DR JOHN ELLOR TAYLOR: GUIDE, PHILOSOPHER AND FRIEND

by STEVEN J. PLUNKETT

A GREY STONE monument near the chapels in the old cemetery at Ipswich, leaning at a slightly drunken angle, was erected in 1895 by the subscription of friends for a man beloved by his fellow-townsmen who died bankrupt at the age of 58. According to the epitaph,

By knowledge, by humour, by rare and excellent gifts of speech, he opened the eyes of many to the order, variety and beauty of nature.

Dr Taylor, who as Curator of Ipswich Museum from 1872 to 1893 was the driving force behind the creation of the new Museum in High Street in 1880–81, is almost as completely forgotten in Ipswich today as he was renowned in his lifetime. Not only did he modernize and enlarge the collections in ways that are now overlooked, but this amiable and gifted man also devoted much of his life to the service of the town by his teaching and example, laying the foundations of adult educational reform at the cost of his own health and means. His story introduces us to one of the most engaging social circles of the town in late Victorian times. The pages of the East Anglian Daily Times were filled with his doings: but as an Honorary Member of our Institute it is fitting that his permanent memoir should be found in our own *Proceedings*.

1: EARLY DAYS

Born 28 September 1837² at Levenshulme, Manchester, John was the eldest of several sons of a Lancashire cotton factory foreman, William Taylor and his wife Maria (née Ellor). John received his only formal education in a school held in the local Wesleyan chapel, which he supplemented by private study. He was brought up full of religious knowledge, from which he drank in draughts of inspiration. In about 1850 he obtained a place as store-boy at the Longsight (Manchester) locomotive works of the London and North-Western Railway, and two years later was bound apprentice there as a fitter and turner. Mr Ramsbottom, the locomotive superintendent, encouraged him, and after working hours he applied himself especially to Latin, Greek and the Natural Sciences, in the intervals of fighting with other Lancashire and Cheshire boys: at the age of seventeen he began to attend evening classes at the Manchester Mechanics' Institution. A year later he became a Wesleyan lay preacher, but his interest in Natural Sciences worried his teachers:

One day the late Dr Rigg found him poring over a book describing the world before the flood. The learned Methodist divine looked solemnly over the volume – perhaps it was Hugh Miller's *Testimony of the Rocks* – and shaking his head, told the young man severely, 'This book will never save your soul' (Wilson 1895).

Apparently it was Mantell's *Medals of Creation* which sent him out, presumably in the early 1850s, on his maiden geological excursion, which was to a heap of coal-shale near a pit's mouth in the neighbourhood of Manchester, carrying a common house-hammer. Cleaving the carboniferous shales, he discovered a large portion of the plant *Lepidodendron*,



FIG.~37-Dr~John~Ellor~Taylor,~f.L.s.,~F.G.s.~(1837-95)~(photo~by~William~Vick-ISS~Album).

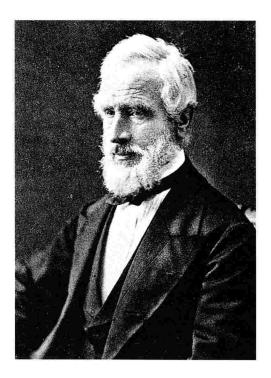
and with a great outburst of pleasure, 'quite equivalent to that of landing the first salmon', he wrapped it carefully in paper and carried it home in his pocket (Taylor (ed.) 1876, 4). Taylor abandoned his notion of becoming a minister, and, with a position at the engineer draughtsman's office of the L.N.W.R. at Crewe, he continued his private studies making natural science his main pastime. Over the next few years he made many excursions, often in company with other young men, and produced essays on the local geology which were published in Manchester newspapers. Collected in his first book, A Sketch of the Geology of the Manchester Area (1864), these already bear the hallmarks of his later writing, with a fine descriptive faculty and a strong interest in the social and economic dimensions of the study. If scientific reviewers found shortcomings, others were enthralled by his popular style and the vivid, romantic qualities of his descriptions, for example of a visit to the Speedwell Mine near Castleton.³ Throughout his life, Taylor remained proud of his Lancashire origins, and he has left a description of the Lancashire character (Taylor 1880, 268–90).

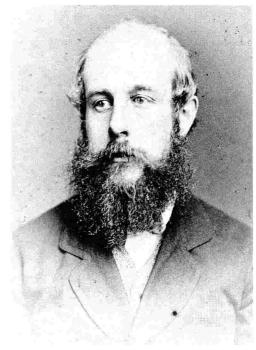
Taylor's study of Quaternary drift deposits around Manchester sometimes took him to Norwich during the later 1850s, where similar geological features were then attracting great interest. He made a strong impression on a young lad, Frank Woolnough (1845–1930), who became his lifelong disciple and friend:

A boy of 12 I had been out fishing and of course trespassing, and I was retracing my steps across a field to the high road with a bait can full of Sticklebacks – Minnows – Newts – Snails – Weeds and the hundred and one things one finds in the ponds and streams. Presently barring my path I saw a tall gaunt form stalking along with a huge stick in his hand. My guilty conscience at once put him down as the farmer on whose land I had no business. 'What ha you got there bor?' was his first salutation. I told him and he took the bait can out of my hands and sat down on the grass and dived his great fist into the water and brought up a handful of the contents. He questioned me as to my knowledge of them, which like most boys of 12 was extremely elementary, and he there and then gave the first Scientific Lecture I ever heard him deliver (Woolnough MS 1).

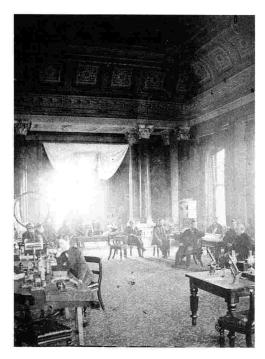
In 1863 Taylor moved permanently to Norwich, working as a sub-editor on the *Norwich Mercury* for Richard ('Dick') Noverra Bacon. He soon joined the circle of Norwich geologists led by the Revd John Gunn of Irstead, which included Searles Valentine Wood senr and jnr and Frederic W. Harmer (authors of the early Palaeontographical Society volumes), Alfred Bell, John King and Horace B. Woodward, all of whom studied, described and debated the horizons and meanings of the East Anglian Crag deposits and their fauna. Taylor conducted geological classes and field-excursions: the Norwich Geological Society was founded in April 1864 with Gunn as President and Taylor as Secretary, supported by Harmer, Robert Fitch and others (Woodward 1891, 18). In December 1864, he addressed the Manchester Geological Society on the subject of the Pliocene and later geology of Norwich.

Bacon appreciated Taylor, and appointed him Editor of a new penny off-shoot, the *People's Weekly Journal*. Taylor made it a vehicle for his own writings, and within a decade it had a circulation of 15–16,000 weekly. He began by reprinting his Geological Essays, and these drew the attention of the young Freddy W. Wilson (1844–1924), son of a founder-director of the Liberal *Norfolk News*, on which Wilson served his indenture under J.H. Tillet, M.P. (Wilson 1895: Anon. 1924). Frank Woolnough was then at the *Norfolk News* as an office boy, rubbing shoulders with senior men like H.W. Massingham, and learning from Tillet, who 'had a pen like vitriol when he liked to use it' (*E.A.D.T.* 1924). Wilson, who had read Taylor's Speedwell Mine description with wonder, first met him at a Watch-Night









F1G. 38 – Above left: the Revd John Gunn, M.A., E.G.S. (1801–90) of Irstead, geologist, photographed in 1882 (after Woodward and Newton, 1891). Above right: William Whitaker, E.G.S., author of several early Geological Survey Memoirs for East Anglia and London (ISS Album). Below: Two views of the first Conversazione of the Ipswich Science-Gossip Society, Ipswich Town Hall Council Chamber, 20 Nov. 1870 (Photos by W. Vick – ISS Album).

service at the Old Methodist Chapel in Norwich in about 1864, and so began a friendship which lasted the rest of their lives.

The details of Taylor's life and work at Norwich have yet to be researched and written, but it is certain that he came to occupy a distinguished place in the city's life. On 31 January 1866 he married Sarah Harriet, youngest daughter of William Bellamy, headmaster of the Boys' Model School at Norwich.

II: CRAGS, COPROLITES AND CURATORS

Debate over the East Anglian Crag deposits flourished in the later 1860s. These are marine deposits from the end of the Pliocene epoch and into the early Pleistocene, leading up to the Great Ice Age: in the successive strata, changing fauna of molluscs and both maritime and terrestrial vertebrates reveal dramatic changes in climate and topography, with an increasing proportion of modern as against extinct species. Taken with the glacial deposits, they show a comparatively continuous succession, unusual in Great Britain, from about 2.5 million years ago down to the present epoch, encompassing primary evidence for human ancestors in Britain some half a million years ago. The Crag debates persisted through the more public arguments which broke in 1859–63 concerning human origins, in Darwin's Origin of Species, Huxley's Man's Place in Nature, and Lyell's Antiquity of Man. Charles Lyell, brother-in-law of Sir Charles Bunbury, popularized awareness that it was at Hoxne, Suffolk, in 1859–60 that John Evans and Joseph Prestwich recognized, in the handaxes described sixty years earlier by John Frere, the first acknowledged English counterparts of Boucher de Perthes's Abbevillian 'hatchets'.

The Reverend Professors J.S. Henslow and A. Sedgwick, elder scientists and friends, helped to develop Crag studies in Museums at Ipswich, Norwich and Cambridge, though they remained sceptical as to the full implications of Darwinism. John Stevens Henslow (1796-1861), Rector of Hitcham and Darwin's botanical mentor at Cambridge, helped Darwin to obtain the position as naturalist on the Beagle voyage of 1831-36 under its Suffolk-born Captain, Robert Fitzroy. Henslow recognized the agricultural potential of the phosphates contained in the 'coprolite' beds, at the base of the Crags, in 1843. He set up a definitive series of Crag fossils at Ipswich Museum (where he succeeded the eminent scientist, the Revd William Kirby of Barham, as President in 1850) as part of a model taxonomic display based on a pre-Darwinian concept of Types. Through family connections and through the Ipswich 1851 Meeting of the British Association, he and George Ransome recruited over sixty leading scientists as honorary members of the Museum.5 The Searles V. Woods, foremost authorities on the Crag mollusca, lived at Hasketon and Melton. In 1854, Adam Sedgwick obtained the important Crag collections of the Revd Thomas Image of Whepstead for the Woodwardian Museum at Cambridge. Sedgwick, a Vice-President of Ipswich Museum, was involved in the early development of Norwich Museum. Having chaired the famous 1860 Oxford meeting when Huxley clashed with Bishop Wilberforce (Moorhead 1969, 26-30: Desmond 1997, 277-81), Henslow died in 1861, and the Ipswich Museum's development slowed.

Taylor gave important papers on the divisions of the Norwich Crag to the Geological Magazine, and to the British Association from 1866. Ray Lankester (whose father, Dr Edwin Lankester of Melton, a star pupil of John Lindley's and Coroner for Middlesex, was an energetic founding honorary member of Ipswich Museum) also studied the Crags during the later 1860s, and his strong friendship with Taylor began at that time. In August 1868 the British Association met at Norwich, under the Presidency of Sir Joseph Hooker, and lively discussions took place on the local geology. John Gunn presented his collection of fossil mammalia to Norwich Museum, which Taylor described for the Norwich Mercury.

Two days later, with Gunn, S.V. Wood jnr and Harmer, Taylor led a memorable excursion to Thorpe Hamlet, and thence by steamer to Bramerton. The excursionists included Thomas Huxley, Joseph Prestwich, John Evans, Henry Woodward, Ray Lankester, and many others: Boyd Dawkins was present later in the week (Woodward 1891, 21–22). Taylor was certainly soon aware of, if he did not attend, Huxley's famous address *On A Piece Of Chalk* given at the Norwich Drill Hall (Huxley 1868), a brilliant performance and a landmark in the diffusion of popular science. In the following year Taylor became a Fellow of the Geological Society.

At Norwich, Taylor combined his newspaper work with that of scientific lecturing, at both an academic and a popular level, and undertook teaching. In 1872 he could boast that he had for several years sent students of geology, botany and zoology up for examination through the South Kensington scheme without a single failure. In 1868 he was invited to lecture in Ipswich: this was brought about by the then Mayor, Edward Packard senr, creator and proprietor of the phosphate fertilizer plant at Bramford. His business was built on Henslow's discovery of the phosphates in the coprolite beds, not truly fossil dung but organic remains from deposits intermediate between the Eocene London clay (c.52 million years ago) and the warm seas of the Pliocene shelly crags which overlaid it long afterwards. Packard's works brought immense trade through Ipswich docks, and as a senior townsman he was closely involved with the Museum Committee. He first met Taylor at a meeting of our Institute:

I felt that if we could get such a man into Ipswich he would be a great acquisition to the town. When I had the honour of being Mayor of this town, I had the satisfaction of introducing him, and he gave a course of six lectures. That confirmed my opinion that he was the man for the office of Curator of the Museum whenever it became vacant (Anon. 1881a).

