WILLIAM WHITEHEAD WATTS

LLD MA MSc DSc FRS

(1860-1947)

Born Broseley, Shropshire 7 June 1860

Died Cambridge, 30 July 1947

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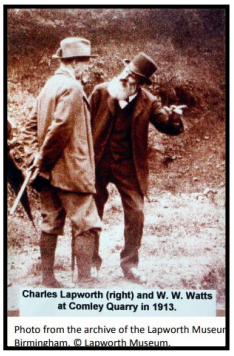
1. Introduction



William Whitehead Watts (1860-1947) and Charles Lapworth (1852-1920) were the pre-eminent geologists of the late Victorian/early twentieth century period, Lapworth as the field geologist and Watts as the organiser. They together supported the work of Edgar Sterling Cobbold on the Lower Cambrian fossils of Shropshire both having previously been involved in researching the fossils of Shropshire. Of the two, only Watts donated fossils to the Ludlow Museums and in doing so he provides a link between the era of the Ludlow Natural History Society and the current collection held at Ludlow. He donated a collection of brachiopoda to the original collection held in the Ludlow Museum as catalogued by Thomas Henry Digges la Touche in 1928 - this was prior to the dispersal of the bulk of the Ludlow collection to London. He also donated fossils to the Shrewsbury Museum, fossils now held at the Ludlow Museum Resource Centre.

William Whitehead Watts was born in Broseley, Shropshire on the 7th June 1860 the son of Isaac Watts and Maria Anne Whitehead - Isaac Watts was a mercer and draper with premises in High Street, Broseley. Watts was educated at Denstone College, Staffordshire and Sidney Sussex College, Cambridge, He became a fellow of the college and an extension teacher. At this time he began his studies on the geology of Shropshire working with Charles Lapworth. Watts taught geology at Oxford and in 1891 joined the Geological Survey**.** In 1897 he took up a teaching post at Mason College, (University of Birmingham) and this was followed by the acceptance of the Chair of Geology at the Imperial College of Science and Technology in 1916.

William Whitehead Watts photo BGS archives

Watts acted as secretary to the Geological Society from 1898 to 1907 and was President of the Society from 1910 to 1912. He was the author of *Geology for Beginners* published in 1888 and *Shropshire the Geography of the County* published in 1919. The work of his mentor Charles Lapworth was outlined in *The Geological Work of Charles Lapworth.* Perhaps Watts' most noted geological work was the mapping of Charnwood Forest in Leicestershire. A detailed account of his life, and the work on Charnwood, is given in Boynton and Ford 2010. A detailed biography was authored by P G H Boswell in 1948. Watts retired to Cambridge and died on the 30th July 1947 - his ashes are placed with his first wife, Louisa Adelaide Atchison, in the cemetery of St Paul's, Cambridge.

2. The Watts Fossils

(a) Wenlock Brachiopoda presumed to be held at the Natural History Museum

The collection of Watts brachiopoda listed by la Touche in 1928 are from Wenlock Edge. The collection, numbering over 350 fossils, was donated by Professor Watts to the Ludlow Natural History Society at an unknown date. Reference is made in the La Touche entry to the extraction of these fossils by George Maw (1832-1912) - the specimens would have been extracted at Maw's Broseley pottery possibly in the 1880s on behalf of Thomas Davidson (see below), The methodology of extraction is outlined in the Geological Magazine (1918 **VIII** 100-109) as are the examination of some of the samples by the Reverend Norman Glass.

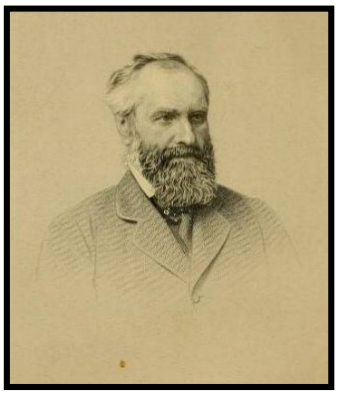
Fossils included in the la Touche catalogue:

Lingula symondsi (Salter)	17
Orbiculoides forbesi (Dav.)	3
Leptaena (Plectambonites) segmentun (Ang.)	28
Orthis (Dalmanella) elegantula (Dalm.)	19
Orthis (Dalmanella) elegantulina (Dalm.)	29
Orthis (Bilobites) biloba (Linn.)	79
Orthis (Rhipidomella) hybrida (Sow.)	74
Orthis (Skendium) lewisi (Dav.)	6
[Orthis] Retsia bouchardi (Dav.)	9
Retsia Salteri (Dav.)	5
Pentamerus (Barrandella) linguifer (Sow.)	2
Spirifer (Dalthyris) elevatus (Dalm.)	7
Cyrtia exporrecta (Wahl.)	2
Glassia obovata (Sow.)	1
Glassia elongata (Dav.)	2
Atrypa reticularis (Linn.)	6
Atrypa (Atrypina) Barrandei (Dav.)	6
[Meristina] Whitfieldia didyma (Dalm.)	1
Streptis grayi (Dav.)	4
Rynchonella dayi (Dav.)	3
Nucleospira pisum (Sow.)	33
Eichwaldia capewelli	2
Waldheima mawei (Dav.)	20
Total	358

Most of the above are presumed to be held at the Natural History Museum?

George Maw, together with his brother Arthur, was the founder of Maw & Co. makers of earthenware encaustic and geometric floor tiles. Their father, John Hornby Maw, purchased the Worcester Porcelain Company on their behalf in 1849. The company moved to Broseley and then on to Ironbridge where the new factory became the largest maker of ceramic tiles in the world.

