Catalogue of type, figured and cited fossils in the City of

Bristol Museum & Art Gallery. Part 1, Plantae.



M.D. Crane

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CATALOGUE OF TYPE, FIGURED AND CITED FOSSILS IN THE CITY OF BRISTOL MUSEUM & ART GALLERY

PREAMBLE

This is the first of a proposed series of catalogues of the type, figured and cited specimens in the museum's palaeontology collections. It is anticipated that one or two parts will be published each year until coverage is complete. The last section(s) to be published will contain an account of the history of the institution, together with biographies of collectors and others associated with the museum. Because of the delay in the publication of these sections it was thought that a brief outline of the history would be appropriate here.

The present City of Bristol Museum & Art Gallery has its origin in the museum of the Bristol Institution for the Advancement of Science, Literature and the Arts, a private institution which opened in 1823. In 1863 it was proposed that the Institution, which was in financial difficulties, should merge with the Bristol Library Society and that they should move into new purpose built premises. Agreement on the merger was reached in 1870 and the Bristol Museum and Library Association came into being the following year.

Financial difficulties still dogged the institution, and in 1894 the shareholders transferred control to the Corporation. The last years of that century and the early years of the next saw major changes. The Art Gallery was opened in 1905 and the new Reference Library in 1906. The greater portion of the books held by the Bristol Museum & Reference Library, as it was now called, were transferred to this new library. A number of other administrative changes have taken place since that time, but they will be dealt with later.

A number of geologists have held curatorial appointments at the museum. Biographies of most will be included in a later issue, but a summary is given here:

Dates of appointment

1823-1830	J.S. Miller (né Müller) (d. 1830)
1831-1850	Samuel Stutchbury (1798-1859)
1837-1844	W.H. Baily (1819-1888)
1850	H.R. Stutchbury (1796-1853)
1851-1856	Robert Etheridge (1819-1903)
1856-1875	William Sanders (1799-1875)
1871-1878	E.B. Tawney (1841-1882)
1878-1882	W.J. Sollas (1849-1936)
1882-1884	James Dallas (fl. 1880s)
1884-1898	Edward Wilson (1848-1898)
1898-1930	Herbert Bolton (1863-1936)
1913-1916/7	V.E. Robson (fl. 1910s)
1916-1919, 1921-1930	Edith Bolton (b. 1893)
1920-1945	F.S. Wallis (d. 1979)
1949-1951	P.W. Curnow
1951-	M.L.K. Curtis
1966-1972	F.R. Jeffery
1968-1980	T.R. Fry
1972-1975	A.N. Insole
1975-	M.D. Crane

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1. INTRODUCTION

It is ninety years since the publication of Edward Wilson's catalogue of the type and figured fossils in the Bristol Museum and Library.¹ In that work Wilson recorded only five plants, one of which, *Zoophycos scoparius* Thiolliere², is now regarded as a trace fossil of animal origin. In including the reference to this specimen Wilson broke his "general rule" that "In regard to the described specimens ... only 'described and figured specimens' will be noticed...".³

He also stated⁴ that only those type specimens "which are at the present time in the Bristol Museum, will be specified ...". In a footnote he added "It is unfortunately the fact that certain type specimens have disappeared from the Bristol Museum."

Several specimens described in the pre-1890 literature and omitted from Wilson's catalogue were, however, subsequently identified in the collection. Unfortunately, therefore, no special significance can be attached to the omission of specimens from that catalogue.

The present catalogue, the first of a proposed series, lists all the type, figured and cited 5 material which is, or is known to have been, in the collection. Some specimens which might be supposed to have been present in the collection have been omitted from the formal listings because of the lack of supporting documentation.⁶

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NOTES AND REFERENCES

- 1 WILSON, E. 1890. Fossil types in the Bristol Museum. Geological Magazine. (dec 3) 7, 363-372, 411-416.
- ² TAWNEY, E.B. 1873. On the occurrence of Zoophycos scoparius (Thioll.) in the Inferior Oolite of Dundry. Proceedings of the Bristol Naturalists' Society, (2) 7, 40-41.
- 3 WILSON [n.1], p. 364.
- 4 WILSON [n.1], p. 364.
- 5 By 'cited' we mean not only those specimens which are described, but also specimens which form the basis of statistical studies, or which are known or believed to form the basis for, or at least be representative of, less specific references in species lists.
- 6 The items concerned were all referred to in publications by museum staff and are as follows:
- a) BOLTON, H. 1911. Faunal horizons in the Bristol Coalfield. Quarterly Journal of the Geological Society of London, 67, 316-341, pl. XXVI.

Bolton makes several references to unspecified plant material and to material of the genera Neuropteris, Cordaites, Sphenopteris, Annularia and Calamites as well as Lepidodendroid twigs and leaves, and Stigmarian rootlets from South Liberty Colliery. No such material has been found amongst Bolton's South Liberty Colliery collection, and no reference to such specimens has been noted in our records.

b) SOLLAS, W.J. 1879. On the Silurian district of Rhymney and Pen-y-lan, Cardiff. Quarterly Journal of the Geological Society of London, 35, 475-507, pl. XXIV.

Sollas figured [pl. XXIV fig. 23] "An Alga", presumably an example of the "fucoidal markings" mentioned earlier in the text (p. 485).

He also referred to the following:

Nidulites favus Salter [= Mastopora fava (Salter)] from the "red ferruginous bed", Ludlow Series, of Rhymney [Rumney] Hill, p. 486.

Pachytheca sphaerica Hooker from the beds above and below the Rhymney [Rumney] Grit, Upper Wenlock Series, from Rhymney [Rumney] Quarry [= Tynmawr Quarry].

"Plant remains, which ... resemble fronds of *Rhodymenia ciliata* and other Floridean species of Algae" (p. 499), also reference to "Fragments of plants" (p. 482), in some cases associated with *Pachytheca*, the occurrence of which is given above.