The Museum's Curator, George Knights, ran the Museum from 1853 under Henslow's energetic instructions:7 but after 1861, in the Presidency of Charles Austin of Brandeston Hall (a brilliant advocate but not a Museum specialist), Knights, left to his own devices, let lectures, displays and records drift. Through his coprolite empire, Packard formed a definitive Crag and sub-Crag fossil collection, the best of which he gave to the Museum in 1868: he also got important items from the collections of William Colchester and John Chevallier Cobbold to perfect the series. Then attention turned to the famous collection of the Revd Henry Canham of Waldringfield, and the Museum Committee contracted Edward Charlesworth to name, arrange and catalogue both the Museum's and Canham's Crag collections. Charlesworth,8 a celebrated if somewhat independent geologist, and a dealer in geological specimens, had first described the division between the Red and Coralline Crags during the 1830s, and had been Curator of one of Ipswich Museum's predecessors, the Ipswich Literary Institute's Museum. His present work did not satisfy the Committee, and in late 1869 there was a suspicion of unpleasantness in their resolution, 'That the Committee refuse to re-open the discussion referring to the Revd Mr Canham's Crag Collection, once offered to the Museum, but in very indefinite terms, and the name of Mr Charlesworth in connection therewith to be no more mentioned' (I.M. Minutes 1869). Charlesworth made substantial purchases at the Sales of the collections of William Whincopp (1870 and 1874) and James Baker (1875) and dispersed them through private sales (Charlesworth 1875).

Taylor, meanwhile, had prepared a manuscript of a proposed guide to the Norwich Museum, and late in 1869 the Ipswich Committee asked him to assist Knights to revise, rename, select and rearrange the specimens, and to prepare a descriptive guide including a short history of their Museum (I.M. Minutes 1869). The work went on through 1870,

and the *Guide* (now a rare volume), a model of clarity and completeness,⁹ was with the printers early in 1871. Knights complained that he felt undermined, and protested his authority, but was told he should have kept better order in the first place (I.M. Minutes 1871). Taylor's lectures in Norwich were becoming quite celebrated: Robert Fitch (an antiquary of more lasting credit and reputation than his brother William, the Ipswich postmaster), who attended most of them, remarked, 'I have been surprized at the vast amount of knowledge possessed by him, and the happy manner of imparting that information to others' (Testimonials).

III: YOUNG BLOOD AT IPSWICH, 1868-72

Taylor at Norwich was in need of a change, as Wilson and Woolnough both knew:

About 1870 there was a severe outbreak of small-pox, encouraged by the unwholesome conditions under which the people lived, and no doubt partly by the poverty which affected the industries of the city, about that time changing from decay in textile factories to the present prosperous boot manufacturing industry. Taylor made an offer to the proprietors of the Eastern Daily Press, then just established, to visit the homes of the stricken people and describe their condition in the newspaper. He went like a brave man of science, like perhaps a careless journalist; wrote some graphic articles, which took the city by storm, and then sickened of the malady himself. The scars thus bravely earned he carried, as all have seen, to his dying day, but he never talked of the deed (Wilson 1895: cf. also I.S.S. Minutes, 2 Oct. 1895).

During this illness, Taylor ran into fairly serious debt, agreeing to compound with his creditors for 10s. in the pound, but afterwards paid off all he owed in full (Anon 1893a).

A new educational impetus at Ipswich began on 9 April 1869, when a group of young men, mainly from industry-owning, Liberal and nonconformist families, met at Dr H.P. Drummond's house (30, Silent Street) to form the Ipswich Science-Gossip Society. Drummond was a stalwart of the Mechanics' Institute in the 1850s, and a member of the Ipswich Philosophical Society, which became inactive after 1855. The 1869 group, including (amongst others) the young William Bantoft, Daniel Ford Goddard, Edward Bidwell, Henry Miller junr, and the photographer William Vick (newly arrived in Ipswich, a slightly older man), determined to form a society to develop interest in natural history, science, geology and archaeology. A large membership (entirely male) was soon achieved. A room at the Museum was used for their monthly meetings, and a programme of soirées and excursions developed. Their first grand public Conversazione – to become a major event in future years – took place in the new Town Hall's Council Chamber in November 1870 (I.S.S. Minutes 1869–70: Anon. 1870).

The name Science-Gossip, implying a popular approach to science, was borrowed from the name of the successful national monthly, Hardwicke's Science-Gossip Magazine. This was founded by Robert Hardwicke, and at first edited by the mycologist Mordecai Cubitt Cooke (associated with the Cubitts of the Woodbridge area): Cooke, Hardwicke and Edwin Lankester also collaborated to form a specialist national group, the Quekett Microscopical Club (English 1990, 134–35). In the columns of Hardwicke's from 1869 Taylor (following Huxley's inspiring example) wrote a series of 'life-stories' of various types of stone. Following the Ipswich model, he founded the Norwich Science-Gossip Club in 1870. Robert Hardwicke was Taylor's sponsor to Fellowship of the Linnean Society, and Taylor became Editor of his Magazine. Thus when George Knights died









FIG. 39 – Above left: Dr Henry Pilkington Drummond (d. c. 1886), of the Ipswich Institute and Ipswich Philosophical Society, and founding father of the Ipswich Science-Gossip Society, photographed c. 1873. Above right: Garrett Garrett (1808–90), naturalist, of the Ipswich Philosophical Society and Ipswich Scientific Society. Below left: William Budden (c.1821–87), ship-broker and Dock Commissioner in Ipswich. Below right: William Vick (1833–1911), photographer in Ipswich. (Photos by W. Vick – ISS Album).

unexpectedly in post in 1872, aged little more than forty, the Ipswich Museum Committee, despite receiving many applications, decided after some argument to appoint Taylor without further interview. This was especially urged by Edward Packard and Edward Grimwade, and opposed by the Chairman, Dr H.A. Holden (Headmaster of Ipswich School), who resigned over it but was persuaded to return (I.M. Minutes 1872). Taylor was received immediately and with laurels into the Ipswich Science-Gossip Society, whom he first addressed (on *Flint Implements*) in 1873 (I.S.S. Minutes): in a composite photograph made for the 1873 Conversazione he and Drummond are shown jointly as their leading figures (I.S.S. Album).

IV: AMONG NEW FRIENDS AND OLD

The new post was for a Curator and Museum Lecturer, a skill in which Taylor had proved himself. His first winter weekly series of twenty-four was a performance repeated on various subjects every year until 1892, not only in Ipswich but also further afield, for instance at Hemel Hempstead and Hitchin (Herts) (Taylor MS 1 and 2). The Museum and its displays progressed rapidly despite these other commitments. In 1872–73 he also produced four books, the two popular science evergreens Half Hours at the Sea Side and Half Hours in Green Lanes, a Guide to Ipswich, and Geological Stories, in which his lithic autobiographies were gathered into one volume. He was a man accustomed to the daily work of a newspaper editor; but his lengthy geological contribution to White's Directory of Suffolk (Taylor 1874) showed specialist knowledge of its subject.

Taylor next assisted in the creation of the East Anglian Daily Times (Wilson 1895: E.A.D.T. 1924). Both he and Wilson were keen to see the development of daily journalism: Norwich now had the Eastern Daily Press, under the aegis of the Norfolk News. The reformation of the Ipswich press arose from the winding-up of the companies which had worked the Ipswich Express, the Ipswich & Colchester Times, and the Suffolk Mercury. J.J. Colman of Norwich acquired these interests and developed business plans with T.R. Elkington, upon whose vision and organisational genius the scheme would ultimately depend. Wilson meanwhile, having finished his training on the Norfolk News, learnt daily journalism for several years on the Liverpool Daily Post and earned high praise for his coverage of the American War; he had just been appointed Editor of the weekly Chester & Birkenhead Observer when the irresistible summons back to East Anglia reached him. Meanwhile, Elkington could not come to terms with Colman, and in disaffection left Ipswich for Wales.

Colman, resolving to back the project, sent Taylor to Wales to bring Elkington back if at all possible. This he achieved, and the first issue of the *East Anglian Daily Times* was produced on 13 October 1874. Taylor obtained a wide circulation for his lectures, which his admiring friend Wilson published in full. Wilson soon became active in the Ipswich Science-Gossip Society: an ardent sportsman and founder of several local golf, tennis, shooting and rowing clubs, he became a loved and respected personality. At his Felixstowe home (High Row, High Road) an annual 'Wayzgoose' was held for the newspaper's staff, whom he encouraged in all sorts of sportsmanlike and intrepid activities. Several reporters who began with Wilson went on to make famous careers in journalism, notably James Sykes and Spencer Leigh Hughes, and in the technical department R.C. Annand, later inventor of the Simplex Rotary Press, learnt his trade in the same office (Anon. 1924: *E.A.D.T.* 1924).

For the Museum, with an estimated 90,000 visitors annually, expansion was becoming an immediate concern. Taylor's lectures, with W. Vick or J. Wiggin manipulating the lantern, began in the large Museum room with a series on Zoology. 'The first few nights [in 1872] the lectures were given to twenty or thirty people, all standing. The audience

however rapidly increased in numbers until there was fear of the frail looking gallery breaking down' (Taylor MS 2, Lectures 1886–87, no. 1). Attendance soon averaged 300, and in the second winter, 1873–74, the series on *Geology and Physical Geography* had to be moved to the Temperance Hall at the foot of High Street, the cost being met by a small charge (2d. and 3d.) for the front seats. In the third winter, attendance at *Plants, their Structures and Uses* exceeded even the capacity of the Temperance Hall, and for that season were moved to the Mechanics' Lecture Hall in Tower Street. Meanwhile in 1874 Charles Austin set up a subscription to buy the freehold of the Northgate Street Assembly Rooms, part of which were rented for the Art School, where the success of William Thompson Griffiths R.A. (its head master 1859–1906) was creating a need for more space. Two houses adjoining the Museum were acquired to accommodate the growing Museum and Free Library collections. In 1875 the Council took the opportunity to purchase the Public Hall, diverting the Northgate Street project funds. This did not help the Art School, because the Hall was then leased for entertainment, pending possible use as a Museum when the lease on the existing Museum should expire in 1879 (I.M. Minutes).

In summer 1874 Taylor made a geological tour of north-west Scotland, inspecting the basalt formations at Fingall's Cave, Staffa ('which exceeds all descriptions') and how these volcanic rocks had infilled and modified the surrounding matrices. He was deeply impressed by their immense thickness in parts of the Isle of Mull, and in a 60ft chasm in the chalk near Port Rush. He crossed to Ireland, and arranged for basalt columns from Giant's Causeway to be sent back to Ipswich: he then attended the British Association Meeting, to hear Professor John Tyndall, the glaciologist, whose *Belfast Address* (Tyndall 1874) became a celebrated landmark in scientific Agnosticism. From Democritus to the present day, Tyndall highlighted those thinkers like Galileo or Giordano Bruno who had come into conflict with religious dogma, and made a forceful plea for the freedom of scientific inquiry. Taylor was sceptical:

... it was very bold, but hardly broad enough in character, and probably would not be lasting in effect. It might be characterized as materialistic, almost holding out the belief that the sin and misery in the world is caused by molecular change. Dr Tyndall laid down his arguments in a most dogmatic way, basing them almost entirely on experiments, apparently not taking sufficient notice of the fact that all the knowledge we obtain by experiment comes to us through our so called 5 senses. Supposing we became possessed of 7 senses, these results would appear to us in a different way, and would most likely upset many of our present theories (I.S.S. Minutes, 4 Sept. 1874).

At the Science-Gossip Club's fifth Conversazione (1874), in the Public Hall, under Vick's presidency and Miller's able secretaryship, ¹⁴ Taylor lectured on his new interest, the fauna and flora of the peat or 'forest' bed in the river Orwell, an early post-glacial formation containing mammoth teeth and human implements (Anon. 1874). William Budden, an Ipswich historian active in the Society, had drawn his attention to some newly-dredged material, and Taylor lectured on the subject jointly with Thomas Miller (the Dock engineer) to the British Association¹⁵ at Bristol in 1875. In that year, the Club voted to rename itself the Ipswich Scientific Society. Although the Presidency changed year by year, Taylor became the senior figure, as Drummond, protesting that he could not call himself a 'scientist', resigned. The Conversaziones were not renewed until 1877 (I.S.S. Minutes). Taylor first appears as 'Dr' at a meeting of January 1876: among so much work, he had also obtained a Ph.D. degree, presumably by dissertation to a European university since he does not appear to have been registered at any of the British ones.

