

before that date, any influence on the part of Dean Buckland was out of the question. Professor Rupert Jones has, rightly, I think, referred to the statement regarding Huxley as “not only uncalled for, but unkind.” Will he now, for the sake of historical accuracy, give us his reasons for placing the burden of responsibility on the shoulders of the Dean? And will Mr. Hunt let us have the “long story” so far as it refers to McEnery’s notes? If, as he says, it dates “long subsequent to McEnery’s death,” again it is difficult to see where and how Dean Buckland’s influence was exerted.

J. ADAM WATSON.

“HAY TOR,” DENNINGTON PARK ROAD, HAMPSTEAD.  
December 21st, 1901.

#### THE HOLOCENE DEPOSIT AT CASTLE CARY.

SIR,—In our recent paper on “The Post-Pliocene Non-Marine Mollusca of the South of England” (Proc. Geol. Assoc., vol. xvii, pt. 5), when speaking of the holocene deposit at Castle Cary (p. 234) we express regret that we were unable to obtain any information concerning it.

Our attention has now been called to the fact that an account of this alluvial deposit is given in the Geological Survey Memoir on East Somerset by Mr. H. B. Woodward, and we hasten to express our regrets to that author for the oversight. He gives the following list of shells which he obtained from the spot in 1868, viz.: “*Helix aspersa*, *H. nemoralis*, *Cyclas*, *Ancylus fluviatilis*, *Limneus*, *Unio* (fragments).” Of these, only one, the *Ancylus fluviatilis*, is common to our list; concerning the others, not having seen the specimens, we are unable to pronounce any opinion.

A. S. KENNARD.

B. B. WOODWARD.

#### OBITUARY.

##### PROFESSOR RALPH TATE, F.L.S., F.G.S.

BORN 1840.

DIED SEPTEMBER 20, 1901.

IF Professor Tate had remained in England his loss would have been severely felt by British geologists; as it is, that loss is to a large extent transferred to the Antipodes, where South Australia will increasingly lament the departure of one who has been so much to the science of the Colony. In this country his memory will linger chiefly in the minds of those who can look back beyond the last quarter of a century, but it will be a fond memory, based on sincere admiration of his powers and his character.

Ralph Tate was the nephew of the well-known geologist George Tate of Alnwick, where he was born in 1840. He received his primary education at the Cheltenham Training College, whence he was sent in 1857 to the Royal School of Mines, where he studied for two years. After some little practice in teaching at the Polytechnic he went to Belfast in 1861 as teacher of Natural Science

at the Philosophical Institution, his principal subjects of interest being Botany, non-marine Conchology, and Geology, particularly the palæontological side of it. His first proceeding was to found the Belfast Naturalists Field Club, which is still in vigorous operation, and he also drew up a Flora of Belfast and, at a later date, a descriptive list of Irish Liassic Fossils, including several new species. An earlier paper on an allied subject contributed in 1864 to the Geological Society was followed by his removal to London as Assistant-Curator to the Society, the results of which appointment may be seen in the admirable condition as to naming, etc., of the specimens in the Society's Museum which came under his hand. Whilst in this position he contributed three papers to the Quarterly Journal—on the Cretaceous Rocks of the North-East of Ireland, on the Zone of *Ammonites angulatus*, and on the South African Fossils in the Museum—all highly palæontological. He was also at work in the other branches of Natural History which interested him, writing three Botanical papers in 1866 and a small textbook on Land and Fresh-water Mollusca. These various branches were so well handled that Lyell and Huxley amongst geologists, Gwyn Jeffreys amongst conchologists, and Hooker, Baker, and Carruthers amongst botanists nominated him as Associate of the Linnean Society in 1866.

In 1867 he was sent by the Central America Association on an exploring expedition to Nicaragua, and in the following year to Guyana in Venezuela, expeditions which resulted in papers to the Geological Society on the geology, and to the American Journal of Conchology on the non-marine Mollusca of those countries. In the interval and afterwards he conducted classes at the Mining School at Bristol, and also brought out his well-known Appendix to Woodward's Manual of Mollusca, and an admirable little class-book of geology forming two volumes of Weale's Rudimentary Series; at the same time he was communicating a series of Jurassic papers (four) to the Geological Society. In 1871 he was appointed teacher to the Mining School established by the Cleveland Ironmasters, first at Darlington and then at Redcar. His attention was thus drawn to Yorkshire, and ultimately led to his bringing out (in conjunction with the writer of this notice) his well-known work "The Yorkshire Lias."

