Naming the Bristol dinosaur, *Thecodontosaurus*: politics and science in the 1830s

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**Abstract**

Several dinosaurs were reported from 1824 to 1842, the latter being the year in which Richard Owen named the ‘Dinosauria’. The fourth dinosaur ever named was *Thecodontosaurus*, based on numerous isolated bones from Late Triassic cave deposits, excavated in 1834 from a working limestone quarry in Bristol in south-west England. The genus was named in 1836, and it was the first dinosaur ever reported from the Triassic. The remains were shown first to Samuel Stutchbury, curator of the museum of the Bristol Institution. He recruited the noted Bristol surgeon and anatomist Henry Riley to assist in interpreting the bones, but local amateur geologist, the Reverend David Williams, was competing to be the first to report the fossils. The squabble between Stutchbury and Williams is reconstructed from manuscript letters, and it highlights the clash between individuals, but also between supposed professionals and amateurs in these early days of the development of geology and palaeontology as sciences.

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1. Introduction

The circumstances of the discovery and naming of the first dinosaurs ever reported, *Megalosaurus Buckland*, 1824, *Iguanodon Mantell*, 1825, and *Hylaeosaurus Mantell*, 1833, have been outlined by several authors (e.g. Spokes, 1927; Curwen, 1940; Swinton, 1951; Colbert, 1968; Delair and Sarjeant, 1975; Taquet, 1984; Buffetaut, 1987; Torrens, 1992, 1995; Torrens, 2012). The fourth dinosaur to be named from England, and perhaps from the world, 1 *Thecodontosaurus antiquus* Riley and Stutchbury, 1836, has largely escaped historical notice, however. It was the first dinosaur to be reported from the Triassic period, the earliest division of the Mesozoic Era, during which dinosaurs originated, and it has subsequently been shown to be one of the most basal sauropodomorph dinosaurs, one of the three major divisions of Dinosauria (Huxley, 1870; Marsh, 1892; Seeley, 1895; Huene, 1908a; Gauthier, 1986; Galton, 1990; Benton et al., 2000; Benton, 2004; Langer and Benton, 2006). The first relatively complete dinosaur to be named from the Triassic was *Plateosaurus*, reported a year later, in 1837, from southern Germany (Meyer, 1837).

The importance of the specimens, the shortage of previously published information about their discovery, and the emergence of some fascinating new archival resources, provide the purpose for this account.

Relevant archives in the Bristol Record Office, B Bond, Smeaton Road, Bristol, BS1 6XN (BRO), the Geology Department, City Museum & Art Gallery, Queens Road, Bristol, BS8 1LR (BRSMG), the Reference Library, Central Library, Bristol, College Green, Bristol, BS1 5TY (CLR), and Somerset Heritage Service, Somerset Heritage Centre, Brunel Way, Norton Fitzwarren, Taunton, Somerset, TA2 6SF (TTNCM), provided documents relevant to the discovery and later history of work on *Thecodontosaurus*.

2. The location

Specimens of ‘saurian animals’ were first noted in autumn, 1834 from the limestone quarries of Durdam Down, Clifton. At that time, Clifton, located in the county of Somerset, was a separate town from Bristol, which was part of Gloucestershire. However, the two towns adjoined, and Clifton was formally incorporated into the city of Bristol in the 1830s.

These quarries are now largely infilled or built over, and there has been some confusion over their exact location, and the location of the dinosaur finds (Fig. 1). The first indication of the site is given as ‘the quarry east of Durdam Down’ by Anon. (1835). Information in papers by Etheridge (1870) and Moore (1881) allowed David Whiteside in 1882 to confirm this and identify the site at the east end of a series of old quarries, and located beside a...
set of steps called Quarry Steps (Fig. 1; National Grid Reference, ST 572747; Benton and Spencer, 1995, p. 89). Etheridge (1870, Figs. 4, 5) gave two drawings showing the reptile deposit at about 320 ft above mean sea level and noted (Etheridge, 1870, p. 188) that “the spot where these remains were found is no longer recognizable or determinable, having been many years ago quarried away, and the site built upon. Fortunately, we have records of the exact position; and many years since, W. Sanders … most accurately determined the site of the reptilian quarry on the eastern side of Durdham Down.” Moore (1881, p. 72) confirmed this, mentioning specifically a place known as ‘The Quarry and The Quarry Steps’ and states “Looking from it [the platform of Quarry Steps], along the Down escarpment to the west, the eye takes in Bellevue Terrace [=Belgrave Terrace; numbers 19–23 Upper Belgrave Road], on the edge of the Down; and it was between these houses and the quarry, a distance probably of 200 yards, along the same face of
limestone, and on the same horizon, that the deposit containing the Thecodontosaurian remains was found. Unfortunately the precise spot is unknown … and built over”. This is only partly true, as Etheridge (1870) had first-hand evidence from people who had witnessed the discoveries. First, he relied on testimony from William Sanders (1799–1875), a keen amateur geologist who lived in Clifton, and who from 1835 onwards produced a detailed geological map of the whole area (Clark, 2004). Further, Etheridge (1870, Fig. 6) was also able to reproduce a sketch he had been given years before by Samuel Stutchbury, showing the position of the bones in the cave breccia as they were being removed.

Huene (1908a, p. 191) seemingly misunderstood Moore, naming the site of discovery as Avenue Quarry at the end of Avenue Road, but Moore (1881) had identified this Avenue Quarry as distinct from the Thecodontosaurus find site just noted, as a location 680 yards away from Quarry Steps and terminating a transect of workings that hosted fissures of different ages. Further, Perceval (1907, p. 5) suggested a third possible location for the 1834 Thecodontosaurus discovery: “The exposure of rock from which they were obtained used to be visible on the west side at the south end of Worrall Road. This exposure is represented in the maps that accompanied Wright’s Bristol Directories of the years 1870–1874. At p. 111 of Arrowsmith’s Dictionary of Bristol, 1884, the locality is thus described: ‘Reptilian remains were found some years ago in a dike of new conglomerate, near Lower Belgrave Road Durdam Down.’ The exposure in Worrall Road is no longer visible, having apparently been built over.” This is the further, western, end of the Worrall Road quarries, and yet it in no way matches the first-hand evidence from Sanders and Stutchbury reported by Etheridge (1870).