Sollas made several donations of Silurian material from Cardiff during 1878 and 1879, material from which will be considered later in the series. If this plant material was included (the donation records are very general and do not specifically refer to such material) it is no longer extant.

The only other plant material mentioned by Sollas was 'mineral charcoal', thin sections of which were prepared by John Storrie (p. 482). This is presumably the material now in the National Museum of Wales [BASSETT, M.G. 1972. *Catalogue of type, figured and cited fossils* ... National Museum of Wales, Cardiff, p. 100].

- c) TAWNEY, E.B. 1866. On the western limit of the Rhaetic Beds in South Wales and on the position of the "Sutton Stone". *Quarterly Journal of the Geological Society of London*, 22, 69-93, pls. III, IV. *Equisetites* from the Rhaetic of Cwrt-y-Coleman near Bridgend (p. 79). This material is not in the collection and no reference to it has been noted in our records.
- d) TAWNEY, E.B. 1874. Notes on the Radstock Lias. Proceedings of the Bristol Naturalists' Society, 1, 167-189.

Fossil wood from the Lower Lias of Timsbury, near Radstock (p. 182). This material is not in the collection and no reference to it has been noted in our records.

e) WILSON, E. 1891, 1894 [See under chapter 3 CITED SPECIMENS]. In addition the specimens mentioned later, Wilson recorded the presence of plant remains from the Tea Green Marls. No such material is present in the collection and no reference to it has been noted in our records.

f) WILSON, E. & CRICK, W.D. 1889. The Lias Marlstone of Tilton, Leicestershire. Geological Magazine, (dec. 3) 6, 296-305, 337-342, pls. IX, X.

Fossil wood is recorded from the Middle – Upper Lias 'Transition Bed', south of Tilton Station. We have a number of specimens described in this account, which will be considered later in the series. The donation records are very general and no reference to plant material is found there or, as far as we can say at present, in our other records.

Plantae

2. CATALOGUE OF TYPE AND FIGURED SPECIMENS

DEVONIAN

"Carbonized plant stems of more than one kind"

Bed 34, Old Red Sandstone; Borehole core, Portishead Power Station, Portishead. Donated by S. Smith, 1937.

SMITH, S. & REYNOLDS, S.H. 1934. Proceedings of the Bristol Naturalists' Society, (4) 7, 523 ["Conglomerate containing much carbonaceous matter - traces of plants"], 526 ["much carbonaceous material of the nature of coal, representing fragmentary plant stems of more than one kind"], 527 ["carbonized plant stems often show traces of structure."], pl. 1, fig. 3. Presumed to have been destroyed by enemy action, 1940.

CARBONIFEROUS

Alethopteris davreuxi (Brongniart)

Coal Measures, [Radstock Series according to Kidston, 1888]; Camerton, Somerset. Acquisition history not known. KIDSTON, R. 1888. Transactions of the Royal Society of Edinburgh, 33, 386-387, 416, pl. XXIV

fig. 1. 1a.

WILSON, E. 1890. Geological Magazine, (dec. 3) 7, 415.

Andrewopteris revoluta Baxter

acetate peel of type

Fleming or Mineral Coal, Cabanis Formation, Cherokee Group, Desmoinsian Stage, Middle Pennsylvanian; Pittsburg-Midway Coal Mine, 191/2 miles north-west of Hallowell, Kansas, U.S.A. Donated by M.D. Crane, 1979.

BAXTER, R.W. 1975. Palaeontographica, 150 B, 157-161, pls.

The holotype is stated by Baxter to be "Slides and peels of coal ball M1469 in the Palaeobotanical Collections, Department of Botany, University of Kansas, Lawrence, Kansas, U.S.A."

This acetate peel, numbered 35, was sent to Crane by Baxter, 1975.

Aphlebia goldenbergii (Weiss)

C 4652 figured [counterpart Cd 102]

Coal Measures, ["most likely from a bed on the horizon of the Farrington Series", Kidston, 1888; "Farrington Group, Westphalian D (lower)", Crookall, 1976]; Pucklechurch,

["probably from the neighbourhood of ...", Kidston, 1888], near Bristol. Donated by J.C. Blackmore, 1884.

KIDSTON, R. 1888. Transactions of the Royal Society of Edinburgh, 33, 388, 416, pl. XXVII fig. 2 (as Rhacophyllum goldenbergii Weiss).

WILSON, E. 1890. Geological Magazine, (dec. 3) 7, 415 (as Rhacophyllum goldenbergii Weiss). CROOKALL, R. 1976. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (7), 859-860, text-fig. 248 [p. 860], pl. CLXIII fig. 3.

Caulopteris macrodiscus (Brongniart)

C 4649 figured

Hard Vein, Coal Measures, ["Farrington Group, Westphalian D (lower)", Crookall, 1955]; Coal Pit Heath, near Bristol.

Purchased from an unspecified source, 1876.

- 3 -

Cb 2676 [not located] figured

Cd 153

C4661

figured

- 4 -

KIDSTON, R. 1888. Transactions of the Royal Society of Edinburgh, 33, 393, 416, pl. XXV fig. 1.

WILSON, E. 1890. Geological Magazine, (dec. 3) 7, 415.

CROOKALL, R. 1955. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (1), 60-62, text-fig. 22 [p. 61] (copy of KIDSTON, 1888, pl. XXV fig. 1).

Incorrectly stated by Crookall, 1955, 62, to be the type and (in the explanation of text-figure 22 [p.61]) to be in the Bath Museum.

Lepidophloios acerosus (Lindley & Hutton)

Coal Measures ["Soap Vein, Lower Pennant Series", Kidston, 1893]; Abersychan, near Pontypool. Donated by W. Wood, date unknown.

KIDSTON, R. 1893. Transactions of the Royal Society of Edinburgh, 37 (3), 558 - 559, 563, pl. 1, fig. 1, 1a [the latter drawn from the counterpart].