V: 'A MOST EFFICIENT CURATOR'

Sir Richard Wallace of Sudbourne Hall, creator of the celebrated Wallace Art Collection at Hertford House, became the Museum's President in 1875 following Austin's death late in 1874. In the next year he acquired and presented the Canham fossils. Taylor, too, was successful in persuading finders to sell such rare fossils as a tapir's tooth, turtle skulls, and a *Trichecodon* tusk. The Crag collections were freshly arranged in a new (first-floor) room opening to the right from the main gallery in the old Museum, with a good range of windows overlooking the lower end of Museum Street affording plenty of light. This created space elsewhere for the growing library and the new Science School sessions under Mr Laidlaw. Taylor, in his late thirties, had won the complete confidence of his Committee – especially of Grimwade, Packard and Sterling Westhorp – and by October 1877 his salary was raised from £130 to £200 per annum: the admirable W.T. Griffiths, by contrast, often protested that he was allowed only half the (already subsidized) fees of his art students, and a small honorarium, and was not allowed to take private pupils.

Like all decent people Taylor detested cruelty to animals, and described with affection his efforts to help an Australian sparrow which lived in a cage in his study. First it was separated from a canary which pulled out its tail feathers, and later Taylor supplied it with two wooden legs made of matchsticks when necrosis attacked its feet. When it eventually died, he had it stuffed (Taylor 1886, 70–71). Yet he was not averse to eating specimens: with Mr Thomas Baker (Museum Assistant since Henslow's time¹⁷) he made fish-casts from the life, inspired by the work of Frank Buckland, observing that the specimens (paid for by the Museum) had both scientific and culinary value (Taylor 1878a). The casts survive as testimony to his dinners. For his *Notes on Preserving Natural History Objects*, compiled from *Hardwicke's*, he collaborated with the botanist and prehistorian Worthington G. Smith.

Taylor inspected the Aquaria at Westminster and Crystal Palace, and at Yarmouth, several times during early 1876, and published his useful book The Aquarium: Its Inhabitants, Structure and Management. Packard offered £1,000 to fit out an Aquarium near the Public Hall, and although this was shelved pending the lease expiry of 1879, there was growing excitement in the Museum's potential under Taylor's guidance (I.M. Minutes). Easter 1876 saw a working holiday with Packard in the south of France, for a survey of Packard's phosphate mines near the river Lotte about twenty miles east of Villefranc. The mines were in caverns, supposed craters of extinct volcanoes, on top of denuded oolitic limestone hills: many bones and teeth of extinct animals were found in them, and Taylor was able to exhibit a fine collection of Palaeotherium, Hyaenadon, Accrotherium, Anthrocatherium, Dinotherium, etc., to the Scientific Society on his return (I.S.S. Minutes, 3 May 1876: cf also Taylor 1880, 19-31). He regaled them with descriptions of the grassy extinct volcanic landscape from the top of the Puy de Dome, and of tracing the old lava courses on the Puy de Pano: 'The rim of the mountain was broad enough for two men to walk abreast, although on a windy day like that on which he and Alderman Packard performed the feat, it was no easy matter to keep themselves erect' (I.S.S. Minutes, 7 Jun. 1877).

The Conversazione of February 1877, again at the Public Hall, made a new departure with demonstrations of applied technology from industrial plant in London and Ipswich. East Anglian representatives had parliamentary news telegraphed directly to the hall, set up in type, and printed on the spot. 'The interest in the proceedings increased as each fresh speaker's name was announced, and the speeches were all ardently looked for.' Electro-plate, stereotype, wood and metal blocks were demonstrated. The Museum dimension was also strong: W.M. Cole (the Society's 'Prehistoric Man') showed a series of British and world stone implements, and some Saxon and early English coins, and Taylor



FIG. 40 – The four 1878 excursionists to Derbyshire. Above left: Dr J.E. Taylor in 1879. Above right: Frederick W. Wilson (1844–1924), founding editor of the East Anglian Daily Times. Below left: Henry Miller jun., M.I.C.E. (1846–1929), Secretary of the Ipswich Scientific Society 1869–90. Below right: William Mason Cole, the Scientific Society's 'Prehistoric Man'. (Photos by W. Vick–ISS Album).

exhibited specimens from the Canham collection and his fish-casts (Anon. 1877). C.P. Ogilvie of Sizewell, Curator of the Yarmouth Aquarium, sent live young of the *hippocampus*, and a year later returned to Ipswich to speak on 'Sea-serpents'.

At Easter 1877 the Society hosted a memorable weekend excursion of the London Geologists' Association, led by William Whitaker, Dr Taylor and Edward Charlesworth. Whitaker (of the Geological Survey), author of the Ipswich district *Memoir* and a notable donor to the Museum, was a genial man and a good friend of Taylor's. Another old associate, John Gunn, was among the visitors. Journeys were made and repasts eaten, and Taylor delivered lecturettes and showed off the Museum. On the second afternoon, after inspecting the Crags at Chillesford, Butley and Sudbourne, the entire party of well over fifty sat down to luncheon before a blazing fire in Orford Castle keep, at the invitation of Sir Richard Wallace (himself absent). Glowing speeches were delivered, and toasts drunk, extolling the local Society, the Museum, Dr Taylor, and Sir Richard's patronage (Anon. 1877).

Ray Lankester, now Professor at University College, London, described Taylor's achievement in a letter to the *Suffolk Chronicle*, congratulating Ipswich on having by far the most perfect Crag series in existence, and a representation of its local geology more complete than any other English town's. He added, 'Dr Taylor proves himself a most efficient curator. The collection is now disposed in the best way, in groups corresponding to the several different kinds of fossils which occur in the crag . . . [and with] . . . a really able and talented curator to make the most of it' (Lankester 1877). Wilson later recalled:

(Taylor) was a poet of science – one of the few men, like Huxley, Procter, and Ball, who can make a fairy tale of science more interesting than a sensational novel. His ardent friend, Professor Ray Lankester, now the foremost savant of the day, once spoke to me of the unique quality of Taylor's work. There were few lecturers, he said, who could expound nature with such beauty and lucidity – 'and mind you,' he added, 'his science is correct.' Numbers of tyros have often tried to trip up the doctor, but this saying of Lankester's will be remembered as the true estimate. Lankester always liked to see him, and I can well recall the professor's disappointment when, on the occasion of an Ipswich Scientific Society's trip, Taylor failed to appear (Wilson 1895).

VI: INFLUENCES FOR GOOD

At Easter 1878 Wilson fulfilled the ambition of many years by persuading Taylor to retrace his steps with him to the heart of the Speedwell Mine in Derbyshire. This expedition, which was repeated the following year, cemented friendships which flourished during the 1880s, and was remembered well into the 20th century. Four friends, Cole, Miller, Taylor and Wilson, gathered in Sheffield and on their first night attended the Music-Hall. Prizes were distributed, and they were amazed to see two whole sheep brought onto the stage and cut up by a butcher, while the audience watched in silence. One of the party had a winning ticket:

A loin of mutton is rather an awkward joint for a knapsacker, except in a cooked state at the end of the journey. The winner stepped forward with all the graceful nonchalance he could command, took his prize, and surreptitiously handed it to the first woman with a child in her arms he encountered on his return to his friends (Wilson 1878).

They walked over to Hathersage, across the crest of the moor; and after a sharp walk to the Bull at Castleton, delighting in the extraordinary and romantic landscape, they explored the Peak Cavern and the Speedwell Mine. Taylor kept them amused:

The Secretary was tall and long, the geologist short and squat. Taylor's own party once lost them for chief part of the day. When at last the two sections met, at Hathersage Inn, Taylor described the grief he had felt at missing them, and the futile enquiries he had made. The only clue was given by a roadman working with others, whom he asked, 'Have you seen two gentlemen pass by here?' The reply was, said Taylor, 'We ain't seen no gentlemen, but we've seen a long ———— and a short 'un.' The Lancashire dialect does not admit of printing the exact word used . . . One beautiful Sunday evening we found ourselves at a little anglers' rest at the head of the valley of the Dove. That evening we could do nothing else but piece together 'Gray's Elegy,' – Taylor one verse, the Secretary another, till we got the whole poem, while the Dove murmured below on the rocks and the geologist went soundly to sleep . . . Next morning we walked down Dove Dale, perhaps the most beautiful and picturesque valley in the British Isles (Wilson 1895; 1917).

In late summer, Taylor also managed a holiday in the west of Ireland.¹⁸ He went from Westport, crossing the boggy table-land studded with pretty loughs, and thence along the stream of the Erive among the Royal Fern, *Osmunda*, in search of the rare heath-plant *Menziesia*, through wild mountain scenery down to Leenane. Next he explored Kylemore Lough and went on to Letterfrack, observing the unusual geological formations: 'The only drawback to the geologist whilst studying these rocks is the absence of a donkey-cart and a good strong donkey, for his knapsack soon gets full and his pockets weighed down, and, worst of all, he is obliged to leave specimens behind him that he would otherwise gladly carry away to gloat over and study . . .' (Taylor 1878c). He reached Cliefden late one evening, and took the early mail-car to Galway, past the Twelve Pins in Connemara: through dismal drizzle along a wild road from Recess to Oughterard: on to Galway and by steamer to Ballyvaughan: and finally to Lisdoonvarna, and the magnificent Mohr Cliffs, presenting a height of 600 feet of Lower Carboniferous rocks. He also found time to produce another new book, *Flowers*, their Origins, Shapes, Perfumes and Colours.

By 1878 the expiry of the Museum's lease was imminent. There was limited space for expansion, the new lease was going to cost more, and the lessors wanted at least £7,000 for the freehold. There were expenses for renting the Masonic Hall for the School of Art, for the Northgate Street building had been sold. While the Public Hall option was being considered, the Committee was approached by the Revd Edmund Holland of Benhall, who agreed to sell the High Street site for £875 (about half its market value) for Museum-related purposes. Amid dark references to the purchase of the Public Hall, the Council resolved in September 1878 to abandon the old Museum and to build a new one in High Street, provided at least £2,500 could be raised by subscription (I.M. Minutes).

Taylor and Sterling Westhorp took a cab to Sudbourne Hall on 30 September 1878:

The pair were shown into a room, whilst Sir Richard was informed of their arrival. Westhorp meanwhile, with lawyer-like cleverness, took a seat with his back to the window, expatiating to Taylor on the advantage it gave a man to have the light behind him, and full on his opponent, in an interview. Sir Richard Wallace came in, and with high Parisian courtesy, invited Alderman Westhorp to take the best seat on the opposite side of the room, planting himself in the advantageous eerie which the lawyer had vacated. But the advocates from Ipswich got a very handsome donation, and, though bested about the light, went home happy (Wilson 1895).

Sir Richard put up the first £500. After three months and a few similar excursions, the sum was in hand. The Corporation, their terms complied with, decided to proceed.

At the February 1879 Conversazione, in Taylor's Presidency of the Scientific Society, the Public Hall was lit throughout with the 'Farmer Wallace' electric light – a great novelty – which had been explained by Ford Goddard in the previous November. Wilson demonstrated electrotyping, while Goddard showed new efficient gas burners. Vick exhibited the zoetrope (with Muybridge's photographs of a running horse), Kirkman's melo-grand pianoforte with pedal-operated sustaining repetition movement was admired, and large audiences were amused by Edison's phonograph, shown by the London Stereoscopic Company. A demonstration of the telephone, linked to the Dock Post Office, had been given at the Museum in December 1877, and telephones and microphones were again exhibited (Anon. 1879). The Society had progressed far in ten years: William Budden stated at a Golden Lion supper in September 1880 that this extraordinary growth 'showed the influence for good upon the intellectually disposed young men of the town of all classes which the monthly meetings had exerted'.

VII: A GREAT LABOUR AND ITS REWARD

As work on the New Museum building developed in 1880, Taylor, ever the natural historian, produced three new books, Mountain and Moor and Underground for the Natural History Rambles series, and Nature's Byepaths. His earlier volumes were already running through numerous reprints and fresh editions. At the winter lectures, Fruit and Flowers (1879–80) and The Lower Forms of Animal Life (1880–81), attendances had never been greater. Late in March 1880, Taylor had a trip to Street near Glastonbury to inspect a large Ichthyosaur fossil to be presented by Edward Packard.

Preparations for moving to High Street involved immense work, which was relieved by a geological excursion to Switzerland. Everything was cleaned and restored, the birds in particular getting a complete overhaul. The new Museum was to have special rooms and laboratories for the Schools of Science and Art. All the old mahogany cases were installed in the new structure, the scheme reproducing the hall and gallery of 1847, but with other large rooms. The big 'lion's den' case was reconstructed eight feet wider than previously, and Taylor himself restored the huge panorama backdrop painted in c.1848 by Edward R. Smythe (1810–99) and stocked the cabinet with eleven new specimens. J.E. Ransome reported: 'I was often in the Museum in the morning, during the removal of the specimens from the old building, and I invariably found Dr Taylor as hard at work there as any labourer in the town; working with his hands and no less with his head. In an almost incredibly short time the specimens were removed . . . ' (Anon. 1881a).

