

◆ Prelude to Piltdown

CHARLES DAWSON'S ORIGINS, CAREER AND ANTIQUARIAN PURSUITS, 1864–1911, AND THEIR REPERCUSSIONS

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*Towards the end of his life Charles Dawson (1864–1916), amateur palaeontologist and antiquary, discovered the remains of Piltdown Man and since 1953 has been heavily implicated in their fabrication. On him in that connection much has been written, but little has been published on his earlier life with adequate documentation. Drawing on sources not previously used, this article describes his family background, upbringing and fossil collecting, and his career as a solicitor, and explores his antiquarian pursuits in Sussex, particularly his association with Hastings Museum and with the Sussex Archaeological Society (including the society's ejection from Castle Lodge), his excavations at Hastings Castle and the Lavant caves, the Beauport Park statuette, the Pevensy Roman bricks, his History of Hastings Castle and his attempt to thwart L. F. Salzman's election to the Society of Antiquaries. The antiquarian phase of Dawson's research career was neatly bracketed by A. S. Woodward's publication in 1891 and 1911 of his successive finds of *Plagiaulax dawsoni*.*

These antiquarian pursuits show his enormous energy and charm, occasional disingenuous conduct, and the facility with which he moved between West End society and Sussex labourers, an important source of his finds. As a well-known collector he may have accepted, and attempted to exploit, items of doubtful authenticity, but his recording of provenance was reasonable by contemporary amateur standards. He actively used the press, local and London, to boost his reputation. But his failure to conceal the limits of his scholarship in his History of Hastings Castle of 1910 contributed to his reverting to palaeontology.

A face-saving account of the 'Castle Lodge episode' of 1903, doubts emerging in 1914 about the finds from the Lavant caves, and Salzman's antipathy for Dawson on account of the Pevensy bricks (1907) and his canvassing the Antiquaries (1911), may all have contributed to Piltdown Man being disregarded by the Sussex Archaeological Society. But they cannot of themselves have outweighed the advocacy by Woodward, Dawson's collaborator at Piltdown, who was active in the society between 1924 and 1943. The implication is that there were doubts expressed locally, but only informally, about the authenticity of Piltdown Man.

This ADS Supplement comprises:

Appendix 1. Consolidated list of primary and secondary sources

Appendix 2. List of the published works of Charles Dawson

Appendix 3. Charles Dawson, 'The Priory of Hastings. The old and the new. A pilgrimage', *Hastings & St Leonards Observer*, 24 November 1888

Appendix 4. *Plagiaulax dawsoni*

Appendix 5. The mourners at Charles Dawson's funeral, 12 August 1916

Corrigenda to the main article

The symbol § refers to sections of the main article.

Appendix 1 Consolidated list of primary and secondary sources

This list encompasses all sources cited in the main article, in appendices 3 and 4 and in notes to entries in appendix 2.

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IOR/L/AG/46/11/138, East Indian Railway Company, staff lists, 1864–8.

British Museum, London, Department of Prehistory and Europe library

Visitors' book and in-letters, 1891–2

City of Westminster Archives Centre

CHRIST CHURCH/3/2 m/f, marriage register of Christ Church, Mayfair

East Sussex Record Office, The Keep, Brighton

ABE/2W, 17L and 20E/1, files of the Marquess of Abergavenny's agent concerning Castle Lodge, Lewes
ACC 364/6/3 and ADA 159, court books, Manor of Lewes Burgus

ACC 1034, papers of the Lewes and County Club
ACC 3801/2/2/4, Archive of the Sussex Archaeological Society, agreements relating to windows at Castle Lodge, Nov. 1903–Dec. 1930

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ACC 6614, papers of the firm of Dawson & Hart, solicitors, 1854–1917, including some personal papers of C. Dawson
ACC 7010, Pelham documents relating to the castle and rape of Hastings, 1429–1758

ACC 9048, Archive of the Sussex Archaeological Society, including 1/4, Ironwork exhibition 1901; 1/5, correspondence file for 1903–6; 5/1/10, papers of H. M. Whitley, honorary secretary, and Canon J. H. Cooper, chairman of council, concerning the society's eviction from Castle Lodge; 11/1/1–3, three books of out-letters kept by the society's clerk, 1894–1910; and 2/7/6, visitors' books, 1947–81

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AMS 6499, sale of C. G. Turner's property in Lewes, 1919

BMW/A 15/143, sale particulars of Fairholme in Fairwarp, 1924

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DL/A 25/445, building regulations plan for extension to Castle Lodge, Lewes, 1914

DW/B 128/1–7 and 129/1–6, Uckfield UDC minute books, 1895–1917

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GIL ; 3/161/1–2; 3/170/1, 6, 10, 11, papers relating to H. M. Whitley as agent of the Gilbert estate, Eastbourne
PAR 326/14/2/1, Fairwarp parochial church meeting minutes, 1902–99

RAY, Archive of J. E. Ray, headnote and 1/2/4

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SFD 2/3/3, 7, leases in Hassocks to John Lewis, 1851, 1858.

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SRS 1/1, 2/1, Sussex Record Society, minute book, 1900–25, and subscription account book, 1901–35.

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Borough Council) and books, off prints and newspaper cuttings relating to those artefacts

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Appendix 2 List of the published works of Charles Dawson

I have adopted a wide definition of ‘published works’, by including reports of exhibits to learned societies, two unpublished papers, two commissioned publications which never appeared, several newspaper reports naming him in the third person, the edition of a letter published in 1981 and a book which may have been by his wife. Dawson was given to publishing the same material more than once, usually with small changes, and all known variants are included, except for offprints which are just that. There must be more letters to newspapers than I have identified. Abstracts of Dawson and Woodward’s papers on Piltdown, which appear to be derived from the primary publications in the journals of the Geological Society of London, have been excluded.

All items are in a single chronological sequence and undated items are assigned to a year (as are those in journals with each volume covering several years), so as to give consistent referencing, with the dating discussed in the note at the end of the entry. If more than one item is assigned to a year, a, b, etc. is added. The attribution of unsigned items is similarly discussed in the note. Dawson is the first-named author of all multi-authored papers. Citations in the notes are by year and letter if by Dawson and otherwise by author and year to Appendix 1.

1883a. [Report on Palaeolithic remains in Poole’s Cavern, near Buxton, Derbyshire], [A Hastings newspaper?]. (On 14 Dec. 1882, the *Hastings & St Leonards Observer* reported that Charles Dawson ‘the local geologist’, was on an excursion to search for Palaeolithic remains in Poole’s Cavern, near Buxton, Derbyshire. Thirty years later Dawson recounted to a reporter that his first step to the discovery of fossil man was in 1882, on a short holiday spent digging beneath the floors of stalagmite in the Derbyshire caves for remains of our early ancestors, and that an account formed his first contribution to scientific literature: [Hastings correspondent] 1913. No copy has been traced.)

1883b. Proceedings of the Association, May 16,

1883, *Journal of the British Archaeological Association* **39**, 207. (Exhibition of Dawson’s drawings of a dagger found near Hastings Castle and two bronze celts from Bopeep.)

1888. The Priory of Hastings. The old and the new. A pilgrimage, *Hastings & St Leonards Observer*, 24 Nov. (Transcribed in Appendix 3 below. Author’s copy at Society of Antiquaries of London, Tracts 260 (10).)

1892. Hastings Castle, *Hastings & St Leonards Observer*, 25 June, 7. (Report of Dawson’s presentation to the meeting of the Sussex Archaeological Society’s committee on 23 June. A similar report appeared in *Sussex Daily News*, 24 June 1892. The *Observer* of 30 July 1892 reprinted a letter on the castle and its Norman dungeon from John Lewis to the *West Sussex Gazette*.)

1893a. A tooth impregnated with phosphate of iron, *Brighton and Sussex Natural History and Philosophical Society. Abstracts of papers*, 14–16. (Notes contributed to accompany the tooth’s exhibition to the society on 11 Jan. 1893. The specimen, obtained from a Brighton jeweller, was a calf’s tooth artificially coloured and polished, ready for cutting by the trade as a turquoise. Dawson had attempted to imitate the process.)

1893b. The Minnis Rock, *Hastings & St Leonards Observer*, 18 Feb. (See §6.)

1893c. Interesting discovery near Goodwood. Early British caves in the chalk, *West Sussex Gazette*, 2 Mar. (An amended and reordered version of the report on the excavation of the Lavant caves, the discussion of their origin and the finds list, dated 19 Feb. 1893, which Dawson had sent to the Duke of Richmond, now West Sussex Record Office, Goodwood MS 1928. See §8.)

1893d. Lavant caves [letter to the editor], *East Sussex News*, 27 Mar. (Reprinted in the *Chichester Observer*, 5 Apr. 1893.)

1893e. Iron statuette found in 1877 in Beauport Park, Sussex, *Proceedings of the Society of Antiquaries of London* **14**, 359-61. (Exhibited on 18 May 1893, with observations by C. H. Read and discussion.)

1893f. The Lavant caves, *Sussex Daily News*, 12 Aug. (Paper read at the conversazione during the Sussex Archaeological Society's general meeting in Chichester on 10 Aug. 1893.)

1894a. Excavations of the 'dungeon' at Hastings Castle [letter to the editor], *Hastings & St Leonards Observer*, 18 Aug., 7.

1894b. The Hastings cave excavations, *East Sussex News*, 12 Oct. (Read to the committee and several members of the Sussex Archaeological Society at Hastings Castle on 10 Oct. 1894. See also 1896a.)

1894c. Neolithic flint weapon in a wooden haft, *Sussex Archaeological Collections* **39**, 97-8.

1894d. Ancient boat found at Bexhill, *Sussex Archaeological Collections* **39**, 161-3.

1895a. The Lavant caves, *Daily Graphic*, 6 Apr., 10, 12. (Includes four engravings from photographs taken by Dawson and Lewis, for which see prints in West Sussex Record Office, Goodwood MS 1928, and Sussex Archaeological Society, Curwen and Gurd, box 2, Lavant.)

1895b. The Battle of Beachy Head, *East Sussex News*, 2 Aug. (Read at the meeting of the Sussex Archaeological Society, 25 July 1895, at Eastbourne Town Hall.)

1895c. *A description of the Battle of Beachy Head... (Read at the meeting of the Sussex Archæological Society, 25th July, 1895, at Eastbourne Town Hall)*. Lewes and Eastbourne: Farncombe & Co. 16 pp. (A reprint of 1895b from the same type, but with a small number of amendments. Dated only in the title. Dawson sent a copy to the *Army and Navy Gazette* for review. The editor passed it to John Knox Loughton (1830-1915), professor of modern history at King's College, London, who replied:

I don't see my way to doing anything with this little pamphlet, which I return. He has strung together an account from the ordinary English materials. The only point of interest

in it is his having seen what was probably the wreck of the Dutch ship at St Leonards. He is certainly wrong in many important details – e.g. that the French had 82 ships exclusive of frigates etc. (p. 3) – or (p. 4) 'the French were flying up and down the Channel between the English fleet & the coast of Hampshire!' But it is not worth slaughtering such a trifle.

Loughton continued that he might write up the battle himself, perhaps for a book he was writing for the same editor. (Costello 1985a, 48, quoting the letter tipped into a copy of the pamphlet in the library of the National Maritime Museum, c.1979; neither pamphlet nor letter could be found in the library in 2013.)

1895d. *The drummer, a legend of Herstmonceux Castle*. Brighton: W. J. Smith. 31 pp. (Dated 25 July 1895 in the introduction. Illustrated cover and title-page, three full page engravings, five in the text and a photograph of a 16th c. chest in the author's possession.)

1896a. Note on the seals of the Barons and of the Bailiffs of Hastings, *Sussex Archaeological Collections* **40**, 261-4. (Offprints are repaginated 1-4 Read at the society's visit to Hastings on 10 Oct. 1894. See also 1894b.)

1896b, with **Lewis, J.** Description of and remarks on the dungeon cells at Hastings Castle, *Sussex Archaeological Collections* **40**, 222-35. (Offprints are repaginated pp. 1-14. The draft as forwarded by the editor for setting is at Hastings Museum and Art Gallery, 2003.35.240. Lewis contributed, pp 226, first full paragraph, to 229, second paragraph.)

1897a. *Hastings Castle*. [Uckfield]: [C. Dawson]. 2 pp. (A prospectus for the 'History of the Castle of Hastings and the College and Church within its walls' by Charles Dawson, to be published by the author in one volume. It was distributed with *Sussex Archaeological Collections* **40** in August 1897 (see §12). Copies in SAS, Library Acc 2951 (lacking the tear-off order form) and Hastings Museum and Art Gallery, 2003.44.)

1897b. Discovery of a large supply of 'natural gas' at Waldron, Sussex, *Nature* **57 (1468)**, 150-1. (Issue of 16 Dec.)

1898a. Petroleum in Sussex, *The Standard*, 3 May. (Though unattributed, this article is almost identical to 1899a.)

1898b. Natural gas in Sussex, *Proceedings of the South-Eastern Union of Scientific Societies*, 73–80. (Read to the union's congress in Croydon on 3 June 1898. See 1898e, 6–10.)

1898c. On the discovery of natural gas in East Sussex, *Quarterly Journal of the Geological Society of London* **54**, 564–74. (Read to the society on 8 June 1898.)

1898d. Natural gas in Sussex, *Science Gossip* **2nd s.**, **5 (July)**, 45.

1898e. *Petroleum in Sussex*. Lewes: Farncombe & Co. 10 pp. (Copy at East Sussex Record Office, AMS 5555/15, with the date inferred from the contents which are:

pp. 1–5, extract from *The Standard*, 3 May 1898, being 1898a;

p. 5, letter to the editor of *The Standard*, from William Carter of Tilsmore, Cross-in-Hand, 3 May 1898, as owner of the land on both sides of the railway line at Heathfield station where gas was struck, who is open to negotiation for his selling it;

pp. 6–10, 'Natural gas' in Sussex, reprint of 1898b.

Tipped in are two plans of Carter's property:

facing p. 1, 'Plan of freehold estate, adjoining Heathfield railway station, Sussex, the property of Mr William Carter. As laid out for building purposes'; and

facing p. 6, 'Plan of freehold estate, [as it is now 1898 inserted in Dawson's hand] adjoining Heathfield railway station, Sussex, the property of Mr William Carter'. Both plans carry other annotations by Dawson.

Inserted in this copy is a cutting from *Engineering*, 25 Sep. 1903, reporting a paper at an unidentified meeting by R. Pearson on 'Natural gas in Sussex'.)

1898f. List of Wealden and Purbeck-Wealden

fossils, *Brighton and Hove Natural History and Philosophical Society. Abstracts of papers*, 31–7. (Dated June 1898.)

1898g. *List of Wealden and Purbeck-Wealden fossils*. Brighton: Southern Publishing Co. [i]+7 pp. (Offprint of 1898f. Reprinted in Brook and Austen 2012, which in turn has been offprinted.)

1898h. Ancient and modern 'dene holes' and their makers, *Transactions of the South-Eastern Union of Scientific Societies* **3**, 34–46. (Read to the union's congress in Croydon Town Hall, on 3 June.)

1898i. Ancient and modern dene-holes and their makers, *Geological Magazine* **decade 4, 5 (July)**, 295–302.

1898j. *Ancient and modern dene-holes and their makers*. London: Dulau & Co. 12 pp. (Author's copies at Society of Antiquaries of London, Tract 174**(2), and Sussex Archaeological Society, 930.1028X, the latter presented to John Lewis with ms. corrections and additions. Offprint of 1898i, repaginated as pp. 1–10; p. 10, reprint from *The Times*, 6 June 1898, reporting its reading on 3 June; pp. 11–12, 'Practical agriculture' by W. J. Malden [principal, Agricultural College, Uckfield], a series of articles published by the County Press throughout England, on 'Farming value of chalk' and 'Agricultural "bil stumps"', the former with the date June 1898 added by Dawson and the latter referring to Dawson's paper.)

1899a. Petroleum in Sussex, *Brighton and Sussex Natural History and Philosophical Society. Abstracts of papers*, 10–14. (Read at an excursion of the society to Heathfield, 11 June 1899)

1899b. Remarks on the visit to the bell pits (or dene holes) at Brightling, *Brighton and Sussex Natural History and Philosophical Society. Abstracts of papers*, 15–17. (The visit was on the same day as that to Heathfield (see 1899a), 11 June 1899.)

