## THE EARLY LIFE AND GEOLOGICAL WORK OF JOHN MAWE 1766-1829 AND A NOTE ON HIS TRAVELS IN BRAZIL

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Abstract: A biographical review of the work of the pioneer Derbyshire geologist John Mawe demonstrates his significance as a mineral collector and dealer. It led to an extended visit to Brazilian mines and mineral deposits under Portuguese Royal patronage in 1807-1810.

The history of science currently gives disproportionate attention to 'major' figures; like Cuvier and Darwin, in biology or Werner and Lyell, in geology. The smaller fry, especially those who lacked the foresight to leave manuscripts to posterity, have too often been forgotten. Yet it is only from the study of 'minor' figures that we can properly monitor the achievements of the 'major'. For it is only by demonstrating what was 'normal' science at any one time, that we can show the advances made in that period. Historians further compound such selectivity by paying too much attention to those who published, rather also considering those who advanced science in other ways, as collectors did (Torrens 1988).

John Mawe provides a fine example. Born in 1766, he has never since been given serious biographical attention. All subsequent writers have relied on the hopelessly incomplete account found in the British Dictionary of National Biography (hereafter DNB) or quoted from the many different editions of his ten separate books. This paper attempts an assessment of Mawe's life and work, up to his setting out on his South American adventures in 1804. Mawe provides a fascinating case study in two ways, first as a traveller who gave an eye witness account of life and society in South America when it was very badly known in Europe, through his book Travels in Brazil (Mawe 1812), and secondly as a mineral and shell dealer. Such dealers were a breed of men and women, who provided a wealth of new material for the many collectors and writers then exploring the natural worlds in the first decades of the last century (eg. Taylor and Torrens 1987). Without such dealers scientists would have had great problems in documenting 'the animal and mineral kingdoms. But the part played by dealers in their essentially symbiotic relationship with scientists has been almost totally ignored.

John Mawe was born "in the house (in Queen Street) in which Mr (either Francis or William) Shaw the baker lives facing All Saints Church (now Derby Cathedral)" according to Hannah Wright 1775-1867) (1829 p.26); niece of Joseph Wright (1734-1797) the gifted Derby painter. This was almost certainly in 1766 (Glover 1829 Vol. 1, p.106) rather than in 1764 as given in the DNB. and repeated endlessly since. His father was Samuel Maw(e) (1735-1783), who, almost certainly for reasons connected with a dissenting religious background, did not have any of his three children baptised. With such a crucial piece of biographical jigsaw missing, John's parentage might have been impossible to determine. Luckily John, who was Samuel's younger

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surviving son, recorded that he had been a mariner (Mawe 1821 p.v) before returning to England as a mineral and shell dealer. By good fortune a single document survives to prove his ancestry. It describes Samuel's "younger son of Derby" as a mariner in 1788 (DPL Derbyshire Deeds, Corporation Collection No. 178).

The Maw or Mawe family has been traced back two generations before John. His grandfather (another John who died 1763) was a button maker in Derby, as was his eldest surviving son, John's uncle, Matthew Maw(e) (1732-1788). The youngest surviving son Samuel, John Mawe's father, became instead a baker and flour merchant in Derby, living in a house in Queen Street, opposite All Saints Church. A solid, if not then very prosperous, middle class stock for the Mawe family is suggested by the election of these two brothers to the Freedom of their native city in 1754 and 1756 respectively. On 25 May 1759, Samuel Maw(e) and Elisabeth Massey of Leeds in Yorkshire, were married by banns in All Saints Church. The entry before this in the marriage register was witnessed by a man who was later to play a quite crucial role in the career change suddenly made by John Mawe in 1793, from mariner to mineralogist, namely the sculptor, marble worker and mineral dealer Richard Brown (1736-1816). This other marriage was that of George Whitehurst, clockmaker, to which the other witness was his brother, John Whitehurst (1713-1788), the pioneer of Derbyshire geology, on whose work Mawe was later so much to build. Such connections emphasize how close and well-knit this level of Derby society was in those days.

