

## PRESIDENTIAL ADDRESS

### Mary Anning (1799–1847) of Lyme; ‘the greatest fossilist the world ever knew’

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The historian has an obligation to the specific before he plunges into the general, and it is this responsibility that unifies the manuscript and the manufact.<sup>1</sup>

#### INTRODUCTION

If one wanted to discover the significance of an individual of English extraction who had died during the Victorian era, the first two obvious sources to try would surely be the *Dictionary of National Biography* (hereafter *DNB*)<sup>2</sup> and the *British Museum General Catalogue of Printed Books to 1955* (hereafter *BLC*).<sup>3</sup> If we use these to explore Mary Anning, we find she appears in the *DNB*, but only in the *Supplement*, published in 1901, of ‘accidental omissions or people overlooked in the main *Dictionary*’. This was none the less a real achievement, in view of the ‘very poor’ representation of women in the original *DNB*.<sup>4</sup> She also appears in the *BLC* but, unsurprisingly, not as an author since she herself published nothing,<sup>5</sup> but only as the subject of a slim volume of eighteen pages, *The Heroine of Lyme Regis – The Story of Mary Anning, the Celebrated Geologist* by one H. A. Forde published, according to the *BLC* in 1925, by a writer *apparently* active from 1879 to 1925.<sup>6</sup>

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I thank the British Society for the History of Science for allowing me to spend some of my best days in its company. I am conscious of the problems any male, however honourably female in attitude, will have in writing on the history of a woman even one so clearly masculine, in some eyes, as Mary Anning the third. I have gathered enormous debts to Muriel Arber (Cambridge), Ben Bather (London), Liz-Anne Bawden (Lyme), Sheila Brecknell (Oxford), Geoffrey Cantor (Leeds), Kate Charlesworth (Edinburgh), Sheila Cole (Solana Beach, California), Lawrence Darton (Lewes), Marie Day (Toronto), Edward Ford (Cambridge), John Fowles (Lyme), Tom Goodhue (New York), Barbara Lambert (Concord), Wolfhart Langer (Bonn), Martin Levitt (Philadelphia), Stella Pierce (Bath), Mike Taylor (Edinburgh), John Thackray and Joy Whitby (London) for their kind help. Brian Fender’s news provided final inspiration to ‘take up my pen’ here at Keele. Funds provided by the Royal Society of London and the Friends of Lyme Regis Museum have made the *hunting* possible.

1 W. E. Washburn, ‘Manuscripts and manufacts’, *American Archivist* (1964), 27, 245–50, on 247.

2 *The Dictionary of National Biography*, 22 vols., London, 1885–1900.

3 *The British Museum General Catalogue of Printed Books*, 263 vols., London, 1965–66, v, 774.

4 C. Matthew, ‘The *New Dictionary of National Biography*’, *History Today* (1993), 43, 10–13, on 12.

5 Her only publication was an extract of a letter to E. Charlesworth which he then published, in his *Magazine of Natural History* (1839), new series 3, 605.

6 H. A. Forde, *The Heroine of Lyme Regis – The Story of Mary Anning, the Celebrated Geologist*, London: Wells Gardner, Darton and Co. Ltd, [1925].

On the other hand Mary Anning does not appear in the (United States) *National Union Catalog of pre-1956 Imprints*,<sup>7</sup> suggesting first, that the above book is rare and that secondly, she was of no interest to North American readers. Yet paradoxically the epithet, ‘the greatest fossilist the world ever knew’ in my title, comes from a North American manuscript source, and seems to be an annotation made there.<sup>8</sup>

#### MARY ANNING (1799–1847), WHAT DID SHE DO? A BRIEF BIOGRAPHY

Her story starts with her father Richard Anning (c. 1766–1810) from a family of dissenters, originating, I feel sure, from Colyton in Devon.<sup>9</sup> By 1793 Richard Anning had been attracted to the newly emerging, but still small, sea-bathing resort of Lyme Regis in nearby Dorset, where his skills as cabinet maker and carpenter could be put to good use. On 8 August 1793 he married at Blandford, Mary Moore of Blandford.<sup>10</sup> This union immediately created a first Mary Anning (c. 1764–1842), whom I shall hereafter call Molly to avoid confusion. This couple had perhaps as many as ten children, some of whose births and baptisms are recorded in the Registers of the Congregational chapel at Lyme<sup>11</sup> and those of the Parish Church there.<sup>12</sup> Only two of these children reached maturity, such was infant mortality in a then unhealthy Dorset. The eldest was Joseph Anning (1796–1849) and the famous, third, Mary Anning was the other (hereafter Mary), who was born on 21 May 1799. To complicate matters she had been named after an elder sister, a second Mary (c. 1794–1798), who had just perished in a house fire at Lyme. News of this Christmas-time tragedy proved too sensitive for the local newspapers and was only reported a considerable distance away in Bath.<sup>13</sup> So there were three Mary Annings, even of Lyme Regis, only the last of whom need really concern us, but the previously forgotten first one has certainly been conflated with the last in history.

To add to the drama of being named after a burnt-to-death sister, Mary Anning was to achieve real local notoriety whilst still one year old. On 19 August 1800 a troop of horsemen was giving a display in the Rack Field just above her home in Lyme. In torrential rain a group of four found shelter under an elm tree: a grown woman Elizabeth Haskings, two children Fanny Fowler and Martha Drower and Mary aged 14 months.<sup>14</sup> The tree was struck by lightning and Mary was the only survivor, being revived when placed in warm water. With these two juvenile crises, Mary Anning’s curiosity was ensured and because of the lightning strike, it was even noticed, with twenty years’ hindsight, that Mary ‘from that time, from a dull child, became very intelligent’.<sup>15</sup>

7 *The National Union Catalog pre-1956 Imprints*, 754 vols., London, 1968–81.

8 This annotation is on an undated letter from Mary Anning to one of the Misses Philpot of Lyme, in the collections of the American Philosophical Society, Philadelphia.

9 Details will hopefully appear in my forthcoming biography.

10 H. S. Torrens, ‘Mary Anning’s ancestry’, *Devon and Cornwall Notes and Queries* (1981), 34, 341.

11 Public Record Office, London, RG 4/462.

12 Preserved in the Dorset County Record Office, Dorchester.

13 *Bath Chronicle*, 27 December 1798, 3.

14 W. D. Lang, ‘Mary Anning’s escape from lightning’, *Proceedings of the Dorset Natural History and Archaeological Society* (1959), 80, 91–3.

15 G. Roberts, *The History of Lyme-Regis*, Sherborne, 1823, 128.

Richard was an occasional fossil collector, selling them as curios to the seaside visitors now coming to Lyme Regis. The extent of his involvement is made clear in a letter written in July 1810 by one of the earliest gentlemanly collectors to come to Lyme, James Johnson (1764–1844) of Bristol, to another pioneer in the field of palaeontology, William Cunnington (1754–1810). This noted:

it is some years since I was a resident at Charmouth... there is a person at Lyme who collects for sale by the name of Anning, a cabinet maker and I believe as men are, may be depended upon, I would advise you calling upon him at Lyme... then as early as you can spare, you should walk to Charmouth and ask a confounded rogue of the name of Lock [William Lock (c. 1739–1814)] to call upon you... upon first sight give him a Grog or a Pint, this will buy him to your interest and all crocodiles he may meet with will most assuredly be offered you first.<sup>16</sup>

But Richard died a few months later, in November, of the combined effects of having fallen over a cliff on his way to Charmouth and of consumption, aged only 44. This left his family unprovided for, the fossil treasures of Lyme Regis, about which he was clearly well informed, still undescribed, but his children well instructed in how to collect fossils.

The remarkable ‘first’ fossil discovery, which was later to make Mary Anning’s name, was made under these circumstances, at a date variously given between 1809 and 1811 and at any age between 10 and 12 years old. This was Mary’s supposed finding of the ‘first *Ichthyosaurus*’. The truth is complicated, but clearly it was not the first such ‘crocodile’ to have been found, even at Lyme Regis, as Johnson’s letter makes quite plain. In addition, according to a well-informed source, Mary’s brother Joseph had been the first to find the actual specimen in question, below Black Ven in 1811. It was Mary who located the remainder of the skeleton nearly twelve months later in 1812.<sup>17</sup> This specimen was merely the first to come to the attention of the gentlemanly scientists in London, one of whom described the specimen and illustrated it with four plates including the skull in 1814<sup>18</sup> but who then failed, thereby starting a long tradition, to note any information about who had actually ‘collected’ it. Earlier specimens had in any case been found at Weston, near Bath, in 1804–05<sup>19</sup> and in Warwickshire. The latter was even illustrated in 1811.<sup>20</sup> In Germany other specimens had been found as early as the middle of the eighteenth century.<sup>21</sup>

The death of Richard Anning left the family £120 in debt and the Annings, consisting of mother and two children, in financial crisis. By 1811 they were on parish relief from the Overseers of the Parish Poor, which lasted until at least 1816.<sup>22</sup> This predicament will have no doubt helped those later wishing to embroider the already mythic story of Mary’s miraculous, and miraculously timed, discovery of the first *Ichthyosaurus*-to-be. After the

16 Cunnington MSS at Wiltshire Archaeological Society Library, Devizes.

17 S. R. Howe, T. Sharpe and H. S. Torrens, *Ichthyosaurs: A History of Fossil ‘Sea-dragons’*, Cardiff, 1981, 12.

18 Sir E. Home, ‘Some account of the fossil remains of an animal...’, *Philosophical Transactions of the Royal Society* (1814), 104, 571–7 and plates 17–20.

19 Howe *et al.*, *op. cit.* (17), 9.

20 J. Brooks, ‘Remarks on fossil remains’, *The Medical and Physical Journal* (1811), 25, 97–101 and plate.

21 K. D. Adam, ‘Ichthyosaurier aus dem schwäbischen Jura. Ein Beitrag zur Forschungsgeschichte’, in *Das Naturkundemuseum braucht unsere Hilfe. Katalog zur Ausstellung in der Girokasse... Stuttgart, 8 Februar bis 5 März 1971*, Stuttgart, 1971, 12–16.

22 Dorset County Record Office, PE/LR OV 6.

announcement of its discovery in the local press, the specimen was sold, for £23, to the Lord of the Manor, a keen local fossil collector called Henry Hoste Henley (1766–1833), who was a subscriber to William Smith's famous *Geological Map* in 1815. It was Henley who then passed the fossil to William Bullock (1773–1849) for exhibition in his London Museum of Natural History.<sup>23</sup> Bullock's collection was sold in 1819 when the British Museum secured the remains of this historic object for £47 5s.<sup>24</sup> Here it aroused great interest as a denizen of the new world that the embryonic science of palaeontology was beginning to reveal. The skull survives in the Natural History Museum, London (Reg. no. R 1158) but it still lacks, in 1995, any official acknowledgement or label giving its origins or early history.