KIDSTON, R. 1893. Transactions of the Royal Society of Edinburgh, 37 (3), 604. JONGMANS, W.J. 1930. Fossilium catalogus II, Plantae, pars 16 Lycopodiales III, 410 as

Lepidodendron sp.).

CROOKALL, R. 1964. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (3), 314, 315 (as Lepidodendron sp.). THOMAS, B.A. 1977. Palaeontology, 20, 280, 282 ("... I would agree with Jongmans ... and Crookall ... that ... there appears to be no good reason for including it within [Lepidophloios acerosus]".

The specimen C 4636 is presumed to have been destroyed by enemy action, 1940.

Lepidostrobus ornatus Brongniart

B 1397 [not located] figured

Coal Measures; ["Glamorganshire", Hooker, 1848]. [In the MS 'Catalogue of Fossil Plants Bristol Institution' the locality has been added in pencil as "Glamorgan or Nantyglo ..." (Catalogue number 411).]

Acquisition history not known.

HOOKER, J.D. 1848. Memoirs of the Geological Survey, 2 (2), 448, pl. vii. CROOKALL, R. 1966. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (4), 493. Presumed to have been destroyed by enemy action, 1940.

Margaritopteris conwayi (Lindley & Hutton)

Cb 4701 figured

Coal Measures, ["probably Westphalian B or lower C", Crookall, 1976]; Risca, Monmouthshire. Donated by J. Leman.

CROOKALL, R. 1976. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (7), 853-854, text-fig. 247 [p.854], pl. CLX figs. 4, 5 [reverse of slab] and pl. CLXII.

Incorrectly described as holotype by Crookall, 1976, (in explanation to text-figure 247 [p. 854]).

Margaritopteris conwayi (Lindley & Hutton)

Coal Measures, ["probably Westphalian B or lower C", Crookall, 1976]; ["probably from Risca, Monmouthshire", Crookall, 1976].

Acquisition history not known.

CROOKALL, R. 1976. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (7), 853-854, pl. CLX fig. 2. This specimen is number 372 in the MS 'Catalogue of fossil plants ...', not 373 as stated by Crookall, 1976, (in the explanation to pl. CLX fig. 2).

Cb 4756 figured

[counterpart] Cd 142 figured

C 4636 [not located]

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Megaphyton elongatum Kidston

Coal Measures, ["Radstock Group, Westphalian D (upper)", Crookall, 1955]; ? Radstock, Somerset. [The earliest label associated with the specimen does not give the locality. Wilson, 1890, gave "Radstock?"].

Acquisition history not known.

KIDSTON, R. 1888. Transactions of the Royal Society of Edinburgh, 33, 390, 416, pl. XXVI fig 1.

WILSON, E. 1890. Geological Magazine, (dec. 3) 7, 413.

CROOKALL, R. 1955. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey* ... *Palaeontology*, 4 (1), 76-77, text-fig. 31. [p. 76] (copy of KIDSTON, 1888, pl. XXVI fig. 1).

Neuropteris flexuosa Sternberg

Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1925. Transactions ... Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS 6 (2), 171.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 299-304, pl. 6 [top row, first from left].

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95.

Neuropteris flexuosa Sternberg

Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1925. Transactions ... Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS 6 (2), 171.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 299-304, pl. 6 [top row, second from left].

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95.

Intermediate between Neuropteris flexuosa Sternberg and N. gigantea Sternberg

Cb 50 figured

Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-304, pl. 6 [top row, third from left].

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95.

Intermediate between Neuropteris flexuosa Sternberg and N. gigantea Sternberg

[counterpart, Cb 51, of figured specimen]

Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. POLTON E 1926 *Journal of the Linnean Society* Botany, 47, 303-304, pl. 6 [top row,

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-304, pl. 6 [top row, fourth from left].

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n,

C 4650

type

Cb 48 figured

Cb 49

figured

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CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey ... Palaeontology*, 4 (2), 95. We have been unable to trace any record of the figured specimen having been in the collection.

Intermediate between Neuropteris flexuosa Sternberg and N. gigantea Sternberg Cb 52 figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-304, pl. 6 [top row, fifth from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95. Cb 53 Intermediate between Neuropteris flexuosa Sternberg and N. gigantea Sternberg figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-304, pl. 6 [top row, sixth from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95. Cb 54 *Neuropteris gigantea* Sternberg figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. BOLTON, E. 1925. Transactions ... Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS 6 (2), 171. BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-307, pl. 6 [middle row, first from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95. Intermediate between Neuropteris gigantea Sternberg and N. tenuifolia Schlotheim Cb 55 figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-307, pl. 6 [middle row, second from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95. Cb 56a Intermediate between Neuropteris gigantea Sternberg and figured N. tenuifolia Schlotheim [counterpart Cb 56b] Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 303-307, pl. 6 [middle row, third from left].

<u>CROOKALL</u>, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey* ... *Palaeontology*, 4 (2), 95.

Intermediate between Neuropteris gigantea Sternberg and N. tenuifolia Schlotheim Cb 57

figured

Cb 61

Ironstone nodules at about level of Crow Coal, Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925. BOLTON, E. 1926. *Journal of the Linnean Society* ... *Botany*, 47, 303-307, pl. 6 [middle row, fourth from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section].

Neuropteris macrophylla Brongniart

Memoirs of the Geological Survey... Palaeontology, 4 (2), 95.

figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1925. Transactions ... Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS 6 (2), 171.

BOLTON, E. 1926. *Journal of the Linnean Society* ... *Botany*, 47, 307-310, pl. 6 [bottom row, third from left].

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey ... Palaeontology*, 4 (2), 95.

Neuropteris tenuifolia Schlotheim

Cd 71 figured [counterpart Cb 4353]

Coal Measures; Abersychan, near Pontypool.

Acquisition history not known, but it may have been one of the specimens donated by W. Wood, date unknown.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 306-307, pl. 5. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology 4 (2), 95.

