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*Volume XI, Part I, 1898.*

CATALOGUE OF THE TYPES AND FIGURED SPECIMENS  
IN THE PALÆONTOLOGICAL COLLECTION OF THE  
GEOLOGICAL DEPARTMENT, AMERICAN  
MUSEUM OF NATURAL HISTORY.

By R. P. WHITFIELD, assisted by E. O. HOVEY.

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*July 22, 1898.*

## P R E F A C E .

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This Catalogue is intended to embrace all the type and figured specimens in the Palæontological Collection of the Geological Department of the American Museum of Natural History. The term 'type,' as employed herein, is applied to the specimens which have been used in the original description of a species, whether illustrated or not, and in the further elucidation of the species by the same author. A 'figured specimen' is one which has been identified with the name by a different author from the one who described the species, and which has been illustrated by him in the work to which reference is given. A 'generic type' may be a specific type also, or only a figured specimen. The Catalogue is one of individuals, and therefore does not pretend to give the bibliography of the species, but each entry gives the history of a particular specimen or set of specimens. In many instances there are other individuals in the type series than those which were figured, but these have not been entered separately.

In the tabulation the first column indicates the minor geological subdivision to which the specimen or set of specimens belongs; the second, the number which it bears in the Museum catalogue; the third, a statement as to whether the specimen is a type or only a figured specimen. The fourth column gives the generic and specific names with the author of each. In every instance the person whose name stands at the right hand side of this column is the author of the publication cited on the same line. In the case of the 'figured specimens' the name of the author of the species is placed in parenthesis. When a specimen stands under a different generic or specific name from the one under which it was first published, the original name is put in italics in its proper place in this column, and the revised name will be found in the

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column of remarks. The complete history of the specimen or set of specimens will be found under the revised name. In some instances the name has been changed more than once, but such changes are noted only as far as they pertain to the particular specimen or set of specimens in question. A synonymous generic name is indicated in this column by italics. The next five columns contain the references to places of publication by name of work, volume or year of publication, page, plate and figure. If there is but one figure of a specimen cited, an abbreviated statement is inserted, when practicable and desirable, to show what view was used. All the references are grouped together in chronological order, except when the specific name has been changed. In case of such change, the first reference is to the place where the new name was first applied, after which the chronological order is followed, as elsewhere. No copied figures are noted. The tenth column gives localities and the eleventh contains remarks. In the last note is made of changes which have been made in the reference of the specimen to genus or species, and there is a brief statement as to the character of the specimen or specimens and their condition.

The order of arrangement is primarily stratigraphical, as far as the great geological subdivisions, Cambrian, Lower Silurian, etc., are concerned, but under these heads the arrangement is partly zoölogical and partly alphabetical. Plants are placed first, and then the animals are put in ascending order under subkingdoms and classes. Further classification has not usually been considered advisable, genera and species being arranged in strictly alphabetical sequence.

In Volumes I and II of the Palæontology of New York, the terms dorsal and ventral as applied to the valves of Brachiopods are used in the opposite sense from that now used. In this Catalogue the prevailing usage is followed.

# ABBREVIATIONS.

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## AUTHORS' NAMES.

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B. & S.	Billings & Salter.
BILL	E. Billings.
BLAINV.	H. M. D. de Blainville.
CON.	T. A. Conrad.
D'A. & V.	d'Archiac & de Verneuil.
DEFR.	Defrance.
D'ORB	Alcide d'Orbigny.
EDW	Milne-Edwards.
EICHW.	E. von Eichwald.
FISCH.	Fischer von Waldheim.
FR.	F. Frech.
GOLDF.	E. Goldfuss.
GRN.	J. Green.
H.	James Hall.
H. & C.	Hall & Clarke.
H. & S.	Hall & Simpson.
H. & W.	Hall & Whitfield.
LAM	J. P. B. A. de M. de Lamarck.
LAPW.	C. Lapworth.
LINN	Linné.
M. & W.	Meek & Worthen.
MILNE-EDW.	Milne-Edwards.
NICH.	H. Alleyne Nicholson.
RAF	C. S. Rafinesque.
ROEM.	Ferd. Roemer.
SOW.	J. Sowerby.
VAN. or VANUX	Lardner Vanuxem.
VERN	E. de Verneuil.
W.	R. P. Whitfield.
W. & S.	Wachsmuth & Springer.
WAHL.	Wahlenberg.
WHITE	R. P. Whitfield.

# ABBREVIATIONS.

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## LIST OF WORKS CITED.

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- Leth. Geog. . . . . Lethæa Geognostica ; by Ferd. Römer. Revised edition in press.
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- M. Am. Tr. . . . . A Monograph of the Trilobites of North America ; by Jacob Green. 16mo, Philadelphia, 1832.
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- St. G. N. Y. . . . . Annual Report of the State Geologist (of New York). 8vo and 4to, Albany. The first was that for 1881.
- U. S. G. S. . . . . Bulletin of the United States Geological Survey. 8vo, Washington. Numbered parts have been issued at irregular intervals since 1883.

CATALOGUE OF TYPES AND FIGURED  
SPECIMENS.

**Cambrian.** Kingdom PLANTÆ. Subkingdom

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
L. C. ?	200	Fig'd.	<b>Buthotrephis</b> Hall. <i>flexuosa</i> ( <i>Emmons</i> ) Hall.	Pal. N. Y.	I	263	69A	I
			<b>Fucoides</b> Brongniart. <i>duplex</i> .....	.....	.....	.....	.....	.....
U. C.	355	Type.	<b>Palæophycus</b> Hall. <i>duplex</i> ..... Hall.	Lake Sup.	2	226	A23	I

Kingdom ANIMALIA. Subkingdom

U. C.	289	Gen. and Sp. Type.	<b>Dendrograptus</b> Hall. Hallianus.... <i>Prout.</i> <i>Hall.</i> " " " " " " " " <b>Graptolithus</b> Linn. <i>Hallianus.</i> <b>G. (Dendrograptus)</b> Hall. <i>Hallianus</i> .....	Am. J. Sci. Geol. Wis. N. Y. S. M. Can. O. R. N. Y. S. M.	II, II I 16 Dec. 2 20	189 21 124 127 177	p. 190 ..... ..... ..... .....	1c-f, 2 1a-c 1a-c 1a-c 10
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MOLLUSCOIDEA.

L. C.	208	Type.	<b>Billingsella</b> Hall. <i>orientalis</i> .... <i>Whitfeld.</i>	A. M. N. H.	I	144	14	6
U. C.	$\frac{200}{2}$	Gen. and Sp. Type	<i>pepina</i> ..... <i>Hall.</i> " " <i>H. &amp; C.</i>	N. Y. S. M. St. G. N. Y. Pal. N. Y.	16 2 8, pt. 1	134 ..... 230	6 37 7	23-26 16-19 16-19
"	$\frac{200}{3}$	" "	" ..... <i>Hall.</i>	N. Y. S. M.	16	134	6	27
			<b>Dicellomus</b> Hall. <i>crassus</i> ..... <i>politus</i> .....	.....	.....	.....	.....	.....
U. C.	289a	Type.	<b>Discina</b> Lamarck. <i>? inutilus</i> ..... <i>Hall.</i>	N. Y. S. M.	16	130	6	11
			<b>Discinella</b> Hall. ....	.....	.....	.....	.....	.....
U. C.	$\frac{200}{2}$	Fig'd.	<b>Lingula</b> Bruguière. <i>ampla</i> ( <i>Owen</i> ).... <i>Hall.</i> " " " " <i>antiqua</i> ..... <i>surora</i> ..... " var. ....	Geol. Wis. " " N. Y. S. M.	1861 I 16	24 21 125	Ct. 2 6 6	4, ext.? 10 "
U. C.	$\frac{200}{1}$	Type.	<i>mosia</i> ..... <i>Hall.</i> " " <i>pinniformis</i> ..... <i>polita</i> ..... <i>prima</i> .....	N. Y. S. M. " " " "	16 16	126 126	6 6	1-3 3a, ext.



## CRYPTOGAMIA.

## Class THALLOGENA.

LOCALITY.	REMARKS.
Greenwich, N. Y. .....	In slate. Referred to Hudson River group in the volume.  See <i>Palæophycus</i> .
Pictured Rocks, L. Sup.	As <i>Fucoides</i> ? Slab bearing several stems. Not described.

## CŒLEENTERATA.

## Class HYDROZOA.

..... ..... .....	As type of <i>Graptolithus Hallianus</i> . " <i>G. (Dendrograptus)</i> . Made generic type.
Osceola Mills, Wis. ..... .....	A large stipe with branchlets; fronds imbedded. Two blocks.  See <i>Dendrograptus</i> .  " "

## Class BRACHIOPODA.

Georgia, Vt. ..... 3 miles above Reed's Landing, Minn. Kickapoo, Wis. ..... .....	As <i>Orthisina</i> . Interior imprint of ventral valve. " <i>Orthis</i> . " <i>Orthis?</i> ( <i>Orthisina?</i> ) Made generic type. Exterior imprint of a dorsal and a ventral valve and interior imprint of the two valves. As <i>Orthis</i> . Interior imprint ventral valve.  = <i>Obolella</i> . See " " " "
Mazomanie, Wis. ..... .....	Imprint in sandstone retaining some shell.  See <i>Hyalithellus micans</i> .  ,
..... Mazomanie, Wis. ..... Mazomanie, Wis. Stillwater, Minn. ..... .....	As type of <i>L. aurora</i> Hall. " " Ventral? valve, imbedded. See <i>Lingulepis pinniformis</i> . " <i>Lingula ampla</i> and <i>Lingulella aurora</i> . " <i>Lingulella Stoneana</i> . Two imprints and an imbedded individual retaining some shell. Imbedded individual retaining shell. See <i>Lingulepis</i> . " <i>Obolella</i> . " " and <i>Lingulepis pinniformis</i> .

MOLLUSCOIDEA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
U. C.	296	Fig'd.	<b>Lingula</b> Bruguière— <i>Cont. prima</i> (Con.).....Hall.	Lake Sup.	2	204	23	1a
"	291	Type.	<i>winona</i> .....Hall.	N. Y. S. M.	16	126	6	9, ext.
"	292	"	<b>Lingulella</b> Salter. <i>aurora</i> .....Hall.	" "	16	126	6	4, 5
"	"	"	".....H. & C.	Pal. N. Y.	8, pt. I	...	2	12, 13
L. C. ?	205	"	<i>cælata</i> .....Hall.	Pal. N. Y.	1	290	79	9a-c
U. C.	294	"	<i>Stoneana</i> .....Whitfield. Hall. H. & C.	Geol. Wis. N. Y. S. M. Pal. N. Y.	4 16 8, pt. I	344 127 ...	6	6-8 9-11
"	274	"	<b>Lingulepis</b> Hall. <i>minima</i> .....Whitfield.	A. M. N. H.	1	141	14	1, 2, enl.
"	275	Fig'd.	<i>pinniformis</i> (Owen)...H.	Lake Sup.	2	204	23	1e, ext.
"	"	"	" " " "	" " "	2	204	23	2a, b
"	"	Gen. T.	" " " "	Geol. Wis. N. Y. S. M.	1 16	21 129	Ct. 2 6	3, ext. v. v 13, 14
L. C.	209	Type.	<b>Obolella</b> Billings. <i>crassa</i> .....Hall.	Pal. N. Y. N. Y. S. M.	1 23	290 246	78 13	8a, ext. 6, ext. X 2
"	"	"	".....H. & C.	Pal. N. Y.	8, pt. I	67	2	31, 32
"	"	"	".....Hall. H. & C.	" "	1 8, pt. I	292 67	80 2	3a, b. 33
U. C.	298	"	<i>polita</i> .....Hall.	Geol. Wis.	1861	24	...	...
"	"	"	" " " "	" " "	1	21	Ct. 2	1, ext.
"	"	"	" " " "	N. Y. S. M.	16	133	6	19-21
"	"	"	" " " " H. & C.	Pal. N. Y.	8, pt. I	67	2	40, 41
"	276	Fig'd.	<i>prima</i> (Con.).....Hall. Whitfield.	" "	1	3	1	2, ext.
			<b>Orthis</b> Dalman. <i>pepina</i> .....	A. M. N. H.	1	142	14	3-5
			<b>Orthisina</b> d'Orbigny. <i>orientalis</i> .....	.....	.....	.....	.....	.....

Subkingdom MOLLUSCA.

**Avicula** Klein.  
*? desquamata*.....

Class GASTROPODA.

U. C.	304	Type.	<b>Euomphalus</b> Sowerby. <i>? vaticinus</i> .....Hall.	N. Y. S. M.	16	136	6	29, top.
"	305	"	<b>Maclurea</b> Le Sueur. <i>Wadsworthi</i> ...Whitfield.	A. M. N. H.	1	153	14	16, base.
			<b>Metoptoma</b> Phillips. <i>rugosa</i> .....	.....	.....	.....	.....	.....
U. C.	303	Type.	<b>Platyceras</b> Conrad. <i>primordiale</i> .....Hall.	N. Y. S. M.	16	136	6	28, side.

## Class BRACHIOPODA—Continued.

LOCALITY.	REMARKS.
Tequamenon Bay, L. Sup. Lansing, Ia.	Exfoliated valve, imbedded. Is the original of figure and description and is a linguloid shell. Valve, imbedded.
Mazomanie, Wis.	As <i>Lingula</i> . Two valves almost in opposition, and a ventral? valve. Imprints.
" "	Two imprints showing dors. valve and card. area. Degree of enlargement incorrectly stated in explanation of plate (X2).
Troy, N. Y.	As <i>Orbicula</i> . Referred to Hudson River group in volume.
.....	As <i>Lingula aurora</i> , var., Hall.
Mazomanie, Wis.	Ext. impr. of one valve and int. impr. of the other on same block.
Near Keeseville, N.Y.	A dorsal and a ventral valve, imbedded. From Au Sable Chasm.
St. Croix Falls, Minn.	As <i>Lingula prima</i> Con. Dorsal valve, imbedded.
" " "	" " <i>antiqua</i> Emmons. Two ventral valves, imbedded.
St. Croix Falls, Minn.	Made generic type. Two opposite valves, imbedded.
.....	As <i>Orbicula</i> ? and referred to Hudson River group.
Troy, N. Y.	" <i>Dicellomus</i> . Exfoliated valve, imbedded.
.....	As type of <i>Avicula? desquamata</i> and referred to Hudson Riv. grp.
Troy, N. Y.	Very perfect valve, imbedded.
.....	As <i>Lingula</i> .
.....	" <i>Obolella</i> ?
Trempealeau, Wis.	Three separated valves, imbedded, and an imprint of interior of ventral valve. This species was made the type of <i>Dicellomus</i> Hall, 23d rept. N. Y. S. M., p. 246.
.....	As <i>Lingula</i> .
Au Sable Chasm, N.Y.	A group and a very perfect single individual, imbedded.
.....	See <i>Billingsella</i> .
.....	" "

## Class LAMELLIBRANCHIATA.

.....	See <i>Obolella crassa</i> .
.....	.....
La Grange Mt., Minn.	Cast in sandstone.
Mazomanie, Wis.	Cast showing flat side, and matrix.
.....	See <i>Stenotheca</i> .
.....	.....
Trempealeau, Wis.	Internal? cast, imbedded.

## Class PTEROPODA.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
L. C.	213	.....	<b>Hyo lithellus</b> Billings. micans ( <i>Bill.</i> )..... <i>Hall.</i>	N. Y. S. M.	23	246	.....	.....
U. C.	307	Type.	Murchisoni..... <i>Hall.</i>	Geol. Wis.	1861	48	.....	.....
			"	"	I	21	Ct. 2	6
			"	N. Y. S. M.	16	136*	6	32, side.
L. C.	215	Fig'd.	<b>Hyo lithes</b> Eichwald. americanus ( <i>Bill.</i> )... <i>Hall.</i>	Pal. N. Y.	I	313	87	1a, c
U. C.	215	Type.	primordialis..... <i>Hall.</i>	Geol. Wis.	1861	48	.....	.....
			"	"	I	21	Ct. 2	5a, b
			"	N. Y. S. M.	16	135*	6	30, 31
L. C.	212	"	<b>Steno theca</b> Salter. rugosa..... <i>Hall.</i>	Pal. N. Y.	I	306	83	6a, c
			<i>Theca</i> Sowerby.....	.....	.....	.....	.....	.....
			<i>primordialis</i> .....	.....	.....	.....	.....	.....
			? <i>triangularis</i> .....	.....	.....	.....	.....	.....

## Subkingdom VERMES.

**Serpulites** Murchison.  
*Murchisoni*.....

## WORM-BURROWS.

L. C.	278	Type.	<b>Scolithus</b> Haldeman. linearis..... <i>Hall.</i>	Pal. N. Y.	I	2	I	1a
"	278	"	"....."	"	I	2	I	1c

## Subkingdom ARTHROPODA.

Class

L. C.	289	Type.	<b>Nothozoë</b> Barrande. vermontana... <i>Whitfield.</i>	A. M. N. H.	I	144	14	14, 15
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## Order TRILOBITA.

U. C.	310	Type.	<b>Agnostus</b> Brongniart. disparilis..... <i>Hall.</i>	N. Y. S. M.	16	179	10	25-27
"	311	"	josepha..... <i>Hall.</i>	"	16	178	6	54, 55
U. C.	309	Type.	<i>lobatus</i> .....	"	16	179	10	23, 24
			parilis..... <i>Hall.</i>	"	16	179	10	23, 24
"	349	"	<b>Amphion</b> Pander. ? <i>matutinus</i> ..... <i>Hall.</i>	"	16	222	5a 6,	glab. x 4
			<b>Angelina</b> Salter. <i>Hitchcocki</i> .....	.....	.....	.....	.....	.....
U. C.	337	Fig'd.	<b>Arionellus</b> Barrande. bipunctatus ( <i>Shumard</i> ) <i>H.</i>	"	16	169	7	50, 51
M. C.	272	Type.	quadrangularis <i>Whitfield.</i>	A. M. N. H.	I	147	14	8, glab. ent.
			<b>Atops</b> Emmons <i>trilineata</i> .....	.....	.....	.....	.....	.....

LOCALITY.	REMARKS.
Troy, N. Y.	As gen. type of <i>Discinella</i> , but the two specimens here referred to are opercula of the pteropod. Quebec group in the description. As <i>Serpulites</i> .
La Grange Mt., Minn.	" " Cast, imbedded.
Troy, N. Y.	As type of <i>Theca? triangularis</i> H. Hud. Riv. group in description. As <i>Theca</i> .
Trempealeau, Wis.	" " An exterior imprint and an internal cast, imbedded. Two other spec. were used to complete the details of the figures.
Troy, N. Y.	As <i>Metoptoma?</i> Almost entire, imb. Hud. R. group in the descr.  See <i>Hyolithes</i> . " " " " <i>americanus</i> .
Class ANNELIDA.	
.....	See <i>Hyolithellus</i> .
Susquehanna Riv., Pa. Adams, Mass.	The casts of several long tubes in quartzite. Several casts in quartzite. (Probably of vegetable origin.)
CRUSTACEA. Order OSTRACODA.	
Highgate, Vt.	Group of casts in quartzite.
Osceola Mills, Minn. Trempealeau, Wis.	Imprint of under side of a head and two pygidia. <sup>1</sup> Cast of head and of pygid. First fig. completed fr. two other spec.
L. Pepin, Minn.	See <i>Microdiscus</i> . Cast of a glabella and of a pygidium.
Trempealeau, Wis.	Imprint under side glabella and part of fixed cheeks.  See <i>Protypus</i> .
Mth. Root Riv., Minn. Braintree, Mass.	Interior imprint of a glabella and of a right movable cheek. Second locality is incorrect in the explanation of plate. Glabella and fixed cheeks imbedded in slate.  = <i>Ptychoparia</i> . See " "

<sup>1</sup> Many of the blocks from the Upp. Camb. (Potsdam) of Wis., Minn., Iowa and Ill. bear several types and figured specimens each.

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Barrandia</b> Hall.....					
			<i>Thompsoni</i> .....					
			<i>vermontana</i> .....					
L. C.	338 1	Gen. and Sp.Type.	<b>Bathynotus</b> Hall. holopyga.....Hall.	N. Y. S. M.	12	62	...	3
			"	Pal. N. Y.	3	529	....	1
			"	N. Y. S. M.	13	118	....	1
			"	Geol. Vt.	1 and 2	371	13	3
			<b>Calymene</b> Brongniart. <i>Becki</i> .....					
U. C.	339	Gen. and Sp.Type.	<b>Chariocephalus</b> Hall. Whitfieldi.....Hall.	N. Y. S. M.	16	175	6	49-53
"	"	Fig'd.	" " " "	" "	16	171	6	47
"	324	Type.	<b>Conaspis</b> Hall. eos.....Hall.	" "	16	152	7	24, 25
			"	"	16	151	8	8, 9
			<b>Conocephalites</b> Zenker. <i>anatinus</i> .....					
			<i>binodosus</i> .....					
			<i>diadematus</i> .....					
			<i>eos</i> .....					
			<i>eryon</i> .....					
			<i>hamulus</i> .....					
			<i>iowensis</i> .....					
			<i>minor</i> .....					
			<i>minutus</i> .....					
			<i>nactus</i> .....					
			<i>nasutus</i> .....					
			<i>optatus</i> .....					
			<i>Oweni</i> .....					
			<i>Patersoni</i> .....					
			<i>perseus</i> .....					
			<i>Shumardi</i> .....					
			<i>verrucosus</i> .....					
			<i>wisconsensis</i> .....					
U. C.	322	Type.	<b>Conocoryphe</b> Corda. optata.....Hall.	N. Y. S. M.	16	222	5a	7
"	321	Fig'd.	<b>Crepicephalus</b> Owen. iowensis (Owen)... Hall.	" "	16	162	7 8	29, 32, 33 10-12
"	321	"	" " " "	" "	16	162	7 8	31 30
"	316	"	wisconsensis (Owen) Hall.	" "	16	164	7 8	39, 41 22-24, 27, 28
"	316	"	" " " "	" "	16	164	7	42
"	347	Type.	<b>Dikelocephalus</b> Owen. crassimarginatus.. Whitf. Hall.	Geol. Wis. N. Y. S. M.	4 16	344	..	11 2
L. C.	236	"	? Marcouii... Whitfield.	A. M. N. H.	1	150	14	7
U. C.	344	Fig'd.	minnesotensis (Owen) H.	N. Y. S. M.	16	138	9	5

LOCALITY.	REMARKS.
.....	See <i>Olenellus</i> .
.....	“ “
.....	“ “
.....	As <i>Peltura</i> ( <i>Olenus</i> ).
.....	“ “
.....	Generic type of <i>Bathynotus</i> . Hud. Riv. grp. in all above descriptions.
Georgia, Vt.	A nearly perfect exterior imprint. An unfigured imprint of thorax and pygidium is in the type series.
.....	See <i>Ptychoparia trilineata</i> .
Trempealeau, Wis.	Internal casts of two glabellas and two opposite detached free cheeks.
“ “	Material used in making fig. 20 of pl. 10.
.....	As <i>Ptychaspis mimiscensis</i> , but is probably of this species. Imprint of left half of a thoracic segment.
Loose at Trempealeau, Wis.	As <i>Conocephalites</i> . Interior imprint of a glabella with fixed cheeks and the right half of a thoracic segment.
.....	See <i>Ptychoparia</i> .
.....	“ “
.....	“ “
.....	“ <i>Conaspis</i> .
.....	“ <i>Ptychoparia</i> .
.....	“ <i>Lonchocephalus</i> .
.....	“ <i>Crepicephalus</i> .
.....	“ <i>Ptychoparia</i> .
.....	“ “
.....	“ “
.....	“ <i>Conocoryphe</i> .
.....	“ <i>Ptychoparia</i> .
.....	“ “
.....	“ “
.....	“ “
.....	“ <i>Crepicephalus</i> .
Trempealeau, Wis.	As <i>Conocephalites</i> . Figure combined from two imprints of under side of glabella.
.....	As <i>Conocephalites</i> . Imprints of the parts represented, six specimens.
Trempealeau, Wis.	Locality incorrectly given for fig. 33, pl. 7, in the description.
In Wis. opp. mouth of Root River, Minn.	As <i>Conocephalites</i> . Interior imprint of glabella and fixed cheeks.
.....	“ “
Trempealeau, Wis.	“ “ Int. impr. of the parts represented; 5 specimens.
3 miles above Reed's Landing, Minn.	As <i>Conocephalites</i> . Imprint of cephalic (?) spine of this species (?)
La Grange Mt., Minn.	As <i>D. pepinensis</i> Owen? Interior imprint left movable cheek.
Georgia, Vt.	Exterior imprint of a fragmentary pygidium.
Mazomanie, Wis.	Imprint of under side of glabella and fixed cheeks. Frontal limb has been uncovered since figure was made.