1899c, with **Lewis, J.** and **de Paris, G.** *Museums Association. Brighton Meeting. Excursion to Lewes, July 6th, 1899*. Brighton: J. G. Bishop. 8 pp. (Dawson contributed 'Short notes on Lewes Castle', including a plan copied from the Ordnance Survey and annotated; Lewis, 'The Cluniac Priory of St

- Pancras at Lewes', covering also the Battle of Lewes and with a plan signed by Lewis; and de Paris, 'Southover Church, Lewes'. This is perhaps the 'excellent little guide to Lewes Castle' mentioned in a brief portrait of Dawson in *Hastings & St Leonards Observer*, 7 Jul. 1900.)
- 1899d, with **Woodhead, S. A.** The problem of honeycomb, *Natural Science* **15 (Nov.)**, 347–50.
- 1900a, with **Woodhead, S. A.** The crystallisation of beeswax and its influence on the formation of the cells of bees, in *Report of the sixty-ninth meeting of the British Association for the Advancement of Science*, 782. London: John Murray. (Abstract of paper read to Section D, Zoology, on 15 Sep 1899 at Dover. See 1900b.)
- 1900b, with **Woodhead, S. A.** The hexagonal structure naturally formed in cooling beeswax, and its influence on the formation of the cells of bees, *Annals and Magazine of Natural History ser. 7: 5 (25)*, 121–6. ('Communicated by the Authors, having been read at the Dover Meeting of the British Association, 1899.' See 1900a. Their thesis was contradicted by Chapman 1900.)
- 1900c. Sub-Wealden exploration [letter to the editor], *Hastings & St Leonards Observer*, 2 Mar.
- 1901a. Coronation services of the Barons [of the Cinque Ports], *East Sussex News*, 22 Mar. (Read to the AGM of the Sussex Archaeological Society on 20 Mar. 1901.)
- 1901b. Hastings and the coronation interesting relics. Valuable mementoes nearly sold for old metal. Paper by Mr. Charles Dawson, *Hastings & St Leonards Observer*, 6 Apr., 2. (Read at the annual meeting of the Hastings Museum Association, 30 Mar. 1901. See 1902a.)
- 1901c. [A toad in a flint exhibited on] April 18th 1901, *Proceedings of the Linnean Society of London* **113 (1)**, 15–16.
- 1901d. A toad in flint, *Illustrated London News*, 20 Apr., 561. (Illustrated by two photographs taken by Dawson, with text doubtless provided by him. An illustrated report may have also appeared in *The Graphic*.)
- 1901e. Discovery of a mummified toad in a flint nodule found at Lewes, Sussex, *Brighton and Sussex Natural History and Philosophical Society. Abstracts of papers*, 34–9. (Paper read to the society on 26 April 1901. Blocks for the illustrations were donated by the *Illustrated London News*.)
- 1901f. *Paper on the discovery of a mummified toad in a flint nodule found at Lewes Sussex (now in the Henry Willett Collection, Brighton Museum)*. Brighton: W. H. Attwick. 7 pp. (Reprint of 1901e.)
- 1901g. Two objects of the Bronze Age found in Sussex, *Proceedings of the Society of Antiquaries of London* **18**, 409–11. (Exhibited on 20 June 1901, with Dawson communicating a note. The objects were found while digging foundations for 133 Bonchurch Road, Brighton.)
- 1901h. Combarons and their rights [letter to the editor], *Hastings & St Leonards Observer*, 6 July, 9.
- 1901i. Hastings' historical records [letter to the editor], *Hastings & St Leonards Observer*, 31 Aug., 7. (A letter from Dawson to the town clerk of Hastings on 'Hastings local and historical records' which he signed as FSA and Keeper of the Hastings Historical Manuscripts at Hastings Museum. Dawson invited the corporation to meet the cost of printing a history of Hastings as a Cinque Port and municipality, which he would compile from original records with a connecting text from contemporary chronicles and archaeological research.)
- 1901j. *Sussex Archaeological Society, Lewes Castle. Exhibition. Catalogue of ancient Sussex iron implements, ornaments and utensils....1901–2*. Lewes: [Sussex Archaeological Society]. 24 pp. (Copy in a private collection. It is marked 'Proof' and endorsed with Dawson's compliments to Frederick Jones of Halland, as a lender to the exhibition. Jones, agent and reeve of the Laughton estate and manors of the Earl of Chichester, had antiquarian interests and went through the catalogue, ticking loaned items and annotating other captions, but seems not to have returned it to Dawson. The exhibition opened on 12 Dec. 1901. The society's council had agreed in Sep. to print a catalogue for sale, and Dawson had this almost ready in manuscript on 24 Sep., with the intention that 'the various items may be cut out of the proof & pasted on cards with each

specimen.' It was ready for circulation in proof form only by 18 Dec., when Dawson recommended 'its publication at a later date, with the additions of illustrations by blocks of the specimens which have been presented and lent for the purpose.' The council seems to have sanctioned plates only for the 1903 article in *SAC* and there is no evidence that the catalogue was on sale at the exhibition. (East Sussex Record Office, SAS/2/1/6, 25 Sep., 18 Dec. 1901; ACC 9048/1/4; ACC 9048/11/1/3, 30 July 1903))

1901k. A note on the titular rank of the barons of the Cinque Port, *Hastings & St Leonards Observer*, 14 Dec., 7.

1901l. The services of the barons of the Cinque Ports at the coronation of the kings and queens of England, and the precedency of Hastings Port, *Sussex Archaeological Collections* **44**, 45–54. (Follows closely the text which Dawson read to the AGM of SAS on 20 Mar. 1901, see 1901a, with footnotes added. Offprint in Society of Antiquaries of London, Tract 171** (7), includes a leaf following the cover, 'A note on the titular rank of the Barons of the Cinque Ports', being 1901k.)

1901m. Excursion to Heathfield and Brightling. Saturday, June 22nd, 1901, *Proceedings of the Geologists' Association* **17 (4) (Aug.)**, 171–5.

1901n. Early man and Anglo-Saxon remains. (Commissoned before August 1901 to write this for the first volume of the *Victoria county history of Sussex*, despite reminders in March 1902, Dawson failed to deliver his chapter. It was reassigned to George Clinch and Reginald Smith, appearing as Clinch 1905 and Smith 1905.)

1902a. Note on the Hastings Corporation relics of coronations of the kings and queens of England, *Sussex Archaeological Collections* **45**, 110–13. (Read at the annual meeting of the Hastings Museum Association, 30 Mar. 1901. See 1901b.)

1902b. The history of the Hermitage at Buxted, Sussex. (This article is the appendix to an album of photographs which is known in four copies, among them at least two variants. The period in which is likely to have been first printed is 1900–03. The albums were prepared for private distribution

by Cecil de M. Caulfeild Pratt of The Hermitage, High Hurstwood near Buxted and are discussed at length in Miles 2007.)

1903a. [The Castle of Hastings], *Hastings & St Leonards Observer*, 22 Aug., 7. (Lecture at the castle to a visiting party of members of 'Le Souvenir Normand'.)

1903b. *Souvenir Normand: Note sur le Chateau de Hastings*. Uckfield: Brooker & Son. 4 pp. (Author's copy in Society of Antiquaries of London, Tract 215/2 (24). Includes two photographs of Hastings Corporation seal. Four ms. corrections and the date 1903 added by the author. On 20 Aug. 1903, the society, Le Souvenir Normand, unveiled a plaque at the site of the Battle of Hastings, followed by a gala concert on Hastings Pier and visits within the town: see *Hastings & St Leonards Observer*, 22 Aug. 1903.)

1903c. Sussex ironwork and pottery, *Sussex Archaeological Collections* **46**, 1–62. (The ironwork section of the catalogue, pp. 33–54, used type set for 1901j, with entries for exhibits added later (108a, 122a and 124a).)

1903d. Sussex pottery. A new classification, *Antiquary* **39 (Feb.)**, 47–9.

1905a. Bronze rapier found at Lissane, co. Derry, Ireland, *Proceedings of the Society of Antiquaries of London* **20**, 267–8. (Exhibited on 20 Mar. 1905.)

1905b. Old Sussex glass: its origin and decline, *Antiquary* **41 (Jan.)**, 8–11.

1906. *A minister of fate*. London: John Long. 341 pp. (This attribution is highly speculative and indeed is to Dawson's wife, for whom see §10.1. I have traced no other British-published novel by a Charles Dawson. In the words of a reviewer: 'The Lepells, father and son, are a capital pair of villains;... and the love romance that develops between Seymour and Florence, the sister of Edward Ravenshaw who inherits her brother's money in the event of his death and is the destined bride of the younger Lepell, makes a very charming idyll.... if it is a first novel it is distinctly promising.' It is set in southern England, the French Pyrenees and Brittany. The young men are Oxford (under)graduates, of landed families. The only character who showed much

sense is Mr Beverley, the Seymour family's solicitor, whose direction averted disaster and brought to court the last chapter's action for illegal detention in a French asylum. There is a pointed remark that the action evidently predated the Married Woman's Property Act (p. 173); and Dr Jarisson holidaying in the Pyrenees is of Grand Parade, Brighton (p. 29). See Review of *A minister of fate* by Charles Dawson 1906, 1907 (quoted.)

1907a. Note on some inscribed bricks and tiles from the Roman *Castra* at Pevensey (Anderida?), Sussex, *Proceedings of the Society of Antiquaries of London* **21**, 411–13. (Exhibited on 11 Apr. 1907.)

1907b. The Bayeux Tapestry in the hands of 'restorers', and how it fared, *Antiquary n.s.*, **3 (July)**, 253–8; (**Aug.**), 288–92.

1907c. *The 'restorations' of the Bayeux Tapestry*. London: Elliot Stock. 14 pp. (Author's copy dated 19 Jul. 1907, at Society of Antiquaries of London, Tract 267 (7). Set up from the same type as 1907b, with a few minor amendments.)

1907d. Pieces of ordnance of small calibre of the sixteenth and seventeenth centuries, *Proceedings of the Society of Antiquaries of London* **21**, 476–7. (Three guns and a mould for casting shot exhibited on 6 June 1907.)

From 1907, see also **Costello, P.** 1981 at the end of this list.

1908. Two prick-spurs found in Hastings Castle and an iron object from Lewes Castle, *Proceedings of the Society of Antiquaries of London* **22**, 320. (Exhibited on 4 June 1908.)

1909a. Bronze gilt stirrup from Framshall Park, near Stroud, Gloucestershire, *Proceedings of the Society of Antiquaries of London* **22**, 355. (Exhibited on 7 Jan. 1909. F. G. Hilton Price exhibited a bronze stirrup of similar form found at Butler's Wharf, London, and both are illustrated.)

1909b. The Bayeux Tapestry in the hands of the restorers. Additional notes and corrections, *Antiquary n.s.*, **5 (Dec.)**, 470. (Additions and corrections to 1907b.)

1909c. *History of Hastings Castle*. London: Constable & Co., Ltd. 8 pp. (Copy in SAS, Library Acc 2835b. A prospectus for 1909d as published, assumed to have been issued in the year on the title-page. The 'syllabus' is more detailed than the table of contents in 1909c, suggesting that it was the later to be set.)

1909d. *History of Hastings Castle, the Castlery, Rape and Battle of Hastings, to which is added a history of the Collegiate Church within the Castle, and its prebends*. 2 vols. London: Constable. 668 pp. (Notwithstanding the date on the title-page, it was published on 11 July 1910. See §12, also for references to reviews.)

1909e. Old Sussex iron work. In *Catalogue of an exhibition of local antiquities held at the corporation museum, Hastings, from 15th March to 15th May 1909* 58–61. Hastings: F. J. Parsons, Ltd.

1909f. Old Sussex iron work. (Cited in 1909e as in the press in *Memorials of old Sussex* from Bemrose. The series *Memorials of the Counties of England* was started by Bemrose in 1906 and ten or so volumes were published under its imprint down to 1909. In that year the series was taken on by George Allen - who published the Sussex volume which appeared as Mundy 1909, but without any contribution by Dawson.)

1909g. *An olde tyme grace*. London: Novello. 1 pp. (A four-part setting to music of a grace said before a meal.)

1911. The 'red hills' of the Essex marshes and 'saltings', *Antiquary* **47 (4) (Apr.)**, 128–32.

1912a. On the persistence of a 13th Dorsal Vertebra in certain human races. (Unpublished manuscript draft and typed draft in NHM, DF116/16. See Spencer 1990b, 22, and Russell 2003, 133–5.)

1912b, with **Woodward, A. S.** On the discovery of a Palaeolithic human skull and mandible in a flint-bearing gravel overlying the Wealden (Hastings Beds) at Pilttdown, Fletching (Sussex), *Abstracts of the Proceedings of the Geological Society of London* (**1912–13**), 20–27. (Read on 18 Dec. 1912.)

1913a, with **Woodward, A. S.** On the discovery of a Palaeolithic human skull and mandible in a flint-bearing gravel overlying the Wealden (Hastings Beds) at Piltdown, Fletching (Sussex), *Quarterly Journal of the Geological Society of London* **69**, 117–51. (Read on 18 Dec. 1912. Includes an appendix by G. Grafton Smith.)

1913b. The Piltdown skull, *Hastings and East Sussex Naturalist*, **2**, 73–82. (Read on 25 March 1913.)

1913c, with **Woodward, A. S.** Supplementary note on the discovery of a Palaeolithic human skull and mandible at Piltdown (Sussex), *Abstracts of the Proceedings of the Geological Society of London* (**1913–14**), 28–31.

1913d. Zinc-blende and pisolitic limonite from the Fairlight Clays, Hastings, *Quarterly Journal of the Geological Society of London* **69** (2) July, xcvi–xcix. (Brief description of specimens exhibited at a meeting of the Society on 25 June. Dawson records the zinc sulphide as occurring in ironstone nodules containing plant remains, noting that ‘zinc-blende is not known to occur at other horizons in the Weald, nor anywhere else in the South-East of England.’)

1914a. Zinc blende from the upper beds of the Purbeck formation at Netherfield (Sussex), *Quarterly Journal of the Geological Society of London* **70** (1) Apr., xiv. (Exhibited on 17 Dec. 1913.)

1914b, with **Woodward, A. S.** Supplementary note on the discovery of a Palaeolithic human skull and mandible at Piltdown (Sussex), *Quarterly Journal of the Geological Society of London* **70**, 82–93. (Read on 17 Dec. 1913. Includes an appendix by G. Grafton Smith.)

1914c, with **Woodward, A. S.** On a bone implement from Piltdown (Sussex), *Abstracts of*

the Proceedings of the Geological Society of London (**1914–15**), 15–17. (Read on 2 Dec. 1914.)

1915a, with **Woodward, A. S.** On a bone implement from Piltdown (Sussex), *Quarterly Journal of the Geological Society of London* **71**, 144–9. (Read on 2 Dec. 1914.)

1915b. The Piltdown skull, *Hastings and East Sussex Naturalist*, **2**, 182–4. (Read in June 1915.)

1915c. Notes from Piltdown Lecture 23 Feby. 1915 [Sussex Ouse valley cultures]. (Unpublished paper, in manuscript at NHM, DF116/16, read to a joint meeting of the Perhistoric Society of East Anglia and the Royal Anthropological Institute held at the latter’s premises on 23 Feb. 1915. An advance notice called it ‘an account of the cultures of the Sussex Weald from Eoanthropic times down to the Neolithic period’: *British Medical Journal*, 20 Feb. 1915. Reported in *The Lancet*, 13 Mar. 1915. See Spencer 1990a, 89–90, 219–20, for a discussion of this paper and its implications.)

1915d. [Prismatic fracture in starch and flint.], *Abstracts of the Proceedings of the Geological Society of London*, **973** (31 Mar), 81. (Notice to the effect that ‘A series of specimens illustrating ‘prismatic fracture’ in starch and flint, and its bearing on the form of flint-implements, was exhibited by Dawson at a meeting of the Society on 24 Mar. 1915.)

Costello, P. 1981. The Sussex sea serpent, *Quicksilver Messenger* **4**. (Transcribes Dawson’s letter to Woodward of 7 Oct. 1907, from NHM, DF100/43/10, describing Dawson’s sighting of a sea serpent from the Newhaven-Dieppe ferry on Good Friday 1906. Offprint in SAS library.)

Acknowledgement

I am most grateful to David Bate for references from Bate in preparation 2013 and to Jeremy Hodgkinson for a copy of 19011.

Appendix 3 Charles Dawson, 'The Priory of Hastings. The old and the new. A pilgrimage', *Hastings & St Leonards Observer*, 24 November 1888

In 1913 Charles Dawson recalled an excursion December 1882 to search for Palaeolithic remains in Poole's Cavern, near Buxton, Derbyshire, from which came his first contribution to scientific literature – which I have not succeeded in tracing. The article here transcribed is therefore his earliest identified publication. It is printed here with the original spellings, capitals and punctuation, and only obvious typographical errors have been changed.

The historical content of the article is derived from Edward Turner's long account of the priory in *Sussex Archaeological Collections* for 1861, supplemented in 1864.¹ That does not however contain the legend of the two lovers. The use of the skull as a bird's nest features in Lower's *History of Sussex* of 1870.²

The interest of the article lies mainly in showing Dawson's early willingness to read the secondary literature, undertake fieldwork and write for a lay audience. It also shows his interest in the Wealden iron industry, and the Ashburnham shopkeeper's anecdote of her brand-irons being pounced on by a visiting antiquary is amusing in the context of the provenance of items in his collection often now being questioned.³

THE PRIORY OF HASTINGS.
THE OLD AND THE NEW.
A PILGRIMAGE.