About this time, however (1875), a complete change occurred in his life on his appointment as Professor of Natural Science on the Elder Foundation at the University of South Australia in Adelaide. To the work thus opened before him he henceforth devoted all his energies. He found there a Philosophical Society issuing no proceedings and studying science chiefly at second-hand. This Society he determined to raise to a high position by commencing a series of Transactions, and publishing in them his papers on the Geology and Natural History of the Colony, instead of sending them to better known and more widely circulating journals, and by persuading others to do the same. For three years he piloted this Society, first as Vice-President and constant Chairman (1877-8),

and then as President (1878–80), by which time he had established it under the new title “The Royal Society of South Australia.” In the twenty-four volumes issued up till now we find no less than ninety-one papers contributed by him: a few of these are botanical, others are on general geology, such as glaciation, but the greater number are on the Tertiary beds of the continent and their fossil Mollusca. On this subject he contributed also to the Proceedings of the Royal Society of Tasmania, of the Linnean Society of New South Wales, and of the Australian Association for the Advancement of Science, of which he was President in 1893. How broadly and firmly he thus laid the foundation of our knowledge of Molluscan phylogeny in the Australian province may be judged from a Catalogue of Tertiary Australian Mollusca in the British Museum issued in 1897. Out of 380 species therein recognized from the Australian continent, 225 are species established by him and 90 more are determined or recorded in his writings; every one of his species (with a single doubtful exception) is accepted by the author of that catalogue, and only four corrections of names are suggested. This is probably a ‘record’ result.

In 1888 Professor Tate took over the editorship of the Transactions, and with one short intermission continued it to the last. In 1893–5 he was again President as ‘Governor’s Representative,’ and he took occasion to congratulate the Society on the position its Transactions had attained, and to thank the early contributors for their self-sacrifice for its sake in sending their papers to a publication then so obscure. Soon afterwards he learnt the price he had himself paid in doing the same. In the Autumn of 1896–7 he paid a visit to this country, and unhappily the opportunity was not seized of giving him that recognition of the value of his work which undoubtedly would have long ago been his had he remained in this country or sent his papers to European publications. He was somewhat disappointed at this, but let us hope he was a philosopher. At all events, he continued his work in his adopted country with undiminished zeal, and only the approach of his final malady put a period to his activity. Early this year heart trouble gradually became more serious, and brought his useful and honourable life to a conclusion on September 20th. He was twice married, and leaves behind him several children all well established in life, as is his own reputation in the minds of all palæontologists.

J. F. B.

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JAMES SHIPMAN, F.G.S.

BORN APRIL 30, 1848.

DIED NOVEMBER 21, 1901.

AN energetic worker on geology has been lost to science in the death of Mr. James Shipman. In early life he was apprenticed to the printing trade; he subsequently entered the employment of the late Mr. Edmund Renals, then proprietor of the *Nottingham Daily Express*, and at the time of his death Mr. Shipman occupied a post on the sub-editorial staff. About the year 1868 he attended the science classes held by the late Edward Wilson, and in 1870 he won the bronze medal of the Science and Art Department for geology. Later on Mr. Shipman became a teacher in the science. He devoted himself with remarkable enthusiasm to the study of all the open geological sections in and around Nottingham, and furnished important aid to Mr. W. T. Aveline when he was revising the geological survey map of the district. He became an active member of the Nottingham Naturalists Society, contributing to its Transactions papers on the geology of various parts of Nottinghamshire and Derbyshire. The Drift deposits, the New Red Rocks, and the Coal-measures naturally attracted his chief attention, and so thoroughly sound was his knowledge that his advice was sought in various inquiries of economic importance. As a journalist his time was greatly occupied, and especially at night, so that it was only in leisure hours, often taken from those which should have been devoted to sleep, that he was enabled to give so much time to his favourite subject. In 1887 he published “Holiday Notes of a Geologist,” a work which contained many interesting reminiscences. There can, however, be little doubt that by utilizing what he termed his ‘free’ days so fully, while labouring also at night, he too severely taxed his strength. He died suddenly at the age of 53.<sup>1</sup>

<sup>1</sup> We are indebted for most of the above particulars to an article by Mr. A. Stapleton in the *Nottingham Daily Express*.