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
U. C.	344 1	Fig'd.	<b>Dikelocephalus</b> Owen— <i>Cont.</i> <i>minnesotensis</i> (Owen) H.	N. Y. S. M.	16	138	9	5 (pt.)
"	344 1	"	" " " "	Geol. Wis.	I	22	....	2
"	344 1	"	" " " "	N. Y. S. M.	16	138	9	6
"	344 1	"	" " " "	" " " "	16	138	9	7
"	344 1	"	" " " "	Geol. Wis.	I	22	....	5
"	344 1	"	" " " "	N. Y. S. M.	16	138	9	8
"	344 1	"	" " " "	" " " "	16	138	9	9
"	344 1	"	" " " "	" " " "	16	138	9	10
"	344 1	"	" " " var. "	" " " "	16	141	9	11
"	344 1	"	" " " var. "	" " " "	16	141	10	9
"	344 1	"	" " " "	" " " "	16	138	10	10
"	344 1	"	" " " "	" " " "	16	138	10	12
"	344 1	"	" " " "	" " " "	16	138	11	1
"	344 1	"	" " " "	" " " "	16	138	11	3
"	344 1	"	" " " "	" " " "	16	138	11	4
"	344 1	Type.	" var. <i>limbatus</i> Hall.	" " " "	16	141	9	12
"	344 1	"	<i>misa</i> ..... Hall.	" " " "	16	144	8	15
"	342	"	<i>osceola</i> ..... Hall.	" " " "	16	146	10	4-8 18, 19
"	346 1	Fig'd.	<i>pepinensis</i> (Owen) Hall.	Geol. Wis.	I	22	Ct. 3	4
"	341	Type.	<i>spiniger</i> ..... Hall.	N. Y. S. M.	16	142	9	I-4
"	342	Fig'd.	<i>sp. ?</i> ..... Hall.	" " " "	16	143	10	13-17
"	342	"	" " " "	" " " "	16	146	7	1, 2 49
"	342	"	" " " "	" " " "	16	146	10	3
"	330	Gen. and Sp. Type.	<b>Illænurus</b> Hall. <i>quadratus</i> ..... Hall.	" " " "	16	176	7	52-57
"	315 1	Fig'd.	<b>Lonchocephalus</b> Owen. <i>hamulus</i> (Owen) Hall.	" " " "	16	166	7 8	43 25, 26
"	315 1	"	" " " "	" " " "	16	166	7	44
"	315 1	"	" " " "	" " " "	16	166	11	5, 6
			<i>Mesonacis</i> Walcott.....					
U. C.	312	Type.	<b>Microdiscus</b> Emmons. <i>? bullatus</i> ..... Hall.	N. Y. S. M.	16	221	5a	3-5
L. C.	219	"	<i>lobatus</i> ..... Hall.	Pal. N. Y.	I	258	67	5a-f
"	223 1	Gen. and Sp. Type.	<b>Olenellus</b> Hall. <i>Thompsoni</i> ..... Hall.	N. Y. S. M.	12	59	p. 60	I
"	223 1	"	" " " "	Pal. N. Y.	3	525	p. 526	I
"	223 1	"	" " " "	N. Y. S. M.	15	114	....	....
"	223 1	"	" " " "	" " " "	13	116	....	I (pt.)
"	223 1	"	" " " "	Geol. Vt.	I and 2	369	13	I "
"	227 1	Fig'd.	" (Hall) <i>Whitfield</i> .	N. Y. S. M.	15	114	....	....
"	227 1	Type.	<i>vermontanus</i> ..... Hall.	A. M. N. H.	I	151	15	I
"	227 1	"	" " " "	N. Y. S. M.	12	60	....	2
"	227 1	"	" " " "	Pal. N. Y.	3	527	....	I
"	227 1	"	" " " "	N. Y. S. M.	13	117	....	I
"	227 1	"	" " " "	Geol. Vt.	I and 2	370	13	2
"	227 1	"	(Hall) <i>Walcott</i> .	Am. J. Sci.	III, 29	328	....	....
"	227 1	Fig'd.	" (Hall) <i>Whitfield</i> .	A. M. N. H.	I	152	15	2-4



LOCALITY.	REMARKS.
Mazomanie, Wis.	Imprint of glabella used in completing frontal limb of figure.
La Grange Mt., Minn. Madison, Wis.	Imprint of upper side of a small pygidium. Cast of a large pygidium from a loose block.
La Grange Mt., Minn.	Imprint of upper side of right half of a thoracic segment.
“ “	“ inside of a small hypostoma, not perfect.
“ “	“ “ larger “
“ “	“ “ glabella, frontal limb and left fixed cheek.
Stillwater, Minn.	“ “ “ and fixed cheeks, nearly perfect.
“ “	“ glabella and fixed cheeks used in making figure.
La Grange Mt., Minn.	“ left half of a thoracic segment.
Mazomanie, Wis.	“ outside of a very large hypostoma, not perfect.
La Grange Mt., Minn.	“ under side of a right movable cheek.
Mazomanie, Wis.	“ upper side of a large pygidium.
La Grange Mt., Minn.	“ part of under side of glabella and right fixed cheek.
Trempealeau, Wis. Osceola Mills, Wis.	Four int. and two ext. imprints of the parts represented in the figs. Interior imprint of a small glabella and exterior imprint right movable cheek. Slab has been split since figures were made.
La Grange Mt., Minn.	{ The figures were made from internal imprints of the parts represented. Eight specimens. Fig. 14, pl. 10 is a restoration based on figs. 1 and 3, pl. 9. See also <i>D. crassimarginatus</i> .
Trempealeau, Wis. Osceola Mills, Wis.	Interior imprint of a glabella and a pygidium on same block.
Three mi. above Reed's Landing, Minn.	Imprint of upper side of pygidium. Possibly = <i>D. osceola</i> .
Osceola Mills, Wis.	Imprint of under side of right movable cheek and spine.
Osceola Mills, Wis.	Imprint of the under sides of parts represented. Six specimens.
Miniska, Minn. Trempealeau, Wis.	As <i>Conocephalites</i> . Interior imprint of glabella and fixed cheeks. “ “ Imprint of spine, belonging to this species? Impr. of 2 spines. Of this species? Distal extremity in fig. 6 restored.
Trempealeau, Wis.	See <i>Olenellus</i> .
Trempealeau, Wis.	As generic type of <i>Pemphigaspis</i> . A detached cast of interior. An unfigured type is in the series.
Troy, N. Y.	As <i>Agnostus</i> . The specimen indicated by Prof. Hall as being the type. Hudson River group in description.
.....	As <i>Olenus</i> and referred to Hudson River group.
.....	“ “ “ “ “ “ “ “ “ “ “ “ “ “ “ “ “ “ “ “
Georgia, Vt.	Made gen. type of <i>Olenellus</i> . Impr. of large indiv. Impr. of pygidial and left cheek spines can be disting. but were not repr. in the fig.
.....	As generic type of <i>Barrandia</i> and referred to Hudson River group.
.....	“ “
Georgia, Vt.	Made gen. type of <i>Olenellus</i> . Impr. of pygid. thor. and pt. mov. ch'ks.
.....	A large, almost perfect individual, in slate.
.....	As <i>Olenus</i> and referred to Hudson River group.
.....	“ “
.....	As <i>Barrandia</i> .
.....	“ “
Georgia, Vt.	“ “ and referred to Quebec group.
.....	Made generic type of <i>Mesonacis</i> Walcott. Head and six thoracic segments imbedded in slate.
.....	Two individuals and the imprint of a cephalic shield.

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Olenus</b> Dalman.					
			<i>Thompsoni</i> . . . . .					
			<i>undulostriatus</i> . . . . .					
			<i>vermontanus</i> . . . . .					
			<b>Peltura</b> Milne-Edw.					
			<i>holopyga</i> . . . . .					
			<b>Pemphigaspis</b> Hall.					
			<i>bullata</i> . . . . .					
L. C.	232	Gen. and Sp. Type.	<b>Protypus</b> Walcott.					
			<i>Hitchcocki</i> . . . . . <i>Whitfield</i> .	A. M. N. H.	I	148	14	13, <i>ent. x2</i>
			<i>Walcotti</i> . . . . .	U. S. G. S.	Bul. 30	211		
			<b>Ptychaspis</b> Hall.					
			<i>granulosa</i> . . . . .					
U. C.	331	Fig'd Sp. and G. T.	<i>miniscensis</i> ( <i>Owen</i> ) <i>Hall</i> .	N. Y. S. M.	16	171	6	41-46
"	332	Type.	<i>striata</i> . . . . . <i>Whitfield</i> .	Geol. Wis.	4	186		
				N. Y. S. M.	16	173	6	33-39
"	332	"	" ( <i>Whitfield</i> ) "	" "	16	173	6	40
"	333	"	" " "	" "	16	173	8	13
"	334	Fig'd.	<i>sp. ?</i> . . . . . <i>Hall</i> .	" "	16	174	6	48, <i>ent. x3</i>
			<b>Ptychoparia</b> Corda.					
"	322	Type.	<i>anatina</i> . . . . . <i>Hall</i> .	" "	16	158	7	34, 35
"	323	"	" " " " " "	" "	16	158	8	29
"	323	"	<i>binodosa</i> . . . . . <i>Hall</i> .	" "	16	160	7	47, 48
"	314	"	<i>diademata</i> . . . . . <i>Hall</i> .	" "	16	167	7	16, 38a
"	314	"	" " " " " "	" "	16	167	7	37, 38
"	314	"	" " " " " "	" "	16	167	8	18, 21
"	317	"	<i>eryon</i> . . . . . <i>Hall</i> .	" "	16	157	7	10-12, 16
"	317	"	" " " " " "	" "	16	157	8	16
"	317	"	" " " " " "	" "	16	157	7	13-15
"	320	Fig'd.	<i>minor</i> ( <i>Shumard</i> ) . . . . . <i>Hall</i> .	" "	16	149	8	31
"	279	"	<i>minuta</i> ( <i>Bradley</i> ) . . . . . <i>Hall</i> .	" "	16	150	8	1-4
"	317	Type.	<i>nacta</i> . . . . . <i>Hall</i> .	" "	16	200	7	58
"	313	"	<i>nasuta</i> . . . . . <i>Hall</i> .	" "	16	155	7	3-9
"	318	"	<i>Oweni</i> . . . . . <i>Hall</i> .	" "	16	155	8	17, 20
"	328	"	<i>Patersoni</i> . . . . . <i>Hall</i> .	" "	16	159	7	45, 46
"	319	"	<i>perseus</i> . . . . . <i>Hall</i> .	" "	16	153	7	17
"	319	"	" " " " " "	" "	16	153	8	33
"	319	"	" " " " " "	" "	16	153	7	18-20
"	319	"	" " " " " "	" "	16	153	7	21-23
"	326	"	<i>Shumardi</i> . . . . . <i>Hall</i> .	" "	16	154	7	1, 2
"	326	"	" " " " " "	" "	16	154	8	32
"	326	"	" " " " " "	" "	16	154	8	19
L. C.	235	"	<i>trilineata</i> . . . . . <i>Enmons</i> .	Agric. N. Y.	I	64	Fig. 8	No. 1
			<i>Hall</i> .	Pal. N. Y.	I	252	67	4a
			<i>Walcott</i> .	U. S. G. S.	Bul. 30	203	27	1
U. C.	280	"	<i>verrucosa</i> . . . . . <i>Whitfield</i> .	A. M. N. H.	I	146	14	9-12

LOCALITY.	REMARKS.
.....	See <i>Olenellus</i> .
.....	" <i>Bathyrurus</i> .
.....	" <i>Olenellus</i> .
.....	" <i>Bathynotus</i> .
.....	Probably = <i>Microdiscus</i> .
.....	See <i>Microdiscus</i> .
.....	As <i>Angelina</i> . Very perfect individual, compressed, imbedded.
Georgia, Vt.	Made generic type of <i>Protypus</i> .
.....	See <i>P. striata</i> .
Trempealeau, Wis.	Imprint of the parts represented. Figs. 41 and 46 are partly restorations. Five specimens. See also <i>Chariocephalus Whitfieldi</i> .
" "	As <i>P. granulosa</i> Owen. Impr. of the parts represented. Five spec.
In Minn. opp. mouth	As <i>P. granulosa</i> Owen.
Chippewa Riv., Wis.	Imprint of under side of left half of a large pygidium.
.....	As <i>P. granulosa</i> Owen.
Trempealeau, Wis.	Imprint of upper side of pygidium.
" "	" " " " head.
3 miles above Reed's	As <i>Conocephalites</i> . Imprint under side of somewhat imperfect
Landing, Minn.	glabella and of a right movable cheek.
Trempealeau, Wis.	As <i>Conocephalites</i> . Imprint under side of glabella, nearly perfect.
Osceola Mills, Wis.	" " ? Imprint of a pygidium and a right mov. cheek.
Marine Mills, Wis.	" " Impr. of glabella and cast of doublure of glab.
Mth. Root Riv., Minn.	" " " and of right movable cheek.
Marine Mills, Wis.	" " Int. impr. of a glab. and a pyg. ref. to this species.
Trempealeau, Wis.	Interior imprints of the parts represented.
.....	Four specimens.
10 miles east of La	As <i>Conocephalites</i> . Imprints of under side of parts of three thoracic
Crosse, Wis.	segments and of a glabella, etc.
Trempealeau, Wis.	As <i>Conocephalites</i> . Impr. of 4 glab., a left mov. cheek and a pygidium.
Au Sable Chasm, N. Y.	" " Glabella, imbedded. Spine restored.
Mth. Black River, Wis.	" " Interior imprint glabella without fixed cheeks.
Kickapoo, Wis.	" " Interior imprint of the parts represented, except
.....	figs. 4 and 8, which are from exterior imprints. Seven specimens.
Marine Mills, Minn.	As <i>Conocephalites</i> . Interior imprints of a glabella and of a right
.....	movable cheek; not on same block.
3 miles above Reed's	As <i>Conocephalites</i> . The first is from an interior, the second from
Landing, Minn.	an exterior imprint.
Kickapoo, Wis.	As <i>Conocephalites</i> . Interior imprint glabella and fixed cheeks.
In Minn. opp. mouth	" " " " and of detached right
Chippewa Riv., Wis.	movable cheek. Locality incorrect in description.
Mth. Root Riv., Minn.	As <i>Conocephalites</i> . Imprints of the parts represented. Three spec.
.....	" " Interior imprints of a glabella with fixed cheeks,
Kickapoo, Wis.	a pygidium and a very large imperfect glabella.
Marine Mills, Minn.	As <i>Conocephalites</i> . Interior imprint left movable cheek.
.....	As generic type of <i>Atops</i> .
No. Bald Mt., Wash-	" <i>Calymene Becki</i> Green.
ington Co., N. Y.	Exterior imprint of head and three thoracic segments.
Au Sable Chasm, N. Y.	As <i>Conocephalites</i> . Two glabellas with their fixed cheeks, an im-
.....	perfect left movable cheek and two pygidia.

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
U. C.	350 1	Gen. and Sp. Type.	<b>Triarthrella</b> Hall. auroralis . . . . . Hall.	N. Y. S. M.	16	177	9	13
			<b>Triarthrus</b> Green. s. g. <i>Triarthrella</i> .. Hall. <i>auroralis</i> .	.....	.....	.....	.....	.....
U. C.	348	Fig'd.	Genus? sp.?..... Hall.	N. Y. S. M.	16	.....	8	14

## Order MEROSTOMATA.

U. C.	351 1	Gen. and Sp. Type.	<b>Aglaspis</b> Hall. Barrandii . . . . . Hall.	Can. N. & G.	7	445	.....	1
"	"	"	" . . . . . "	N. Y. S. M.	16	181	11	7, 10
"	"	"	" . . . . . "	" "	16	181	11	8, 9, 11-14, 16
"	351 2	"	" . . . . . "	" "	16	181	11	15

## Lower Silurian.

## Kingdom PLANTÆ.

## Subkingdom

Tr.	866	Gen. and Sp. Type.	<b>Buthograptus</b> Hall. laxus . . . . . Hall. <i>Whitfield</i> .	Geol. Wis.	1861	19		
			" . . . . . "	A. M. N. H.	6	351	11	1-3
			" . . . . . "	Mem. A. M.	1	40	4	1-3
H. R.	1114 125	Type.	<b>Buthotrephis</b> Hall. subnodosa . . . . . Hall.	Pal. N. Y.	1	262	68	3a, b
Tr.			" . . . . . "	" "	1	62	22	2a
"	865	Gen. and Sp. Type.	<b>Callithamnopsis</b> Whitfield. fruticosa . . . . . Hall. <i>Whitfield</i> .	Can. O. R.	Dec. 2	50	.....	.....
			" . . . . . "	A. M. N. H.	6	354	11	4-8
			" . . . . . "	Mem. A. M.	1	42	4	4-8
"	858	"	<b>Chætocladus</b> Whitfield. plumula . . . . . Whitfield.	A. M. N. H.	6	356	11	11-13
			" . . . . . "	Mem. A. M.	1	.....	4	11-13
"	4494	Type.	<b>Chætomorpha</b> Kützing. ? prima . . . . . Whitfield.	A. M. N. H.	6	355	11	9, 10
			" . . . . . "	Mem. A. M.	1	.....	4	9, 10
Be.	623	"	<b>Palæophycus</b> Hall. simplex . . . . . Hall.	Pal. N. Y.	1	63	22	1a-c
"	624	Fig'd.	sp. . . . . "	" "	1	.....	21	3
"	570	Type.	<b>Phytopsis</b> Hall. cellulosa . . . . . Hall.	" "	1	39	9	1, 1a, b, d
"	573 8	Gen. and Sp. Type.	tubulosa . . . . . Hall.	" "	1	38	8	1
Tr.	635	"	<b>Primicorallina</b> Whitfield. trentonensis . . . . . Whitfield.	A. M. N. H.	6	357	11	14-17
			" . . . . . "	Mem. A. M.	1	.....	4	14-17
H. R.	1112	Type.	<b>Sphenothallus</b> Hall. latifolius . . . . . Hall.	Pal. N. Y.	1	262	68	2d

LOCALITY.	REMARKS.
La Grange Mt., Minn.	As <i>Triarthrus?</i> subgenus <i>Triarthrella</i> . Interior imprint glabella.
.....	See <i>Triarthrella</i> .
Trempealeau, Wis.	Imprint of the under side of a pygidium.
Mazomanie, Wis.	About three-fourths of a large carapace, imbedded.
" "	Imprints of the parts represented. Seven specimens. Fig. 9 was
Miniska, Minn.	made from the imprint of the upper side of a carapace. Imprint of a caudal? spine.
CRYPTOGAMIA. Class THALLOGENA.	
Platteville, Wis.	Several stipes on one block.
Turin, N. Y. Glens Falls, N. Y.	Imperfect imprint of two fragments. Portion of a large individual, scarcely compressed.
.....	As <i>Oldhamia?</i>
Platteville, Wis.	Five fragments of stipes imbedded in two blocks.
" "	A considerable fragment of frond, imbedded.
" "	Two specimens on the same block. These were a part of the types
Middleville, N. Y.	of <i>Oldhamia? fruticosa</i> Hall.
" "	Portions of two large stems. A stem with four branches.
Watertown, N. Y.	Three weathered blocks showing the stems.
Near Amsterdam, N. Y.	A weathered block showing stems.
Middleville, N. Y.	Three stipes or fronds, imbedded.
Schoharie, N. Y.	A fragment of a leaf, imbedded.

Kingdom ANIMALIA. Subkingdom PROTOZOA. Class

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	629	Type.	<b>Receptaculites</b> de France. <i>cyathiformis</i> ..... Hall.	Pal. N. Y.	I	72	25	6a-c
"	863	"	<i>fungosus</i> ..... Hall.	Geol. Wis.	1861	15		
"	1022	"	<i>Whitfield.</i> <i>globularis</i> ..... Hall.	Mem. A. M.	I	45	5	5, 6
"	631a	Fig'd.	<i>Whitfield.</i> <i>neptunei (de Fr.)</i> ... Hall.	Geol. Wis.	1861	16		
"	881	Type.	<i>Whitfield.</i> <i>Oweni</i> ..... Hall.	Mem. A. M.	I	44	5	7
"	881	"	" " " " " "	Pal. N. Y.	I	68	24	3a-d
"	881	"	" " " " " "	Geol. Wis.	1861	13		
"	881	"	" " " " " "	" " " " " "	I	46		2
"	881	"	" " " " " "	Mem. A. M.	I	44	5	8
"	881	"	" " " " " "	" " " " " "	I	44	5	9
"	881	"	" " " " " "	" " " " " "	I	44	5	10
"	881	"	" " " " " "	" " " " " "	I	44	5	11
			Genus? <i>cyathiformis</i> .....					

Subkingdom PORIFERA.

U.	1017a	Type.	<b>Rhombodictyon</b> Whitfield. <i>discum</i> ..... Whitfield.	A. M. N. H.	I	348	35	I
"	1015a	Gen. and Sp. Type.	<i>reniforme</i> .... Whitfield.	" "	I	347	35	2-7
"	1016a.	Type.	" var. <i>rhombiforme</i> W.	" "	I	348	35	8, 9

Subkingdom CŒLEENTERATA.

			<b>Chætetes</b> Fischer. <i>columnaris</i> .....					
			<i>lycoepodon</i> .....					
			<i>rugosus</i> .....					
B. R.	592	Fig'd.	<b>Columnaria</b> Goldfuss. <i>alveolata (Goldfuss)</i> Hall.	Pal. N. Y.	I	47	12	1a-c
H. R.	1171	Type.	<b>Diphyphyllum</b> Lonsdale. <i>obsoletum</i> ..... Hall.	Lake Sup.	2	213	29	2a, b
Tr.	643	"	<b>Favosites</b> Lamarck. <i>columnaris</i> ..... Hall.	Pal. N. Y.	I	68	23	4, 4a
			<b>Gorgonia</b> Linn. <i>? perantiqua</i> .....					
			<b>Porites</b> Lamarck. <i>? vetustus</i> .....					
Tr.	642	Type.	<b>Protaræa</b> Edw. & Haime. <i>vetusta</i> ..... Hall.	Pal. N. Y.	I	71	25	5a, b
			<b>Sarcinula</b> Lamarck. <i>? obsoleta</i> .....					
Tr.	545	Type.	<b>Streptelasma</b> Hall. <i>corniculum</i> ..... Hall.	Pal. N. Y.	I	69	25	1a, c, d
"	545	"	" " " " " "	" " " " " "	I	69	25	1b
"	547	"	<i>crassum</i> ..... Hall.	" " " " " "	I	70	25	2a, b
Tr.	646	Type.	<i>expansum</i> .....					
B. R.	594	"	<i>parvulum</i> ..... Hall.	Pal. N. Y.	I	71	25	4a-c
			<i>profundum</i> ..... Hall.	" " " " " "	I	49	12	4, 4c
			<i>Streptoplasma</i> Hall.....					

## RHIZOPODA ?

## Order FORAMINIFERA ?

LOCALITY.	REMARKS.
Carlisle, Penn.	Probably = <i>R. iowensis</i> Owen. Upper part of an individual, not referred to a genus in the description.
Rockford, Ill.	Detached individual. Galena horizon.
Mt. Morris, Ill. Carlisle, Penn.	An almost perfect individual. Galena horizon. A fragment showing surface and longitudinal section.
Rockford, Ill. Galena, Ill. Watertown, Wis. Beloit, Wis.	Crust on the limestone. Galena horizon. Large fragment, imbedded. Galena horizon. Crust, and imprint of the surface ornamentation. Crust imbedded. Galena horizon.
See <i>Receptaculites</i> .	

## Class PLETHOSPONGIÆ.

Kenwood, N. Y.	Imbedded.
“ “	Three individuals or fragments, imbedded.
“ “	Two fragments on block with the preceding.

## Class ACTINOZOA.

.....	See <i>Favosites</i> .
.....	“ <i>Monticulipora</i> , <i>Stenopora</i> sp., and <i>Trematopora</i> sp.
.....	“ <i>Monticulipora</i> .
Watertown, N. Y.	Two fragments, one showing a longit. and the other a cross section.
Green Bay, L. Mich.	As <i>Sarcinula</i> ? A fragment and a water-worn pebble.
Sugar River, Lewis County, N. Y.	As <i>Chatetes</i> ? Large, irregular mass, part of which was figured.
.....	See <i>Enallopora</i> .
.....	See <i>Protaræa</i> .
Watertown, N. Y.	As <i>Porites</i> ? Weathered colony, imbedded.
.....	See <i>Diphyphyllum</i> .
.....	All as <i>Streptelasma</i> in Pal. N. Y., vol. 1.
Watertown, N. Y.	Two small individuals, one of which shows internal structure.
Middleville, N. Y.	An individual imbedded at the cup.
“ “	The specimen represented by the figure.
.....	See <i>Crinoid plates</i> .
Middleville, N. Y.	A nearly entire individual and an imbedded group of four.
Watertown, N. Y.	Two somewhat imperfect individuals.
.....	See <i>Streptelasma</i> .

Class ? Order MONTICULIPOROIDEA.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	672	Type.	<b>Constellaria</b> Dana. antheloidea . . . . . Hall.	Pal. N. Y.	I	79	26	10a, b
"	887 3	Fig'd.	<b>Monticulipora</b> d'Orbigny. ? lycoperdon (Say) Hall.	" "	I	64	23	1b, c
"	887 1	"	" " " "	" "	I	64	23	1e
"	"	"	" " " "	" "	I	64	23	1f
"	"	"	" " " "	" "	I	64	23	1g
" ?	887 2	"	" " " "	" "	I	64	23	1h, i
"	887 4	"	" " " "	" "	I	64	24	1a, b
"	887 7	"	" " " "	" "	I	64	24	1c, n. s.
"	887 7	"	" " " "	" "	I	64	24	1d, n. s.
H. R.	887 10	"	" " " "	" "	I	276	75	2c
"	887 8	"	" " " "	" "	I	276	75	2d
"	874 2	"	Ortoni (Nich.)? . . . Hall.	" "	I	277	75	4
Tr.	636	Type.	? rugosa . . . . . Hall. <i>Stellipora</i> Hall. antheloidea . . . . .	" "	I	67	24	2a, b
Tr.	639	Fig'd.	<b>Stenopora</b> Lonsdale. sp. . . . . Hall.	Pal. N. Y.	I	64	24	1g-i
"	671	"	<b>Trematopora</b> Hall. sp. . . . . Hall.	" "	I	64	24	1m, n†
"	670	"	" " " "	" "	I	64	24	1k, n

Class HYDROZOA.

U.	1045	Type.	<b>Amphigraptus</b> Lapworth. divergens . . . . . Hall.	Pal. N. Y.	3	509	...	9, n. s.
"	"	"	" " " "	N. Y. S. M.	12	57	...	9, n. s.
"	"	"	" " " "	Can. O. R.	Dec. 2	13	...	11, n. s.
"	"	"	" " " "	N. Y. S. M.	20	179	...	12, n. s.
"	1041 6	Gen. and Sp. Type.	<b>Climacograptus</b> Hall. bicornis . . . . . Hall.	Pal. N. Y.	I	268	73	2a, b
"	1041 1	"	" " " "	" "	I	268	73	2c, d
"	"	"	" " " "	Can. O. R.	Dec. 2	A	...	16
"	"	"	" " " "	N. Y. S. M.	20	...	2	16
"	"	"	" " " "	Pal. N. Y.	I	268	73	2f, h, l, m
"	1041 6	"	" " " "	" "	I	268	73	2i, k, m', n
"	1041 1	Fig'd.	" " " "	" "	I	271	73	4a-d
"	"	Gen. and Sp. Type	" " " "	Can. O. R.	Dec. 2	A	...	13-15, 17
"	"	"	" " " "	N. Y. S. M.	20	...	2	13-15, 17
"	1042	Fig'd.	parvus . . . . . Hall.	Pal. N. Y.	I	268	73	2p, s
"	"	"	" " " "	" "	I	271	73	4g
" ?	1090	Type.	typicalis . . . . . Hall.	Can. O. R.	Dec. 2	A	...	2-8
"	"	"	" " " "	N. Y. S. M.	20	...	2	2-8
"	1043 1	Gen. and Sp. Type.	<b>Cœnograptus</b> Hall. gracilis . . . . . Hall.	Pal. N. Y.	I	274	74	6a, c, d
"	"	"	" " " "	N. Y. S. M.	12	58	...	10
"	"	"	" " " "	Pal. N. Y.	3	511	...	1, 3-6
"	"	"	" " " "	N. Y. S. M.	13	56	...	1, 3-6
"	"	"	" " " "	Can. O. R.	Dec. 2	13	...	12, 14-17
"	"	"	" " " "	N. Y. S. M.	20	179	...	13, 15-18



LOCALITY.	REMARKS.
Lowville, N. Y.	As generic type of <i>Stellipora</i> . On the same block with type of <i>Retepora? foliacea = Bucania punctifrons</i> .
Watertown, N. Y.	As <i>Chatetes</i> . Small, hemispherical mass.
Middleville, N. Y.	" " Irregular mass showing coalescence of individuals.
" "	" " A somewhat slickensided individual.
" "	" " Irregular mass supposed to show origin of branches.
Watertown, N. Y.	" " Large mass of which only a small part was figured.
Lowville, N. Y.	Enlargement perfected from another fragment. 11 on plate.
L. Champlain, N. Y.	As <i>Chatetes</i> . Small crescentic mass, imbedded.
Middleville, N. Y.	" " Base of hemispherical form on d. v. of <i>Orthis testudinaria</i> .
Middleville, N. Y.	As <i>Chatetes</i> . Small base of attachment.
W. Turin, N. Y.	" " Branching form, very large for this group.
Turin, N. Y.	" " Imbedded pyriform colony attached to crinoid stem.
" "	As "undetermined". A bryozoan? The impression of a large colony on an orthoceras.
Middleville, N. Y.	As <i>Chatetes</i> . Individual showing base of three branches.
.....	= <i>Constellaria</i> .
.....	See " "
Lowville, N. Y.	As <i>Chatetes lycoperdon</i> . Branched form.
Middleville, N. Y.	" " " Imbedded.
Lowville, N. Y.	" " " Slab showing several detached branches.
.....	Described by Hall as <i>Graptolithus</i> , but referred by Lapworth to the
.....	present genus and cited by Zittel, <i>Paléontologie, Fr. ed.</i> , 1883,
.....	vol. 1, p. 303, as the type of it. An unfigured specimen is in the
.....	type series.
Kenwood, <sup>1</sup> N. Y.	As <i>Graptolithus</i> .
Ballston, N. Y.	" "
Kenwood, N. Y.	Fragment preserving the base.
" "	As <i>Graptolithus</i> . Two blocks, the first of which bears also three
" "	types of <i>Dicranograptus ramosus</i> H.
Ballston, N. Y.	As <i>Graptolithus</i> . This block was indicated by Prof. Hall as bearing
" "	the originals of these figures. Not clearly recognized.
Kenwood, N. Y.	As <i>Graptolithus scalaris</i> Linn. Two individuals imbedded on edge.
" "	Three specimens showing the base and one long fragment. One
" "	shows the film and is the counterpart of the type.
" "	As <i>Graptolithus bicornis</i> H. A small fragment.
" "	" " <i>scalaris</i> Linn. " "
Cincinnati, O.	Fragments imbedded in same block, except fig. 4. Two unfigured
Kenwood, N. Y.	specimens are in the type series.
" "	As <i>Graptolithus</i> . Two fragments.
" "	" "
" "	" "
" "	" "
" "	" "
Kenwood, N. Y.	" " ( <i>Canograptus</i> ). Six specimens are referred to these
.....	figures. Of the two, however, which are said to be the figure of
.....	fig. 5, p. 511, vol. 3, Pal. N. Y., neither agrees exactly with the figure.