Little is known of Samuel Mawe. His first wife died late in 1776 when John was only ten and in September of the following year Samuel married again, one Fawnia Beighton (c.1745-1822), at Radbourne near Derby (DM 25.9.1778). where the Beighton family possessed property. This second marriage enhanced the financial status of the Mawes. On 14 February 1783 Samuel Maw died at the age of 47 (DM 27.2. 1783) leaving John, the younger son, orphaned at the age of 16. Samuel's will (DPL, Derby Deeds, Corporation Coll. No. 176) left the water corn mill he had leased from Derby Corporation since at least 1773, his business and all his stock-in-trade to his eldest son Samuel junior, who continued in the family trade. His other real estate, in Derby and nearby Stanley, was left in trust to his younger son John. who concerns us. John, as a minor, was left in the guardianship, until 1787, of Joseph Sowter, a fellow baker of nearby Castle Donington in Leicestershire (DM 25.12.1783 and 13.5.1784). The possibility exists that John Mawe may have spent some time there, but nothing is known.

All we know is that John's early years were spent at sea, as a mariner, in one of the merchant ships then carrying

Britain's rapidly expanding trade all around the world. Unfortunately we have no further details of this. All Mawe recorded is that a ship in which he was an officer, once "sounded on a coral reef in the channel of Mozambique" (1821 p.23). As Thomas (1977 p.160) has shown, it is almost impossible to trace the careers of boys after they have left their parishes of origin for the sea, unless the name of their ship is known. It is a pity this is the case as it is clear that John Mawe's years as a mariner were crucial to his later development as a dealer in minerals, shells and the many other curiosities which could be found all over the world and be imported to the curious natural history collecting public in Britain (Dean 1936 pp.227-8; Allen 1976).

In 1821 Mawe published his Voyager's Companion or Shell Collector's Pilot, in a third edition, described as undoubtedly the most entertaining shell collectors guide of the period (Dance 1986 p. 93). In this he referred to his earlier small pamphlet Directions to Captains of Ships, Officers and Travellers, particularly to those who visit the South Sea Islands, which had gone through two editions "several years ago". Unfortunately no copy of either of these editions has been located. The third edition, however, has an advertisement to captains of ships, and passengers, urging them that the problems of passing shells through customs are simple, if only instructions were followed. If such people would send shells, packed in cases, to him c/o King's Warehouse, London they would not be seized by customs officers if entered on the ship's manifest, and Mawe would pay both for the shells themselves and "trivial" customs charges, which for shells imported into Britain then amounted to 20% of their value (Lingwood 1984), until July 1825 when the tax was repealed (Burkhardt and Smith 1985 p.268; Dance 1986 p.108).

In the Voyager's Companion Mawe recorded that he sailed "to most parts of the globe", although it is often difficult, from his descriptions, to know if he had visited particular places in person. He referred specifically to his having been, or collected, at Mogador in Morocco (p.6), Jamaica (p.8), Bombay and Tellichery (pp.23-24). Despite Mawe's facilities for dealing with such shells and specimens, which reached him from mariners and travellers from all over the world, (there were clearly dangers, particularly in the accuracy of documentation or localities. Dance (1986 p.97) gives some examples of shells Mawe recorded from impossible locations, either through carelessness or his credulity. In a revealing note Mawe (1821 p.v) referred to the conclusion of his maritime career, "finding a sea-faring life hazardous during the war, after a favourable voyage, I left off going to sea, and with other business, commenced collecting minerals and shells". The war referred to here is the long conflict from 1793 to 1815 with France, which comprised the 'Great War' to all Europeans up to the end of the last century (Lewis 1960) p.15). Mawe must thus have remained a sailor until at least February 1793 when war was declared by France against Great Britain and Holland. Since Mawe was a mariner for 15 (Mawe 1821 p.v) or 16 years (Mawe 1825 advert. at end) he must have gone to sea either in 1777, after the death of his mother, or in 1778, after his father's remarriage. He would then have been either 11 or 12. Such youth was then nothing new, at least in the British Navy. Lewis (1960 pp. 161-4) records that entry to this, at around the age of nine, was "not at all unusual". Lewis also notes the effect of the declaration of war in 1793 on both the Merchant Navy, in which John Mawe served, and the Royal Navy, in competing for men. He gives us some idea of the problems, with press gangs and recruitment drives, which may have precipitated Mawe's departure from the sea back home to inland England.

