before taking the final step that would have completed his adhesion to the Jesuits. To his intimate friends he would now and then disclose an unexpected breadth of view in religious questions. As years passed, the longing for mental freedom grew ever stronger, until at last it overmastered all the traditions and associations of a lifetime, and he finally separated himself from the Church of Rome. Had he contented himself with the announcement of this change of opinion, the outery against his apostasy in such a country as Belgium would doubtless in any case have been loud and long. But he marked his secession from the clerical order by marrying-an act which could not but intensify the persecution. Many bitter and unworthy reproaches were heaped upon him, and many old friends now shunned him. A man of his gentle and kindly nature must have keenly felt the misrepresentation to which he was subjected. To those who still held to his friendship, he said that he had done what after long meditation he believed to be right, and that the consciousness of his rectitude of aim supported him in the trial. But the hand of death was already upon him. An insidious and fatal disease, of which many years ago he had premonitions and for which he had undergone several operations, now spread through his body and rapidly brought his life to a close on the 9th July, 1903, at Brussels.

Renard held for many years a professorship in the University of Louvain and a Conservatorship in the Royal Museum of Natural History at Brussels. These appointments he vacated when he succeeded to the chair of geology in the University of Ghent, which he retained up to the time of his death. The members of the Geologists' Association were greatly indebted to Professor Renard for much kindness and valuable assistance on the occasion of their visit to the Ardennes in August, 1885. The value of his scientific work was recognized in this country by the Geological Society when it awarded to him the Bigsby Medal in 1885, and by the Royal Society of Edinburgh when it elected him into the select number of its honorary Fellows. From his frequent visits to this country he learnt to speak English fairly well, while his early training in Germany gave him fluency in the language of that country. His genial face, beaming with good-nature, will long be missed at the meetings of the British Association, which he frequently attended. A. G.

## JOHN ALLEN BROWN, J.P., F.G.S., F.R.G.S. BORN SEPTEMBER 3, 1831. DIED SEPTEMBER 24, 1903.

By the death of Mr. John Allen Brown, an earnest student of geology, and more especially of the latter post-Pliocene deposits of the Thames Valley, has been removed from our midst.

He was born in London 3rd September, 1831, succeeded his father<sup>1</sup> as diamond merchant, and some forty years ago settled in

<sup>1</sup> John Brown (1797-1861), one of the founders of the Ethnological Society, took a keen interest in geographical, especially Arctic, exploration, making large collections in illustration thereof. He was conspicuous as an advocate of expeditions in search of Sir J. Franklin, and defined the area which that explorer was ultimately found to have reached, but was not listened to at the time. Ealing. From his father he inherited a taste for geographical research, and he joined the Royal Geographical Society in 1861; but incited by the investigations made by General Pitt-Rivers (then Colonel Lane Fox) in 1869, the results of which were published in 1872,<sup>1</sup> he turned his attention to the drift deposits in north-west Middlesex, for which the numerous excavations for building purposes then beginning in Ealing afforded the requisite material.<sup>1</sup> His earliest scientific papers were, however, on general subjects and given before the Ealing Microscopical and Natural History Society, of which he was one of the founders and its president from 1882-83.

In 1883 he laid before the members of the Geologists' Association, both on an excursion and in a paper read to that body, the evidences that appeared to him indicative of ice-action on the summit of the high ground to the north of Ealing. To this subject he frequently recurred in subsequent papers.

A little later he discovered that patches of gravel were found at intervals up to the top of Castlebar Hill, a situation in which they had not then been mapped by the Geological Survey.

Primæval Man and his Implements was the subject, however, to which he was most devoted, and from 1885, when he read his paper on "The Earliest Men of Ealing" to the local Society, his scientific publications were almost exclusively confined to that theme.

In a series of communications to various Societies during the next two years he demonstrated the existence of a "Palæolithic floor" in the neighbourhood of Ealing and Acton, comparable to the ones previously described for north-east London by Mr. Worthington G. Smith and Mr. Greenhill. The substance of these papers was gathered together and extended to form his work "Palæolithic Man in N.W. Middlesex," issued in 1887.<sup>2</sup>

He continued to work at this line of research for the rest of his life, and his latest paper, read before the Ealing Natural Science Society in 1902, was on "Recent discoveries in relation to Prehistoric Man in Ealing."

He passed quietly away at his Ealing home on 24th September, 1903, after a long and painful illness.

His portrait in oils hangs in the Reading-room of the Public Library at Ealing, in the establishment of which he took a leading part, becoming first Chairman of the Committee.

Mr. Brown became a Fellow of the Geological Society in 1886, and was made a Justice of the Peace in 1894.

His private collection of geological objects was extensive, but the assemblage of implements which he brought together is remarkably fine, and it is to be hoped that this will not be allowed to melt away, as collections so often do when the loving hand of the owner is removed and they are not transferred, as they always should be, to the safe keeping of some public body.

B. B. W.

<sup>1</sup> Quart. Journ. Geol. Soc., vol. xxviii. <sup>2</sup> His other chief work "The Chronicles of Greenford Parva" is of great topographical interest, but is not connected with geology.



Profile of Skull of Arsinöitherium Zitteli, Beadn. Upper Eocene, Fayûm, Egypt. [Reproduced by permission of the Directors of the Sphere.]