The decade 1810–20, in fact, is the least well known of the Anning story, which is both a pity and perhaps inevitable, as it was the decade in which the family were establishing their reputation as fossil 'hunters', with the mother and the two children both involved, at least when Joseph could be spared from his upholstery apprenticeship. In 1817 we first hear of the comparable fossil 'gathering' activities of the Philpot family of three maiden sisters who had arrived at Lyme in the previous decade and started to gather the fossils of this by now famous coast.<sup>25</sup> The extent to which the Philpots were both 'hunters' and 'gatherers' of the fossils they hoarded remains to be established, but the importance of their fossil collection now in Oxford University Museum is undeniable, as is the importance of their legacy to the town of Lyme Regis with its fine and newly restored Philpot Museum.

The new fish-lizard *Ichthyosaurus* was named in 1817, clearly on the basis of the Joseph and Mary Anning specimen.<sup>26</sup> In 1818 another rather mysterious fossil 'gatherer' appeared at Lyme for the first time. This was the Life Guards Officer Lt.-Col. Thomas James Birch (1768–1829), who was spending his half-pay pension touring the West Country collecting fossils. One of the most characteristic fossil ammonites of Lyme is happily now named after him. Birch had acquired the most complete 'crocodile' that had yet been found at Lyme by September 1818, and it was this specimen that revealed the complete anatomy of the new animal *and* the inappropriateness of the name *Proteosaurus* that Everard Home was still hoping to give it.<sup>27</sup>

It was this hunt for the truth behind the anatomy of these early specimens of *Ichthyosaurus*, a hunt that lasted nearly a decade, which is the, often still misunderstood, process that George Roberts, Lyme's fine first historian, likened to the Siege of Troy. Roberts' well-informed book, in naming Mary as the equivalent Helen,<sup>28</sup> consequently presents one of the earliest instances of myth-making to involve Mary Anning, a point to which I shall subsequently return.

23 E. P. Alexander, 'William Bullock: little-remembered museologist and showman', *Curator* (1985), 28, 117–47.

24 *Sale Catalogue of the Bullock Museum 1819*, facsimile reprint, London: Harmer Johnson and John Hewett, 1979, ninth day, 63, lot 100\*.

25 J. M. Edmonds, 'The fossil collection of the Misses Philpot of Lyme Regis', *Proceedings of the Dorset Natural History and Archaeological Society* (1978), 98, 43–53.

26 C. Koenig, *Synopsis of the Contents of the British Museum*, 11th edn, London, 1817, 54.

27 H. S. Torrens, 'Colonel Birch (c. 1768–1829)', *Newsletter of the Geological Curators Group* (1979), 2, 405–12 and *The Geological Curator* (1980), 2, 561–2.

28 G. Roberts, *The History and Antiquities of the Borough of Lyme Regis*, London, 1834, 290.

But Birch was, above all, a philanthropist, as the letter he wrote in March 1820 from Bath to the Sussex fossil gatherer Gideon Mantell (1790–1852) shows:

I have not forgotten my promise to select for you some fine things from the blue lias [the rock in which the Lyme fossils occur] – I cannot however, perform it yet as I have great occasion for every individual specimen I can muster. The fact is that I am going to sell my collection for the benefit of the poor woman [Molly] and her son [Joseph] and daughter [Mary] at Lyme who have in truth found almost *all* the fine things, which have been submitted to scientific investigation: when I went to Charmouth and Lyme last summer [1819] I found these people in considerable difficulty – on the act of selling their furniture to pay their rent – in consequence of their not having found one good fossil for near a twelvemonth. I may never again possess what I am about to part with; yet in doing it I shall have the satisfaction of knowing that the money will be well applied, the sale is to be at Bullock's in Piccadilly the middle of April.<sup>29</sup>

In fact the sale took place in May 1820<sup>30</sup> and drew a record crowd, with bidders coming from all over Europe. It provided high-profile publicity for the Annings. Some of the best lots went to the Museum of the Royal College of Surgeons in London, like lot 102, the Anning/Birch ichthyosaur, which was sold for £100. A number of specimens also went from this sale to the French anatomist Georges Cuvier (1769–1832) but these have been confused by the historical misdating of some vital evidence.<sup>31</sup>

More important for the Annings, the sale raised over £400.<sup>32</sup> But Birch's philanthropic gesture clearly caused some fascinating rumours. On 20 August 1820 George Cumberland (1754–1848), the poet and painter William Blake's Bristol friend and a major fossil collector who was himself grappling with the problems of his nymphomaniac daughter, noted that 'Mrs Hanning [Dorset dialect here rendered through Bristol ears] is the dealer at Lyme. Col. Birch is generally at Charmouth (they say *Miss Anning attends him* [underlining original]).<sup>33</sup> He was 52, she was 21. The first evidence of Mary's independent part in the Lyme fossil business is her signature on a receipt for a specimen sold to Adam Sedgwick (1785–1873) in Cambridge, and dated October 1820.<sup>34</sup>

On 6 April 1821 William Conybeare (1787–1857) and Henry De la Beche (1796–1855) described a new fossil animal to the Geological Society in London, which had been discovered near Bristol and at Lyme. This description was based on fragments and a headless skeleton from Birch's Lyme collection (which must have been another Anning discovery) and so involved an animal that was particularly difficult to interpret. This equally extinct animal was thought to be closer to the crocodile than *Ichthyosaurus* but it had similar paddles. It was named *Plesiosaurus*, the near-lizard, but once again no mention

29 Mantell MSS, Alexander Turnbull Library, Wellington, New Zealand.

30 *A Catalogue of... Organised Fossils... the Genuine Property of Colonel Birch, which will be Sold by Auction by Mr Bullock 15 May 1820*, London, 1820. The Anning family copy, signed 'Joseph Anning May 12 1820', is in the Palaeontology Library, Natural History Museum, London.

31 Like the letter wrongly dated 20 July 1820 by W. A. S. Sarjeant and J. B. Delair, 'An Irish naturalist in Cuvier's laboratory. The letters of Joseph Pentland 1820–1832', *Bulletin of the British Museum (Natural History) Historical Series* (1980), 6, 245–319, especially 257–61. The correct date is 1821, after the Birch sale.

32 Torrens, op. cit. (27), 407.

33 British Library, Add MSS 36520.

34 Cambridge University Library, Sedgwick Museum archives; see D. Price, 'Mary Anning specimens in the Sedgwick Museum, Cambridge', *The Geological Curator* (1986), 4, 319–24.

was made of the ‘hunters’ who had discovered the fragmented specimens brought to the attention of scientists.<sup>35</sup>

1821 seems to have been an important year for the Annings as on 11 July 1821 De la Beche reported to the Keeper at the British Museum that ‘the Annings who search for fossils here had found a very beautiful small skeleton of *Ichthyosaurus communis* exceeding in preservation any yet found, I immediately obtained the refusal of it for the British Museum’. The skeleton, found in May 1821, was only 5 feet long and the price asked £100.<sup>36</sup> But then, as so often since, state parsimony ruled and another cheaper and *much* less complete specimen was instead purchased from the Annings, for £50, by the British Museum. This transaction, in due course, caused problems both for Molly Anning, still running the family fossil business, but who had not been paid by September 1821, and for the Museum, whose Keeper soon discovered how much less exciting this cheaper specimen was than the one he had first hoped to purchase. Molly Anning was now forced to write to him:

I am very sorry to hear that the fossil is considered dear, the same sum was offered for it before Mr Buckland saw it... As I am a widow woman and my chief dependence for supporting my family being by the sale of fossils, I hope you will not be offended by my wishing to receive the money for the last fossil as I assure you, Sir, I stand much in need of it.<sup>37</sup>

This document supports my first serious piece of revisionism here, namely that it was as much Molly who was supporting Mary at this stage of the fossil-hunting business, as it was Mary supporting Molly. This last view has been the only one allowed by history thus far. The change-over in the running of the Anning business to the younger generation was not to happen for some time. Joseph Anning, too, was active in the Anning fossil business, at least until 1825, when he seems to have become a full-time upholsterer. Only then did Mary take up the dominant role in the business, having already been its sharpest-eyed fossil-seeker for some years.

The 5 feet long, better specimen of *Ichthyosaurus* was instead eventually sold to a consortium of nine Bristol purchasers, who presented it as an 1823 New Year’s gift to become a centrepiece exhibition specimen for the new Bristol Institution on its opening early that year. Again, the names of the donors – the consortium – are carefully recorded but not, at least in the Institution’s own records, the name of its real discoverer. George Cumberland, however, revealed her identity in a local newspaper. The specimen, he reported, was:

the *very finest specimen of a Fossil Ichthyosaurus ever found in Europe*, a specimen that sets at rest all further investigation... of that remarkable aquatic animal, which we owe intirely to the persevering industry of a young female fossilist, of the name of Hanning [*sic*] of Lyme in Dorsetshire, and her dangerous employment.

Cumberland expanded on the danger of fossiling in a footnote:

35 H. De la Beche and W. D. Conybeare, ‘Notice of the discovery of a new fossil animal...’, *Transactions of the Geological Society of London* (1821), 5, 559–94 and plates 40–2.

36 British Museum archives, letter bound in C 1467 but wrongly dated 1820.

37 W. D. I. Rolfe, A. C. Milner and F. G. Hay, ‘The price of fossils’, *Special Papers in Palaeontology* (1988), 40, 139–71, on 149.

This persevering female has for years gone daily in search of fossil remains of importance at every tide, for many miles under the hanging cliffs at Lyme, whose fallen masses are her immediate object, as they alone contain these valuable relics of a former world, which must be snatched at the moment of their fall, at the continual risk of being crushed by the half suspended fragments they leave behind, or be left to be destroyed by the returning tide: – to her exertions we owe nearly *all* the fine specimens of Ichthyosauri of the great collections; and, to shew that it is one which rewards industry a single specimen of her's, *far inferior to this placed in the Institution* was lately sold to the College of Surgeons [as a result of the publicity of the Birch sale] for the sum of One Hundred Pounds.<sup>38</sup>

This historic Bristol specimen (Reg. no. Cb 2465) comprised the first geological donation to the Bristol Institution but sadly did not survive the Second World War.<sup>39</sup>

Later, at the end of the same significant year, on the evening of the 10 December 1823, Mary Anning:

the well known fossilist...found...immediately below the celebrated Black Ven Cliff, some remains, which were removed on that night and the succeeding morning, to undergo an examination, the result of which is, that this specimen appears to differ widely from any which have been before discovered at Lyme... while it approaches nearly to the structure of the *Turtle*. The whole osteology has not yet been satisfactorily disclosed, owing to its very recent removal.