<sup>1</sup> The locality called Norman's Kill in Pal. N. Y., vol. 1, and other early reports is now a part of Kenwood, a suburban portion of the city of Albany, N. Y.

## Class HYDROZOA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
U.	1029a	Type.	<b>Dictranograptus</b> Hall. arundinaceus. . . . . Hall.	Pal. N. Y.	I	...	74	8, a
"	1031a	"	divaricatus. . . . . Hall.	" "	3	513	p. 514	I, 2
"	"	Fig'd.	" " " "	N. Y. S. M.	20	180	...	20
"	"	"	" " " "	Pal. N. Y.	I	273	74	3c, n. s.
"	1028a	Type.	furcatus. . . . . Hall.	" "	I	273	74	4a, b
"	"	"	" " " "	" "	I	273	74	4g, h
"	1030a	Gen. and Sp. Type.	ramosus . . . . . Hall.	" "	I	270	73	3a-c, e
"	"	"	" " " "	" "	I	270	73	3f, g, h
"	"	"	" " " "	Can. O. R.	Dec. 2	...	A	18-20
"	"	"	" " " "	N. Y. S. M.	20	...	2	18-20
"	1027	Type.	sextans. . . . . Hall.	Pal. N. Y.	I	273	74	3a, b, d, e
Tr.	867	"	<b>Dictyonema</b> Hall. neenah. . . . . Hall. <i>Whitfield.</i>	Geol. Wis. Mem. A. M.	1861	17	47	5 13
U.	1024a	"	<b>Didymograptus</b> McCoy. serratulus. . . . . Hall.	Pal. N. Y.	I	274	74	5a, b
"	1076	"	subtenuis. . . . . Hall.	Am. P. F.	...	244	...	...
"	"	"	" " " "	Pal. N. Y.	I	272	74	2c, d
Tr.	884	"	<b>Diplograptus</b> McCoy. amplexicaulis. . . . . Hall.	" "	I	79	26	11a, b
U. ?	1040	Fig'd.	" " " "	" "	I	265	72	1a-c
" ?	1040	"	" " " "	" "	I	265	72	1f, g
" ?	1040	"	" " " "	" "	I	265	72	1h, i
"	1040	"	" " " "	" "	I	265	72	1k, l
Tr.	884	Type.	" " " "	N. Y. S. M.	20	...	3	6, 7
U.	1033	"	angustifolius. . . . . Hall.	Pal. N. Y.	3	515	...	I, 2
"	"	"	" " " "	N. Y. S. M.	13	59	...	I, 2
"	1038	Fig'd.	ciliatus ( <i>Emmons</i> ). . . . . Hall.	Can. O. R.	Dec. 2	...	B	14, 15
"	"	"	" " " ? " "	N. Y. S. M.	20	...	I	14, 15
"	"	"	" " " " " "	Can. O. R.	Dec. 2	...	B	16, enl. x 6
"	"	"	" " " " " "	N. Y. S. M.	20	...	I	16, "
"	1032	"	marcidus. . . . . Hall.	Pal. N. Y.	3	508	...	6, enl. x 3
"	"	"	" " " "	Can. O. R.	Dec. 2	...	B	18, " x 6
"	"	"	" " " "	N. Y. S. M.	20	...	I	18, " "
"	1034	Type.	mucronatus. . . . . " "	Pal. N. Y.	I	268	73	1a-d
"	1092	"	peosta. . . . . " "	Geol. Wis.	1861	17	...	...
"	1088	Fig'd.	pristis ( <i>Hisinger</i> )? . . . . . Hall.	Mem. A. M.	I	47	5	12, enl. x 6
"	1088	"	" " " " " "	Pal. N. Y.	I	265	72	1d, e
"	1088	"	" " " " " "	" "	I	265	72	1m, n
"	1088	"	" " " " " "	" "	I	265	72	1 o, p
"	1088	"	" " " " " "	" "	I	267	72	2b, b, b
"	1041	"	" " " " " "	" "	I	268	73	2e, n. s.
H. R. (U. ?)	1098	Type.	putillus. . . . . Hall.	Can. O. R.	Dec. 2	...	A	10-12a
"	"	"	" " " "	N. Y. S. M.	20	...	2	10-12a
Hoosic Slates.	424	Fig'd.	secalinus ( <i>Eaton</i> ). . . . . Hall.	Pal. N. Y.	I	267	72	2a, n. s.
U.	1039	Type.	spinulosus. . . . . Hall.	" "	3	517	...	1, enl. x 2
"	"	"	" " " "	N. Y. S. M.	13	60	p. 61	I, "
"	1027	"	<i>Whitfieldi</i> . . . . . Hall.	Pal. N. Y.	3	516	...	I, "
"	"	"	" " " "	N. Y. S. M.	13	60	...	I, "
"	"	"	" " " "	Can. O. R.	Dec. 2	36	...	31, "
"	"	"	" " " "	N. Y. S. M.	20	205	...	33, "
"	"	"	" " " "	Pal. N. Y.	3	507	...	I-3
"	"	"	" " " "	Can. O. R.	Dec. 2	...	B	6-11
"	"	"	" " " "	N. Y. S. M.	20	...	I	6-11

LOCALITY.	REMARKS.
Turin, N. Y.	As <i>Graptolithus</i> . Not described. Its characters are not distinctive enough for description.
Kenwood, N. Y.	As <i>Graptolithus</i> .
" "	" " Two other unfigured individuals are in type series.
" "	As type of <i>Graptolithus sextans</i> H. Small fragment.
" "	As <i>Graptolithus</i> . On slab with a type of <i>D. sextans</i> .
" "	" " Individual shows the two branches crossed.
" "	" " Five specimens on three slabs, one of which bears a type of <i>Climacogr. bicornis</i> .
" "	As <i>Graptolithus</i> . Fig. is incorr. Spec. is composed of two indiv.
" "	As <i>Climacogr.</i> (s. g. <i>Dicranogr.</i> ) Two individuals.
" "	" <i>Graptolithus</i> . Two branching fragments on a block and another on block with a type of <i>D. furcatus</i> H.
Appleton, Wis.	A large frond, imbedded.
Kenwood, N. Y.	As <i>Graptolithus</i> . Fragment on block with next specimen.
Kenwood, N. Y.	Name proposed by Prof. Hall.
Kenwood, N. Y.	As <i>G. tenuis</i> Portl. A fragment on block with preceding.
Middleville, N. Y.	As <i>Graptolithus</i> . Several stipes on limestone.
Turin, N. Y.	" " <i>pristis</i> His. Two fragments on one block.
Lorraine, N. Y.	" " " "
Near Collinsville, N. Y.	" " " "
Oxtungo Creek, N. Y.	" " " "
Middleville, N. Y.	" " A single stipe, imbedded.
Kenwood, N. Y.	" " Associated with several fragments of same species.
Kenwood, N. Y.	An unfigured specimen is in the type series.
" "	As <i>Graptolithus</i> . Two germs, one with long midrib and radicles.
" "	A discoid germ not referred to a species by Prof. Hall.
" "	A germ not referred to a species by Prof. Hall.
" "	As <i>Graptolithus</i> . Three fragments, imbedded.
Maquoketa Creek, Ia.	" " ( <i>Diplograptus</i> ).
Oxtungo Creek, N. Y.	A distended fragment, imbedded.
Kenwood (?), N. Y.	As <i>Graptolithus</i> . Distinct from Kenwood form?
Nr. Albany, N. Y. (Hall)	" " " " " "
Oxtungo Creek, N. Y.	" " " " " " Orig. surv. label on spec. reads "N. W. cor. Columbia Co." type of <i>Grapt. secalinus</i> . Specimen indicated by Prof. Hall as the one from which the figures were made.
" "	As a type of <i>Grapt. bicornis</i> .
Near Dubuque, Iowa.	As <i>Graptolithus</i> ( <i>Diplograptus</i> ).
Hoosic Falls, N. Y.	A distended, imbedded fragment, part of which was figured.
Kenwood, N. Y.	As <i>Graptolithus</i> . Is same as <i>Diplogr. simplex</i> Emmons.
Kenwood, N. Y.	" " A small fragment.
Kenwood, N. Y.	" " " "
Kenwood, N. Y.	" " " "
Kenwood, N. Y.	" " " "
Kenwood, N. Y.	" " A very perfect, isolated individual.
Kenwood, N. Y.	Without reference to species.
Kenwood, N. Y.	As <i>Graptolithus</i> . Fig. 7 is fr. counterpart of fig. 2 in Pal. N. Y., 3.
Kenwood, N. Y.	" " " " " " Four stipes showing germ sacs and one showing the macerated remains of the sacs.

## Class HYDROZOA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Graptolithus</b> Linn.					
			<i>amplexicaulis</i> . . . . .					
			<i>angustifolius</i> . . . . .					
			<i>arundinaceus</i> . . . . .					
			<i>bicornis</i> . . . . .					
			" . . . . .					
			<i>ciliatus</i> . . . . .					
			<i>divaricatus</i> . . . . .					
			<i>divergens</i> . . . . .					
			<i>furcatus</i> . . . . .					
U.	1021a	Type.	<i>gracilis</i> . . . . .					
			? <i>lævis</i> . . . . . Hall.	Pal. N. Y.	1	274	74	7, n. s.
			<i>Milesi</i> . . . . .					
			<i>mucronatus</i> . . . . .					
			<i>peosta</i> . . . . .					
			<i>pristis</i> . . . . .					
			" . . . . .					
			<i>putillus</i> . . . . .					
U.	1022a	Fig'd.	<i>ramosus</i> . . . . .					
			<i>scalaris</i> (Linn.) . . . . . Hall.	Pal. N. Y.	1	271	73	4c, f
			<i>scalaris</i> . . . . .					
			" . . . . .					
			<i>secalinus</i> . . . . .					
			" . . . . .					
			<i>serratus</i> . . . . .					
			<i>sextans</i> . . . . .					
			" . . . . .					
			<i>spinulosus</i> . . . . .					
			<i>subtenuis</i> . . . . .					
			<i>tenuis</i> . . . . .					
			<i>Whitfieldi</i> . . . . .					
			germs . . . . .					
			<b>Loganograptus</b> Hall.					
?	433	Type.	<i>Milesi</i> . . . . . Hall.	Geol. Vt.	1, 2	372	12	2-4
			<b>Oldhamia</b> Forbes.					
			? <i>fruticosa</i> . . . . .					
			<b>Rastrites</b> Barrande.					
U.	1050	Type.	<i>Barrandii</i> . . . . . Hall.	Pal. N. Y.	3	522		1, 2
			" . . . . .	N. Y. S. M.	13	64		1, 2
			" . . . . .	Can. O. R.	Dec. 2	26		28
			" . . . . .	N. Y. S. M.	20	184		25
			<b>Stromatocerium</b> Hall.					
B. R.	530 6	Gen. and Sp. Type.	<i>rugosum</i> . . . . . Hall.	Pal. N. Y.	1	48	12	2, 2a
			<b>Thamnograptus</b> Hall.					
U.	1047	Type.	<i>capillaris</i> . . . . . Hall.	" "	3	520		3
			" . . . . .	N. Y. S. M.	13	63		3
"	1048	Gen. and Sp. Type.	<i>typus</i> . . . . . Hall.	Pal. N. Y.	3	519		1, n. s.
			" . . . . .	N. Y. S. M.	13	62		1, "
			" . . . . .	Pal. N. Y.	3	519	p. 520	2, "
			" . . . . .	N. Y. S. M.	13	62	p. 63	2, "
			" . . . . .	Can. O. R.	Dec. 2	17		24, "
			" . . . . .	N. Y. S. M.	20	184		26, "
"	1031a 1048 1	Fig'd.	Genus? sp.? . . . . . Hall.	Pal. N. Y.	3	508		4a, b
"			" . . . . .	" "	3	508		7, n. s.
			" . . . . .	Can. O. R.	Dec. 2		B	19
			" . . . . .	N. Y. S. M.	20		I	19

LOCALITY.	REMARKS.
.....	See <i>Diplograptus</i> .
.....	“ “ “ “ “ “
.....	“ <i>Dicranograptus</i> .
.....	“ <i>Climacograptus</i> .
.....	“ “ <i>parvus</i> .
.....	“ “ <i>pristis</i> .
.....	“ <i>Diplograptus</i> .
.....	“ <i>Dicranograptus</i> .
.....	“ <i>Amphigraptus</i> .
.....	“ <i>Dicranograptus</i> .
.....	“ <i>Canograptus</i> .
Turin, N. Y.	More of the stipe has been uncovered since the figure was made.
.....	See <i>Loganograptus</i> .
.....	“ <i>Diplograptus</i> .
.....	“ “ “ “ “ “
.....	“ “ <i>amplexicaulis</i> .
.....	“ <i>Dicranograptus</i> .
Kenwood, N. Y.	Small fragment. Probably is <i>G. sagittarius</i> flattened on the face.
.....	See <i>Climacograptus bicornis</i> .
.....	“ “ <i>parvus</i> .
.....	“ <i>Diplograptus</i> .
.....	“ “ <i>pristis</i> .
.....	“ <i>Didymograptus</i> .
.....	“ <i>Dicranograptus</i> .
.....	“ “ <i>divaricatus</i> .
.....	“ <i>Diplograptus</i> .
.....	“ <i>Didymograptus</i> .
.....	“ “ <i>subtenuis</i> .
.....	“ <i>Diplograptus</i> .
.....	“ “ <i>ciliatus, marcidus</i> and <i>Whitfieldi</i> .
.....	
Monkton, Vt.	As <i>Graptolithus</i> . Two fronds imbedded in a boulder.
.....	See <i>Callithamnopsis</i> under Algæ.
.....	
Kenwood, N. Y.	A single stipe with branchlets, imbedded.
Watertown, N. Y.	Imbedded individual showing weathered longitudinal section.
.....	
Kenwood, N. Y.	A stipe with branchlets, imbedded.
“ “	“ “ “ “ “ “
.....	
“ “	“ “ “ “ “ “
“ “	On slab with several species of graptolites.
.....	
“ “	On block with <i>Dicranograptus divaricatus</i> .

Subkingdom ECHINODERMATA.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Asterias</b> Lamarck. <i>matutinus</i> .....					
Tr.	661	Type.	<b>Palæaster</b> Hall. <i>matutinus</i> .....Hall.	Pal. N. Y.	I	91	29	5a, b
H. R.	1195	"	Schæfferi. ....Hall.	N. Y. S. M.	20	284	9	t, ven. side

Class CRINOIDEA.

			<b>Actinocrinus</b> Miller. <i>tenuiradiatus</i> .....					
			? sp. ....	Pal. N. Y.	I	18	4	10
Tr.	654	Type.	<b>Cupulocrinus</b> d'Orbigny. <i>heterocostalis</i> .....Hall.	Pal. N. Y.	I	85	28	3d-f
Tr.	$\frac{650}{3}$	Type.	<b>Dendrocrinus</b> Hall. <i>alternatus</i> .....Hall.	Pal. N. Y.	I	83	28	1a-d
"	$\frac{650}{2}$	"	" .....	" "	I	83	28	1e
"	$\frac{650}{1}$	"	" .....	" "	I	83	28	1f
H. R.	1180	"	<i>caduceus</i> .....Hall.	N. Y. S. M.	24	208	5	7, 8
Tr.	$\frac{848}{1}$	"	<i>gracilis</i> .....Hall.	Pal. N. Y.	I	84	28	2a, b
H. R.	$\frac{856}{1}$	Type.	<b>Ectenocrinus</b> S. A. Miller. <i>simplex</i> .....Hall.	Pal. N. Y.	I	280	76	2a, d
"	"	"	" .....	N. Y. S. M.	24	...	5	11, 12
"	1178	"	<b>Heterocrinus</b> Hall. <i>exilis</i> .....Hall.	" "	24	213	5	16, side x, 3
"	1117	"	? <i>gracilis</i> . ....Hall.	Pal. N. Y.	I	280	76	3a, b
"	$\frac{1116}{3}$	Gen. and Sp. Type.	<i>heterodactylus</i> .....Hall.	" "	I	279	76	1a, n. s.
"	$\frac{1116}{2}$	"	" .....	" "	I	279	76	1e
"	$\frac{1116}{1}$	"	" .....	" "	I	279	76	1i-o
"	$\frac{1178}{1}$	Type.	<i>juvenis</i> .....Hall. ( <i>Iocrinus</i> ) <i>polyxo</i> ..... <i>simplex</i> .....	N. Y. S. M.	24	212	5	9, 10
H. R.	1182	Gen. and Sp. Type.	<b>Glyptocrinus</b> Hall. <i>decadactylus</i> .....Hall.	Pal. N. Y.	I	281	77	1a, side.
"	"	"	" .....	" "	I	281	77	1b-f, B.
"	"	"	" .....	" "	I	281	78	1b-e, o, p, r
"	"	"	" .....	" "	I	281	78	1f-h
"	"	"	" .....	" "	I	281	78	1i-k
"	$\frac{1118}{2}$	"	" .....	" "	I	281	78	1s, n. s.
"	"	"	" .....	" "	I	281	78	1t (first)
"	"	"	" .....	" "	I	281	78	1t (second)
"	1182	"	" .....	" "	I	281	78	1u
			<i>Nealli</i> .....					
"	$\frac{1178}{2}$	Fig'd.	<b>Iocrinus</b> Hall. <i>subcrassus</i> (M. & W.)Hall	N. Y. S. M.	24	212	5	1, side.
"	"	"	" .....	" "	24	212	5	2, "
			<b>Poteriocrinus</b> Miller. <i>alternatus</i> .....					
			( <b>Dendrocr.</b> ) <i>caduceus</i> ....					
			<i>gracilis</i> .....					

## Class ASTEROIDEA.

LOCALITY.	REMARKS.
.....	See <i>Palæaster</i> .
Trenton Falls, N. Y. Cincinnati, O.	As <i>Asterias</i> . Imbedded individual. A nearly entire individual, imbedded.
.....	.....
.....	See <i>Palæocystites</i> . " " sp.
Middleville, N. Y.  Turin, N. Y. Carlisle, Pa. Middleville, N. Y. Near Lebanon, O.  Middleville, N. Y.	As generic type of <i>Scyphocrinus</i> , but the name was pre-occupied. Isolated body with broken arms and no stem.  As <i>Poteroocrinus</i> . Weathered individual on limestone. " " Single pelvic plate on limestone. " " Fragment of column imbedded. " " ( <i>Dendrocr.</i> ). Two calices and an unfigured one form the type series. " " Imprint; body lost.
Cincinnati, O. " "	As <i>Heterocrinus</i> . A small calyx with arms nearly entire. " " " large " "
" " Snake Hill, Saratoga Co., N. Y. " " Booneville, N. Y. Pulaski, N. Y.  Lebanon, O.	A small calyx with arms nearly entire. Impression of a column in slate. Species rejected by Wachsmuth and Springer, because founded on column only. Small individual imbedded. Head has been lost, column remains. Slab bears several stems of this and other species. Slab of slate bearing many imprints of crinoid plates, etc. [This species has been made the type of <i>Stenocrinus</i> by Wachsmuth and Springer, <i>vid.</i> Rev. of Palæocrinoidea, III, p. 207.] Detached calyx with arms and short piece of column. See <i>Iocrinus subcrassus</i> . " <i>Ectenocrinus</i> .
Cincinnati, O. " " " " " " " " Booneville, N. Y. " " " " Cincinnati, O.	Two young individuals imbedded in contact. Arms fragmentary. Entire calyx with arms complete to beyond where free. Six fragments of stems corresponding with the figures. Rather small stem, imbedded. Six detached column plates of various form referred here. A slab bearing several stems referred to this species. Large stem, imbedded, associated with other stems, etc. A large stem, imbedded, fragment. Fragment of a large stem, imbedded. See <i>Retioocrinus</i> .
Cincinnati, O. " " ..... ..... .....	As type of <i>Heterocr.</i> ( <i>Iocr.</i> ) <i>polyxo</i> Hall. Rather large calyx. " " " " " " Imbedded, nearly entire.  See <i>Dendrocrinus</i> . " " " "

## Class CRINOIDEA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
H. R.	1198 <sub>g</sub>	Type.	<b>Retiocrinus</b> Billings. Nealli . . . . . Hall.	N. Y. S. M.	24	206	5	18, 19
Tr.	652 <sub>f</sub>	Gen. and Sp. Type.	<b>Schizocrinus</b> Hall. nodosus . . . . . Hall.	Pal. N. Y.	1	81	27	1c, g, k, l, n
"	651	Type.	striatus . . . . . Hall.	" "	1	316	28	4a-c
Ch.	519	Fig'd.	<i>Scyphocrinus</i> Hall. Crinoid plates . . . . . Hall.	Pal. N. Y.	1	17	4	6b, b
Be.	572	"	" column . . . . . "	" "	1	51	12	9

## Class CYSTOIDEA.

H. R.	1194	Fig'd.	<b>Agelacrinus</b> Vanuxem. s. g. <b>Lepidodiscus</b> M. & W. cincinnatensis ( <i>Ram.</i> ) <i>H.</i>	N. Y. S. M.	24	214	6	7, top X 2½
"	1193	Type.	pileus . . . . . Hall.	" "	24	214	6	10, pt. X 3
"	1192	"	s. g. <b>Streptaster</b> Hall. vorticellatus . . . . . Hall.	" "	24	215	6	11, 12
Tr.	887	"	<b>Cyclocystoides</b> B. & S. anteceptus . . . . . Hall.	N. Y. S. M. Lake Sup.	24	219	25	4b
"	662	"	Salteri . . . . . Hall.	N. Y. S. M.	24	218	6	16, enl.
			<b>Echino-encrinites</b> Meyer. <i>anatiformis</i> . . . . .					
H. R.	1191 <sub>f</sub>	Type.	<b>Hemicystites</b> Hall. stellatus . . . . . Hall.	N. Y. S. M.	24	215	6	5, top X 6
Tr.	658	"	<b>Homocystites</b> Barrande. anatiformis . . . . . Hall.	Pal. N. Y.	1	89	29	4a-c
"	"	"	" . . . . .	" "	1	89	29	4d, d <sup>1</sup>
"	"	Fig'd.	" ( <i>Hall.</i> ) . . . . . <i>Frech.</i>	Leth. Geog.	?	?	?	?, enl. X 2
"	659	"	var. <i>Logani</i> ( <i>Bill.</i> ) <i>Fr.</i>	" "	?	?	?	?, 3 enl.'s
H. R.	1190a	Type.	<b>Lichenocrinus</b> Hall. crateriformis . . . . . Hall.	N. Y. S. M.	24	217		
"	1190	Gen. and Sp. Type.	Dyeri . . . . . Hall.	" "	24	216	7	4
Ch.	519	Type.	<b>Palæocystites</b> Billings. tenuiradiatus . . . . . Hall.	Pal. N. Y.	1	18	4	9, n. s.
"	520	Fig'd.	? sp. . . . . Hall.	" "	1	18	4	10

## MOLLUSCOIDEA.

Tr.	522 <sub>g</sub>	Type.	<b>Clathropora</b> Hall. flabellata . . . . . Hall.	Lake Sup.	2	207	24	2a, b
Ch.	525	"	glomerata . . . . . Hall.	Pal. N. Y.	1	17	4	5, n. s.
Tr.	525 <sub>f</sub>	Gen. and Sp. Type.	<b>Enallopora</b> d'Orbigny. perantiqua . . . . . Hall.	" "	1	76	26	5a, b



LOCALITY.	REMARKS.
Near Lebanon, O.	As <i>Glyptocrinus</i> . Two bodies as represented. Another, not figured, is in the type series.
Middleville, N. Y.	A tentaculated finger and five fragments of columns.
" " "	Body and part of column.
Chazy, N. Y.	See <i>Cupulocrinus</i> . This name was pre-occupied.
Watertown, N. Y.	As types of <i>Streptelasma expansum</i> . Imbedded in block with <i>Palaeocystites tenuiradiatus</i> , fig. 9, pl. iv.
	Imbedded. Two annulations have been broken off since the fig. was made. Ref. in book to Black Riv. grp., but the block bears Prof. Hall's loc. num. for Birdseye, and possesses the charac. of that rock.
Cincinnati, O.	A vertically compressed individual, imbedded.
" "	Individual crushed so as to show three arms and the space between two.
" "	Somewhat crushed individual, imbedded.
Escalañaba River, Mich. Near Saratoga, N. Y.	Without name. An incomplete individual. Imbedded.
.....	See <i>Homocystites</i> .
Cincinnati, O.	As <i>Agelacrinus</i> ( <i>Hemicystites</i> ). Small individual on <i>Rafinesquina alternata</i> .
Turin, N. Y.	As <i>Echino-encrinites</i> . Parts of two individuals in same slab.
" " "	" " " Two worn individuals in slab with others.
" " "	Lower part of calyx.
Brighton, Ont.	Calyx with arms and stem. This and the preceding are fig'd in a revised edition of F. Rømer's <i>Lethæa Geognostica</i> not yet published.
Cincinnati, O.	A small individual. In type series, but not figured.
" "	Rather large individual, probably somewhat weathered. Two unfigured individuals are in type series.
Chazy, N. Y.	As <i>Actinocrinus</i> . A number of plates imbedded in block with originals of figs. 6b, b, same plate.
" "	As <i>Actinocrinus</i> . Single summit-plate imbedded. Two figures.
Class POLYZOA.	
Escalañaba River, Mich. Granville, Vt.	A very large frond, imbedded. As <i>Stictopora</i> . A considerable surface, of which a part was fig'd.
Middleville, N. Y.	As <i>Gorgonia</i> ? An imbedded frond, of which a part has been lost.

## MOLLUSCOIDEA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs
Tr.	568 1	Type.	<i>Escharopora</i> Hall.	Pal. N. Y.	I	73	26	1e
			recta . . . . . Hall.					
			recta . . . . . " var. <i>nodosa</i> . . . . .					
Tr.	568 1 569	Type.	<i>Ptilodictya</i> Lonsdale.	Pal. N. Y.	I	73	26	1c, d 2, n. s.
			recta . . . . . Hall.					
			" var. <i>nodosa</i> . . . . . Hall.					
Ft. C.	583	Type.	<i>Retepora</i> Lamarck.	A. M. N. H.	9	177	4	5, 6
			<i>gracilis</i> . . . . .					
			<i>incepta</i> . . . . .					
			? <i>foliacea</i> . . . . .					
Tr.	566 1	Type.	<i>Rhinopora</i> Hall.	Pal. N. Y.	I	74	26	3a-c
			prima . . . . . Whitfield.					
Ch.	526 2	Type.	<i>Stictopora</i> Hall.	Pal. N. Y.	I	75	26	4a-c
			? <i>acuta</i> . . . . . Hall.					
B.	574 2	Type.	<i>elegantula</i> . . . . . Hall.	" "	I	75	26	4d, e
			" . . . . .					
B. R.	596	"	<i>fenestrata</i> . . . . . Hall.	" "	I	16	4	4a, b
			<i>labyrinthica</i> . . . . . Hall.					
Ch.	524 2	Type.	<i>ramosa</i> . . . . . Hall.	" "	I	51	12	6, 7, 7a
			" . . . . .					
Ch.	524 2	Type.	<i>Subretepora</i> d'Orbigny.	Pal. N. Y.	I	15	4	2a, b
			<i>gracilis</i> . . . . . Hall.					
"	"	"	<i>incepta</i> . . . . . Hall.	" "	I	15	4	1a (2d fig.)

