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## Appendix A — Palaeontological

1.—List of places where Cambrian fossils have been collected.

### Durness District (Sheet 114)

1. Old quarry, close to road, Bailamhuic, Durness.
2. Baile na Cille (Balnakiel) Bay, below old church, 1 mile W.N.W. of Durness.
3. On cliff, 500 yards west of Balnakiel old church, 1■ mile W.N.W. of Durness.
4. West side of Loch Croisaphuill, opposite manse,  $\frac{3}{4}$  mile west of Durness.
5. On hill-slope, 400 yards S.S.W. of manse,  $\frac{3}{4}$  mile S.W. of Durness.
6. East side of Loch Borrallaidh, opposite island,  $1\frac{1}{4}$  mile S.W. of Durness.
7. Pier at Keoldale, 2 miles S.W. of Durness.
8. Quarry at Post Office, Durness.
9. Cnoc Ach na h' Anaile, near road, 2 miles S.S.W. of Durness ("*Serpulite Grit*").
- 9a Cnoc Ach na h' Anaile, near road, 2 miles S.S.W. of Durness (*Salterella* Limestone).
- 9b Shore at Keoldale road-end.
10. Quarter mile west of Loch Meadaidh, 2 miles south of Durness.
11. Bealach Mor Burn, where road crosses,  $3\frac{3}{4}$  miles south by east of Durness.
12. Hill-slope, near Pictish Tower, south side of burn,  $\frac{1}{4}$  mile from road, 4 miles south by east of Durness.
13. Allt Ach a Chorrain,  $\frac{3}{4}$  mile S.S.W. of Loch Meadaidh, 3 miles south of Durness.
14. Allt Ach a Chorrain, left branch of burn,  $\frac{3}{4}$  mile S.S.W. of Loch Meadaidh, 3 miles south of Durness.
15. River Dionard, Drochaid Mhòr,  $5\frac{1}{2}$  miles south by west of Durness.
16. Knoll, west of road,  $\frac{1}{4}$  mile S.S.W. of No. 15 locality.
17. At shepherd's house, Rudha Ghrudaidh, head of west branch of Kyle of Durness, 4 miles S.S.W. of Durness.
18. Streamlet near Ghrudaidh shepherd's house, head of west branch of Kyle of Durness, 4 miles S.S.W. of Durness.
19. Shore cliffs, Port Odhar, 4 miles N.W. of Durness.
20. Eilean nan Cas leac,  $4\frac{1}{2}$  miles N.W. of Durness.
21. An Garbh-eilean, 6 miles N.W. of Durness.
22. Dubh-sgeir, near Eilean Hoan, 3 miles east of Durness.