The announcement of this wonderful new discovery ended:

it will be for the great geologists to determine by what term this creature is to be known. The great Cuvier will be informed when the bones are completely disclosed, but probably it will be christened at Oxford or London, after an account has been accurately furnished. No doubt the Directors of the British or Bristol Museums will be anxious to possess this relic of the 'great Herculaneum'.<sup>40</sup>

This, Mary's second major discovery, was her greatest in the eyes of her scientific contemporaries. It was of a strange 9 feet long animal with a small head, only 4–5 inches long like a turtle's but an inordinately long neck, which De la Beche at least thought must have been an adaptation for lakes and rivers not the sea. The animal was described to the largest audience yet at a Geological Society meeting on 20 February 1824, a red letter day for British palaeontology. Conybeare recognized that the specimen was a virtually complete example of the little-known *Plesiosaurus*.<sup>41</sup> As well as this event, William Buckland (1784–1856), who had clearly been expected in Dorset to describe this *Plesiosaurus*, also read his famous paper, on the first dinosaur-to-be, the 'Notice on the *Megalosaurus* or great fossil lizard of Stonesfield'.<sup>42</sup> The complete Anning *Plesiosaurus* is shown here, as Figure 1, in Thomas Webster's fine, and here much reduced, drawing for Conybeare's paper.

The Anning plesiosaur was very soon purchased, after a squabble about who should own it, by the then profligate Richard Grenville, first Duke of Buckingham (1776–1839),

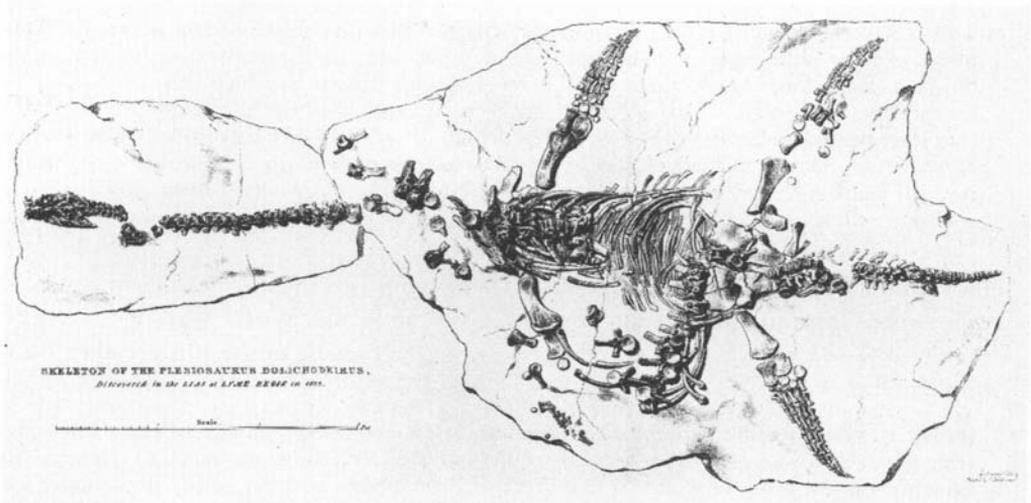
38 *Bristol Mirror*, 11 January 1823, 4.

39 M. A. Taylor and H. S. Torrens, 'Saleswoman to a new science', *Proceedings of the Dorset Natural History and Archaeological Society* (1987), 108, 135–48, on 139, and M. A. Taylor, 'The plesiosaur's birthplace', *Zoological Journal of the Linnean Society* (1994), 112, 179–96.

40 *Western Flying Post*, 15 December 1823.

41 W. Conybeare, 'On the discovery of an almost perfect skeleton of the *Plesiosaurus*', *Transactions of the Geological Society of London* (1824), 1, 381–9 and plates 48–9.

42 W. Buckland, 'Notice on the *Megalosaurus* or great fossil lizard of Stonesfield', *Transactions of the Geological Society of London* (1824), 1, 390–6 and plates 40–4.



**Figure 1.** Mary Anning's complete *Plesiosaurus*. Lithograph by Thomas Webster. From *Transactions of the Geological Society* (1824), 1, plate 48.

probably for £100 according to the most informed sources, though eight other sources give different figures of between £110 and £200 (demonstrating the problems facing the historian of money!).<sup>43</sup> Again it was the 'gatherer' Duke whom Conybeare carefully named and patronized in his paper while the 'hunter' Anning was again nowhere named. The mature judgement on this animal was given by Buckland, following Cuvier, thus:

The discovery of this genus forms one of the most important additions that Geology has made to comparative anatomy. It is of the *Plesiosaurus* that Cuvier asserts the structure to have been ... altogether the most monstrous, that have been yet found amid the ruins of a former world. To the head of a Lizard, it united the teeth of a Crocodile; a neck of enormous length, resembling the body of a Serpent; a trunk and tail having the proportions of an ordinary quadruped, the ribs of a Chameleon, and the paddles of a Whale.<sup>44</sup>

Nevertheless, the short period between the discovery and the announcement of this remarkable fossil hides a short, but venomous, debate about whether this 'most monstrous' animal was genuine or a 'forgery' foisted on an unsuspecting metropolitan science by provincial schemers. Cuvier's first opinion, on the basis of drawings sent to him, was that it was forged. The discovery that it was not, immediately and finally established the veracity of the Annings as dealers.<sup>45</sup> It also established 23 year old Mary as a curiosity in her own right. People now came to Lyme to visit *her*.

Two visitors to Lyme in 1824 provide nicely polarized views, since one was a man and the other a woman. The mineralogist Thomas Allan (1777–1833) from Edinburgh noted, on 25 June 1824, that 'Mary Anning's knowledge of the subject is quite surprising – she is perfectly acquainted with the anatomy of her subjects, and her account of her disputes with

<sup>43</sup> Taylor and Torrens, op. cit. (39), 143.

<sup>44</sup> W. Buckland, *Geology and Mineralogy Considered with Reference to Natural Theology*, 2 vols., London, 1836, i, 202.

<sup>45</sup> M. J. S. Rudwick, *The Great Devonian Controversy*, Chicago, 1985, 425, claims that 'Mary's finds were accepted without question' but this was clearly true only after 1824.

Buckland, whose anatomical science she holds in great contempt, was quite amusing'.<sup>46</sup> He was reporting on a woman's view of masculine science. The woman was Lady Harriet Silvester (1753–1843), widow of a former Recorder of the City of London. She visited Mary on 17 September 1824 and recorded in her diary the 'very extraordinary history of this young woman'. This diary entry provides one of the first known descriptions of Mary's early years from which it is clear that Mary was now starting to act as her own historian to such visitors, who then recorded that history in their diaries or elsewhere. A particularly fine example of this personal history-making comes from the scientific lecturer and writer John Murray (c. 1786–1851) who was to visit Mary in the next decade.<sup>47</sup>

Lady Silvester's diary continued:

the extraordinary thing in this young woman is that she has made herself so thoroughly acquainted with the science that the moment she finds any bones she knows to what tribe they belong. She fixes the bones on a frame with cement and then makes drawings and has them engraved... It is certainly a wonderful instance of divine favour – that this poor, ignorant girl should be so blessed, for by reading and application she has arrived to that degree of knowledge as to be in the habit of writing and talking with professors and other clever men on the subject, and they all acknowledge that she understands more of the science than anyone else in this kingdom.<sup>48</sup>

She was patently describing a woman's penetration, across a very thick series of social strata, into masculine science.

Visitors also came from abroad. One of the more far-flung was the American geologist George William Featherstonhaugh (1780–1866) who arrived at Lyme in October 1827, to collect fossils for the new New York Lyceum of Natural History. He met and purchased many specimens from Mary whom he called 'a very clever, funny Creature'.<sup>49</sup> Unfortunately, the specimens that he took back to New York have not survived.

1828 was another wonderful year for Mary Anning when she made her first recorded, but significant, discovery in invertebrate palaeontology. This was the 'anterior sheath and ink bag of *Belemnosepia*' that Buckland announced in 1829<sup>50</sup> and figured in 1836.<sup>51</sup> The discovery that such fossil sepia could survive into the fossil record also gave an unexpected boost to the Lyme tourist trade, as drawings of the new Lyme fossils were soon made in this fossil ink, for sale there. They appealed by providing a peculiarly contemporary representation of such fossils.<sup>52</sup>

The same year saw Mary heavily involved with Buckland's exciting work on the new 'science' of coprology, the importance of which, for Oxford students, was so memorably rendered into poetry by John Shute Duncan (1769–1844):

46 Notebook of Thomas Allan, 'Travels in England 1813–1824', Palaeontology Library, Natural History Museum, London.

47 J. Murray, 'The late Miss Mary Anning', *Mining Journal*, 11 December 1847, 591.

48 E. Welch, 'Lady Silvester's tour through Devonshire in 1824', *Devon and Cornwall Notes and Queries* (1967), 30, 313 and (1973), 32, 265–6.

49 E.B. and D.S. Berkeley, *George William Featherstonhaugh, the First US Government Geologist*, Tuscaloosa, 1988, 66.

50 W. Buckland, 'Fossil sepia', *London and Edinburgh Philosophical Magazine* (1829), 5, 388.

51 Buckland, op. cit. (44), ii, plate 44", fig. 1.

52 See R. W. Purcell and S. J. Gould, *Finders, Keepers: Eight Collectors*. With Photographs by Rosamond W. Purcell, Text by Stephen J. Gould, London, 1992, 103, fig. 72.

Approach, approach, ingenuous youth,  
And learn this fundamental truth  
The noble science of Geology  
is bottomed firmly on Coprology.<sup>53</sup>

Mary had already identified such coprolites as ‘faeces’ as early as 1824<sup>54</sup> and she played a vital role in finding specimens showing the association of such coprolites with the fossil animals from which they derived and in particular in finding specimens that showed coprolites preserved inside the fossils concerned.<sup>55</sup>

December 1828 saw the discovery of Mary’s next – third – major find, the first British example of a fossil flying reptile. This, which clearly caught the *public* imagination even more than the complete plesiosaur had captured the attention of London science, was described as *Pterodactylus macronyx* by Buckland in 1829, when he now, at last, identified her as its discoverer. Buckland’s powers of description were certainly equal to the novelty of the animal:

[It] somewhat resembled our modern bats and vampyres, but had its beak elongated like the bill of a woodcock, and armed with teeth like the snout of a crocodile; its vertebrae, ribs, pelvis, legs, and feet, resembled those of a lizard; its three anterior fingers terminated in long hooked claws like that on the fore-finger of a bat; and over its body was a covering... of scaly armour like that of an Iguana; in short, a monster resembling nothing that has ever been seen or heard-of upon earth, excepting the dragons of romance and heraldry.<sup>56</sup>

Most of the specimen survives in the Natural History Museum, London (Reg. no. R 1034), if only by the skin of its separated teeth, since Buckland had to purchase it himself to save it for a strangely uninterested British Museum. But its supposed teeth, over which there had been much debate, later went, as part of the Philpot collection, to Oxford (OUM J 28251). This discovery soon inspired, in 1829, a very sombre painting by Rev. George Ernest Howman, later Little (c. 1797–1878), of an enormous dragon or basilisk spreading its wings over a storm-tossed, ship-filled and rocky Lyme seascape. This was acquired by Lyme Regis Museum in 1983.<sup>57</sup> Mary, meanwhile, became in due time, St Georgina of Lyme Regis, having slain this mythical fossil dragon.<sup>58</sup>

In February or March 1829 Mary found her second complete *Plesiosaurus* and an international battle started over who was to acquire it. It was more perfect than the first and was initially expected to go to Philadelphia.<sup>59</sup> Buckland, angry about the problems he had had with the Museum over the pterodactyl, stepped in and demanded that the British Museum buy it, which they finally did for 100 guineas.<sup>60</sup> It survives in the Natural History Museum, London (Ref. no. R 1313). It is interesting to see how English geologists now

53 N. A. Rupke, *The Great Chain of History*, Oxford, 1983, 142.

54 Berkeley and Berkeley, op. cit. (49), 82–3.

55 W. Buckland, ‘On the discovery of coprolites, or fossil faeces in the lias at Lyme Regis...’, *Transactions of the Geological Society of London* (1829), 2nd series 3, 223–36, on 229.