Various public works were under way. At the opening of the Ipswich Sewage Outfall in June 1881, engineered by Peter Bruff with his protégé Henry Miller junr, Taylor was among those invited to inspect. This

obviously imparted a desire to sustain the inner man. This had been anticipated by the contractors, and a sumptuous repast was set out in one of the suspension chambers, which was illuminated by Chinese lanterns. The guests gave ample demonstration that the inspection of a sewer carries with it a keen appetite and a measure of thirst equal to imbibing costly wines (*E.A.D.T.* 1924).

The Museum opening, on 27 July 1881, was one of the great red letter days of Victorian Ipswich, and coincided with the opening of the New Post Office and the New Lock Entrance. After a steamer trip down the Orwell and ceremonies at the Post Office, Mayor









FIG. 41 – Above left: William Thompson Griffiths, R.A. (c.1832–1909), Headmaster of Ipswich Art School 1859–1906 (private collection). Above right: Edward Packard sen., 'the Coprolite King', as Mayor of Ipswich in 1868 (photo by W. Vick). Below left: Frank Woolnough (1845–1930) confectioner, curator and newspaper columnist (photo by W. Vick – ISS Album). Below right: John Shewell Corder, (1857–1922), Ipswich architect, sketching at Wroxham in July 1889 (photo by W. Vick – ISS Album).

Wrinch and the Corporation processed to the New Museum, where Lord Henniker took the chair. Taylor traced the history of the Museum, its recent successes and many benefactors, and the unusual extent of its collections. Lord Henniker recalled the power of Henslow's lectures and the social pleasures of his company, declared that the future of the institution was secure, and that it would make its mark on the future history of the town. At 4 p.m. there was a grand déjeuner in the Council Chamber for about 150, including many of Taylor's friends and colleagues, such as Whitaker, Miller and Wilson, Griffiths with his famous pupils F.G. Cotman and W.R. Symonds, and the ageing Sam Read. Taylor's work was praised handsomely: the evening Conversazione at the Museum, held by the Scientific Society, was beautifully lit by electric lamps (Wilson 1881).

The next day in Council, Packard observed that £200 per annum was very little for a man of Taylor's position, and but for the income from his writing he would probably already have been lured elsewhere. Since the penny rate left nothing for a salary increase, Packard (supported by Grimwade) produced a letter from Sir Richard Wallace offering £50 towards a new public subscription for a Testimonial for Dr Taylor. At a public meeting in August speakers waxed lyrical, and reports were splashed in the papers (Anon. 1881a). Taylor collected the published lists in great suspense (Taylor MS. 1). He must have been warmly affected by the many small contributions from working people. By December they reached £733, and it was decided to present a Schulen and Boby marble clock with gold inlay, inscribed SUI MEMORES ALIOS FECIT MERENDO, 19 and a pair of tazzas, to Dr Taylor, and a gold watch to Mrs Taylor, the remaining £660 to be presented in a purse.

Sir Richard and Lady Wallace, the Mayor and many of the Council headed a great crowd which assembled in front of the 'lion's den' in the Museum's central hall on 3 December 1881. In a series of speeches, honours and praises were heaped upon Dr Taylor to frequent loud cheers and applause. Sir Richard, in his first appearance at the Museum, gave an amusing speech which came to a serious point:

I have reason to believe that there is a better and a higher tone among the young men in the town since you have been instilling scientific knowledge into their minds – [applause] – and this, Dr Taylor, you have a right to be very proud of. [Cheers.] Whoever elevates the tone and softens the manners of a community is a benefactor to society in general. [Applause.]

Taylor's reply was characteristic:

Ever since the idea of this testimonial was mooted I have been going about with a considerable lump in my throat. I have slunk along back streets – [laughter] – in order to avoid the compliments of my fellow-townsmen . . . I can only feel that in my person you are paying a compliment to that science which has done and is doing so much to promote human interests and human happiness . . . In these days, when unfortunately it too often happens that knowledge is sought after for the sake of the money profit it brings, and when so much is said about the necessity of a man possessing education, in order that he may get on in the world – which means very often that he may press his less highly-gifted fellow-man closer to the wall – I would rather be the means of imparting knowledge for the purpose of elevating the human mind, and lifting higher my fellow men, than for the purpose of bringing others down (Anon. 1881b).

Having thanked the committee for including Mrs Taylor in the presentation, who had so often surrendered him to his public duties, he concluded: 'My sincerest hope and desire at this moment is that I may continue to be a minister in this temple of nature, expounding

the revelations of God's will, as revealed in the structures and illustrated in the lives of His creatures, to your children, and if it may be, to your childrens' children [Loud and prolonged cheering.]' (ibid.).

VIII: NEW VIGOUR

Between 1880 and 1882, Binyon's Corn Exchange was built and the Cornhill was laid open for sewerage diggings. Taylor did not neglect antiquities: in 1879 he obtained a series from the hoard of 2,600 early mediaeval pennies found at Sudbourne Church.²⁰ From the sewerage trenches, workmen brought him Middle Saxon finds from Westgate Street and the Cornhill, including bone needles and antler combs and tines, and quantities of rough black earthenware which he was the first to identify as Anglo-Saxon. He located and described a corduroy road at the junction of Westgate Street and Providence Street, not again seen clearly until a century later. From studies of the soils and rootlets he reconstructed a picture of the ancient town bounded on the north by a marshy carr traversed by the corduroy road, with heathy uplands above the West Gate (Taylor 1881).

In the New Museum, the balcony cases showed an impressive series of palaeolithic and neolithic implements. Human prehistory was a real interest for Taylor: he had been with Canon Greenwell in around 1870 when a mining gallery at Grimes' Graves was opened (I.S.S. Minutes, 6 Jan. 1886). At the sale of Spalding's collections at Woodbridge in 1876 he got a substantial series of implements and hammers,21 and in 1880 about a hundred more from Fenton of Mildenhall, which together with older donations from Fitch, John Evans and others already amounted to a leading provincial collection. When implements were first found in brickearth deposits at Hitchin (Herts), he made a point of visiting, and in 1884 returned for a more detailed inspection (Taylor 1884b). He collected a few palaeoliths of his own from valley gravels in Russell Road. He does not seem to have conducted formal excavations, but he was always ready to assist at opportune discoveries, as in Christchurch Park in 1886 (I.S.S. Minutes, 7 April 1886). A large late Thetford Ware cistern with spigot-holes was found - somewhat auspiciously - in digging the foundations for the New Museum. In September 1881 Taylor and Drummond excavated and retrieved to the Museum a stone coffin from near Wolsey's Gate, and early in 1882 Taylor worked with the Misses Phillipps in a gravel pit at Sproughton to recover collared urns with cremations, and from the gravel itself the remains of mammoth and bison.

Important donations followed. The Revd S.B. Turner bequeathed casts of fictile ivories, and Dr Drummond gave seal impressions. Sir Richard Wallace bought and presented the immense de Bloquière Collection of early Palaeozoic fossils. The first gifts were also received from Miss Layard, who had been visiting Ipswich since the 1870s, began collecting in earnest, and was probably made aware of Ipswich Museum by her mentor in Bath, Leonard Jenyns (Henslow's brother-in-law).

In 1881 Frank Woolnough settled in Ipswich, having in 1867 married Louisa Catchpole of Letheringham Abbey Farm, and become a commercial traveller in textiles during the 1870s (Smith MS, 16). He now set up in Ipswich as a wholesale confectioner in Fore Street, in partnership with a man named Gardiner. Taylor at once introduced him to the Scientific Society, and the young man brought a new zest to the social dimension of their excursions, which, in addition to formal outings, increasingly included weekly stomps and rambles which vibrated in the memories of the friends for years after. Woolnough was very devoted to Taylor, remarking

His delight was to gather young people around him and interest them in nature's wonders, and a most fascinating way he had of doing it. A country walk in his company was a lecture on Natural History miles long – interest never flagging. I

have tramped with him over field and fen, heath and brake. More than once we have been threatened with being locked up for trespass and damage – it was all one to him (Woolnough MS 1).

What delightful rambles [we] enjoyed . . . Hammers in hand, we searched the coprolite workings in the Colneis Hundred, discovering traces of the old forgotten world which lay buried deep below the debris of shells. Taylor was always leader of the party, stopping every few yards to pick a spring flower and give a scientific account of it (Wilson 1917).

The gastronomic possibilities of excursions were not overlooked:

We often finished at the village inn, and I particularly remember one tea, when we had not only gathered mushrooms, but some fungoid specimens growing on trees, known as 'Bull's Fists'. Taylor insisted that they were just as edible as the mushrooms, so all were fried together, and with many qualms about poison a few of us tried the 'Bull's Fists', finding them about as edible as stewed leather, with a horrid suspicion all the time that the Doctor's botany was out of date (Wilson 1917).

A Society jaunt to Tuddenham and Clopton in June 1883 stirred the Editor of the *Ipswich Journal* to a similar vein. They visited Joseph Smith the agriculturalist,²² then a tenant at Thorpe Hall:

Mr Smith is renowned for his black-faced Suffolks, and a quarter of one of his lambs on the table made us all forget science for the moment. As a contribution to the lamb-as-food question, let me say that this was a twelve-pound forequarter from a lamb whose existence had been as short as eight weeks (Wright 1883).

Three months later, Taylor led a large excursion to Felixstowe Ferry in company with Professor George Henslow, who recounted how his father had recognized the potential of the phosphatic nodules forty years before: the party sat down to a lobster feast in the Martello Tower 'T' at Wilson's invitation (Anon. 1883).

A regular excursionist was Bruce, Taylor's large black smooth-haired retriever:

A gravel, clay, or sand-pit has a similar attraction for me that a public-house has for some other men – I cannot pass one. Bruce soon found all these weaknesses out. On a country ramble if he were ahead, he never passed a stone-heap or a gravel-pit – he stood there till I came up, and said as plainly as an intelligent dog could, 'Master, are you going in here this morning?' I have seen that look hundreds of times, and said to him, 'Not this morning, Bruce;' whereupon he wagged his huge tail at the compliment that he was understood, and proceeded on his own canine investigations. I used to say to my friends, 'Bruce knows as much about Geology as most men,' whereupon some of the easily-surprized ones said, 'Indeed!' and the others, who were conscious that they knew no more of geology than my dog did, laughed at my weak joke (Taylor 1888).

IX: A SHOCK AND AN ADVENTURE

A satirical sketch of this period shows a poster for the Museum Lectures, Dr Taylor to speak about 'Jugged Leverets'. His lecture manner was 'almost a classic style, tempered with sly humour, which delighted an audience': '. . . in his happiest vein, enriching scientific

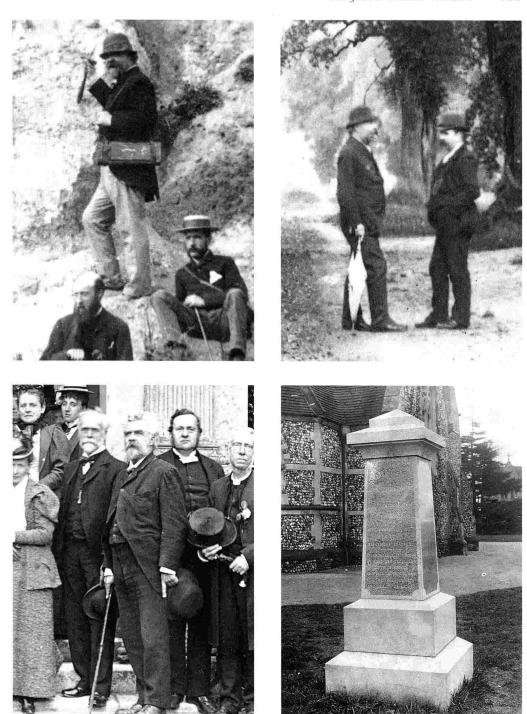


FIG. 42 – Above left: Dr Taylor at Great Blakenham chalkpit, 26 June 1886 (photo by W. Vick – ISS Album). Above right: Dr Taylor and Frank Woolnough at Akenham, 28 September 1889 (photo by W. Vick – ISS Album). Below left: Dr Taylor at Long Melford Hall with the Suffolk Institute of Archaeology, 20 June 1895 (photo by W. Vick – SIAH). Below right: Dr Taylor's grave in Ipswich Cemetery, 1895 (photo by W. Vick – ISS Album).

facts with quaint touches of humour and happy quotations, and indicating the higher teachings of modern research in passages of unstudied eloquence, inspired by personal sympathies both reverent and liberal.' In 1883 the lectures were removed permanently from the Temperance Hall to the Institute's Hall in Tower Street, the hire underwritten by the Institute against a small charge for admission to the first few rows of seats.

