

He attributes all the flinty chalk seen to the west of the bluff in Branscombe West Cliff, described on p. 25, to the *Rhynchonella Cuvieri*-chalk, except for the tops of the first two or three bluffs. The latter are easily recognizable and all lie well to the east of the 'Camp' on Berry Cliff. But in the south-west face of the 'Camp', about 20 yards east of the cart track leading into the undercliff, there is a bluff quite 25 feet high accessible from top to bottom and composed exclusively of normal (flinty) *Terebratulina gracilis*-chalk, and there are four similar bluffs, first one by itself, and then three close together, in the cliff some way further west. Again, just east of the fence which runs down the cliff under Littlecombe Hollow there is a bluff which is probably continuous with two small exposures a few feet eastwards of it, the higher of which is composed of normal *T. gracilis*-chalk. The estimate of 60 feet of flinty *R. Cuvieri*-chalk, if based on the assignment to that zone of all the flinty chalk seen beyond Littlecombe Hollow, may therefore be excessive.

These exposures of *T. gracilis*-chalk are not expressly mentioned in the very full official account of these cliffs given in *The Cretaceous Rocks of Britain*, but it may be intended to cover them.

Incidentally I may add that the very curious *Metopaster cornutus* occurs in the flintless as well as in the flinty *R. Cuvieri*-chalk, though the reverse might have been expected.

R. M. BRYDONE.

27 TWYFORD MANSIONS, MARYLEBONE STREET, W.
October 9, 1912.

OBITUARY.

THE REV. ROBERT ASHINGTON BULLEN,

B.A. (LOND.), F.L.S., F.G.S., ETC.¹

BORN JUNE 11, 1850.

DIED AUGUST 14, 1912.

(WITH A PORTRAIT, PLATE XXIV.)

It is with sad regret we record the loss of our valued friend Mr. Ashington Bullen, who passed away suddenly on August 14, 1912, in his 63rd year.

Born at St. George's, Bermuda, on June 11, 1850, he had but a short acquaintance with his birthplace, his parents returning to England with their children when he was only 6 years of age. That he retained a love for his birthplace is shown by his making a special expedition to the Bermudas and subsequently publishing a very interesting account of the geology of the group (see *GEOL. MAG.*, 1911, pp. 385-95 and 433-42), very fully illustrated.

R. A. Bullen settled with his parents on the south coast and was sent to a private school at Gosport, where he received his early education,

¹ Mr. Bullen's death was recorded in the September Number of the *GEOL. MAG.*, p. 432.

and acquired a love for the sea and of Natural History which he never lost. It was originally intended that he should be prepared to enter the Civil Service, but by the force of circumstances he became instead a schoolmaster and continued his own studies privately, taking his B.A. in London University in 1873. He continued teaching after he was ordained in 1875; indeed, until 1883, when he became a curate. His first duty was at St. Peter's, Croydon (1875-9); thence he was transferred to Farleigh, Surrey (1879-80).

On December 19, 1855, Mr. Bullen married Miss Lloyd, daughter of Mr. Edward Lloyd, of Delahay Street, Westminster. He leaves his widow, one son, Robert Edward, and two daughters.

In 1883 he had the good fortune to be appointed curate to Archdeacon Farrar at St. Margaret's, Westminster, and held office until 1888, when he became Vicar of Shoreham, Kent, a preferment which he held until 1896. This was a peculiarly delightful period of Mr. Bullen's life, for it brought him into close personal contact and friendship with Sir Joseph Prestwich, who had for some years taken up his residence at Darent Hulme, Shoreham, Kent, an ideal country house for a man of science to retire to, after a long and active life. Here, for eight years, Mr. Bullen had the happiness of constant intercourse with one of the greatest geologists of the last century, and devoted many rambles over the Chalk Downs in search of flint implements and in discussing the age and extent of the old high-level gravels to which Prestwich devoted much of his latest years. In Lady Prestwich also Mr. and Mrs. Bullen found a most delightful and intellectual friend and neighbour.

From the influence of Sir Joseph Prestwich, Mr. Bullen took up and carried out a most valuable series of researches, which continued up to August last, in many localities where fossil land and fresh-water Mollusca could be met with, and especially those associated with the remains of early Man, the early Plateau Gravels, the ancient prehistoric places of interment, and the implements of flint and bone identified with Palæolithic man. The titles of these papers are given at the end of this notice. Much of the spirit of scientific research, inspired by Prestwich, will be found embodied in the little volume on the prehistoric remains discovered at Harlyn Bay, which were very carefully figured and described by Mr. Bullen, a third and greatly enlarged edition of which appeared this year.

His papers on the Æolian deposits on the Coast of Étrel; fossil Mollusca, Alcudia (Mallorca); on Manresa, Cataluña; and the Bermuda Islands (1911) specially merit attention.

Shortly after the death of Sir Joseph Prestwich (which occurred June 23, 1896) Mr. Bullen became Rector of Little Stukeley, Hunts (1898-9); and subsequently Rector and Vicar of Wisley, Pyrford, Surrey (1901-5). After resigning the living at Pyrford he made his home first at Hurstpierpoint, Sussex, and later at Englemoor, Heathside, Woking; devoting much time to the work of the various scientific societies to which he had become attached, and in travelling in France, Italy, Spain, and elsewhere.