56 W. Buckland, ‘On the discovery of a new species of pterodactyle in the lias at Lyme Regis’, *Transactions of the Geological Society of London* (1829), 2nd series 3, 217–22.

57 J. Fowles, in *Lyme Regis Museum Curator’s Report for 1983*, Lyme, 1984, 27.

58 F. Bickley, *Where Dorset Meets Devon*, London, 1911, 55.

59 *Treuman’s Exeter Flying Post*, 7 May 1829, 3.

60 *Bath and Cheltenham Gazette*, 28 April 1829, 3, and Buckland to Featherstonhaugh 23 March 1829, Sedgwick MSS, Cambridge University Library, Add 7652 II LL 21 C.

made sure it was safely preserved in the national museum of the country in which it was found.<sup>61</sup>

Between 7 and 12 July 1829 Mary made her first, and probably only visit to London, where she stayed with the Murchisons, Mrs Charlotte Murchison (née Hugonin 1789–1869), the wife of geologist Roderick Murchison (1792–1871), having become a firm friend. The diary of Mary's visit to London survives in the Owen archive (having escaped from the Anning archive).<sup>62</sup> She records her delight at visiting the Geological Society and the British Museum, to whose collections and debates she had already contributed so much.

December 1829 saw her next – fourth – major discovery at Lyme, the remarkable fossil fish *Squaloraja*, which was seen as another unique transition, this time between sharks and rays, and yet another link of support for the long-lived Chain of Being debate.<sup>63</sup> The majority of this fish was purchased for the Bristol Institution, for £40,<sup>64</sup> but it does not survive. The tail section again escaped, as part of the Philpot collection, to Oxford (Reg. no. J 3097), where it does survive.

By May 1830, Henry De la Beche (1796–1855) had produced his famous illustration *Duria antiquior*, a reconstruction of the wonderful, if blood-thirsty, world of Ancient Dorsetshire, which Mary had done so much to uncover and bring to the attention of scientists. New evidence shows that De la Beche's cartoon had been both inspired by Mary's work and for her financial benefit, since all the financial proceeds from his first version were to go to her.<sup>65</sup> The inspiration that this first version provided for the many subsequent versions and the later plagiarists or imitators has been revealed by Martin Rudwick.<sup>66</sup>

December 1830 soon brought Mary further financial rewards since she then discovered her last – fifth – major discovery, the *Plesiosaurus macrocephalus*, named by Buckland only in 1836 and which Richard Owen (1804–92) eventually described in 1840.<sup>67</sup> Figure 2 shows George Scharf's engraving of it from Owen's paper. This specimen was purchased by William Willoughby, then Lord Cole, (1807–86) in 1831 for the then remarkable sum of 200 guineas. He also purchased the most perfect *Ichthyosaurus*, which she had found the same year, a year that saw her fossil prices reach their acme. The latter specimen passed to the Oxford University Museum while the former *Plesiosaurus* ended up at the Natural History Museum (Reg. no. R 1336).

Meanwhile the flood of visitors coming to Lyme to see the real curiosity – Mary herself – continued. On 27 June 1832 the misogynist (if only to judge by what happened to his

61 The supposed 'first stirrings of the movement to retain objects where they are found', claimed for the Melbourne meteorites in the 1860s, by A. M. Lucas *et al.*, 'Colonial pride and metropolitan expectations', *BJHS* (1994), 27, 65–87, on 82, are thirty years later than this thrust from Lyme Regis.

62 Owen MSS, Natural History Museum, London, OC 62.1/153–4.

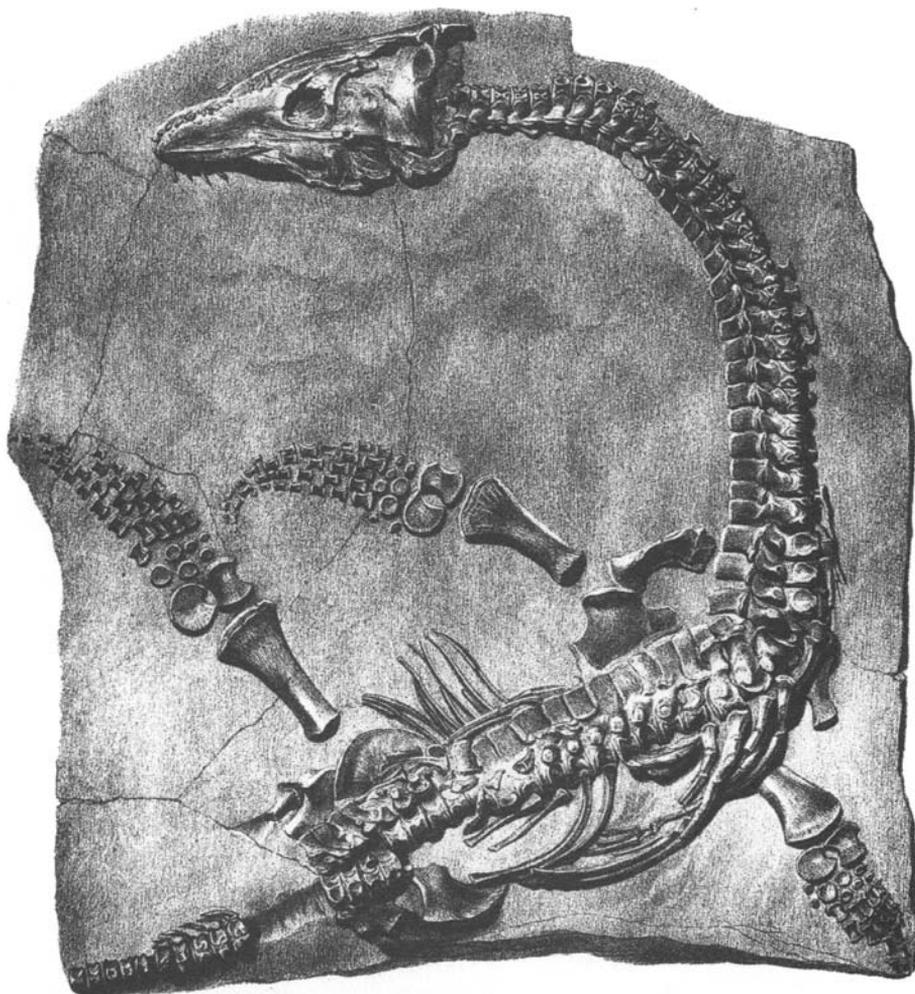
63 Taylor and Torrens, *op. cit.* (39).

64 *A Catalogue of the Celebrated and Extensive Collection of Fossils, Minerals, &c the Genuine Property of James Johnson Esq...*, Bristol, 1845, 17 (lot 364).

65 Charles Lyell to Gideon Mantell, 13 May 1830, Mantell MSS, Alexander Turnbull Library, Wellington, New Zealand.

66 M. J. S. Rudwick, *Scenes from Deep Time*, Chicago, 1992.

67 R. Owen, 'A description of a specimen of the *Plesiosaurus macrocephalus*, Conybeare in the collection of Viscount Cole', *Transactions of the Geological Society of London* (1840), 2nd series 5, 515–35 and plates 43–5.



**Figure 2.** *Plesiosaurus macrocephalus*, named by Buckland in 1836 and later described by Richard Owen. Lithograph by George Scharf. From *Transactions of the Geological Society* (1840), 5, plate 43.

wife) Gideon Mantell, ‘gatherer’ of the dinosaur-to-be *Iguanodon*, visited Lyme and reported that he had:

sallied out in quest of Mary Anning, the geological Lioness... We found her in a little dirty shop, with hundreds of specimens piled around her in the greatest disorder. She, the presiding Deity, [proved] a prim, pedantic vinegar looking, thin female; shrewd, and rather satirical in her conversation.<sup>68</sup>

Five years later another visitor came, the German-born Ludwig Leichhardt (1813–?48), the future explorer of Australia. He wrote that he:

68 E. C. Curwen (ed.), *The Journal of Gideon Mantell... 1818–1852*, London, 1940, 108.

stayed at Lyme regis for 8 days... We had the pleasure of making the acquaintance of the Princess of palaeontology, Miss Anning. She is a strong, energetic spinster of about 28 years of age, tanned and masculine in expression. Every morning, and after every stormy sea, she goes walking and clambering about on the slopes of the Lias to see whether fossils have been brought to light by falls of rock or wave action.<sup>69</sup>

The contrast between the two descriptions shows how unobjective the historical record can be. Mantell, who seems to have disapproved of women doing the things that Mary did, was sour, while Leichhardt heartily approved. And how feminine of Mary (if only to these eyes) to be able to make Leichhardt believe she was 28, when her real age was 37! A further famous, and again foreign, visitor came on 1 July 1844 when the King of Saxony arrived. His physician recorded the visit:

we had alighted from the carriage... when we fell in with a shop in which the most remarkable petrifications and fossil remains... were exhibited in the window. We entered and found the small shop and adjoining chamber completely filled with the fossil productions of the coast... I was anxious, at all events, to write down the address, and the woman who kept the shop – for it was a woman who had devoted herself to this scientific pursuit – with a firm hand, wrote her name, ‘Mary Annins’, in my pocket-book, and added, as she returned the book into my hands, ‘I am well known throughout the whole of Europe’.<sup>70</sup>

The 1840s were a sad decade for the Annings. October 1840 had seen the last, but the first recorded, sale by Mary of three liassic ophiuroids to the British Museum.<sup>71</sup> In 1842 Molly, Mary’s mother, died and by 1845 Mary was suffering from the breast cancer which caused her death on 9 March 1847. The most complete of many tributes was by George Roberts, but it typically remained unpublished.<sup>72</sup> The affection in which she was held in the geological community is clearly revealed by the three accolades she had received in the last decade of her life. The first was when she was granted a special annuity of £25 a year in 1838, provided from £200 raised by private subscription at the 1835 British Association for the Advancement of Science meeting at Dublin, and £300 that either Buckland or Owen wheedled out of the new prime minister, William Lamb, Lord Melbourne (1779–1848).<sup>73</sup> The second was in 1846, after her diagnosis as a cancer victim, when the geologists of the Geological Society of London organized a further subscription for her.<sup>74</sup> The third accolade was her election, in July 1846, as the first Honorary Member of the new Dorset County Museum in Dorchester.<sup>75</sup>

## MARY ANNING’S TREATMENT BY HISTORIANS

Two other posthumous tributes count as history, to which we now turn. From 1823, with the discovery of the first complete *Plesiosaurus*, it is evident that Mary had often been able to act as her own historian in reporting her own view of her own history to the many

69 M. Arousseau (ed.), *The Letters of F. W. Ludwig Leichhardt*, 3 vols., Cambridge, 1968, i, 232.

70 C. G. Carus, *The King of Saxony’s Journey through England and Scotland in the year 1844*, London, 1844, 197.

71 Natural History Museum, London, Reg. nos. 14398–40.

72 [G. Roberts 1847] ‘A brief memoir of Miss Mary Anning, the celebrated fossilist’. Eyles MSS, Bristol University Library.