As noted by Benton et al. (2000) and Galton (2007), there are five quarry sites around this area (Fig. 1):

1. Worrall Road quarries, east end, extending some 300 m from the eastern limit, at Quarry Steps/High Street to Sutherland Place (Fig. 1).
2. Worrall Road quarries, west end, lying to the west of Sutherland Place (=‘Sunderland Place’ on some old maps), and extending to the end of Worrall Road, where it joins Upper Belgrave Road (Perceval’s, 1907, suggested site).
3. Avenue Quarry (Huene’s, 1908a, suggested location), located to the northwest of Clifton Down (the A4176 road) opposite the end of The Avenue, a residential street.
4. Redland House Quarry, lying north of the roundabout at the junction of the A4176 and A4018. Quarrying had ended in 1876, and the site was used in turn as a sports and recreation centre by music company Duck, Son and Pinker, then after 1946 as a public recreation site owned by John Ley, then from 1953 to 1983 as the Locarno (renamed Tiffany’s) Dance Hall, and finally a BUPA private hospital, now named the Spire. This quarry is located within the Redland district of Bristol, and is sometimes termed the ‘Redland quarry’ (Galton, 2007, Fig. 1), lying as it does some 100 m west of the former Redland House.
5. Durdam Down quarries, lying under grass within the Downs today, to the northwest of Upper Belgrave Road; these are remains of former lead workings, known formerly as ‘the Dumps’ (Ralph, 1961).

The exact dates of operation of the various quarries is not clear, but it is interesting that there is no sign of the Worrall Road quarries, nor indeed of Worrall Road, on a famous 1828 map (Ashmead, 1828). The line of Worrall Road was represented at the east end by Caroline Row, which joined what is now the upper part of Whiteladies Road, called Blackboy Hill, but it curved substantially and meandered westwards as an open country road.

The site of discovery of Thecodontosaurus, according to the testimony of Etheridge (1870) and Moore (1881) may still be seen, largely overgrown, forming a cliff behind a block of flats, and with an old set of stone steps (Quarry Steps) descending beside it. The topotype quarry contains at least one fissure with a lithology similar to that of the bone-bearing matrix, but all bones appear to have been quarried away.

Some confusion might arise from the slightly later discovery of a bone-bearing fissure on Durdam Down, but this time a Pleistocene fissure containing fragmentary bones of ice age mammals, found early in 1842, and in which David Williams took an interest. He had begun his geological career in the 1820s with studies on the famous Mendips bone caves at Banwell, Holwell, Bleadon, and Uphill. However, Stutchbury and Riley carried out the excavations at Durdam Down and specimens of rhinoceros, elephant, horse, hyaena, and bear were extracted for the Museum (Stutchbury, 1842; Wilson, 1886, 1890). The exact location of the fissure is unknown, but it seems to have been in a quarry on the south side of Stoke Road, at map ref. ST 562752; the fauna indicates an Ipswichian age (Hawkins and Tratman, 1977).

3. The experts

The saurian bones found by the quarrymen apparently became quite widely known among naturalists in Bristol, and some were brought to the Bristol Institution, where Samuel Stutchbury was curator from 1831 to 1850. He requested more, and received them. At the same time, he discovered that other investigators were also interested in the specimens, and so there followed a brief spat of letters between Stutchbury and a country parson and geologist, David Williams. At the same time, recognizing the importance of the specimens, Stutchbury planned to publish an account. However, he realised that he lacked the necessary anatomical and palaeontological background to describe fossil vertebrate remains (he knew his fossil invertebrates), and he consulted Henry Riley to assist in describing the bones. Three publications followed from the collaboration, namely Riley and Stutchbury (1836, 1837, 1840).

The Bristol Institution for the Advancement of Science, Literature and the Arts had been founded in 1823 (Neve, 1983; Taylor and Torrens, 1987; Taylor, 1994), and it was housed in a grand building at the foot of Park Street, today the home of Bristol’s free museums. It was established with the aim of fostering scientific and literary discourse and advancement through the provision of museum collections, a library, scientific apparatus, and a lecture room. Meetings were normally private, for the benefit of the members, and public lectures were also offered. Entry fees and annual charges were high, and this restricted membership to gentlemen. The wide range of topics discussed included scientific advances from across Europe, as well as questions of evolution, geology, and palaeontology, then very much debated. Pioneering work was done by the eminent West-country geologists William D. Conybeare (1787–1857) and Henry T. De la Beche (1796–1855) in the 1820s, and it was at the Institution that Conybeare first publicly announced the discovery of the first complete plesiosaur. Gentle- men members sought to acquire important fossil specimens, including some from Mary Anning the younger of Lyme Regis (1799–1847). In the 1820s and 1830s, before the full development of the great natural history museums in London, Oxford, and Cambridge, the Bristol Institution was a major national player. The Bristol Institution declined under financial pressures from 1836 onwards, eventually to be taken over by Bristol City Council in 1894, and its remaining fossil collections are in the Bristol City Museum & Art Gallery (Barker, 1906).

Samuel Stutchbury (1798–1859) began his professional career as an assistant at the Hunterian Museum of the Royal College of
Surgeons in London, where he was appointed in 1820. While there, he drew Gideon Mantell’s attention to the resemblance between the teeth of the extant iguana lizard and Mantell’s new Lower Cretaceous teeth, an action that led to the new finds being named Iguanodon (Crane, 1983; Taylor, 1994), the second dinosaur ever named. Stutchbury was then appointed naturalist on the Pacific Pearl Fishing Company’s commercial expedition to the Tuamotu Archipelago (Branagan, 1996). He returned to England in 1827, and worked with his older brother, Henry Rome Stutchbury (1796–1853), a dealer in natural history specimens, while he applied for various official posts. He was eventually appointed curator of the Bristol Institution in 1831, and served there until 1850 (Fig. 2). During this time, he published accounts of a lizard and of some of the marine invertebrates he had encountered in his Pacific years, but he became ever more immersed in the geology and palaeontology of the Bristol area (Crane, 1983). Stutchbury resigned his position in Bristol in 1850, having accepted the post of mineral surveyor for New South Wales, presumably a promotion, and indeed a more secure source of income, the Bristol Institution having become somewhat negligent in paying its curator. In a short period in Australia, Stutchbury carried out extensive geological surveying work, and made a major impact on the development of geology in that country. He returned to Bristol in 1856, his health undermined, and he died in poverty in 1859. He is buried in the Arnos Vale Cemetery, Bath Road (A4), Bristol, where his grave may still be seen.

Henry Riley (1797–1848) was a local surgeon and medical school teacher who had graduated MD in Paris in the mid 1820s (Fig. 3); he ‘was very like a Frenchman in appearance and manners’ (Prichard, 1894, p. 6). Riley lived in Berkeley Square, Clifton, and he had gained brief notoriety in 1828, when he was fined £6 for attempting to rob a grave in Brislington, Bristol (Smith, 1917). Riley gave a successful series of lectures on ‘Zoological and Philosophical Anatomy’ in Bristol in 1831–1833, emphasising the works of Lamarck, Cuvier, and Geoffroy, and he was a member of the important group of gentleman naturalists who founded and sustained the Bristol Institution (Taylor and Torrens, 1987; Desmond, 1989; Taylor, 1994). He served on the Bristol Institution Committee from 1833 to 1836, and at the same time he was secretary of the Bristol, Clifton and West of England Zoological

Fig. 2. Portraits of Samuel Stutchbury, (A) as he was in the early 1830s, from a hand-tinted print in the BRSMG, and (B) as he was about 1850, from a sketch by Marshall Claxton, published in the Illustrated London News on 3rd July, 1852 (p. 9).