### Eireboll (Sh. 114)

23. An t-Sron, Camas an Duin, 1 mile south of Heilem Inn, Loch Eireboll.

### **Inchnadamph (Sh. 101, 107)**

24. Roadside, north of Ardvreck Castle, 2 miles N.N.W. of Inchnadamph.

25. Knockan Craig, near Elphin, 11 miles S.S.E. of Inchnadamph. Ullapool, (Sh. 92, 101.)

26. Ullapool River, 1 mile north of Ullapool.

27. At bridge, ½ mile east of Ullapool.

28. North shore of Loch Broom, 1 mile S.S.E. of Ullapool,

29. Allt Rìgh Iain, at roadside, 9½ miles south of Ullapool.

30. Burn, 400 yards N.E. of Loch an Nid, 12¼ miles south of Ullapool.

### **Kinlochewe (Sheets 82, 92)**

31. Abhuinn Bruachaig, 1¾ mile E.N.E. of Kinlochewe.

32. Abhuinn Bruachaig, a little further down stream.

33. Burn, Meall a Ghubhais, 3½ miles W.N.W. of Kinlochewe.

### **Achnashellach and Kishorn (Sh. 81, 82)**

34. Allt nan Dearcaig, 1½ mile N. of Achnashellach Station.

35. Court Hill, Kishorn.

### **Skye (Sheet 71)**

36. Top of limestone knoll, Suardal, 1½ mile south of Broadford Hotel.

37. West side of Bealach a Ghlinne, 1¾ mile south of Broadford Hotel.

38. South slope of Ben Suardal, 2½ miles S.S.W. of Broadford Hotel.

39. Ben Suardal, side of Bealach a Ghlinne, 1½ mile south of Broadford Hotel.

40. West side of Ben Suardal, 2 miles S.S.W. of Broadford Hotel.

41. Slope, east of turnpike road, Suardal.

42. At Loch Lonachan, 3 miles south of Broadford Hotel.

43. Slopes, north and N.W. of Loch Lonachan, 2¾ miles south of Broadford Hotel.

44. Slope, west of Allt a Mhuilinn, 1¾ mile south of Broadford Hotel.

45. Shore of Loch Slapin, 5 miles S.W. of Broadford Hotel.

46. Shore of Loch Eishort, ¼ mile north of Ord, 6 miles south of Broadford Hotel.

47. Burn at head of wood, ¾ mile east of Tokavaig, 7½ miles south of Broadford Hotel.

## ii. List of fossils from the *Olenellus*-Zone (Lower Cambrian)

|                                    | Lower Cambrian<br>( <i>Olenellus</i> -Zone) | Lower Cambrian<br>( <i>Olenellus</i> -Zone) | Lower Cambrian<br>( <i>Olenellus</i> -Zone) | Lower Cambrian<br>( <i>Olenellus</i> -Zone) | Locality number                       |
|------------------------------------|---|---|---|---|---------------------------------------|
|                                    | Quartzite                                   | Fucoid Shales                               | Serpulite Grit                              | Ghrudaidh<br>Limestone                      |                                       |
| <b>ECHINODERMATA</b>               |   |   |   |   |                                       |
| <b><i>Eocystites</i>, Billings</b> |   |   |   |   |                                       |
| <i>Eocystites</i> , sp.            |   | x   |   |   | 29, 32, 34                            |
| <b>ANNELIDA</b>                    |   |   |   |   |                                       |
| <b>Boring annelides</b>            |   |   |   |   |                                       |
| <i>Planolites</i> (worm<br>casts)  |   |   |   | x   | 33                                    |
| <b><i>Scolithus</i>,</b>           |   |   |   |   |                                       |
| <b>Haldeman</b>                    |   |   |   |   |                                       |
| <i>Scolithus, linearis</i> ,       |   |   |   |   | x                                     |
| Haldeman                           |   |   |   |   |                                       |
| <i>Scolithus</i> , sp. II.         |   |   |   |   | x                                     |
| (common pipes)                     |   |   |   |   |                                       |
| <i>Scolithus</i> , sp. III.        |   |   |   |   |                                       |
| ("trumpet" pipes) =                |   |   |   |   | x                                     |
| <i>Arenicolites</i> , Salter       |   |   |   |   |                                       |
| <b>Worm Castings</b>               |   |   |   |   |                                       |
| (so-called Fucoids)                |   | x   |   |   |                                       |
| <b>ANNELIDA (?)</b>                |   |   |   |   |                                       |
| <b><i>Coleoloides</i>,</b>         |   |   |   |   |                                       |
| <b>Walcott</b>                     |   |   |   |   |                                       |
| <i>Coleoloides</i> , sp.           |   | x   |   |   | 29                                    |
| <b><i>Hyolithes</i>,</b>           |   |   |   |   |                                       |
| <b>Eichwald</b>                    |   |   |   |   |                                       |
| <i>Hyolithes</i> ,                 |   |   |   |   |                                       |
| <i>terranovicus</i> ,              |   | x   |   |   | 29                                    |
| Walcott                            |   |   |   |   |                                       |
| <i>Hyolithes</i> , sp.             |   | x   |   |   | 23, 24, 25, 26, 28,<br>29, 30, 32, 33 |
| <b><i>Salterella</i>, Billings</b> |   |   |   |   |                                       |
| <i>Salterella</i> ,                |   |   |   |   | 9, 9b, 17, 18, 23,                    |
| ( <i>Serpulites</i> ),             |   |   | x   | x   | 24, 26, 27, 28, 29,                   |
| <i>Maccullochi</i> (Salter)        |   |   |   |   | 30, 32, 34                            |
| <i>Salterella pulchella</i> ,      |   |   |   |   | 9a, 16, 23, 24, 26,                   |
| Billings                           |   | x   |   | x   | 27, 28, 29, 31, 34,<br>35             |
| <i>Salterella rugosa</i> ,         |   |   |   |   | 16, 23, 24, 26, 27,                   |
| Billings                           |   |   |   | x   | 28, 29, 31, 34                        |
| <i>Salterella</i> sp.              |   | x   |   |   | 29, 47                                |
| <b>BRACHIOPODA</b>                 |   |   |   |   |                                       |
| <b><i>Acrothele</i>,</b>           |   |   |   |   |                                       |
| <b>Linnarsson</b>                  |   |   |   |   |                                       |
| <i>Acrothele subsidua</i> ,        |   |   |   |   |                                       |
| White                              |   | x   |   |   | 29, 33                                |