73 Roberts, *op. cit.* (28), copy annotated by the author and preserved in Lyme Regis Museum, opposite 290.

74 Letter from W. Buckland to Sir Walter Trevelyan, 10 October [1846], British Library, Add MSS 31026/247.

75 *Minutes of the Council of the Dorset County Museum*, 2 July 1846, Dorchester.

visitors now so intrigued to meet her. In the same year Mary ‘acquired’ her own historian in Lyme while she was still only 24. This was George Roberts (1803–60), who was born in Lyme and was four years her junior. His *History of Lyme Regis*, to which ‘Miss Mary Anning’ was a subscriber, was published in October 1823. In this she was – but still anonymously – accorded the fine tribute that ‘as a fossil-hunter, she [had already been] destined to bring to light some of the grandest relics of a primaeval world that have been discovered in any age or country’.<sup>76</sup> Of Roberts, it has been observed by another Lyme historian, that he ‘is... incomparably our finest, and Lyme will be very lucky if it ever sees his superior’.<sup>77</sup> In 1834 Roberts published an expanded version of this book (effectively a second edition), which brought her even greater fame, at the age of 35. Here Roberts also introduced his Homeric myth:

The progressive discovery of the structure of the *Ichthyosaurus* appears to have occupied about the same number of years as the siege of Troy. Miss Anning figured throughout, was in fact the Helen to the geologists. The grand specimens, those relics of a primaeval world, to be seen in the great collections in this and other countries, found at Lyme, have been discovered and extricated by our townswoman, at intervals, since 1811. A genius for discovering where the *Ichthyosauri* lie imbedded, is but a part of the gift possessed by [her]: great judgement in extracting the animals, and infinite skill and manipulation in their development, must be superadded... Miss Anning, on visiting the several great museums may exclaim, *Quae regio in terris nostri non plena laboris!*

Roberts’ notice reported in greater detail on Mary’s discoveries but strangely dealt only with the 1811–12 *Ichthyosaurus* discovery and its aftermath. For some reason, Roberts failed to notice any of Mary’s many later discoveries made up to 1834. Thus seems to have been born the strange, and to me sad, obsession with Mary’s earliest and infantile discoveries but which ignores her much more significant later discoveries. These have been much less emphasized by later writers who have relied too much on Roberts.

Yet Roberts’ final words on Mary were finely judged, as well as deserved, when he commented on Mary’s real, and twin, skills of finding *and* then developing, from their entombing matrices, those fossil specimens she had found by 1834. She was both discoverer and creator. But there was a sting in Roberts’ tail. His tribute ended ambiguously: ‘though the subject of this notice would not be disparaged by a description more strictly personal, yet such might be unpleasant’.<sup>78</sup>

After Mary’s death on 9 March 1847, she was honoured by a number of notices as one would expect of someone who had become as much a curiosity as the specimens she had sold so assiduously and carefully to the gentlemen geologists of Britain, France and America for so many years. 1848 brought an affectionate obituary notice by her old friend Henry De la Beche, by then Director of Her Majesty’s Geological Survey and President of the Geological Society of London.<sup>79</sup> This notice was impressive, if not so much by its content (though De la Beche was careful to check his facts),<sup>80</sup> as by the fact that it appeared where it did. It was published in the *Quarterly Journal of the Geological Society*,

<sup>76</sup> Roberts, op. cit. (15), 128.

<sup>77</sup> J. Fowles, *A Short History of Lyme Regis*, Wimborne, 1991, 5.

<sup>78</sup> Roberts, op. cit. (28), 290.

<sup>79</sup> H. De la Beche, Obituary notices, *Quarterly Journal of the Geological Society of London* (1848), 4, pp. xxiv–xxv.

<sup>80</sup> As the De la Beche archive in the National Museum in Cardiff reveals.



Figure 3. Mary Anning painted by William Gray, probably in 1842.

the journal of a Society that only first admitted women in 1904: this was despite her not being, and her not being capable of being, a Fellow of the Society. The notice has even been claimed as the only case of a non-Fellow having been so honoured.<sup>81</sup> It started: ‘I cannot close this notice of our losses by death without adverting to that of one, who though not placed among even the easier classes of society, but who had to earn her daily bread by her labour.’ De la Beche’s short notice did try to summarize her life’s work. It did not concentrate on her juvenile achievements alone.

<sup>81</sup> W. D. Lang, ‘Mary Anning, of Lyme, collector and vendor of fossils, 1799–1847’, *Natural History Magazine* (1936), 5, 64–81, on 80.

In February 1850 Mary was further honoured by the unveiling of a new window in the parish church at Lyme, characteristically thanking her by showing the six corporal acts of mercy being given to her townfellows. This was funded through another subscription among the Fellows of the Geological Society of London.<sup>82</sup> Two full portraits were also painted, one, probably in 1842, by William Gray (1818–fl. 1883), London-based painter and sculptor and the other a copy of this, painted posthumously in 1850 by B. J. M. Donne (1831–fl. 1928) of Lyme, who had known Mary well. The former in a black and white reproduction, is shown here (Figure 3). The original is in the Natural History Museum where it was once described as ‘one of the minor delights of that Museum’ in a *Times* leader.<sup>83</sup>

George Roberts died in 1860 but his hand can surely be seen in an essay ‘The fossil-finder of Lyme Regis’ published anonymously in 1857.<sup>84</sup> This was particularly well informed even where slightly fictionalized, particularly for example over the details of Richard Anning’s death. Roberts’ hand, or that of his ghost, can equally be seen in a similar piece published in *All the Year Round*, the journal edited by, and mostly written by, Charles Dickens, ‘Mary Anning, the fossil-finder’ in 1865.<sup>85</sup> Both placed Mary in a properly informed context. 1857 also saw another notice of Mary published by a young Lyme native, the barrister Henry Rowland Brown (c. 1838–1921), who must have known Mary in person, since his father, the local ironmonger Edward Brown, was an executor and trustee of Amelia Anning’s will of 1858.<sup>86</sup> Amelia was the widow of Mary’s only surviving brother Joseph. Brown’s notice was affectionate enough, if too reliant on Roberts. But it struck a new and sour note when it remarked that ‘the death of Mary Anning, was a serious loss to the town, as her presence attracted a large number of distinguished visitors, who able to appreciate her genius, were desirous of perambulating with her’. The town could now only regret that its best tourist attraction had gone. Lymian regret is understandable. At that time Dorset had the lowest agricultural wage of any county in England, well below the cost of keeping a man in one of the new Poor Law Workhouses. This is why Lyme recorded her death as such a loss to the town.<sup>87</sup>

In 1901 Mary was given the accolade, unusual for a working class, female, and provincial member of society, of an entry in the *DNB Supplement*.<sup>88</sup> This was by Bernard Barham Woodward (1853–1930), librarian at the British Museum (Natural History) and a close friend of Charles Davies Sherborn (1861–1942) who had dispersed the Anning archive.<sup>89</sup> Woodward again simply, but incorrectly, characterized her as ‘the discoverer of the *ichthyosaurus*’ and added insult to injury by incorrectly identifying this discovery with a much later (1832), but still Mary Anning discovered, specimen also preserved in the British Museum.<sup>90</sup>

82 Roberts, op. cit. (28), opposite 290.

83 *The Times*, 6 February 1939, 13.

84 G. Roberts, ‘The fossil-finder of Lyme Regis’, *Chambers Journal of Popular Literature* (1857), 7, 382–4.

85 Anon. [?C. Dickens], ‘Mary Anning, the fossil-finder’, *All the Year Round* (1865), 13, 60–3.

86 Dorset County Record Office, PPR/CW 1858 160/120.

87 H. R. Brown, *The Beauties of Lyme Regis*, Lyme Regis, 1857, 30.

88 *DNB*, supplement, 1901, xxii, 51–2.

89 C. D. Sherborn, ‘Bernard Barham Woodward 1853–1930’, *Naturalist*, 1 December 1930, 437–8.

90 Natural History Museum, London, Reg. no. 2003.

In 1925 appeared the single work on her listed in the *BLC* up to 1955. This, of eighteen pages, was, in effect, a moral tract by the mysterious H. A. Forde. It was entitled *The Heroine of Lyme Regis: The Story of Mary Anning the Celebrated Geologist* and carried an introduction by its publisher Frederick Joseph Harvey Darton (1878–1936)<sup>91</sup> who lived at Cerne Abbas in Dorset and had just published *The Marches of Wessex*,<sup>92</sup> in which Mary Anning also made two brief, inaccurate, appearances. Darton's firm was one with a long tradition of publishing children's books, to which he contributed a seminal survey, *Children's Books in England*, in 1932.<sup>93</sup> It must have been Darton who saw *The Heroine* through the press, years after it was written, since its author had been dead since at least 1907.<sup>94</sup> The *BLC* entry for H. A. Forde reveals that she was female and that she had at least two author sisters.

With these leads she can be revealed as Harriott Anne Forde (1834–96).<sup>95</sup> Her father was Rev. Frederick Forde (1802–81), the author of *Parentalia: Reminiscences of...fforde of fforde Grene etc.*<sup>96</sup> The printer of this 'unpublished' work in London was William Wells Gardner (1821–80), ancestor of the firm that Darton's father had taken over. Harriott's writer sisters were Eleanor Anne Bulley (1854–1928)<sup>97</sup> and Georgiana Mary Forde (1849–1923). All three appear in *BLC* as authors of moral tracts published by the Society for the Promotion of Christian Knowledge, the Society for the Propagation of the Gospel and the Christian Knowledge Society, among others.<sup>98</sup> As one might expect from this background, the tale told in *The Heroine* is a moral one of 'Victorian values' and Samuel Smiles' type 'self help' in Lyme Regis. Later writers, in ignorance of the thirty years which had passed between composition and publication, the special circumstances under which this, the first tract on Mary, was written *and* the special audience to which it must have been addressed, have used it as a source for some of the over-romantic nonsense written on Mary ever since. Once again the main focus of the book is the 'child life' of its subject. Only five pages deal with the adult. Some time after publication the book was castigated for its lack of footnotes and references.<sup>99</sup>

In 1931 a new angle on Mary appeared in the English newspaper *The Morning Post*.<sup>100</sup> This piece, by Marigold Watney, broke new ground by calling Mary 'the First Woman Geologist'. It started enthusiastically, 'women have helped to make history for various reasons, sometimes merely by their beauty, wit or wickedness', but otherwise it gave a balanced view of a complete life in a short piece which relied mostly on Roberts. It inspired

91 *Burke's Landed Gentry*, 18th edn, 3 vols., London, 1972, iii, 236.