Neuropteris tenuifolia Schlotheim

Cb 65a figured [counterpart Cb 65b]

Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1925. Transactions ... Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS6 (2), 171.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 306-307, pl. 6 [middle row, fifth from left]

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey ... Palaeontology*, 4 (2), 95.

C 973a figured

C 973b

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Intermediate between Neuropteris tenuifolia Schlotheim and Cb 59 Neuropteris macrophylla Brongniart figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne. Donated by E. Bolton, 1925. BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 308, pl. 6 [bottom row, first from left]. CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (2), 95. Intermediate between Neuropteris tenuifolia Schlotheim and Cb 60 Neuropteris macrophylla Brongniart figured Ironstone nodules at about level of Crow Coal, Middle Coal Measures; Phoenix Brickworks, Crawcrook, Ryton, near Newcastle-upon-Tyne.

Donated by E. Bolton, 1925.

BOLTON, E. 1926. Journal of the Linnean Society ... Botany, 47, 308, pl. 6 [bottom row, second from left].

CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. *Memoirs of the Geological Survey ... Palaeontology*, 4 (2), 95.

Palaeoxyris helicteroides (Morris)

279 feet below the Bedminster Great Vein, Lower Coal Measures; South Liberty Colliery, Bristol. Donated by H. Bolton. BOLTON, H. 1911. *Quarterly Journal of the Geological Society of London*, 67, 324, 336, 338, 341, pl. XXVII fig. 20. CROOKALL, R. 1928, Summary of Progress of the Geological Survey for 1927, (2), 98.

Palaeoxyris helicteroides (Morris)

figured 279 feet below the Bedminster Great Vein, Lower Coal Measures; South Liberty Colliery, Bristol. Donated by H. Bolton. BOLTON, H. 1911. Quarterly Journal of the Geological Society of London, 67, 324, 336, 338, 341, pl. XXVII fig. 21. CROOKALL, R. 1928. Summary of Progress of the Geological Survey for 1927, (2), 98.

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I.

KIALIIC	
Cotham Marble, Double Landscape Marble	Cb 3850 figured
Cotham Beds, Rhaetic; Cotham, Bristol. Donated by Street Museum, 1948. HAMILTON, D. 1961. <i>Palaeontology</i> , 4, 324, 326, 330, pl. 39 fig. 1.	
Cotham Marble, "Flakes of Crazy Cotham Marble penetrating Double Landscape Marble"	Cb 4128 figured
Cotham Beds, Rhaetic; Bristol district. Donated by Clifton College, 1954. HAMILTON, D. 1961. <i>Palaeontology</i> , 4, 325-326, 329, 332, pl. 40.	U
Hepaticites solenotus Harris	Ca 9277 figured
Bed k, Rhaetic; Coldharbour Farm, Redland, Bristol. Donated by W.H. Wickes, 1924. HARRIS, T.M. 1938. <i>The British Rhaetic flora</i> , 67, 70, text-figures 24 E-G [p. 68]. With <i>Naiadita lanceolata</i> Buckman, emend. Harris, <i>q.v</i> .	
Naiadita lanceolata Buckman, emend. Harris	Ca 7687 figured
 Bed k, Rhaetic; Coldharbour Farm, Redland, Bristol. Donated by W.H. Wickes, 1924. WICKES, W.H. 1900. Proceedings of the Geologists Association, <u>16</u>, 422 (as Naiadites WICKES, W.H. 1901. Proceedings of the Bristol Naturalists' Society, NS 9, 100, pl. 1 (as Naiadites acuminatus). HARRIS, T.M. 1938. The British Rhaetic flora, 35, 36-37, 43, 65, text-figures 13C [16B [p. 37], 20F [p. 65]. 	opp. p. 100
Naiadita lanceolata Buckman, emend. Harris	Ca 9279b figured
 Bed k, Rhaetic; [Coldharbour Farm], Redland, Bristol. Donated by W.H. Wickes, 1924. WICKES, W.H. 1900. Proceedings of the Geologists' Association, 16, 422 (as Naiadites acuminatus WICKES, W.H. 1901. Proceedings of the Bristol Naturalists' Society, NS 9, 100, pl. 1 opp. p. 100 (as Naiadites acuminatus). HARRIS, T.M. 1938. The British Rhaetic flora, 35, text-figure 13I [p. 33]. 	
Naiadita lanceolata Buckman, emend. Harris Bed k, Rhaetic; [Coldharbour Farm], Redland, Bristol.	Ca 9279c figured
Donated by W.H. Wickes, 1924. WICKES, W.H. 1900. Proceedings of the Geologists' Association, 16, 422 (as Naiadite WICKES, W.H. 1901. Proceedings of the Bristol Naturalists' Society, NS 9, 100, pl. 1 p. 100 (as Naiadites acuminatus). HARRIS, T.M. 1938. The British Rhaetic flora, 36-37, 65, text figures 16A, 16C [p. With Hepaticites solenotus Harris, q.v.	opp.

Naiadita lanceolata Buckman, emend. Harris	Ca 9278 figured
Bed k, Rhaetic; [Coldharbour Farm], Redland, Bristol. Donated by W.H. Wickes, 1924.	liguicu
WICKES, W.H. 1900. Proceedings of the Geologists' Association, 16, 422 (as Naiadites ac WICKES, W.H. 1901. Proceedings of the Bristol Naturalists' Society, NS 9, 100, pl. 1 opp (as Naiadites acuminatus).	
HARRIS, T.M. 1938. The British Rhaetic flora, 39, 65, text figure 18A [p.40].	
Naiadita lanceolata Buckman, emend. Harris	Ca 9279a figured
Bed k, Rhaetic; [Coldharbour Farm], Redland, Bristol. Donated by W.H. Wickes, 1924.	
WICKES, W.H. 1900. Proceedings of the Geologists' Association, 16, 422 (as Naiadites ac WICKES, W.H. 1901. Proceedings of the Bristol Naturalists' Society, NS 9, 100, pl. 1 opp (as Naiadites acuminatus).	
HARRIS, T.M. 1938. The British Rhaetic flora, 46, 65, text figure 21J [p. 46].	
Naiadita lanceolata Buckman, emend. Harris	Cb 2663 figured
[Naiadita Bed], Rhaetic; Southmead Laundry, Westbury, Bristol. Donated by W.H. Wickes, 1924.	inguleu
HARRIS, T.M. 1938. The British Rhaetic flora, 39, 40, 65, text-figures 18D [p. 40], 19	[p. 41].