In 1884, as equipment became more portable, William Vick began to photograph the Society's excursions. The first so recorded (I.S.S. Album) was to Langenhoe, Essex, soon after the big earthquake of 22 April. Taylor wrote

I was in the upper part of my house at Ipswich when the first shock came. It was preceded by a noise like that of a wagon rumbling through the streets. Then followed a new sensation and, in the space of a few seconds, a new experience was gained for life. All my old instinctive notions of the solidity and strength of a well-built English house vanished in a moment. The walls and floors were converted into india-rubber of the most elastic kind, and a kind of nausea accompanied the change of experience (Taylor 1884c).

He went next day through Colchester and Wivenhoe to see the wreckage - lamenting that prompt repairs were destroying scientific evidence - and the Society visited soon afterwards. Pondering the causes, Taylor remembered the carboniferous ridge deep beneath the Cretaceous strata, postulated many years before by Godwin Austen. This represented a buried chain of hills linking the Mendips with the Ardennes in Belgium, and had been cored near Ipswich at a depth of some 1,200 feet and reported by Peter Bruff in 1859. In this connection he made a tramp through Holland: 'At Maestricht, I asked for a celebrated hill well known to geologists for its quarries and the peculiar fossils . . . I could not at first see the hill anywhere about, and a man showed me the way: but I could not then see it, because there was a row of poplar trees in front' (Taylor MS 2, Lectures 1886-7, no 6). Taylor's most celebrated title, The Sagacity and Morality of Plants, appeared in the same year. Meanwhile his health was suffering: a week's holiday in the summer of 1884 'delightfully located' at the Royal Hotel, Llangollen, was 'all too brief, but it brings with it thankful relief, and as near an approach to boyhood's joviality as one's commencing grey hairs can expect'. He made several excursions, but most enjoyed sitting in the hotel gardens watching salmon and trout anglers making their casts in the river a few feet away (Taylor 1884d).

In November, at the ninth Conversazione, he was left in charge of an aquarium full of live oysters (it is not recorded whether there was the same number before and after). His friends, however, observed that a more substantial remedy was required, and by the next spring, with doctor's orders to have a rest-cure, he arranged to fulfil a lifelong dream by visiting Australia. R.S. Smythe, who had run lecture-tours for R.A. Proctor and Archibald Forbes, came anonymously to a Museum Lecture, and on hearing him said 'That's the man for Australia'. He offered liberal terms, and the Committee gave Taylor a clear twelvemonth holiday, appointing J.D. Buck caretaker-Curator. Taylor, already a regular contributor to The Australasian, regarded Australia as a naturalist's and geologist's paradise (Taylor MS 1). Before going, early in 1885, he brought out Our Common British Fossils, and Where To Find Them, reworked from an old series from Hardwicke's.

On 8 April 1885 he set off by train to Marseilles, and then by the Australian steamer Yarra through Port Said and the Suez Canal; and after inspecting the famous water-tanks at Aden, on into the Indian Ocean to Reunion Island, where he spent a day driving out and inspecting the Museum at St Denis. Not an hour was wasted. Next morning at Mauritius he had thirty-six hours in and around Port Louis, and in the Botanical Gardens at Pamphenmousse, before the fifteen days' steaming to Adelaide. At the height of a storm

off Cape Leeuwin, part of the ship's screw broke, and they put in briefly in Western Australia before heading on to Larg's Bay near Adelaide. In the progress which followed, through Adelaide, the South Australian Bush, to Melbourne, and ramblings in Victoria and 'Australia Felix', visits to the Crater-lakes and aboriginal encampments, overland to New South Wales and Sydney, and on to the Blue Mountains, one can guess how deeply and joyfully the Doctor drank at the wells of inspiration and renewal. It is all written in his book *Our Island Continent* (1886).

In Adelaide, Sydney, Melbourne, Ballarat, Hamilton and Portland his lectures were packed:

He has a happy knack of rattling on in an intensely interesting way about scientific wonders without making them wearisome, and now and then he lets fall some little humorous piece of satirical philosophy, which lightens his discourse even more . . . he has to speak rapidly in order to get out as much as possible in an hour and a half (Adelaide Observer). Men eminent in scientific research . . . were there with their wives and daughters; shop-assistants had taken their sweethearts as though to a high-class entertainment; and men who could not boast a linen collar to their shirts had for once invested in a shilling's-worth of geology (Sydney Morning Herald).

After all these triumphs, he returned home in October by the same route, in order to spend a few hours studying the geology and natural history of Mahé in the Seychelles.

In his absence, the Scientific Society, had notable excursions to Hintlesham Hall fishponds, with Dr Drummond, and to Brandon flint workings, where Vick took some now-famous photographs. Taylor was back in time to deliver his winter lectures, beginning on the subject of *Revelations of Microscopical Life:* but by popular demand he instead lectured on *Australia*, protesting gently that he needed to digest his experiences. The hall was packed with working men – labourers, foundry lads, etc. – to hear these talks. In April 1886 Mrs Margaret Ogilvie of Sizewell House sent to the Committee a cheque for £1,300 to extinguish the floating debt on the Museum building, adding:

The noble efforts Dr Taylor is making to impress a higher culture on his fellow men commands my warmest sympathy, and although I have never been privileged myself to hear him lecture, I have read lessons from his lips which compel me to say that your townspeople owe a debt of gratitude to their Curator beyond the power of gold to buy (Taylor MS 1).

X. HUBRIS AND TRIBUTES

The 1885 General Election and subsequent legal petition in Ipswich prompted great developments at the East Anglian, including the launch of the Evening Star. With a magnificent new plant of Wharfedale machinery, in June 1887 – on Jubilee Day – the new East Anglian offices opened, with electric light throughout, on the corner of Carr Street and Little Colman Street. The massive carved oak stairs and the Oak Room were incorporated from the ancient building which had stood on the site. Taylor was at the opening dinner, and in a burst of post-prandial oratory he declared that the structure would be 'a monument for hundreds of years to come', and that 'it will certainly last as long as that fine old bit of Elizabethan brickwork in Christchurch Park' (E.A.D.T. 1924) – he was mistaken.

In early July 1887, the sudden death of William Budden removed one of the Society's important founding members. Frank Woolnough (now co-opted to the Museum

Committee) led an excursion to Easton a fortnight later, rounding off with a 'bountiful spread' at his in-laws' at Letheringham Abbey, which Taylor missed (Anon. 1887a). But the informal excursions went on almost weekly, and as Woolnough recalled, the convivial dimension was to the fore:

Wilson enjoyed the excursions, especially the more informal ones on Friday evenings, when they usually finished up at the Bramford 'Angel' . . . there was always a good tap of beer, good bread and cheese, fresh eggs and salad, including 'Onions' . . . Amongst the habitués of these walks were Henry Miller, Wilson, Taylor, H.H.P. Powles (familiarly known as Hundred Horse Power Powles, on account of his energy), Vick, Hewetson, John Corder and myself.

After the monthly meetings of the ISS at the Museum, an adjournment was usually made to the Golden Lion for supper, limited to Welsh rarebits, personally prepared by old Ellis, the waiter of life-long service, of whom it is said he went as one of the fixtures when the house changed hands. After closing-time, a move was made to the *East Anglian* office, where, in Wilson's room, shooting matches were indulged in with a Gem air gun at a target placed on the mantelpiece (*E.A.D.T.* 1924).

At the 1887 Conversazione, Vick's excursion photographs and portraits of the members were a great success. Taylor took an undemanding role, showing Australian seeds and pods, and their fossil British counterparts.

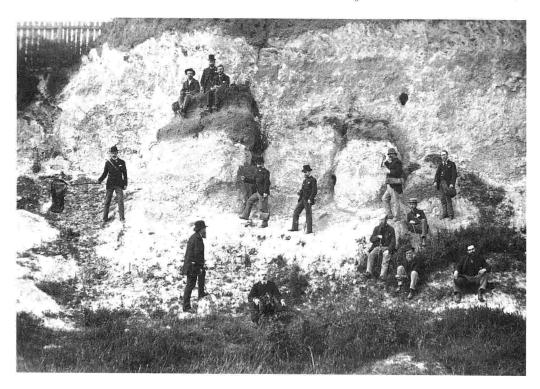
Taylor's Guide To Suffolk, written for Stanford in 1887, was arranged as a series of excursions. His next effort was an attractively illustrated history, In And About Ancient Ipswich (1888). Taylor made this a tribute to Budden by drawing on his notes, probably knowing that Budden himself would have made a far better job of it. Budden's obituarist observed:

At home he [Budden] occupied his time by reading all books on all subjects, and writing, it might be letters on antiquarian lore, some lecturette that he was about to deliver, or miscellaneous jottings. What heaps of papers there were stowed away in the books on the crowded shelves. His way was to put newspaper cuttings, especially those relating to archaeological matters, in the books on the respective subjects, and these volumes were bound round with string to keep them from bursting. Mr Budden has left behind him, in this shape and in the form of notes – marginalia – a priceless collection of local information (Anon. 1887b).

Soon afterwards Taylor suffered a more private loss, when his dog Bruce was found dead – evidently poisoned – prompting his most personal words:

Bruce was my literary friend. He has lain hours, days, months at my feet whilst I have been writing. He has listened, with one twitching ear, whilst I have read aloud to myself some sentence I had written which I thought unusually good – and afterwards dropped it, wondering what it was all about, and what good in the world it was to a dog! How well he knew me! I had my moments of depression, of anxiety, of low-spiritedness – often brought on from assiduous over-work and over-worry. Bruce knew! Often has he silently thrust his great, cold, black nose into my hand at such times. I knew what he meant – 'Cheer up, master; "Heart beneath and God o'erhead"!'

Bruce was nearly as old as my youngest child. They were almost babies together. As soon as my baby-daughter could toddle, Bruce was her companion



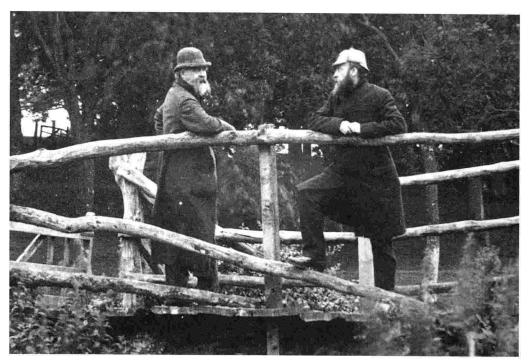


FIG. 43 – Above: Members of the Ipswich Scientific Society at Great Blakenham chalkpit, 26 June 1886. Below: Dr Taylor and James Napier near Salhouse Broad, Norfolk, July 1889. (Photos by W. Viek – ISS Album).

and play-fellow. She rode astride his big black back, and Bruce would then put out his great red-flannel strip of a tongue on one side, as if he were proud that a mere dog could be so useful. The children played 'Little Red Riding Hood' with him. He was the 'Wolf', and was put to bed with a white night-cap on his splendid black head – only he wouldn't go to sleep or pretend to. He preferred to see what was going on, and every now and then to put in a word or two and interrupt the dialogue in the form of a sharp bark.

The last time Bruce appeared in public (for he frequently made his way surreptitiously on to my platform) was three weeks ago, when Mr Leighton Bailey gave his lecture on Australia, and I proposed a vote of thanks. The people called out 'platform', and on to the platform I went. There was a large audience, and they cheered me. Then, just as I was speaking, there was another cheer. It was for Bruce, who had followed me, and now stood confronting the audience I was addressing, greeting their cheers with a few short but vigorous barks. The more they cheered, the more he barked at them – until, at a word from me, he coiled himself up, and the subsequent proceedings interested him no more (Taylor 1888b).

Nina Layard was collecting mammal fossils from the gravels around Ipswich before finally settling in the town in 1889, and must often have attended Taylor's lectures. Her first scientific publications dealt with philosophical implications of Evolutionary Rudiments, Vestiges and Reversions. These studies, perhaps developed in conversation with Taylor, formed a series of letters which he published for her in *Hardwicke's*, beginning in 1886, and were targeted against *atheistic* evolution. By 1890 they led to papers to the Victoria Institute and to the British Association at Leeds.

XI: THE PRICE OF SUCCESS

Taylor's salary never rose above £200. Although the Museum Lectures were unpaid, and indeed subsidized by him, his total income supplemented by other editing, writing and lecturing amounted to about £500.23 Our Island Continent was his last book of popular science, and only by long hours of travel to deliver lectures, and a great strain on his health, could he maintain this income. Useful sidelines were his lectures on agriculture up and down the county, and those for Framlingham College and for the Colonial College at Hollesley Bay.

The Physical Geography and Wild Flowers lectures of 1886-88 were among his best. They still commanded large audiences, but Taylor, who would not accept payment for addressing the working people, incurred heavy expenses. At the last spring lecture of 1889, a working man moved the vote of thanks 'for his grand sermons, the influence of which would never die among hundreds of the working people of Ipswich and elsewhere'. Another seconded, saying that he had attended the lectures for fifteen years, and had never enjoyed himself more than when he was listening to them: they had set many a working man thinking of the works of the Almighty in a manner that he would not otherwise have dreamed of. When Mayor Josselyn remarked that Ipswich people wanted to help keep them going, Taylor replied:

When he first came to Ipswich he was deeply impressed with the conviction that there was a new revelation coming to the world if people would only open their minds to it – a revelation of what God had been doing in the world for ages past, and was still doing, which was destined to bring mankind and

womankind nearer to the Great Father of all just in proportion as it was most carefully and reverently studied . . .