Fig. 3. Portrait of Henry Riley MD, by J.G. Swayne MD, from collection labelled ‘Lecturers at the Bristol Medical School, AD 1840. Drawn by J.G. Swayne MD, then a pupil’. From Smith (1917).
Society, which procured £7000 for the purchase of land and the establishment of Bristol Zoo in 1835–1836 (Green-Armytage, 1964; Hunter, 2004, p. 454). Riley's credentials in palaeontology had been established by his lectures, and by his description of the Lias cartilaginous fish Squaloraja (Riley, 1833, 1837), based on a specimen obtained from Mary Anning (Taylor and Torrens, 1987).

The Revd. David Williams (1792–1850), Rector of Bledon parish, just south of Weston-super-Mare, was already established as a local geologist and palaeontologist (Woolrich, 2004). He was elected Fellow of the Geological Society of London in 1828, and had published a paper on Pleistocene bones from the Mendip caves (Williams, 1834). In 1830, Williams visited Lyme Regis, and sought to buy the Squaloraja specimen then on sale by Mary Anning. He offered £35, which was declined, and the Bristol Institution eventually obtained it, perhaps for £50 (Taylor and Torrens, 1987).

Through his life, Williams amassed a large collection of geological specimens from south-west England, and these included diverse Palaeozoic fossils, Mesozoic vertebrate specimens, and abundant Pleistocene bones, his first love. Their collection was purchased on his death by the Somersetshire Archaeological and Natural History Society in Taunton (Baker, 1853), where they now form part of the collections of the Somerset County Museum.

David Williams engaged actively in the 'Great Devonian Controversy', the debate over the dating and extent of what later became defined as the Devonian system, and he published 13 papers on the subject between 1836 and 1846 based on vast amounts of detailed fieldwork in Somerset and north Devon (Rudwick, 1985). Rudwick (1985) suggests that Williams was an expert observer and collector, but in engaging in controversy with such luminaries as Adam Sedgwick (1785–1873) and Roderick Murchison (1792–1871) he suffered both from the contempt of such a provincial amateur geologist, but also overstepped his knowledge in pronouncing on wider topics where he lacked experience. In 1839, Murchison wrote to Sedgwick, 'Parson Williams gave us another diatribe on Devon last meeting ... The blundering Welshman has now got into a more extraordinary blunder than ever' (Thackray, 2003, p. 91). In any case, Williams was a controversialist and he was clearly a tough-minded individual in repeatedly re-entering the fray against Murchison. Despite communication with his surviving relatives, and with a variety of archivists and historians, no extant portrait of Williams has been located. He was described by a contemporary as of 'huge build, with a farmer-like face and a head full of the strata and anthro-pomorphs of Somersetshire' (Anon., 1850). His obituarist (Anon., 1850) paints a kinder picture, deploiring the 'disastrous extinction of a strong intelligence, and the disappearance of a name, not only dear to the science which he loved and adorned, but rendered familiar to the public as well by social position and distinguished friendships, as by the characteristic bonhomie, the independent views, and the active originality displayed by that eminent person ... [To] his geological brethren the frank open brow, the energetic and hearty countenance, the weighty frame, the almost rustic simplicity of manner, chastened by a certain refinement and repose, have been long familiar, and will be keenly missed ... We remember to have made a pilgrimage to Bledon with a distinguished member of the British Association. We found the retreat of science encumbered, within and without, with the imperishable exuviae of the ransacked hills. Not a table, a chair, or a sofa without its antediluvian occupant.'

Williams seems to have had rather distant relations with the Bristol Institution, which he does not mention in his notebooks (TTNCM), even though he had been elected an Honorary Member of the Bristol Philosophical and Literary Society in 1829. Apart from


4. Chronology of discoveries

A fairly detailed chronology of the discovery of the bones of Thecodontosaurus can be reconstructed from a copy of a letter written by Samuel Stutchbury to an unknown recipient (Appendix, Letter 4; Fig. 4) on 26th March, 1836, perhaps partly to explain his role, and that of his rival, the Rev. David Williams. Bones were found in the first week of September, 1834, and delivered to the Bristol Institution while Stutchbury was away at the meeting of the British Association for the Advancement of Science in Edinburgh. Since Stutchbury was away, the quarryman took them to Dr Riley. The first fossils were 'one or two fragments of bone', including a nearly complete fibula that was figured in the memoir (presumably Riley and Stutchbury, 1840, pl. 30, Fig. 7). When Stutchbury returned to Bristol at the beginning of October, several more bones were brought in, and he encouraged the quarrymen to collect as many as they could. By this means a 'considerable number of fragments' was brought together in the Bristol Institution, where they were shown to several notable visitors 'at the same time'.
(October 1834): Professor Louis Agassiz (1807–1873), the Swiss expert on fossil fishes from Neuchâtel, then touring Britain to collect information for his ongoing ‘Recherches sur les Poissons Fossiles’ (Agassiz, 1833–1844), the Revd. William D. Conybeare, rector of Sully (Glamorgan), later vicar of Aynminter (Devon) and Dean of Llandaff Cathedral, and a noted geologist and palaeontologist, and the Rev. David Williams.

Williams visited the Durham Down site at the same time, just after his visit to the Bristol Institution, to judge from comments in Letter 3 (Appendix). Williams had been to the Edinburgh meeting of the British Association also, and he spent several weeks studying geology in Scotland and in northern England. In his notebooks (TTNCM; Williams field notebook No. 6, ‘Augt. 1834 to Decr. 1834’), he records some general information about the geology of the Bristol Downs and Avon Gorge, and mentions a visit to Mr Grainer’s Quarry on Durham Down. He notes ‘Bones in Magn. Conglomerate’, but says no more, and goes on to describe the nearby strata on Durham Down, at St Vincent’s Rocks, and in the Avon Gorge.