Plantae

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With *Botryococcus braunii* Kützing and "Branched filaments resembling moss rhizoids", *qq.v.*

3. CITED SPECIMENS

a) BOLTON, E. 1925. Fossil flora of the Northumberland and Durham Coalfield. *Transactions* of the Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne, NS 6 (2), 167-181.

In this paper Bolton lists (pp. 170-171) species from the clay-with-ironstone and a thin coal, said to be at about the level of the Crow Coal, exposed in the Phoenix Brickworks Company's clay pit at Crawcrook, some 14 miles west of Newcastle-upon-Tyne.

Bolton commented on the richness of the flora from the ironstone nodules; the coal was also described as "very fossiliferous". Two lists of Crawcrook material were published, the first, from the coal, was of ten species. The second was said to be a "complete list of all the species from this locality", but it omitted most of those recorded from the coal.

The following species are represented, or have been represented, in the collection. Items not located are presumed to have been destroyed by enemy action, 1940.

Alethopteris lonchitica var. decurrens (Artis) Ca 5382 [not located]

Artesia transversa (Artis) C 4670 [not located]

Calamites ramosus Artis Ca 5369 [not located]

Calamites suckowii Brongniart Ca 5350 [not located]; Ca 5351 [not located]

Calamocladus equisetiformis Schlotheim Ca 5356 [not located]; Ca 5359 [not located]

Calamocladus grandis (Sternberg) Ca 5355 [not located]; Ca 5358 [not located]

Calamocladus longifolia Brongniart C 4627 [not located]; Ca 5357 [not located]

Cordaianthus pitcairniae Lindley & Hutton C 4669 [not located]

Cordaites principalis (Germar) Ca 5364 [not located]; Ca 5365 [not located]; Ca 5366 [not located]; Ca 5367 [not located]; Ca 5368 [not located]; Ca 6435 [not located] Lepidophloios acerosus Lindley & Hutton Ca 5387 [not located]

Neuropteris sp. Cb 97

Neuropteris sp. Cb 98) in micaceous shale, a lithology not mentioned in the paper Neuropteris sp. Cb 99)

Neuropteris flexuosa Sternberg C 4656 [not located]; Cb 72 [not located]; Cb 84 [not located]; Cb 64a, b; Cb 67a, b; Cb 69 a, b; Cb 73a, b; Cb 76; Cb 77; Cb 78; Cb 80; Cb 81; Cb 85; Cb 86; Cb 87; Cb 88; Cb 93a, b; Cb 94a, b; Cb 95a, b. See also specimens figured by Bolton 1926.

Neuropteris gigantea Sternberg Cb 83 [not located]; Cb 62a, b; Cb 66a, b; Cb 68a, b; Cb 71a, b; Cb 74a, b; Cb 75a, b; Cb 90a, b; Cb 82.

See also specimens figured by Bolton 1926.

Neuropteris loshii Brongniart Cb 70 a, b; Cb 79; Cb 91a, b; Cb 102

Neuropteris macrophylla Brongniart Cb 92a, b

See also specimens figured by Bolton 1926

Neuropteris obliqua Brongniart Cb 100

Neuropteris rarinervis Bunbury Cb 101

Neuropteris rotundifolia Brongniart Cb 63

Neuropteris tenuifolia (Schlotheim) Cb 58

See also specimens figured by Bolton 1926

Pinnularia capillaceae Lindley & Hutton C 4619 [not located]

Pinnularia columnaris (Artis) Ca 6438 [not located]

Sigillaria principes Weiss Ca 5388 [not located]

Sigillaria saulii Brongniart Ca 5338 [not located]; Ca 5339 [not located].

Sphenopteris obtusiloba Brongniart Ca 5384 [not located]

We cannot locate representatives of the following species, listed by Bolton, and can find no reference to such material having been in the collections:

Alethopteris lonchitica (Schlotheim) Bothrodendron punctatum Lindley & Hutton Calamostachya sp. Lepidodendron aculeatum Sternberg Mariopteris muricata Schlotheim Neuropteris heterophylla Brongniart Neuropteris ovata Hoffman Sigillaria reniformis Brongniart Sphenophyllum cuneifolium (Sternberg) Sphenopteris laurenti (Weiss) Sphenopteris trifoliata (Artis) Stigmaria ficoides Brongniart Trigonocarpum parkinsoni Brongniart

Bolton also listed (pp. 171-172) species identified in material from unspecified colliery spoil tips and 'direct from the mines through the kindness of the managers'. We have some such material, but have excluded it from this catalogue because of the lack of specific published data.

b) BOLTON, E. 1929. On the cuticle of certain species of *Neuropteris*, Brongn. Annals of Botany, 43, 414-415.

From her acknowledgements it is clear that Bolton used material from our collections for the preparation of transfers. Unfortunately the preparations are not present in the collection, presumably destroyed by enemy action in 1940, and the specimens used cannot, as far as we can tell at present, be identified in our records.

c) CAVE, R. 1977. Geology of the Malmesbury district. *Memoir of the Geological Survey of Great Britain*, viii + 343 pp., pls.

On pp. 214-215 Cave records a number of Lower Cornbrash, Jurassic, species from the Gas Council's pipe trench, running parallel with, and to the east of, the Foss Way, 1 mile WSW of Foxley Church. This list includes lignite, the reference being based on a single fragment [Cd 154] collected at grid reference ST 8808 8557 by M.L.K. Curtis.

d) CROOKALL, R. 1925. On the fossil flora of the Bristol and Somerset Coalfield. *Geological Magazine*, 62, 145-180.