## Class BRACHIOPODA.

Ft. C.	440	Type.	<i>Atrypa</i> Dalman.	Pal. N. Y.	I	145	33	11a-d
			<i>altilis</i> . . . . .					
			<i>ambigua</i> . . . . .					
			<i>bisulcata</i> . . . . .					
			<i>circulus</i> . . . . .					
			<i>cuspidata</i> . . . . .					
			<i>dentata</i> . . . . .					
			<i>exigua</i> . . . . .					
			<i>extans</i> . . . . .					
			<i>hemiplicata</i> . . . . .					
			<i>increbescens</i> . . . . .					
			? <i>modesta</i> . . . . .					
			<i>nucleus</i> . . . . .					
			<i>plena</i> . . . . .					
			<i>phlicifera</i> . . . . .					
			<i>recurvirostra</i> . . . . .					
			<i>sordida</i> . . . . .					
			<i>subtrigonalis</i> . . . . .					
			sp. ? . . . . .					
			Ft. C.					
? <i>primordialis</i> . . . . . Whitfield.								

## Class POLYZOA—Continued.

LOCALITY.	REMARKS.
Middleville, N. Y.	Pre-occupied by <i>Ptilodietya</i> . The upper portion of this spec. is a fragm. of a <i>Cyrtoceras</i> coated with a bryozoan, not <i>Ptilodietya</i> . Below this is a piece of crinoid stem, and then an organic fragment of undetermined nature. See <i>Ptilodietya</i> . " "
Middleville, N. Y.	As generic type of <i>Escharopora</i> . Slender individual, imbedded. As <i>Escharopora</i> . Is specifically distinct from <i>P. recta</i> .
" "	See <i>Subretepora</i> . " " " <i>Bucania punctifrons</i> .
Fort Cassin, Vt.	A frond, imbedded.
Middleville, N. Y.	Small individual with several bifurcations.
" "	" " two "
Watertown, N. Y.	" " crust nearly gone.
Chazy, N. Y.	Two branches, imbedded, one showing axis, the other the ext. surface.
" "	Several branching stems, imbedded.
Watertown, N. Y.	Many fragments imbedded.
Chazy, N. Y.	As <i>Retepora</i> . A small fragment, imbedded.
Near Galway, N. Y.	" " Fragment of frond, imbedded.
.....	See <i>Camarotechia</i> . " <i>Triplecia extans</i> . " <i>Cyclospira</i> . " <i>Camerella</i> . " <i>Triplecia extans</i> . " <i>Rhyncotrema</i> . " <i>Protozyga</i> . " <i>Triplecia</i> . " <i>Parastrophia</i> . " <i>Rhyncotrema increbescens</i> and <i>R. capax</i> . " <i>Zygospira</i> . " <i>Triplecia</i> . " <i>Camarotechia</i> . " " " <i>Zygospira</i> . " <i>Plectorthis</i> . " <i>Camarotechia</i> . " <i>Triplecia extans</i> .
Fort Cassin, Vt.	As <i>Streptorhynchus</i> ? Dorsal valve imbedded, right angle wanting.

## Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Camarotoëchia</b> H. & C.					
Ch.	532	Type.	altilis. . . . . Hall.	Pal. N. Y.	I	23	4 bis	9a-d
"	530	"	plena. . . . . Hall.	" " "	I	21	4 bis	7c, v. v.
"	533	"	? plicifera. . . . . Hall.	" " "	I	22	4 bis	8c, d
Tr.?	708	"	? subtrigonalis. . . . . Hall.	" " "	I	145	33	12a-c
			<b>Camerella</b> Billings.					
Tr.	696	Type.	circulus. . . . . Hall.	Pal. N. Y.	I	142	33	7a-c
			<b>Crania</b> Retzius.					
H. R.	1326	Type.	lælia. . . . . Hall.	N. Y. S. M.	24	220	7	16, ext. d. v
			H. & C.	St. G. N. Y.	11	....	6	16, "
			"	Pal. N. Y.	8, pt. I	....	4H	I, "
"	1327	"	scabiosa. . . . . Hall.	N. Y. S. M.	24	220	7	15, group
			H. & C.	Pal. N. Y.	8, pt. I	148	4H	26, "
Tr.	908	"	setigera. . . . . Hall.	N. Y. S. M.	24	220	7	13, 14
			H. & C.	Pal. N. Y.	8, pt. I	150	4H	15, 16
"	687	"	trentonensis. . . . . Hall.	N. Y. S. M.	24	219	7	11, 12
			H. & C.	Pal. N. Y.	8, pt. I	150	4H	21, 22
			<b>Cyclospira</b> H. & C.					
Tr.	713	Fig'd Sp. and G. T.	bisulcata (Emmons). . . H.	Pal. N. Y.	I	139	33	3a-e
			H. & C.	St. G. N. Y.	13	808	40	1-3
"			"	Pal. N. Y.	8, pt. 2	146	54	38-40
			<b>Dalmanella</b> H. & C.					
H. R.	1329	Type.	emacerata. . . . . Hall.	N. Y. S. M.	13	121	....	....
			H. & C.	Pal. N. Y.	8, pt. I	15	....	1, ext. d. v.
Ft. C.	441	Fig'd.	? evadne (Bill.). . . Whitf.	A. M. N. H.	I	300	24	8, ext. x 2
Ca.	361	Type.	Macleodi. . . . . Whitfield.	" " "	2	43	7	1-4
Tr.	333	"	perveta. . . . . Conrad.	P. A. N. S.	I	333	....	....
			Hall.	Pal. N. Y.	I	120	32	5a-d
			"	Geol. Wis.	I	42	....	7a-d
			"	St. G. N. Y.	2	....	34	16, d. v.
			H. & C.	Pal. N. Y.	8, pt. I	205	5C	12, "
"		Fig'd.	" (Con.). . . . . Hall.	St. G. N. Y.	2	....	34	17, 18
"		"	" (Con.). . . . . Hall.	Pal. N. Y.	8, pt. I	205	5C	13, 14
			H. & C.	St. G. N. Y.	2	....	34	24, int.
			H. & C.	"	II	....	II	10, "
"	910	Type.	subæquata. . . . . Conrad.	Pal. N. Y.	8, pt. I	205	5C	10, "
			Hall.	P. A. N. S.	I	333	....	....
			"	Pal. N. Y.	I	118	32	2a-d
			"	Geol. Wis.	I	42	....	1-3
			H. & C.	St. G. N. Y.	2	....	34	19-21
Tr.	330	Fig'd.	testudinaria (Dalman) H.	Pal. N. Y.	8, pt. I	205	5C	6-8
H. R.	330	"	" " " "	" " "	I	117	32	1a-d
Tr.	330	"	" " " "	" " "	I	117	32	1g-k
H. R.	330	"	" " " "	" " "	I	117	32	11, d. v.
Tr.	18	"	" " " "	" " "	I	288	79	4a-c
		Fig'd Sp. and G. T.	" " " "	St. G. N. Y.	2	....	34	1-5
			H. & C.	" " "	II	....	II	4, 5
"	330	"	" (Dalman) Hall.	Pal. N. Y.	8, pt. I	207	5B	27-31
			H. & C.	St. G. N. Y.	2	....	34	11, int. x 2
"	330	"	" (Dalman) Hall.	Pal. N. Y.	8, pt. I	207	5B	39, "
			H. & C.	St. G. N. Y.	2	....	34	12
"	330	"	" (Dalman) Hall.	Pal. N. Y.	8, pt. I	207	5B	38
			H. & C.	Pal. N. Y.	2	....	34	12
"	330	"	" (Dalman) Hall.	St. G. N. Y.	8, pt. I	207	5B	38
			H. & C.	Pal. N. Y.	8, pt. I	207	5B	38
			<i>Delthyris</i> Dalman.					
			<i>biforata</i> , var. <i>lynx</i> . . . . .					

LOCALITY.	REMARKS.
Chazy, N. Y.	As <i>Atrypa</i> . Entire individual.
" "	" " " "
Turin, N. Y.	" " Entire, somewhat compressed. Entire.
Middleville, N. Y.	As <i>Atrypa</i> . Somewhat exfoliated.
Oxford, O.	Four individuals on the ventral and two on the dorsal valve of a specimen of <i>Strophomena planumbona</i> .
Ohio River, opp. Westport, Ky.	Twelve or more individuals on dorsal valve of <i>Platystrophia lynx</i> .
Near Mineral Pt., Wis.	Dorsal valve, imbedded.
Middleville, N. Y.	" "
Adams, N. Y.	As <i>Atrypa</i> . Entire. Entire adult.
Cincinnati, O.	As <i>Orthis</i> . " "
Fort Cassin, Vt.	Two dorsal valves, one used only for card. process and musc. impr.
Beekmantown, N. Y.	As <i>Orthis</i> . An imbedded dorsal valve.
" "	" " A dorsal ? and two ventral valves, imbedded.
" "	" "
" "	" "
" "	" "
Mineral Pt., Wis.	An entire, perfect individual.
Mineral Pt., Wis.	As <i>Orthis</i> . Margin somewhat broken.
" "	As <i>Orthis subaquata</i> .
" "	" <i>Dalmanella subaquata</i> .
Mineral Pt., Wis.	" " " Detached ventral valve.
" "	As <i>Orthis</i> . " "
" "	" "
" "	" "
Mineral Pt., Wis.	Entire, perfect, detached. See also <i>D. perveta</i> .
Middleville, N. Y.	As <i>Orthis</i> . Detached individual.
Cincinnati, O.	" " A dorsal valve and an individual of medium size.
Middleville, N. Y.	" " Loc. incor. in expl. pl. Spec. evidently from Middleville.
Pulaski, N. Y.	" " Imprints of two ventral and a dorsal valve.
" "	" " <i>testudinaria</i> , var.
" "	Generic type.
Mineral Pt., Wis.	" " Two entire individuals, a ventral and a dorsal valve.
" "	As <i>Orthis</i> .
Lowville, N. Y.	Generic type. Two imbedded dorsal valves which were used.
" "	As <i>Orthis</i> . Enl. $\times 2$ and not nat. size, as stated in expl. of pl., vol. 8.
Middleville, N. Y.	Generic type. Ventral valve, imbedded. Used for outline and hinge.
" "	As <i>Orthis</i> .
Lowville, N. Y.	Generic type. Ventral valve, imbedded. Used for muscular impr.
" "	= <i>Spirifer</i> .
" "	See <i>Platystrophia lynx</i> .

Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	879 2	Fig'd.	<b>Dignomia</b> Hall. <i>quadrata</i> (Eichw.)..Hall.	Pal. N. Y.	I	96	30	4a, b
			“ “ “ “ “ “	Geol. Wis.	I	46	....	I
“	892 2	“	<b>Dinorthis</b> Hall & Clarke. <i>pectinella</i> (Conrad)..Hall.	Pal. N. Y.	I	123	32	10, ext. d. v.
			“ “ “ “ “ “	“ “ “	I	123	32	10a, b
“	692a	Type.	“ “ “ “ “ “ <i>H. &amp; C.</i>	St. G. N. Y.	2	....	34	39, 40
			“ var. <i>semiovalis</i> ..H.	Pal. N. Y.	8, pt. I	195	5	27, 28
“	909 1	“	<b>Hebertella</b> Hall & Clarke. <i>bellarugosa</i> .....Conrad.	P. A. N. S.	I	333	....	....
			“ “ “ “ “ “ <i>Hall.</i>	Pal. N. Y.	I	118	32	3a-e
H. R.	912 1	“	<i>insculpta</i> .....Hall.	Geol. Wis.	I	42	..	4-6
			“ “ “ “ “ “	Pal. N. Y.	I	125	32	12a-d
“	1842 2	“	<i>occidentalis</i> .....Hall.	“ “	I	127	32A	2a, c, e-g, i, k, m
			“ “ “ “ “ “	“ “ “	I	127	32B	1a, c, f, g
“	1842 2	Fig'd.	“ “ “ “ “ “	“ “ “	I	129	32C	1a-n
			“ “ “ “ “ “	St. G. N. Y.	2	....	34	31, 32
“	1842 1	Type.	“ “ “ “ “ “ <i>H. &amp; C.</i>	Pal. N. Y.	8, pt. I	222	5A	11, 12
			“ “ “ “ “ “ <i>Hall.</i>	St. G. N. Y.	2	....	35	16-19
H. R.	1842 1	Type.	<i>sinuata</i> .....Hall.	Pal. N. Y.	I	128	32B	2a, g-k
			“ “ “ “ “ “	“ “ “	I	128	32C	2n, o
“	“	“	“ “ “ “ “ “	“ “ “	I	128	32B	2e, f
			“ “ “ “ “ “	“ “ “	I	128	32C	2m, p, s
“	“	Fig'd.	“ ? “ “ “ “	St. G. N. Y.	2	....	34	33, 34
			“ “ “ “ “ “ <i>H. &amp; C.</i>	Pal. N. Y.	8, pt. I	....	5A	9, 10
“	1842 2	Gen. and Sp. Type.	“ “ “ “ “ “ <i>Hall.</i>	St. G. N. Y.	2	....	35	20, int. d. v.
			“ “ “ “ “ “ <i>H. &amp; C.</i>	“ “ “	II	266	10	3, “
“	1842 1	“	“ “ “ “ “ “	Pal. N. Y.	8, pt. I	198	5A	3, “
			“ “ “ “ “ “ <i>Hall.</i>	St. G. N. Y.	2	....	35	21, int. v. v.
“	“	“	“ “ “ “ “ “ <i>H. &amp; C.</i>	“ “ “	II	266	10	I, “
			“ “ “ “ “ “	Pal. N. Y.	8, pt. I	198	5A	I, “
			<b>Hemipronites</b> Pander. <i>apicalis</i> .....					
			<b>Leptæna</b> Dalman <i>alternata</i> .....					
			<i>alternistriata</i> .....					
			<i>camerata</i> .....					
			<i>deflecta</i> .....					
			<i>deltoidæa</i> .....					
			<i>filitexta</i> .....					
			<i>planoconvexa</i> .....					
			<i>planumbona</i> .....					
			<i>recta</i> .....					
			<i>sericea</i> .....					
			<i>subtenta</i> .....					
H. R.	898 8	Fig'd.	<i>tenuistriata</i> (Sow.)..Hall.	Pal. N. Y.	I	108	31A	4a, b, e-g
Tr.	898 8		“ “ “ “ “ “	“ “ “	I	108	31A	4d, ext.
H. R.	898 6	“	“ “ “ “ “ “	St. G. N. Y.	2	....	38	12, int.
			“ “ “ “ “ “ <i>H. &amp; C.</i>	Pal. N. Y.	8, pt. I	276	8	12, “
“	898 6	“	“ “ “ “ “ “ (Sow.)..Hall	St. G. N. Y.	2	....	38	13-15
			“ “ “ “ “ “ <i>H. &amp; C.</i>	“ “ “	II	....	13	1, 2
Ft. C.	443	“	“ “ “ “ “ “	Pal. N. Y.	8, pt. I	276	8	13-15
			sp. ?.....Whitfield.	A. M. N. H.	I	302	24	6, ext.
U.	886 8	Type.	<b>Leptobolus</b> Hall. <i>insignis</i> .....Hall.	N. Y. S. M.	24	227	7	17
			“ “ “ “ “ “ <i>H. &amp; C.</i>	St. G. N. Y.	11	....	3	8
“	“	“	“ “ “ “ “ “	Pal. N. Y.	8, pt. I	73	3	3

LOCALITY.	REMARKS.
Lewis Co., N. Y.	As <i>Lingula</i> . " " Individual with broken cardinal area.
" "	As <i>Orthis</i> . An entire individual from Dry Sugar River.
Lewis Co., N. Y. Middleville, N. Y.	Gen. type. Entire indiv. from Dry Sugar Riv. Figs. are not enl. As <i>Orthis</i> . Imbedded ventral valve and detached individual.
Mineral Pt., Wis. Cincinnati, O.	" " " " Detached, entire individual. " " Ventr. valve retaining ovarian markings. Beak imperf.
" "	" " Four individ. One is very large, with margin broken.
" "	" " Three individuals. Two are somewhat imperfect.
Savannah, Ill. Cincinnati, O.	As types of <i>Orthis subjugata</i> . Five individuals. As <i>Orthis</i> . Small, entire, probably young. As <i>Orthis</i> . Entire, perfect, adult. See also <i>Hebertella sinuata</i> .
Cincinnati, O.	" " Small, entire individ. and a large one, somewhat crushed.
" "	" " Large, distorted individ. and two large opposite valves. <i>occidentalis?</i>
Cincinnati, O.	An entire individual doubtfully referred to this species. As <i>Orthis occidentalis</i> .
Lebanon, O.	Made generic type. A large dorsal valve. As <i>Orthis occidentalis</i> .
Cincinnati, O.	Made generic type. A large ventral valve.
	See <i>Polytechia</i> .
	See <i>Rafinesquina</i> .
	" "
	" <i>Plasiomys</i> .
	" <i>Rafinesquina</i> .
	" <i>Strophomena</i> .
	" "
	" <i>Plasiomys deflecta</i> .
	" <i>Plectambonites</i> .
	" <i>Strophomena</i> .
Cincinnati, O. Carlisle, Pa.	A small ventral valve and an entire individual of medium size. Ventral valve, imbedded.
Oxford, O.	As <i>Strophomena</i> . A small dorsal valve. As <i>Strophomena</i> .
Lebanon, O. Fort Cassin, Vt.	An entire adult. All the figures are from one individual. Ventral valve, imbedded.
Utica, N. Y.	Local. is incorrect in explanation of plates, and degree of enl. is $\times 6$ .

## Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Lingula Bruguière.</b>					
Tr.	674	Type.	<i>æqualis</i> . . . . . Hall.	Pal. N. Y.	I	95	30	3a, b
"	673	Fig'd.	<i>attenuata</i> (Sow.)? . . . Hall.	" "	I	94	30	1a, b
U.	672 <sup>a</sup>	Type.	<i>curta</i> . . . . . Conrad.	J. A. N. S.	8	266	15	12
			" . . . . . Hall.	Pal. N. Y.	I	97	30	6a
Tr.	676	Fig'd.	" (Con.) . . . . . Hall.	" "	I	97	30	6b
"	678	Type.	<i>obtusa</i> . . . . . Hall.	" "	I	98	30	7a, b
			<i>quadrata</i> . . . . .					
H. R.	1121	Fig'd.	<i>rectilateralis</i> (Con.) Hall.	Pal. N. Y.	I	285	79	1a, d? v.
Tr.	680	Type.	<i>riciniformis</i> . . . . . Hall.	" "	I	95	30	2a-c
			<b>Lingulops Hall.</b>					
H. R.	1096	Gen. and Sp. Type.	<i>Whitfieldi</i> . . . . . Hall.	N. Y. S. M.	23	245	13	I, 2
			" . . . . . H. & C.	St. G. N. Y.	11	234	1	18, 19
			" . . . . .	Pal. N. Y.	8, pt. I	18	2	27-29
H. R.	1096	Gen. and Sp. Type.	" (Hall) H. & C.	St. G. N. Y.	11	234	1	20
			" . . . . .	Pal. N. Y.	8, pt. I	18	2	30
			<b>Orbicula Cuvier.</b>					
			? <i>deformata</i> . . . . .					
			? <i>filosa</i> . . . . .					
			? <i>lamellosa</i> . . . . .					
			? <i>subtruncata</i> . . . . .					
			? <i>terminalis</i> . . . . .					
			<b>Orbiculoidea d'Orbigny.</b>					
Tr.	684	Type.	<i>lamellosa</i> . . . . . Hall.	Pal. N. Y.	I	99	30	10a, b
			" . . . . . H. & C.	" "	8, pt. I		4E	12, ext. d. v. X 2
			<b>Orthis Dalman.</b>					
			<i>bellarugosa</i> . . . . .					
H. R.	1342	Type.	<i>cinnatensis</i> S.A. Miller.	Am. P. F.	2d ed.	296		
			" . . . . . Hall.	Am. J. Sci.	48	295		
Ch.	528	"	<i>costalis</i> . . . . . Hall.	Pal. N. Y.	I	20	4 bis	4a, b
			" . . . . .	St. G. N. Y.	2		34	35-38
			" . . . . . H. & C.	Pal. N. Y.	8, pt. I	221	5	15-17
			<i>costata</i> . . . . .					
			<i>disparilis</i> . . . . .					
			<i>ella</i> . . . . .					
			<i>emacerata</i> . . . . .					
			<i>erratica</i> . . . . .					
			<i>evadne</i> . . . . .					
			<i>fissicosta</i> . . . . .					
			<i>insculpta</i> . . . . .					
			<i>Macleodi</i> . . . . .					
			<i>occidentalis</i> . . . . .					
			<i>pectinella</i> . . . . .					
			" var. <i>semiovalis</i> .					
			<i>perveta</i> . . . . .					
			<i>plicatella</i> . . . . .					
			<i>sinuata</i> . . . . .					
			<i>subaquata</i> . . . . .					
			<i>subjugata</i> . . . . .					
			<i>subquadrata</i> . . . . .					
			<i>testudinaria</i> . . . . .					
Tr.	911	Fig'd.	<i>tricenaria</i> . . . . . Conrad.	P. A. N. S.	I	333		
"	911	"	" . . . . . Hall.	Pal. N. Y.	I	119	32	4a-d
"	911	"	" (Con.) . . . . . Hall.	" "	I	121	32	8a, c
"	911	"	" . . . . .	Geol. Wis.	I	42		8, 9
"	911	"	" . . . . .	St. G. N. Y.	2		35	1-5
			" . . . . . H. & C.	" "	11		9	4, 5, 7
			" . . . . .	Pal. N. Y.	8, pt. I	193	5	9-12, 14



LOCALITY.	REMARKS.
Middleville, N. Y.	A dorsal and a ventral valve, imbedded. First figure combined from two indiv. Second a large vent. valve.
" " "	
Carlisle, Penn.	Imbedded valve.
Middleville, N. Y.	" " Two dorsal valves, imbedded. Two unfig'd spec. are in type series. See <i>L. rectilateralis</i> and <i>Dignomia quadrata</i> .
Lorraine, N. Y.	As <i>L. quadrata</i> , Eichw. Exfol. dorsal ? valve, imbedded.
Middleville, N. Y.	Three ventral valves, imbedded.
Maquoketa Creek, Ia.	A ventral valve and imprint of two other ventral valves in same block. Locality is 12 miles N. W. of Dubuque.
" " "	Figure may have been made from an impression of this specimen, which is an internal cast of dorsal valve.
Maquoketa Creek, Ia.	
" " "	See <i>Stenotheca dubia</i> .
" " "	" <i>Schizocrania</i> .
" " "	" <i>Orbiculoidea</i> .
" " "	" <i>Pholidops</i> .
" " "	" <i>Trematis</i> .
" " "	As <i>Orbicula</i> .
Middleville, N. Y.	Dorsal valve, imbedded, somewhat crushed.
" " "	See <i>Hebertella</i> .
Cincinnati, O.	As type of <i>O. costata</i> , preoccupied. Entire.
Chazy, N. Y.	Imprints of 4 valves, 2 dorsal and 2 ventral. Two retain some shell. See <i>O. cincinnatensis</i> .
" " "	" " <i>tricenaria</i> .
" " "	" <i>Plectorthis sordida</i> .
" " "	" <i>Dalmanella</i> .
" " "	" <i>Zygospira</i> .
" " "	" <i>Dalmanella</i> .
" " "	" <i>Plectorthis</i> .
" " "	" <i>Hebertella</i> .
" " "	" <i>Dalmanella</i> .
" " "	" <i>Hebertella</i> .
" " "	" <i>Dinorthis</i> .
" " "	" " " <i>Dalmanella</i> .
" " "	" <i>Plectorthis</i> .
" " "	" <i>Hebertella</i> .
" " "	" <i>Dalmanella</i> .
" " "	" <i>Hebertella</i> .
" " "	" <i>Plasionys</i> .
" " "	" <i>Dalmanella</i> .
Mineral Pt., Wis.	As type of <i>O. disparilis</i> . " <i>O. disparilis</i> , Con., but is young of <i>O. tricenaria</i> .
Middleville, N. Y.	An entire individual and an imbedded ventral valve.
Mineral Pt., Wis.	An entire individual, a dorsal and two ventral valves.

Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	710	Type.	<b>Parastrophia</b> H. & C. hemiplicata . . . . . Hall.	Pal. N. Y.	I	144	33	10a-f
H. R.	1120	"	<b>Pholidops</b> Hall. subtruncata . . . . . Hall.	" "	I	290	79	7a, b
			" " " " " "	N. Y. S. M.	24	221	7	9, <i>enl.</i> X 4
			" " " " " "	H. & C.	Pal. N. Y.	8, pt. I	4 I	19, <i>enl.</i> X 4
Tr.	680	"	trentonensis . . . . . Hall.	N. Y. S. M.	24	221	7	8, <i>d. v.</i> X 4
			" " " " " "	H. & C.	Pal. N. Y.	8, pt. I	157	4 I 17, "
"	921	Type.	<b>Plasiomys</b> H. & C. defectus ( <i>Con.</i> ) . . . . . Hall.	Pal. N. Y.	I	113	31B	5a-c, & one not numb'd
"	920	Fig'd.	" " " " " " " " " " " "	Con.	P. A. N. S.	I	332	...
			" " " " " " " " " " " "	Hall.	Pal. N. Y.	I	113	31B
H. R.	813	Gen and Sp. Type.	subquadratus . . . . . Hall.	" "	I	126	32A	6a, b 1a-n
			" " " " " " " " " " " "	" "	I	54	ct. 10	I, 2
			" " " " " " " " " " " "	H. & C.	Geol. Wis.	I	54	ct. 10
			" " " " " " " " " " " "	H. & C.	Pal. N. Y.	8, pt. I	196	...
"	593	Fig'd.	<b>Platystrophia</b> King. biforata <i>Schlotheim</i> ,	" "	I	133	32D	1a-g
"	593	"	" " " " " " " " " " " "	var. lynx ( <i>Eichw.</i> ) H.	Pal. N. Y.	I	133	32D
			" " " " " " " " " " " "	" "	I	133	32D	1k-1U
Tr.	704	Fig'd.	<b>Plectambonites</b> Pander. sericea ( <i>Sow.</i> ) . . . . . Hall.	" "	I	110	31B	2a-f
H. R.	704	"	" " " " " " " " " " " "	" "	I	42	...	17 <i>d. v.</i>
			" " " " " " " " " " " "	Geol. Wis.	I	287	79	3a-b
Tr.	704	"	" " " " " " " " " " " "	" "	I	2	...	25-29
			" " " " " " " " " " " "	H. & C.	St. G. N. Y.	2	...	46
			" " " " " " " " " " " "	" "	II	...	19	4-7
			" " " " " " " " " " " "	" "	8, pt. I	...	15	25-29
H. R.	4490	Type.	<b>Plectorthis</b> H. & C. fissicosta . . . . . Hall.	" "	I	121	32	7a, b
"	695	Gen. and Sp. Type.	plicatella . . . . . Hall.	" "	I	122	32	9a-g
"	1354	Type.	? sordida . . . . . Hall.	" "	I	148	33	16, <i>d. ? v.</i>
"	1086	Fig'd.	" " " " " " " " " " " "	" "	13	121	...	...
			" " " " " " " " " " " "	" "	15	158	2	6-8
Ft. C.	444	Gen. and Sp. Type.	<b>Polytæchia</b> H. & C. apicalis . . . . . <i>Whitfield</i> .	A. M. N. H.	I	300	24	1-5
			" " " " " " " " " " " "	Hall.	St. G. N. Y.	8	44	...
			" " " " " " " " " " " "	H. & C.	" "	II	275	8
			" " " " " " " " " " " "	" "	8, pt. I	239	7A	16-18 28-30
"	505	Type.	<b>Protorthis</b> H. & C. cassinensis . . . . . <i>Whitfield</i> .	A. M. N. H.	9	178	4	1, 2
"	506	"	minima . . . . . <i>Whitfield</i> .	" "	9	178	4	3, 4
Tr.	714	Type.	<b>Protozyga</b> H. & C. exigua . . . . . Hall.	Pal. N. Y.	I	141	33	6a-d
"	"	"	" " " " " " " " " " " "	H. & C.	St. G. N. Y.	13	810	40
			" " " " " " " " " " " "	" "	8, pt. 2	149	54	47, 48
"	697	Fig'd.	<b>Rafinesquina</b> H. & C. alternata ( <i>Con.</i> ) . . . . . Hall.	Pal. N. Y.	I	102	31	1a, e
"	697	"	" " " " " " " " " " " "	" "	I	102	31	1c-d, h
H. R.	697	"	" " " " " " " " " " " "	" "	I	102	31	1g, <i>ext. v. v.</i>
"	"	"	" " " " " " " " " " " "	Geol. Wis.	I	54	ct. 10	6, "
"	"	"	" " " " " " " " " " " "	" "	I	102	31	1i-m*
Tr.	697	"	" " " " " " " " " " " "	" "	I	102	31A	1a-c
"	697	"	" " " " " " " " " " " "	" "	I	102	31A	1d, <i>ext. d. v.</i>
H. R.	697	"	" " " " " " " " " " " "	" "	I	102	31A	1e-g
"	11	"	" " " " " " " " " " " "	" "	I	286	79	2a, c, f*
"	"	"	" " " " " " " " " " " "	" "	I	286	79	2g-i

LOCALITY.	REMARKS.
Middleville, N. Y.	As <i>Atrypa</i> . Three entire individuals.
.....	As <i>Orbicula</i> ?
Lorraine, N. Y.	A group of individuals, imbedded. Probably not a true <i>Pholidops</i> .
Middleville, N. Y.	Dorsal valve, imbedded.
Mineral Pt., Wis.	As <i>Leptana</i> . Probably Conrad's type specimen with figs. enlarged.
.....	As type of <i>Strophomena recta</i> .
Mineral Pt., Wis.	As <i>Leptana recta</i> Con., but really is a young <i>P. defectus</i> . Entire.
.....	As <i>Orthis</i> .
.....	" " "
Cincinnati, O.	Generic name proposed. Four individuals and a large ventral valve.
Middleville, N. Y.	As <i>Delthyris</i> . Four small, entire individuals.
Cincinnati, O.	" " " Fourteen small to very large individuals.
.....	As <i>Leptana</i> .
Middleville, N. Y.	" " " Two individuals and two dorsal valves.
Near W. Turin, N. Y.	" " " Two interior imprints dorsal valves.
.....	" " "
Mineral Pt., Wis.	An entire individual and two opposite detached valves.
Cincinnati, O.	As <i>Orthis</i> . Entire, somewhat crushed.
" " "	" " " Four individuals ranging from very small to large.
" " "	" <i>Atrypa</i> . Entire, small.
.....	" type of <i>Orthis ella</i> .
Cincinnati, O.	" " " ? " " Two entire individuals.
.....	As <i>Hemipronites</i> .
.....	Made type of genus <i>Waagenia</i> , but name was preoccupied.
.....	" " " <i>Polytachia</i> .
Fort Cassin, Vt.	Two ventral valves imbedded separately.
" " "	Two individuals ? imbedded.
" " "	" " " " "
Lewis Co., N. Y.	As <i>Atrypa</i> . Three entire individuals.
Watertown, N. Y.	A large entire individual.
" " "	As <i>Leptana</i> . Two ventral valves imbedded.
Middleville, N. Y.	" " " A dorsal and two ventral valves, imbedded.
" " "	" " "
Cincinnati, O.	" <i>Strophomena</i> . Very large individual, imbedded.
" " "	" <i>Leptana</i> . Two imperfect individuals and a large ventral valve.
" " "	" " " Two entire individuals of medium size.
Watertown, N. Y.	" " " Dorsal valve, imbedded.
Middleville, N. Y.	" " " Three ventral valves, imbedded.
Near Pulaski, N. Y.	" " " Three interior casts of ventral valves, one imbedded.
" " "	" " " An imperfect imbedded valve and two internal casts of ventral valves retaining some shell.

## Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp. and G. T.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
H. R.	997 18	Fig'd Sp and G. T.	<b>Rafinesquina</b> H. & C.— <i>Cont.</i> <i>alternata</i> (Con.) . . . . . Hall. H. & C.	St. G. N. Y. St. G. N. Y. Pal. N. Y.	2 11 8, pt. 1	.... 279 282	38 13 8	6-II 5, 13, 14, 17 6-II
"	1350	Type.	<i>alternistriata</i> . . . . . Hall.	" "	1	109	31B	1a-c
Tr.	699 2	Fig'd.	<i>camerata</i> (Con.) . . . . . Hall.	" "	1	106	31A	2a, b
"	701 1	Type.	<i>deltoidea</i> . . . . . Conrad.	Geol. N. Y.	1838	115	....	....
			<i>Emmons</i> .	" "	1839	64	....	....
			<i>Vanuxem</i> .	" "	2d D.	389	....	2, ext.
			Hall.	Pal. N. Y.	3d D.	46	....	2, "
			H. & C.	" "	1	106	31A	3f, "
"	699 3	Fig'd.	" (Con.) . . . . . Hall.	" "	8, pt. 1	283	9A	4, "
"	700 2	"	" " " " " "	" "	1	106	31A	3a, prof.
"	701 1	"	" " " " " "	" "	1	106	31A	3b, c
"	701 1	"	" " " " " "	" "	1	106	31A	3d, ext.
"	700 4	"	<i>incrassata</i> (Safford) Hall.	Geol. Wis.	1	42	....	16, d. v.
"	697 7	"	" " " " " "	St. G. N. Y.	2	38	1,	"
			H. & C.	Pal. N. Y.	8, pt. 1	283	8	1, "
"	700 4	"	" (Safford) Hall.	St. G. N. Y.	2	38	2,	int.
			H. & C.	Pal. N. Y.	8, pt. 1	283	8	2, "
"	700 18	"	" (Safford) Hall.	St. G. N. Y.	2	38	3	
			H. & C.	Pal. N. Y.	8, pt. 1	283	8	3
"	"	"	" (Safford) Hall.	St. G. N. Y.	2	38	4	
			H. & C.	Pal. N. Y.	8, pt. 1	283	8	4
"	700 6	"	" (Safford) Hall.	St. G. N. Y.	2	38	5	
			H. & C.	Pal. N. Y.	8, pt. 1	283	8	5
			<b>Rhynchotrema</b> Hall.					
H. R.	702 7	Fig'd.	<i>capax</i> (Conrad) . . . . . Hall.	Pal. N. Y.	1	146	33	13k-o, t-y
"	702 7	"	" " " " " "	N. Y. S. M.	13	67, 68	....	9-II, 14
"	1358 8	Type.	<i>dentata</i> . . . . . Hall.	Geol. Wis.	1	55	ct. 12	5-7
Tr.	702 1	"	<i>increbescens</i> . . . . . Hall.	Pal. N. Y.	1	148	33	14a-c
"	"	"	" " " " " "	Geol. Wis.	1	146	33	13a-i
"	688 1	"	<b>Schizocrania</b> H. & W. <i>filosa</i> . . . . . Hall.	Pal. N. Y.	1	99	30	9a-d
H. R.	688 1	Gen. and Sp. Type.	" (Hall) . . . . . H. & W.	Pal. Ohio.	2	73	1	14, int. d. v. X 2
Tr.	1333	Type.	? <i>rudis</i> . . . . . H. & W. H. & C.	N. Y. S. M. Pal. N. Y.	23 8, pt. 1	243 142	13 4G	19, d. v. X 2 21, "
			<b>Streptorhynchus</b> ( <i>Strophonella</i> ). <i>deltoideum</i> . . . . . <i>filitextum</i> . . . . . <i>planoconvexum</i> . . . . . <i>planumbonum</i> . . . . . <i>primordiale</i> . . . . .					
			<b>Strophomena</b> Raf. (Blainv). <i>altirnata</i> . . . . . <i>deltoidea</i> . . . . . <i>filitexta</i> . . . . . Hall.					
Tr.	702	Type.	" " " " " "	Pal. N. Y.	1	111	31B	3a, b
			" " " " " "	St. G. N. Y.	2	39	1,	6
			H. & C.	Pal. N. Y.	8, pt. 1	251	9	1, 6
			" " " " " "	" "	1	111	31B	14
"	"	"	" " " " " "	Geol. Wis.	1	42	....	14, "
"	702 3	"	" " " " " "	St. G. N. Y.	2	39	39	2, 4, 5
			H. & C.	Pal. N. Y.	8, pt. 1	251	9	2, 4, 5

LOCALITY.	REMARKS.
.....	As <i>Strophomena</i> .
Cincinnati, O.	Made generic type of <i>Rafinesquina</i> . A large individual and two large opposite valves.
.....	As <i>Leptæna</i> . Imbedded ventral valve and two large free individuals.
Trenton Falls, N. Y.	Figs. 1a and 1b were not made from the same specimen.
.....	As <i>Leptæna</i> . Ventral valve, imbedded. See also <i>R. deltoidea</i> .
.....	Catalogue name.
.....	" <i>Strophomena</i> .
.....	" "
.....	" "
.....	" <i>Leptæna</i> .
Middleville, N. Y.	Exterior imprint ventral valve on slab with fig. 3d, pl. 31A.
Trenton Falls, N. Y.	As <i>Leptæna</i> . Prob. is <i>R. camerata</i> , but d. v. and card. area do not show.
Watertown, N. Y.	" " <i>incrassata</i> Safford.
Middleville, N. Y.	" " Ventral valve on slab with fig. 4, pl. 9A.
Mineral Pt., Wis.	" <i>Strophomena</i> . Entire, margin broken since figure was made.
.....	" "
Platteville, Wis.	Entire individual.
.....	As <i>Strophomena</i> .
Mineral Pt., Wis.	Dorsal valve, imbedded.
.....	As <i>Strophomena</i> .
Near Nashville, Tenn.	A dorsal valve. The figure is of cardinal process $\times 3$ .
.....	As <i>Strophomena</i> .
Near Nashville, Tenn.	An entire individual. Figure shows cardinal area $\times 3$ .
.....	As <i>Strophomena</i> .
Dodgeville, Wis.	Internal cast of ventral valve.
.....	As type of <i>Atrypa increbescens</i> . Five entire individuals.
Oxford, O.	" <i>Atrypa increbescens</i> . A very gibbous individual and a ventral valve of medium size.
Iron Ridge, Wis.	As <i>Atrypa</i> . Entire, rather small.
Cincinnati, O.	" "
Middleville, N. Y.	" " Four entire individuals.
.....	" "
" "	As <i>Orbicula</i> ? Two imbedded dorsal valves and two imbedded individuals retaining shell.
Cincinnati, O.	Internal cast dorsal valve on a <i>Rafinesquina alternata</i> .
.....	As <i>Trematis</i> .
Clifton, Tenn.	Internal cast retaining some shell. From the hydraulic beds.
.....	See <i>Strophomena nutans</i> and <i>S. Winchelli</i> .
.....	" "
.....	" "
.....	" "
.....	" <i>Billingsella</i> .
.....	" "
.....	" <i>Rafinesquina</i> .
.....	" "
.....	As <i>Leptæna</i> .
.....	" <i>Streptorhynchus</i> .
Middleville, N. Y.	Two entire individuals, one used for the enlargement only.
.....	As <i>Leptæna</i> .
Middleville, N. Y.	Ventral valve, imbedded.
.....	As <i>Streptorhynchus</i> .
Mineral Pt., Wis.	Two ventral valves, one imbedded.

## Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Strophomena Raf. (Bl.)—Cont.</b>					
Tr.	702 4	Type.	<i>filitexta</i> ..... Hall.	St. G. N. Y.	2	...	39	3, <i>int.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9	3, "
H. R.	702 12	"	"..... Hall.	St. G. N. Y.	2	...	42	12, 13
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9A	12, 13
"	442 2	Fig'd.	<i>nutans (James)</i> .... Hall.	St. G. N. Y.	2	...	39	II, <i>card.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9	II, "
"	"	"	" ( <i>James</i> ).... Hall.	St. G. N. Y.	2	...	42	5, <i>d. v.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9A	5, "
"	442 2	"	" ( <i>James</i> ).... Hall.	St. G. N. Y.	2	...	42	6, <i>int.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9A	6, "
"	912 2	Type.	<i>planoconvexa</i> ..... Hall.	"	"	...	114	31B 7a, c, d
			"..... Hall.	St. G. N. Y.	2	...	39	19, 20
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9	19, 20
"	912 3	"	<i>planumbona</i> ..... Hall.	"	"	...	112	31B 4a-c, e
			"..... Hall.	"	"	...	112	31B 4d, <i>int.</i>
"	912 4	"	"..... Hall.	Geol. Wis.	1	...	54	ct. 10 7, "
			"..... Hall.	St. G. N. Y.	2	...	42	8
"	"	"	"..... Hall.	"	"	...	11	16
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	251	...	9A	8
"	"	"	"..... Hall.	St. G. N. Y.	2	...	39	16, 17
			<i>H. &amp; C.</i> Pal. N. Y.	"	"	...	11	16
"	922 2	Fig'd.	<i>subtenta (Conrad)</i> .. Hall.	Pal. N. Y.	8, pt. I	251	9	16, 17
			<i>tenuistriata</i> ..... Hall.	"	"	1	115	31B 9a, b
Tr.	701 1	Type.	<i>Winchelli</i> ..... H. & C.	Pal. N. Y.	8, pt. I	344	9	10, 14
			"..... Hall.	St. G. N. Y.	2	...	39	10, 14
"	701 2	"	" ( <i>H. &amp; C.</i> ) Hall.	St. G. N. Y.	2	...	39	12, <i>int.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	344	...	9	12, "
"	701 3	"	" ( <i>H. &amp; C.</i> ) Hall.	St. G. N. Y.	2	...	39	20
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	344	...	9	26
			"..... Hall.	St. G. N. Y.	2	...	39	13, <i>int.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	344	...	9	13, "
			<b>Syntrophia Hall.</b>					
Ft. C.	442	Gen. and Sp. Type.	<i>lateralis</i> ..... Whitfield.	A. M. N. H.	1	303	24	9-II
			"..... H. & C.	St. G. N. Y.	13	836	45	7-9
			"..... H. & C.	Pal. N. Y.	8, pt. 2	216	62	1, 2, 6
			<b>Trematis Sharpe.</b>					
H. R.	122 6	Type.	<i>millepunctata</i> ..... Hall.	N. Y. S. M.	24	221	7	22-24
			<i>H. &amp; C.</i> St. G. N. Y.	"	11	...	6	2-4
"	"	"	"..... Hall.	Pal. N. Y.	8, pt. I	142	4G	6-8
"	"	"	"..... Hall.	"	8, pt. I	142	4G	4, <i>int.</i> x 2
"	"	"	"..... Hall.	St. G. N. Y.	11	...	6	5, <i>int.</i> x 1.5
"	"	"	"..... Hall.	Pal. N. Y.	8, pt. I	142	4G	9, " " "
Tr.	1335	"	<i>punctostriata</i> ... H. & W.	N. Y. S. M.	23	243	13	17, <i>ext. d.</i>
			<i>H. &amp; C.</i> Pal. N. Y.	8, pt. I	142	4G	II,	" " "
H. R.	1334	"	? <i>pustulosa</i> ..... Hall.	N. Y. S. M.	24	222	...	...
			<i>rudis</i> ..... Hall.	"	"	...	...	...
Tr.	685 4	Fig'd.	<i>terminalis (Con.)</i> ... Hall.	Pal. N. Y.	I	100	30	IIa, b.
			"..... Hall.	"	"	I	100	30
			<b>Triplecia Hall.</b>					
"	712	Type.	<i>ambigua</i> ..... Hall.	"	"	I	143	33 8a-c
"	"	"	"..... Hall.	"	"	I	143	33 9
"	711	Fig'd Sp. and G.T.	<i>extans (Conrad)</i> ... Hall.	"	"	I	137	33 1a, <i>ext. v. v.</i>
"	"	"	"..... Hall.	"	"	I	137	33 1b, <i>ext. d. v.</i>
"	"	"	"..... H. & C.	St. G. N. Y.	11	...	18	4, <i>card.</i>
"	"	"	"..... H. & C.	Pal. N. Y.	8, pt. I	269	11C	5, "
"	"	Fig'd.	" ( <i>Conrad</i> )... Hall.	"	"	I	145	33 11a-d

LOCALITY.	REMARKS.
Platteville, Wis.	As <i>Streptorhynchus</i> . A dorsal valve, imbedded.
Cincinnati, O.	As <i>Streptorhynchus</i> . Entire individual.
Lebanon, O.	As <i>Streptorhynchus</i> ( <i>Strophonella</i> ?) <i>deltoideum</i> Con. Entire individual.
Lebanon, O.	As <i>Streptorhynchus</i> ( <i>Strophonella</i> ) <i>deltoideum</i> Con. Entire individual.
Oxford, O.	As <i>Streptorhynchus</i> ( <i>Strophonella</i> ) <i>deltoideum</i> Con. Ventral valve.
Cincinnati, O.	As <i>Leptæna</i> . Entire.
Cincinnati, O.	" <i>Streptorhynchus</i> . Entire individual of medium size.
" "	As <i>Leptæna</i> . Two individuals of medium size.
Cincinnati, O.	A ventral valve of medium size. As <i>Streptorhynchus</i> .
Lebanon, O.	A dorsal valve of medium size. Figure represents hinge $\times 2$ . As <i>Streptorhynchus</i> .
Lebanon, O.	A dorsal valve and a rather large ventral valve. The latter is ticketed "Cincinnati, O."
Oxford, O.	As <i>Leptæna</i> . A dorsal valve.
Mineral Pt., Wis.	See <i>Leptæna</i> . Locality incorrect in explanation of plate. As <i>Streptorhynchus</i> ( <i>Strophonella</i> ?) <i>deltoideum</i> Con. Imbedded.
Janesville, Wis.	A dorsal valve imbedded. Last figure is an enlargement $\times 3$ .
Clifton, Wis.	As <i>Streptorhynchus</i> ( <i>Strophonella</i> ?) <i>deltoideum</i> Con. A ventral valve imbedded.
Fort Cassin, Vt.	As <i>Triplecia</i> . Made generic type. Internal imprint of dorsal valve and of ventral valve with some shell.
Cincinnati, O.	Internal cast retaining some shell. All figures enlargements $\times 2$ .
" "	A dorsal valve imbedded so as to show the interior.
" ? "	Rather large dorsal valve imbedded.
Clifton, Tenn.	Dorsal valve preserving much shell. From the hydraulic beds.
Near Horicon, Wis.	Internal cast retaining fragments of the shell. See <i>Schizocrania</i> .
Lowville, N. Y.	As <i>Orbicula</i> . A detached and an imb. indiv., each with some shell.
Middleville, N. Y.	" " Detached individual.
" "	As <i>Atrypa</i> . Entire.
" "	" " Four individuals imbedded in one block.
" "	" " Ventral valve imbedded.
" "	" "
Middleville, N. Y.	Generic type of <i>Triplecia</i> . Dorsal valve showing cardinal process.
" "	As <i>Atrypa</i> sp. ? Entire, young.

## Class BRACHIOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.					
				Work.	Vol.	P.	Pl.	Figs.	
Tr.	711 3	Fig'd Sp. and G. T.	<b>Triplecia</b> Hall—Continued.						
			<i>extans</i> (Conrad) . . . . . Hall.	Pal. N. Y.	I	138	33*	1a-d	
"	"	"	<i>H. &amp; C.</i>	St. G. N. Y.	II	18		I, 2	
			<i>(Conrad)</i> . . . . . Hall.	Pal. N. Y.	8, pt. I	269	11C	1-3	
Ca.	715 362	Type.	<i>lateralis</i> . . . . .	Hall.	I	138	33*	1e-h	
			<i>nucleus</i> . . . . .	Hall.	Pal. N. Y.	I	138	33	2a-c
"	"	"	<i>radiata</i> . . . . .	Whitfield.	A. M. N. H.	2	43	7	5, 6
			"	"	"	2	43	7	7, <i>enl. x 3</i>
"	"	"	"	"	"	2	43	7	8, <i>enl. x 2</i>
			<i>Triplexia</i> Hall . . . . .						
H. R.	1386 1	Fig'd Sp. and G. T.	<b>Zygospira</b> Hall.						
			<i>modesta</i> (Say) . . . . . Hall.	Pal. N. Y.	I	141	33	15	
"	1386 2	"	"	"	N. Y. S. M.	15	154		
			"	"	"	15	155		I, 2
Tr.	705 3	Type.	<i>recurvirostra</i> . . . . . Hall.	Pal. N. Y.	I	140	33	5a-c	
H. R.	708 2	Sp. and S-gen. T.	(s. g. <i>Orthonomæa</i> H.)						
			<i>erratica</i> . . . . . Hall.	Pal. N. Y.	I	288	79	5a-f	
"	"	"	"	"	N. Y. S. M.	12			
			"	"	H. & C.	St. G. N. Y.	13	814	40
			Hall.	Pal. N. Y.	8, pt. 2	159	54	19, 20	

## Subkingdom MOLLUSCA.

Tr.	745	Type.	<b>Ambonychia</b> Hall.					
"	930	"	<i>amygdalina</i> . . . . . Hall.	Pal. N. Y.	I	165	36	6a-c
"	717 2	Gen. and Sp. Type.	<i>attenuata</i> . . . . . Hall.	Geol. Wis.	1861	33		8-II
			<i>Whitfield.</i>	Mem. A. M.	I	59	7	4a, <i>int.</i>
H. R.	928 2	Fig'd.	<i>bellistriata</i> . . . . . Hall.	Pal. N. Y.	I	163	36	
			<i>cancellosa</i> . . . . .					
"	928 3	"	<i>carinata</i> (Goldf) . . . . . Hall.	Pal. N. Y.	I	292	80	4a
"	928 4	"	"	"	I	292	80	4b
"	928 5	"	"	"	I	292	80	4c
"	928 6	"	"	"	I	292	80	4d, e
"	928 7	"	"	"	I	292	80	4f
"	1124 4	"	"	"	I	292	80	4h, i, k
"	"	"	"	"	I	292	80	4j, g
"	"	"	"	"	I	292	80	4l
"	928 8	"	"	"	I	294	80	5a, b
			"	"	N. Y. S. M.	12	8	I
"	1124 4	"	"	"	Pal. N. Y.	3	269	I
			"	"	N. Y. S. M.	12	110	I, 2
Tr.	931	Type.	"	"	Pal. N. Y.	3	523	I, 2
			<i>erecta</i> . . . . . Hall.	Geol. Wis.	I	54	ct. II	I, 2
"	928 2	"	<i>Whitfield.</i>		1861	32		
			<i>lamellosa</i> . . . . . Hall.	Mem. A. M.	I	59	7	I, 2
"	928 3	"	"	"	1861	31		
			<i>Whitfield.</i>	Mem. A. M.	I	57	7	5
"	928 8	"	"	"	1861	31		
			<i>Whitfield.</i>	Geol. Wis.	I	437		
"	928 1	"	"	"	1861	31		
			<i>Whitfield.</i>	Mem. A. M.	I	57	7	6
"	928 1	"	"	"	1861	31		
			<i>Whitfield.</i>	Geol. Wis.	I	437		
"	928 1	"	"	"	1861	31		
			<i>Whitfield.</i>	Mem. A. M.	I	57	7	7, <i>prof.</i>



LOCALITY.	REMARKS.
Lowville, N. Y.	As type of <i>Atrypa cuspidata</i> . Generic type <i>Triplecia</i> . Entire, adult.
" " "	As type of <i>Atrypa cuspidata</i> . Two entire individuals. See <i>Syntrophia</i> .
Middleville, N. Y. Beekmantown, N. Y.	As <i>Atrypa</i> . Entire, perfect. Two dorsal valves, imbedded.
" " "	Two imbedded ventral valves used for figure. Ventral valve, = <i>Triplecia</i> .
Cincinnati, O. Oxford, O.	As <i>Atrypa</i> . Made generic type. A very small and a large individual. Six specimens showing loops and spires from which the greatly enlarged figures were made.
Martinsburg, N. Y.	As <i>Atrypa</i> . Entire.
Loose in Wayne or Monroe Co., N. Y.	As <i>Orthis</i> . Interior casts of three individuals, small to large. Proposed as type of subgen. <i>Orthonomæa</i> in a supplementary note to 12th Rep't N. Y. S. M., not in the American Museum copies.
" " "	Internal casts of two individuals of medium and large size.

## Class LAMELLIBRANCHIATA.

Adams, N. Y.	Species probably belongs here, though referred to <i>Palearca</i> ? by Hall in 12th Rep't N. Y. S. M., p. 65.
Beloit, Wis.	Two int. casts, 1 of which prob. came from Niagara gr. at Racine, Wis.
Trenton Falls, N. Y.	Left valve, imbedded.
Pulaski, N. Y.	See <i>A. lamellosa</i> .
Oswego, Co., N. Y.	As type of <i>A. radiata</i> . External cast left valve, imbedded.
Pulaski, N. Y.	" " " " " " right " "
Turin, N. Y.	" " " " " " " " " "
Pulaski, N. Y.	" " " " Interior imprint right valve.
Cincinnati, O.	" " " " Compressed ext. cast both valves.
" " "	" " " " Worn exterior cast large right valve.
" " "	" " " " Fragmentary exterior imprint of very large ? valve.
L. Ontario, N. Y.	External cast of both valves, found loose on south side of lake.
Near Pulaski, N. Y.	As <i>A. radiata</i> . Type.
" " "	" " " " Very perfect internal cast right valve.
" " "	" " " " Type.
Lindsley's Hill, Tenn.	" " " " Right valve of medium size.
Beloit, Wis.	Parts of internal casts of two right valves.
" " "	Name given in catalogue.
Beloit, Wis.	As <i>A. cancellosa</i> , by mistake.
" " "	Internal cast left valve, imb. Two unfigured casts are in the series.
" " "	Name given in catalogue.
Mineral Pt., Wis.	Internal cast left valve. One entire internal cast, unfigured.
Pte. aux Baies, Wis.	Name given in catalogue.
" " "	Internal cast, nearly entire.

## Class LAMELLIBRANCHIATA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol	P.	Pl.	Figs.
			<b>Ambonychia</b> Hall—Cont.					
Ch.	536	Type.	mytiloides . . . . . Hall.	Pal. N. Y.	I	315	33*	2a, b
Tr.	734	"	obtusa . . . . . Hall.	" "	I	167	36	8a, b
	716	"	orbicularis . . . . . Hall.	" "	I	164	36	5b-d
"	222	"	planistriata . . . . . Hall.	Geol. Wis.	1861	32		
			Whitfield.	Mem. A. M.	I	58	7	3, 4
			<b>radiata</b> . . . . .					
			<b>Avicula</b> Klein.					
			demissa . . . . .					
			desquamata . . . . .					
			trentonensis . . . . .					
			<b>Cleidophorus</b> Hall.					
H. R.	1362	Type.	neglectus . . . . . Hall.	Geol. Wis.	I	55	ct 13	2, ext. l. v.
"		"	" " " " " "	" "	I	55	ct 13	3, int. l. v.
"	1262	Fig'd.	" " " " " "	Pal. N. Y.	I	150	34	1g, h
"	1126	Fig'd Sp.	planulatus (Con.) . . . Hall.	" "	I	300	82	9b-d
"	1126	and G. T.	" " " " " "	" "	I	300	82	9e
			<b>Cypriocardites</b> Conrad.					
Tr.?	230	Type.	islandicus (Hall.) . . . Miller	Am. P. F.		189		
			Hall.	N. Y. S. M.	12	10		1-3
			" " " " " "	Pal. N. Y.	3	271		1-3
Tr.	235	"	lata . . . . . Hall.	" "	I	160	35	10a, l. v.
"	240	"	niota . . . . . Hall.	Geol. Wis.	1861	29		
			Whitfield.	Mem. A. M.	I	38	ct. 4	8, int. l. v.
"	242	"	rectirostris . . . . . Hall.	Geol. Wis.	1861	54	6	17-20
			Whitfield.	Mem. A. M.	I	55	6	21, 22
"	243	"	" (Hall.) . . . . . Whitf.	" "	I	55	6	23-25
"	242	"	rotundatus . . . . . Hall.	Geol. Wis.	1861	29		
			Whitfield.	Mem. A. M.	I	38		7, int. r. v.
"		"	" " " " " "	" "	I	53	6	13-15
"	242	"	" (Hall.) . . . . . Whitf.	" "	I	53	6	16
Tr. or H. R.	232	"	Saffordi . . . . . Hall.	N. Y. S. M.	12	11		4, 5
		"	" " " " " "	Pal. N. Y.	3	271		4, 5
Tr.	732	"	subspatulatus . . . . . Hall.	" "	I	159	35	9a, b
"	731	"	subtruncatus . . . . . Hall.	" "	I	156	35	3a-c
"	230	"	ventricosus . . . . . Hall.	" "	I	155	35	1d-f
			<b>Edmondia</b> de Koninck.					
			subtruncata . . . . .					
			ventricosa . . . . .					
			<b>Goniophora</b> Phillips,					
Tr.	741	Type.	? carinata . . . . . Hall.	Pal. N. Y.	I	160	35	11a, ext. r. v.
"		"	" " " " " "	" "	I	160	35	11b, c
			<b>Lyrodesma</b> Conrad.					
H. R.	247	"	poststriatum . . . . . Emmons.	Geol. N. Y.	2d D.	399		4, int. l. v.
			Hall.	Pal. N. Y.	I	301	82	10b, "
Tr.	747	Fig'd.	" (Emmons) H.	" "	I	151	34	2a, b
			pulchellum . . . . .					
			<b>Modiolopsis</b> Hall.					
			anodontoides . . . . .					
Tr.	737	Type.	arcuata . . . . . Hall.	Pal. N. Y.	I	159	35	8
"	738	"	aviculoides . . . . . Hall.	" "	I	161	36	1a, b
			carinata . . . . .					