|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <i>Archaeoscyphia<br/>minganensis</i> ,<br>Billings                               | x | x | x | 12, 19, 21,<br>36, 37, 38,<br>39, 40, 43. | Calciferous.<br>Mingan<br>Islands,<br>Canada.   |
| <i>Archaeoscyphia</i><br>sp.  | x | x | x | 19, 36, 37,<br>39, 41.                    |   |
| <b>Calathium</b> ,<br>Billings  |   |   |   |   |   |
| <i>Calathium</i><br>( <i>Receptaculites</i> )<br><i>Anstedti</i> ,<br>Billings    | x |   | x |   |   |
| <i>Calathium</i><br>( <i>Receptaculites</i> )<br><i>calciferum</i> ,<br>Billings  |   |   | x | 36, 40.                                   | Calciferous.<br>Mingan<br>Islands,<br>Canada.   |
| <i>Calathium</i><br>( <i>Receptaculites</i> )<br><i>elegantulum</i> ,<br>Billings |   |   | x | 37, 39.                                   | Calciferous.<br>Mingan<br>Islands,<br>Canada.   |
| <i>Calathium</i><br>( <i>Receptaculites</i> )<br><i>pannosum</i> ,<br>Billings    |   |   | x | 42, 43.                                   | No. 2<br>Quebec<br>Group. Point<br>Lam,<br>Canada.                                      |
| <i>Calathium</i><br>( <i>Receptaculites</i> )<br>sp.                              | x | x | x | 12, 19, 36,<br>37, 38, 40,<br>42, 43.     | NOTE.-In<br>Newfoundland<br>the genus<br>ranges from<br>G.-K. of<br>Billings'<br>Table. |
| <b>Rhabdaria</b> ,<br>Billings  |   |   |   |   | Calciferous.  |
| <i>Rhabdaria</i> ,<br>sp.   | x | x | x | 36. 37, 39,<br>40, 43, 44.                | Mingan<br>Islands,<br>Canada.   |
| <b>Trichospongia</b> ,<br>Billings  |   |   |   |   |   |
| <i>Trichospongia</i><br>sp.   | x | x | x | 36, 38, 40,<br>43                         | Calciferous.<br>Mingan<br>Islands,<br>Canada.   |
| <b>Sponge</b> ,<br>indet.   | x | x | x | 12, 19, 21,<br>36, 37, 42,<br>43.         |   |
| ACTINOZOA<br><i>Coral</i> (?)   | x |   |   | 12.                                       |   |
| TRILOBITA<br><b>Asaphus</b> ,<br>Brongniart                                       |   |   |   |   |   |

|  |   |   |         |   |
|--|---|---|---------|---|
| <i>Asaphus</i><br>( <i>Isotelus</i> )<br><i>canalis</i> (?),<br>Conrad   | x |   | 10.     | Zones F.-M.<br>of Billings.<br>Port au<br>Choix, Point<br>Rich,<br>Table Head,<br>Bonne Bay,<br>Newfoundland.<br>Zones F., G.,<br>H. It N. of<br>Billings. Port<br>au Choix,<br>Cape<br>Norman,<br>Newfoundland.<br>The genus<br><i>Bathyrurus</i><br>ranges from<br>B. to P. of<br>Billings. |
| <b><i>Batliyurus</i>,</b><br>Billings  |   |   |         |   |
| <i>Batliyurus</i><br><i>Nero</i> , Billings  |   | x | 21.     |   |
| <i>Batliyurus</i><br>sp.   | x | x | 12, 21. |   |
| ?  |   |   |         | Table Head,<br>Newfoundland.  |
| <b><i>Conocoryphe</i>.</b><br><b><i>Corda</i></b><br><i>Conocoryphe</i><br>( <i>Conocephalites</i> )<br><i>chippewaensis</i> ,<br>Owen |   | x | x       | 19, 21.   |
| <i>Conocoryphe</i><br>sp.  |   | x |         | 19.   |
| <b><i>Solenopleura</i>,</b><br><i>Angelin</i>  |   |   |         | The genus<br><i>Conocoryphe</i><br>is confined to<br>the<br>Cambrian<br>Formation'  |
| <i>Solenopleura</i><br><i>tumida</i> (?),<br>Walcott   |   |   |         | <i>Olenellus</i><br>zone.<br>Washington<br>County, New<br>York, U.S.,<br>America.   |
| Olenoid<br>trilobite<br>(? <i>Ellipsocephalus</i> ,<br>Schlotheim)   |   |   | x       | 21.   |
|  |   |   |         | Middle and<br>Upper<br>Cambrian.  |