The next event, and a highly significant one for his later career, is John Mawe's marriage by licence on 1 November 1794, at the age of 28, at St. Paul's Church, Covent Garden, London (the parish he then resided in), to Sarah Brown, daughter of Mr Richard Brown II, of the parish of All Saints, Derby (Hunt, 1907 Vol. 35, p.324). The event was reported in the Derby paper (DM 6.11.1794) and the Gentleman's Magazine (1794 Vol. 64 (2) p.1053) who both reported his address as Tavistock Street. Wright (1829p.126) referred to John Mawe having been "an apprentice to Mr. Brown at the Marble) Works, Derby, to whose daughter he married". Since an apprenticeship then lasted several years (Rees 1803), there is no time during which John could have served a full apprenticeship, after having left the sea, although Brown and Son were certainly then seeking apprentices (DM 4.9.1794). But he clearly returned to his native town after February in 1793 and there gained employment at the marble works where he was soon able to advance himself, in the most time-honoured way, by marrying the owner's eldest daughter! The owner Richard Brown (or Browne) had been a name familiar in Derby statuary and marble working circles since 1735 (Gunnis 1968 p.64), when an advert inserted by the first of this name (1699-1756), appeared (DM 17.4.1735), offering "monuments, chimney pieces and grave stones" for sale. By 1765 his son had opened a marble-working factory in the 'Old Shop' of the Derby Silk Mill, to manufacture turned ornaments from a variety of Derbyshire fluorspars and marbles, using water power. This attracted a lot of visitors, like Faujas de St Fond in 1784 (Geikie 1907 Vol. 2, pp341-3). By 1788 the third generation had joined the firm, through Richard Brown III (1765-?), becoming Brown and Son. By the 1780s Richard Brown II was also dealing, from Derby, in the mineralogical productions of Derbyshire and in 1784 was elected an Honorary Member of the London Society for Promoting Natural History, which had been established in 1782 (Anon. 1791 p.29). Those to whom minerals were sold in the 1780s and 1790s, apart from St Fond, included Erasmus Darwin, Philip Rashleigh and Josiah Wedgwood.

By November 1794 John Mawe had moved to London where he became the London manager of the shop opened in 1794, together with Richard Brown II and III, as "Brown, Son and Mawe, Petrifaction Warehouse, 5 Tavistock Street" near Covent Garden Market", as the firm first appears in Lowndes' London Directory of 1795 (p.29). By 1797 the same directory (p.32) also recorded "Brown and Co.; Derbyshire Spar Warehouse" at the same address, showing the two aspects of the new outlet in London, selling both minerals and the spar and marble ornaments made at their jointly owned Derby Marble works.

A letter dated 29 November (1796) from Mawe to White Watson (1760-1835), the pioneer geologist of Bakewell in Derbyshire (Bateman archives, Sheffield City Museums, Archaeology Dept.) gave details of the firm's activities. It reported on a box of minerals which Watson had clearly asked Mawe to send him, when they met earlier that year on a visit Mawe had made to Derbyshire. The letter lists 40 minerals and a few fossils Mawe then sent Watson, "nearly the whole of which I have bought at auction", but very few are in any way localized. They included fine pieces of Opal and of "Rainbow antimony from Felsobania (Hungary), as fine a specimen as I ever saw", with some very good "Crystallised Red Silver". Mawe noted too, of specimens Watson had asked for, that "Arsenicated Copper Ore, Moss Copper and Vitriolated Lead no more found, and are the scarcest English fossils I know". Mawe put a price of between 6 and 7 guineas on what he had sent and asked Watson to send good Derbyshire specimens in exchange.

Watson's annotation recorded that he returned a first instalment, of cut and polished ironstone nodules worth 2.8.0 sterling pounds, on May 3, 1797. Mawe's letter ends "We have frequently people here (at the London shop) of consequence and lovers of Natural History that if you think I could introduce your Publication and sell a few copies I would do it with pleasure". This must have referred to the Watson pamphlet An Explanation of the Tablet representing a Section of the Strata of Derbyshire published in five different versions between 1788 and 1797 (Ford 1973).