The first public announcement of the specimens seems to have been in a lecture delivered by Riley to the Bristol Literary and Philosophical Society on 13th November, 1834. Riley’s lecture had been trailed the previous week (8th November, 1834) in the Bristol Mercury (Anon., 1834a), and this probably represents the first published mention of the new Bristol dinosaur: ‘We have observed with particular interest a notice in the Vestibule, announcing the discovery of some remarkable fossil bones in our immediate neighbourhood, and that, at a public meeting of the Philosophical and Literary Society, to be held on the evening of Wednesday next, Dr. Riley is to bring before the members and their friends some observations on these singular remains.’ Riley’s lecture was entitled ‘Observations on some fossil bones recently discovered in the Magnesian Conglomerate in the vicinity of Bristol’ (Annual Report of the Bristol Institution for 1834). Conybeare gave a lecture on geological principles a week later, on 20th November, and in it he referred to ‘the lizard of the last lecture’ (Felix Farley’s Bristol Journal, 20th December, 1834, p. 4), and ‘the inferences which Dr Riley has been enabled to draw, from even the few and mutilated bones as yet discovered, are striking proof of the beauty of the laws discovered by Baron Cuvier’, presumably Cuvier’s ‘laws’ of comparative anatomy, concerning the correlation of parts and the subordination of characters, which enabled the French anatomist famously to speculate on diet and function of ancient animals based even on very limited remains. This geological lecture was published in January, 1835 (Conybeare, 1835).

At this time, a brief notice appeared in the Philosophical Magazine (and identically in at least four other venues at the same time; Anon., 1834b), which mentions Riley and Conybeare. The remains are described as ‘some Saurian vertebrae, ribs, femora, and phalanges, together with claws, the latter of considerable proportional size: a coracid bone has also been found, approaching very nearly to that of the Megalosaurus [sic].’ It is interesting that Stutchbury indicates that Conybeare ‘sent a short notice to the Philos. Mag. for Decr. 1834’, presumably indicating that he was the author of Anon. (1834b). There is no mention of the names to be given to the specimens, but Conybeare was a noted classificat and palaeontologist, and he had coined some of the most euphonious names for fossil reptiles in the 1820s and 1830s: Mosasaurus, Plesiosaurus, Megalosaurus, and Iguanodon (Colbert, 1968; Buffetaut, 1987). Perhaps he suggested the names Thescodontosaurus and Palaeosaurus for the Bristol fossils?

At the same time, Williams’s short paper was read to the Geological Society of London, on 17th December, 1834, presumably by himself. In the published version, Williams (1835) notes the discovery of the bones ‘Which Dr Riley and Mr Stutchbury have ascertained to belong to Saurians’, and he goes on to give further details of ‘a fragment of a small jaw found by himself’ which has characters suggesting that the animal ‘may have formed a link between the crocodiles and the lizards proper’. In making this statement, Williams may have been referring to comments made in the short notes just then appearing in print (Anon., 1834b), reporting comments by Riley, Stutchbury, and Conybeare.

The second published notice of the new finds appeared in January, 1835 in the West of England Journal of Science and Literature, effectively the organ of the Bristol Institution. In a news report (Anon., 1835), the bones are referred to two unnamed species, a larger and a smaller. At that point, Riley and Stutchbury clearly thought that the dentary bone with teeth was too small to belong to the postcranial elements, including vertebrae, ribs, coracoids, humerus, ulna, radius, femur, tibia, fibula, metacarpals, metatarsals, phalanges, and claws. It is clearly stated that Riley and Stutchbury were preparing a memoir for the Geological Society of London. Conybeare (1835, p. 99) noted the ‘saurian bones’ in the published version of his November, 1834 lecture, in the second part of the printed version, which was published in April, 1835.

The first of the Bristol letters (Appendix, Letter 1) is a defence by the Rev. David Williams of his actions, written on 14th January, 1835. Williams had visited the Bristol Institution in October, 1834, as noted above, and had heard a rumour subsequently that he had been accused of improper behaviour in inspecting some of the reptile bones that Stutchbury intended to study and in obtaining information about the quarry. He denies any impropriety, but notes that he has already sent a ‘short and hasty memoir’ to the Geological Society of London. The timing of the letter from Williams, his haste in sending off a description of his specimens, and the apparent urgency of the news reports placed by Riley and Stutchbury (Anon., 1834b, 1835) suggests that all participants were aware of these competing efforts to publish accounts of the new specimens, and that they variously wished to establish priority in publication.

In his reply, dated 16th January, 1835 (Appendix, Letter 2; Fig. 5), Stutchbury expresses surprise at the rumour, but also indicates that he is unhappy about the fact that Williams has poached on his territory and has sent off a paper for publication, since Stutchbury fully intends to do the same. Stutchbury indicates that he had given Williams all the details of the discovery, except for the precise locality, when Williams inspected the collections of the Bristol Institution. He even proposed to take Williams to the site, but also suggested that his enthusiasm to know the site pointed to a desire to deprive the Bristol Institution of the ‘opportunity of securing the remains yet entombed’. Stutchbury is particularly upset because he states that he had told Williams of ‘our intention of working out a memoir for the Geological Society’, the ‘our’ indicating Riley and himself. This fact was also stated in the published accounts (Anon., 1834b, 1835).

The reply from Williams (Appendix, Letter 3) is unrepentant. He recalls that Stutchbury would not reveal the location, a circumstance which he ‘could only regard as selfishness in some one’. However, as a working quarry, it was not hard for him to find, and he saw ‘the bones were being haled [sic] away daily for building or other purposes’. On the subject of publications, Williams clearly intends to proceed with his paper to the Geological Society of London, which he suggests will not compromise the plans Riley and Stutchbury might have, since their collections are larger and since Riley is clearly recognized as a professional anatomist who will describe the bones in full: ‘... all you communicated to me was that an account wd. appear in the Phill. Magazine – it was from the Bl. Inst. only I learned that Dr. Riley was preparing a Paper for the Geol. Transactions. My short and hasty memoir will not much frustrate his more scientific assessment for you are possessed of more ample details and opportunities than I had.’ The ‘account in
the Phill. Magazine’ is clearly Anon. (1834b). Williams refers to his ‘fragment of a small jaw which by a lovely fracture explained the dentition, from which I inferred the genus, of the animal’, and he offered the specimen on loan to Riley and Stutchbury. Indeed, they refer to this specimen in their memoir (Riley and Stutchbury, 1840, p. 351, pl. 29, Fig. 3), but presumably returned it to Williams, and its present location is unknown.

Williams did not proceed with his paper which had been read to the Geological Society of London on 17th December, 1834 (Williams, 1835; Thackray, 2003, p. 62). At that time, brief abstracts of papers read to the Society were reported soon after in the Proceedings. Some of these papers might not go further, while others were developed into longer memoirs that would appear later in the Transactions. However, such a fuller account required additional effort from the author, and was costly and time-consuming if plates had to be engraved. Williams did not proceed to a fuller account. In his summary of events (Appendix, Letter 4), Stutchbury refers to Williams’s brief paper somewhat contemptuously: ‘... in fact he had no materials for such a notice (independent of the small portion of jaw) except what he saw during several visits to the Instn. This may be true, since there is no record in Williams’s papers (TTNCM) of any further materials; indeed he makes no further mention of the Durham Down site anywhere in his extensive series of papers and notebooks, except for the brief notebook entry noted above.