It would be a very painful thing for him to be divorced from his old Museum lectures; but the matter was entirely in the hands of those by whom he was surrounded. He was willing to give these lectures free, as he had always done, but he had thought it hard – harder, perhaps, because people did not know it – that he should have had to bear the burden of the expenses upon his own shoulders (Anon. 1889).

Alderman Cowell offered to underwrite the next series.

In May 1889 he made a lightning trip to Africa, getting to Algiers and back again within twenty days (Anon. 1890a: I.S.S. Minutes). Woolnough, as President of the Scientific Society that year, resolved to reinvigorate the spirit of the old excursions, and arranged a naturalists' holiday on the Norfolk Broads for the last week of July.

The party consisted of Dr Taylor, F.W. Wilson, Hy Miller, J.S. Corder, J. Napier, W. Vick, P. Cornell and myself. We hired a Norfolk wherry from Press Bros. of North Walsham and, starting from Wroxham Bridge, explored the Bure, Wroxham, Ranworth, South Walsham and other Broads. We shot, we fished, we had botanical lectures from Taylor, Chemistry from Napier, Photography from Vick, Fun from Wilson, naughty tales from Corder, Music from Miller, and I looked after the Commisariat including a barrel of beer from Bullards Brewery at Norwich. We finished off at Acle bridge whence we took train home – certainly no merrier or happier crew ever manned a wherry (Woolnough MS 2).

Woolnough (a skilled photographer) and Vick took at least eighty photographs in that week: Corder produced sketches, and Taylor wrote a long account of their voyage²⁴ which Wilson serialized, in which accidents, jollities and scientific commentary were delightfully intermingled. In effect, this was Taylor's last and most personal book, but it never saw the light of day outside the columns of the *East Anglian*.²⁵ At Akenham Dairy Institution two months later he looked very informal, but posed for a picture with Frank Woolnough (I.S.S. Album).

The 18th winter lectures, The Story of Our Old Planet, beautifully illustrated, went very well despite a falling off in paying seats and anxiety about Taylor's health: the East Anglian reporter remarked that it was the intelligent working men who properly appreciated the talks. Opening, Westhorp said that fears for the future of the lectures were allayed, and 'through the high sense of justice and generosity of a great many friends in the county, Dr Taylor had been recouped in some measure the losses that he had sustained in his last three courses' (Taylor MS 2, Lectures 1889–90, no 1). But no Chairman was present to propose a vote of thanks at the end of the series. The geological theme was neatly rounded off in April by the recovery, by a team of twelve men, of a giant puddingstone boulder from Tuddenham Road sandpit to the Museum, where it yet remains (Taylor 1890).

Many of the educational and social changes Taylor had worked for had their own momentum: his circle of friends had become leading townsmen, and the role of the Scientific Society had altered with the pace of technological and industrial development. His personal vision of natural history as divine revelation was becoming outdated, he was suffering from long-term mental and physical exhaustion, and his personal finances were precarious. Everyone loved him, and his friends remained loyal, but for his difficulties there were no obvious answers.

XII: GUIDE, PHILOSOPHER AND FRIEND

In 1889 the Scientific Society teamed up with the Essex Field Club to visit the Felixstowe Cliffs with Taylor as their 'guide, philosopher and friend', and in June 1890 they joined again for a steamer excursion on the Orwell and Stour, dredging for estuarine specimens. Miss Layard and her friend Evelyn Garratt were aboard to witness Taylor's demonstrations and lecturettes (Anon. 1890b). The winter session of 1890–91, on *The Ingenuity, Sagacity and Morality of Plants*, was received with real enthusiasm. Early in 1891 he had a serious physical breakdown, but pulled through and completed the series triumphantly. For twenty years he had pondered the buried carboniferous formations beneath Suffolk, and in his lectures of 1882–83 and 1886–87 had argued that these might be coal-bearing strata. Coal was actually discovered in borings near Dover in 1890, and a year later Taylor launched a serious declaration of the possibilities of coal-mining in Suffolk. He indicated precisely where borings might be taken.

It was a strong possibility that during the next few years we might see Suffolk and Essex discover mineral treasures which the industry and genius of the people would develop, so as not only to lift these counties to a condition of great prosperity, but assist them in giving a commercial and intellectual stimulus to the great country of which they form a part (Taylor 1890–1).

Taylor could be no more than an advocate, but a suggestion that the Mayor should raise a subscription for trial borings was roundly applauded.

After a bout of flu in June, July 1891 was busy with lively outings. On 2 July he was in the Suffolk Institute party which inspected the interior of Henslow's Roman tumulus at Rougham, and he looks in jovial mood with Corder and Prigg in the photograph at Babwell. He was again at Felixstowe Cliffs on 22 July, and two days later the joint estuary dredging excursion was repeated with tremendous success. Mrs Taylor and the Misses Taylor were among the company. 'Dr Taylor . . . came out in a sun helmet, and looked so remarkably like a famous explorer, that the first salutation addressed to him was – "Mr Stanley, I presume!" '(Anon. 1891). A stinking mass of estuarine life was dredged up, and carefully separated out in jars full of sea-water, while Taylor explained vividly and amusingly what was to be seen. Was there a rueful note in his comments on the worms? –

There were only two ways of getting a living – one was to go after it, and the other was to have it brought to you. In the latter contingency, the people belonged to the upper ten. That was not the case with those present, nor with the *Errantia* group of sea worms. They had to go after their living, and had therefore got all sorts of locomotive organs for creeping and crawling and moving about (*ibid.*).

Replying to the vote of thanks, 'the Doctor said humorously that if he had expected such a *douche* of compliment he would have brought the family umbrella. His services could always be commanded by the nature-loving students of Essex, Norfolk, Suffolk, or anywhere else for that matter' (*ibid*.).

In Essex, Taylor found congenial company among the society known as the 'Odde Volumes', of which he belonged to the inner circle of 'Large Paper Copies' (Anon. 1896). The dinners of this literary society included challenges to members to deliver short after-dinner speeches on subjects drawn out of a hat. At the Suffolk Institute's Ipswich Conversazione in October 1891, he spoke on the 'Saxon Road through Ipswich'; in 1892 he was in the Institute's June party visiting Yoxford, Sibton and Dennington with his friends Westhorp, Corder, Ridley and Vick, and spoke at the Yoxford 'Tuns'. Woolnough

worked to lessen his load, acting as Secretary to the Museum Committee and to the Schools of Art and Science, rapidly expanding, and Miller acted for him as Treasurer. Taylor was busy helping others: the young entomologist Claude Morley worked and studied with him for several months before moving to South Kensington Museum.

Taylor resigned as Editor of *Hardwicke's* in 1892, but gave his deferred lecture series, *Revelations of Microscopical Life*. At the Scientific Society Conversazione of May 1892, in the Town Hall, he and Vick displayed Mason's new oxy-hydrogen microscope, by which microscope slides could be projected. About thirty fascinating subjects were shown:

a mosquito sprawled upon the screen in appalling dimensions of about eight feet by eight feet; the familiar flea was magnified to the size of a Newfoundland dog; and the last scene of all, which was introduced by Dr Taylor as *The Battle of Armageddon*, showed the dust from a Stilton cheese all alive with struggling and fighting cheese mites. It goes without saying that the Doctor kept up a running comment of learned and humorous patter, and that this singular demonstration was one of the most successful items of the varied programme (Anon. 1892).

THE END

Through the winter of 1892–93 his health finally cracked: it is rumoured that drink was involved. By spring 1893, with mounting medical fees after a winter which had been an embarrassment to the Committee, he tendered his resignation. Woolnough stepped in to keep the Museum ticking over through the summer. The Committee were uncertain how to act, for many, including Taylor himself, hoped he might recover and return. When his own doctor refused to certify him permanently incompetent for work, the Committee found another physician to provide the certificate they needed to end his contract. Edward Packard junr remarked on the peculiar and difficult position in which the Committee had been placed, and that it was known that the resignation must take place long before it actually did. In September Taylor was told he would be paid £100 in lieu of notice, and though he protested his long term of exemplary service, the matter was pushed through regardless (I.M. Minutes).

Edward Packard senr, Chairman of the Committee, resigned in disgust at this treatment, and not until 1895, after Taylor's death, was he was willing to be associated with the Museum again, this time as its President. Woolnough had his sights on the Curatorship, and made a printed submission proposing to resign from the Committee and continue Taylor's work officially. When Taylor's resignation was confirmed, Woolnough was appointed without competition at the existing salary of £200. He was therefore already committed to a new career when, before Council in October, Mr Cattermole objected that a much better man might be found for £50 a year. He was in a minority of two, and was greeted with ridicule (Anon. 1893). 26

Taylor, meanwhile, paid the price – the price, it might be said, of having given his life, character, learning and service to the town of Ipswich with a love and self-sacrifice which was greater than the Council's appreciation and remuneration of what he had given. In February 1893 he told the Scientific Society once again about coal-boring: a month later he attended Ledger's lecture about Mars, and thereafter never appeared before the Society again (I.S.S. Minutes). By autumn 1893 he owed two friends £175 each, £35 to a money-lender, and £202 to a secured creditor, and had many outstanding bills with local tradesmen. With two bailiffs actually in his house, he filed a petition for bankruptcy, showing gross liabilities of £735 7s. 6d., against which his books and furniture were set as assets valued at £50 but reduced by contra charges to a mere £20 15s. 9d. His publishers

claimed all rights in the books he had written, several of which ran to many editions, and he had no record of the copyrights. The creditors passed no resolution, and left the administration of the estate to the Official Receiver (Anon. 1893). His Fellowship of the Geological Society was forfeit in 1893 through non-payment of subscription.

Sir Richard Wallace having died, Sterling Westhorp was made President to stabilize the Museum through 1894, but he died in July 1895 after only fifteen months in office. Taylor wrote regularly for the *East Anglian* through 1894, though unable to lecture, and his admirers looked eagerly for his letters there. In December 1894 he was re-introduced at the Lecture Hall to speak on *The Origin of the Orwell*. There was a mood of relief at the meeting:

Dr Taylor was accorded an exceedingly kind reception, and throughout his discourse he was followed with the deepest interest by the audience who frequently expressed their appreciation of his efforts by applause of the most cordial character. It brought back pleasant memories to the minds of his audience, and gave promise of ever-welcome treats in store (Anon. 1894).

Some of his last letters to the press – suggesting, for instance, that 'the oldest oak trees in Christchurch Park date backward for perhaps more than fifteen centuries' – echo his post-prandial style. There is no doubt that Taylor had a certain fondness for beer: some thirty years later, Woolnough recalled their convivial hours in the Black Horse Inn, St Matthew's:

... it always maintained a good reputation, and, something more, for it obtained something like fame for a certain beer. This was an old ale in perfect condition, drawn from the wood. The late Dr. Taylor, somewhat of a connoisseur on the subject, used to declare it was the finest glass of beer to be obtained in Ipswich. There was something in the temperature of the cellar, he declared, that brought it to perfection. I can endorse the doctor's opinion, for I have in bygone days accompanied him, and at a mid-morning drink you would meet doctors, lawyers and tradesmen of St Matthew's on a like errand. In the evening the little cosy taproom would have an atmosphere so full of smoke you could almost cut it, but the weighty questions of national politics were well thrashed out (Woolnough 1923).

In June 1895, Taylor managed an excursion with the Suffolk Institute, and appears looking ill and with a walking-stick in photographs taken at Melford Hall, a tall, strongly-built figure, his beard and hair white (S.I.A. Album). In early September the Scientific Society and the town hosted the annual meeting of the British Association: Ipswich was alive with meetings, and scientists and visitors filled the hotels, crowded the restaurants and generally lionized the town. Taylor spoke informally on coal-boring, and two Conversaziones were held at the Museum.

Two weeks later, on 28 September, he died at the age of fifty-eight:

Dr Taylor had been in failing health for two years past, but it was not until the week before last that a decided change for the worse was noticeable. He attended the Conversazione given by the Mayor at the Museum and Free Library to members of the British Association, and his appearance then suggested the fear that the end was drawing nigh. For the greater part of last week he was unable to leave his bed. Dr W.A. Elliston visited him on Friday afternoon, and again in the evening, and found him in a state of collapse, without any constitution to resist the

inroad made by his illness. During the night he was delirious, often repeating snatches of his old lectures to an imaginary audience; but in the morning his strength was exhausted, and the end was quiet and peaceful (Anon. 1895).