|  |   |   |   |         |   |
|--|---|---|---|---------|---|
| Trilobite,<br>fragment of<br>(?<br><i>Lonchocephalus</i><br>=<br><i>Conocephalites</i><br>=<br><i>Couocoryphe</i> )<br>BRACHIOPODA<br><b>Camerella</b> ,<br>Billings |   | x |   | 5.      |   |
| <i>Camerella antiquata</i> ,<br>Billings   | x | x |   | 5.      | Olenellus-zone.<br>Swanton,<br>Vermont,<br>U.S.,<br>America.  |
| <b>Orthis</b> ,<br>Dalman<br><i>Orthis</i> sp.<br><b>Orthisina</b> ,<br>D'Orbigny  |   |   | x | 21.     |   |
| <i>Orthisina festinata</i> ,<br>Billings   |   | x | x | 21, 43. | <i>Olenellus</i> -zone.<br>Swanton,<br>Vermont,<br>U.S.,<br>America.  |
| <i>Orthisina grandoeva</i><br>(?), Billings  |   |   |   | x       | 43.<br>Calciferous.<br>Canada.  |
| <i>Orthisina (Orthis) striatula</i> ,<br><i>Sad.</i>   | x |   |   | x       | 4, 12, 43.  |
| <i>Orthisina</i><br>LAMELLIBRANCHIATA<br><b>Euchasma</b> ,<br>Billings   |   |   |   |         |   |
| <i>Euchasma Blumenbachi</i> ,<br>Billings  | x | x |   | x       | 12, 19, 21<br>36, 38, 43.<br>Zones G. &<br>H. of Billings.<br>Port an<br>Choix, Table<br>Head, Cape<br>Norman,<br>Newfoundland.<br>Clear Water<br>Point,<br>Mingan<br>Islands,<br>Canada. |
| <i>Euchasma Blumenbachi</i><br>var. l.   |   | x |   | x       | 21.   |

|   |   |   |   |           |  |
|---|---|---|---|-----------|--|
| <i>Euchasma Blumenbachi</i> var. II.                                    | x | x | x | 19, 21.   |  |
| <i>Euchasma Blumenbachi</i> var. III.                                   |   | x |   | 21.       |  |
| <i>Euchasma Blumenbachi</i> var. IV. ( <i>Eopteria</i> ).               |   | x |   | 21.       | Quebec Group. Port an Choix, Newfoundland.           |
| <i>Euchasma Blumenbachi</i> sp.   | x | x |   | 42.       |  |
| GASTEROPODA   |   |   |   |           |  |
| <b>Bellerophon,</b><br>Monfort  |   |   |   |           |  |
| <i>Bellerophon</i> ( <i>Cyrtolites</i> ) <i>palinurus</i> (?), Billings |   | x |   | 21.       | Quebec Group. Stanbridge, Eastern Canada.            |
| <b>Chelodes</b> (Davidson and King)                                     |   |   |   |           |  |
| <i>Chelodes</i> ( <i>Chiton</i> ) sp.                                   |   |   | x | 36.       |  |
| <b>Euomphalus,</b><br>Sowerby   |   |   |   |           |  |
| <i>Euomphalus</i> ( <i>Oriostoma</i> ) sp. III.                         | x |   |   | 3, 4, 12. |  |
| <i>Euomphalus</i> ( <i>Oriostoma</i> ) sp. IV                           | x | x |   | 2, 21.    | '  |
| <b>Holopea,</b><br>Hall   |   |   |   |           |  |
| <i>Holopea leiosoma</i> , Billings                                      |   | x |   | 21.       | No. 3 Limestone, Quebec Group. Point 1.4vis, Canada. |
| <i>Holopea Ophelia</i> , Billings                                       | x |   | x | 38.       | Quebec Group. Point Rich, Newfoundland.              |
| <b>Maclurea,</b><br>Lesueur   |   |   |   |           |  |