92 F. J. H. Darton, *The Marches of Wessex*, London, 1922.

93 F. J. H. Darton, *Children's Books in England*, Cambridge, 1932.

94 Wells Gardner, Darton and Co.'s catalogue, bound into H. Avery, *With Wellington at Waterloo*, 1907, notes that H. A. Forde was already dead.

95 *The Times*, 13 August 1896, 1.

96 F. Forde, *Parentalia: Reminiscences of...fforde of fforde Grene etc*, London, 1878 (copy in Boston Public Library, USA).

97 *The Times*, 30 July 1928, 1.

98 A pedigree of the Forde family appears in G. Ormerod, *The History of the County...of Cheshire*, 2nd edn, 3 vols., London, 1882, iii, 101–2.

99 W. D. Lang, 'Mary Anning (1799–1847) and the pioneer geologists of Lyme', *Proceedings of the Dorset Natural History and Archaeological Society* (1939), 60, 142–64, on 144.

100 M. Watney, *The Morning Post*, 4 February 1931, 8.

another, anonymous, Harmsworth journalist who soon published one of the most remarkably inaccurate images ever of Mary ‘unearthing the prehistoric’. This article described ‘Mary Anning, a young dealer in fossils, astounded at her discovery of what proved to be the remains of an *Ichthyosaurus*’ as part of a short piece called ‘A country girl meets an *ichthyosaurus*’.<sup>101</sup> Charles Edmund Brock’s (1870–1938) unique picture, showing this ‘simple country girl’ finding the ‘monster, 30 feet long with 6-foot jaws’, had been earlier used from 1925 to illustrate ‘the World in the Jurassic Age’ in the extraordinarily popular *Children’s Encyclopaedia*, which was edited by Arthur Mee (1875–1943)<sup>102</sup> and had originated in 1908. It is shown here with Mee’s suitably improved caption (Figure 4). Needless to say, the specimen in the picture is not the one actually discovered by the Annings.

In 1935 William Dickson Lang (1878–1966) published the first of his many short papers on Mary. Lang was a scientist: a stratigrapher and palaeontologist who had come to love West Dorset after his first visit there in 1898. He became Keeper of Geology at the British Museum (Natural History) in 1928.<sup>103</sup> During his scientific work in Dorset he became aware of both the originality and importance of all Mary Anning’s discoveries and set about gathering as much data as possible. Between 1935 and 1963 he published ten papers; the last on ‘Mary Anning and a very small boy’ in 1963.<sup>104</sup> Lang’s work was vital in gathering whatever was then available about Mary, largely in the days before County Record Offices and Archivists, and in putting it on record. It was scholarly and above all well referenced, so that any later researcher could follow every lead through the minefield of unscholarly work which has so long cursed the Annings.

In 1951 the archaeologist Jacquetta Hawkes (born 1910) published her stimulating study *A Land*, an attempt to evoke the past and present of Britain through the findings of geology and archaeology. To her, Lyme Regis was *the* place where memory was most deeply stirred, where ‘one is exposed to the assault of time’ and where the spirit of Mary Anning haunts the mouldering cliffs. To her mind, Hugh Miller and Mary Anning of Lyme were:

by far the most remarkable, because the most spontaneous, of all the manifestations of consciousness roused in quest of [British geology]’s origins. Certainly the imprint of their minds and lives will remain in the history of geology with all the sharpness of their own finest fossil specimens.<sup>105</sup>

Yet this finely evoked tribute was somewhat spoiled in her next book in 1954 when Mary’s first complete plesiosaur discovery was wrongly credited as being in ‘1824, when Mary Anning found the first megalosaur in the cliffs at Lyme Regis’.<sup>106</sup>

101 Anon., *The Sunday Companion*, 1 August 1931.

102 A. Mee (ed.), *Children’s Encyclopaedia* London, 1925, iii, 1509 and [1953], iii, 1509. By 1946 Mee’s biographer, John Hammerton, estimated that 52 million volumes of the *Children’s Encyclopaedia* had been sold; see R. Pound and G. Harmsworth, *Northcliffe*, London, 1959, 295. It is better known in the United States as *The Book of Knowledge* and has been translated into French, Italian, Spanish, Portuguese, Arabic and Chinese (see DNB 1941–50, 584–5, *sub* Mee).

103 E. I. White, ‘William Dickson Lang’, *Biographical Memoirs of Fellows of the Royal Society* (1966), 12, 367–86.

104 W. D. Lang, ‘Mary Anning and a very small boy’, *Proceedings of the Dorset Natural History and Archaeological Society* (1963), 84, 181–2.

105 J. Hawkes, *A Land*, London, 1951, 59.

106 J. Hawkes, *Man on Earth*, London, 1954, 63.



Figure 4. 'A school-girl meets Ichthyosaurus' by Charles Edmund Brock. From Arthur Mee's *Children's Encyclopaedia*, London, 1925.

Roberts' child-centred lead was to be evoked as both chief resource and focus for the many 'childish' biographies and notices which now started to appear. Mee's popular *Children's Encyclopaedia* started this trend which was followed by the American dinosaur-hunter in Mongolia, Roy Chapman Andrews (1884–1960). He, in 1959, published a notice with a new illustration of Mary 'finding the first fossil reptile [*sic*] in 1811'.<sup>107</sup> Such a cavalier attitude to facts stands as the hallmark of the wholly *child-centred* view of Mary Anning that comes down to us today. Changing this child-centredness is the second major piece of 'historical revisionism' I would wish to be able to achieve.

Most of these child-centred views now come from abroad. The next was by the Canadian Helen Brandon Bush, a lecturer in geology. This was first published, with illustrations by Gwyneth Cole, as *Treasures in the Rock* in Canada in 1960,<sup>108</sup> then as *Mary Anning's Treasures* in 1966 in America<sup>109</sup> and in Britain in 1967,<sup>110</sup> to be followed by a new version in 1976 as a paperback, all 'a true story for readers of nine and over'.<sup>111</sup> In fact this was fictionalized, and conversationalized, history for children. But it *was* based on considerable research, and did have a bibliography for which it acknowledged the help of the British Geological Survey. But it only took the Anning story up to the famous *Ichthyosaurus* discovery of 1811–12, and devoted only an epilogue of three pages to the rest of Mary's life. In 1977 this work was published in a Japanese translation.<sup>112</sup>

In 1972 the British Broadcasting Corporation took another look at the Anning story and produced the film *The Crocodile* on location at Lyme Regis for a BBC-TV Schools *Merry-Go-Round* programme, directed by Dorothea Brooking. The book to accompany it, by John Tully, was published in 1972, with photographs from the film.<sup>113</sup> This too was a fictionalized and conversationalized story for children.

In 1969 Justin Delair published the important discovery that the Joseph and Mary Anning 'first ichthyosaur' specimen, which had been for so long misidentified, had survived in part in the collections of the British Museum (Natural History). Delair also illustrated it.<sup>114</sup> But this potentially important stimulus to the search for more factual evidence passed unnoticed in a world more interested in myths, than facts.

In 1975 the American writer Ruth van Ness Blair published her book *Mary's Monster* in New York.<sup>115</sup> The heroine was now a much more onomatopoeic Mary Ann Anning, following the mislead of Mrs Elizabeth Oke Gordon, William Buckland's daughter.<sup>116</sup> It was once again history made through invented conversation and it, again, largely took the story only up to 1812, after which point Mary presumably lost much of her interest for a childish audience. 1987 saw the publication by Dennis Brindell Fradin of another American

107 R. C. Andrews *All about Dinosaurs*, London, 1959, 17.

108 H. B. Bush, *Treasures in the Rock*, Toronto, 1960.

109 H. B. Bush, *Mary Anning's Treasures*, New York, 1966.

110 H. B. Bush, *Mary Anning's Treasures*, London, 1967.

111 H. B. Bush, *Mary Anning's Treasures*, London: Puffin Books, 1976.

112 Copy in Lyme Regis Museum.

113 J. Tully, *The Crocodile*, London, 1972.

114 Natural History Museum, London, no. Reg 1158, see J. B. Delair, 'A history of the early discoveries of liassic ichthyosaurs in Dorset and Somerset (1779–1835)', *Proceedings of the Dorset Natural History and Archaeological Society* (1969), 90, 115–27, on 121.

115 R. van N. Blair, *Mary's Monster*, New York, 1975.

116 E. O. Gordon, *The Life and Correspondence of William Buckland*, London, 1894, 7.

book called *Remarkable Children – Twenty who made History*.<sup>117</sup> This, in a world survey from Mozart to Judy Garland and from Louis Braille to Pelé, featured Mary as the ‘discoverer of a fossil skeleton at eleven’.

1991 saw two new North American books on Mary Anning. Both are by friends of mine, so I tread carefully. We might recall that neither have attempted to write ‘serious’ history; they have instead both tried, and succeeded in fascinating children with the story of Mary Anning that they, as so many before, had both found captivating. The first, *Dragon in the Rocks*, is by Marie Day,<sup>118</sup> the Canadian artist and stage designer who stumbled across the story of Mary Anning during a visit to Lyme Regis and determined to follow it up. Her book is illustrated with her own fine illustrations but is again fictional. It was published with the financial support of the Canada Council and the Ontario Arts Council. The second is by the Californian Sheila Cole. Her *Dragon in the Cliff* is again ‘a novel based on the life of Mary Anning’, since ‘there are so few known facts about Mary Anning’.<sup>119</sup> Cole came to write the book because Mary ‘was not only female, but also poor in a small town but still managed to contribute to the scientific work of her time’. The book takes the story up through the ichthyosaur discovery to 1815, when Mary unaccountably experiences a previously unrecorded crush on the young Henry De la Beche. Any later life is again relegated to the five page epilogue. Poor John Fowles, now suffering from an overdose of such a child-centred Anning, thought the Mary revealed in this text was ‘much too nicified (no dialect, no poverty) and thought the book ‘a little bit of a nightmare for any remotely scientific historian’.<sup>120</sup>

## HISTORIOGRAPHIC PROBLEMS FOR THE ANNING BIOGRAPHER

The problems facing all the many recent, often fictionalizing, writers on Mary have been that there are ‘so few known facts’ and, what facts there are, often not to be trusted. This has arisen because of a number of special circumstances. Mary was

- (a) already a curiosity in her own life time, so that myths were soon made of her. As John Fowles rightly says mythic is the only word for much of what has been written about her.<sup>121</sup>
- (b) working class and solitary. The history of such people is far less easily revealed than that of the gentry and their associates.<sup>122</sup>
- (c) provincial. The history of such people is again understandably much less often or fully revealed than that of metropolitan figures.
- (d) female (and unmarried).
- (e) a dissenter.