[SPECIALLY CONTRIBUTED TO THE
"OBSERVER" BY MR. C. DAWSON,
F.G.S., HASTINGS.]

Many of our readers will be able to recall to mind, in days gone by, the beautiful Step Meadow, and the Priory Farm beneath, now the site of the houses belonging to the Cornwallis Estate; some, again, can remember the old White Rock, with the high road running over it, the Bohemia or Cambridge-road before it was raised to its present level, and

the little trout stream, spanned by the Priory Bridge in the marsh land, now occupied by the Memorial and the adjacent buildings. Few, indeed, are those who can remember the time when, on a winter's morn, the hounds were wont to meet on the site of Wellington-square, when St. Leonards -on-Sea was yet a wild dream, before the Castle Rocks were cut away to form Pelham-crescent, and Old Hastings nestled in the valley of the Bourne. Such was Hastings as Byron knew it. Already the reader will be somewhat startled who does not know the history of the march upon Bexhill of the Hastings bricks and mortar; and yet all these things are within the memory of our oldest townsmen. Let us, however, go back with our archaeologists learned in Norman-French and the Latin documents to ancient times. Here, indeed, a surprise awaits us, for they tell us of days when an older Hastings stood south of our present sea walls, of the destruction of churches dedicated to the same saints, but which did not occupy the same sites of the oldest churches known to us, with their tell-tale perpendicular architecture. Again, mention occurs of

A PARISH OF ST. PETER

now so entirely lost amid the waves, that even tradition, with her erring finger, declines to direct us to it. Imagine, then, Hastings situate, like Old Winchelsea, upon a fertile plain, protected from the inroads of the sea by its walls, on the east flanked by the river Bourne, on the west by a haven, beyond which lay the fringe of the great forest of Anderida, and sheltered in the rear by the forest ridge and the hills of Hastings, from which frowned the Norman Castle in all its glory. Thus stood Hastings, when, according to Leland, one Walter Bricet, knight, in the reign of Richard Cœur de Leon, probably, about the year 1191, founded the Priory and Convent of Hastings. The Priory of Hastings was dedicated in honour of the Holy

Trinity, and the canons were Black Canons Regular of the Order of St. Augustine, one of the oldest Orders in Christendom. The original Charter is not now known to be extant, but the form of its seal is still preserved in the collection of Elias Ashmole, at Oxford, and is of very ancient workmanship. It bears the device of a building having a round tower, with a low, cone-shaped roof, and on either side a block containing two windows or arches. Around are the words:- "Sigillum Prioris et Conventus St.Æ. Trinatas de Hastings." This figure may be some clue to the style and appearance of the older and principal portion of the ancient Priory thus founded. From what little we know of the Priory, we gather it had many

BENEFACTORS

among whom were the celebrated Earls of Eu, the de Pelhams, the family of Hastings, and the Knights of Hoo. So early indeed as the Archbishoprick of Seffred II., of Chichester, who held the office between the years 1180 and 1204, one Henry de Palerne gave certain lands to the Church of the Holy Trinity and its Canons, having in view the preservation of his soul, and those of his ancestors. Thus, in his valuation, Pope Nicholas, in A.D. 1291, estimated the temporalities of the Priory of Hastings, at Langford, at 6s. 8d. Again, the Rectory of Ashburnham was acquired by it in A.D. 1293, and later, those of Tycehurst and Crowhurst, the advowson of Dallington, and the Manor of Hazleden. A list of the Priors has partially been made out, and it commences, appropriately enough, with the name of Prior Adam (*sine dato*). For a little more than two centuries the Priory continued to flourish behind the forest trees, conveniently situated for water carriage at one of the arms of the Haven of Hastings, and hidden from the marauders of the sea by the Mount of St. Michael and the old White Rock. But alas! the doom of the

"OLD PRIORY"

was sealed-as time went on, year by year an at first unforeseen danger became more and more apparent. The extraordinary inroads of the sea, which, within two centuries of the Norman Conquest, began to affect the whole of our S.E. Coast, were felt with great severity by Ancient

Hastings. Probably the old sea walls, as at Winchelsea, so scrupulously repaired, at length were undermined by the waves or dismantled by some alien foe. The date assigned for the retreat of Ancient Hastings into the Valley of the Bourne is about the year 1380-this date synchronizes with the style of architecture of the Old Town churches. It seems, however, probable that the monks contrived to defend their Priory a few years longer against the inroads of the sea. An excavation 30 feet square containing sluice gates, discovered, in the last century, in the hollow near the present site of Cambridge Hall, were thought to be the work of the old monks, and may have formed part of this endeavour. Despite their efforts, in the year 1410 the Priory had become so undermined and ruinous that the monks were compelled to quit their home. Such was the wretched state of things when John de Pelham, "pitying their houseless and forlorn condition," gave them permission to commence building a new priory on his property at Warbleton. This John de Pelham (constable of Pevensey Castle) was the son of the celebrated John de Pelham, who, at the battle of Poitiers, became one of the captors of the chivalrous King of France, on which occasion, and in memory thereof, the king added a buckle to his coat of arms, which badge was always known as

"THE PELHAM BUCKLE."

Beside the destruction of the old Priory by the sea, another cause may have contributed to complete the ruin of the old Priory, namely, that most of the carved stone-work, including the pillars and capitals, were, probably, removed and rebuilt into the "New Priory" at Warbleton, since but little of the carved stone-work was found remaining, and that built into the walls of the Priory Farm above mentioned. The exact site, as marked out on the map of the Borough Surveyor, would appear to be about No. 19, Cambridge-gardens. In the garden of No. 36 (exactly opposite) is still to be found the well of the old Priory.

"THE NEW PRIORY,"

as it was called, we fear is one of those things which Hastingsers "sometimes read about, but very seldom see." Even Bishop Tanner, in his "Notice of Hastings," thinks that John de Pelham's gift

“did not fully take effect,” and vaguely states that, through the charity of several other well disposed persons, the monks were enabled to build their priory “at or near Hastings.” Moss cites Tanner, but shirks the subject, and Horsfield wrote that its “place-house” was built by John of Gaunt of Lancaster, at Ore: however, with the reader’s permission, we will follow in the steps of the Sussex Archaeological Society, and go to Warbleton and dig it out for ourselves.

THE PILGRIMAGE

The Priory of Warbleton is not at Warbleton, but about two miles nearer to Battle, from which it is distant eight miles; the pilgrims, therefore, must arrive at Battle by some means, our visitors probably taking the route by the “Black Horse,” while our residents prefer that of the “iron horse.” From Battle we follow the high road towards Normanhurst, and, just before reaching the gates, we turn sharp to the right, down a long lane leading towards Beach Farm, where the timber is exceptionally fine. On our left lies the “Old Deer Park of Ashburnham.” A little more than an hour’s walk brings us to the hamlet of Penhurst, whose church will repay a visit. Whatever scruples the pilgrim may have had for not putting the customary peas in his shoes will have been readily overcome by the state of the roads to this point: but forward the road is beautifully mettled with the slag from the old Ashburnham Forge, and a short walk will bring him to the hamlet in the valley of the Ash Bourne. From Roman time up to the reign of Charles II, this was the heart of the iron country. The geological formation called the Wadhurst clay abounds in this district, and it was from its strata that, our geologists tell us, the iron ore was principally drawn. The Furnace itself lies farther up the stream, but there is little now to see. Specimens of the Sussex iron may still be “picked up” in the old homesteads and cottages about here, but *caveat emptor*, the writer was once informed by a good lady at an Ashburnham cottage shop, that a pair of her brand-irons, recently secured in a “set off” with a neighbouring blacksmith, had been pounced on and immortalised by an elderly gentleman, who bought them for a museum. In answer to our enquiry if she had not told him about the blacksmith, she answered, with just a tinge of yokel humour, curling her lip: “We reckon he knew

more f’what we did, for after he’d bought them he told us all about them, as they was Sussex iron from the furnace. Maybe ‘twas Sussex iron, but I ain’t no very good judge of such like.” It is after leaving Ashburnham, near Pont’s Green, that our Pilgrim’s troubles begin. Over hill and dale there are many cross roads, and but few sign-posts or cottages. The roads marked in the map are vague, and most of the places marked are not known by names to the inhabitants, many of whom, although in residence half a century, have not wandered beyond the radius of two miles from their homes, so engrossing a pursuit is agriculture! At length, when within half a mile of our destination, we quit the high road, and some paths through the field then lead us to a deep wooded valley, and crossing a bridge which spans the stream at foot, we see in front, on the higher ground, “the

PRIORY FARM.”

It will at once be perceived that the farm buildings have been moulded from nobler edifices. The Priory buildings were probably begun during the year 1410, and we find that they had so far advanced in the year 1412, that Robert Reade, the Bishop of Chichester, while on an Episcopal progress, stayed the night at the “New Priory,” while passing between Buxted and Salehurst. It was not until the year 1414, that the license confirming John de Pelham’s grant was given by King Henry IV. In this deed the king also granted the Manor of Monkencourt in Wytham, for the term of 20 years, free, in consideration of the expense the monks were being put to in erecting the Priory. On the score of poverty, the Priory was afterwards-in A.D. 1488-exempted from payment of taxes. John de Pelham again, in the 5th year of Henry VI, let to farm for the Priory his Manor of Pelham, when he was thereupon, in recognition of this and his former munificence, reputed the founder of the New Priory. It is thus, at first thought, surprising to find that, although the founder, he was not buried in the Priory Church, as by his will, dated 1429, he desired his body to be buried in the Abbey Church of Robertsbridge, but it appears that to this Church he was also a great benefactor. A large portion of a sepulchral stone, coffin shaped, with the upper quarter missing, and having a peculiar design upon it, found in the ruins, tradition pointed out as a portion of his tomb, but this is

entirely unsupported. The only member of the Pelham family recorded to have been buried here is his second son, William Pelham, who died in 1503, and who left peculiar instructions in his will concerning his tombstone, which he desired to be as plain as possible, having only his arms, name, and date of demise carved thereon. This stone does not fulfil those directions, and it seems probably, since its design is very ancient, that it was brought from the old Priory. The stone is Sussex marble, an unusual thing since Purbeck marble, an almost identical stone, was generally used, owing to the greater facility of the carriage being by water. The inland roads, it will be remembered, were bad, and often founderous even in Walpolean days.

THE NEW PRIORY CHURCH

or chapel, was a cruciform structure, and a portion of the ruins will be at once noticed on entering the Priory Close. It was an unusually large monastic church, and the measurements, which were taken some years ago when a dry summer's sun had parched the grass over the foundations, were as follows:-

Chancel	35	feet long
Nave	65	" "
Space between, probably supporting a tower	27	" "
Total length	127	feet.

To the west of these foundations stands the homestead constructed principally from the materials of a more ancient structure. Adjoining, and at right angles, is another building having on the outside the appearance of a chapel. This building is divided into two rooms-one a very large one, and the other small. The former was most probably the refectory or chapter-room of the monks. The room is high, and the roof supported by an enormous beam of oak. It is said that this room was originally wainscoted, and was ornamented with carvings of the "Pelham buckle." The fireplace is ancient and very spacious. In recent times there was a fine fire-back of Sussex iron, and bearing the Pelham arms, and the border ornamented with the "Pelham buckle," alternating with a cross. The large brand-irons are of the ordinary Sussex half-figure type. These have probably superseded the original pair, which,

as in most cases, would bear a design to match the fire-back. Besides these, we are informed that recently there was preserved a *couvre feu*, or curfew, for extinguishing the fire. The instrument was of metal, having a long handle, and of very antique design. Projecting from one of the outside walls are two grotesque carved heads; a legend concerning these will be hereafter mentioned. Pursuing investigations outside, the visitor will notice that the walls adjoining and the farm offices and barn are very large, and have nearly all been converted to their present use from nobler structures. In their walls are several mullioned windows, mostly filled in, and one stone in the homestead is carved with the "Pelham Buckle."

THE "NEW PRIORY OF HASTINGS,"

as it stood at Warbleton during the Fifteenth century, must have been a very important foundation. At first thought, it would seem to be at too great a distance from Hastings, and several authors, like Bishop Tanner, would seem to have been led astray by the very fact of its remoteness: but when we come to consider its central position in relation to the possessions acquired by the Priory, hereafter mentioned, the policy of this movement will be at once apparent. The architecture itself would seem to have been of the style known as "Early English." Five capitals of pillars were dug up near the foundations of the church, one being Norman (cushion shaped) and the other Early English-most probably the former, and perhaps all, were brought from the Old Priory. A hollow, appearing to be the remains of a large pond near the foot of the orchard on the west, was probably devoted to the preservation of fresh water fish for the Priory larder. The site, as the name Warbleton may have already suggested, was one of extreme beauty, standing on the side of a valley traversed by a pleasant stream, and surrounded for miles by the magnificent timber of the Weald. We regret that much of the latter has now disappeared, but some noble beech trees, the largest in the district, still proclaim its former magnificence. We do not know much regarding the

LIVES OF THE MONKS

during the early part of their residence in the Priory. What we do know at all is chiefly owing to the

reports made to the Bishop upon his visitations, and which do not appear to have been of a very felicitous nature. Thus, at the visitation in A.D. 1441 complaints were brought against the Prior for negligence and extravagance, whereby his Priory had become much in debt, and which the Bishop arranged should be cleared off by instalments; then, in the visitation A.D. 1473, the Prior accused the Vicar of Dallington with appropriating to his own use two cups of gold, value 46s., the property of the Priory, allowing his church to fall into decay, refusing to celebrate, and to deliver up the seal of the Priory, which he misappropriated by granting leases without the consent of his brethren. The Vicar pleaded "set off" in regard to the cups, and "joined issue" on the other counts. The nature of these incessant squabbles would seem to have been pretty general, and no doubt paved the way to the general dissolutions which took place in subsequent years; and we find at a later visitation (1524), when there were only three canons and one novice resident, that contumacy had developed in the Priory itself. The Prior reported that one canon was continually absent without leave, and had even then absented himself. Another canon complained that he was not treated by the Prior with the same civility and kindness as he treated the other canons, and as for the novice, he did "not scruple to employ himself in creating discord between him and the brethren." At last, in the year 1536, by Act of Parliament, all ecclesiastical houses which possessed revenues of less than £200 a year were

DISSOLVED,

and converted to the King's use. By a detailed estimation, taken in the previous year, the revenues of the "New Priory of Hastings" were estimated at the annual value of £130 2s. 9½d. In the following year-1537-King Henry the Eighth granted the Priory and its possessions to his Attorney-General (John Baker). The parcels in the deed include the following, viz.: "The Manor of Hazelden, with its lands, etc. The rectories of Ashburnham and Tycehurst, and all the Manor's lands, etc., belonging to the New Priory itself. All the lands in Burwash, Herstmonceux, Warthyng, Dalyngtun, Tycehurst, Ashborneham, Warbleton, Mayfield, Hastings, Holyngton, Bexhill, Westham, Willyngdon, Ewehurst, Brede, Oymere, Winchelsea, Iklesham, Gestlyng,

Fareleigh, Westfield, and Crowhurst, belonging to this Priory." This was the death blow to the New Priory as an ecclesiastical structure, and it has now many years been converted, like its predecessor, into farm buildings. This far tradition has not helped us in this history, but it would be hard usage to turn away our pilgrim without hearing one

LEGEND OF THIS ANCIENT PRIORY.

However, there are two skulls, or portions of two, carefully preserved in the Priory Hall or Refectory. The cranium of one is high and broad, and the other is smaller and smooth: they might well be those of "a monk and a maid." There are two legends concerning them, one is very romantic, the other not quite so much so, but both are tragic. The former is embodied in an old rhyming poem, somewhat lengthy and "Byronic," of fair merit, entitled "Agnes and Wilfred: A Legend of Warbleton Priory." It relates that, in monastic times, two lovers were wont to meet by the side of the before-mentioned stream, amid the woods. A monk, "who within the Priory dwelt," coveted the lady, of course beautiful, and having one very fine evening, in the wood, stabbed the yokel swain, and the lady fainting in consequence, she does not revive until she is safe within the Priory walls, where, of course, entreaties and finely-turned speeches do not avail. Later on this monk of "the iron ring," perhaps reconsidering that "marriage is a failure," kills her also. But retribution follows; hardly has the monk got comfortably into his bed, that night, than his privacy is intruded upon by the ghosts of the unfortunate lovers. Amid thunder and lightening the distracted monk shrieks, rushing from room to room, and disappears that night never to be heard of again. So complete, in fact, is this disappearance, that we are left in fear concerning the authenticity of the above details. The two carved corbel heads above mentioned are said to be the portraits of "Agnes and Wilfred." Another tradition has it that only one skull is entitled to any particular fame, the other having been promiscuously dug up from the ruins. The former is said to have been the

SKULL OF AN OLD TENANT

of the farm, who was murdered in an upper room, and whose blood still stains the boards in

the said room. These stains are said to possess the usual legendary qualities, of being indelible by human scrubbing. It is also said that when this skull has been removed from the house, the cattle on the farm sicken, and fearsome noises pervade the house, which, of course, cannot be else than supernatural. This legend received a rude shock when, one summer, a profane hand hung the cranium on a branch, and a bird took advantage of the situation to rear its brood within it, as if emblematical of peace. It is also said that the monks made a subterranean passage from the New to the Old Priory, some fifteen miles away, the precise object for which we have been unable to discover, unless, tired of the solitude of Warbleton, the monks had endeavoured to get the sea to undermine their Priory again.