The death of his second daughter (Miss Evelyn Bullen) in February,

1910, induced him to remove to Hilden Manor, Tonbridge. In 1912 he made a voyage to the Grand Canary, and was, indeed, contemplating a second voyage, with Mrs. Bullen, preparatory to publishing an account of the geology and fossil shells of those islands at the time of his death.

He joined the Geological Society in 1891, the Geologists' Association in 1893, the Malacological Society in 1897, the Linnean in 1899, and the Zoological Society in 1911. He was also a Fellow of the Royal Astronomical Society, and a member of the Selborne Society and the South-Eastern Union of Scientific Societies. It is to this last-named Society's Hon. General Secretary, Dr. Wm. Martin, M.A., F.S.A., that we are indebted for permission to reproduce the portrait (Plate XXIV) of Mr. Bullen which accompanies this notice.

An enthusiastic lover of Nature, an untiring worker, a faithful friend in time of need, his loss will long be felt by a very wide circle, to whom he was endeared by his unostentatious kindness and liberality.

LIST OF PUBLICATIONS BY THE REV. R. ASHINGTON BULLEN.

1894. "Shells from Portland Rubble Drift": *GEOL. MAG.*, pp. 431-2.
 1898. "Fossil Non-marine Mollusca, Dover": *Proc. Malac. Soc.*, pp. 162-5.
 "The Authenticity of Plateau Implements": *Nat. Sci.*, xii, pp. 106-11, pls. iv-vii.
 1899. "Land-shells from Holocene deposit, Horseshoe Pit, Colley Hill, Reigate": *Proc. Malac. Soc.*, iii, pp. 326-9.
 1900. "Shells from Portland Rubble Drift": *GEOL. MAG.*, pp. 286-7.
 1901. "Eolithic Implements": *GEOL. MAG.*, pp. 426-7; *Journ. Vict. Inst.* London, 1900, pp. 1-29, figs. and pls. i-vii; 1901, pp. 191-215.
Harlyn Bay and the Discoveries of its Prehistoric Remains. pp. 1-96, with 18 plates. 1st ed., 1901; 2nd ed., London, 1902; 3rd ed., Harlyn Bay, Padstow, 1912.
 "Pleistocene Mollusca from Raised Beach Deposits, Perim Island": *Proc. Malac. Soc.*, pp. 254-5.
 "Note on Well-section at Dallinghoe (Suffolk)": *Abs. Proc. Geol. Soc.*, 1900-1, p. 78; *Q.J.G.S.*, lvii, pp. 285-7, 1901.
 1902. "Notes on Holocene Mollusca from North Cornwall": *Proc. Malac. Soc.*, v, pp. 185-8.
 1903. "Eoliths from South and South-West England": *GEOL. MAG.*, Dec. IV, Vol. X, pp. 102-10, Pls. VI-VIII.
 "Late Keltic Cemetery at Harlyn Bay (Cornwall)": *Trans. S.E. Union Sci. Soc.*, 1903, pp. 1-6, figs.
 "Pleistocene Non-marine Mollusca, Portland Bill, and Holocene Non-marine Mollusca from various localities": *Proc. Malac. Soc.*, pp. 317-19.
 1904. "New species of Non-marine Shells from Java and new species of *Corbicula* from New South Wales": *Proc. Malac. Soc.*, pp. 109-11, pl. vi.
 "New variety of *Planispira zebra*, Pfr., from the Island of Gisser, and new species of *Chloritis*, Java": *Proc. Malac. Soc.*, pp. 191-2, pl. xi.
 1905. "Notes on land and freshwater shells from the Alhambra Ditch, Granada, Spain; on recent land shells, Carmona, Province of Seville; and on land, fresh-water, and marine shells from Holocene deposits, Carmona": *Proc. Malac. Soc.*, pp. 309-13.
 "Pleistocene and Recent Shells from Crete": *Proc. Malac. Soc.*, pp. 307-8.

- Some materials towards the History of Wisley and Pyrford Parishes.*
pp. 80. Guildford.
1906. "Notes on some Microzoa and Mollusca from East Crete": *GEOL. MAG.*, pp. 354-8, Pls. XVIII, XIX.
- "Notes on a Holocene deposit at Harlton, Cambs": *Proc. Malac. Soc.*, vii, pp. 85-7.
- "Land and Fresh-water Mollusca from Sumatra": *Proc. Malac. Soc.*, 1905, pp. 12-16, pl. ii; 1906, pp. 126-30.
1907. "On the advisability of appointing a Committee for the photographic survey of ancient remains in the British Isles": *Rep. Brit. Assoc. Adv. Sci.*, p. 37.
1908. "Kitchen-Middens in North Cornwall": *GEOL. MAG.*, pp. 140-1.
1909. "Holocene Non-marine Shells of Perranzabuloe": *Proc. Malac. Soc.*, viii, pp. 247-50, 373-4.
1910. "Æolian Deposits on the Coast at Étel": *GEOL. MAG.*, pp. 6-15, 97-101, Pls. IV and IX.
- "Pitfalls for Elephants in Africa: in reference to Dewlish": *GEOL. MAG.*, p. 334.
- "Notes on (I) Pleistocene, (II) Holocene, (III) Recent Non-marine Shells from Alcudia (Mallorca), and (VI) Non-marine Shells from Manresa (Cataluña)": *Proc. Malac. Soc.*, ix, pp. 118, 122.
1911. "Notes on the Geology of the Bermuda Islands": *GEOL. MAG.*, pp. 385-95, 433-42, Pls. XVIII-XXIII, and Text-figs.