On p. 148 Crookall lists the following species from the museum's collection: Caulopteris cistii Brongniart <u>"from Radstock"</u>
Cyclopteris orbicularis Brongniart New Rock Series; Golden Valley, near Bristol.
?Dicksonites pluckenetii (Schlotheim) New Rock Series; Golden Valley, near Bristol.
Neuropteris ? heterophylla Brongniart ? Farrington Series; Norton Hill Pit, Bristol.
Sigillaria major Lindley & Hutton Pennant Rock; Downend, Bristol.
Sigillaria major Lindley & Hutton

Radstock Series; Camerton, near Radstock.

We cannot locate any of these specimens in the collection; they are presumed to have been destroyed by enemy action in 1940. We have not yet identified this material in our records and cannot add anything to the basic information given by Crookall.

e) CROOKALL, R. 1928. Palaeozoic species of Vetacapsula and Palaeoxyris. Summary of Progress of the Geological Survey for 1927, part 2, 87-107, pl. I.

Crookall refers to two specimens from our collection. One, *Palaeoxyris helicteroides* (Morris) (p. 98), had been figured by Bolton (1911) (see catalogue of type and figured specimens).

The second (p. 100) was *Palaeoxyris carbonaria* Schimper [Cb 1566, two items, presumably specimen and counterpart] from between the Brooch and Thick Coals, Yorkian Series; Coseley, near Dudley. This was probably donated by Mrs. Mary E. Moysey in 1923, rather than by her son, L. Moysey, as stated by Crookall. These specimens cannot be located and are presumed to have been destroyed by enemy action, 1940.

f) HARRIS, T.M. 1938. *The British Rhaetic flora*. British Museum (Natural History), London, xi + 84 pp., pls. I-IV.

Harris figured, described and cited a number of specimens from our collections. The material he cited is:

p. 14 Botryococcus braunii Kützing
Cb 2663 [occasional colonies; with Naiadita lanceolata (see catalogue of type and figured specimens) and "Branched filaments resembling moss rhizoids", q.v.].
Rhaetic; Southmead Laundry, Westbury, Bristol.
Donated by W.H.V. Wickes, 1924.

p. 65 Naiadita lanceolata Buckman, emend. Harris

Cb 2660 ["Leafy shoots, a fish scale on a different plane ..."]; Cb 2661 ["Leafy shoots, a rather small *Estheria* shell ..."]; Cb 2662 ["Shoots with gemma cups, archegonia, etc.; a poorly preserved specimen of "insect's compound eye.""]. Rhaetic; Southmead Laundry, Westbury, Bristol. Donated by W.H.V. Wickes, 1924.

Ca 7686 ["Fairly good shoots with archegonia, fragments of sporangia, two fairly good specimens of "compound eye of insect."]; Ca 9277 ["Shoots and leaves of *Naiadita*. Scale of *Lepidotus*; other smaller fish scales ...". With *Hepaticites solenotus* (see catalogue of type and figured specimens).]; Cb 1538 ["... shoots and gemma cups ... two specimens of the body of a fairly large insect ..."].

[Bed k], Rhaetic; [Coldharbour Farm] (Ca 7686)/Coldharbour Farm (Ca 9277)/near Coldharbour Farm (Cb 1538), Redland, Bristol. Donated by W.H.V. Wickes, 1924 (Ca 7686, Ca 9277) and 1927 (Cb 1538).

C 4558 ["Isolated leaves."] (2 specimens).

Rhaetic; Pylle Hill, Totterdown, Bristol. Donated by E. Wilson, 1891.

Cb 2664 ["Isolated leaves and stems"]. Rhaetic: Coldharbour Farm, Redland, Bristol. Donated by Rev. H.H. Winwood, 1921.

Two other papers on Naiadita were published by Harris,

1937. Naiadita, a strange fossil bryophyte. British Association for the Advancement of Science. Report of the Annual Meeting, Nottingham, 1937, pp. 429, 523.

1939 Naiadita, a fossil bryophyte with reproductive organs. Annales Bryologici, 12, 57-70. No specimens are specifically mentioned, but it is made clear that the descriptions are based on the same material as the 1938 account.

p. 71 Hepaticites solenotus Harris

Ca 9279c ["... unbranched piece of thallus." With Naiadita lanceolata (see catalogue of type and figured specimens)].
Rhaetic; [Coldharbour Farm], Redland, Bristol.
Donated by W.H.V. Wickes, 1924.

- p. 72 "Branched filaments resembling moss rhizoids" Cb 2663 [with Botryococcus braunii and Naiadita lanceolata, qq.v.]
 Rhaetic; Southmead Laundry, Westbury, Bristol.
 Donated by W.H.V. Wickes, 1924.
- g) KIDSTON, R. 1888. On the fossil flora of the Radstock Series of the Somerset and Bristol Coalfield (Upper Coal Measures). *Transactions of the Royal Society of Edinburgh*, 33 (2), 335 - 417, pl. XIX - XXVIII.

Kidston cited, described and figured a number of specimens from our collection. The cited specimens are:

p. 342 Stylocalamites (Calamites) suckowii Brongniart [not traced] Upper Coal Measures; Camerton, near Radstock.
(Calamites suckowii Brongniart pars; Crookall, R. 1969. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (5). 634).

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This specimen has not been located, or identified in our records.

p. 392 Caulopteris primaeva Lindley & Hutton [C 4646]. Coal Measures [Radstock Group, Upper Westphalian D, according to Kidston]; Camerton, near Radstock. (Caulopteris lindleyi (Brongniart): Crookall, R. 1955. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section]. Memoirs of the Geological Survey ... Palaeontology, 4 (1), 59-60). Acquisition history not known.
pp. 403-404 ? Trigonocarpus dawsii Lindley & Hutton [not positively identified].

