ramified, brown or blackish-brown in color.

Length 3 to 8 lines; breadth 2-5th to 4-5th of a line. The longest may contract to 3 lines by 4-5th in breadth.

*Habitation and Remarks.* In ditches communicating with the Delaware and Schuylkill Rivers, below Philadelphia, creeping upon the submerged stems of *Arum virginicum*, *Pontederia cordata*, *Nelumbium luteum*, and *Zizania aquatica*.

When seized or irritated it everts its acetabulum, by which it attaches itself to surrounding bodies with the tenacity of a leech.

RHYNCHODEMUS, *Genus novum.*

Body cylindroid, ob-fusiform. Head continuous with the body, probosciform, recurvatile, without tentacular appendages. Eyes two, lateral. Interior structure planaroid. Terrestrial.

1. RHYNCHODEMUS SYLVATICUS, *Leidy*: Pr. A. N. S. v, 241.

2. RHYNCHODEMUS ? TERRESTRIS, *Leidy*.

*Fasciola terrestris*, *Müller*.

*Planaria terrestris*, *Gmelin*: Syst. Nat. 3092 ; *Duges*: An. Sc. Nat. 21, 82, Pl. 2, fig. 18 ; *Oersted*: Entw. d. Plattw. ; *Diesing*: Syst. Helm. i, 206.

BDELLOURA, *Leidy*: Proc. A. N. S. v, 242.

Body dilated, plano-convex ; posteriorly, dilated, constricted, truncated. Head continuous with the body ; tentacular appendages none. Mouth inferior, sub-central ; œsophagus protractile, cylindrical. Eyes two. Marine.

1. BDELLOURA PARASITICA, *Leidy*: ib.

2. BDELLOURA RUSTICA, *Leidy*: ib. 243.

3. BDELLOURA ? LONGICEPS, *Leidy*.

*Planaria longiceps*, *Duges*: An. Sc. Nat. 21, 83, Pl. 2, fig. 21 ; *Diesing*: Syst. Helm. i, 207.

PLANARIA, *Müller*.

1. PLANARIA MACULATA, *Leidy*: Pr. A. N. S. iii, 251 ; v, 225.

*Dugesia maculata*, *Girard*: Keller and Tiedemann, Nordam. Monatsb. ii, 23.

Body thin, spatulate, with sharp, nearly parallel, lateral margins ; anteriorly thin trapezoidal, the lateral angles formed by an acute, angular, erectile tentacular appendage ; posteriorly sub-acute ; superiorly a little convex, irregularly maculated with black, in the young sometimes with brown ; inferiorly translucent whitish. Eyes two, reniform, proximate, situated at the inner side of an oval translucent space.

Length from 2 to 8 lines.

*Habitation*. In ditches and ponds in the neighborhood of Philadelphia ; upon the under side of stones in the Delaware and Schuylkill Rivers, abundant.

*Variety a*. Brownish, indistinctly maculated.

Length 8 lines.

*Variety b*. Maculations greyish, indistinct, with the intestine blackish, brownish or greenish, frequently with a lighter stripe down the back.

Length 6 lines.

*Habitation*. Schuylkill River, under stones.

CATESTHIA,\* *Genus novum.*

Body very soft, cylindroid. Head continuous with the body. Mouth infero-terminal ; œsophagus amphoraform. Eyes two, deeply seated in the interior of an oval translucent space of the integument.

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\* Κατῆσθιω, devoro.



1. *CATESTHIA STELLATO-MACULATA*, *Leidy*.

Body oblong, cylindroidal; anteriorly and posteriorly obtusely rounded; superiorly maculated closely and regularly with very much branching, stellate, black pigment cells, which cease abruptly laterally, and anteriorly form 3 lobes, in the translucent whitish interspaces of which, deeply seated, are the eyes, which are black and globular; inferiorly translucent whitish. Mouth round, very large and dilatable; œsophagus amphoraform, very large.

Length 3 to 8 lines, breadth 1-4th to 1 line; thickness 1-5th to 4-5th line.

*Habitation.* Upon the under side of stones, in the Delaware and Schuylkill Rivers, below tide water mark.

*Remarks.* Closely allied to *Vertex*, *Hemp.* and *Ehrenb.*, but has not 4 eyes, and has a differently arranged generative apparatus.

It is exceedingly voracious; I have seen an individual, of 8 lines in length, swallow whole a *Planaria maculata* 6 lines in length.

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Mr. Lea announced the death of RICHARD COWLING TAYLOR, which took place on Sunday morning, the 26th inst., at his residence in 13th street, in his 62d year, after a very short illness.

Mr. Lea remarked, that it was very rarely that the members of the Academy had to deplore so severe a loss, as that sustained by the death of their distinguished fellow member Mr. Taylor.

In his particular branch of Geology (economic-geology) he stood pre-eminent, and as a mining engineer, no authority in this country, or, perhaps, in Europe, was superior to that of Mr. Taylor. By early education and association in England, he became versed, in the most thorough manner, in these important sciences at an age when such education usually begins. Hence, his first literary productions brought him prominently before the learned world, and he was introduced into literary and scientific societies, where he took an active part. The first work of importance which he published, was one on the Monastic remains of the county in which his father lived as a country gentleman, and on whose property there was a noted Anglo-Norman ruin. It was this probably that induced Mr. Taylor first to turn his attention to this branch of knowledge, and the result was the "Index Monasticus, in the ancient kingdom of East Anglia," published in 1821, in 1 vol. folio,\* which at once gave him a reputation for thorough investigation and exactness, which noted all his after works, and which has rarely been excelled. This work was received with so much favor, that Mr. Taylor was induced, at the request of the publishers, to undertake that thorough and learned work which he called a "General Index to Dougdale's Monasticon Anglicanum," in 1 vol. folio, with plates and maps, which was published in 1830. This took Mr. Taylor two years to complete, and was said to be so perfect as to require nothing further to be added in regard to it. In his profession, he had the great advantage of a most thorough and complete education, and he was associated in business with the late Wm. Smith, who has been considered as "the father of British Geology," on account of his having been the first geologist in England who attempted to classify the rocks of that country, by their characteristic fossils; and who was said

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\* At a public sale his private copy, with some notes, brought £30.