The to-and-fro over the Bristol bones reflects a number of aspects of contention (Knell, 2000). To palaeontologists then, as today, there are three kinds of ownership involved: (1) ownership of the actual fossils–Stutchbury wanted them all for the collections of the Bristol Institution, whereas Williams wanted them for his own collection; (2) ownership of the species name – the hope that the new animal might be named after its discoverer; and (3) ownership of permission to bestow the name – the first discoverer is expected to exercise the privilege of announcing the new materials to the world, and perhaps affixing a name. In the 1820s to 1840s, the norm was to seek to achieve both objectives 2 and 3, by naming the genus first (objective 3), and then allowing someone else to name the species later (objective 2). A further issue, and strengthening point 1, was that Stutchbury and Riley may have felt an intense need to keep the Bristol bones in Bristol; the specimens came from quarries in Clifton, geographically close to the rooms of the Bristol Institution, and it may have seemed unusually challenging to see some of them disappearing out of the city and out of general ownership to the private collection of a country parson. Linked with these issues was the fact that the fossil collections of the Institution were proudly displayed for the benefit of members and others, both in their rooms, and at national events like the meeting of the British Association for the Advancement of Science (Anon., 1836a), and so the curator and members urgently required new materials. Two final points of contention may have been that Williams was a country parson, perhaps also that he was Welsh, and these facts may have played against him; certainly these two epithets, ‘Welsh’ and ‘parson’, were employed almost as terms of abuse by Murchison and others (Rudwick, 1985; Thackray, 2003). Whether these reflect generalised prejudices against country parsons and against the Welsh, or just the fact that Williams was roundly disliked as an individual, it is hard to tell. After the urgency of the proceedings from October, 1834 to March, 1835, it seems remarkable that the much–promised paper by Riley and Stutchbury to the Geological Society of London was not read until March, 1836, and that the memoir was not completed until late 1838, and published in 1840. Perhaps it was clear to all that Williams had withdrawn decisively from the fray: after all he was launching into a much bigger dispute, with Murchison and others, on the nature of the Devonian system, and he gave his first paper on that subject at the meeting of the British Association for the Advancement of Science in Dublin in August, 1835 (Rudwick, 1985). The Devonian dispute rumbled on from 1835 to 1841, and Williams carried out constant fieldwork, writing, and trips to London to present his papers.

Riley and Stutchbury’s account of the Durham Down specimens was read at the Geological Society of London on March 23rd, 1836, but they were not present at the reading of their paper (Appendix, Letter 4), which was communicated by Charles Lyell (1797–1875). The published version (Riley and Stutchbury, 1836), an abstract, is unillustrated, but it gives a full page of description of the new taxon Thecodontosaurus, and indicates the repository of the jaw bone and other elements, and can hence he regarded as an adequate characterization of the genus. The name Thecodontosaurus (‘sheath-toothed reptile’) refers to the fact that, although superficially lizard-like, the teeth are set in distinct sockets, clearly not a lizard character. Riley and Stutchbury (1836) also announce their new genus Palaeosaurus, and the two species P. cylindricum [sic] and P. Platydodon [sic], but here the characterization of the genus is minimal, and of the species, non-existent. A further account was presented to the British Association for the Advancement of Science, which met in Bristol in August, 1836 (Riley and Stutchbury, 1837). This second paper concentrates on the geology of the bone-bearing sediments, and adds nothing to the characterization of the taxa. A detailed argument is presented that the vertebrae from Durham Down are crocodilian in nature, and the jaws and teeth rather lizard-like. The genus Palaeosaurus is referred to in a footnote (p. 91), together with its two species P. cylindron and P. Platydodon [both now spelled correctly], but the genus name is spelled Palaeosaurus in a table on p. 94.

The Bristol Mercury of Saturday 27th August, 1836 provides a brief report of the reading of this paper at the British Association meeting on the preceding Wednesday, together with a verbatim summary of the discussion (Anon., 1836a, p. 3): ‘Mr Conybeare said he had listened with great pleasure to this interesting paper, as he
had always been a lizard fancier. Dr Buckland said, he knew the partiality for the lizard tribe, and it was not to be wondered at that his long and lanky friend (a laugh) should be so disposed. The doctor then expressed his admiration of the paper just read, which treated of a most interesting subject, and proceeded to remark on Saurian remains, of which there was a beautiful collection on the table, from the museum of the Institution. The report continues with further light-hearted remarks by Buckland about Gideon Mantell’s saurian remains (Iguanodon), ‘which must have been of such gigantic size that, compared with them, the elephant was a mere shrimplike’ (hear, hear). Many who had travelled to Brighton were not perhaps aware, that they were crushing beneath their chariot-wheels the remains of tens of thousands of animals which, had the travellers lived a hundred thousand years ago, would have turned the tables upon them; there was at this time, in the College of Surgeons, in London, the remains of an animal, whose tail was more than a yard in circumference, as was proved by the existing vertebrae. It is interesting that Buckland at this point linked the Bristol animal directly with his and Mantell’s earlier reports of Megalosaurus and Iguanodon respectively, and yet Owen (1842) failed to include Thecodontosaurus in his newly invented Dinosauria (see below). A further verbatim report was offered by The Athenaeum on 3rd September, 1836 (Anon., 1836b, p. 525), focusing more on the paper itself, and omitting the humorous tone of the discussion. This report notes that Buckland made comparisons between the Bristol fossils, and those then recently reported by Hermann von Meyer from the German Keuper (Upper Triassic).

The full descriptive memoir (Riley and Stutchbury, 1840) was published three years later. Proofs were ready in October, 1838 (Appendix, Letter 5), and William Lonsdale (1794–1871), a noted geologist and palaeontologist, and then curator and librarian of the Geological Society of London, noted some editorial work he had done and some changes to the plates which were evidently engraved in London at the behest of the Society (Fig. 6). The memoir confirms the indication in the 1836 paper that Thecodontosaurus was founded upon a right dentary with 21 teeth, while the two species of Paleosaurus [note spelling], P. cylindrodon and P. playodon, are described and illustrated adequately, each on the basis of a single tooth (Riley and Stutchbury, 1840, pl. 29, Figs. 4, 5). These authors also describe a range of postcranial remains which are not clearly assigned to either of these taxa. The postcranial remains are generally compared with those of modern crocodiles, and the vertebrae are said to share similarities with Megalosaurus, but the jaws and teeth are no longer said to be particularly lizard-like. Riley and Stutchbury (1836, 1837, 1840) named only the genus Thecodontosaurus; the specific name antiquus was added by Morris (1843, p. 211) in his Catalogue of British Fossils. The intricacies of the taxonomy of these taxa and changes in the assignment of material to the genera Thecodontosaurus and Paleosaurus (usually spelled Palaeosaurus after 1840) are discussed in Benton et al. (2000).