|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <i>Maclurea acuminata</i> , Billings        |   |   | x | M.  | Zones K. -M. of Billings. Table Head and Point Rich, Newfoundland. Zones J., K. L & M. of |
| <i>Maelurea crenulata</i> , Billings        | x | x | x | 5, 19, 20, 31, 36, 37, 39, 45, 53.                        | Billings. Table Head and Point Rich, Newfoundland. Zones J., K., L. & M. of               |
| <i>Maclurea Emmonsii</i> , Billings         |   |   | x | 36, 41, 43.   | Table Head and Point Rich, Newfoundland. Zones F., G.,                                    |
| <i>Maclurea oceana</i> , Billings           | x | x | x | 2, 5, 12, 14, 19, 20, 21, 36, 37, 38, 39, 40, 41, 42, 43. | H. of Billings. Pistolet Bay, Port an Chola, Cape Norman, Newfoundland.                   |
| <i>Maclurea Peachi</i> , Salter             | x | x | x | 1, 2, 13, 19, 21, 36, 37, 38, 39, 40, 41, 43, 45.         | Cf. operculum of <i>M. matutina</i> . Geology of  |
| <i>Maclurea</i> sp. I. ( <i>operculum</i> ) | x | x | x | 1, 2, 21, 36, 37, 39, 43, 44.                             | Canada. p. 115, fig. 25. Calciferous Group. Lake St. Louis.                               |
| <i>Maclurea</i> sp. II.                     | x | x | x | 12, 19, 21, 36, 37, 38, 39, 40, 41, 43.                   | Cf. operculum, Palmozoic Fossils of Canada, p. 243, fig. 229.                             |

|  |   |   |   |                                     |   |
|--|---|---|---|-------------------------------------|---|
| <i>Maclurea</i> sp.<br>III   | x |   | x | 36, 37, 38,<br>39, 40, 41,<br>43. . | Cf.<br>operculum,<br>Palsozoic<br>Fossils of<br>Canada, p.<br>243, fig. 288.<br>Cf.<br>operculum,<br>Palmozoic<br>Fossils of<br>Canada, p.<br>243, fig. 230.  |
| <i>Maclurea</i> sp.<br>IV.   | x | x | x | 19, 20, 36,<br>40, 41, 43.          | Zones F., G.,<br>H. of Billings'<br>Table. Cape<br>Norman,<br>Newfoundland.   |
| <i>Maclurea</i> sp.<br>V.<br><b>Murchisonia</b> ,<br>D'Archiac et<br>De Verneuil | x | x | x | 5, 36, 37, 43,<br>44.               |   |
| <i>Murchisonia</i><br>( <i>Ectornaria</i> )<br><i>Adelina</i> ,<br>Billings      | x | x | x | 12, 20, 43. .                       | Zone G. of<br>Billings.<br>Calciferous.<br>Cape<br>Norman,<br><br>Newfoundland.   |
| <i>Murchisonia</i><br>( <i>Hormotoma</i> )<br><i>angulocincta</i> ,<br>Salter    |   |   |   |                                     |   |
| <i>Murchisonia</i><br>( <i>Hormotoma</i> )<br><i>Anna</i> ,<br>Billings          | x | x | x | 5, 19, 20, 21,<br>38, 45.           | Calciferous.<br>Canada.   |
| <i>Murchisonia</i><br>( <i>Hormotoma</i> )<br><i>antiqua</i> ,<br>Donald.        |   | x |   | 21.                                 |   |
| <i>Murchisonia</i><br><i>Artemesia</i> ,<br>Billings                             | x | x | x | 12, 20, 37,<br>43.                  | Calciferous.<br>County of<br>Leeds and<br>Grenville,<br>Canada.<br>Zones H.-K.<br>Pistolet Bay,<br>Point Rich,<br>Table Head,<br>Burnt Cape,<br>Newfoundland. |
| <i>Murchisonia</i> ,<br><i>Augustine</i><br>(?), Billings                        | x |   | x | 19, 36, 38                          |   |