As we vary our homeward steps through the Old Deer park of Ashburnham, we can scarcely recall, without an involuntary shudder, the effect of those fatal decrees, which, as if by the stroke of a pen, stripped of their splendour 3,219 religious houses throughout this realm; and among them razed to the ground the New Priory Church of Hastings. And now that we have returned to find the Borough of Hastings, and we look in vain for the ruins of the "Old Priory," its meadows and the Haven of Hastings, we still see rising in the midst of the houses which cover this district a church, not far removed from the site of the Old Priory; it, too, has one canon; and lest, amid the turmoil and traffic that surround it, "auld acquaintance be forgot," we call it the church of the "Parish of the Holy Trinity, otherwise dissolved Priory."

NOTES

¹ E. Turner, 'The College and Priory of Hastings, and the Priory of Warbleton', *Sussex Archaeological Collections* **13** (1861), 154–79. E. Turner, 'Warbleton Priory', *Sussex*

Archaeological Collections **16** (1864), 294–8.

² M. A. Lower, *A compendious history of Sussex*, 2 vols. (Lewes: Geo. P. Bacon, 1870), **2**, 226.

³ M. Russell, *Piltdown Man. The secret life of Charles Dawson & the world's greatest archaeological hoax* (Stroud: Tempus, 2003).

Appendix 4 *Plagiaulax dawsoni*

Dawson as collector of fossils of Wealden fauna, as antiquary, and as palaeontologist studying human origins, represent three fairly discrete phases in his career as an amateur researcher, the transitions occurring in 1891 and 1909/10. The first phase encompassed collecting dinosaurian remains under the guidance of S. H. Beckles and their presentation to the Natural History Museum (NHM) in 1884; it closed in 1891 with A. S. Woodward exhibiting Dawson's find of a fossil tooth of an early mammal, the first from the Wealden, which Woodward named *Plagiaulax dawsoni*. The second, antiquarian, phase is discussed at length in the main article. The third opened in 1909 with Dawson's collaboration with Pierre Teilhard de Chardin in collecting fossils from bone-beds around Hastings, leading to Woodward exhibiting in 1911 three further specimens of mammalian fossils, two of them identified as *P. dawsoni*. This new species joined the two existing species of the genus *Plagiaulax* which Beckles had found in the 1850s at Durlston Bay in Dorset. But no further specimens have been reported and the species is no longer accepted as accurately identified, while *P. becklesii* remains in good standing. *Plagiaulax dawsoni* deserves some review.

This appendix incorporates research undertaken after the main article went to press, includes a detailed assessment of Dawson's dealings with Teilhard and reaches a firmer conclusion about *P. dawsoni*. It is based, firstly, on Woodward's published accounts of five mammalian fossils associated with Dawson and, secondly, a recent examination of these by Dr Jerry Hooker of the NHM. Thirdly, I draw on Dawson's surviving letters written to the NHM.¹ Fourthly, Teilhard wrote to his parents roughly fortnightly from Hastings between 1908 and 1912 (and from Egypt before and from Paris afterwards) and I have used the published editions.²

THE SPECIMENS

Woodward unveiled *Plagiaulax dawsoni* in 1891 as the first identified species of mammal from the Wealden formation. His 1911 publication brought the number of mammalian fossils from the

Wealden to five, of three genera. Charles Dawson had been associated with the finding of four and had commented on the fifth. A young American George G. Simpson (1902–84) examined four of the five specimens in 1926/7, making the important point that 'the remains of Mesozoic mammals are among the smallest, the rarest, and the most fragile of fossils', usually no more than 5mm in any dimension. In the initial phase of a research project led by Kenneth A. Kermack (1919–2000) at University College, London (UCL), William A. Clemens (b. 1932) in 1960/1 re-examined all five specimens. Building on Simpson's work, Clemens concluded that only two of the five, not including those found by Dawson, could be accepted without reservation. That remains the generally accepted position, with further specimens found by Kermack's team and subsequently.³

The five teeth, in the order of their determination and publication by staff of the Natural History Museum, are discussed below. Each is identified by its accession number in the registers of the (then) department of geology, but these numbers do not appear in the initial publications, as none except possibly M5691 had by then been presented to the NHM.

M13134

At a date unknown, Dawson submitted M13134 to Woodward for identification. As explained later, Dawson dated the start of his 'careful study' of the bone-beds to 1886, but it was likely in 1888/9 that he worked intensively on them, thereafter living and working in Uckfield with much less opportunity. Woodward exhibited the tooth to the Zoological Society on 17 November 1891 and hailed it as the only known remains of a Mesozoic mammal 'from the great area of south-east England and western Europe covered by the fossiliferous sands and clays of the Wealden period.' He allocated it to the genus *Plagiaulax* under the provisional name *P. dawsoni*. At the time a young assistant in the geology department of the NHM, Woodward in the same year published the second of what were to be four volumes of *Catalogue of fossil fishes in the British Museum* which was to be his *magnum opus* contributing to his becoming the

greatest palaeoichthyologist of his time. He had no particular expertise in mammals.

On the eve of the exhibit Dawson had told Woodward that, reluctantly, he would have to miss the meeting, and that 'With regard to the secret of the horizon, there can be no harm of stating that it was from a bone-bed in the pockets in the Wadhurst Clay of Hastings etc. etc.... Of course I have no objection to your confiding the details I gave you to anyone who would not take a mean advantage of the knowledge.' In deference to Dawson's concern to keep the site of the find secret, Woodward referred only to an irregular bone-bed in the Wadhurst clay of the Wealden formation, occurring in lenticular patches at one definite horizon in a quarry near Hastings. In 1911 he placed the quarry 'behind St Leonards'.⁴

For the meeting at which M5691 was exhibited in 1893, Dawson prepared a section and notes on the find-spot of M13134, though giving the location no more specifically than 'a quarry in Hastings'. Presumably on information left by Woodward, in 1928 Simpson stated that to be Old Roar quarry (in fact in St Leonards). A bone-bed was already visible in 1873 when the Geologists' Association visited the quarry. Then the strata mentioned were: leaf bed; bone bed; Wadhurst Clay, 3 to 4 foot thick from which limestone was quarried; blue clay; stone; Ashdown Sand. These correlate reasonably well to Dawson's strata which, with estimated depths from the few measurements given, were:

- 1 Brown shales and clays, 3ft
- 2 Hard blue shale with few fossils, chiefly shells and fish scales, 4ft
- 3 Bone breccia and lignite pockets, variable up to 18ins
- 4 Band stiff blue clay containing bones of Iguanodon, 3ft, not as stratified as 2, bones found frequently in situ, the deposit appearing to have been formed rapidly
- 5 Band of dark blue shelly shale with rolled bones, usually large pieces very much broken and rounded, 6 ins
- 6 Band of compact stone resembling Tilgate stone, 4ft [presumably what was being quarried]

- 7 Yellow shelly sand with rolled bones, etc., 1ft to quarry floor, 'which contains a quantity of remains of all kinds and I still think that it is a band in which mammalian remains are likely to be found, [but *deleted*] although I have examined many tons of it superficially (as it was weathered) I have been unable so far to find any reliable specimen.'

In the all-important band 3, so Dawson noted in 1893, 'occur (occasionally only) pockets of Bone Breccia and a substance like jet or lignite composed of river plants. These pockets vary much in size. The large ones are usually filled with the Lignite with bones embedded. The pockets of breccia occur much less frequently and are often very small, holding perhaps not more than a handful of deposit (during the last 7 years I have had about 1cwt [51kg] of it). The breccia is composed of reptilian, fish and vegetable remains and it was also in the breccia that the mammal tooth occurred. The deposits in the pockets are laminated & appear to have been deposited in shallow tranquil waters and in the inequalities of the surface of the river mud flats.' Dawson did not therefore have massive blocks of matrix to break up, but the fabric was still hard, for, as Woodward explained in 1891, the tooth was 'extracted from the matrix as far as possible by the skilled hand of Mr Richard Hall [at the NHM], but one side still remains attached and is thus obscured'.⁵

On the eve of the 1891 meeting, Dawson had expressed the hope that 'the fellows of the Zoo will handle it kindly.' How right he was to be concerned about the tooth's fragility. With the specimen is now a note signed by Woodward: 'This is the original tooth of *Plagiaulax dawsoni* from Wealden, Hastings. It was never formally presented by Mr Dawson, and was accidentally broken when exhibited at the Geol. Assn. *Conversazione*.' Woodward evidently took the tooth to the *conversazione*, an annual event, on 4 November 1892, where it was broken. His superior, the keeper Henry Woodward, wrote to Dawson around the turn of the year, asking whether he would present the tooth. Dawson replied 'If the *Plagiaulax* tooth is acceptable you can have it with my blessing.' Only then did A. S. Woodward own up to the breakage, for on 27 February 1893 Dawson wrote, 'I am extremely sorry the tooth has been broken. I

can only say, do the best you can with it before you leave for Syria if possible (you have the engraving [in the 1891 paper] to assist you), and then put it safely in the mammal case.⁶

Perhaps Woodward wrote the note only on tidying his office at his retirement in 1924, phrasing it to justify not accessioning it but to identify a specimen which he had published. It was not accessioned until 1927, while Simpson was cataloguing the Mesozoic mammalia. Simpson considered the tooth comparable only with equally worn teeth of *Plagiaulax*, and probably plagiaulacid, ‘although its generic and specific affinities are quite indeterminable.’ By the time Clemens saw the tooth it had broken again, presumably the repair having failed, and the crown had been lost, leaving only the root attached on one side to the matrix. What was then evident was that the root had only a single pulp cavity. This, on Clemens’s view, ‘reduces the probability that the tooth is a plagiaulacid molar, which has two roots, and strongly suggests that it is not a tooth of a mammal.’⁷

In 2013 Dr Jerry Hooker of the NHM has examined M13134 for me. He reported that it ‘is part of a root or roots of a tooth and as such indeterminate. It is in or on a piece of what looks like genuine Wealden bone-bed. There is some glue on the specimen and it’s not easy to tell if it really is embedded in the rock or has been glued on. If glued on then it has been done very carefully. However, the preservation of the specimen is more like that of M20241 [of which the preservation is not typical of the Wealden] and in my opinion is therefore suspect. In any case Woodward’s figure looks rather schematic [being a woodcut rather than a photograph], which is one reason why the species *Plagiaulax dawsoni* is usually ignored as its affinities are uncertain in the absence of either a determinate specimen or a comprehensible published illustration.⁸ Perhaps in 1892 the tooth and matrix broke into three; gluing of tooth to matrix has held, while that of root to crown failed.

M5691

This tooth was found on the seashore at Hastings by Sir John Evans (1823–1908) in or about 1854 and given almost immediately to Joseph Prestwich (1812–98), in whose collection it lay unnoticed until, perhaps prompted by Woodward’s 1891 paper, Prestwich retrieved it and presented it to the NHM. There Richard Lydekker (1849–1915),

an unofficial worker in the department of zoology, determined it, exhibited it to the Geological Society on 23 March 1893 and published it that August. Lydekker considered it not distinguishable from the incisor of a rodent, argued that this was extremely improbable for the Wealden and identified it as *Bolodon* of the Purbeck (a multituberculate). In the discussion of Lydekker’s paper, Evans said that he found the tooth in a block of Tilgate grit ‘which formed part of a heap by the side of the seashore.’ Dawson responded that ‘it was unfortunate that the specimen had been taken from a loose block, because at Hastings stones foreign to the district and miscellaneous drifted stones from the shore were frequently broken up for road-metal. From the limited view permitted him of the specimen that evening he was unable to identify the matrix as from the Hastings district; and he did not recognize the fragmentary specimen before them as portion of a mammalian tooth.’

Simpson rejected Lydekker’s identification, suggesting the tooth might belong to *Loxaulax* (see M10480 below), but, as the matrix was not Tilgate grit and its exact level very dubious, he concluded that the tooth was ‘not generically determinable.’ Clemens accepted that the tooth was the incisor of a rodent, but similar to *Theridomys sp.* found in Tertiary strata, rather than a Wealden multituberculate. Echoing Dawson’s point, he thought it possibly accidentally introduced into the Hastings area from the Hampshire basin or the London basin.⁹ The eastward drift of beach material along the Sussex coast could certainly have brought it from Hampshire.

M10480 AND M10481

These two teeth were found by Pierre Teilhard de Chardin and Félix Pelletier, exhibited by Woodward to the Geological Society on 22 March 1911, and presented by them to the NHM in July 1912. Woodward discussed these along with M20241, saying that work subsequent to the 1891 paper had led to the finding of two further specimens probably belonging to *Plagiaulax* and one to a distinct though related genus, all three from the Ashdown Sands of the Fairlight Cliffs near Hastings (see below for further discussion of the find-spot). The two new molars which seemed to belong to *Plagiaulax* were very imperfect, in one (M10481) the crown closely similar to *P. dawsoni*, in the other (M20241) most of the crown decayed but

the two divergent roots well displayed. The third (M10480) was well preserved with the crown whole and showing no traces of wear, and Woodward recorded it under the name *Dipriodon valdensis*.

Simpson dismissed the assignment of M10480 to *Dipriodon* which 'is truly gigantic in comparison with the Wealden form, and its lower molars... are so different from this primitive tooth that it is quite impossible...to retain them in the same genus.' It was more properly assigned to a new genus *Loxaulax* as *Loxaulax valdensis*. Simpson further judged M10481 to be a fragment of a tooth M2 of a member of the same genus, rather than of *Plagiaulax*. Clemens concurred, adding that both were still embedded in sediment lithographically similar to the blocks of Cliff End Bone Bed found during his research project. These two teeth, under the name *Loxaulax valdensis* Simpson, are the only ones which Clemens accepted without reservation as Wealden mammalian teeth found before his own work in 1960/1, and to which he added a further four specimens from among only five teeth then recovered. Hooker has confirmed that both are embedded in typical Cliff End Bone Bed matrix. Thereby Teilhard and Pelletier are credited with the first mammals from the Lower Cretaceous to be found anywhere in the world, with ample vindication by later finds.¹⁰

Dawson first met Teilhard in May 1909 and provided the connection to Woodward, to whom he wrote on 25 July, 'We have been looking up some of the small things in the Weald' and enclosed several specimens, one looking like *Plagiaulax* which seems, by process of elimination, to have been M10481. Teilhard may therefore have found it at any time since his arrival in Ore in September 1908. M10480 Teilhard found in May 1910. Dawson sent it to Woodward on 21 May. By return Woodward reported that it was significant, such that Dawson replied on the 24th, 'I am glad the tooth is a success', but did not tell Teilhard. In September Dawson told Woodward about the find-spot (see below). On or about 13 January 1911, having identified the tooth as *Dipriodon*, and preparing to exhibit it to the Geological Society, Woodward wrote to both Dawson and Teilhard. Dawson replied on the 15th, saying that he had written to 'my friends in Hastings' to inform them. But Teilhard already knew: on the 16th he told his parents, 'I have received a letter from the British Museum, telling me that a small mammalian

tooth, which I found in May, seems definitely to be novel: there are parallels only in some American sites.' M10480 and M10481 were accessioned at Teilhard and Pelletier's gift in July 1912. Quite what Pelletier's role in the finds is unclear, but he arrived at Ore Place at the beginning of August 1909 and, except for a stay in Jersey around March to May 1912, remained there until Teilhard left in July 1912. I discuss Dawson's relations with Teilhard at length below.¹¹

M20241

M20241 appears to be the tooth exhibited by Woodward to the Geological Society on 22 March 1911, along with M10480 and M10481, described as having most of the crown decayed but the two divergent roots well displayed, and identified as another specimen of *P. dawsoni*. As it was accessioned at the NHM only in 1960, Simpson did not see it, though he mentioned it as 'mammal indet.' being one of the five specimens hitherto published. Clemens did examine it, finding the crown almost completely destroyed and the root not resembling the roots of late Jurassic or early Cretaceous mammalian teeth which are for the most part smaller. 'The mammalian affinities, if any, of this tooth will have to be regarded as indeterminable.' Hooker has commented, 'M20241 is a fragment of tooth, whose preservation is not typical of the Wealden. It is only a fragment of very worn crown with two roots. It could be a rodent, similar teeth of which occur in Eocene deposits of the Hampshire Basin, but I would not want to be definite as it is so fragmentary.'¹²

Dawson sent 'the mammal tooth' to Woodward on 19 January 1911, with the suggestion that Mr Barlow's solution should be applied to it and a sketch that matches Woodward's description of M20241. 'I think I made a mistake about there having been no tubercles on the tooth. There does seem to be an indication of them when looked at sideways thus [arrow to sketch] crinkling on the edge of the enamel near the crown and I think that there may have been a central groove?' Clemens reported in 1963 that '[r]ecently a specimen was found in the collection with the label "Mammal tooth, Fairlight, Ashdown Sand, N[ear] Hastings. C. Dawson 15/1/1911."' This specimen, now catalogued as M20241, agrees with Woodward's brief description.' The date accords well with Dawson labelling the specimen on the same day as

he wrote about M10480, to send off four days later. Woodward was concerned that the tooth may have been broken in the post and sent it back. Dawson extracted it from the small block of stone to which it was attached and returned it on the 27th, offering to send also a bit of matrix on which to mount it.