In their various papers, Riley, the anatomist trained by Cuvier, presumably wrote the portions on the postulated affinities of the Bristol bones and teeth. In the reports that appeared from 1834 to 1837, there was much reference to the hybrid nature of the Bristol animal, which sported lizard-like jaws and teeth combined with crocodilian vertebrae. These comments may have been made in the context of the Great Chain of Being, the view that living organisms were arranged in a divinely ordained sequence from simplest to most complex, and the search for now extinct intermediates between living forms. This was a debate that also coloured contemporary interpretations of the cartilaginous fish Squatina, as well as the ichthyosaurs and plesiosaurs (Taylor and Torrens, 1987; Taylor, 1994). However, there is little mention of these ideas in the final paper (Riley and Stutchbury, 1840), even though Owen retained such allusions in his later reports.

Richard Owen (1804–1892) visited Bristol in August, 1839 (Crane, 1883), and presumably arranged then that the Thecodontosaurus collection should be sent to London. In November, 1840, Stutchbury wrote to Benjamin Silliman (1779–1864), the noted North American geologist at Yale University, regretting that he could not send any specimens of Thecodontosaurus, since the whole collection had been sent to London (Appendix, Letter 6). Owen had been commissioned by the British Association for the Advance-ment of Science to review the fossil reptiles of Britain, and in his second report (Owen, 1842, pp. 153–155), he gave a detailed commentary on Thecodontosaurus and Palaeosaurus, both of which he assigned to his new group, the thecodonts, primitive reptiles with their teeth in sockets, and sharing the characters of modern lizards and crocodiles. These comments were repeated in Owen’s Odontology, then in process of publication (Owen, 1845, pp. 266–267). Owen did not refer Thecodontosaurus to his new group Dinosauria, named in the same report (Owen, 1842, p. 103), and the Bristol animal was recognised as dinosaurian only by Huxley (1863).

The collection of specimens sent to London for Owen’s perusal was then presumably returned soon after (although there is no record of this) because Huxley reported seeing a large collection in Bristol in the 1860s (see below), and the small collection of Durdham Down specimens in the Natural History Museum includes few of good quality and few that were ever illustrated (Benton et al., 2000).

5. The fate of the collections after 1840

Most of the Thecodontosaurus specimens were collected in the 1830s, but there were already small artisans’ dwellings in the floor of the quarry at that time. These, and new large houses on top of the quarry margin, prevented further expansion, and specimens could no longer be obtained.

There was surprisingly little mention of the Thecodontosaurus specimens in various Bristol Institution reports from 1835 onwards. Stutchbury, in one of his reports to the Museum Committee (CRL 26066, report dated 30th November, 1844) notes that the ‘crocodilian remains are arranged on tablets, the whole forming a very respectable series’, these possibly being the Thecodontosaurus materials. A list of ‘Duplicates of the Bristol Institution’ (CRL 26066, undated, 1840s) includes item 50, ‘Thecodontosaurus in Magn. Lime’; priced £3.0.0, but whether any specimens were sold then is unknown. From 1835 onwards, the Bristol Institution had been distinctly short of money (Barker, 1906, pp. 28–31; Neve, 1983), and sales of specimens would have earned some revenue.

In the late 1860s, when Huxley visited Bristol to examine the Thecodontosaurus and Palaeosaurus specimens, he reported that ‘more than a hundred different specimens were spread before me’ (Huxley, 1870, p. 45). Moore (1881, p. 67) noted that ‘A few years since, in drainage works at the same spot, this conglomerate was again crossed, and some other bones added to the series deposited in the Museum of the Bristol Philosophical Society’. In 1888–1889, Edward Wilson (1848–1898), the then curator, sent a number of ‘duplicate’ specimens from the Bristol Thecodontosaurus collection to the British Museum (Natural History) and to the Peabody Museum, Yale University (details in Benton et al., 2000). A further collection of 17 Thecodontosaurus specimens had already earlier been acquired by the Academy of Natural Sciences, Philadelphia, through a local benefactor, Thomas Batterby Wilson (1807–1865), who acquired these as ‘duplicates’ from the Bristol Institution through his brother, Edward Wilson of Hean Castle, Tenby (1808–1888), in 1845. Marsh visited the Bristol collections in 1888, and he personally arranged the transfer of specimens to Yale, partly in exchange for American materials, but the supposed ‘duplicates’ sent to Yale included a near-complete braincase and forelimb, described by Marsh (1892), and in fact two of the best of the
Fig. 6. One of the two original plates from Riley and Stutchbury’s (1840) description of Thecodontosaurus, showing the type lower jaw (top left), teeth (top right), a partial ilium (lower left), vertebrae (lower right), and a rib (bottom).
Thecodontosaurus specimens. The Bristol curator Edward Wilson published a series of catalogues of the collections, in one of which (Wilson, 1890, p. 365), he noted the type specimens of Thecodontosaurus and the two species of Palaeosaurus, identifying previously figured examples, but he did not give catalogue numbers or any count of the number of specimens. Seeley (1895) and Huene (1902, 1908a, pp. 190–216, 240–241, 1908b, 1914) described the considerable collections in Bristol.

A further 25 Thecodontosaurus bones found their way into the collections of the British Museum (Natural History), a series of isolated vertebrae, rib fragments, and phalanges (BMNH 49984, R1531–1553; listed by Benton et al., 2000), presumably sold or exchanged as ‘duplicates’: only two of these were figured by Huene (1908a). In some way, not exactly clear, some of the Durham Down Thecodontosaurus specimens in the BMNH were mis-labelled as from Queensland, Australia, and these were later named Agrosaurus magilivrai Seeley, 1881, one of the first dinosaurs to be reported from Australia. However, the origin of the materials had been confused, and the specimens are almost certainly from the Durham Down locality (Vickers-Rich et al., 1998).