117 D. B. Fradin, *Remarkable Children – Twenty who made History*, Boston, 1987.

118 M. Day, *Dragon in the Rocks*, Toronto and Buffalo, 1991.

119 S. Cole, *Dragon in the Cliff*, New York, 1991.

120 J. Fowles, in *Lyme Regis Museum Curator’s Report for 1991*, Lyme Regis, 1992, 31.

121 Fowles, op. cit. (77), 41, and see his ‘Introduction’ to a forthcoming pamphlet on *Mary Anning* by Sir Crispin Tickell (a direct descendant of Mary’s brother Joseph), to be published in 1995 by Lyme Regis Museum.

122 See J. Sharpe, ‘History from below’, in *New Perspectives on Historical Writing* (ed. P. Burke), Cambridge, 1991, 24–41, on 36.

- (f) a doer, not a writer. Anning published nothing under her own name. Such people are papyrophobic to a world which imagines all is recorded on paper. She created manufactures.<sup>123</sup>
- (g) She was a professional dealer and was ‘tainted’ by commerce. People are often not honest in recording such monetary matters, often preferring to overestimate (?to fool spouses) or underestimate (?to fool bankers). Thus arise the problems faced by historians of money.<sup>124</sup>
- (h) She has been confused with her mother, also Mary.
- (i) She predated the camera, or at least its use in Dorset.
- (j) She is now too ancient for the techniques of oral history to be applied reliably to her. Nigel Nicolson has noted how tenuous such links are with the past, and that the last Briton to have had a parent born in the same year as Mary (1799) was dead by 1970, and achieved a place in *The Guinness Book of Records* by so doing.<sup>125</sup> In any case Anningian oral history would have had to survive significant changes in the strong local dialect.

On top of these methodological problems there is the very real problem of her own small personal archive. This *was* kept well after her death but was subsequently ‘rescued’ in 1885 by one of her old friends, and a ‘customer’ from 1824, the fossil ‘gatherer’ Lord Enniskillen, William Willoughby Cole, who then passed it on, the year before he died, to Richard Owen (1804–92) whose archive has been so notoriously served.<sup>126</sup> C. D. Sherborn was given the job of preserving the items in this, by now, joint archive. But Sherborn preserved only those items that he regarded as scientifically important and the rest were dispersed all around the world. A few Anning items stayed in the Owen archive<sup>127</sup> but other Anning archive material escaped from this schizophrenic accumulation to other locations in the Natural History Museum in London, to the County Museum in Dorchester, Dorset, and to the Ellen S. Woodward Collection at McGill University in Canada<sup>128</sup> and certainly beyond. Only one letter *to* her has been located further to those in the Owen archive, in a private American collection,<sup>129</sup> where it resided unknown to its owner and was found quite serendipitously.

No attempt was therefore made to keep the Anning archive together and no record was kept of its disposal. Many items were, however, stamped ‘Coll. Sherborn. Ex Litt. Ricardi Owen. Don. R. S. Owen’. The archive was seen as being ‘merely’ the mementos of a ‘curiosity’, not the repository of an important figure in the history of science, and so a good deal of investigation is still needed. One of the most poignant documents I found had

123 Washburn, *op. cit.* (1).

124 Taylor and Torrens, *op. cit.* (39), 143.

125 N. Nicolson, ‘Tricks of the memory’, *The Spectator*, 12 March 1994, 41–2

126 J. R. Norman, *Squire: Memories of Charles Davies Sherborn*, London, 1944, 65 and 88, and J. W. Gruber, ‘The Richard Owen correspondence: an introductory essay’, in J. W. Gruber and J. C. Thackray, *Richard Owen Commemoration*, London, 1992, 1–93, especially 1–6.

127 Gruber and Thackray, *op. cit.* (126), ‘A catalogue of the correspondence... of Richard Owen’. This notes two items of correspondence and three other Anning MSS in this archive, on 107, 114 and 141.

128 S. Sheets-Pyenson, ‘Geological communication in the nineteenth century’, *Bulletin of the British Museum (Natural History)*, *Historical Series* (1982), 10, 179–226, on 200.

129 Professor G. M. Friedman collection, Troy, USA.

accompanied her Common-Place Book from the Owen archive to the Dorset County Museum in 1935.<sup>130</sup> It was an earlier letter of refusal by the British Museum, stating how this volume did ‘not prove to be of sufficient importance’ to them. I would have liked to be able to question the judgement that allowed this archive to be so dispersed and so much material to be ‘lost’.

### SOME CONCLUDING PROBLEMS

Clearly Mary has been strangely served both by history and by those writing about her. Mary Anning is, in my view, a figure of enormous historical significance. She *can* be revealed as a real figure by painstaking historical work. Over fifty original manuscript letters have now been located *from* her, her mother (1) and her brother (1), all over England, in Canada, New Zealand and the United States. These at least slay the additional mythic dragon that she ‘was barely literate’.<sup>131</sup> These letters will ultimately provide a good basis for a reappraisal. In addition, as a ‘curiosity’, many notices of Mary Anning appeared in strictly contemporary letters, diaries and journals drawn up by *other people*. Such notices are, however, usually not indexed. Newspaper notices of her discoveries, perhaps inserted through her own efforts as befits the consummate business woman she evidently was,<sup>132</sup> can be very useful but they have to be checked and are also very hard to find. But there still remain problems. Mary Anning must have received an education but nothing has yet been revealed of this. Any sex life, which as a woman, people now seem especially to demand she must have had, remains equally unrecorded, although uninterpretable gossip involving such people as Colonel Birch, does survive. Henry De la Beche still remains her favoured mythic partner.

For me, a bigger problem is the more historical one of how historians treat ‘objects’ as opposed to ‘words’. It would be nice to be able to say of her, as Sir Christopher Wren’s son was nearly to write on his father’s memorial in St Paul’s Cathedral in London, ‘*Si monumenta requiris, circumspice*’. Any monuments to the person Stephen Jay Gould has intriguingly called ‘probably the most important unsung (or inadequately sung) collecting force in the history of paleontology’,<sup>133</sup> should surely be in the world’s museums? But the only Anning specimens he was apparently able to find in the British Natural History Museum for a volume dedicated to the achievements of such collectors, were some obscure ophiuroids, one of which was illustrated. This was one of her least important discoveries (one of three insignificant specimens), from her last recorded sale to the British Museum, in 1840, for £2.<sup>134</sup> However, the British Museum only started the registration of each incoming specimen as it arrived, in 1837,<sup>135</sup> with only retrospective curation of the older

130 Dorset County Museum, NHMS XXXVII/2.

131 L. Barber, *The Heyday of Natural History*, New York, 1980, 127.

132 Taylor and Torrens, *op. cit.* (39).

133 Gould, *op. cit.* (52), 100.

134 Standing Committee Minutes of the British Museum, C 5494, 14 November 1840, British Museum archives.

135 H. S. Torrens and J. A. Cooper, ‘George Fleming Richardson (1796–1848) – man of letters, lecturer and geological curator’, *Geological Curator* (1986), 4, 249–72, on 256, and R. A. Hewitt, ‘London clay nautiloid collections’, *ibid.* (1995), 6, 117–24, on 119.

collections. By then nearly all their most significant Anning specimens (with the obvious exception of the 1823 *Plesiosaurus dolicodeirus*) had long since arrived with inadequate documentation. These ophiuroids seem to be the only post-1837 acquisition, and the last, that the Museum made from Mary Anning on 14 November 1840.<sup>136</sup> They are thus the only one to be properly recorded and listed.

Many other, often very spectacular, specimens that she discovered found their ways into museums in Britain, Europe and even America. For example, the American palaeontologist George Gaylord Simpson (1902–84) recorded that an ichthyosaur and plesiosaur were sold by Mary to one ‘T. B. Watson who presented them to the Academy of Natural Sciences in Philadelphia’.<sup>137</sup> That Simpson so misidentified Thomas Bellerby Wilson (1807–65), principal benefactor to that Academy,<sup>138</sup> means that the whole history of these particular specimens needs to be re-examined and confirmed. Too often, as at Philadelphia, such material, although discovered, extracted and then sold by her, has since evaded recognition in modern collections.

All too often it was the donors, not the discoverers, of specimens who got recorded. In proof of this, the *Donation Books* of the Geological Society of London from 1807 to 1911 are silent on any material coming from her,<sup>139</sup> despite the fact that at least two of her more significant specimens are known to have gone there. In the *Donors Index* for fossils at the Natural History Museum in London there was again (when I last looked) no entry for her. In Cambridge University’s Sedgwick Museum there were no recorded specimens either, despite the number that have subsequently been revealed there through investigation of surviving manuscripts that allowed them to be documented.<sup>140</sup> The Bristol Institution (now the Bristol City Museum) *Collections Donations Books* showed no direct record of her involvement, despite one of her prize specimens being chosen as the founding acquisition for this institution in 1823.<sup>141</sup> Yet the team of people who purchased this fine specimen from her were all carefully recorded. Oxford University Museum Records are the only ones whose donation entries detail any Mary Anning involvement. These reveal that a single, small (4 centimetres high), perfectly formed coprolite had been presented by her (Reg. no. J 23781). This is a highly appropriate object to be the only recorded Anning donation, in these five major English institutions. One wonders if Mary had a sense of humour.

Such problems are deeply cultural ones. Information about who originally found the specimens was simply not thought worth recording, despite Gould’s claim of ‘Mary Anning’s absolutely indispensable’ work having received ‘much praise in [contemporary] paleontological writings’. The problem is that all her specimens were sold to other ‘collectors’ and it was their, later, donations that were seen to be what had to be recorded. Historically it was not the discoverer who got recorded but those who patronized the

136 Natural History Museum archives, NS: Additions, Geology, 12001–16000, 75.

137 G. G. Simpson, *Concession to the Improbable*, New Haven, CT, 1978, 44–5.

138 E. E. Spamer *et al.*, ‘Recovery of the Etheldred Benett collection of fossils...’, *Proceedings of the Academy of Natural Sciences of Philadelphia* (1989), 141, 115–80, on 118.

139 No references appear in the Society’s MSS books and there is no reference either in D. T. Moore, J. C. Thackray and D. L. Morgan, ‘A short history of the museum of the Geological Society of London 1807–1911...’, *Bulletin of the British Museum of Natural History, Historical Series* (1991), 19, 51–160.

140 Price *op. cit.* (34).

141 Taylor, *op. cit.* (39).

discoverer.<sup>142</sup> This attitude has a long history. On 17 February 1832, when Mary was at the height of her reputation, one of her friends, Roderick Murchison, gave his presidential address to the Geological Society of London. This concluded with a review of recent progress in geological science and how the Fellows' network had helped others to identify fossils or compare them with modern forms.<sup>143</sup> Such mere fossil 'hunters' as Mary, who first found much such material, were excluded from consideration since they were not Fellows.