In March, on the eve of the Geological Society's meeting, Dawson made a present of 'the *Plagiaulax* teeth' to the museum. The plural suggests that Dawson was offering both of the teeth then identified as *Plagiaulax*, M10481 as well as M20241, but as M10481 was not his to give, it was not accepted at that juncture. M20241 was not accessioned until 1960, notably as M13134 was not accessioned until 1927, whereas M10480 and M10481 were evidently among those collected by Woodward from Teilhard at Ore Place in July 1912 and immediately accessioned (see below).¹³

CLIFF END, FAIRLIGHT

As in 1891 in relation to M13134, Dawson was anxious to conceal the find-spot of M10480, M10481 and M20241, and in September 1910 advised Woodward: 'You can describe the mammal tooth [M10480] as having been discovered in the [Fairlight Clay *deleted*] [lower *deleted*] Ashdown Sands Hastings. You might make a private record that the exact site was "Cliff END" (between Fairlight and Pett Level) [between 100 and 200 feet above the Purbeck *deleted*]', Dawson was usually a fluent writer, with very few amendments, so the hesitation is uncharacteristic and suggests real uncertainty. Dawson slightly changed the description in January 1911: 'The horizon may be described as a bone-bed near the base of the Ashdown Sands at Fairlight Cliffs, near Hastings' and referred to M10480 as 'the Fairlight tooth'. He labelled M20241 as from Fairlight, Ashdown Sand, near Hastings. In May 1911, he asked 'When can you come to see our mammal grits at Fairlight?', and two months later wrote: 'I am sending you a few other pieces one with two well defined tubercles which I found the day you and I were on search', indicating that Woodward had visited the site, but only after he had exhibited the teeth and committed his paper to the press.¹⁴ These descriptions of the site are generalised in one respect and wrong in another.

Firstly, the ancient parish of Fairlight extended along the shore from the eastern boundary of Hastings, at Ecclesbourne, over 9km to the western

margin of Pett Level, all but the last 2km being fronted by cliffs. 'Fairlight Cliffs' is not the name of any specific part of these cliffs. Cliff End is where the cliffs fall away to Pett Level – nearer to Pett village than to Fairlight village. Secondly, the top of Ashdown sands is not visible at Cliff End, as they have dipped below the beach. Kermack has stated that Percival Allen (1917-2008) rediscovered the exact locality with the help of information passed onto him by Woodward. This is plausible in that Allen was writing his PhD thesis submitted in 1943, on 'The Ashdown and Wadhurst series of the Weald of Kent, Surrey and Sussex', while Woodward was still alive. But in an article published in 1949, five years after Woodward's death, Allen could only say 'exact locality and horizon unknown' for the find-spot of the teeth Woodward had published in 1911. The likely spot seems to have been identified first, 'after the Second World War', by a group from UCL, including Kermack, which was initially be 'hindered' by Woodward having given the site as Fairlight. The group nevertheless collected between 20 and 30 teeth – which have not been published nor even mentioned in connection with the 1960s project.¹⁵

Presumably from fieldwork in the 1950s, Allen could say in his field guide of 1960 that erosion had re-exposed 'the celebrated bone-bed'. But in 1960/1 Kermack and colleagues could not locate it *in situ* in the cliffs. As they found bone-bed material in quantity only after the spring and autumn gales, they supposed that the ultimate source of the material was an off-shore reef, from which fragments were dislodged by the intense wave-action of storms and thrown up on the beach. Subsequently Shephard-Thorn identified the bone-bed towards the top of the cliff, within shales about 2.5m above a 10m band of fine white sandstone, a unit within the Wadhurst Clay formation which overlies the Ashdown formation. Waves were undermining the joint-blocks of the latter and causing falls of the overlying shales, bring blocks of the bone-bed down to the beach. 'Mammalian fossils have been found only in strata that contain a high concentration of rock fragments of approximately the same size, thus preventing rapid separation and concentration of the fossils by sorting on the basis of this character, or are well cemented and do not readily disaggregate.' The teeth came from '...a layer of rather coarse sandstone between [5 to 12.5cm]

thick, with its upper surface ripple marked. The sandstone is made up of angular grains of quartz. The grains vary considerably in size and range from about ¼mm to some 5mm in diameter. The cement which binds these grains is calcareous, being slowly broken down by weak acid. The fossils in the bed consist of bone and teeth, black in colour and all more or less rolled. The size range of the fossil material is similar to that of the quartz particles, although large pieces of bone are found very occasionally. The mammalian teeth are found reasonably intact, as they are below the critical upper limit of size (about 5mm in diameter) above which complete structures are not preserved in the bed. Fish make up about 90% of the recognizable vertebrate remains.... The residue consists of reptilian fragments, the mammalian remains being negligible as a percentage component of the whole.' Whereas the UCL team got to the teeth by dissolving the cement in acid, fieldworkers fifty years earlier presumably set to with hammers, on material evidently more intractable than that from Old Roar quarry or wherever M13134 came from.¹⁶

DOUBTS ABOUT *PLAGIAULAX DAWSONI*

Although Kermack's team concluded that *Plagiaulax dawsoni* was unlikely to be what Dawson and Woodward had believed it to be, a mammalian tooth from the Weald formation, they held Dawson in high regard. In 1965 they named one of the teeth they found at Cliff End *Aegialodon dawsoni*: 'The trivial name is to honour Mr Charles Dawson who was the first man to search deliberately for mammalian teeth in the Wealden.'¹⁷

However, since 1973 doubts about *Plagiaulax dawsoni*'s authenticity have been aired, that one or both were not found in the locations claimed and that they have been tampered with in modern times. In 1973, D. P. S. Peacock published his analysis of the Pevensey bricks, which Dawson claimed to be Roman, showing them to have been moulded in the early 20th century (§11) and ended with the paragraph:

In my opinion the time is now ripe for a full investigation of Dawson's numerous and often bizarre discoveries. From an archaeological point of view it would be particularly useful to know more of the cast iron figurines reputed to have come from the

Roman iron-working site at Beauport Park, while geologically, the mammal *Plagiaulax dawsoni* represented by a molar tooth from a bone bed 'near Hastings', might repay scrutiny.¹⁸

Peacock did not state the grounds for his suspicions, either then or later, but they had some consequences.

While Peacock was working on the Pevensey bricks, P. B. S. Andrews was developing his thesis that the Maresfield map was a hoax perpetrated by Dawson (§7) and managed to attract the interest of Philip Howard, a features writer on *The Times* where an article appeared on 30 March 1974. Doubtless on the strength of Peacock's last sentence, Howard wrote: '[Dawson's] other scientific "discoveries" included:...the tooth of a unique creature, half mammal, half reptile, promptly named by the gullible *Plagiaulax dawsoni* in honour of its fabricator – sorry, discoverer.' The article led to a flurry of correspondence, starting with the president of the Sussex Archaeological Society defending the society's, W. V. Crake's and L. F. Salzman's reputations. Then came Alfred Scheuer:

Woodward introduced Dawson to scientific society with the fossil "*plagiaulax dawsoni*" and then presented Piltdown Man as "*eoanthropus dawsoni*": Woodward also claimed to have excavated *eoanthropus* with his own hands and took the credit for interpreting the find.

It is time anthropologists stopped worrying about hurting the British Museum's feelings and conceded the benefits of having found the missing link between ape and man were enjoyed by the British Natural History Museum and its most influential staff and that Dawson was no more than a stooge.

Kermack rose to the defence:

Dawson was the person who initiated the systematic search for Wealden mammals. He carried on the work initially alone, and later with M. M. Teilhard de Chardin and Pelletier. He continued searching for at least 20 years. The search led to the discovery of the first Lower Cretaceous mammals known from anywhere in the world,...

Professor Clemens considers *Plagiaulax dawsoni* to be doubtfully mammalian. I think he is probably right.... There is no question here of "fabrication" – only a legitimate

difference of opinion in the assessment of a fragmentary and difficult specimen. As far as the Wealden mammals are concerned Dawson's reputation is quite safe.

Some restraint in attacking the good name of a dead man is surely desirable.

In 1984 Simpson wrote to C. S. Binderman that he thought Dawson was most likely, alone, the Piltdown hoaxer, adding: 'For one more bit of evidence, he had perpetrated a previous hoax.' This may of course have been a reference to the Pevensey bricks, but one may speculate that Simpson had come to have doubts about the authenticity of *Plagiaulax dawsoni* as finds.¹⁹

A more substantive allegation was made in 2003 by Miles Russell and has gained wide currency:

[C]areful examination of the first [1891] tooth of *Plagiaulax dawsoni* showed that the side-to-side abrasion that it has sustained, and which Woodward first noted as being otherwise unknown in the natural wear of this order of ancient mammal, is wholly artificial. Such damage, which effectively eroded the crown and much of the enamel, could only have occurred through a programme of extensive post-mortem rubbing. Examination of the remaining plagiulacoid teeth, recovered in 1911, shows that Woodward's initial comment that their crowns were 'closely similar to the original tooth', was eerily prophetic for they too are the product of artificial abrasion. In short, *Plagiaulax dawsoni* is a fake.

Russell has not published a scientific report of his examination, with photographs and the teeth's present museum accession numbers. They are identified by reference only to Woodward's published papers. He has informed me that the one tooth which he has physically examined and found abraded was in Hastings Museum in the early 1990s, and was labelled *Plagiaulax dawsoni*. He inferred from this tooth that, on the basis of the woodcut in Woodward's 1891 paper (which Hooker considers 'looks rather schematic'), M13134 had also been abraded. Therefore his conclusion of fraud is not based on examination of any of the five teeth in the Natural History Museum, which were taken by Simpson and Clemens to be those described by Woodward and are those discussed above. Hastings Museum now (2013) has no knowledge of holding, or having held, a tooth

labelled *Plagiaulax dawsoni*, or indeed any fossils from Dawson.²⁰

Plagiaulax dawsoni can still be a hoax. Russell considered from where Dawson might have taken the raw material for a forgery. '[T]he pre-abraded plagiulacoid teeth could easily have derived from his own extensive private collection of fossils.' Alternatively 'Could it be that the enlarged, pre-abraded plagiocid [*sic*] tooth was originally one of Beckles' specimens?' The former implies that Dawson had found a genuine multituberculata, mammalian, tooth in the Wealden, and had modified it to look like an example of the species *Plagiaulax becklesii*, though Woodward made comparison with the smaller *P. minor* which in the shape of its crown is a closer match. The latter is a more attractive supposition. S. H. Beckles died on 4 September 1890. Probate of his estate was granted to his widow as sole executrix on 29 September. Beckles's collections of pictures, porcelain and objects of art were auctioned in London the following March. Presumably in the intervening time, the NHM negotiated the purchase of what it required from the collection of Wealden fossils, and Dawson 'gave much help' in labelling these specimens. Hastings Museum acquired its holding from Beckles's remaining fossil finds, through the sale room in March. The NHM had purchased Beckles's Purbeckian collection in 1876 and 1877, but, as with the Wealden collection in 1890/1, is unlikely to have taken everything. So Beckles may well have kept material from his excavations in Dorset and the Isle of Wight. When Dawson was working intensively on fossil collecting around Hastings in 1888/9 he may have been helping an ailing Beckles to organise the collection. Dawson must have had much opportunity to beg or take specimens for himself.²¹

Here Hooker's observations are pertinent. Both M13134 and M20241 are broken, are apparently post-fossilization and do not show evidence of artificial abrasion. 'M20241 is a fragment of tooth, whose preservation is not typical of the Wealden. It is only a fragment of very worn crown with two roots. It could be a rodent, similar teeth of which occur in Eocene deposits of the Hampshire Basin, but I would not want to be definite as it is so fragmentary'; and '[M13134] is in/on a piece of what looks like genuine Wealden bone bed.... However, the preservation of the specimen is more like that of M20241 and in my opinion is therefore

suspect.' Dawson may therefore have submitted to Woodward as from the Wealden specimens which he knew came from further west. He may have also foisted another one on Hastings Museum.²²

I now consider what other, contextual, evidence there may be to support the suggestion that these teeth are suspect.

THE CONTEXT

THE STIMULUS FOR SEEKING MAMMALIAN FOSSILS

Dawson must have been the source of the advance publicity in the *Daily Graphic*, *Nature* and *The Athenaeum* for Woodward exhibiting M13134 to the Zoological Society in 1891. *The Athenaeum* (14 November 1891) reported that 'The long-expected discovery of a Wealden mammal has at last been made by Mr. Charles Dawson, FGS'; and *Nature* (12 November 1891) more soberly 'A mammalian tooth has just been discovered by Mr. Charles Dawson, of Uckfield, in a Wealden bone-bed near Hastings.... It is the first evidence of mammal from the Wealden formation.' Why should the find be 'long-expected'? The answer was simply stated by the president of the Geological Society in opening the discussion on M5691 in 1893: 'it was natural to expect the occurrence of mammalian remains in the Wealden, seeing they were known to occur in the underlying Purbeck.' That the Purbeck underlay (at least part of) the Wealden had been discovered by the boring undertaken at Netherfield by the Sub-Wealden Exploration Committee in 1872-6. The honorary secretary and treasurer was Henry Willett, the wealthy Brighton brewer, later an acquaintance of Dawson's and father of Dr Edgar Willett (1856-1928), Dawson's friend and occasional chauffeur to Piltdown. Beckles joined the committee in April 1872, so would have been well aware of the project's results. Beckles's own finds in excavations at Durlston Bay had been identified as mammalian remains from the Purbeckian and, as noted above, two species were named *Plagiaulax becklesii* and *Plagiaulax minor*.²³

Woodward in 1911 nevertheless said that it was since O. C. Marsh's discovery of mammalian teeth and bones in the Laramie Formation in Wyoming, USA, that Dawson had searched for similar fossils in the Wealden. Marsh's descriptions were published in 1889, though in 1882 Cope had announced the discovery of the first American

Cretaceous mammal. This was perhaps a post hoc rationalisation on Woodward's part (he had met Marsh in London between 1885 and 1889), when earlier finds in an older formation in Dorset, found by Beckles, should have been sufficient stimulus for Dawson to start looking. But as FRS and an established figure in London scientific circles, Beckles may well have ready access to the literature, better than Dawson would have had, and may have altered Dawson to the American finds.²⁴

FINDING THE FOSSILS

Dawson's fossils generally came from quarries around Hastings. In 1913 he recalled that as a boy of 12, he was spending all his pocket money on buying fossils from the quarrymen. He beguiled his playtime hours by tracing the footprints of giant fossil reptiles in the Wealden rocks of Sussex, digging out their bones and piecing them together - probably meaning that he found dinosaur footprints on the foreshore and dug these out. Otherwise his collecting relied on identifying potential sites for fossils, briefing the quarrymen on what he was interested in and tipping them for what they found for him. Indeed, the circumstances in which he first met Teilhard in May 1909 were the quarrymen reporting that Teilhard was poaching on Dawson's patch and not paying tips. Letters to Woodward in 1911 reveal the machinations required to secure for the NHM a fine set of dinosaurian remains. Dawson stressed the need to keep the workmen happy: Woodward should take, and pay for, some specimens, even though the NHM might have enough already, rather than leave them with the quarrymen and risk drawing other people to the spot. In 1889 he told Woodward that he had been extending his geological district beyond the three quarries close by Hastings (unnamed, perhaps Little Ridge, Old Roar and Shornden) and was in communication with nine quarries on the Wadhurst Clay within a radius of ten miles. As an enormous number of specimens must be thrown away he had a great scheme in his head for establishing an agency for collecting fossil specimens from all the Wadhurst Clay quarries in Kent and Sussex.²⁵

Reliance on the quarrymen applied, with a sophistication, when Dawson switched his collecting from dinosaurs to mammals. W. V. Crake recalled in 1907:

In the early years of the [Hastings] Museum

[c. 1890] they had two active geologists in the town rivalling one another in their desire for research – the late Mr Rufford and Mr Charles Dawson, who, he was thankful to say, was still with them. Mr Dawson kept two lock-up boxes to be filled by quarrymen at Fairlight and Black Horse with their findings. The boxes were periodically examined. Part of the contents went to London, and part Mr Dawson kept for his own purposes. Mr Rufford had his own methods of collecting; some of his collections came to Hastings and some went to the British Museum.