LOCALITY.	REMARKS.
Chazy, N. Y. Watertown, N. Y.	Imprint of interior of left valve. Internal cast of individual. " " left valve. Figs. 5b and c are evid. of the same indiv. but the striae rep. in 5d are not on orig. of 5b, as stated in expl. of pl.
Mineral Pt., Wis.	Casts of two opposite valves. See <i>A. carinata</i> .
..... ..... .....	See <i>Pterinea</i> . " <i>Obolella crassa</i> . " <i>Pterinea</i> .
Sinsinawa Mnd., Wis. Near Dubuque, Ia. Mineral Pt., Wis. Turin, N. Y. Waterford, N. Y.	Entire, medium size. Many others are in the series. Internal cast of individual retaining some shell. As type of <i>Vucula levata</i> . Internal cast, entire, rather large. Imprints of left valves in shale, three specimens. Interior imprint of both valves expanded. Metamorphosed shales.
..... St. Joseph's Island, L. Superior. Carlisle, Pa.	Name proposed instead of <i>C. ventricosus</i> , pre-occupied. As <i>Palaarca ventricosa</i> , gen. and sp. type. Ditto. Two opposite valves and an entire individual. As <i>Modiolopsis</i> . Internal cast of individual.
Beloit, Wis.	Very perf. int. cast, entire, imb., and the int. cast of a left valve, imb.
Rockford, Ill. Janesville, Wis.	A very perfect internal cast in chert. Two casts in limestone, the larger very perfect; pt. of orig. type ser.
Beloit, Wis.	Entire inter. cast of indiv., and inter. cast of right valve, imbedded. Another internal cast of right valve is in the type series.
Janesville, Wis.	Internal cast both valves imbedded. Two others are in type series. As <i>Palaarca</i> .
Nashville, Tenn. Watertown, N. Y.	" " Two large opp. valves. Eight others are in the type ser. " <i>Modiolopsis</i> . Internal cast.
" " "	" <i>Edmondia</i> . Internal casts of a left and of a right valve and the external cast of a left valve.
Middleville, N. Y.	As <i>Edmondia</i> . A nearly ent. indiv. and one ent., but vertic. compr.
..... .....	See <i>Cypricardites</i> . " "
Middleville, N. Y. " " "	As <i>Modiolopsis</i> . Entire, imbedded. " " Two right valves, imbedded.
..... Pulaski, N. Y. Carlisle, Pa.	As <i>Nuculites</i> . " <i>Nucula</i> ? Internal cast of left valve, large. " " External cast of individual.
.....	See <i>Tellinomya</i> .
..... Herkimer Co., N. Y. Middleville, N. Y.	See <i>M. sinuata</i> . Cast of interior of right valve. Generic relations uncertain. " " " shell. = <i>Cypricardites</i> ? See <i>Goniophora</i> .

## Class LAMELLIBRANCHIATA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
<b>Modiolopsis Hall—Cont.</b>								
H. R.	$\frac{947}{2}$	Type.	<i>curta</i> ..... <i>Hall</i> .	Pal. N. Y.	I	297	81	4
	$\frac{947}{2}$	"	" " " " " " " "	" "	I	297	82	2a
Tr.	947	"	" " " " " " " "	" "	I	297	82	2b, d
"	$\frac{739}{2}$	Fig'd.	<i>faba</i> ( <i>Con.</i> ) ..... <i>Hall</i> .	" "	I	158	35	6b, ext.
"	"	"	" " " " " " " "	" "	I	158	35	6c
"	"	"	" " " " " " " "	" "	I	158	35	6d
H. R.	$\frac{739}{4}$	"	" " " " " " " "	" "	I	298	82	4a
			<i>lata</i> .....					
"	$\frac{1130}{1}$	Fig'd Sp. and G. T.	<i>modiolaris</i> ( <i>Con.</i> ) ..... <i>Hall</i> .	Pal. N. Y.	I	294	81	1c
"	"	"	" " " " " " " "	" "	I	294	81	1d
"	"	"	" " " " " " " "	" "	I	294	81	1e
"	$\frac{1130}{3}$	"	" " " " " " " "	" "	I	294	81	1f
"	$\frac{1130}{3}$	"	" " " " " " " "	" "	I	294	82	1, r. v.
Tr.	739	Fig'd.	<i>nasuta</i> ( <i>Con.</i> ) ..... <i>Hall</i> .	" "	I	159	35	7, ext.
U.	1063	Type.	? <i>nuculiformis</i> ..... <i>Hall</i> .	" "	I	298	82	5a
H. R.	1365	"	<i>pholadiformis</i> ..... <i>Hall</i> .	Lake Sup.	2	213	30	1b
		"	" " " " " " " "	"	2	213	30	1c, r. v.
		"	" " " " " " " "	"			31	1, card.
Tr.	$\frac{950}{1}$	"	<i>plana</i> ..... <i>Hall</i> .	Geol. Wis.	1861	30	38	6, int. r. v.
		"	" " " " " " " "	"	I	56	7	12, 13
"	$\frac{950}{2}$	"	" (Hall) ..... <i>Whitfield</i> .	Mem. A. M.	I	56	7	14, 15
H. R.	1132	Fig'd.	<i>sinuata</i> ( <i>Emmons</i> ) ..... <i>Hall</i> .	Pal. N. Y.	I	298	82	3c
		"	<i>subspatulata</i> .....					
Tr.	951	Type.	? <i>superba</i> ..... <i>Hall</i> .	Geol. Wis.	1861	31		
		"	" " " " " " " "	"	I	56	7	16-18
H. R.	1369	"	<i>terminalis</i> ..... <i>Hall</i> .	Pal. N. Y.	I	318	33*	5a, b
"	"	"	" " " " " " " "	" "	I	297	81	5a, b
"	"	"	" " " " " " " "	" "	I	318		
"	1370	"	<i>truncata</i> ..... <i>Hall</i> .	" "	I	296	81	3a, b
		"	" " " " " " " "	" "	I	86	2	13, r. v.
		"	sp. ? ..... <i>H. &amp; W.</i>	Pal. Ohio.	I	297	81	5a, b
			Pal. N. Y.					
<b>Nucula Lamarck.</b>								
			? <i>donaciiformis</i> .....					
			<i>fabula</i> .....					
			<i>fecunda</i> .....					
			<i>levata</i> .....					
			<i>obliqua</i> .....					
			<i>poststriata</i> .....					
<b>Nuculites Conrad.</b>								
			<i>poststriatus</i> .....					
<b>Orthodesma H &amp; W.</b>								
H. R.	$\frac{1378}{1}$	Type.	<i>contracta</i> ..... <i>Hall</i> .	Pal. N. Y.	I	300	82	8a, l. v.
	"	"	" " " " " " " "	Pal. Ohio.	2	96	2	4, "
"	"	"	" " " " " " " "	Pal. N. Y.	I	300	82	8b, card.
"	$\frac{1134}{3}$	"	<i>parallela</i> ..... <i>Hall</i> .	" "	I	299	82	7a, d
"	$\frac{1134}{3}$	"	" " " " " " " "	" "	I	299	82	7b, card.
"	"	"	" " " " " " " "	" "	I	299	82	7c
<b>Orthonota Conrad.</b>								
			<i>contracta</i> .....					
			<i>parallela</i> .....					
<b>Palaearca Hall.</b>								
			<i>Saffordi</i> .....					
			<i>ventricosa</i> .....					

LOCALITY.	REMARKS.
Grimsby, Ont. Lorraine, N. Y. Mineral Pt., Wis. Watertown, N. Y.	Exterior-interior cast of left valve, imbedded. " " " " " "
" "	Entire. Lettering incorrect in explanation of plate.
" "	Right valve, imbedded.
Pulaski, N. Y.	Cast of interior of left valve retaining small pieces of shell.
" "	" " right " " " piece "
" "	" " small, imbedded.
Near Pulaski, N. Y.	See <i>Cypricardites</i> .
" "	Exterior-interior imprint of a right valve.
" "	" imprint of right valve.
Madison, Ind.	" -interior imprint of a left valve.
Ohio.	" both valves expanded and somewhat crushed.
Carlisle, Pa.	Cast of interior of a young individual.
Turin, N. Y.	Imbedded right valve of very young indiv. Probably = <i>Orthodesma</i> .
Little Bay des Noquets, Mich.	Cast both valves expanded, imb. In 12th Rep. N.Y. S. M. is ref. to <i>Nucula</i> or <i>Tellinomya</i> , but the spec. shows no card. teeth.
" "	An exterior-interior imprint of a large right valve.
" "	Imperfect exterior-interior cast of a large individual.
Beloit, Wis. Mineral Pt., Wis. Rodman, N. Y.	Internal cast and exterior imprint of same right valve. Internal cast, entire. Two other casts are in the type series. As <i>M. anodontoides</i> Con. Exterior imprint both valves, expanded. See <i>Cypricardites</i> .
Beloit ?, Wis. Cincinnati, O.	Two exterior-interior casts both valves, nearly perfect. = <i>Orthodesma</i> ? Internal cast, entire, somewhat worn. As <i>M. sp.</i> ?
Cincinnati, O.	Referred here to this species. Imperfect internal cast.
" "	Internal cast, entire, somewhat compressed.
" "	See <i>M. terminalis</i> , Hall.
" "	See <i>Tellinomya</i> .
" "	" "
" "	" "
" "	" " <i>levata</i> , <i>T. fecunda</i> and <i>Cleidophorus neglectus</i> .
" "	" <i>Tellinomya</i> .
" "	" <i>Lyrodesma</i> .
" "	" "
Cincinnati, O.	As <i>Orthonota</i> . Exterior-interior cast of individual.
" "	" " " " " "
" "	" " Worn internal cast of small individual.
Pulaski, N. Y.	" " Imperfect internal cast, imbedded.
" "	" " Imbedded external cast left valve.
" "	See <i>Orthodesma</i> .
" "	" "
" "	= <i>Cypricardites</i> .
" "	See
" "	" " <i>islandicus</i> .

## Class LAMELLIBRANCHIATA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
H. R. Tr.	1123	Fig'd.	<b>Pterinea</b> Goldfuss.					
	71 <sup>b</sup> <sub>1</sub>		demissa (Con.)... Hall.	Pal. N. Y.	I	202	80	2b, ext.
			trentonensis (Con.) Hall.	" "	I	161	36	2b-d
"	72 <sup>a</sup> <sub>4</sub>	Type.	<b>Tellinomya</b> Hall.					
			alta... Hall.	Geol. Wis.	1861	27		
"	72 <sup>a</sup> <sub>3</sub>	"	Whitfield.	Mem. A. M.	I	50	6	5, l. v.
		"	" (Hall)... Whitfield.	" "	I	50	6	6-8
			<i>anatiniformis</i> .....					
			<i>cuneata</i> .....					
Tr.	72 <sup>1</sup> <sub>1</sub>	Type.	donaciformis... Hall.	Pal. N. Y.	I	316	33*	3a, b
	72 <sup>0</sup> <sub>1</sub>		dubia... Hall.	" "	I	153	34	6a-d
H. R.	1361	"	? fabula... Hall.	Am. J. Sci.	48	295		
"	1360	"	fecunda... Hall.	Geol. Wis.	I	55	ct-13	1, r. v.
"	1360	Fig'd.	".....	Pal. N. Y.	I	150	34	11, l. v.
Tr.	72 <sup>5</sup> <sub>1</sub>	Type.	gibbosa... Hall.	" "	I	153	34	5a, b
"		Fig'd.	".....	" "	I	153	34	6e, f
"	937	Type.	inflata... Hall.	Geol. Wis.	1861	26		
			Whitfield.	Mem. A. M.	I	38		4, 5
"	72 <sup>4</sup> <sub>1</sub>	"	levata... Hall.	Pal. N. Y.	I	49	6	10-12
"	72 <sup>3</sup> <sub>1</sub>	Gen. and Sp. Type.	nasuta... Hall.	" "	I	152	34	1c-e, k
"		"	".....	Geol. Wis.	I	38		1, "
"		"	".....	Pal. N. Y.	I	152	34	3b, c
H. R.	1038	Type.	? nuculiformis... Hall.	" "	I	298	82	5b
"	1362	"	? obliqua... Hall.	Am. J. Sci.	48	294		
Tr.	936	"	ovata... Hall.	Geol. Wis.	1861	28		
			Whitfield.	Mem. A. M.	I	52	6	9
U.	1064	"	pulchella... Hall.	Pal. N. Y.	I	302	82	12a, b
H. R.	1127	"	".....	" "	I	302	82	12c, d
Tr.	722	"	sanguinolaroidea... Hall.	" "	I	152	34	4a, b
"	725	"	ventricosa... Hall.	Geol. Wis.	1861	27		
			Whitfield.	" "	I	38		3, int. r. v.
			Whitfield.	Mem. A. M.	I	51	6	1-4

## Class GASTROPODA.

Tr.	781	Fig'd.	<b>Bellerophon</b> Montfort.					
			bilobatus (Sow.)... Hall.	Pal. N. Y.	I	184	40	3a, b
H. R.	781	"	" " " " " "	Geol. Wis.	I	39	7	
Tr.	783	Type.	" var. acutus Hall.	Pal. N. Y.	I	307	83	9a, c, d
"			" " " " " "	" "	I	185	40	4a, b
"	782	"	" " corrugatus " "	" "	I	185	40	5a, b
"	"	" ?	" " " " " "	" "	I	185	40	6a, rear
			" " " " " "	" "	I	185	40	6b, c
Ft. C.	471	"	cassinensis... Whitfield.	A. M. N. H.	I	318	26	8, 9
			<b>Bucania</b> Hall.					
Tr.	787	"	bidorsata... Hall.	Pal. N. Y.	I	186	40	8a, b
"		"	" " " " " "	Geol. Wis.	I	39		6
"	787	"	" " " " " "	Pal. N. Y.	I	186	40	8c-g
Ch.	569	"	champlainensis... Whitf.	A. M. N. H.	9	181	4	14-16
Tr.	785	"	expansa... Hall.	Pal. N. Y.	I	186	40	7a-c
			" " " " " "	Geol. Wis.	I	40		1

LOCALITY.	REMARKS.
Near Rome, N. Y. Middleville, N. Y.	As <i>Avicula</i> . Exterior imprint of a left valve. " " A right and two left valves, imbedded. The spec. desig. by Prof. Hall as the orig. of the last fig. is not exactly like it.
Dodgeville, Wis. Mineral Pt., Wis.	Internal cast of both valves, entire. Entire internal cast. Figs. 6 and 7 are enlargements. Several other internal casts from these localities and Beloit are in the type series. See <i>Pterotheca anatiformis</i> . " <i>T. nasuta</i> .
Middleville, N. Y. " " Cincinnati, O. Scales' Mound, Ill. Mineral Pt., Wis. Middleville, N. Y. " "	As <i>Nucula</i> ? Slicksided internal cast both valves. Two entire individuals and a left valve. See <i>T. gibbosa</i> , also. As <i>Nucula</i> . Several minute internal casts form the series. " " ( <i>Tellinomya</i> ). Exterior-interior cast, entire. " type of <i>Nucula levata</i> . Internal cast, entire. Internal cast of both valves. As type of <i>T. dubia</i> . Right valve, imbedded.
Mineral Pt., Wis. Middleville, N. Y.	Individual, nearly perfect. As <i>Nucula</i> . Internal casts of three individuals.
" " " " Waterford, N. Y. Cincinnati, O.	" <i>T. cuneata</i> by mistake. Right valve, imbedded. Internal cast of individual. As <i>Modiolopsis</i> ? External cast small right valve. " <i>Nucula</i> . Several minute casts are in the series.
Beloit, Wis. Near Watertown, N. Y. Waterford, N. Y. Middleville, N. Y.	Internal cast right valve, imbedded. As <i>Lyrodesma</i> . Exterior-interior cast, imbedded. " " Internal cast from the metamorphic shale. Internal cast of individual. Internal casts of two opposite valves, of a small individual and of a large one. Five other internal casts from this locality and one from near Dubuque, Ia., are in the series.
Middleville, N. Y. Pulaski, N. Y. Middleville, N. Y. " " " " " " Fort Cassin, Vt.	Internal cast. Two internal casts. The figures should have been lettered ga, b, c. Imbedded individual. Free. A plaster cast of a very perfect individual. Imbedded. Uncertain whether this or a specimen in the N. Y. State Museum, in Albany, is the one illustrated. Nearly entire internal cast retaining some shell.
Middleville, N. Y. Watertown, N. Y. Valcour Island, Vt.	Entire. Two internal casts, one of which retains some shell. Three individuals imbedded. From bed "C" of Brainerd & Seely.
Watertown, N. Y.	Two individuals used in making the figures.

## Class GASTROPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
<b>Bucania</b> Hall—Continued.								
Tr.	788	Type.	punctifrons . . . . . Hall.	Pal. N. Y.	I	187	40A	1a-e
"	"	Fig'd.	" " " " " "	" " "	I	78	26	9a, b
Ch.	550	Type.	rotundata. . . . . Hall.	" " "	I	33	6	11a, b
"	"	"	" " " " " "	" " "	I	33	6	11c, <i>vert. sect.</i>
Ca.?	386	"	tripla . . . . . Whitfield.	A. M. N. H.	2	55	9	12, 13
<b>Calaurops</b> Whitfield.								
Ch.	470	Gen. and Sp. Type	lituiformis . . . . . Whitfield.	" " "	I	315	26	1-4
<b>Capulus</b> Montfort.								
<i>auriformis</i> . . . . .								
<b>Carinaropsis</b> Hall.								
Tr.	779	"	carinata . . . . . Hall.	Pal. N. Y.	I	183	40	1a-c
			<i>cymbula</i> . . . . .					
H. R.	1138	Type.	orbiculata . . . . . Hall.	Pal. N. Y.	I	306	83	8a-c
Tr.	780	"	patelliformis . . . . . Hall.	" " "	I	183	40	2a, b
H. R.	780	"	" " " " " "	" " "	I	306	83	7a, b
<b>Clisospira</b> Billings.								
Ft. C.	450	"	lirata . . . . . Whitfield.	A. M. N. H.	I	308	24	16, 17
<b>Cyclonema</b> Hall.								
H. R.	1372	Fig'd Sp. and G. T.	bilix (Conrad). . . . . Hall.	Pal. N. Y.	I	305	83	4a-e
Tr.	752	Type.	percarinatum . . . . . Hall.	" " "	I	177	38	4, <i>back</i>
H. R.	1380	"	varicosum . . . . . Hall.	N. Y. S. M.	14	91		
			<i>ventricosum</i> . . . . .		24		8	2, <i>frt.</i>
<b>Cyclora</b> Hall.								
"	1387	Gen. and Sp. Type.	minuta . . . . . Hall.	Am. J. Sci.	48	294		
"	1386	Type.	parvula . . . . . Hall.	" " "	48	294		
<b>Cyrtolites</b> Conrad.								
Tr.	777	Fig'd.	compressus (Con.) . . . . . Hall.	Pal. N. Y.	I	188	40A	2a, b
			" " " " " "	Geol. Wis.	I	40		4
			<i>filosum</i> . . . . .					
H. R.	1139	Fig'd.	ornatus (Con.) . . . . . Hall.	Pal. N. Y.	I	308	84	1a, b
"	"	"	" " " " " "	" " "	I	308	84	1d
"	"	"	" " " " " "	" " "	I	308	84	1e, f (?)
"	"	"	" " " " " "	" " "	I	308	84	1g
			<i>trentonensis</i> . . . . .					
<b>Ecculiomphalus</b> Portlock.								
Ca.	584	Type.	compressus . . . . . Whitfield.	A. M. N. H.	9	180	4	13
"	369	"	priscus . . . . . Whitfield.	" " "	2	46	8	19, 20
Tr.	778	Fig'd.	trentonensis (Con.) . . . . . Hall.	Pal. N. Y.	I	189	40A	3a, b, d
"	778	"	" " " " " "	" " "	I	189	41	1a-c
Ft. C.	459	Type.	triangulus . . . . . Whitfield.	A. M. N. H.	3	29	1	5-9
Tr.	969	"	undulatus . . . . . Hall.	Geol. Wis.	186I	37		
			" " " " " " Whitfield.	Mem. A. M.	I	63	8	1-3
Ft. C.	458	"	volutatus . . . . . Whitfield.	A. M. N. H.	I	314	25	8
"	"	"	" " " " " "	" " "	I	314	25	9-II



LOCALITY.	REMARKS.
Middleville, N. Y. Lowville, N. Y. Chazy, N. Y. " " "	Three individuals, one of which is imbedded. As type of <i>Retepora foliacea</i> . A crushed individual. Internal cast retaining some shell. Imbedded individual showing nearly central vertical section.
Providence Island, Vt.	Small individual.
Fort Cassin, Vt.	Three internal casts with some shell and a fragment showing surface.
.....	See <i>Platystoma</i> .
Middleville, N. Y.	Two imbedded individuals.
Waterford, N. Y.	See <i>Phragmostoma</i> .
Middleville, N. Y.	Exterior-interior casts of two individuals, imbedded.
Pulaski, N. Y.	Imbedded.
Fort Cassin, Vt.	Exterior-interior cast of large individual, imbedded.
Cincinnati, O.	Well preserved, but lacking summit whorl, imbedded.
Middleville, N. Y.	As <i>Pleurotomaria</i> ? Three entire individuals, one imbedded.
.....	" " . Attached through aperture.
Tennessee.	As <i>C. ventricosum</i> by mistake.
.....	Very large, nearly entire.
Cincinnati, O.	See <i>C. varicosum</i> .
" "	Many minute shells and casts form the series.
Middleville, N. Y.	As <i>Turbo</i> (?). Many minute individuals.
.....	Individual with most of shell preserved.
Pulaski, N. Y.	See <i>Cyrtoceras</i> .
" "	Interior cast of rather large individual.
" "	" " individual of medium size, some shell.
" "	Imperfect internal cast retaining some shell.
.....	Small internal cast.
Colchester, Vt.	See <i>Ecculiomphalus</i> .
Beekmantown, N. Y.	Imbedded individual retaining part of shell.
Middleville, N. Y.	Internal cast. Matrix shows the thickness of the shell.
Carlisle, Pa.	As <i>Cyrtolites</i> . Two imbedded individuals.
Providence Island, Vt.	" " Free.
Beloit, Wis.	Two internal casts. Figs. 5 and 6 are partial restorations.
Fort Cassin, Vt.	Internal cast of outer whorl.
" "	Two internal casts which were used for the figure.
.....	Large internal cast, partly restored in figure.

## Class GASTROPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Euomphalus</b> Sowerby.					
Ca.	370	Type.	calciferus . . . . . <i>Whitfield.</i>	A. M. N. H.	2	47	8	12, 13
Ft. C.	460	"	circumiratus . . . . . <i>Whitfield.</i>	" "	1	308	24	18-21
"	461	"	Perkinsi . . . . . <i>Whitfield.</i>	" "	3	30	1	10-11, 14
"	"	"	" . . . . . "	" "	3	30	1	12, 13
Tr.	264	"	triliratus . . . . . <i>Conrad.</i>	P. A. N. S.	1	333		
			<b>Fusispira</b> Hall.					
"	968	"	elongata . . . . . <i>Hall.</i>	N. Y. S. M.	24	229	8	5, <i>frt.</i>
			<i>obeliscus</i> . . . . . "					
Tr.	174	Type.	subfusiformis . . . . . <i>Hall.</i>	Pal. N. Y.	1	180	39	2a, b
	174	"	" . . . . . "	" "	1	180	39	2c, <i>frt.</i>
H. R.	967	"	terebriiformis . . . . . <i>Hall.</i>	N. Y. S. M.	24	230	8	4, "
Tr.	966	"	ventricosa . . . . . <i>Hall.</i>	" "	24	229	8	6, "
"	773	"	vittata . . . . . <i>Hall.</i>	Pal. N. Y.	1	181	39	3a, b
			<b>Helicotoma</b> Salter.					
"	175	Fig'd.	planulata ( <i>Salt.</i> ) . . . . . <i>Hall.</i>	Geol. Wis.	1	39		3, <i>top</i>
Ca.?	454	Type.	similis . . . . . <i>Whitfield.</i>	A. M. N. H.	3	31	1	1, 2
			<b>Holopea</b> Hall.					
Ft. C.	462	Fig'd.	arenaria ( <i>Bill.</i> ) <i>Whitfield.</i>	A. M. N. H.	1	310	25	5, <i>back</i>
	463	Type.	cassina . . . . . <i>Whitfield.</i>	" "	1	310	25	6, 7
Ca.	376	"	diluculum . . . . . <i>Hall.</i>	Pal. N. Y.	1	12	3	7
Tr.	749	"	obliqua . . . . . <i>Hall.</i>	" "	1	170	37	2a-c
"	751	Gen. and Sp. Type.	symmetrica . . . . . <i>Hall.</i>	" "	1	170	37	1, <i>back</i>
Ca.	375	Fig'd.	turgida ( <i>Hall</i> ) <i>Whitfield.</i>	A. M. N. H.	2	50	9	3-7
Tr.	750	Type.	ventricosa . . . . . <i>Hall.</i>	Pal. N. Y.	1	171	37	4a, b
Be.	577	Fig'd.	sp. . . . . <i>Hall.</i>	" "	1	42	10	5
			<b>Lophospira</b> Whitfield					
Ca.	377	Type.	calcifera . . . . . <i>Whitfield.</i>	A. M. N. H.	2	55	9	8-11
Ft. C.	464	"	cassina . . . . . <i>Whitfield.</i>	" "	1	312	25	1-4
Tr.	769	Gen. and Sp. Type.	Milleri . . . . . <i>Hall.</i>	Am. P. F.		244		
"	768	"	" . . . . . "	Pal. N. Y.	1	177	38	5a, b, d-f
"	"	"	" . . . . . "	" "	1	177	38	5g, h
Be.	578	Type.	perangulata . . . . . <i>Hall.</i>	" "	1	41	10	4, <i>side.</i>
Tr.	767a	"	" . . . . . "	" "	1	179	38	7a, b
"	767	"	tricarinata . . . . . <i>Hall.</i>	" "	1	178	38	6a-c
"	766	"	uniangulata . . . . . <i>Hall.</i>	" "	1	179	38	8, <i>rear</i>
H. R.	1136	"	" var. abbreviata " . . . . . "	" "	1	304	83	2a, <i>side</i>
"	"	"	" . . . . . "	" "	1	304	83	2d, "
			<b>Maclurea</b> Le Sueur.					
Ft. C.	467	Fig'd.	acuminata ( <i>Bill.</i> ) <i>Whitf.</i>	A. M. N. H.	3	32	2	1, 2
"	466	"	affinis ( <i>Bill.</i> ) . . . . . <i>Whitfield.</i>	" "	9	180	4	8, 9
Tr.	265	Type.	Bigsbyi . . . . . <i>Hall.</i>	Geol. Wis.	1861	37		
"	265	"	" . . . . . <i>Whitfield.</i>	Mem. A. M.	1	62	8	12, 13, 15
"	265	"	" ( <i>Hall</i> ) <i>Whitfield.</i>	" "	1	62	8	14, <i>top</i>
Ch.	547	Fig'd.	magna ( <i>Le Sueur</i> ) . . . . . <i>Hall.</i>	Pal. N. Y.	1	26	5	1c, "
"	"	"	" . . . . . "	" "	1	26	5	1e, <i>sect.</i>
"	"	"	" . . . . . "	" "	1	26	5	1a, "
Ca.	283	Type.	matutina . . . . . <i>Hall.</i>	" "	1	10	3	3, "
"	382	Fig'd.	sordida ( <i>Hall</i> ) <i>Whitfield.</i>	A. M. N. H.	2	49	8	1, 2
"	"	"	" . . . . . "	" "	2	49	8	3, 4
			<b>Metoptoma</b> Phillips.					
"	363	Type.	alta . . . . . <i>Whitfield.</i>	" "	2	44	7	12, 13

LOCALITY.	REMARKS.
Beekmantown, N. Y. Fort Cassin, Vt.	Two individuals. Internal cast retaining small portion of shell. " " " some of shell.
" " " Mineral Pt., Wis.	" Free. Small individual retaining shell.
Elkader, Ia.	External cast of lowest four whorls. From Galena horizon. See <i>Murchisonia</i> .
Middleville, N. Y.	As <i>Murchisonia</i> . Internal cast.
Adams, N. Y.	" Imperfect cast of large individual.
Cincinnati, O.	A somewhat imperfect internal cast, adult.
Depere, Wis.	External cast, adult. From Galena horizon.
Turin, N. Y.	As <i>Murchisonia</i> . Internal cast.
Beloit, Wis. Shoreham, Vt.	Internal cast imbedded. " From above Ft. Cassin beds.
Fort Cassin, Vt. " "	Internal cast of a large individual. Large internal cast retaining small portion of shell.
Middleville, N. Y.	As <i>Turbo</i> . Internal cast imbedded.
" "	Two specimens.
" "	Well preserved, imbedded.
Beekmantown, N. Y. Middleville, N. Y. Watertown, N. Y.	Three individuals. External cast. As <i>Natica?</i> sp. Small internal cast, imbedded.
Beekmantown, N. Y. Fort Cassin, Vt.	Two individuals. Three more or less perfect internal casts.
Middleville, N. Y. Watertown, N. Y.	Specific name proposed instead of <i>Murchisonia bicincta</i> , preoc. As <i>Murchisonia bicincta</i> H. Two individuals and an internal cast. " " " Ind. imb. These specs. were made
" "	the generic type of <i>Lophospira</i> . Bul. A. M. N. H., vol. I, p. 311.
Middleville, N. Y.	As <i>Murchisonia</i> . Cast of individual, imbedded.
Mineral Pt., Wis.	" " <i>perangulata</i> , var. <i>A</i> . Individual imbedded.
Middleville, N. Y.	" " A somewhat compressed indiv. and a fragment.
Pulaski, N. Y.	" " An individual.
Mohawk Valley, N. Y.	" " Internal cast imbedded with type of <i>Murchisonia gracilis</i> , fig. 1a, same plate. As <i>Murchisonia</i> . Internal cast, imbedded.
Fort Cassin, Vt. Otter Creek, Vt.	Internal cast retaining small portion of shell. Two considerable fragments preserving shell.
Mineral Pt., Wis. Janesville, Wis. Chazy, N. Y.	A small internal cast and a large one preserving external features. Internal cast of medium size. Three other casts are in the series. Large individual, somewhat imperfect and weathered.
" "	Weathered horizontal section of individual, medium size.
Mohawk Valley, N. Y. Beekmantown, N. Y.	Imbedded individual giving vertical section near the middle. Large weathered individual, imbedded.
" "	Two adults preserving more or less shell, imbedded.
" "	Internal cast retaining small portion of shell.
" "	An individual.