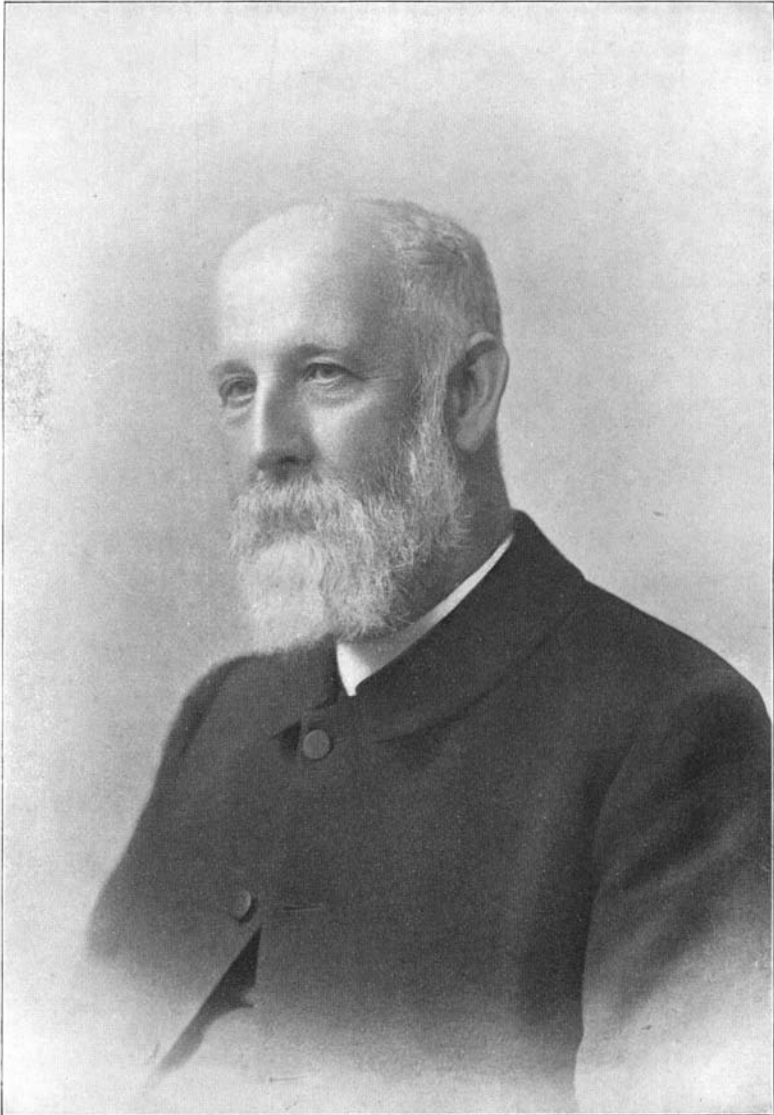
JAMES PARKER, HON. M.A. OXON., F.G.S.

BORN 1833.

DIED OCTOBER, 1912.

WE regret to announce the death of Mr. James Parker, of Oxford, at the age of 79. In the leisure of a busy life as a publisher he devoted himself to archæological and geological studies, and accomplished much, especially in the geology of the neighbourhood of Oxford and in the exploration of the caves of Somersetshire. He made a great collection of fossils in the days when the Oolites round Oxford were extensively worked, and some of his finest specimens, including Teleosaurian skulls and Megalosaurian remains, were described in Phillips' *Geology of Oxford*. In 1880 he prepared a map and sections of the strata south of Oxford, which he printed with explanatory notes for an excursion of the Geologists' Association, and in 1884 he issued a revised edition of the same little work under the auspices of the Warwickshire Field Club. His exploration of the caves in the Mendip Hills was done in association with Professor Boyd Dawkins and the late Mr. Ayshford Sanford. Mr. Parker became a member of the Geologists' Association in 1861 and a Fellow of the Geological Society in 1867. He contributed a curiously critical paper on the valley of the Somme and its gravels to the Proceedings of the Association in 1875, and he frequently took part in the discussions at the meetings of both Societies. His views were usually original, not infrequently singular, and he appeared at his best in the informal debates during the excursions of the Geologists' Association, where his genial presence was always especially welcomed.

A. S. W.



THE REV. R. ASHINGTON BULLEN, B.A. (LOND.) F.L.S. F.G.S., ETC.