Watson thought he had been the first to "attempt to describe a Mineral District by a Section of the Strata themselves" (Watson 1797 p.iv) and seems certainly to have been the first to produce tablets in which the actual rocks involved were inlaid to show the sequential stratification in Derbyshire. Watson's inlaid version of the Section of the Strata of Derbyshire was first made in September 1787 according to Watson's Common Place Book (in private archives). But Richard Brown had earlier provided "collections of Derbyshire spars cut into small square tablets" for collectors in 1784 (Geikie 1907 Vol. 2, p.342). Watson was not the only one to produce such inlaid tablets, as has been claimed. Notices which appeared between 1797 and 1812 (Brown and Co. 1797 pp.15-6; Hedinger 1800 pp.33-5 and Mawe 1802 pp.14 and 45) show that such Tablets of the Strata of Derbyshire and of Mam Tor could also be had of either John Mawe or had been 'published' by Brown and Co. The earliest of these notices specifically adds that their tablets of the Strata of Derbyshire for sale were "laid down to a scale of measurements from actual surveys, by John MAWE, in the firm of BROWN and MAWE". The value of the geology displayed on such Brown and Co. tablets was rudely remarked on by John Farey (1811 pp.237 and 275). An example survives in Saffron Waldon Museum as a double sided inlaid tablet of the Strata of Derbyshire with a "Vien (sic) of Copper Ore (at Ecton Mine)" on the reverse side, signed on its partly broken edge "Brown, Son and Mawe". It measures 167 x 115 mm. It must date from between 1794 to some date after 1802, when they are last recorded. Watson first noted the section at Ecton Mine on which this "Vein of Copper Ore" tablet was based, in 1790 (DPL MSS 8371 pl. 137) and first described such back-to-back tablets in his pamphlet of 1797.

It is important that such inlaid tablets (of which 19 have been listed by Ford 1973 and Stanley 1976 p.401) should no longer be credited just to Watson. Some are named; as is the double-sided Watson example dated 1800 at the Hancock Museum, Newcastle (Stanley 1976). But the fine quality larger scale and unsigned, double-sided tablet now in Derby Museum, showing the same counterposed sections as the single surviving Brown and Mawe tablet, and previously credited to Watson, may just as well be by Brown, Son and Mawe. Since these early tablets represent effectively only what John Whitehurst (1778 and 1786 pp. 178-80) had already urged and documented, there is no scientific dispute with their 'authorship' unlike the different inlaid tablets of Delineation of the Strata of Derbyshire by Watson from 1808, in which Watson clearly plagiarized John Farey's work without proper acknowledgment (Farey 1811 p.163; Bainbridge 1818).

We know the range of minerals offered by Brown and Mawe from a printed 16 page Catalogue of the Mineral Substances on Sale at Brown and Co. No. 5 Tavistock Street, Covent Garden (Brown and Co. 1797) - which also survives in a copy once owned by Gregory Watt (1777-1804) in the Watt archives (now in private hands). This catalogue lists the many minerals, then "for sale (or exchange for the Encouragement

of the Sciences) on as low terms as can be afforded" and offers mineral analyses, scientifically arranged collections of 200 specimens for 10 guineas and "all the new-discovered Substances and . . . elegant Crystallisation, Fossils (ie. minerals) and Petrifactions, in the greatest variety". The catalogue also announces that "Collections of Natural History were bought" and "Collections of Mineral Substances, the produce of Derbyshire, consisting of specimens from the Strata, shewing their Position, Thickness, and Produce" sold. It was one of these last collections which brought Mawe into contact with the Spanish Royal family, a contact later to lead to his journey to Brazil. Mawe (1802 pp.iv-v) "was applied to by a Spanish gentleman to make surveys of principal mines (of Derbyshire), to collect their various productions, and. species from each stratum, describing their thickness, situation and position; . . . to shew an exact representation of the mines", for the (Royal) cabinet (of Natural History) of his Most Catholic Majesty (Charles IV) at Madrid. Such a work was "worthy of the patronage of a Prince who enjoys so great a share of the precious metals produced in South America". This cabinet was founded in 1753 by Charles III of Spain (Amoros 1963) and actively continued by his son Charles IV (1748-1819), who appointed the Catalan natural historian Charles de Gimbernat (1768-1834) to be Collector for this Cabinet (Sabaris 1982 p.14). From 1791 to 1796 Gimbernat was based in Britain, with a scholarship to enable him to study science and technology. In 1796 he was busy gathering material for the Royal Cabinet and asked Mawe to make this collection of stratigraphically arranged rocks, minerals (and perhaps some true fossils) from Derbyshire (Sabaris 1982 p.18). This first Royal commission was a crucial line in Mawe's later career as a dealer in minerals. We do not know whether the materials which Gimbernat ordered ever arrived in Madrid. It seems unlikely as, on 18 October 1796, Spain declared war against Britain and Gimbernat was forced to leave Britain. We find another Royal Spanish commission to the rival London mineral dealer Jacob Forster (1739-1806), which must again have come from Gimbernat, and listed as "5 or 6 boxes of specimens collected in Russia for the King of Spain worth 1000 pounds" was also never delivered, presumably for just the same reason. It had to be sold in London on Forster's death (Frondel 1972).