In 1926, according to records in the Bristol City Museum, 166 specimens of Thecodontosaurus were catalogued and packed, but other material presumably remained on display. In November 1940, during a bombing raid by the Luftwaffe, a direct hit destroyed the original geology gallery of Bristol City Museum (Anon., 1941), and some 92 specimens of Thecodontosaurus were lost, including much of the best material illustrated and described by Huene (1908a). The specimens that had been boxed up in 1926 were reopened in 1959, and their dusty condition suggested that they had not been touched since. These specimens, together with 18 further bones recovered from the wreckage of the museum, give a current total of 184 specimens extant in the Bristol City Museum collection, including some of the specimens figured by Riley and Stutchbury (1840). One specimen, the proximal end of a femur (BRSMG Ca7456), shows burn marks, and a note states that it was salvaged from the wreckage of the museum annex in May, 1941.

After the Second World War, further studies on Thecodontosaurus were proposed and executed. John Attridge of Birkbeck College, London, studied the Bristol specimens between 1959 and 1979, and had some of them prepared from the rock, but nothing was published (Anon., 1961). Further work through the 1970s and 1980s is summarised by Benton et al. (2000). A new specimen, an apparent juvenile from fissure fills in Pant-y-Fnymon Quarry in South Wales, similar to those in Clifton, was assigned to Thecodontosaurus antiquus by Kermack (1984), and named as the new species T. caducus by Yates (2003), and then assigned to the new genus Pantydraco by Galton et al. (2007), and described in detail by Galton and Kermack (2010). All the surviving specimens of Thecodontosaurus from Durham Down were described by Benton et al. (2000), including the first full descriptions of the braincase and the articulated forelimb in the Yale Peabody Museum collections. These authors provided reconstructions of the whole skeletons of adult and putative juvenile specimens (Fig. 7). Meanwhile, a collection of some 5 tonnes of bone-rich cave breccia from Tytherton Quarry (ST 660890), near Bristol, was transported to the University of Bristol in 1975, and formed the basis of a PhD study (Whiteside, 1983) and an ongoing, major research and public engagement initiative (Benton et al., 2011).

6. Discussion

The story of the discovery and naming of Thecodontosaurus is a vignette of scientific practice and scientists in the 1830s. The three proponents represent three classes of scientists of the day, the paid curator, the gentleman medical man, and the amateur country parson. The curator, Samuel Stutchbury, overworked and underpaid, and certainly not regarded as a gentleman by the fellows of the Bristol Institution, became increasingly respected in Bristol and London because of his industry and wide knowledge (Taylor, 1994). The gentleman surgeon, Henry Riley, had a higher social status, even though he worked for his living. He was styled ‘doctor’, and was something of a dandy and a radical, coloured profoundly by his student years in Paris (Desmond, 1989).

The country parson, David Williams, was driven by his interest in geology and palaeontology, and was clearly held somewhat at arm’s length by the established scientific community in Bristol and London (Rudwick, 1985; Thackray, 2003). Normally, such a person would have been accepted well into society, as were many other country parsons, including Conybeare, but perhaps Williams’s controversial character and his pushy approach to establishing fields of research made him something of an outcast. In one of his notebooks (TTNCM, notebook 18, May–October, 1840), he notes that he is a nobody in London and was snubbed shamefully, and this after a decade as a Fellow of the Geological Society, and having read his papers at their meetings through that time.

Williams was not even well regarded as a parson. In a devastating sketch, published in his lifetime, the anonymous ‘Churchgoer’, later revealed as Joseph Leech, local journalist and founder of the Bristol Times, described how Williams’s church at Bleadon, west of Bristol, was uncared for. He attracted meagre congregations of a dozen in the morning and ‘in the afternoon there might have been two, a sorry proportion for so extensive a parish’ (Churchgoer, 1850, p. 88). He notes, further, that during the service, Williams ‘seemed to be suffering from flatulency, for at every other verse he was obliged to pause, afterwards wiping his mouth with an old brown handkerchief, and occasionally varying the act by using the sleeve of his surplice (which was far from clean) for the purpose’. Later, Churchgoer (1850, pp. 91–92) estimates that Williams earned some £1000 per year from the living of Bleadon and a neighbouring parish (Kingston Seymour), a vast sum in those days, and yet ‘there is no school of any kind at Bleadon; nor have I heard that the Revd. David Williams ever made a single effort to establish one there’.

5 Felicity Walker (pers. comm.), living relative of David Williams, notes that at the time of Leech’s visit, Williams was nearing his death, and was suffering from hydrothorax (fluid accumulating around the lungs), hence the need for a handkerchief.
In the end, the Thecodontosaurus specimens passed to Richard Owen, another class of scientist, firmly rooted in London, and at that time rising rapidly in prestige. Although he worked for a living, and was in some regards no different from Stutchbury in his origins and social class, Owen’s higher appointments, at the Hunterian Museum of the Royal College of Surgeons in London, and elevation from mere curatorial tasks to the title of Professor, allowed him to pass into the higher echelons of society. His position in London also gave him an immediate advantage, since even the gentleman savants in Bristol, like others around the provinces, saw it as their duty to send every new discovery to him for his inspection. Owen rarely went in the field. He travelled out of London to see specimens in the private collections of noblemen, but generally relied on country naturalists to send specimens to him from all parts of England. Around 1840, he had at his disposal a vast array of fossil reptiles, including the specimens of Thecodontosaurus, but also related materials from the Triassic of Shropshire and Warwick, also sent by local natural history societies (Benton and Gower, 1997), and these he used in his various reports to the British Association for the Advancement of Science (e.g. Owen, 1842), his ambitious, monographic study of the comparative anatomy of teeth (Owen, 1845), and various concurrent papers to the Transactions of the Geological Society of London.

Acknowledgements

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Appendix

Letters concerning the discovery of Thecodontosaurus, all preserved at Bristol Record Office (BRO) and catalogued in package BRO Ref. No. 32079/43).

[1. Letter from Revd D. Williams to S. Stutchbury Esq., Philos. Institution, Park St., Bristol; postmarked ‘Cross Penny Post’; BRO Ref. No. 32079/43/2.]
Bleadon nr. Cross
Jany. 14th 1835.
Sir,

In a conversation I had with Mr Danger a day or two ago, he stated that he had been told at the Institution that I had privately & unfairly possessed myself of facts and information collected there of, the Bones found on Durdham Down.

The only time, since the discovery that I have been in the Laboratory I was asked to walk down by Mr Upham on my enquiring for yourself, when Mr Adams and a workman were there. Neither then, or at any time obtained the knowledge of a fact, or information that I had not more fully ascertained at the Quarry, and the entire substance and matter of the short and hasty memoir which I sent to the Geol. Society, I collected with my own eyes and hammer, or specimens brought me by the quarrymen.

What may have been intended by the terms “privately and unfairly” or by whom said I knew not, but in either their restricted or extended senses I repel them with as much scorn as a man can feel when he knows himself to be wrongfully & unjustly accused.