## Class GASTROPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
H. R.	1395	Gen. and Sp. Type.	<b>Microceras</b> Hall. inornatum.....Hall.	Am. J. Sci.	48	294		
			<b>Murchisonia</b> d'A. & V. bellicincta.....Hall	Pal. N. Y.	1	179	39	1a, b, d, c
Tr.	$\frac{768}{768}$	Type.	"	"	1	179	39	1c, frt.
			<i>bicincta</i> .....					
Ft. C.	507	Type.	<i>cassina</i> .....Whitfield.	A. M. N. H.	9	179	4	7
Ca.?	379	"	? <i>confusa</i> .....Whitfield.	"	2	54	8	16, 17
"		"	"	"	2	54	8	18
"	380	"	<i>gracilens</i> .....Whitfield.	"	2	53	8	14
Ca.		"	"	"	2	53	8	15
Tr.	$\frac{766}{766}$	"	<i>gracilis</i> .....Hall.	Pal. N. Y.	1	181	39	4a, c
H. R.	$\frac{1180}{766}$	"	"	"	1	303	83	1a
"	$\frac{766}{766}$	"	"	"	1	303	83	1
Tr.	$\frac{1020}{1020}$	"	<i>major</i> .....Hall.	Lake Sup.	2	209	26	1a
			<i>Milleri</i> .....					
Ft. C.	465	Type.	<i>obeliscus</i> .....Whitfield.	A. M. N. H.	1	317	26	5, 6
"	466	"	? <i>prava</i> .....Whitfield.	"	1	316	24	22, rear
			<i>subfusiformis</i> .....					
			<i>vittata</i> .....					
			<b>Natica</b> Adanson. ? sp.....	Pal. N. Y.	1	42	10	5
Ca.	$\frac{872}{872}$	Fig'd.	<b>Ophileta</b> Vanuxem. <i>complanata</i> ( <i>Vanux.</i> ) W.	A. M. N. H.	2	48	7	18-25
H. R.?	977	Type.	<b>Phragmostoma</b> Hall. <i>cymbula</i> .....Hall.	N. Y. S. M.	14	94		
Ch.	563	"	<b>Platystoma</b> Conrad. <i>auriformis</i> .....Hall.	Pal. N. Y.	1	31	6	9a, b
Ca.	381	"	<b>Pleurotomaria</b> DeFrance. <i>beekmanensis</i> .....Whitfield.	A. M. N. H.	2	53	8	8-II
Ft. C.	468	Type.	? <i>bilix</i> .....					
"	467	Fig'd.	<i>difficilis</i> .....Whitfield.	A. M. N. H.	3	33	1	17, 18
			? <i>etna</i> ( <i>Bill.</i> )? Whitfield.	"	1	316	24	12, 13
			<i>micula</i> .....					
			<i>Nasoni</i> .....					
Tr.	757a	Type.	<i>niota</i> .....Hall.	Geol. Wis.	1861	33		
			.....Whitfield.	Mem. A. M.	1	60	8	11
Be.	576	"	? <i>nucleolata</i> .....Hall.	Pal. N. Y.	1	42	10	6a, b
			<i>percarinata</i> .....					
			<i>rotuloides</i> .....					
H. R.?	1028	Type.	<i>semele</i> .....Hall.	Geol. Wis.	1861	36		
			.....Whitfield.	Mem. A. M.	1	61	8	8-10
Tr.	$\frac{787}{787}$	"	<i>subconica</i> .....Hall.	Pal. N. Y.	1	174	37	8a-c
"		"	"	"	1	174	37	8d, e
			"	Geol. Wis.	1	39		1, back
H. R.	$\frac{767}{11}$	"	"	Pal. N. Y.	1	304	83	3c, d
			<i>subtilistriata</i> .....					
			<i>umbilicata</i> .....					
H. R.	1137	Fig'd.	sp. ?.....Hall.	Pal. N. Y.	1	305	83	5b, base
			sp. ?.....	"	1	31	6	8
			<b>Rhaphistoma</b> Hall. <i>compressum</i> .....Whitfield.	A. M. N. H.	1	309	24	14, 15
Ft. C.	452	Type.	<i>hortensia</i> ( <i>Bill.</i> )? Whitf.	"	3	32	1	15, 16
"	451	Fig'd.	<i>micula</i> .....Hall.	Geol. Wis.	1	55	ct. 13	4, top
H. R.	$\frac{1388}{1388}$	Type.						

LOCALITY.	REMARKS.
Cincinnati, O.	Prob. = <i>Cyrtolites</i> . Many minute individuals form the series.
Middleville, N. Y.	Two individuals and a large internal cast.
Watertown, N. Y.	Cast showing form of aperture. See <i>Lophospira Milleri</i> .
Fort Cassin, Vt.	Incomplete shell, imbedded.
Shoreham, Vt.	Two casts retaining some shell; imbedded separately.
" "	Weathered slab, part of which was figured.
Providence Island, Vt.	Individual imbedded with type of <i>Isochilina Seelyi</i> , fig. 6, pl. 13.
Beekmantown, N. Y.	Internal cast of six volutions, imbedded.
Watertown, N. Y.	Two internal casts, one of which retains some shell.
Pulaski, N. Y.	Int. cast imb. with type of <i>Lophospira abbreviata</i> , fig. 2a, same pl.
Lorraine, N. Y.	Int. cast, imb. Two unfigured specimens are in the type series.
3 miles above Green Bay, L. Mich.	Internal cast five whorls, imbedded. From the Galena horizon. See <i>Lophospira</i> .
Fort Cassin, Vt.	Large int. cast retaining small portion of shell. Prob. = <i>Fusispira</i> .
" "	Internal cast retaining but little shell. See <i>Fusispira</i> .
" "	" "
" "	See <i>Holopea</i> .
Beekmantown, N. Y.	Four individuals and a block containing many.
Allen's Bluff, Tenn.	As <i>Carinaropsis (Phragmostoma)</i> . Marg. somew. broken. Trenton ?
Galway, N. Y.	As <i>Capulus</i> . Cast, somewhat worn.
Beekmantown, N. Y.	A nearly entire individual retaining some shell, and an internal cast.
" "	See <i>Cyclonema</i> .
Fort Cassin, Vt.	Internal cast retaining some shell.
" "	" "
" "	See <i>Rhaphistoma</i> .
" "	" "
Beloit, Wis.	Internal cast of a large individual, nearly entire.
Watertown, N. Y.	Cast of small individual, imbedded. See <i>Cyclonema</i> .
" "	" <i>Rhaphistoma</i> .
" "	" "
Maquoketa Creek, Ia.	Int. cast retaining some shell. From shales above Galena limest.
Watertown, N. Y.	Imbedded.
" "	Cast of exterior.
Pulaski, N. Y.	Two imperfect casts imbedded together in hard shale. See <i>Rhaphistoma</i> .
" "	" <i>Trochonema</i> .
Turin, N. Y.	Small cast, imbedded. See <i>Rhaphistoma stamineum</i> .
" "	" "
Fort Cassin, Vt.	Internal cast retaining much of shell.
" "	Large internal cast retaining some shell.
Sinsinawa M'nd., Wis.	As <i>Pleurotomaria</i> . Rather large internal cast.

## Class GASTROPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	960	Type.	<b>Rhaphistoma</b> Hall— <i>Cont.</i>					
			Nasoni . . . . . Hall.	Geol. Wis.	1861	34	.....	.....
			" " " " " "	" " "	I	39	.....	2, top
			Whitfield.	Mem. A. M.	I	61	8	4-7
Ch.	543	" "	planistria . . . . . Hall.	Pal. N. Y.	I	30	6	3a, top
Ca.	366	" "	prævium . . . . . Whitfield.	A. M. N. H.	2	52	8	5-7
Tr.	761	" "	rotuloides . . . . . Hall.	Pal. N. Y.	I	173	37	7a-c
Ch.	545	" "	stamineum . . . . . Hall.	" " "	I	29	6	4, side
" "	" "	Fig'd.	" " " " " "	" " "	I	31	6	8, " "
Tr.	760 3	Type.	subtilistriatum . . . . . Hall.	" " "	I	172	37	5a-d
Ca.	585	"	<b>Stroparollina</b> Billings.					
			minima . . . . . Whitfield.	A. M. N. H.	9	179	4	10-12
Tr.	772 771 771	Fig'd.	<b>Subulites</b> Conrad.					
			abbreviatus . . . . . Hall.	N. Y. S. M.	3	172	3	2a, b
			elongatus (Con.) . . . . . Hall.	Pal. N. Y.	I	182	39	5b, frt.
" "	" "	" "	" " " " " "	" " "	I	182	39	5c, side
Ft. C.	469	Type.	obesus . . . . . Whitfield.	A. M. N. H.	I	318	26	7, " "
Ca. Be or B. R.	378 579 753 " " " " 753 8	"	<b>Trochonema</b> Salter.					
			exile . . . . . Whitfield.	" " "	2	51	9	I, 2
			umbilicatum . . . . . Hall.	Pal. N. Y.	I	43	10	9a, b, d, e
			" " " " " "	" " "	I	175	38	1a, back
			" " " " " "	" " "	I	175	38	1b, c
" "	" "	" "	" " " " " "	" " "	I	175	38	1d-f
" "	" "	" "	" " " " " "	" " "	I	175	38	1g, side
Ca. Ft. C.	364 447 " " " " " " 445 446 " " 365 " "	"	<b>Tryblidium</b> Lindström.					
			? acutum . . . . . Whitfield.	A. M. N. H.	2	45	7	9-11
			conicum . . . . . Whitfield.	" " "	I	306	24	26, 27
			" " " " " "	" " "	I	306	24	32, 33
			" " " " " "	" " "	3	29	I	3, side
			" " " " " "	" " "	3	29	I	4, " "
			" " " " " "	" " "	I	305	24	28, 29
			" " " " " "	" " "	I	305	24	23, 24
			" " " " " "	" " "	I	305	24	25
			" " " " " "	" " "	I	305	24	25
Ca.	365	" "	pileolum . . . . . Whitfield.	" " "	2	46	7	15, 16
" "	" "	" "	" " " " " "	" " "	2	46	7	17, top
Ft. C.	448	Fig'd.	simplex (Bill.) Whitfield.	" " "	I	306	24	30, 31
			<b>Turbo</b> Klein.					
			diluculum . . . . .					
			parvulus . . . . .					

## Class PTEROPODA.

			<i>Clodermis</i> Hall.					
			canaliculatum . . . . .					
			Saffordi . . . . .					
Tr.	789 791 790 788 " "	Type.	<b>Conularia</b> Miller.					
			gracilis . . . . . Hall.	Pal. N. Y.	I	224	59	7a, b
			granulata . . . . . Hall.	" " "	I	223	59	5a, b
			papillata . . . . . Hall.	" " "	I	223	59	6a, b
			trentonensis . . . . . Hall.	" " "	I	222	59	4b, ext.
" "	" "	" "	" " " " " "	" " "	I	222	59	4d, e, f

LOCALITY.	REMARKS.
.....	As <i>Pleurotomaria</i> .
Beloit, Wis.	" <i>Rhaphistoma</i> ( <i>Pleurotomaria</i> ). " <i>Pleurotomaria</i> ( <i>Rhaphistoma</i> ). Two very perfect internal casts.
Chazy, N. Y.	Four others are in the type series.
Beekmantown, N. Y.	Imbedded individual.
Middleville, N. Y.	Large individual.
Chazy, N. Y.	As <i>Pleurotomaria</i> . Individual.
Watertown, N. Y.	A somewhat worn individual. As <i>Pleurotomaria</i> sp. ? Small, imbedded.
Colchester, Vt.	" " Two individuals preserving some shell.
Watertown, N. Y.	Two weathered individuals.
Middleville, N. Y.	Fragment.
Mineral Pt., Wis.	Internal cast preserving some shell.
Fort Cassin, Vt.	Four whorls retaining some shell. Rather large internal cast with some shell.
Beekmantown, N. Y.	Internal cast.
Watertown, N. Y.	As <i>Pleurotomaria</i> . Three internal casts, two with some shell.
Middleville, N. Y.	" " Retains some shell.
" " "	" " Small individual.
Mineral Pt., Wis.	" " Large internal cast.
" " "	" " Medium size, imbedded.
Beekmantown, N. Y.	Exfoliated individual, imbedded.
Fort Cassin, Vt.	Internal cast of small individual imbedded.
" " "	" " very " "
" " "	Individual of medium size.
" " "	Internal cast of large individual.
" " "	" " " " imbedded.
" " "	" " retaining part of the shell.
Beekmantown, N. Y.	Large ovate individual retaining much of shell.
Fort Cassin, Vt.	" round " " Internal cast very large individual with small part of shell.
.....	See <i>Holopea</i> .
.....	" <i>Cyclora</i> .
.....	= <i>Pterotheca</i> .
.....	See " "
Middleville, N. Y.	Imbedded.
" " "	" compressed.
" " "	Individual, free.
" " "	Frag. showing septum. This is the orig. of the upper figure 4f.
" " "	Another individual, imbedded, is in the type series.

## Class PTEROPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	796	Type.	<b>Pterotheca</b> Salter. anatifomis . . . . . Hall.	Pal. N. Y.	I	154	34	7, ext.
"	793	"	canaliculata . . . . . Hall	N. Y. S. M.	14	97	...	...
"	976	"	Saffordi . . . . . Hall.	" "	14	96	...	...
			" "	" "	15	166	6	15-17
Ch.	539	"	<b>Stenotheca</b> Hicks. dubia . . . . . Hall.	Pal. N. Y.	I	23	4 bis	11a, b
"	"	Fig'd.	" " " "	" "	I	23	4 bis	10a, b
			<b>Tentaculites</b> Schlotheim. ? flexuosus . . . . .					

## Class CEPHALOPODA.

Tr.	800	Type.	<b>Actinoceras</b> Bronn. distans . . . . . Hall.	Pal. N. Y.	I	220	58	1a, b
"	812	"	<b>Cameroeras</b> Conrad. approximatum . . . . . Hall.	" "	I	219	54	2a, side
"	815	Fig'd.	trentonense (Con.) . . . . . Hall.	" "	I	221	56	4a-c
Ft. C.	483	Type.	<b>Cyrtoceras</b> Goldfuss. acinacellum . . . . . Whitfield.	A. M. N. H.	I	327	27	10-13
			annulatum . . . . .					
			arcuatum . . . . .					
Ca.	389	"	beekmanense . . . . . Whitfield.	A. M. N. H.	2	57	10	2, 3
Ft. C.	481	"	Boycii . . . . . Whitfield.	" "	I	326	29	4
Tr.	816	"	camurum . . . . . Hall.	Pal. N. Y.	I	196	42	6
Ft. C.	482	"	confertissimum . . . . . Whitf.	A. M. N. H.	I	327	27	7-9
Tr.	818	"	constrictostriatum . . . . . Hall.	Pal. N. Y.	I	195	42	2a, b
"	"	"	" " " "	" "	I	195	42	3c, d
			corniculum . . . . .					
Tr.	801	Type.	eugium . . . . . Hall.	Geol. Wis.	186I	40		
			Whitfield.	Mem. A. M.	I	66	9	3, 4
"	817	"	filosum (Con.) . . . . . Emmons.	Geol. N. Y.	2d D.	392	...	4
			Hall.	Pal. N. Y.	I	190	41	3a, b
"	823	"	Hallanum . . . . . d'Orbigny.	Pr. d. Pal.	I	I		
			Hall.	Pal. N. Y.	I	193	41	2a-c
Ca.	391	"	Kirbyi . . . . . Whitfield.	A. M. N. H.	2	57	10	4-7
			lamellosum . . . . .					
Tr.	818	"	loculosum . . . . . Hall.	Geol. Wis.	186I	42		
			Whitfield.	Mem. A. M.	I	67	9	6-9
"	820	"	macrostomum . . . . . Hall.	Pal. N. Y.	I	194	42	1b, c
			Conrad.	P. A. N. S.	I	334	...	...
"	822	"	" " " "	Pal. N. Y.	I	194	42	1a
"	822	"	" " " "	" "	I	194	42	3a, b
			marginale . . . . .					
Tr.	820	Type.	multicameratum . . . . . Hall.	Pal. N. Y.	I	195	42	4, side
"	822	"	neleus . . . . . Hall.	Geol. Wis.	186I	40		
			Whitfield.	Mem. A. M.	I	65	9	10, 11
"	822	"	" (Hall)	" "	I	...	9	12
Ca.	390	"	Raei . . . . . Whitfield.	A. M. N. H.	2	58	10	8, 9
Tr.	821	"	subannulatum . . . . . d'Orb.	Pr. d. Pal.	I	I	...	...
			Hall.	Pal. N. Y.	I	194	41	4a
"	821	"	" " " "	" "	I	194	41	4b, d
"	"	"	" " " "	" "	I	194	41	5





Class CEPHALOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	819	Type.	<b>Cyrtoceras</b> Goldfuss— <i>Cont.</i> subarcuatum. . . . . <i>d'Orbigny.</i> <i>Hall.</i>	Pr. d. Pal.	I	2	...	...
				Pal. N. Y.	I	196	42	5a-c
"	<del>819</del> I	"	tenuistriatum. . . . . <i>Hall.</i>	Am. P. F. Geol. Wis.	...	243	...	I, 2
H. R.	1400	"	Whitneyi. . . . . <i>Hall.</i> <i>Whitfield.</i>	" "	186I	39	9	5
			<b>Endoceras</b> Hall.					
Tr.	814	"	angusticameratum. . . . . <i>Hall.</i>	Pal. N. Y.	I	218	51	3
"	811	"	annulatum. . . . . <i>Hall.</i>	" "	I	207	44	1a, b
			<i>approximatum.</i>					
Tr.	813	Type.	arctiventrum. . . . . <i>Hall.</i>	Pal. N. Y.	I	217	51	2a, b
			<i>distans</i>					
B. R.	608	Type.	gemelliparum. . . . . <i>Hall.</i>	Pal. N. Y.	I	60	19	1a-c
Tr.	810	"	magnaventrum. . . . . <i>Hall.</i>	" "	I	218	53	1a-c
"	"	"	" ? var. . . . .	" "	I	218	54	2b
"	809	"	proteiforme. . . . . <i>Hall.</i>	" "	I	208	48	I
"	"	"	"	" "	I	208	48	2a-c
"	"	"	"	" "	I	208	48	3
"	"	"	"	" "	I	208	48	4a-c
"	"	"	"	" "	I	208	49	1a
"	"	"	"	" "	I	208	49	1b, c
"	"	"	"	" "	I	208	49	1e
"	"	"	"	" "	I	208	50	1a, b, 2a, b
"	"	"	"	" "	I	208	50	2d
"	"	"	"	" "	I	208	50	3
"	"	"	"	" "	I	208	53	2
"	"	"	"	" "	I	216	57	1a, b
"	809	"	" var. lineolatum " " "	" "	I	211	45	4a, b
"	"	"	" " " " " " "	" "	I	211	45	4e
"	"	"	" " " " " " "	" "	I	211	46	1a-c
"	"	"	" " " " " " "	" "	I	211	46	2a, b
"	"	"	" " " " " " "	" "	I	211	47	4a, d
"	"	"	" " " " " " "	" "	I	211	47	4e
"	"	"	" " " " " " "	" "	I	211	59	3
"	809b	"	" "strangulatum" " " "	" "	I	212	46	4a, b
"	"	"	" " " " " " "	" "	I	212	46	4d
"	"	"	" " " " " " "	" "	I	212	46	4e
"	809d	"	" "tenuistriatum" " " "	" "	I	209	45	1a, b
"	"	"	" " " " " " "	" "	I	209	47	1a, b
"	"	"	" " " " " " "	" "	I	209	47	2a-e
"	809c	"	" "tenuitextum" " " "	" "	I	210	45	2a, b
"	"	"	" " " " " " "	" "	I	210	45	3a, b
"	"	"	" " " " " " "	" "	I	210	45	5a-c
B. R.	603	Gen. and Sp. Type	subcentrale. . . . . <i>Hall.</i>	" "	I	59	17	4
			<b>Gomphoceras</b> Sowerby.					
Ft. C.	480	Type.	cassinense. . . . . <i>Whitfield.</i>	A. M. N. H.	I	322	29	1-3
"	479	"	minimum. . . . . <i>Whitfield.</i>	" "	I	321	27	3-5
			<b>Gonioceras</b> Hall.					
B. R.	607	Gen. and Sp. Type.	anceps. . . . . <i>Hall.</i>	Pal. N. Y.	I	54	14	1a
"	"	"	"	" "	I	54	14	1b
Tr.	800	Type.	occidentale. . . . . <i>Hall.</i>	Geol. Wis.	186I	47	12	2
"	800	Fig'd.	" ( <i>H.</i> ) <i>Whitfield.</i>	Mem. A. M.	I	72	12	I
"	"	"	" " " " " " "	" "	I	72	12	I



## Class CEPHALOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<i>Inachus</i> Hisinger.					
			<i>undatus</i> .....					
			<b>Lituites</b> Breynius.					
Ft. C.	486	Type.	<i>Eatoni</i> ..... <i>Whitfield</i> .	A. M. N. H.	I	331	28	7
"	487	"	" var. <i>cassinensis</i> "	" "	I	331	32	1
"	488	"	<i>internistriatus</i> <i>Whitfield</i> .	" "	I	332	32	2
"	"	"	" .....	" "	I	332	29	5, 8
"	"	"	" .....	" "	I	332	29	6, 7
Tr.	1003	"	<i>Robertsoni</i> ..... <i>Hall</i> .	Geol. Wis.	1861	38		
			<i>Whitfield</i> .	Mem. A. M.	I	64	10	4-6
Ft. C.	485	"	<i>Seelyi</i> ..... <i>Whitfield</i> .	A. M. N. H.	I	330	31	2, sect.
			" .....	" "	I	330	32	3
B. R.	829	"	<i>undatus</i> ( <i>Con.</i> ).. <i>Emmons</i> .	Geol. N. Y.	2d D.	394	ct. 104	1 and 2
"	609	Fig'd.	" ( <i>Con.</i> ).. <i>Hall</i> .	Pal. N. Y.	I	52	13	1
"	"	"	" .....	" "	I	52	13	3, sect.
"	"	"	" .....	" "	I	52	I3bis	1
Tr.	1002	Type.	" var. <i>occidentalis</i> . <i>Hall</i> .	Geol. Wis.	1861	38		
"	1002	Fig'd.	" " ( <i>H.</i> ) " <i>Whitfield</i> .	Mem. A. M.	I	63	10	7
"	"	"	" " .....	" "	I	63	11	1
			" " .....	" "	I	63	12	3
			<b>Nautilus</b> Breynius.					
Ft. C.	489	Type.	? <i>champlainensis</i> .. <i>Whitf.</i>	A. M. N. H.	I	329	31	1
"	"	"	" .....	" "	I	329	31	3
"	490	"	<i>Kelloggi</i> ..... <i>Whitfield</i> .	" "	I	328	30	1
"	"	"	" .....	" "	I	328	31	4
"	"	"	" .....	" "	I	328	31	5
"	508	"	<i>Perkinsi</i> ..... <i>Whitfield</i> .	" "	9	182	5	1, 2
			<b>Oncoceras</b> Hall.					
Tr.	997	"	<i>abruptum</i> ..... <i>Hall</i> .	Geol. Wis.	1861	44		
			<i>Whitfield</i> .	Mem. A. M.	I	68	10	1-3
"	1000	"	<i>alceus</i> ..... <i>Hall</i> .	Geol. Wis.	1861	46		
			<i>Whitfield</i> .	Mem. A. M.	I	70	9	23-26
"	924	Gen. and Sp. Type.	<i>constrictum</i> ..... <i>Hall</i> .	Pal. N. Y.	I	197	41	6a-c
"	924	"	" .....	" "	I	197	41	6d
"	"	"	" .....	" "	I	197	41	6e
"	"	"	" .....	" "	I	197	41	7a-c
"	"	"	" .....	" "	I	197	41	7d
"	"	"	" .....	N. Y. S. M.	3	172	3	3a, b
"	"	"	" .....	Pal. N. Y.	I	197	41	6f
"	999	Fig'd. Type.	<i>lycus</i> ..... <i>Hall</i> .	Geol. Wis.	1861	45		
			<i>Whitfield</i> .	Mem. A. M.	I	69	9	13, 14
"	999	"	<i>pandion</i> ..... <i>Hall</i> .	Geol. Wis.	1861	45		
			<i>Whitfield</i> .	Mem. A. M.	I	69	9	20
"	999	"	" .....	Geol. Wis.	I	41		3
			<i>Whitfield</i> .	Mem. A. M.	I	69	9	21, 22
"	996	"	<i>plebeium</i> ..... <i>Hall</i> .	Geol. Wis.	1861	44		
			<i>Whitfield</i> .	Mem. A. M.	I	68	9	15-19
			<b>Ormoceras</b> Stokes.					
H. R.	1141	"	<i>crebrisepalum</i> ..... <i>Hall</i> .	Pal. N. Y.	I	313	86	2a
"	"	"	" .....	" "	I	313	87	2a-c, e
"	1141	"	" .....	" "	I	313	87	2d
B. R.	905	"	<i>tenuifilum</i> ..... <i>Hall</i> .	" "	I	55	15	1c
"	"	"	" .....	" "	I	55	16	1b, c, e
"	905	"	" .....	" "	I	55	17	1, 1a
"	905	"	" .....	" "	I	55	17	1b
B. R. or Tr.	905	Fig'd.	" ? .....	" "	I	222	58	2a
"	"	"	" ? .....	" "	I	222	58	2b, c
B. R.	905	"	" ? var. <i>distans</i> . <i>Hall</i> .	" "	I	55	17	2