The quarry at Fairlight was not on the beach but near the parish church; it is not noted for having exposed bone-beds, but may have done a century ago. The bone-bed exposed in the Old Roar quarry in 1873 was then thought continuous with that seen in the Black Horse quarry near Battle a few years earlier but not in 1874. In 1949 however Allen reported bone-beds at Black Horse, which he named as Telham quarry, though not on the same horizon as Old Roar.²⁶

In 1893, Dawson said that in the previous seven years he had collected about 1cwt [51kg] of bone breccia. This then had to be closely examined to extract the fossils. Where he did that is not known, but the quantities involved may have made that possible even in his lodgings in Hastings and, later, at home or at the office in Uckfield. As Simpson explained in 1928, ‘the remains of Mesozoic mammals are among the smallest, the rarest, and the most fragile of fossils. Very few students have been able to make any considerable first-hand study of them; the last general review of the subject was made just forty years ago [in 1888]. Binocular microscopes were not then available...’ There is no sign that Dawson had one, rather several times he complained about the strain on his eyes: at the end of 1892, ‘it is an eye-aching job & mine are not of the best’; in July 1909 ‘We have been looking up some of the small things in the Weald & I am nearly blinded!’; and in May 1910 ‘I am searching a bone bed (Wadhurst clay) at Uckfield but it is very trying work for the eyes’ (this bone-bed at Uckfield is, incidentally, not heard of again). The work was also seasonal: at the end of 1892, ‘it is a “closed season” for them. i.e. we are stuck in the mud [at the quarry]’, in January 1911, ‘There is no chance of getting any more for some time to come as all my matrix is exhausted and we cannot get to the spot

until later on’, while in early March 1910, ‘Now that the weather is better the season for “bones” will commence again, I hope.’²⁷

The fragility of the fossils was underlined not only by the breakage of M13134. In January 1910 Dawson asked Woodward for a solution for preserving specimens as they were found: ‘they have a way of scaling and cracking on drying, especially when they occur on the weathered edges of those blocks exposed to the sea salt. We have several times lost specimens which I was hopefully regarding as mammal’; he has tried silicate of soda. With a letter of a year later ‘I send you the mammal tooth [M20241] and think that Mr Barlow’s solution will act very well.’²⁸

DATING DAWSON’S COLLECTING

Dating Dawson’s activity relies mostly on his letters surviving in the Natural History Museum. The earliest four are two of December 1884 about a further consignment of dinosaurian relics, additional to his collection transferred earlier that year, one of 1888 about some specimens of coral previously presented and a letter of February 1889 (the first addressed to A. S. Woodward) on some *Iguanodon* footprints.

Dawson had reason to want a new line of research, as he no longer had a sizeable family home in which to amass again large fossils. In the discussion of Lydekker’s paper in March 1893, Dawson said ‘seven years’ careful study of the Bone-beds at Hastings had yielded him only one minute mammalian tooth (*Plagiaulax*), i.e. M13134. This places the start of his study to 1886. But in 1911 he recounted the ‘Crowhurst *Iguanodon* story’: bones were found in about 1885–7, Henry Woodward asked him to look at them but he could not leave London at the time, however ‘when I returned to Hastings in 1887 I visited the quarry several times.’ In July 1887 he was enrolled as a solicitor, and in a directory of 1911 he said that he commenced practice in 1887. If he did set up the locked boxes at the quarries in 1886, it would have been during occasional visits to his brother or friends in Hastings; conversely he seems not to have held a solicitor’s practising certificate between November 1888 and January 1890, so he may have collected intensively then. It was in the next letter of June 1889 that he floated the scheme for establishing the agency for collecting fossil specimens from all the Wadhurst Clay quarries.²⁹

Thereafter is a gap of over two years in the surviving correspondence until the eve of M13134's exhibition to the Zoological Society in November 1891. By then Dawson was working and living in Uckfield, and the letter indicates that he no longer had much time for collecting: 'I propose next summer to spend a holiday in a thorough examination of the bed [from which the tooth came] & pieces which are to be kept and afterwards to write a full note on the formation, for publication.' The intention was not carried through. Then follow the letter at the turn of 1892/3 presenting the tooth to the NHM and that of February 1893 concerning the breakage. During the next 10 years only one letter from Dawson was filed, in 1897 covering some reptilian teeth from Lambert's quarry, Black Horse, Battle. He emphasised that he was busy on his history of Hastings Castle and noted '[i]t seems a long time since I saw you.' In 1903 Dawson proposed to bring to the museum a fish's jaw from the chalk, on Henry Willett's behalf. In the June of the year following he conducted the Geologists' Association around Hastings Castle with Woodward, as president, in the party. The next letter, in October 1907, recorded an encounter missed: 'We were sorry you did not turn up yesterday although we scarcely expected you. However a large motor party arrived & consumed the tea & buns spread for you!' Only from March 1909 does a regular correspondence survive, the first letter catching up with news of Dawson's activities. So there is no evidence of Dawson collecting from the bonebeds between 1891 and 1909, other than in 1897 (from Black Horse quarry). Well might he say in May 1910, 'It is 19 years since the last [tooth] you described! A very poor average in Wealden mammals!', the tooth in question actually having been found by Teilhard (M10480). Surely the collecting arrangements had been in abeyance for most of those 19 years.³⁰

The timing of the resumption of fossil hunting in spring 1909 is significant. Since marrying money in January 1905, Dawson had more leisure for his researches, and initially that went on completing his history of Hastings Castle (§12). Although the book was not published until July 1910, it was clearly a long time in the press, carrying the date of 1909 on the title-page, so maybe the writing was completed early in 1909. Just after Christmas 1909 his wife petitioned the home secretary for

him to be made a Companion of the Bath, as 'for a quarter of a century [he has] devoted his spare time to scientific labours and has done a great deal for the National Collections at the British Museum of Natural History' (§14). She enclosed appreciations, probably from successive keepers of geology at the NHM, Henry Woodward and A. S. Woodward. It was in their interest to humour collectors such as Dawson, as the museum relied heavily on their gathering specimens. But they must have known that, since donating his collection of dinosaurian remains in 1884, he had added only small instalments over the following 25 years (§3), that he had submitted very few other finds and that he had no scientific publications in his own name, for it was the museum staff who had determined and published his finds. Unsurprisingly, his hopes were dashed, between mid-February and early March 1910. He may well have realised in his own mind that his historical research was not going to bring him distinction. So he returned his energies to palaeontology, hoping to improve his standing and perhaps setting his sights on a fellowship of the Royal Society. The letters of 1909 were initially about dinosaurian remains from Old Roar quarry, until on 25 July starts a string of some 30 letters down to February 1912 and the first mention of the Piltdown finds. These mainly concern smaller items and suggest a frenzy of activity, much of it associated directly or indirectly with Teilhard de Chardin.

DAWSON AND TEILHARD DE CHARDIN

In September 1908 Pierre Marie Joseph Teilhard de Chardin (1881–1955) arrived as a scholastic at the French Jesuit theologate in exile at Ore Place, some 2km north of the seafront at Hastings. Born in the Auvergne, at the age of 11 he recorded a passion for stones and antiquities, while his father was instilling a deep interest in natural history. From 1901 to 1905 he was based at the noviciate in Jersey. The Jesuit house there was an established centre for teaching and research in geology and archaeology. He worked with fellow Jesuit Félix Pelletier on the island's mineralogy and wrote up some of the results while at Ore for publication in 1911, with a further one or two papers appearing in 1920/1. He was sent then to teach in the Jesuits' secondary school in Cairo for three years, and

undertook much fieldwork around Cairo and further afield. As well as working with other Jesuits with similar interests, he was in touch with half a dozen scholars in Egypt, Algeria and France, viewing their collections, passing specimens of fauna and fossils for identification and undertaking commissions to find specimens. 'I am becoming,' he wrote in September 1906, 'a supplier of shells, neuropteran, orthoptera, chrysalids, lepidoptera, etc., not to speak of making a fundamental study of geology, or rather, palaeontology.' They gratefully acknowledged his assistance and several species were named after him. He attended the monthly meetings of the Institut Égyptien, to which he read a paper on the Eocene in the vicinity of Miniyeh (northern Lebanon). In 1910 at Hastings he was working on material brought back from Egypt, describing some butterflies and classifying an important series of Pliocene shells.³¹

So Teilhard came to Sussex with, for his age, notable experience building on acute powers of observation, a very competent fieldworker. In his first letter home from Ore, he wrote, 'this is a Lower Cretaceous area...marked by chalky soil, the extinction of dinosaurs, the development of early mammals and flowering plants, and I've already spotted a few fossils. In the cliffs are slender threads of lignite, compressed like jet and containing pretty leaf impressions.' He knew what he was looking at. And in October, 'during my reading, I discovered that this part of the country (the Weald) is remarkable, geographically speaking... I've already collected several teeth and fish scales', and on 3 November 'in the crumbling rocks along the shore, I saw a dozen or so Iguanodon prints.' The following month with Hastings Museum's curator, W. R. Butterfield, he went once again to the eastern cliffs to see the prints, of which he would send his parents a snapshot. On a fine late January day in 1909, he pounced on the chance to bring back a considerable number of small fossils, teeth and fragments of shell from the cliffs. Three weeks later, 'new fossils are comparatively plentiful, and in some cases, I'm beginning to have a better collection than the museum' which he visited in mid-April to identify several fossils and to enjoy the loan exhibition of local antiquities to which Dawson made many contributions. A couple of weeks later he made quite a rare find, a megalosaur's tooth.³²

At Ore Place, Teilhard's life was much more

closely regulated than in Cairo and outside its walls he had to be accompanied by another member of the community. At the beginning of August 1909, Félix Pelletier, with whom he had kept in touch while in Egypt, by happy chance joined the Ore community, and he was to be associated with Teilhard as finders of M10480 and M10481; he continued at Ore, bar a stay in Jersey in March to May 1912, until Teilhard left.³³ Butterfield and Dawson were the only two local people outside of Ore Place (besides perhaps the mother of a colleague) with whom he had acquaintance, and he had no opportunity to join local societies nor to visit the Natural History Museum except when passing through London on missions decreed by his superiors. Language may have been a barrier, for both Jersey and, among Europeans, Cairo, were Francophone, lessened perhaps by Dawson's knowledge of French.³⁴ What he could do, though, contributed to his sacerdotal career, for it was in his second year at Ore, through reading Henri Bergson's *L'évolution créatrice* (1907), that Teilhard became convinced of the truth of evolution, the evidence being in the earth, the rocks, the fossil record.³⁵

Before he first met Dawson, in mid-May 1909, therefore, Teilhard identified the research potential of the Weald for the palaeontologist, had like-minded colleagues at Ore Place, was reading the literature, started collecting fossils and made contact with the local museum. He was not, as Kermack has suggested, 'pursuing an idea of Charles Dawson that mammals should occur in the Wealden': the idea was already common currency and Teilhard had picked it up before or soon after arriving. At Old Roar quarry, where Iguanodon bones were piling up destined for the NHM, the workmen complained to Dawson that two young Frenchmen were poaching in his field and failing to give them the customary tips. Dawson obliged on the Frenchmen's behalf and asked the days and times when they visited the quarry, contriving then to be there to meet them. Early on Teilhard spotted Dawson's ambition for recognition. He recounted how at the end of June he and a colleague had told Butterfield of the Iguanodon being found, and how furious the curator was at a prize for the local museum being taken from under his nose. Yet Dawson was a member of the local scientific society: 'how more sinister could his conduct be?' They had written to alert Dawson of

their indiscretion, and his reply, though friendly, still smacked 'of someone who senses the ornate hall of the British Museum behind him, and who lets his scorn for Hastings and its museum break through.'³⁶

On 22 July 1909, he took Dawson to see the *Iguanodon* prints and noticed that Dawson 'isn't very used to the rocks, and both Father de Bélinay and I had to help him over the obstacles. I had all the trouble in the world rescuing his hat from the ditch.' The incident was sufficiently memorable that, when they next met in the December, 'Dawson bore no grudge about the expedition I had made him make among the rocks last July; he even had the grace to make a joke of it.' Pictures of Teilhard on the beach in March 1911 show him wearing a clerical suit, and he is unlikely to have been allowed out more suitably dressed for clambering over rocks, but he clearly managed better than Dawson.³⁷

At the July meeting Teilhard handed over finds which he had already made. These included some teeth from a small crocodile found two days before in a quarry on an excursion which had taken him through lots of woods and a park with ostriches and deer - probably Ashburnham.³⁸ On the Sunday following, Dawson forwarded these to Woodward, inviting him to select one or two of the most useful *Therapsuchus* teeth and return the rest for 'my friends'.

I enclose in a round box something which looks like *Plagiaulax* [M10481?]. There is a spirally twisted spur which I think may be *hybodus* but do not recollect seeing before. There is also a bean-shaped palaloul [?] tooth or tubercle [?]

Back in the field after a retreat and five weeks in Jersey, in the middle of October Teilhard, found a new quarry in the vicinity of Ore which proved exceptionally rich in crocodile teeth and evidently wrote to Dawson who chased Woodward up on 25 October:

You were going to make a selection of the small Wealden crocodile teeth for the museum.... If you see among the specimens anything which you specially want as a gift for the Museum let me know & I will endeavour to arrange it. Will you kindly get someone to examine the little crustacean (in two pieces top and bottom) without delay. I think it ought to be described. As soon as

this is done kindly return it & I will do my best to acquire it for the Museum, if desired.

Teilhard and Dawson next met on 4 December, probably at Ore Place. Teilhard reported that '[a] specimen he took in July [the crustacean] is undoubtedly a novelty, but London [the NHM] do not know whether it is an imprint of a shellfish or the larva of a dragonfly.' Dawson took away two or three other things which might be novelties and that same day wrote to Woodward :

I am sending you for determination a few more small things.

The *Planorbis* [a freshwater snail] from the Wealden Purbeck is new I believe to the Purbeck series generally. In the largest glass tube is a tooth with a serrated edge [*sketch labelled styosaurian*] which is new to me. Something like *scelidosaurian* but the base is different. A little development might disclose something.

The crusade among the small things seems to be rather useful.³⁹

Woodward responded quick enough to Dawson for Teilhard to write home on 16 January 1910 that 'At the British Museum someone recognised the shells (similar to our *Planorbis*) which I had collected in October as something no one had discovered in the area before', suggesting that these had been found in the same quarry as the second lot of crocodile teeth. The first letter from Teilhard in the NHM archive is dated the following day and may mark the beginning of communication with the museum independent of Dawson.⁴⁰

They may have met next in May 1910, when Teilhard handed over a recent find, the mammalian tooth, M10480. On the 21st Dawson sent it to Woodward, from whom, within a couple of days, he learnt it was 'a success'. Dawson suggested in January 1911 that in exhibiting the tooth Woodward should write to the effect:

This specimen (the *Dipriodon*) was discovered by Messieurs P. Teilhard de Chardin and Felix Pelletier who have been rendering Mr. Ch. Dawson great assistance in collecting specimens for the British Museum, especially by systematic search in the bone-beds of the Hastings Beds for smaller palaeontological specimens.

What Woodward wrote in the abstract, presumably in advance of (though printed after) the society's meeting (but before the full paper) was:

[Dawson] has obtained two imperfect molars apparently of *Plagiaulax*, from the beds of grit in the Wealden near Hastings; and his associates in the work of exploration, [Teilhard and Pelletier], have found a well-preserved multituberculate molar of the form named *Dipriodon* by Marsh.

In the discussion, Dawson demoted them from associates to assistants:

during the past two years he had been favoured by the patient and skilled assistance of [Teilhard and Pelletier], to whom the discovery of... (*Dipriodon*) was due, as well as several new forms not mammalian.... [B]y the kindness of his colleagues, all these specimens are to be ceded to the British Museum.

In the published paper, Woodward reflected Dawson's statement:

More recent work, in which Mr. Dawson has been helped by Messrs P. Teilhard de Chardin and Félix Pelletier, has led to the finding of three additional specimens...from the Ashdown Sands of the Fairlight Cliffs near Hastings.

Teilhard felt the abstract to be 'complimentary enough' ('suffisamment élogieux'). This surely was over generous: the record above shows that Dawson had no hand in the finding of the tooth and the role only of the conduit to Woodward. Given Teilhard's notable prior achievements, his immediate awareness of the potential of the local strata and his exploration of the cliffs with Butterfield before meeting Dawson, he was an independent worker making Dawson's acquaintance. Indeed, that Dawson was hoping to take credit for it is suggested by his failure to tell Teilhard as soon as he knew in May that the tooth was 'a success' – and by his replying to Woodward, 'It is 19 years ago since the last one you described! A very poor average in Wealden mammals!' His cover was blown when Woodward wrote to Teilhard in January, whereupon Dawson immediately sent Woodward M20241 as a further specimen of *Plagiaulax dawsoni*.⁴¹ Similarly, on 13 July 1911, Teilhard found a further mammalian tooth which Dawson delivered (as 'a damaged tooth *Dipriodon* (?)') to the NHM on the 19th, and on the day following posted a few other items which he and Woodward had found on their trip to Cliff End a month or two previously.⁴²

This suspicion that Dawson played down Teilhard's independent contributions is enhanced by the history of a second collection of Teilhard's which went to the museum.