|   |   |   |   |   |                                     |  |
|---|---|---|---|---|-------------------------------------|--|
| <i>Murchisonia bellicincta</i> , Hall                                 | x |   |   | x | 2, 19.                              | Trenton and Hudson River Group. New York, U.S. America.  |
| <i>Murchisonia (Lophospira) borealis</i> , Donald.                    | x | x |   | x | 2 12, 21, 36, 39.                   | Trenton and Hudson River Group. Allumette Island, Canada.                                      |
| <i>Murchisoni (Hormotoma) gracilis</i> , Hall.                        | x | x | x | x | 2, 4, 5, 7, 8, 12, 19, 20, 22, 37.  | Black River Limestone, Loraine and Hudson River Group. Pauquette Rapids, River Ottawa, Canada. |
| <i>Murchisoni (Hormotoma) gracillima</i> , Salter.                    | x | x | x | x | 2b, 4, 5, 7, 8, 12, 19, 20, 22, 37. |  |
| <i>Murchisoni linearis</i> , Billings                                 | x | x |   |   | 5, 12, 20, 21.                      | Calciferos. Birch Island, Mingan Islands, Canada. Black River Limestone.                       |
| <i>Murchisoni (Ectomaria) pagoda</i> Salter                           | x |   |   | x | 2, 36, 38, 41, 45.                  | Pauquette Rapids, River Ottawa, Canada.  |
| <i>Murchisoni (Ectomaria) pagoda</i> var. <i>orientalis</i> , Donald. |   | x |   | x | 21, 36, 37, 39, 41, 43.             |  |
| <i>Murchisoni (Ectomaria) pagoda</i> var. <i>Peachi</i> , Donald.     | x |   |   | x | 5, 12, 20, 37.                      |  |
| <i>Murchisoni</i> sp.   |   |   |   | x | 10, 19, 39.                         |  |

***Ophileta*,**  
Vanuxem

The genus  
*Ophileta*  
ranges from  
E.-P. of  
Billings.  
Table Bay,  
Newfoundland.  
Calciferous  
Sand Rock.  
Beauharnais,  
near  
Montreal. (*O.*  
*compacta*  
odours  
abundantly in  
the Chau  
and  
Bird's-eye  
Limestone,  
N. America,  
which takes  
its name  
from the  
abundance  
of this fossil.)

*Ophileta*  
*compacta*,  
Salter

x

x

x

2, 13, 38.

*Ophileta*  
*complanata*,  
Vanx.

x

43,

Calciferous  
division.

*Ophileta*  
*Nerine*,  
Billings

x

37, 43.

Zone F. of  
Billings. Bay  
of St. John's,  
Newfoundland.

*Ophileta* sp.  
I. (U.S.)

x

10.

*Ophileta* sp.  
II.

x

21.

*Ophileta* sp.  
III.

x

2, 3.

*Ophileta* sp.  
IV. (n.s.)

x

*Ophileta* sp.  
***Oriostoma*,**  
Lindström

x

22, 43.

*Oriostoma*,  
(*Pleurotomaria*)  
*Calphurnia*,  
Billings

x

x

x

12, 20, 21,  
43.

Quebec  
Group. Cape  
Norman,  
Newfoundland.

*Oriostoma*,  
(*Pleurotomaria*)  
*Calphurnia*,  
var. I.

x

x

x

12, 21.