LOCALITY.	REMARKS.
.....	See <i>Lituites</i> .
Fort Cassin, Vt.	A large individual, with artificial section.
" " "	Int. cast retaining some of shell. Used also for figs. 5, 6, pl. 28.
" " "	Large individual with the shell almost entire.
" " "	Internal cast, retaining much of shell.
" " "	Imperfect cast with artificial section.
Rockford, Ill.	Two nearly entire internal casts. A fragm. from Beloit is in series.
Fort Cassin, Vt.	Cast of medium size showing artificial section.
" " "	Large individual retaining much shell.
.....	As <i>Inachus</i> .
Watertown, N. Y.	A large individual, nearly entire.
" " "	Imbedded; shows water-worn section.
" " "	Very large cast retaining much of shell.
Beloit, Wis.	Large cast. Incor. ref. to Niag. grp. in Geol. Wis., vol. 1, p. 441.
La Salle Co., Ill.	Very perfect large cast. From Homer, Troy Grove Tp.
Fort Cassin, Vt.	Large cast retaining small portion of shell.
" " "	Most of chamber of habitation of a very large individual.
" " "	Internal cast of very large individual. Partly restored in figure.
" " "	" " " young " retaining some shell.
" " "	Fragment cut so as to show siphon and septa.
" " "	Two individuals, one retaining some shell.
Platteville, Wis.	Int. cast of 10 cham. and part of the outer one, and a small fragm.
Beloit, Wis.	Two casts of 7 and 15 chambers, with parts of those of habitation.
Watertown, N. Y.	Cast.
Middleville, N. Y.	" of 10 chambers and that of habitation, which is nearly entire.
" " "	" " 8 " " " "
" " "	Rather small fragment, imbedded.
" " "	Cast of single chamber, imbedded.
" " "	An almost perfect individual retaining shell.
" " "	An indeterminable fossil, certainly not an <i>Oncoceras</i> .
Beloit, Wis.	Cast of 10 chambers besides that of habitation.
Mineral Pt., Wis.	Cast of 3 chambers besides outer one.
.....	Restored in part in figure.
Beloit, Wis.	Cast of 9 chambers besides outer one.
" " "	Three internal casts as represented. Four others are in the series.
Near Pulaski, N. Y.	Cast of 24 chambers besides outer one.
" " "	Four int. casts; two retain'g some shell and 1 show weath. longit. sect.
Turin, N. Y.	Block containing many small individuals, part of which was figured.
Watertown, N. Y.	Very large indiv., imbedded. Shows weathered longitudinal section.
" " "	Three large, imbedded fragments, showing " " "
Tennessee.	Small fragment of large individual; siphon in contact with shell.
Watertown, N. Y.	Part of large, imbedded indiv.; shows weathered longit. section.
Mohawk Valley?, N. Y.	" " siphon with small portion of shell adhering.
" " "	" " individual. Shows weathered longitudinal section.
Watertown, N. Y.	" " imbedded indiv. Shows " " "

## Class CEPHALOPODA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
			<b>Orthoceras</b> Breynius.					
Tr.	798	Type.	amplicameratum . . . . . <i>Hall</i> .	Pal. N. Y.	I	205	51	1a, c-g
"	<del>808</del>	"	anellus . . . . . <i>Conrad</i> .	P. A. N. S.	I	334		
"		"	<i>Hall</i> .	Pal. N. Y.	I	202	43	6a-c
"	<del>805</del>	Fig'd.	" (Con.) . . . . . "	"	I	202	43	6d-f
"	807	Type.	arcuoliratum . . . . . <i>Hall</i> .	"	I	198	42	7a, side
"		"	<i>Hall</i> .	"	I	198	42	7b, c
"	<del>808</del>	"	bilineatum . . . . . <i>Hall</i> .	"	I	199	43	2b, d
Ft. C.	474	Fig'd.	" (H.) <i>Whitfield</i> .	A. M. N. H.	3	35	2	5
Tr.	<del>808</del>	Type.	" var. $\alpha$ . . . . . <i>Hall</i> .	Pal. N. Y.	I	200	43	3a-c
Ft. C.	472	"	Brainerdi . . . . . <i>Whitfield</i> .	A. M. N. H.	I	319	27	14-16
Tr.	806	"	clathratum . . . . . <i>Hall</i> .	Pal. N. Y.	I	201	43	4a-c
Ch.	551	"	clintoni . . . . . <i>Hall</i> .	Am. P. F.		244		
			"	Pal. N. Y.	I	34	7	3
			<i>coralliferum</i> . . . . .					
Ft. C.	473	Type.	cornu-oryx . . . . . <i>Whitfield</i> .	A. M. N. H.	I	320	27	1, 2, 6
"	475	Fig'd.	explorator ( <i>Bill</i> ) . . . <i>Whitf</i> .	"	3	33	2	3
			<i>gregarium</i> . . . . .					
Tr.	797	Type.	junceum . . . . . <i>Hall</i> .	Pal. N. Y.	I	204	47	3a-f
H. R.	1142	"	lamellosum . . . . . <i>Hall</i> .	"	I	312	86	2d, e
Tr.	802	"	laqueatum . . . . . <i>Hall</i> .	"	I	206	56	2b, c
"		"	" ? var. $\alpha$ . . . . . <i>Hall</i> .	"	I	206	56	3
"	799	"	latianulatum . . . . . <i>Hall</i> .	"	I	204	54	1a, b
Ch.	552	"	moniliforme . . . . . <i>Hall</i> .	"	I	35	7	5
Be.	581	Fig'd.	multicameratum ( <i>Con</i> ) . . <i>H</i> .	"	I	45	11	1-1b
Tr.	<del>808</del>	Type.	planoconvexum . . . . . <i>Hall</i> .	Geol. Wis.	1861	I	47	
			<i>Whitfield</i> .	Mem. A. M.	I	72	8	24, 25
							9	1, 2
Ca.	<del>807</del>	Fig'd.	primigenium ( <i>Vanux</i> ) . <i>H</i> .	Pal. N. Y.	I	13	3	11
"	<del>807</del>	"	" ( <i>Vanux</i> ) <i>Whitf</i> .	A. M. N. H.	2	56	10	1
H. R.	1396	Type.	sociale . . . . . <i>Hall</i> .	Am. P. F.		245		
			<i>Whitfield</i> .	Geol. Wis.	1861	46		
Ft. C.	476	Fig'd.	sordidum ( <i>Bill</i> ) . . . <i>Whitf</i> .	Mem. A. M.	I	71	8	16-23
Tr.	801	Type.	strigatum . . . . . <i>Hall</i> .	A. M. N. H.	3	34	2	4
			<i>subarcuatum</i> . . . . .	Pal. N. Y.	I	205	56	1a-d
Tr.	804	Type.	undulostriatum . . . . . <i>Hall</i> .	Pal. N. Y.	I	202	43	7a-k
	803	"	vertebrale . . . . . <i>Hall</i> .	"	I	201	43	5a-c
U.	<del>808</del>	Fig'd.	sp . . . . . <i>Hall</i> .	"	I	311	85	1a
"	"	"	sp . . . . . <i>Hall</i> .	"	I	311	85	1b
"	<del>808</del>	"	sp . . . . . <i>Hall</i> .	"	I	311	85	1d, f
"	<del>1065</del>	"	sp . . . . . <i>Hall</i> .	"	I	311	85	2
"	1065	"	sp . . . . . <i>Hall</i> .	"	I	312	85	3
H. R.	<del>1065</del>	"	sp . . . . . <i>Hall</i> .	"	I	312	86	1d
			<b>Piloceras</b> Salter.					
Ft. C.	484	Type.	explanator . . . . . <i>Whitfield</i> .	A. M. N. H.	I	323	28	1-4
"		"	" . . . . .	"	I	325		1
			<b>Trocholites</b> Conrad.					
Tr.	830	Fig'd.	ammonius ( <i>Con</i> ) . . . <i>Hall</i> .	Pal. N. Y.	I	192	40A	4a, d, f-k
H. R.	<del>1144</del>	"	planorbiformis ( <i>Con</i> ) . <i>Hall</i> .	"	I	310	84	3c-d
"	<del>1144</del>	"	" . . . . .	"	I	310	84	3e, f

## Subkingdom VERMES.

Tr.	831	Type.	<b>Conchicolites</b> Nicholson.					
			flexuosus . . . . . <i>Hall</i> .	Pal. N. Y.	I	92	29	6a, a*, b







## CRUSTACEA.

## Order OSTRACODA.

LOCALITY.	REMARKS.
Cove Is., Ball's Bay, Vt. " " " " " " " " "	As <i>Primitia</i> ? Two opposite valves imbedded together. A right valve imbedded with many others. As <i>Primitia</i> . A detached left valve. " " Right valve and int. cast of right valve imb. together. Two right valves imbedded together.
Providence Island, L. Champlain, N. Y. " " ..... ..... .....	As <i>Primitia</i> . Right valve imbedded with many others, and with type of <i>Murchisonia gracilens</i> , fig. 14 of plate 8. Left valve imbedded with many others.  See <i>Isochilina</i> . " " " "
Fort Cassin, Vt. " "	Cast of interior. " "
..... Bay of Quinta, Ont.	See <i>Bathyrurus</i> . Folded individual.
..... Chazy, N. Y. Fort Cassin, Vt. " " " " " " " " " " " "	See <i>Ogygia</i> . As <i>Isotelus</i> . Part of a large hypostoma, imbedded. Imperfect interior imprints, each retaining some crust. Small, imperfect glabella, imbedded. Small, imperfect, left movable cheek, imbedded. Imperfect cast, large left movable cheek on block with orig. of fig. 8. " " imprint, convex side large hypostoma; some crust. " " under side of two pygidia. " " " a large individual partly folded and and distorted. Retains much of the crust.
..... Watertown?, N. Y.  Chazy, N. Y. Middleville, N. Y. " " " "	See <i>Bathyrurus</i> . As <i>Isotelus</i> . As type of <i>Isotelus cyclops</i> . Original of Green's cast No. 24. Almost entirely denuded of crust. As <i>Isotelus</i> . A very small pygid. Species queried in expl. of plate. " " Hypostoma, imbedded. " " Interior imprint of cranium retaining some crust. " " " " pygidium. " "
..... Kentucky. Middleville, N. Y. " " " " Near Fort Plain, N. Y. Watertown?, N. Y.	An almost perfect individual retaining test. As <i>Isotelus</i> . Internal cast of pygidium, imbedded. " " Hypostoma. " " Small pygidium, imbedded. " " Very large hypostoma, imbedded. An imb. pygid. and pt. of another; loc. more prob. Collingw'd, Can. See <i>Bathyrurus extans</i> .
Mohawk Valley?, N. Y. .....	As <i>Ogygia</i> ? Imprint under side pygidium retaining some test.  See <i>Bathyrurus</i> .

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Ca.	397	Fig'd.	<b>Bathyrus</b> Billings. conicus ( <i>Bill.</i> )... <i>Whitf.</i>	A. M. N. H.	2	61	13	15, 16
"	"	"	" " " " " " " "	" " "	2	61	13	17-19
"	"	"	" " " " " " " "	" " "	2	61	13	20, 21
?	498	"	caudatus ( <i>Bill.</i> )... <i>Whitf.</i>	" " "	3	39	2	14
Be.	$\frac{1}{2}$ <sup>12</sup> <sub>2</sub>	Type.	extans. .... <i>Hall.</i>	Pal. N. Y.	1	228	60	2c?
Tr.	842	Fig'd.	" " " " " " " "	" " "	1	248	61	1a, b
?	500	Type.	glandicephalus <i>Whitfield.</i>	A. M. N. H.	3	38	2	9-13
Ft. C.	499a	"	Perkinsi " " " "	" " "	9	183	5	7, 8
Ca.	396	"	Seelyi. .... <i>Whitfield.</i>	" " "	2	62	13	8, 9, 11-14
"	"	"	" " " " " " " "	" " "	2	62	13	10, ext.
Tr.	854	"	spiniger. .... <i>Hall.</i>	Pal. N. Y.	1	241	64	5, "
?	$\frac{1}{2}$ <sup>12</sup> <sub>2</sub>	Fig'd.	? sp. .... <i>Hall.</i>	" " "	1	258	67	3a, b
			<b>Bolbocephalus</b> Whitfield.					
Ft. C.	494	Gen. and Sp. Type.	Seelyi. .... <i>Whitfield.</i>	A. M. N. H.	1	339	33	12-18
"	"	"	" " " " " " " "	" " "	3	36	3	3-8
"	"	"	" " " " " " " "	" " "	3	36	3	1, 2
"	495	Type.	? truncatus .... <i>Whitfield.</i>	" " "	3	37	2	6-8
			<b>Calymene</b> Brongniart.					
Tr.	$\frac{1}{4}$ <sup>13</sup> <sub>1</sub>	Fig'd.	callicephala ( <i>Grn.</i> ) <i>Hall.</i>	Pal. N. Y.	1	238	64	3a-c, n?
H. R.	$\frac{1}{4}$ <sup>13</sup> <sub>1</sub>	"	" " " " " " " "	" " "	1	238	64	3e-g
"	$\frac{1}{4}$ <sup>13</sup> <sub>1</sub>	Type.	Chrystyi. .... <i>Hall.</i>	N. Y. S. M.	13	119	10	2-5
"	1408	"	mammillata. .... <i>Hall.</i>	Geol. Wis.	1861	50		
"	"	"	" " " " " " " "	" " "	1	432		1, 2
U.	1069	Fig'd.	<i>senaria</i> . .... <i>Hall.</i>	Pal. N. Y.	1	253	66	3a
			sp. .... <i>Hall.</i>					
			<b>Ceraurus</b> Green.					
Tr.	$\frac{1}{5}$ <sup>10</sup> <sub>1</sub>	"	pleurexanthemus ( <i>Grn.</i> ) <i>H.</i>	" " "	1	242	65	1b-n
"	"	"	" " " " " " " "	" " "	1	242	66	1a-g
"	"	"	" " " " " " " "	" " "	1	242	66	1h
			<i>postulosus</i> . ....					
			<i>vigilans</i> . ....					
			<b>Dalmania</b> Emmerich					
			<i>breviceps</i> . ....					
			<b>Dalmanites</b> Barrande.					
H. R.	1410	Type.	<i>breviceps</i> . .... <i>Hall.</i>	N. Y. S. M.	24	223	8	15, 16
Tr.	849	"	callicephala. .... <i>Hall.</i>	Pal. N. Y.	1	247	65	3a-i
"	"	Fig'd.	" " " " " " " "	" " "	1	245	65	2e
			<b>Encrinurus</b> Emmerich.					
"	851	Type.	<i>vigilans</i> . .... <i>Hall.</i>	" " "	1	245	65	2a-d, f-h
			<b>Harpes</b> Goldfuss.					
Ft. C.	503	"	cassinensis. . . <i>Whitfield.</i>	A. M. N. H.	9	182	5	3, 4
Tr.	841	"	pustulosus. .... <i>Hall.</i>	Pal. N. Y.	1	246	61	2a, b
			<b>Illænus</b> Dalman.					
"	$\frac{1}{4}$ <sup>13</sup> <sub>1</sub>	Fig'd.	crassicauda ( <i>Wahl.</i> ) <i>Hall.</i>	" " "	1	229	60	4a, b
"	$\frac{1}{4}$ <sup>13</sup> <sub>1</sub>	"	" " " " " " " "	" " "	1	229	60	4c, d
"	846	Type.	latidorsatus. .... <i>Hall.</i>	" " "	1	230	60	6a, b
"	$\frac{1}{10}$ <sup>11</sup> <sub>1</sub>	"	ovatus. .... <i>Conrad.</i>	P. A. N. S.	1	332		
"	"	"	" " " " " " " "	Pal. N. Y.	1	259	67	6a, b
"	"	Fig'd.	" ( <i>Conrad.</i> ) " " " "	" " "	1	259	67	6a (lower)

LOCALITY.	REMARKS.
Beekmantown, N. Y.	Internal cast of cranium retaining some test.
" "	Three imperfect internal casts of crania retaining some test.
Bridport, Vt.	Pygidium, imbedded.
Lowville, N. Y.	Internal cast pygidium. From above the Fort Cassin beds.
Watertown, N. Y.	As <i>Asaphus</i> ? Int. impr. pygid. and pt. of thorax ret'g some test.
Shoreham, Vt.	Ref. to this figure by Prof. Hall, but does not agree closely with it.
Fort Cassin, Vt.	As type of <i>Asaphus</i> ? <i>nodostriatus</i> . Glabella, imbedded.
Beekmantown, N. Y.	As <i>Bathyurellus</i> ? Internal imprint of cranium and of pygidium, each with some test. From above Fort Cassin beds.
" "	Two glabellas. Genal angles completed from the larger specimen.
Mohawk Valley, N. Y.	Imperfect interior imprints, three specimens.
Snake Hill, Saratoga Co., N. Y.	Left movable cheek, imbedded. See also <i>Bolbocephalus</i> .
" "	As <i>Acidaspis</i> . Glabella, imbedded.
Fort Cassin, Vt.	As type of <i>Olenus undulostriatus</i> . Exterior imprint, cephalic shield and first six thoracic segments.
" "	As <i>Bathyurus</i> ?
" "	Generic type. Casts of two crania, an imperfect right movable cheek and three pygidia. Some crust.
" "	Cast of small cranium retaining small pieces of test.
" "	" pygidium retaining some test.
Middleville, N. Y.	See <i>Triarthrus</i> .
Cincinnati, O.	As <i>C. senaria</i> Con. An exfoliated individual, a small, nearly perfect one, and an exterior imprint of a glabella.
4 m. west of Oxford, O.	Two folded individuals, one of which is very perfect.
Maquoketa Cr., 12 m.	A large, partly exfoliated cranium and a pygidium, imbedded separately. Four unfigured types in the series.
N. W. of Dubuque, Ia.	See <i>C. callicephala</i> .
Canajoharie, N. Y.	Internal cast of about nine thoracic segments retaining some test.
Middleville, N. Y.	Ten specimens showing the parts represented.
" "	Head and seven thoracic segments of very large individual.
" "	Right movable cheek, imbedded. Figure not lettered on plate.
" "	See <i>Harpes</i> .
" "	" <i>Dalmanites callicephala</i> and <i>Encrinurus vigilans</i> .
" "	= <i>Dalmanites</i> .
" "	See "
Lebanon, O.	As <i>Dalmaia</i> . Internal cast retaining some test.
Middleville, N. Y.	" <i>Phacops</i> . The parts as represented. Five specimens.
" "	" <i>Ceraurus vigilans</i> . A pygidium, imbedded.
" "	As <i>Ceraurus</i> . Three individuals, imbedded separately. There are eleven unfigured types in the series.
Fort Cassin, Vt.	Two cephalia, imbedded.
Watertown, N. Y.	As <i>Ceraurus</i> ? Int. cast of left mov. cheek and spine, imbedded.
" "	Two crania, imbedded separately.
Middleville, N. Y.	A small individual considerably exfoliated.
Watertown, N. Y.	Head and part of thorax, imbedded, partly crushed.
" "	As <i>Thaleops</i> .
Mineral Pt., Wis.	" " ( <i>Illenus</i> ). Individual preserving most of test.
" "	" " " Internal imprint with some of test.

## Order TRILOBITA—Continued.

Geol. Subdiv.	Cat. No.	Type or Fig'd Sp.	GENUS, SPECIES AND AUTHOR.	REFERENCE.				
				Work.	Vol.	P.	Pl.	Figs.
Tr.	1012 1	Type.	<b>Illænus</b> Dalman—Cont. <i>taurus</i> . . . . . Hall.	Geol. Wis.	1861	49		
"	1012 2	"	" . . . . . Whitfield.	Mem. A. M.	I	73	12	4-7
"	1012 3	"	" . . . . . Hall.	Geol. Wis.	1861	49		
"	1012 4	Fig'd.	" (Hall.) . . . . . Whitfield.	Mem. A. M.	I	73	12	8
"	847 2	"	<i>trentonensis</i> (Emmons) H.	Pal. N. Y.	I	73 230	12 60	9 5
			<i>Isotelus</i> DeKay . . . . .					
			<i>canalis</i> . . . . .					
			<i>cyclops</i> . . . . .					
			<i>gigas</i> . . . . .					
Ft. C.	567	Type.	<b>Lichas</b> Dalman. <i>champlainensis</i> Whitfield	A. M. N. H.	I	342	33	6-8
Tr.	852 2 1	Fig'd.	<i>trentonensis</i> (Conr.) Hall.	Pal. N. Y.	I	235	64	1a, b
"	852 1	"	" . . . . .	I	235	64		1c, d
Ft. C.	509	Type.	<b>Nileus</b> Dalman. <i>striatus</i> . . . . . Whitfield.	A. M. N. H.	9	184	5	5, 6
Tr.	1015 1	"	<b>Ogygia</b> Brongniart. <i>Barrandii</i> . . . . . Hall.	Lake Sup.	2	210	27	1a
"	1015 2	"	" . . . . .	"	2	210	27	1b, c
"	"	"	" . . . . .	"	2	210	27	1d
"	"	"	" . . . . .	Geol. Wis.	1	41		4
"	"	"	" . . . . .	Lake Sup.	2	210	28	1
			? <i>vetusta</i> . . . . .					
			<b>Olenus</b> Dalman. <i>Thompsoni</i> . . . . .					
			<i>undulostriatus</i> . . . . .					
			<i>vermontanus</i> . . . . .					
			<b>Phacops</b> Emmrich. <i>callicephalo</i> . . . . .					
			<i>Platynotus</i> Conrad . . . . .					
			<i>trentonensis</i> . . . . .					
H. R.	4493	Type.	<b>Proetus</b> Steininger. <i>parviusculus</i> . . . . . Hall.	N. Y. S. M.	13	120		
		"	" . . . . .	"	24	223	8	14
Be.	568	Type.	<b>Sao</b> Barrande. ? <i>lamottensis</i> . . . . . Whitfield.	A. M. N. H.	I	334	33	9, 10
"	"	"	" . . . . .	"	I	334	33	11
			<i>Thaleops</i> Conrad . . . . .					
			<i>ovata</i> . . . . .					
Tr.	839	Fig'd.	<b>Triarthrus</b> Green. <i>Becki</i> (Green) . . . . . Hall.	Pal. N. Y.	I	237	64	2a-c
U.	839 2 3	"	" . . . . .	"	I	250	66	2b
"	839 4	"	" . . . . .	"	I	250	66	2c, d
Tr.?	839 5	"	" . . . . .	"	I	250	66	2g
U.	839 6	"	" . . . . .	"	I	250	66	2h
"	839 7	"	" . . . . .	"	I	250	66	2i
"	839 8	"	" . . . . .	"	I	250	66	2i, k
"	839 9	"	" . . . . .	"	I	250	66	3b
			<b>Trinucleus</b> Llhwydd. <i>concentricus</i> (Eaton) Hall.	"	"	I	249	65
Tr.	844 2	Fig'd.	" . . . . .	"	"	I	249	65
"	844 1	"	" . . . . .	"	"	I	249	65
H. R.	844 3	"	" . . . . .	"	"	I	255	67
"	844 4	"	" . . . . .	"	"	I	255	67
"	844 5	"	" . . . . .	"	"	I	255	67
"	844 6	"	" . . . . .	"	"	I	255	67

LOCALITY.	REMARKS.
Mineral Pt., Wis.	Entire, folded, retains most of test.
Rockford, Ill. Near Wilmington, Ill. Hogansburgh, N. Y.	Internal cast cranidium, imbedded. From the Galena horizon. " " pygidium retaining part of test. The orig. came from a bowlder and was lost prior to 1847. It is represented in the Museum by a plaster cast of Emmons's type spec. = <i>Asaphus</i> .
..... ..... .....	See " " " " <i>gigas</i> .
Isle La Motte, Vt. Carlisle, Penn. Middleville, N. Y.	Int. imprint of pygidium retaining some test; margin imperfect. As <i>Platynotus</i> . Imperf. cranidium and pygidium, imb. separately. " " Part of cephalic shield, imbedded.
Fort Cassin, Vt.	Cranidium, imbedded. Figures are enlargements $\times 3$ .
St. Joseph's Is., Ont. Platteville, Wis.	As <i>Asaphus</i> . A considerably exfoliated glabella, imbedded. " " Exfol. cranid. and a left mov. cheek, imb. separately.
Platteville, Wis. " "	" " Imperfect pygidium, imbedded. " " Interior imprint with hypostoma in place.
..... ..... .....	See <i>Asaphus</i> .  See <i>Olenellus</i> . " <i>Bathyurus</i> sp. " <i>Olenellus</i> .
..... ..... .....	See <i>Dalmanites</i> . = <i>Lichas</i> . See "
Cincinnati, O.	Somewhat distorted individual, restored in figure.
Isle La Motte, Vt. " "	Interior imprint of cranidium, retaining some of test. Figure combined from two thoraces imbedded in same block. = <i>Illenus</i> . See "
Middleville, N. Y. Canajoharie, N. Y. Turin, N. Y. Middleville?, N. Y. Lewis Co., N. Y. Near Johnstown, N. Y. Turin, N. Y. Canajoharie, N. Y.	As <i>Calymene</i> . Three specimens, imbedded. " " Cephalic shield and thorax, imb., mostly exfoliated " " Two specimens, imbedded separately. " " Cephalic shield, imbedded. " " Thorax and pygid. of a small individual imbedded. " " The hypostoma (?) represented in the figure. " " Four specimens were used in making these figures. " " sp. Pygidium and about six thoracic segments.
Middleville, N. Y. Glens Falls, N. Y. Lorraine, N. Y. Turin, N. Y. Waterford, N. Y.	Cephalic shield preserving one cheek spine, imbedded. " " the occipital cheek spine, imbedded. A large individ. imbedded, and int. impr. of a rather small individ. Head with genal angles wanting, imbedded. Pygidium and about five thoracic segments, imbedded.

ADDENDUM to pp. 14 and 56.

**Sphenothallus** *angustifolius* Hall, Pal. N. Y., Vol. I, p. 261, pl. 68, fig. 1. Canajoharie, N. Y. Hudson River Group. Cat. No. 114<sup>A</sup><sub>E</sub>. Gen. and Sp. Type.

This species has been shown by R. Ruedemann, American Geologist, Vol. 17, pp. 163 and 165, 1896, to have the characteristics of a *Conularia*, instead of those of a marine plant, as originally indicated by Prof. Hall. The specimen in question, when examined under a strong glass, shows the fine transverse lines of a *Conularia*. This specimen was deposited in the Museum under certain conditions in June, 1898, by Prof. James Hall.

CORRIGENDA.

Pages 8 and 9, For **Barrandia** Hall. . . . . See *Olenellus*, read *Barrandia* Hall. . . . . = *Olenellus*.  
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Page 16, For de France read DeFrance.