In 1799 Mawe received an interesting compliment from Jacob Forster's wife, Elizabeth, who was running the rival Forster mineral dealing business whilst her husband was in Russia. In a letter to the Cornish collector Philip Rashleigh of August 1799 she writes "I make no doubt but (Mawe's) frequent visits to Cornwall will enhance the price of Minerals there, he has been very successful since entering the Mineral line and is a very busy man" (Rashleigh archives, Cornwall Record Office). Mawe is first found listed as a Mineral Collector in Holden's Triennial London Directory (28.1.1800 p.467). Evidence that his scientific opinion was also being sought by politicians comes from the surviving report (BL Add. Mss. 33124, ff109-16) he prepared for Lord Pelham outlining a plan for a mineralogical expedition to New South Wales and Ceylon in 1799 or 1800 according to Vallance and Moore 1982 p.3). In fact this may have been written at any time between 1799 and 1804 and Mawe's departure to South America (of which he had noted "they never search for metals where they meet with Extinct Volcanoes"). Mawe told Pelham that he would "instantly embark in the undertaking (to Australia) for having been habituated early in Life to Sea and the last ten years to the practice of working mines and long pedestrian tours in search of Mineral Substances, the distance of New South Wales would be to me no object". An advertisement for the Brown and Mawe business in London (Felix Barley's Bristol Journal May 10

and 17, 1800) noted that they "have received a most extensive collection of minerals from Vienna . . . from Siberia, Hungary etc which, added to their former Collection, forms the most extensive Variety on sale in the Kingdom". Later in the same year Hedinger (1800 p.35) recorded that "Mawe had (now) formed connections at Vienna, Petersburgh, Copenhagen, Lisbon, and almost every part of the world . . . being lately returned from a MINERALOGICAL TOUR through the mines of this Kingdom, Scotland . . . He has more than 20,000 specimens always on sale".

Mawe's Highland tour in Scotland which started in June 1800 was recorded in letters written to fellow mineralogist John Pinkerton (1758-1826) who described him "as expert mineralogist" despite having at first confused him with partner Richard Brown (Turner 1830 Vol. 2, pp.156-69). Mawe reported on his tour when he had reached Oban in Scotland, "having come via the famous lead mining area of Leadhills. He then visited Glasgow and travelled, largely on foot, to Oban, whence he passed to Mull, Iona and then Staffa (where he noted, with a true collector' instinct, that the basalt columns were too large to take away!). He moved on to Ardnamurchan and then Strontian, the famous locality of the eponymous mineral. On his way back to London he called on a fellow collector in Edinburgh, Gilbert Laing, who reported to Pinkerton that "Mawe had picked up a very great quantity of specimens as to bulk, but I presume not much in regard to variety" emphasising again the main purpose of this Scottish Tour (Turner 1830 Vol. 2, pp.171-92).

In 1802 Brown, Son and Mawe moved their works to a new factory in St Helens, Derby, where they installed a 6 h.p. steam engine (Britton and Brayley 1802 pp.372-5, 487). These continued in the family until 1832 (DM 27.6.1832 and Anon. 1850 pp.280-1). Also in 1802, Mawe's first book was published as The Mineralogy of Derbyshire with a Description of the most interesting Mines in the North of England, in Scotland, and in Wales; these mines were those he had visited on tour. Mawe here recorded that he had "resided several years on the most interesting part of the county" round Castleton; a statement confirmed by the monument erected to his memory in the church there, where "he first became attached to his favourite study of the science of mineralogy". For Derbyshire mining matters this is a useful source, but it does not break much new ground scientifically. This point is reinforced by the book's reissue, as late as 1816, quite unaltered except for a new title page. This misleadingly claimed, after a most momentous decade in British geology, that the book now covered the Mineralogy and Geology and the position of the strata in Derbyshire. Later in 1802, Mawe visited France. The Peace of Amiens, finally signed on 27 March 1802, allowed much more freedom for travel. Large numbers of English travellers had made their way to France well before the Treaty was signed (Philips 1904) including Mawe (Turner 1830 Vol. 2, pp.208-25). A group of French geologists from June 1802 also made their way into England (Eyles 1985), until the Treaty was ruptured, on visits which may have been of great importance in promulgating William Smith's stratigraphic ideas in France.