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <i>Oriostoma</i> ,<br>( <i>Pleurotomaria</i> )<br><i>Calphurnia</i> ,<br>var. II.                               | x | x | x | 3, 5, 14, 20,<br>21, 22.                |   |
| <i>Oriostoma</i> ,<br>sp.   | x | x | x | 2, 5, 19, 36,<br>42, 43.                |   |
| <i>Oriostoma</i><br>sp. (near<br><i>Pleurotomaria</i><br>: ribbed)<br><b><i>Pleurotomaria</i></b> ,<br>DeFrance |   |   | x | 37.                                     |   |
| <i>Pleurotomaria</i> , <i>Arabella</i><br>(?), Billings   | x | i |   | 19.                                     | Calciferous.<br>County of<br>Leeds and<br>Grenville,<br>Canada.   |
| <i>Pleurotomaria</i> , <i>beekmanensis</i><br>(l), Whiff.   | x | x | x | 12, 21, 45.                             |   |
| <i>Pleurotomaria</i> , <i>calcifera</i> ,<br>Billings   | x | x | x | 5, 12, 19, 21<br>36, 37, 40,<br>42, 43. | Calciferous.  |
| <i>Pleurotomaria</i> , <i>canadensis</i> ,<br>Billings  | x |   |   | 19.                                     | Calciferous.<br>County of<br>Leeds and<br>Grenville,<br>Mingan<br>Islands,<br>Canada.<br>Black River<br>Limestone.<br>Pauquette<br>Rapids,<br>Ottawa<br>River,<br>Canada.<br>Zone G.-1L<br>of Billings. |
| <i>Pleurotomaria</i> , <i>Dryope</i> ,<br>Billings  |   |   |   | 2, 12.                                  | Cape<br>Norman,<br>Table Head<br>Newfoundland.<br>Calciferous.<br>St.<br>Genevieve<br>island,<br>Mingan<br>Islands,Canada.  |
| <i>Pleurotomaria</i> , <i>Etna</i> ,<br>Billings  | x | x |   | 10, 21.                                 | Calciferous.<br>St.<br>Genevieve<br>island,<br>Mingan<br>Islands,Canada.  |
| <i>Pleurotomaria</i> , <i>gregaria</i> ,<br>Billings  |   | x |   | 20.                                     | Calciferous.<br>County of<br>Leeds and<br>Grenville,  |
| <i>Pleurotomaria</i> , <i>lanrentina</i> ,<br>Billings  |   | x | x | 21, 36, 37,<br>38, 40, 42,<br>43.       | Calciferous.<br>County of<br>Leeds and<br>Grenville,  |

|   |   |   |   |   |  |
|---|---|---|---|---|--|
| <i>Pleurotomaria</i> ,<br>sp. (near to<br>do.) .                                    |   |   |   |   | Mingan<br>Islands,<br>Canada.<br>Calciferous   |
| <i>Pleurotomaria</i> , <i>Ramsayi</i> ,<br>Billings.                                |   | x |   | x | 10, 11, 21,<br>36. Ha. Mingan<br>Islands,<br>Canada.<br>Black River<br>Limestone.<br>(l) Chazy.<br>Pauquette |
| <i>Pleurotomaria</i> ,( <i>Helicotoma</i> )<br><i>spinosa</i><br>(Salter)           | x |   | x |   | 12, 21.<br><br>Rapids,<br>Ottawa<br>River,<br>Canada.  |
| <i>Pleurotomaria</i> , <i>Thule</i> ,<br>Salter                                     | x |   |   |   | 3.<br><br>Very near to<br><i>Murchisonia</i><br><i>vontriosa</i> .<br>Calciferous                            |
| <i>Pleurotomaria</i> ,( <i>Holopea</i> )<br><i>turgida</i> , Hall                   |   |   | x | x | 21, 36, 38,<br>40, 43. and Trenton<br>Horizons.<br>North<br>America.   |
| <i>Pleurotomaria</i> ,<br>sp.<br>CEPHALOPODA.<br><b>Actinoceras</b> ,<br>Bronnigart | x |   |   | x | 12, 19, 20,<br>37.   |
| <i>Actinoceras</i> ,<br>sp.   | x |   |   |   | 2.   |
| <i>Cyrtoceras</i> ,<br>Goldfuss   |   |   |   |   |  |
| <i>Cyrtoceras</i> ,<br>sp. I. x   |   | x |   |   | 2, 10.   |
| <i>Cyrtoceras</i> ,<br>sp. II. .  |   | x |   |   | 2, 10.   |
| <i>Cyrtoceras</i> ,<br>sp. III.   |   | x |   |   | 2.   |
| <i>Cyrtoceras</i> ,<br>IV   |   | x |   |   | 3.   |
| <i>Cyrtoceras</i> ,<br>sp.  |   |   |   |   | 11.  |
| <b>Endoceras</b> ,<br>Hall  |   |   |   |   |  |
| <i>Endoceras</i> ,<br>sp. I   | x |   | x | x | 21.  |
| <i>Endoceras</i> ,<br>sp II   | x |   |   | x | 21.  |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| <i>Endoceras</i> ,<br>sp.  | x | x | x | 12, 21, 36,<br>37, 40, 43.                          |   |
| <b>Orthoceras</b> ,<br><i>Breynius</i>   |   |   |   |   |   |
| <i>Orthoceras</i><br><i>arcuoliratum</i> ,<br>Hall<br>(siphuncle of<br><i>Endoceras</i> )  | x |   |   |   | Black River<br>Group and<br>Trenton<br>Limestone<br>Horizons,<br>North<br>America.<br>Probably a<br>siphuncle of<br>Endoceras.  |
| <i>Orthoceras</i><br><i>baculoides</i> ,<br>Blake  | x |   | x | 4, 36.  |   |
| <i>Orthoceras</i> ,<br><i>durinum</i> ,<br>Blake   | x |   | x | 12, 19, 20,<br>21, 36, 7 ,<br>43, 44.               | 31 57<br>Calciferous<br>Sand Rock.<br>See Billings'<br>O.   |
| <i>Orthoceras</i> ,<br>( <i>Actinoceras</i> )<br><i>mendax</i> ,<br>Salter   | x | x | x | 6, 12, 19, 21,<br>22, 36, 37,<br>39, 40, 42,<br>43. | lamarcki,,Mingan<br>Islands,<br>Canada.<br>Also O.<br>priamus,<br>Point Rich,<br>Pistolet Bay.<br>Newfoundland.   |
| ? <i>Orthoceras</i><br><i>pertinens</i> ,<br>Blake.  | x | x | x | 6, 12, 19, 20,<br>21, 36, 37,<br>38, 39, 41,<br>43. |   |
| ? <i>Orthoceras</i><br><i>undulostriatum</i> ,<br>Hall (= <i>O.</i><br><i>durinum</i> ),<br>Blake<br>(siphuncle of<br>an<br><i>Endoceras</i> ) | x | x |   | 12, 19.   | The form<br>identified by<br>Salter as <i>O.</i><br><i>undulostriatum</i> ,<br><i>Hall</i> , is<br>evidently the<br><i>O. durinum</i> of<br>Blake, which<br>is probably<br>the siphuncle<br>of an<br>Endoceras. |
| ? <i>Orthoceras</i><br><i>vertebrale</i> ,<br>Hall (= <i>O.</i><br><i>mendax</i> ,<br>Salt.= <i>O.</i><br><i>olorus</i> , Hall)                | x | x |   | 2, 12, 21.  |   |