Upper Coal Measures; Camerton, near Radstock. Acquisition history not known. Our records show Kidston to have had two specimens of *Trigonocarpus* on loan. These cannot be positively identified, but one may be the specimen registered Cd 141.

h) KIDSTON, R. 1893. On the fossil flora of the South Wales Coal Field, and the relationship of its strata to the Somerset and Bristol Coal Field. *Transactions of the Royal Society of Edinburgh*, 37 (3), 565-614, pl. I.

Lepidophloios acerosus Lindley & Hutton [C 4636, Cd 142] (see catalogue of type and figured specimens).

 PEARCE, J.C. 1842. On the mouths of Ammonites, and on fossils contained in laminated beds of the Oxford Clay, discovered in curting the Great Western Railway, near Christian Malford in Wiltshire. *Proceedings of the Geological Society of London*, 3, 592-594.
 [Also in Annals and Magazine of Natural History, 9, 578-579.]

Pearce refers to the presence of "Lignite, with oysters sometimes affixed to it" and a "succulent plant".

Pearce's MS (1816—) 'Catalogue of British Organic Remains The Collection of Joseph Chaning Pearce' lists the following:

Catalogue no: [Oxford Clay] 1 "a piece of wood with oysters attached". Railway, Chippenham, Wiltshire. [Cd 155].

Catalogue no: [Oxford Clay] 2 "Do. showing structure". Railway, Chippenham, Wiltshire. [Cd156]. Catalogue no: [Oxford Clay] 3 "Do." Railway near Christian Malford, Wiltshire. [Cd 157].

Pearce's MS 'Catalogue ...' does not make any reference to a "succulent plant", but there is an entry, no: [Oxford Clay] 5 to "a series of branches of a coniferous plant" which is almost certainly the material concerned.

The "coniferous plant" material has been labelled by T.M. Harris as follows:

Cb 3998-Cb 3999	Brachyphyllum expansum (Sternberg) Seward
Сь 4000-Сь 4007	Brachyphyllum desnoyersii (Brongniart) Saporta
Cb 4008	Brachphyllum crucis Kendall
Cb 4009	Pagiophyllum sp.

Catalogue no: [Oxford Clay] 6 is unspecified plant material from this locality and it may also be relevant. Unfortunately no specimen or specimens so numbered have, as yet, been identified in the collection.

j) FITTON, W.H. 1836. Observations on some of the strata between the Chalk and the Oxford Oolite in the south-east of England. *Transactions of the Geological Society*, (2) 4, 103-388.

James deC. Sowerby contributed the palaeontological lists, descriptions and figures. A single botanical specimen from our collection is cited:

- Silicified wood bored by *Pholas* Ca 5627 Greensand, Cretaceous; Blackdown Hills, Devon/Somerset ex J.S. Miller collection, purchased 1831.
- k) TUTCHER, J.W. & TRUEMAN, A.E. 1925. The Liassic rocks of the Radstock district (Somerset). Quarterly Journal of the Geological Society of London 81 (4), 595-662, pls. XXVIII-XLI.

p. 608 Otozamites obtusus Lindley & Hutton Cd 45, Cd 158 Bed below Sun Bed, White Lias, Jurassic; Rockhill [Quarry], Radstock Purchased from J.W. Tutcher, 1942. WARNE, L.G.G. 1937. Speedwell Pit. Proceedings of the Bristol Naturalists' Society, (4), 8 (3), 306-309.

We have representatives of the following species from the New Rock Series, Speedwell Pit. The material was donated by Warne in 1933.

Annularia radiata Brongniart Cd 103 - Cd 105; Cd 106 [with Lepidodendron ophiurus Brongniart, q.v.]; Cd 140 [with Pinnularia capillacea [Lindley & Hutton]. Calamites carinatus Sternberg Cd 107 Calamites cisti Brongniart Cd 108 Calamites undulatus Sternberg Cd 109 - Cd 111 Lepidodendron aculeatum Sternberg Cd 112 - Cd 116 Lepidodendron lycopodiodes Kidston Cd 117 Lepidodendron obovatum Sternberg Cd 121 - Cd 124 Lepidodendron ophiurus Brongniart Cd 106 [with Annularia radiata Brongniart, q.v.]; Cd 125 - Cd 127 Lepidodendron rimosum Sternberg Cd 119 - Cd 120 Lepidodendron simile Kidston Cd 118 Mariopteris nervosa Brongniart Cd 128 - Cd 130 Neuropteris heterophylla Brongniart Cd 131 - Cd 132; Cd 133 [with Neuropteris pseudogigantea Potonie, q.v.] Neuropteris pseudogigantea Potonie Cd 133 [with Neuropteris heterophylla Brongniart, q.v.] Neuropteris tenuifolia Schlotheim Cd 134 - Cd 135

Sigillaria mammilaris Brongniart Cd 137 - Cd 139

Sphenophyllum saxifragaefolium Sternberg Cd 136

We cannot locate representatives of the following species listed by Warne, and we can find no reference to such material having been in the collections.

Annularia galiodes Lindley & Hutton Bothrodendron minutifolium Boulay Diplotmena cf furcatum Brongn. Lepidodendron lanceolatum Lesqx. Lepidophloios acerosus Lindley & Hutton Lepidophloios laricinus Sternberg Lepidostrobus morissianus Lesqx. Neuropteris obligua Brongn. Palaeostachys sp. Samaropsis sp. Sigillaria boblayi Brongn. Sigillaria scutellata Brongn. Sigillaria tesselata Brongn. Sphenophyllum cuneifolium Sternb. Sphenophyllum myriophyllum Crepin Sphenopteris dilatata Lindley & Hutton Sphenopteris sp. Stigmaria ficoides Sternberg

m) WETHERED, E. 1880. The Carboniferous flora of the Bristol coalfield. *Proceedings of the Cotteswold Naturalists' Field Club*, 7, 73-92, 3 pls., 1 folding section [opp. p. 73].