He was survived by his wife and four daughters, by several of his brothers, and even by his mother, who in her nineties lived to mourn her clever son. The *East Anglian* carried the fullest obituary, with a long tribute by Wilson²⁷ who suggested a statue of Taylor on the Cornhill. The Scientific Society and the Norwich Science-Gossip Club simultaneously met to pass resolutions of regret (I.S.S. Minutes). His friends never forgot him, especially Henry Miller (d. 1929), Freddy Wilson (d. 1924), John Corder (d. 1922) and above all Frank Woolnough (d. 1930), who retired in 1920. Years later he wrote:

I recollect one moonlight night, on the Norfolk Broads, Wilson, Dr Taylor and myself were paddling along in a small boat, lazily enjoying the stillness of the scene in long silences. All at once Wilson said, apropos of nothing, 'I say, Taylor, I wonder shall I write your obituary notice for the *East Anglian*, or will you write mine?' 'Ugh,' grunted Taylor, 'it will be a rum un which ever it is.' (*E.A.D.T.* 1924).

Woolnough's unpublished tribute gives the true measure of their feelings:

It is over 40 years ago since my friendship with Dr Taylor began and it lasted I am proud to say till the day I stood beside his open grave and dropped a spray of the



FIG. 44 – Cartoon by J.S. Corder, c. 1900–10, showing how Frank Woolnough continued Dr Taylor's work (private collection).

flowers he loved upon his coffin. No one would have rejoiced more than Dr Taylor had he lived to see the continued growth and development of the great work he began. No one rejoices more today than I do myself at being privileged to carry on his work and raise up a monument to the man I knew so well and loved so dearly (Woolnough MS. 1).

'SUI MEMORES ALIOS FECÍT MERENDO'

APPENDIX: IPSWICH MUSEUM LECTURES

Dr Taylor's Museum Lectures are reported at length in the Suffolk Chronicle, Ipswich Journal and East Anglian Daily Times. Many undated cuttings of these reports are contained in Taylor MSS 1 and 2 (see below), and include a good sample of his humorous asides. They usually ran weekly from October to March with a break at Christmas. The titles of the series were as follows:

1872-73: Zoology

1873-74: Geology and Physical Geography

(Moved to Temperance Hall to accommodate large audiences)

1874-75: Plants, their Structures and Uses

(Moved to Lecture Hall, Tower Street, for this season)

1875-76: Invertebrate Animals

1876-77: Vertebrate Animals

1877–78: The Physical Aspects of the Earth's Surface

1878–79: The Geological History of the Earth

1879-80: Fruit and Flowers

1880-81: The Lower Forms of Animal Life

1881-82: Fish, Reptiles, Birds and Mammals

1882-83: The World We Live In, and How We Came By It.

1883-84: Vegetable Life (Moved permanently to Lecture Hall, Tower Street)

1884-85: The World Before Man

1885-86: Australia (replacing 'Revelations of Microscopical Life')

1886-87: The Physical Geography of the Earth

1887-88: The Romance of Our Wild Flowers

1888-89: Fish, Reptiles, Birds and Mammals.

1889–90: The Story of Our Old Planet

1890-91: The Ingenuity, Sagacity and Morality of Plants

1891–92: Revelations of Microscopical Life

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tracing Dr Taylor's footsteps were made doubly pleasurable by the company of our member Stephen Mael (now Manager of Leiston Museum), whose enthusiasm equalled and strengthened my own. Photographs from the ISS Album are reproduced by courtesy of Howard Mendel on behalf of the Ipswich and District Natural History Society.

NOTES

- 1 The context of Dr Taylor's work towards the civil improvement of Ipswich townsfolk is set out in Plunkett 2001.
- 2 1837 is given, but variant sources suggest 1835 for Taylor's birth year.
- 3 A variant version was published in Nature's Byepaths (Taylor 1880), but the original is better.
- 4 Henslow was brother-in-law of his biographer Leonard Jenyns (alias Bloomfield), an eminent geologist of Bath, and father-in-law of the botanist Joseph Dalton Hooker of Halesworth, whose own father, William Hooker, was Director of the Gardens at Kew and a founding Vice-President of Ipswich Museum. J.D. Hooker was not present at the Ipswich 1851 meeting because he was engaged in a naval voyage. Thomas Huxley made his first scientific appearance before the BA at Ipswich, having newly completed a voyage to the Torres Strait as naval surgeon under Captain Owen Stanley, son of the naturalist Bishop Stanley of Norwich, founding Patron of the Ipswich Museum 1847–49 and President of the (Royal) Archaeological Institute.
- 5 For the work of Henslow and the Honorary Members at 1pswich Museum in 1848-53, cf. Plunkett 2002.
- 6 'The attendance of the members of the Association at these lectures is strictly forbidden, in order that the classes for whom they are intended may have accommodation enough' (Taylor 1880, 225–26).
- 7 Henslow's style as President is shown in his letters to Knights (Henslow MS), who must have been taxed by Henslow's energy.
- 8 Edward Charlesworth (1813–93) was connected with Burstall and Ipswich. Like Dr. W. Barnard Clarke (Ipswich Curator 1847–50) he was early a member, and continued an Honorary Member, of the Ipswich Philosophical Society (1841–55). He was Curator of the Ipswich Literary Institute's Museum, (founded in 1832 in the Town Hall (Read 1860)), until 1844. His involvement with the Museum of 1847–53 was slight, because he was 1844–58 Curator of the Museum of the Yorkshire Philosophical Society, where he developed the geology collections. A sister, Elizabeth, married Edward Cowell, Sanscrit Professor at Cambridge, two who between them provided Edward Fitzgerald of Woodbridge with both the romantic and the literary inspiration for the *Omar Khayyám* verses. In later life Charlesworth lived near the Museum at Saffron Walden, where he must have been well-known to George Nathan Maynard, Curator 1880–1904, and perhaps also to his son Guy Maynard (1877–1968), Curator there 1904–20 and of Ipswich Museum 1920–53.
- 9 The volume was heavily criticized by the bookseller James Read on account of its inadequate bibliography; but Read, who regularly offered and supplied books for sale to the Museum Committee, mistook Taylor's purpose in listing the books available in the galleries themselves, rather than those in the Museum's Library. An interesting inventory of the Museum Library itself as transferred to the Borough in 1853 is still held by the Museum.
- 10 Some members, such as Dillwyn Sims, Jeremiah Head, Dr W.H.B. Webster, and several of the Alexanders and Ransomes, became involved in the Borough's administration of the Museum, or in wider public life: some, like George Ransome and Dr Clarke, became disaffected by the Museum Committee and distanced themselves from Ipswich: others were lost by death, and W.S. Fitch fell on hard times. Dr Webster, R.C. Ransome, and Benjamin Catt maintained the Society's correspondence with the Museum Committee during the mid-1850s.
- 11 Dr Cooke's interesting life is explored by Dr English in a biography of her relative (English 1987). A member of the Cubitt family, of the same connection, at one time lived at 8 Fonnereau Road, Ipswich, which at another time (1900–20) was the home of Nina Layard.
- cf Woodward 1891, 27–28. 'The object of this club was the promotion among its members of a spirit of enquiry and investigation of Scientific and Literary Knowledge, by means of fortnightly papers, and occasional excursions. The members assembled at one time at the "Bell" Hotel, and afterwards at the "Royal" Hotel. The chair was taken at eight o'clock, tea, coffee, ale, or any other beverage was ordered by the members, pipes and cigars were lighted, and a paper was then read, to be followed by a discussion. There was a spirit of good fellowship about the gatherings that rendered them more popular than those of the more severely scientific local societies. The younger members were encouraged to ask questions or to enter into the debates, and many interesting objects were brought for exhibition and comment.' John Gunn of Irstead was active with Dr Taylor in the Norwich Science Gossip Club.

- 13 Four joints of basaltic columns from Giants' Causeway duly arrived at Ipswich Museum in November 1874, and at the time of writing (1999) are still part of the collection.
- 14 Miller took over secretarial duties for the Society from Edward Bidwell within a few months of its foundation, and resigned them only to become President in 1890: much of its early success was owing to his efforts. A civil engineer by profession (Peter Bruff's protégé), he maintained his interest in entomology until his death in 1929, and witnessed the birth of the Suffolk Naturalists' Society.
- Taylor described, and may have been admitted to, the 'Red Lion Club', an unusual dining society connected with the British Association, originally for the benefit of rising young naturalists who could not afford the expenses of the grand dinners arranged by the municipal hosts of the Association's annual congress. Inaugurated by Edward Forbes, it was dedicated to beefsteaks with stout or ale, 'whisky toddy to follow, accompanied by songs and ballads, mostly impromptu, with witty parodies of scientific papers and lectures'. Eminent scientists belonged to it. 'Whilst dinner is being served or waited for, leonine, ursine and hippopotamine grunts and roars are heard, and the affrighted, perspiring waiters start as they are serving the soup to some rampant "Red Lion", and get a sharp snarl and snap instead of the ordinary "thanks!"... The speeches overflow with wit and broad humour, and are responded to by the leonine roars of the audience, who growl and wag the tails of their dress-coats in approval' (Taylor 1880, 230–32). Taylor's description, however, is drawn from a *Memoir of Edward Forbes* (Wilson and Geikie 1861, cf also English 1990, 28–29).
- 16 The bulk of Canham's collection, however, did not reach the Museum until 1877.
- Thomas Baker took up his post as Museum Attendant in around 1850, and survived the resignations of the Curators W.B. Clarke (1850), David Wooster (1853), that of the sub-curator William Bilson (1852), and those of the two secretaries, F.W. Johnson (1851) who became deranged owing to matrimonial difficulties and George Ransome (1851–52), who was somewhat unfairly blamed for the financial failure of 1852. As each of these officers resigned, the increasing burden of duties placed intolerable pressure on the remainder a circumstance not unknown in our own time. Baker worked under George Knights after the transfer of the Museum to the Borough in 1853, and is referred to by Henslow in his letters to Knights. He assisted Taylor, was still in post in 1893, and is mentioned by Frank Woolnough as having died in around 1910. In his long service, this gentleman no doubt contributed immensely to the continuity of the Museum's work almost from its beginning until the dawn of the 20th century, and remained a powerful living connection with Henslow's Museum: and, as is usual in such cases, his contribution remains almost entirely unnoticed indeed, barely recorded.
- 18 Taylor conducted these tramps and rambles over many years, and in almost every part of Great Britain. This Irish excursion is described in some detail, together with an early visit to Llangollen, another to Dudley and the Black Country, and an inspection of a coal mine in the Manchester district, in *Nature's Byepaths* (Taylor 1880). He considered that the smoking of a pipe was best enjoyed whilst 'solitarily disinterring organic remains' from rocks, and that beer tasted best on the same occasions (Taylor (ed.) 1876, 9).
- 19 i.e. He made others mindful of him by his merits.
- 20 Tronically, the coins were discovered during alterations following the death of a former incumbent, the Revd J. Maynard, a well-known numismatist, who little dreamt that such a treasure lay literally at his feet.
- 21 See I.M. Accounts, 30 June 1876: £6. 3s. was spent on implements, and £1. 11s. on bronze antiquities from Dunwich, as against 8s. for a 'Saxon font' (? a mortar or quern), so the collection must have been significant.
- 22 His son J.A. Smith became a stalwart of the Ipswich Scientific Society.
- 23 In 1881 the press questioned why such a man as the Ipswich Police Superintendent Russell, the 'Kid-glove Super', should be paid £120 more than Dr Taylor, this man of extraordinary cultural endowment who had lovingly laboured on behalf of the Museum, and 'one of the few men in whose presence Jem mentally removes his head and foot gear' (Taylor MS 1).
- The account appears in six parts over the name 'Gagates', which is the latin word for the black substance, jet, corresponding to J.E. Taylor's initials. I am grateful to John Fairclough for having helped me to realise this identification. Taylor may have thought of this while penning an article in *Hardwicke*'s about a certain black mollusc, which begins: 'Amalia gagates, one of the most local of British slugs...'
- 25 Taylor's love of the district presumably dated from his Norwich days, and is described in the chapters on 'The Norfolk Broads' and 'Pike-Fishing in Norfolk' in *Nature's Byepaths* (Taylor 1880, 235–51, and 303–16). In fact the pattern of the 1889 excursion is altogether foreshadowed in the closing paragraph of the former of these two essays, on which it was probably based.
- The experience of 1999, in which severe cuts in staff and finance were imposed upon Ipswich Museum, echoes Mr Cattermole's opinion of the asset to which so many generations of servants have dedicated their lives and efforts.
- 27 A few occasional phrases and wordings of Wilson's tribute to his friend have been incorporated into the present article without individual acknowledgement, having seemed to the writer to express their sense better, and with more authenticity, than anything which he might substitute for them.