Mawe, newly arrived in Paris, wrote to Pinkerton comparing conditions between London and Paris and recording French elation at the signing of the Peace treaty. He had quickly visited many of the mineralogists then in Paris including Hauy, whose free lectures at the École des Mines he was attending, Patrin and Vauquelin. Faujas, who spoke English, was "in the country". Mawe found learning French difficult, saying he "would certainly rather go on an East India voyage

as a sailor (and it would be less difficult) than to learn French". He was also anxious about the state of his business in London, which he had left in the hands of his wife Sarah during his absence, adding that his "minerals have not arrived yet and until they do I can do nothing", which again gives a clear indication of the main purpose of his French sojourn; to deal in minerals. His book on Mineralogy of Derbyshire 'was in great fame'. By April he had also met De Lametrie, Le Levre and Pini and his French was starting to improve. By May he sent comments on the mineral and petrological collections seen in France and had started to send minerals to Mrs Mawe, received in exchange for those brought by him. Mawe's letters to Pinkerton stop in May but it is clear that Mawe either remained in Paris or returned later, for in September he again wrote from Paris about a meeting he had there with Dr. Thomas Fulhame (BL Add. Mss. 33109 f425). Fulhame had developed a new process for the manufacture of white lead and Mawe was anxious that the process would not be lost to the English.

Late in 1802 or early in 1803 the Swedish industrial spy Eric Svedenstierna listed in his diary the best mineral dealers then in London. In the published version (Flinn 1973 p.220) Mawe appears confusingly as "Mr Man". In December 1803 a letter from Rashleigh to fellow mineralogist John Hawkins (Russell 1952 p. 102) noted that "Mawe intends to rival (Jacob Forster) in business", more evidence of Mawe's London mineral dealing business. In 1804 Mawe donated A Sketch of the Strata of Derbyshire and a few minerals to the mineralogical collection of the Royal Institution in London (Archives 1973 p.224) and in 1804 also issued a 34 page ANew catalogue of Mineral Substances . . . after Professor Werner . . . with the new names of Prof. Hauy (Mawe 1804), presumably in an attempt to leave his business in an organised state before his departure. This new catalogue now claims "collectors will find the largest Variety of Minerals and Shells in Europe" at Mawe's Covent Garden shop. The connections for the supply of minerals had now been made with "Sweden, Norway, Switzerland, Madrid, Italy, Paris, East Indies, New Holland, etc." to add to those recorded in 1800. On the 1st August 1804 he set off on his long "voyage of commercial experiment" going to what is now Uruguay (Mawe 1812 p.1). This led him via a series of well recorded crises and accidents to his travels in the interior of Brazil over the period 1807-1810 (Kirkham 194-6; Leonardos 1970) about which he published in English in 1812 (Mawe 1812) and which was soon translated into eight other European languages.

Mawe emerges then as clearly qualified, if only as a traveller and mineral dealer, when he set off on his South America journey, with a new Royal (now Portuguese) patronage in 1804. This guaranteed him access to mining sites not otherwise easily visited by a European in Brazil and could be also, and was soon, used as publicity coup on his return to England late in 1810. Such Royal patronage was later made much of by Mawe, whether in his work on Brazil (1812) or on Diamonds (1813), the first editions of which were dedicated to the Prince Regent of Portugal, and to whom he claimed he was "First Administrator and Mineralogist" when the latter had become King John VI of Portugal, as on the title page of the third edition of Mawe's Catalogue of Minerals (Mawe 1818). This also recorded his membership of the Royal Geological Society, but that of Cornwall rather than London. The latter success of the Mawe empire whether as writer or publisher of popular textbooks on mineralogy and shell collecting, or as a supplier of mineral specimens and diamonds and "Royal" Museum proprietor, in London, Cheltenham, Castleton and Matlock all owed much to such claims to patronage. The Mawe ability to collect patrons

continued well after his death in 1829, when his widow, Sarah Mawe (1767-1846), who had so valiantly and effectively continued his mineral business in London during his long absence abroad in 1804-1810, was appointed "Mineralogist to her Majesty" Queen Victoria, just after she became Queen in 1837 (Mining Journal 16.12.1837 p.198).

## ABBREVIATIONS:

BL British Library, London; DM Derby Mercury

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