Maw was born in London and studied at the Cirencester Agricultural College - *taking a special interest in geology, archaeology and botany* (Matthew 1986). Maw was an accomplished botanist. He was the author of a monograph on 'The Genus Crocus' having travelled across Europe in his investigations of the genus. Maw became a fellow of the Geological Society in 1864 and made a number of contributions to the Geological Magazine/Quarterly Journal over the years 1864 to 1878. This included an account of a journey made in 1871 to Morocco and the Atlas Mountains together with Sir Joseph Hooker. He retired from his business in 1886 and lived in Kenley, Surrey until his death in 1912.

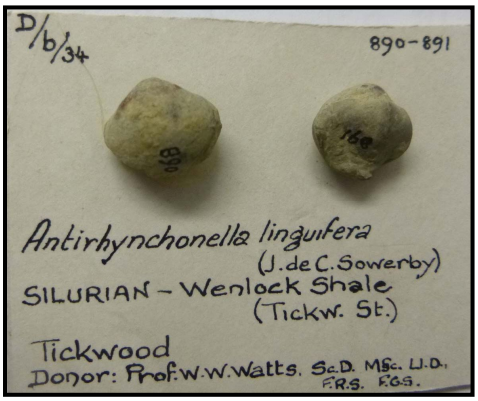


Thomas Davidson

Maw extracted Wenlock brachiopoda on behalf of **Thomas Davidson** FRS FGS (1817-1885). Davidson was a naturalist and palaeontologist who became an authority on Brachiopoda. Born in Edinburgh on the 17th May 1832 he studied at the University of Edinburgh and in Europe where he joined in several geological expeditions. He was mentored by the German palaeontologist Baron Leopold von Buch (1774-1853), elected a fellow of the Geological Society in 1852 and became a fellow of the Royal Society in 1867. He began to study brachiopoda at the age of twenty and became the undisputed authority publishing his six volume work on the phylum from 1850 to 1886 - publications including over 200 hand-drawn plates by Davidson. His collection of brachiopoda and original drawings are bequeathed to the Natural History Museum.

(b) Wenlock Brachiopoda held at Ludlow

Some of the Brachiopoda donated by Watts to the Ludlow Natural History Society remained at the Ludlow Museum Resource Centre but these were not included in the la Touche catalogue - although confusingly some cards hold reference numbers similar to those found in the la Touche catalogue as shown below. This group of fossils are listed below under as 'G' numbers according to the John Norton Accession Book.



Antirhynchonella linguifera (Sow.)
D/b/34

G. 165-68	Br.	Dicaelosia biloba (Linn.)	Buildwas	
G. 169-70	Br.	Howellella elegans (Muir-Wood)	Tickwood	
G. 171-74	Br.	Dalejuna hybrida (Sow.)	Buildwas	
G. 173-74	Br	Dalejuna hybrida (Sow.)	Buildwas	
G. 268-270	Br.	Lingula symondsi Davidson	Buildwas	
G. 274-284	Br.	Lingula symondsi (Davidson)	Buildwas	
G. 285-291	Br.	Lingula symondsi (Davidson)	Buildwas	
G. 890/891	Br.	Antirhychonella linguifera (Sow.)	Tickwood	(D/b/34)
G. 1154-1201	Br.	Dalejuna hybrida (Sow.)	Buildwas	
G. 1202-1256	Br.	Dicaeosia biloba (Lin.)	Buildwas	
G. 1262-1266	Br.	Howellella elegans (Muir-Wood)	Tickwood	
G. 4633	Br.	Resserella sp.	Buildwas	
G. 4634	Br.	Resserella elegantula (Dalman)	Buildwas	
?	Br.	Orthis elegantulina (Davidson)	Buildwas	

(c) Fossils donated by Watts to the Shrewsbury Museum

A third group of fossils were donated by Watts to the Shrewsbury fossils. The fossils are referenced below under the 1997 Adlib series. The fossils are now held at Ludlow.

shyms: G.1977/0xxx

Gast.	111	Oxydiscus perturbatus (Sow.)	Shelve Church
Gr.	113	Didymograptus murchisoni (Beck)	Holywell Barn, nr Rorrington
Gr.	114	Dictyonema cobboldi (Bulman)	Holywell Barn, nr Rorrington
Tr.	115	Ogygia (niobella) selwyni (Salter)	White Grit Mine, Shelve
Br.	136	Coelospira hemisperica (Sow.)	Bush House, Rushbury
Br.	157	Pentamerus oblongus (Sow.)	Gilberries Hall Farm, C. Stretton
Br.	189	Lingula symondsi (Salter)	Buildwas
Br.	190	Cyrtia exporrecta (Wahl.)	Railway cutting, Coalbrookdale
Br.	191	Barrandella linguifer (Sow.)	Railway cutting, Coalbrookdale

Br.	195	Leptaena sp. nov.	Railway cutting, Coalbrookdale
Br.	196	Sowerbyella transversalis (Dav.)	Tickwood
Br.	197	Rynchotreta cuneata (Dalm.)	Lincoln Hill, Ironbridge
Br.	207	Meristella tumida (Dalm.)	Tickwood
Br.	208/9	Atrypa reticularis (Linn.)	Railway cutting, Coalbrookdale
Br.	225	Rynchotreta borealis (Schlo.)	Tickwood

Only the one fossil has so far been placed on the Natural History Museum Portal

Silurian brachiopod
Resserella eleganta
Priref 65547
Buildwas
G.04634

Dr J. A. Gosling
October 2018

Sources

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