We there d made several donations of palaeobotanical material from the Lower Coal Series of the Kingswood area during 1877 and 1878. We assume some of this material to be representative of the species from the Lower Coal Series listed in his paper. Listed below are the species noted by We thered; given in brackets are the 'Donors Book' numbers which may refer to representative material of that species.

Two Foot Seam pp. 79-80 Ulodendron lindleyanum [= Bothrodendron lindleyanum] [4245] Calamites ramosus, Cordaites [4222]

Great Vein pp. 80-81 Ulodendron lindleyanum [= Bothrodendron lindleyanum] [4245] Calamites radiatus, Cordaites [4222] Toad Vein p. 81 Calamites undulatus, Cordaites [4222] Sigillaria monostachya [4296] Sigillaria pachyderma var ("... to be described as a new species ... Sigillaria Etheridgii ..."). S. scutellata, S. tesselata, S. murchisonae, Sigillaria sp. [4222, 4209, 42191. Sphenopteris obtusiloba, S. irregularis, Stigmaria [4209] Upper Five Coals p. 82 Sigillaria sp. [4222, 4209, 4219], Cordaites [4222] roof of Doxall Seam p. 82 calamites [4222] fireclays, shales etc., above the Doxall Seam Stigmaria [4222] Coal seam beyond the Doxall Seam, Belgium Pit Cordaites [4222], Sigillaria nodosa [4222, 4209, 4219] Only three of Wethered's specimens have so far been identified in the collection: Lepidophloios laricinus Sternberg Cd 160 Lower Coal Series; Kingswood, Bristol A genus not recorded in Wethered's paper] Sigillaria sp. Cd 159 [Donors Book 4209] Lower Coal Series; spoil tip, Kingswood, Bristol Cordaites with Stigmaria Cd 101 Roof of Two Foot Seam, Kingswood Series, Lower Coal Series; Kingswood, Bristol. Wethered op. cit. p. 87 refers to a specimen of Stigmaria "surrounded with Cordaites"

from the roof of an unspecified seam being in the Bristol Museum. The specimen mentioned above [Cd 101] is presumably that to which he refers.

Two other specimens were registered, but these cannot be located and are presumed to have been destroyed by enemy action, 1940.

Sigillaria tesselata Brongt. Ca 6443 Lower Coal Series; Kingswood, Bristol Sigillaria discophora König Ca 6436 Over Two Foot Seam, Lower Coal Series; Kingswood, Bristol.

m) WICKES, W.H. 1900. A new Rhaetic section at Bristol. Proceedings of the Geologists' Association, 16 (7), 421 - 423.
 WICKES, W.H. 1901. A Rhaetic section at Redland. Proceedings of the Bristol Naturalists' Society, NS 9 (2), 99 - 103. pl. 1 [opp. p. 100].

Both papers deal with a section through "a low hill, on which Coldharbour Farm stands", New Clifton [= Redland], Bristol. We have assumed the material variously labelled "Redland", "Coldharbour Farm" and "near Coldharbour Farm" all to be from this locality.

In the species lists in these papers reference is made to the presence of *Naiadites acuminatus* [= *Naiadita lanceolata* J. Buckman] in Bed k [1900, p. 422; 1901, pl. 1. opp p. 100]. We have the following:

Ca 7687 [Harris, 1938, figures gemma cup, sporangium wall and perianth of *N. lanceolata* on this block]; Ca 9278 [Harris, 1938, figures perianth of *N. lanceolata* on this block]; Ca 9279 a, b, c [Harris, 1938, figures spores, gemma cup and perianths of *N. lanceolata* of these blocks]; Ca 7686 cited by Harris, 1938]; Ca 9277 [cited by Harris, 1938]; Cb 1538 [cited by Harris, 1938]. Donated by W.H.V. Wickes, 1924.

Cd 145 - Cd 147 Bequeathed by W.H.V. Wickes, 1933

Cd 148

Purchased from J.W. Tutcher, 1942. [This specimen bears a printed label of the type used by Wickes on which is written, in Wickes' hand, "Lycopodites".] Cd 143 - Cd 144

Donated by W.T. Gordon, 1950. [Cd 143 is labelled in Wickes' hand; Cd 144 bears a printed label of the type used by Wickes.]

 WILSON, E. 1891. On a section of the Rhaetic rocks at Pylle Hill (Totterdown), Bristol. Quarterly Journal of the Geological Society of London, 47, 545 - 549.
 WILSON, E. 1894. The Rhaetic rocks of Pylle Hill, Bristol. Proceedings of the Bristol Naturalists' Society, NS 7 (3), 213 - 231.

Both papers deal with the same section at Pylle Hill. *Naiadita* is recorded from Beds i, k and l. [1891, table opp. p. 546; 1894, p. 229]. We have only two specimens from Bed i [Cb 3586, Cb 3587], donated by Wilson in 1891, and two [C 4558][cited

by Harris, 1938] from an unspecified horizon, or horizons.

4. SPECIMENS RECORDED AS BEING IN THE CITY OF BRISTOL MUSEUM & ART GALLERY, BUT NOW IN OTHER INSTITUTIONS

Neuropteris macrophylla Brongniart

Huish Slivin Vein, Radstock Group, Westphalian D, Coal Measures; Radstock, Somerset figured

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CROOKALL, R. 1959. Fossil Plants of the Carboniferous Rocks of Great Britain [Second Section], *Memoirs of the Geological Survey* ... *Palaeontology*, 4 (2), pl. XL fig. 2. Crookall, op. cit., explanation of plate, states the specimen to be from the "Moore Collection. Bristol Museum and Art Gallery". Moore's collection, and specimens ascribed to it, were in store in Bristol Museum from the early years of the last war until 1959. Crookall must have seen the specimen during that period. It is now in Bath Museum, registered number M 3546.

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