In March 1910, Teilhard wrote that he had met his friend de Bellaing in Jersey the previous September. 'I only went back to him to get a general appreciation of palaeobotany and to stir up enthusiasm to dig in the clay cliffs at Fairlight; meanwhile, this winter we collected a good number of ferns and pine cones.' At the end of January 1911 he found some very beautiful fern prints and on 12 February Dawson, 'my correspondent in geology' visited for the first time since May, taking away the 12kg block to convey to the NHM. In March 1911, Teilhard wrote of 'new contacts at the British Museum over an Iguanodon footprint recently discovered in the cliffs'. Presumably through the NHM he was put in touch with A. C. Seward, professor of botany at Cambridge, who in November was wanting to see Teilhard's collection of plant fossils. 'I'm preparing them now to send to him.... [T]hose which are worthwhile will undoubtedly go directly from Cambridge to South Kensington. It's the nicest thing that could happen to them'; and a fortnight later, 'I've just finished sending my plant fossils; right now they should be in Cambridge, but I haven't heard a word about them.' In April 1912 Dawson brought to show him fragments of the Piltdown skull, and on the same occasion looked at possibly rare fern prints which Teilhard had found and they sent to Cambridge, 'only it takes them a long time to answer.' The answer came in early May: 'without disclosing any great new things, my plant collections constitute an "important contribution to botany", especially in making knowledge of several species more precise.' The ferns he had found two weeks before were not known in the area in adequate examples. 'A study with photographic reproductions and drawings will be published.'⁴³

Clearly Teilhard had early identified the significance of the Wealden for the development of flowering plants, had updated his knowledge of palaeobotany, had done the searching, had probably made the contact with Cambridge through the NHM and had sent his specimens there. Woodward came to plunder his collection for the museum in early July 1912 and within days Teilhard completed his studies at Ore and left for France. Yet when Seward spoke at length to the

Geological Society in November, just five weeks before the unveiling of Piltdown Man, it was to report that a year previously Dawson had submitted to him for examination a small collection of plants obtained by him with Teilhard and Pelletier's able assistance and in accordance with Dawson's wishes it had been given to the NHM, being added to the *Dawson Collection* (my italics). A species, found by Rufford and the subject of a separate article, Seward named *Selaginellites dawsoni*, for to Dawson's 'enthusiasm and generosity the British Museum is indebted for many specimens of plants from the Sussex coast.' One species was named after Teilhard and two after Pelletier, and in the discussion Dawson paid handsome tribute to them. They had devoted nearly all their spare time over four years to collecting fossils and had displayed an immense amount of industry and perception. After a chance meeting (in fact contrived as noted above) he had assisted them in determining many of their specimens by frequent reference to the NHM, for which Woodward had taken whichever he wished. While Dawson thereby redressed the balance a bit, he still claimed more contribution than Teilhard's letters allow, and clearly the museum and Seward had formed the impression of his leading role.⁴⁴

That Teilhard had some doubts about Dawson's conduct is suggested by his letter to Pelletier in Jersey which opened by recounting Dawson's visit on 20 April 1912 with the Piltdown skull and continued by describing a meeting with Butterfield on 21 May:

This morning I was passing the museum... where I spent quite some time with Butterfield: I found him full of enthusiasm for palaeontology. He has received some new fossils (quite interesting bones from Danvell [Darwell], Robertsbridge (!)...) which were given him for a good enough price as for him to seek more. He seems to have determined to go regularly to all the quarries in the area and he asked me for a list: he also knew Blackman but not his collection. In any case, here's set up a new victim of palaeontology.

I talked to Butterfield frankly about my relations with Seward and the British Museum, and the history of the mammalian tooth (which he had not suspected); he was very nice ['fort gentil'].

While the first paragraph gives no clue that Dawson was known to be actively collecting fossils, the

last sentence suggests that Teilhard felt hard done by - though in December he did say that the abstract of Seward's paper had appeared 'with a very complimentary word from Dawson on us.'⁴⁵

On the strength of three surviving letters in the NHM from Teilhard to Dawson, Costello has concluded that the relationship between Dawson and Teilhard was one of mentor and pupil. That may have been how Dawson sought to present it and how it may have been convenient for Teilhard to humour Dawson. But as a palaeontologist, Teilhard may have already been in a higher league, with a more rigorous academic training and international experience. Rather, Dawson sought to capitalise on Teilhard's expertise but limited access to British scientific circles, for his own benefit. That, on the very day of learning that Woodward would be exhibiting Teilhard and Pelletier's finds of M10480 and M10481, he should produce a further specimen of *P. dawsoni*, was surely a manoeuvre to ride on the back of their success.⁴⁶

In this light, it is significant that there is no evidence of Dawson having been in the field with Teilhard other than in July 1909, when he slithered on the rocks, until they went together to Piltdown in June 1912. Indeed, in the intervening three years, their dealings required no more than four meetings, evidently at Ore Place, which Teilhard mentioned specifically, shortly before 4 December 1909, in May 1910, on 11 February 1911 and on 20 April 1912, plus perhaps a fifth in mid-July 1911, supplemented by correspondence, for example, before letters home on 24 October 1909 and 6 March 1910. Teilhard passed through Lewes in August 1910 and described to his parents the houses around the castle, unaware it seems that was where his geologist friend lived. Thomas similarly counted five meetings in total down to April 1912, before the trips to Piltdown (which took place when Teilhard was freed from the constraints of Ore Place), supplemented by more, but not numerous, letters. I concur with Thomas's conclusion that 'Clearly Dawson, as the great purveyor of fossils to the British Museum, knew to exploit to his own advantage, with the readiness which one expects in him, Teilhard's insatiable eagerness and the skills which he demonstrated in his innumerable geological excursions in the Weald.'⁴⁷

Furthermore, I question the soundness of Weiner's conclusion that '[b]y the time he came

to excavate at Piltdown Dawson could claim a not inconsiderable experience of practical field work,' for the excavations at Hastings Castle and the Lavant caves had been directed by John Lewis.⁴⁸

CONCLUSION

It took no great insight for Charles Dawson to spot in the late 1880s that mammals were something waiting to be found in the Wealden. But there is no evidence that Dawson did his own searching of the bone-beds, though around 1890 he may have had quarrymen collecting material from them for him. He was inactive in collecting such material between at least 1893 and 1909. His historical research not bringing him plaudits nor his scientific research gaining him the CB his wife sought for him, in 1909/10 he had a strong incentive to re-establish himself in palaeontology in order to enhance his reputation. The appearance of Pierre Teilhard de Chardin and Félix Pelletier in Hastings was a stroke of good fortune for Dawson, as their interest in mammalian fossils connected with his last published find of 1891. He relied on, and exploited to his advantage, their fieldwork. The downside was that, while taking the bone-bed material to Uckfield or Lewes was easy, its examination placed a great strain on his eyes and he lacked modern equipment. He was therefore all

the more dependent on Teilhard's great aptitude for this very close and exact research.

Perhaps the most suspicious evidence against Dawson is, firstly, that he did not tell Teilhard when Woodward had, in May 1910, quickly found M10480 to be significant; and, secondly, that, on learning eight months later that Woodward had informed Teilhard directly, he immediately produced for dispatch to Woodward another specimen of *Plagiaulax dawsoni* (M20241). And that neither was accessioned at the NHM when received, but presumably were held back by Woodward, fuels the suspicion that *he* came to doubt them.

Rather as Weiner concluded in 1955 in relation to the Piltdown finds, this evidence does not prove beyond reasonable doubt that Dawson knowingly perpetrated a hoax with *P. dawsoni*. While I have not produced proof of Dawson introducing M13134 and M20241 as from the Wealden near Hastings, knowing that they were from elsewhere, comparison with provenanced material from Beckles's collection now in the Natural History Museum may settle the matter.

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Particularly as this article has taken me into areas in which I have no expertise, I am especially grateful for the assistance I have received from David Bate, John Cooper, Ken Brooks, Jerry Hooker, Miles Russell, Karolyn Shindler, Liz Somerville and Francis Thackeray.

NOTES

¹ In-letters to the department of geology were bound up systematically after the end of each calendar year, arranged by the writer's surname, but some maybe many letters were not retained. Presumably, there was deliberate selection, though not necessarily to consistent rules, to discard those of ephemeral content. I have not referenced every mention of an individual letter if it is in the volumes Natural History Museum (hereafter NHM), DF100/20-51, for 1884–1911; each is listed (though without day and month) in the NHM's on-line archive catalogue. Letters from 1909 onwards are nearly all quoted or summarised (although not completely) in F. Spencer, *The Piltdown papers. The correspondence and other documents relating to the Piltdown Forgery* (London: British Museum (Natural History), 1990), 4–14, with obsolete references.

² P. Teilhard de Chardin, *Lettres d'Hastings et de Paris 1908–1914*, ed. Auguste Demoment and Henri de Lubac, Cardinal Henri de Lubac *Euvres Complètes* **44** (Paris: Les Éditions du Cerf, 2012) (hereafter *Lettres*), reprints the 1965 edition with a preface by Michel Fédou and contains 100 letters from Hastings of which 70 are in P. Teilhard de Chardin, *Letters from Hastings 1908–1912*,

ed. Henri de Lubac, trans. Judith de Stefano (New York: Herder and Herder, 1968). I cite the letters by their serial numbers, in italics, in the 2012 edition, to allow reference also to the 1965 edition.

³ L. F. Laporte, *George Gaylord Simpson, paleontologist & evolutionist, 1902–1984* ([2000?] [cited 11 Nov. 2013]; available from <http://people.ucsc.edu/~laporte/simpson/Index.html>, accessed 11 Nov. 2013. G. G. Simpson, *A catalogue of the Mesozoic mammalia in the Geological Department of the British Museum* (London: British Museum (Natural History), 1928), 1. W. A. Clemens, 'Wealden mammalian fossils', *Palaeontology* **6** (1) (1963), 55–69. The current authoritative overview is S. C. Sweetman and J. J. Hooker, 'Mammals', in *English Wealden fossils*, ed. David J. Batten, **14**, Field Guides to Fossils (London: Palaeontological Association, 2011), 560–80.

⁴ NHM, DF100/26/11. A. S. Woodward, 'On a mammalian tooth from the Wealden formation of Hastings', *Proceedings of the Zoological Society of London* (1891), 585–6. A. S. Woodward, 'On some mammalian teeth from the Wealden of Hastings', *Quarterly Journal of the Geological Society of London* **67** (May) (1911), 278.

⁵ NHM, DF100/108/8; I infer that it was for the 1893 meeting from the reference to 'the last 7 years' corresponding to the years for which he said then that

- he had been searching: R. Lydekker, 'On a mammalian incisor from the Wealden of Hastings', *Quarterly Journal of the Geological Society of London* **49** (1893), 283. J. Hopkinson, 'Excursion to Eastbourne and St. Leonards. May 23rd and 24th, 1873', *Proceedings of the Geologists' Association* **3** (1874), 213. Woodward, 'Mammalian tooth', 585-6.
- ⁶ 'Ordinary meeting. Friday, November 4th, 1892', *Proceedings of the Geologists' Association* **13** (1) (1893), 1-2, where only the 'chief objects' exhibited are listed, the tooth not among them. NHM, DF100/26/11; 100/28/14 (dated to 1892/3 from the New Year greetings and NHM internal notes filed after it).
- ⁷ Simpson, *Mesozoic mammalia*, 51-2. NHM, DF118/3/33. Clemens, 'Mammalian fossils', 56.
- ⁸ J. J. Hooker, pers. comm., 26 June (2013).
- ⁹ Lydekker, 'Mammalian incisor', 281-3. Simpson, *Mesozoic mammalia*, 51, 192. Clemens, 'Mammalian fossils', 56-7.
- ¹⁰ Woodward, 'Some mammalian teeth', 278-81. Simpson, *Mesozoic mammalia*, 49-51. Clemens, 'Mammalian fossils', 57-62. J. J. Hooker, pers. comm., 8 July (2013).
- ¹¹ NHM, DF100/47/231; 49/243, 246, 250, 253 (Spencer, *Piltdown papers*, 7, wrongly dates this to 1910). *Lettres*, **62**, 74. NHM, DF118/3/32. H. Thomas, *Le mystère de l'homme Piltdown. Une extraordinaire imposture scientifique* (Paris: Belin, 2002), 272n16.
- ¹² Woodward, 'Some mammalian teeth', 278-81. Simpson, *Mesozoic mammalia*, 192. Clemens, 'Mammalian fossils', 58. Hooker, pers. comm., 26 June.
- ¹³ NMH, DF100/49/253; 51/171, 72, 173, 177. Clemens, 'Mammalian fossils', 57. *Lettres*, 100.
- ¹⁴ NHM, DF100/49/253, 250; DF100/51/179; DF108/8. DF100/53/218 of 14 Feb. 1912 refers to the costs of 'our trip to Cliff End', probably that of June/July 1911 or possibly (but unlikely) a second later visit.
- ¹⁵ K. A. Kermack, P. M. Lees, and F. Mussett, 'Aegialodon dawsoni, a new trituberculosectorial tooth from the Lower Wealden', *Proceedings of the Royal Society of London, Series B* **162** (1965), 536. P. Allen, 'Notes on Wealden bone-beds', *Proceedings of the Geologists' Association* **60** (1949), 275. K. A. Kermack, 'British Mesozoic mammal sites', in *The use and conservation of palaeontological sites*, ed. P. R. Crowther and W. A. Wimbledon, Palaeontological Association Special Papers in Palaeontology **40** (1988), 87.
- ¹⁶ P. Allen, *The geology of the Central Weald: A study of the Hastings Beds*, Geologists' Association Guides **24** ([n.p.]: Geologists' Association, 1960), 11. Kermack, Lees, and Mussett, 'Aegialodon dawsoni', 536-9. W. A. Clemens and P. M. Lees, 'A review of English Early Cretaceous mammals', in *Early mammals*, ed. D. M. Kermack and K. A. Kermack, Zoological Journal of the Linnean Society Supplements **50** (London: Academic Press, 1971), 120, quoting findings by E. R. Shephard-Thorn.
- ¹⁷ Kermack, Lees, and Mussett, 'Aegialodon dawsoni', 539.
- ¹⁸ D. P. S. Peacock, 'Forged brick-stamps from Pevensy', *Antiquity* **47** (1973), 140.
- ¹⁹ P. B. S. Andrews, 'A fictitious purported historical map', *SAC* **112** (1974), 165-7. P. Howard, 'History is lies ask the Piltdown man', *The Times*, 30 March 1974. *The Times*, 4, 9 Apr. 1974. B. G. Gardiner, 'The Piltdown forgery: a re-statement of the case against Hinton', *Zoological Journal of the Linnean Society* **139** (3) (2003), 316.
- ²⁰ M. Russell, *Piltdown Man. The secret life of Charles Dawson & the world's greatest archaeological hoax* (Stroud: Tempus, 2003), 28-32. M. Russell, pers. comm., 12 Mar., 15 Nov. (2013). Hooker, pers. comm., 26 June.
- ²¹ Russell, *Piltdown Man*, 32. *Morning Post*, 23 Feb. 1891. A. C. L. G. Gunther, *The history of the collections contained in the Natural History Departments of the British Museum, I* (London: Trustees of the British Museum, 1904), 244, 265. A. S. Woodward, 'Charles Dawson, FSA, FGS', *Geological Magazine* **dec. 6, 3** (10) (1916), 478. *Hastings & St Leonards Observer* (hereafter *H&SLO*), 25 Nov 1905.
- ²² Hooker, pers. comm., 26 June.
- ²³ Lydekker, 'Mammalian incisor', 283. H. Willett, *The record of the Sub-Wealden Exploration* (Brighton: W. J. Smith, 1878). H. Falconer, 'Description of two species of the fossil mammalian genus *Plagiaulax* from Purbeck', *Quarterly Journal of the Geological Society of London* **13** (1857), 261-82. Simpson, *Mesozoic mammalia*, 32-6.
- ²⁴ Kermack, Lees, and Mussett, 'Aegialodon dawsoni', 535-6. C. F. Cooper, 'Sir Arthur Smith Woodward', *Obituary Notices of Fellows of the Royal Society* **5** (14) (1945), 82.
- ²⁵ [Hastings correspondent], 'Wizard of Sussex', *Daily Express*, 4 Jan. 1913, 5. A. S. Woodward, *The earliest Englishman* (London: C. C. Watts, 1948), 9. Spencer, *Piltdown papers*, 6-13. NHM, DF100/24/10.
- ²⁶ *H&SLO*, 2 Nov. 1907. K. A. Booth, *Geological investigation of the Ashdown beds at Fairlight, East Sussex*, British Geological Survey Commercial Report **CR/05/040N** (Keyworth: British Geological Survey, 2005). K. Brooks, 'Dinosaur quarries of Hastings', *Hastings & District Geological Society Journal* **17** (2011), 10. Hopkinson, 'Eastbourne and St. Leonards', 213. Allen, 'Bone-beds', 275-83.
- ²⁷ NHM, DF100/28/14; 47/231; 49/246, 241; 51/171. Simpson, *Mesozoic mammalia*, 1 (quoted), 75.
- ²⁸ NHM, DF100/49/253; 51/171.
- ²⁹ Lydekker, 'Mammalian incisor', 283. NHM, DF100/51/179; 24/10. *Who's who in Kent, Surrey and Sussex*, (London: Horace Cox, 1911), 340. P. Costello, 'The missing link. The strange story of the Piltdown Man [version 1]' (unpub. typescript, 1985), 41. P. Costello, 'Piltdown dossier' (unpub. ms, c. 1980).
- ³⁰ NHM, DF100/26/11; 28/14; 30/45; 43/10. *H&SLO*, 18 June 1904.
- ³¹ I have covered much the same ground as Thomas, *Piltdown*, 131-45, though he relied on Spencer, *Piltdown papers* for Dawson's letters (and I on the originals) but he read Teilhard's letters to Pelletier. J. Mortier and M.-L. Aboux, eds, *Teilhard de Chardin album* (London: Collins, 1966), 18. M. Le Morvan, 'Teilhard the geologist in Jersey (1901-1905)', *The Teilhard Newsletter* **19** (2005), 3. P. Teilhard de Chardin, *Letters from Egypt*, ed. Henry de Lubac, trans. Mary Ilford (New York: Herder and Herder, 1965), quote at 115. P. Teilhard de Chardin, 'Huit jours au Fayoum', *Relations d'Orient* (Dec.) (1907), 274-81 [not seen]. P. Teilhard de Chardin, 'L'éocène des environs de Minieh', *Bulletin de l'Institut Égyptien* **ser. 5, 2** (1908), 116-21. R. Fourtau, 'Note sur les échinides fossiles recueillis par M. Teilhard de Chardin dans de l'éocène des environs de Minieh', *Bulletin de l'Institut Égyptien* **ser. 5, 2** (1908), 122-55. R. Fourtau, 'Sur quelques échinides éocènes d'Égypte', *Bulletin de l'Institut Égyptien* **ser.**