REFERENCES

Published Sources

- Anon., 1869. 'The Ipswich Museum', Suffolk Chronicle, 13 Apr. 1869.
- Anon., 1870. 'The Ipswich Science Gossip Society', Ipswich Journal, 29 Nov. 1870.
- Anon., 1874. 'Ipswich Science Gossip Society. Annual Conversazione', Suffolk Chronicle, 5 Dec. 1874.
- Anon., 1877a. 'Ipswich Scientific Society', East Anglian Daily Times, 9 Feb. 1877.
- Anon., 1877b. 'Visit by the Geologists' Association to Suffolk', Unidentified press cutting in I.S.S. Minutes, under 7 Mar. 1877.
- Anon., 1879. 'The Ipswich Scientific Society's Conversazione', Unidentified press cutting, 12 Feb. 1879, in *I.S.S. Minutes*.
- Anon., 1881a. 'Proposed Testimonial to Dr. Taylor', Ipswich Journal, 27 Aug. 1881.
- Anon., 1881b. 'Presentation of a Testimonial to Dr J.E. Taylor', Ipswich Journal, 6 Dec. 1881.
- Anon., 1883. 'The Martello Towers and Submerged Forests of the Suffolk Coast', East Anglian Daily Times, 4 Sep. 1883.
- Anon., 1885. Extracts from Lengthy Notices of the Colonial Press, on Dr J.E. Taylor's Recent Lecturing Tour in Australia, 1885. Ipswich.
- Anon., 1887a. 'Ipswich Scientific Society. Excursion to Easton Park and Letheringham Abbey', East Anglian Daily Times, 18 Jul. 1887.
- Anon., 1887b. 'Sudden Death of Mr William Budden', East Anglian Daily Times, 19 Jun. 1887.
- Anon., 1889. 'Ipswich Museum Lectures', East Anglian Daily Times?, Undated cutting in Taylor MS 2.
- Anon., 1890a. 'Ipswich Scientific Society', (F. Woolnough's Presidential Address). East Anglian Daily Times, c. 9 Jan. 1890.
- Anon., 1890b. 'Excursion of the Essex Field Club and Ipswich Scientific Society', Suffolk Chronicle Supplement, 17 Jun. 1890.
- Anon., 1891. 'East Anglian Scientists at Ipswich', East Anglian Daily Times, 25 Jul. 1891.
- Anon., 1892. 'Ipswich Scientific Society. Conversazione at the Town Hall', East Anglian Daily Times, c.6 May 1892. (Cutting in I.S.S. Minutes).
- Anon., 1893a. 'Failure of Dr Taylor', Unidentified press cutting, Oct. 1893, in scrapbook compiled by Frank Woolnough (penes Mr. J.C. Butters).
- Anon., 1893b. 'The Museum Appointment of Mr Frank Woolnough as Curator', East Anglian Daily Times, Oct. 1893.
- Anon., 1894. 'The Origin of the Orwell', Lecture by Dr J.E. Taylor. East Anglian Daily Times, 22 Dec. 1894.
- Anon., 1895. 'John Ellor Taylor, Ph.D., F.L.S., etc. Obituary (1835-1895)', Geological Magazine 95, 528.
- Anon., 1896. 'Chelmsford Odde Volumes. The Annual Dusting', East Anglian Daily Times, 29 Jun. 1896.
- Anon., 1924. 'Sir Frederick Wilson. Death in Norfolk', East Anglian Daily Times, 27 May 1924.
- Charlesworth, E., 1875. The Baker Suffolk Crag Collection (Broadsheet). In MS. papers of Edward Charlesworth. Ipswich Museum.
- Desmond, A., 1998. Huxley: From Devil's Disciple to Evolution's High Priest. Harmondsworth.
- E.A.D.T., 1924. An Illustrated Souvenir of the 50th Anniversary of the East Anglian Daily Times. Ipswich.

English, M.P., 1987. Mordecai Cubitt Cooke: Victorian Naturalist, Mycologist, Teacher and Eccentric. Bristol.

English, M.P., 1990. Victorian Values - The Life and Times of Dr Edwin Lankester M.D., F.R.S. Bristol.

Huxley, Sir T.H., 1868. 'On a Piece of Chalk', in T.H. Huxley, 1910 (Everyman Edition), Lectures and Lay Sermons, 1-21. London.

Lankester, Sir E.R., 1877. 'The Crag Fossils in the Ipswich Museum', Suffolk Chronicle, 4 Aug. 1877.

Markham, R.A.D., 1990. A Rhino in High Street. Ipswich.

Moorehead, A., 1969. Darwin and the Beagle. London.

Plunkett, S.J., 1996. 'Frank Woolnough - A Biographical Introduction', in S.J. Plunkett (ed.), Humbugs For Christmas by X.Y.Z. Private circulation. S.R.O.I.

Plunkett, S.J., 2001. 'Municipal Reform and Civil Progress in 19th Century Ipswich', in R. Malster and N.P. Salmon (eds.), *Ipswich from the First to the Third Millennium*. Ipswich Society.

Plunkett, S.J., 2002. 'Ipswich Museum Moralities in the 1840s and 1850s', in C. Harper-Bill (ed.), East Anglia's History: Studies in Honour of Norman Scarfe. Woodbridge.

Read, J., 1860. 'Historical Notices of the Ipswich Town Library', Suffolk Chronicle, 7 Jan. 1860.

Report of the British Association for the Advancement of Science, Ipswich Meeting 1895.

Taylor, J.E., 1864. Geological Essays, and Shetches of the Geology of Manchester and the Neighbourhood. London and Manchester.

Taylor, J.E. (ed.), 1864-1871. Norwich People's Weekly Journal.

Taylor, J.E., 1865. 'On the Pliocene and Post-Pliocene Deposits in the Neighbourhood of Norwich', *Trans. Manchester Geological Soc.*, V, No. 3, 1864-65, 44 ff.

Taylor, J.E., 1866. Lithographs: A Series of Four Lectures on Geology Delivered Before the Norwich Geological Society. Norwich.

Taylor, J.E., 1871. A Guide to the Ipswich Museum. Ipswich.

Taylor, J.E., 1872. To the Chairman and Committee of the Ipswich Museum. Printed application containing sundry testimonials, 4pp, in Scrapbook relating to Ipswich Museum 1846–78 compiled by James Read of Ipswich. (Private Collection, penes A.T. Copsey).

Taylor, J.E., 1872. Half Hours at the Sea-Side. London.

Taylor, J.E., 1872. Half Hours in Green Lanes. London.

Taylor, J.E. (ed.), 1872-92. Hardwicke's Science-Gossip Magazine.

Taylor, J.E., 1873. Guide to Ipswich and the Neighbourhood. Ipswich.

Taylor, J.E., 1873. Geological Stories: A Series of Autobiographies in Chronological Order. London.

Taylor, J.E., 1874. 'A Sketch of the Geology of Suffolk', in W. White (ed.), History, Gazetteer and Directory of Suffolk (3rd edn), 1874, 11-23.

Taylor, J.E., 1876. The Aquarium, Its Inhabitants, Structure and Management. London.

Taylor, J.E. (ed.), 1876. Notes on Preserving Natural History Objects. London.

Taylor, J.E., 1878a. 'How to Make and Colour Casts of Fishes', Hardwicke's Science-Gossip Magazine (1878), 107-11.

Taylor, J.E., 1878b. Flowers, their Origins, Shapes, Perfumes and Colours. London.

Taylor, J.E., 1878c. 'An Editor's Holiday in the West of Ireland', Hardwicke's Science-Gossip Magazine, (1878), 228-31.

Taylor, J.E., 1879. Natural History Rambles - Mountain and Moor. London.

Taylor, J.E., 1879. Natural History Rambles - Underground. London.

Taylor, J.E., 1880. Nature's Byepaths. London.

Taylor, J.E., 1884a. The Sagacity and Morality of Plants. London.

- Taylor, J.E., 1884b. 'New Evidences of Primeval Man (Hitchin)', Hardwicke's Science-Gossip Magazine, (1884), 50.
- Taylor, J.E., 1884c. 'A Genuine British Earthquake', Hardwicke's Science-Gossip Magazine (1884), 122-24.
- Taylor, J.E., 1884d. 'At the Gate of North Wales A Midsummer Holiday', Hardwicke's Science Gossip Magazine (1884), 156-59.
- Taylor, J.E., 1885. Our Common British Fossils, and where to Find Them. London.
- Taylor, J.E., 1886. Our Island-Continent: A Naturalist's Holiday in Australia. London.
- Taylor, J.E., 1887. Tourists' Guide to the County of Suffolk. London.
- Taylor, J.E., 1888a. In and About Ancient lpswich. Norwich.
- Taylor, J.E., 1888b. 'Bruce!', Hardwicke's Science-Gossip Magazine, XXIV (1888), 169-70.
- Taylor, J.E. (pseud. Gagates), 1889. 'The Norfolk Broads' (6 parts), East Anglian Daily Times, Aug. 1889.
- Taylor, J.E., 1890. 'Rest at Last! The Story of an Ipswich Boulder', ?East Anglian Daily Times, 16 Apr. 1890.
- Taylor, J.E., 1890-91. 'Coal in East Anglia. Lecture by Dr Taylor', Unidentified press cutting, 1890/91, *Taylor MS 2*.
- Taylor, J.E., 1891. The Story of the Felixstowe Cliffs as told by Dr J.E. Taylor, F.L.S., F.G.S., etc., on Wednesday July 22nd, 1889. Illustrated, 22 pp, 8vo. Ipswich.
- Taylor, J.E., 1892. 'The Relation of the Geology of East Anglia to Archaeology', Proc. Suffolk Inst. Archaeol., VIII, Part 1, 51-53.
- Tyndall, J., 1874. 'The Belfast Address', in J. Tyndall, *Lectures and Essays*, Rationalist Press Association cheap reprints no. 10 (n.d.), 13-43. London.
- Wilson, Sir F.W., 1878. 'A Holiday in the Peak District', Unidentified press cutting, Easter 1878, in *I.S.S. Minutes* following 3 Apr. 1878.
- Wilson, Sir F.W. (et al.), 1881. 'Opening of the New Lock Entrance, New Post Office, and New Museum, Free Library, and School of Art at Ipswich, Wednesday, July 27th, 1881, etc.', East Anglian Daily Times, 27 and 28 Jul. 1881.
- Wilson, Sir F.W., 1895. 'Death of Dr J.E. Taylor at Ipswich', East Anglian Daily Times, 30 Sept.1895.
- Wilson, Sir F.W., 1917. 'East Anglia Past and Present. Scientific Rambles Recalled', East Anglian Daily Times, 12 Jan. 1917.
- Wilson, G., and Geikie, A., 1861. A Memoir of Edward Forbes. Edinburgh.
- Woodward, H.B., 1891. 'Memoir of John Gunn', in H.B. Woodward and E.T. Newton, 1891, Memorials of John Gunn, M.A., F.G.S., 3-42. Norwich.
- Woolnough, F. (pseud. Felix Walton), 1923. 'Sixteenth Century Ipswich: The Black Horse Inn', East Anglian Daily Times, 29 Sept. 1923.
- Wright, H., 1883. 'A Scientific Excursion. (By our Unscientific Reporter)', *Ipswich Journal*, 12 Jun. 1883.

Manuscript sources

- Henslow MS (1850-61). Letters of J.S. Henslow to George Knights. Ipswich Museum.
- I.M. Minutes (1846-present). Minute Books of the Committee of Ipswich Museum. Ipswich Museum.
- I.M. Accounts (1871-86). Account Books of Ipswich Museum, 3 vols. Ipswich Museum.
- I.S.S. Minutes (1869–1924). Minute-Books of the Ipswich Science Gossip Society (1869–75) and Ipswich Scientific Society (1875–1924). S.R.O.I., GC 444/1/1–3.
- I.S.S. Album (1884–c.1900). Photograph Album of the Ipswich Scientific Society.
- Ransome MSS. Two scrapbooks of press cuttings relating to the Ipswich Museum, 1848–52, compiled by George Ransome. Ipswich Museum.

S.I.A. Album. Album of photographs of excursions of the Suffolk Institute of Archaeology. S.R.O.I.

Smith MS. Woolnoughs and Catchpoles. A family history compiled by the late Mr F.M. and Mrs M.I. Smith (née Butters), incorporating recollections of Helen Louise Butters. Typescript, Warwick 1993. (Author's collection).

Taylor MS. 1. Scrapbook of press cuttings relating to Museum Lectures, Testimonial, etc., 1879–85, compiled by Dr J.E. Taylor. S.R.O.I. qS 92 Tay.

Taylor MS. 2. Scrapbook of press cuttings relating to Museum Lectures, Reviews, etc., 1885–92, compiled by Dr J.E. Taylor. Ipswich Museum.

Woolnough MSS. The Woolnough Collection of Local History (191 scrapbook vols of Ephemera, etc.), S.R.O.I. qS 8.

Woolnough MS. 1. Dr Taylor. S.R.O.I. Biography files.

Woolnough MS. 2. Presidential Address to Ipswich Scientific Society, 1908. Ipswich Museum.