|   |   |   |  |   |  |   |
|---|---|---|--|---|--|---|
| ? <i>Orthoceras</i><br><i>n. sp.</i><br>(tapering<br>rapidly) |   |   |  |   | 10.  |   |
| ? <i>Orthoceras</i><br>sp.                                    | x | x |  | x | 2, 12, 19, 20,<br>21, 36, 41,<br>45.         |   |
| <b><i>Piloceras,</i></b><br><i>Salter</i>                     |   |   |  |   |  | The<br>American<br>species of<br><i>Piloceras</i><br>range from<br>zones F. -I.<br>of Billings'<br>Table.<br>In<br>Newfoundland<br>in the<br>Califerous<br>of Lachute |
| <i>Piloceras,</i><br><i>invaginatum,</i><br><i>Salter</i>     | x | x |  | x | 3, 12, 19, 21,<br>36, 37, 38,<br>39, 40, 43. | and in the<br>Bird's-eye<br>and Chazy<br>Limestone,<br>Fort Cassin,<br>Vermont,<br>U.S.<br>America.   |
| <i>Piloceras,</i><br><i>invaginatum</i> ,<br>var. I.          | x | x |  | x | 40.  |   |
| <i>Piloceras,</i><br><i>invaginatum,</i><br>var. II.          | x | x |  | x | 12, 20, 21,<br>36, 37, 38,<br>43.            |   |
| <i>Piloceras,</i><br><i>invaginatum,</i><br>var. III          | x |   |  | x | 12, 36, 43.                                  |   |
| <i>Piloceras</i> sp.  | x | x |  | x | 2, 19, 39.                                   | Billings<br>records<br>several<br>species of<br><i>Nautilus</i> from<br>zones F.–K.,<br>Newfoundland.   |
| <b><i>Trocholites,</i></b><br><i>Conrad</i>                   |   |   |  |   |  |   |
| <i>Trocholites,</i><br>( <i>Nautilus</i> ) sp.<br>I           | x | x |  | x | 5, 12, 21.                                   |   |
| <i>Trocholites,</i><br>( <i>Nautilus</i> ) sp.<br>II.         | x | x |  |   | 5, 12, 21.                                   |   |