I have the honor [sic] to remain
Sir
Your very obedient Servant
Dd Williams

[2. Draft of letter from S. Stutchbury to Revd. D. Williams, Bleaden [sic], Somerset; see Fig. 5: BRO Ref. No. 32079/43/3.]
Bristol. Jan’y. 16. 1835
Sir,

Without enquiring into the motive which has induced you to address me on the subject contained in yours of the 14th, I shall without constraint state (as respects the words imputed to have been made to Mr Danger) that I do not recollect ever to have seen him within the walls of the institution, or to have had the pleasure of speaking to him on any affair whatever, nor am I aware that I have the honour of even being known to him; nor does he appear to be known to any officer employed in the establishment. And as regards the sentence you spoke I was only aware of the fact of your having made such a communication to the Geological Soc'y. from your having so stated it to my assistant Mr Sheriff. The following sentence inserted from the final page of the letter: Therefore not knowing in the slightest degree, even to this day, the nature of your paper, makes it the more improbable that any such words could, under any circumstances, have been uttered by any in this building.] But as regards this affair, I now freely confess that I have felt rather sore on the subject, and for the following reasons. First, the communication, and calling your attention to the bones was gratuitous on my part, being ever anxious that a free intercourse should exist between parties following the same pursuits. Secondly, that exhibiting the fossils, stating the circumstances under which they were found, and freely giving all the information I was possessed of, excepting the precise locality, which last fact, I only at that moment, kept back, because I was in some degree pledged, and without that party’s concurrence was not justified in making it known [the following phrase inserted from the final page of the letter: and I have no doubt you will remember, that at that time I expressed myself freely; indeed, the pleasure I should have in a few days to accompany you to the spot myself.] Thirdly, that having informed you, of my intention of working out a memoir for the Geological Society, and being aware of the possibility of being deprived of the opportunity of securing the remains yet entombed, and judging of your intentions by your importunities regarding the precise locality, notwithstanding I had pointed out to you the geological position, I must again repeat that I felt much hurt to find the material for such a paper was passing into other hands, & also to find that persons following a pursuit which ought to lead to no other feeling than that of unity should by any little untoward differences lose that confidence in each other, which in all professions, and more particularly that of science should be the bond of good fellowship. - further I have only to say that neither by myself or with any acquiescence have such words been used as have led to the honour of our present correspondence.

I remain Sir your most Obdett. Servt.

S.Stutchbury.
To the Revd. D. Williams
Bleadon
(excuse haste)

Jany. 24th 1835.
Sir,

Your frank & satisfactory reply which I recd. last Evng. gave me sincere pleasure. I have invariably experienced from yourself & other officers of the Institution every information & assistance and the most simple and unaffected kindness, and I confess the apprehension of an interruption of these civilities tinctured my regret with a shadow of resentment when I felt conscious that I had done nothing to forfeit them. With respect to the discovery at Durdham Down, I well remember your saying you were obliged not to disclose the place. So far I fully excused you from what I could only regard as selfishness in some one, when on my finding out the spot I saw the bones were being halled[sic] away daily for building or other purposes, for you will surely concede that it was preferable they shd be possessed by the merest collector living to being destroyed or lost altogether.

As for the publication of the fossils, all you communicated to me was that an account wd. appear in the Phil. Magazine - it was from the Bl. Museum only I learned that Dr. Riley was preparing a Paper for the Geol. Transactions. My short & hasty memoir will not much frustrate his more scientific assessment for you are possessed of more ample details & opportunities than I had. I certainly found a fragment of a small jaw which by a lovely fracture explained the dentition, from which I inferred the genus, of the animal, if it is of any service to yourself or Dr. Riley you are welcome to it for so long a time as you may require it. Henceforth the Bl. savants may take [?] the shale of Durdham Down back again without interference from me. The world is wide enough & [thought?] is to be [liased?] & this [ensured?] elsewhere without our quizzing each other there.

I remain Sir,
Your much obliged and faithful Servant
Dd Williams

4 This is presumably John William Upham (1802–1866), Assistant to the Curator in the Bristol Institution, having served faithfully in that and similar roles since at least 1823.
Dear Sir,

My Brother informs me the paper upon the Saurians was read on Thursday Eveny. and that you was [sic] doubtful whether we considered the three animals to belong to the same Genus or not. We believe them to be three distinct species of two genera, the one of jaw with the 20 teeth (Thecodontosaurus) (I wish we could find a shorter name) and the other two, Palaeosaurus cylindrodon and P. platyodon [sic].

In answer to your enquiries as to the time when the discovery of this remains was first made, the following statement will be found to embrace these particulars. In the first week of Sept 1834 during my absence from Bristol and while attending the meeting of the Br. Asson. at Edinburgh, a quarryman brought one or two fragments of bone to the Instn. but in consequence of my not being there he referred to Dr Riley who became possessed of them, one of them proved to be the very interesting portion of a fibula figured & described in the memoir. Upon my return to Bristol at the commencement of October, several other portions were brought. We then immediately engaged the men to work diligently upon the spot until a considerable number of fragments came into our possession - in a few days after we had the pleasure of receiving Dr Agassiz to whom they were shewn, and at the same time they were also shewn to Mr Williams and Mr Conybeare [on the first of February 1835 it was noticed] and a further notice appeared in the first number of the West of England Journal, and Mr Conybeare [deleted] sent a short notice to the Philos. Mag. for Decr. 1834 while Mr Williams [sic] account did not come before the Geological Society until [no date given], in fact had no materials for such a notice (independent of the small portion of jaw) except what he saw during several visits to the Instn.


Geol. Soc.

[6. Letter from Samuel Stutchbury to Prof. Benjamin Silliman of Yale University, New Haven, Connecticut; BRO Ref. No. 32079/43/37.]

Bristol Institution Nov. 6th 1840.

My Dear Sir,

I have the pleasure of sending you the proof sheet of the Saurian Memoir, with the original drawings, and the sketches of the manner in which the Council have directed them to be engraved. You will perceive that two or three figures are omitted, the referee not considering them well defined. If you will have the kindness to send the specimens from which the rejected drawings were made, I will consult with the referee respecting them. I have ventured to make some transposition in the introduction but I hope I have not interfered with your views and Dr Riley [sic].

The description of the two extra teeth would perhaps come in better on the last page, and then the reader’s attention would not be divided between the Thecodontosaurus, and the Palaeosaurus. I presume you consider all the remains except the two teeth, to belong to the former genus.

Will you kindly mark on the last page, the number of extra copies Dr Riley and yourself would wish to have.

An immediate return of the memoir with the specimens would be a great favour.

May I beg you to present my best respects to Dr Riley -

I am very truly yours

Wm. Lonsdale

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