Such problems are highlighted in Gould's book on collectors, *Finders, Keepers* (London, 1992). 'Collectors' is much too all-embracing a term in the English language, since it is used for both those who find and those who keep. For all his skill in dissecting this little-known world, Gould's title obscures the obvious point that the finders (the Annings of this world) are not – for economic reasons in their case – often the keepers. It seems altogether preferable to use the separate terms of 'hunter' and 'gatherer' from anthropology. This is particularly appropriate in the case of Mary Anning since women are – at least mythically – allowed to be hunters, as in the case of Diana: the Italian/Roman Goddess of Hunting. But if we should now try to acknowledge separately the 'hunters' from the 'gatherers', we have first to realize how much, in British history of geological science at least, it has been the 'gatherers' who have been remembered, not the 'hunters'. Similar one-sided problems affect other areas of the history of science<sup>144</sup> unlike in music, where performer and composer are both honoured. In the equally creative world of geology, only the donors or 'gatherers' have been honoured so far, not the truly important 'hunters'. Even when a hunter is recalled in the Anning story, the 'Alpine Jäger' remembered was not her, but Lord Cole instead, who failed to 'keep up with our heroine' because he was so shortsighted.<sup>145</sup>

John Fowles made the significant comment in *The French Lieutenant's Woman* in 1969<sup>146</sup> that 'one of the meanest disgraces of British palaeontology is that although many scientists of the day gratefully used her [Mary's] finds to establish their own reputation, not one native type bears the specific *anningii*'. If this was not quite true in 1969,<sup>147</sup> it is certainly strange how no species were ever named after her in her lifetime by British

142 Taylor and Torrens, op. cit. (39).

143 R. I. Murchison, 'Presidential address', *Proceedings of the Geological Society of London* (1832), 1, 362–86, on 385–6.

144 In *experimental* science, the instrument makers and technicians are as important as the scientists but only more recently has the history of instrumentation become an object for serious study, see S. Shapin, 'Le technicien invisible', *La Recherche* (1991), 22, 324–33.

145 See Murray, op. cit. (47). Another such 'hunter', Alfred Jaeger (1860–1909), 'Nimrod' of Elgar's *Enigma Variations*, can remind us of such relationships in music. Here composition and performance are both vital, are equally regarded and have been equally recorded in history. See his comments in J. N. Moore (ed.), *Elgar and his Publishers*, 2 vols., Oxford, 1987, ii, 715.

146 J. Fowles, *The French Lieutenant's Woman*, London, 1969, 53.

147 In 1878 R. F. Tomes (1823–1904) apparently named his new liassic coral genus and species *Tricycloseris anningi*, from Charmouth, after her (*Quarterly Journal of the Geological Society of London* (1878), 34, 189–90 and plate 9, fig. 1). In 1936 L. R. Cox (1897–1965) named the bivalve genus *Anningia* after her (*Quarterly Journal of the Geological Society of London* (1936), 92, 468 and plate 34, fig. 9–10), but this had to be renamed *Anningella* in 1958 because of homonymy (see *Proceedings of the Geological Society of London* (1958), 1557, 44). The ostracod species, *Cytherelloidea anningi*, has been named since 1969, by Alan Lord, 'Ostracods from the Domesian and Toarcian of England', *Palaeontology* (1974), 17, 599–622 and plate 90, especially 610–13 and figs. 4–5.

palaeontologists. The only two British species that were – the fish *Acrodus anningiae* of 1841 and *Belenostomus anningiae* of 1844 – were both named by the Swiss palaeontologist Louis Agassiz. The Karroo reptile genus *Anningia* was named much later in 1927 by the South African Robert Broom (1866–1951).<sup>148</sup> In 1932 this taxon was made the basis for a new order, the Anningiamorpha, by the same palaeontologist,<sup>149</sup> but he had his own reasons for such ‘pursuit of ladies’.<sup>150</sup>

Such cultural problems – over the naming of fossils to ‘honour people’ – provide further striking historical testimony. In 1829 the ‘gatherer’ George Cumberland rightly thought those hunters who discovered the fossils should be as:

entitled to a full share of the honours reaped by those who, without their aid, could never have brought them before the world, yet, some of whom, with a vanity that *greatly impedes scientific pursuits*, affix their own insignificant names to every little shell they find, or purchase of some poor quarrier on the road side; so that now we have not less than *twenty-three fossil ammonites*, that have little or no other description to know them by than the family names of the *supposed* first finders.<sup>151</sup>

Tension between ‘hunters’ and ‘gatherers’ clearly has a long history.

One additional problem of more recent date concerns the differing attitudes within the world of ‘scholarship’ to the study of objects. In common with the Austrian anthropologist Hans Jörg Först, it is my strongly held belief that, in the field of the history of geology at least, ‘objects are generally associated with a lesser degree of significance for scholarly research than written sources’,<sup>152</sup> although one reviewer did take exception to Först’s mournful claim.<sup>153</sup> When I was trying to purchase Gould’s book *Finders, Keepers* in 1992 I inadvertently discovered the same difficulty even with books about collectors and objects. Enquiries at Dillons and Blackwell’s in Oxford showed that neither then had it in stock, but that it would be found, when in stock, either under Physics (Blackwell’s) or Art Collecting (Dillons)! Thankfully the *Journal of the History of Collecting* is helping to expose a more positive attitude among historians wishing to record the history of ‘collecting’ in its broadest sense, that is, ‘hunting’ and ‘gathering’.

But the scholarly study of objects for their potential as history, seems often to be despised, with the obvious exception of art history in which such study is well established for economic reasons. As Washburn asks, ‘why has the manufacture been comparatively ignored and slighted in the intellectual world?’<sup>154</sup> When the Natural History Museum in London started their major new conservation project on the Museum’s wonderful collection of marine fossil reptiles in 1992, a Press Release was issued in January 1993 to

148 R. Broom, ‘On a new type of mammal-like reptile from the South African Karroo Beds (*Anningia megalops*)’, *Proceedings of the Zoological Society of London* (1928), for 1927, 227–32.

149 R. Broom, *The Mammal-Like Reptiles of South Africa*, London, 1932, ch. 2.

150 E. H. Colbert, *Digging into the Past*, New York, 1989, 191–2. Today *Anningia* entirely fails to honour its dedicatee, see R. R. Reisz and D. W. Dilkes, ‘The taxonomic position of *Anningia megalops*,...’, *Canadian Journal of Earth Science* (1992), 29, 1605–8.

151 G. Cumberland, ‘Some account of the order in which the fossil saurians were discovered’, *Quarterly Journal of Literature, Science and the Arts* (1829), 27, 345–9, on 348.

152 H. J. Först, ‘Material culture research and the curation process’, in *Museum Studies in Material Culture* (ed. S. M. Pearce), Leicester, 1989, 97–110, on 106.

153 S. Jones, in *Journal of the History of Collections* (1990), 2, 87–8.

154 Washburn, op. cit. (1), 249.

announce this. The specimen highlighted was Mary Anning's famous first complete plesiosaur from Lyme Regis (Figure 1, Natural History Museum, Reg. no. 22656). The specimen was, however, described as 'important not only because it is a rare complete skeleton but also because the site from which it was collected no longer exists'.<sup>155</sup> Its *historic* importance was ignored.<sup>156</sup> It is time that historians of geology paid as much attention to objects as to whatever is recorded on paper. It is also time that our museum curators paid more attention to history.<sup>157</sup>

Mary Anning has inspired a wide range of people and should continue to, if only as a fine representative of the 50 per cent of humanity who got such meagre deals in the world of men. As Faith Whittlesey memorably noted, men should 'remember Ginger Rogers did everything Fred Astaire did, but she did it backwards and in high heels'.<sup>158</sup> Mary has inspired cartoons since 1830,<sup>159</sup> poetry since 1838,<sup>160</sup> literature since 1951<sup>161</sup> and 1969,<sup>162</sup> novels since 1966, television since the 1970s, dance since 1987<sup>163</sup> and film since the spirit of Mary Anning could be seen hovering above the film of the *French Lieutenant's Woman* (1981). Britain's second National Science Week in March 1995 took one focus from her inspiration. Even a road in Lyme Regis is named after her. Let us hope she can soon inspire some serious historical study.

It was a pity that the fascinating study of British women in nineteenth-century geology published in this journal in 1994 should first of all have categorized Mary Anning as an 'amateur' when she was surely the ultimate 'professional' and then have enshrined, some for the first time, successive factual errors in the less than one page devoted to a description of her life and work.<sup>164</sup> If this proves only that the historical study of the Mary Annings of this world is technically more difficult than the study of those who published or otherwise entered the historical record on paper, it does mean that anyone writing on the former has a double duty to quote carefully all sources. So it is simply depressing, to find the highly revisionist new biography of Mary Anning's fellow Dorset-born celebrity Thomas Hardy (1840–1928), praised for its lack of footnotes, which 'have become the mere trappings of scholarship' needed only by 'more parochial critics'.<sup>165</sup> I was delighted that Ferdinand Mount, the editor of the *Times Literary Supplement*, had, just before this,

155 See also *New Scientist* (30 January 1993), 137 (1858), 10.

156 I am glad to report that, as a result of recent publicity, attitudes have started to change and Mary Anning's achievements are now properly announced to visitors in the Museum's wonderful marine reptile gallery.

157 M. T. Greene, 'History of geology', *Osiris* (1985), 1, 97–116, for example, provides a summary of only printed sources for the history of geology and concludes that the history of geology is at such a premature stage that 'it is as yet too early to go to the archives'. The possibility of other sources was not considered.

158 A. W. Schaefer, *Meditations for Women who do too much* (1990), San Francisco, entry for 2 May.

159 Henry De la Beche's *Duria antiquior*.

160 J. Kenyon, *Poems: For the Most Part Occasional*, London, 1838, 109–11.

161 Hawkes, *op. cit.* (105).

162 Fowles, *op. cit.* (146).

163 Angharad Wynne-Jones' 'Mary Anning – a natural history', danced at the Chisenhale Dance Space, London, 3 July 1987.

164 M. R. S. Creese and T. M. Creese, 'British women who contributed to research in the geological sciences in the nineteenth century', *BJHS* (1994), 27, 23–54, on 27–8.

165 Peter Ackroyd, 'Review of *Hardy* by Martin Seymour-Smith', *The Times*, 20 January 1994, 41, and see also 7 and 19.



Figure 5. Kate Charlesworth, *New Scientist*, 3 December 1988. Reproduced with the artist's permission.

specifically condemned the ‘deliberate dilution of expert knowledge in the output of almost all public media’ in Britain!<sup>166</sup>

If I could create my own myth about Mary Anning it would be to equate her with Diana, as the hunter. But Mary has many foci, none better expressed than that by another unique female talent, the inimitable Kate Charlesworth in her cartoon of 1988 shown here (Figure 5).<sup>167</sup>

166 F. Mount, ‘A little less learning’, *Daily Telegraph*, 11 December 1993.

167 K. Charlesworth, *New Scientist* (3 December 1988), 120 (1641), 60 and reproduced with kind permission.