- 5, 1** (1907), 205. P. M. Pallary, 'Catalogue de la faune malacologique de l'Égypte', *Mémoires Présentés à l'Institut Égyptien* **6** (1) (1909), 1, 4, 14, 74. *Lettres*, **36, 42, 43, 66, 32** *Lettres*, **2, 4, 5, 11, 12, 15, 16.**
- ³³ Thomas, *Piltdown*, 272n16. Teilhard does not mention Pelletier in his letters from Hastings, but the only companions on excursions named appeared before Pelletier's arrival: Fathers Burdo and de Jerphanion on 4 Nov. 1908, and Father de Bélinay (who left in Dec. 1909), like de Jerphanion (an archaeologist), an old friend from Egypt, on 4 Dec. 1908 and 25 July 1909: *Lettres*, **2, 5, 7, 23.**
- ³⁴ D. Grumett, 'Teilhard at Ore Place, Hastings 1908–1912', *New Blackfriars* **90** (1030) (2009), 687–700. K. Schmitz-Moorman, 'Teilhard and the Piltdown Hoax', *Teilhard Newsletter* **14** (1) (1981), 2–4. NHM, DF100/51/178. *Lettres*, 12–14.
- ³⁶ Kermack, 'British Mesozoic mammal sites', 87. Woodward, *The earliest Englishman*, 8. *Lettres*, **18, 21** ('qui sent derrière lui l'or et les salles du British [Musée]', but I suggest part is a misreading for, e.g., 'l'ornée salle').
- ³⁷ *Lettres*, **23, 33.** Mortier and Aboux, eds, *Teilhard de Chardin album*, 38, 43. C. Cuénot, *Teilhard de Chardin* (Paris: Seuil, 1978), 20. For Dawson and his hats, see Fig. 3 in §8 and Russell, *Piltdown Man*, 158, 158, 206, 223, 264.
- ³⁸ *Lettres*, 23.
- ³⁹ *Lettres*, 33. NHM, DF100/47/231, 230, 232.
- ⁴⁰ *Lettres*, **36, 30.** NHM, TR1/1/31/107 (from catalogue).
- ⁴¹ A. S. Woodward, 'On some mammalian teeth from the Wealden of Hastings', *Abstracts of Proceedings of the Geological Society of London* (1910–11), 67–8. Woodward, 'Some mammalian teeth', 278–80. *Lettres*, **69, 62** (I assume that that letter from the NHM was written by Woodward); also, **67, 74.**
- ⁴² *Lettres*, 76. NHM, DF100/108/8. Perhaps Teilhard met Dawson between 13 and 19 July and handed over the tooth.
- ⁴³ *Lettres*, **40, 63, 64, 72, 84, 85, 94** (which can be read as Dawson having found the ferns but that is clarified in 95), 95. Spencer, *Piltdown papers*, 21. The only reference to the fossils in Seward's surviving letters to Woodward is on 17 Jan. 1912 ('I shall be glad to have the few Wealden plants when you can conveniently send them. I will not keep them long'), perhaps referring to a loan from the NHM for comparison with Teilhard's fossils: NHM, DF100/54/332.
- ⁴⁴ Spencer, *Piltdown papers*, 13, letter of 11 Nov. 1911, implying that Seward's interest was communicated by Woodward to Dawson. A. C. Seward, 'A contribution to our knowledge of Wealden floras, with especial reference to a collection of plants from Sussex', *Quarterly Journal of the Geological Society of London* **69** (1) (1913), 85, 86, 90, 91, 115–16 – the paper immediately preceding Dawson and Woodward's on Piltdown. On reporting the appearance of the full paper, Teilhard noted only the naming of several plants after him: *Lettres*, 120. A. C. Seward, 'A British fossil *Selaginella*', *New Phytologist* **12** (3) (1913), 86.
- ⁴⁵ Thomas, *Piltdown*, 139 (omissions as given in this transcript), 144
- ⁴⁶ P. Costello, 'Teilhard and the Piltdown hoax', *Antiquity* **55** (213) (1981), 58–9. NHM, DF100/54/412–14. For the thesis that Teilhard was complicit in the Piltdown hoax, see the references in T. H. Turriffin, 'An annotated bibliography of the Piltdown Man forgery, 1953–2005', *PalArch's Journal of Archaeology of Northwest Europe* **1** (1) (2006), 25–8 (to which may be added J. F. Thackeray, 'On Piltdown: the possible roles of Martin Hinton and Charles Dawson', *Transactions of the Royal Society of South Africa* **66** (1) (2011), 91–3, and J. F. Thackeray, 'Deceiver, joker or innocent? Teilhard de Chardin and Piltdown Man', *Antiquity* **86** (2012), 228–34) and the summaries of some of those in D. G. Bate, *An annotated select bibliography of the Piltdown forgery*, British Geological Survey Open Report **OR/13/047** (in preparation 2013).
- ⁴⁷ *Lettres*, **33, 64, 94, 50.** NHM, DF100/49/243. Thomas, *Piltdown*, 137.
- ⁴⁸ J. S. Weiner, *The Piltdown forgery*, 1st edn (London: Oxford University Press, 1955), 85–6.

Appendix 5 The mourners at Charles Dawson's funeral, 12 August 1916

This list is based on the report of the funeral at St John-sub-Castro, Lewes, in the *Sussex Express*, 18 August 1916, augmented from the *Sussex Daily News*, 14 August. The first column gives the name of the person, as identified, in the newspaper's ordering. The second column indicates whether the person was a mourner (m), sent a floral tribute (ft) and/or was prevented from attending (pfa). The third column provides further information. Identifications have come mainly from *Kelly's directory of Sussex*, 1915 edition, supplemented by the 1911 census. Doubtful or uncertain identifications are indicated by [?].

It is striking how well represented was Dawson's professional life in and around in Uckfield, compared with his home life in Lewes. Is this evidence that he was cold-shouldered in Lewes? But what might be the grounds for that other than his purchase of Castle Lodge 13 years previous? The Sussex Archaeological Society was not named as represented, but the masonic lodges were the only

social bodies noted. Rather, the imbalance may reflect the exigencies of the time. The funeral was held only two days after Dawson's death. With the horror of the Battle of the Somme being enacted, Sussex was in the front line for marshalling men and equipment, preoccupying many people. In Uckfield, G. E. Hart could set the office staff to notifying the magistrates, the district councillors and private clients. In Lewes, though, Dawson's widow was either too distraught or too ill even to attend the funeral and her daughter stayed at her side, while her son was in France. There may simply not have been the capability at home to arrange a large attendance. Despite Dawson's lifetime association with Hastings, no more other than one mourner came from there. Indeed, aside from family and professional connections, there were few others who attended or sent flowers (only four associated with his scientific and antiquarian researches), though among them the intriguingly unidentified.

Sir Trevor Dawson	m, ft	brother, Elstree, Herts; ft also from wife Lulu
Mrs Gordon	m, ft	sister, ft from Major General and Mrs C. L. Gordon
Nurse Parrott	m, ft	
Nurse Pearce	m, ft	
Dr Arthur Smith Woodward	m	keeper of geology, Natural History Museum, with whom Dawson published <i>Piltdown Man</i>
George Ernest Hart	m, ft	partner in Dawson & Hart; ft also from wife; see §10.2
members and officers of Uckfield Urban District Council	ft	
Thomas Albert Bannister	m	vice-chairman Uckfield UDC
John Windsor Gould	m	member Uckfield UDC
Philip Gander	m	member Uckfield UDC
Ernest Mark Rollinson	m, ft	member Uckfield UDC, solicitor in the firm of Humble-Crofts & Co, 198 High St, Uckfield, spoke on behalf of the local solicitors at the Bench's tribute
Alfred Chilton	m	member Uckfield UDC
Ernest Taylor	m	member Uckfield UDC
Cyril Woodward	m	son of A. S. Woodward
Arthur C. Langham	m	of Sutton, Surrey, the firm's London agent; ft also from wife

Miss Tims	m	of 17 Ventnor Villas, Hove [?]
Alderman George Holman, JP	m	of The Rowans, Prince Edward's Road, Lewes
Major William Wilson Grantham	m	of Balneath Manor, Barcombe
Francis Hugh Baxendale, JP	m, ft	of Framfield Place, Uckfield
Montague S. Blaker, BA	m	former town clerk Lewes Borough, of The Lodge, King Henry's Road; solicitor, Blaker & Son, 211 High Street
Reginald T. Baxter, MA	m	town clerk Lewes Borough, of Undercliffe, Malling Street, Lewes; solicitor, 9 Albion Street
Dr Frank Fawssett, MB, BS, and Mrs Fawssett	m	of 83 High Street, Lewes
F. Frankfort Moore	m, ft	of Castlegate House, Lewes; ft also from wife
Captain G. C. M. Miller	m	provost marshal Shoreham Camp, of Soanberge, Kingston, Lewes
Frank Loud, LRCP, MRCS	m	of Albion House, Albion Street, Lewes, surgeon
Dr Frederick Benjamin Lewis, LSA, JP [?]	m	of 114 London Road, St Leonards. Named in newspapers only as 'Dr Lewis'
Henry Edward White [?]	m	of 52 Springfield Road, Preston, Brighton, representing the Worshipful Master South Saxon Lodge of Freemasons
several representatives of the South Saxon Lodge of Freemasons	m	
members of Loxfield Lodge of Freemasons (No. 2450)	m, ft	
Mr & Mrs James Groves	m, ft	of Brownings Manor, Blackboys
Mrs J. Havelock Groves	m, ft	of Sharelands, Blackboys
Captain Henry King	m, ft	of Isfield Place, ft also from wife
Superintendent Arthur Vine	m	Lewes Division, County Constabulary
Sergeant and Mrs Brambleby	m, ft	ft also from Ellen and Frank
Colonel Frank John Todd, JP	m	of Westmoreland House, New Town, Uckfield
Revd Owen Davies	m	of the Rectory, East Hoathly, Halland
Revd Evan Griffiths	m	of 17 St Anne's Crescent, Lewes, curate of St Anne's, chaplain Newhaven garrison
Henry Marmaduke Langdale	m	of Ulverston House, Uckfield
Clifton George Turner	m, ft with Mrs	of 27 Framfield Road, Uckfield, Dawson's managing clerk
Samuel Staplehurst Avis	m	of 192 High Street, Uckfield, retired bank manager
M. S. Avis	m	of Uckfield
Richards	m	W. E. Richards who contributed to ft below [?]
Richards jnr	m	son of above [?]
Edmund White	m	of Landport House, Lewes, ICS retired
George St John Smith	m	of 196 High Street, Uckfield, registrar of marriages
Rudolph Alexander Niedermayer	m	solicitor, of 53e Terminus Road, Eastbourne, and 20 Gloucester Place, Brighton, a former clerk of Dawson's
C. Edmunds	m	C. Edmonds, 33 Cissbury Avenue, Hove; C. Edmonds and son, accountants, 13 Prince Albert Street, Brighton [?]

W. C. Greey	m, ft	for whom Dawson was ‘an old and valued friend’; perhaps William Commerford Greey, 1848-1932, in his will of Albany Hotel, Hastings, but in 1911 insurance official of Westminster, born Islington
Thomas Mantell	m	of 161 High Street, Lewes, auctioneer
Samuel Allinson Woodhead, MSc, FIC	m	principal of the Agricultural College, Uckfield, public analyst for East Sussex, and one of Dawson’s collaborators
William M. Alderton	m	of Gazle Slope, Piltdown, who helped Dawson with architectural descriptions for <i>History of Hastings Castle</i> , see §§6, 12.
William H. Overton	m, ft	architect and surveyor of 22 Ship Street, Brighton and 4 Selborne Place, Hove who designed the 1914 extension of Castle Lodge, Lewes
James [or Joseph] Osborne	m, ft	ft also from wife. Perhaps the Revd Joseph Osborne, of Down View, Terminus Avenue, Bexhill, Congregational minister.
Frederick Simpson	m	named as of Brighton, but perhaps Frederick Moore Simpson of The Ridge, Chelwood Gate, Uckfield
H. L. Beale	m	of Burgess Hill
Henry Payne Day	m	of 12 Mill Drove, Uckfield
P. G. Hughes		superintended seating arrangements
G. Connett		superintended seating arrangements
Prebendary Frederic John Poole		rector, officiated
A. J. Neeves		organist
The Revd Hugh Leyland Dawson	ft	vicar of Clandown, brother, officiated at graveside; ft from Leyland, Lena and Peggie
Mrs Mary Dawson	ft	mother
Mrs Hélène Dawson	ft	wife
Gladys Postlethwaite	ft	step-daughter
Jack	ft	probably Dawson’s step-son, F. J. M. Postlethwaite
Hugh, Iris and Eva Dawson	ft	three children of Sir Trevor
town and trade of Uckfield	ft	
Uckfield bench of magistrates	ft	
past and present members of office staff at Uckfield:		
Ernest Simmons	ft	of West View, New Alexandra Road, Uckfield
W. E. Richards	ft	
D. Coleman	ft	
W. Chatfield	ft	
F. G. W. Jenner	ft	
J. P. Farr	ft	
Lord Joicey and Marguerite	ft	of Ford Castle, Northumberland, see §10.1
Sir John and Lady Henniker Heaton	ft	in 1911, of 10 Dorset Road, Bexhill
works staff of Uckfield Gas Co	ft	
BB	ft	perhaps R. de Bray Hassell

Sir Francis Osborne, bt, JP, and Lady Osborne	ft	of The Grange, Framfield
Major R. J. Streatfield	ft	chairman Uckfield UDC
Mrs Le Marchand	ft	of Sedbergh, Cumberland
Harold Wakefield	ft	
Major and Mrs John Eckford	ft	of Leighside Hall, Lewes
Mrs Frank Baxendale	ft	of Framfield Place, Uckfield
Revd Arthur Gordon Green	ft	of the Vicarage, Iford
Major Robert Lawrence Thornton, MA, JP	pfa	of High Cross, Framfield, Uckfield
Major Hugh Stott, LRCP, MRCS, LSA, DPHRCPS	pfa	medical officer of health to Uckfield UDC, of 23 High Street and Gundreda Road, Lewes
Lieut Col R. de Bray Hassell, JP	pfa	of Tanners Manor, Horeham Road, Waldron
Charles J. Henry Corbett, MA, BCL, JP	pfa	of Woodgate, Danehill, Uckfield
George M. Meryon Wilson, JP	pfa	of Searles, Fletching, Uckfield

Corrigenda to the main article

p. 150, right-hand column, lines 3 to 5. The conversazione was held on 4 November 1892, not in February 1893: see Appendix 4 above.

p. 151, right-hand column, lines 15–17. Dawson sent the list of tenants to the estate office, not as stated.

p. 162, right-hand column, 6 lines up, *for* William Kelner *read* William Kellner

p. 177, right-hand column, lines 3 to 6. The tooth on which Woodward reported in May 1910 had been found by Teilhard de Chardin and sent to him earlier that month: see Appendix 4 above.
