

The following were elected Members of the Association :—

Alfred Craven, Esq. ; John W. Meyers, Esq. ; Charles Reginald Parkes, Esq. ; and H. Sidney White, Esq.

The President delivered the Opening Address of the Session 1876-77. (See page 17.)

ORDINARY MEETING, DECEMBER 1ST, 1876.

WILLIAM CARRUTHERS, Esq., F.R.S., &c., President, in the Chair.

The following Donations were announced :—

“Quarterly Journal of the Geological Society,” Vol. xxxii., Part 4 ; from that Society.

“Abstracts of the Proceedings of the Geological Society,” No. 323 ; from that Society.

“List of the Geological Society,” November, 1876 ; from that Society.

“Proceedings of the Literary and Philosophical Society of Liverpool,” Vol. xxx. ; from that Society.

“Journal of Proceedings of the Winchester and Hampshire Scientific and Literary Society,” Vol. ii., Part 2 ; from that Society.

“Transactions of the Manchester Geological Society,” Vol. xiv., Parts 4-5 ; from the Society.

“Annual Report of the Royal Cornwall Polytechnic Society” for 1875 ; from that Society.

“Leicester Town Museum—First to Fourth Reports of the Museum Committee to the Town Council” (1873-76) ; from that Committee.

“President’s Addresses and Reports of the Leicester Literary and Philosophical Society,” 1867-72 ; from that Society.

“Reports of the Leicester Literary and Philosophical Society,” for 1874-5, and 1875-6 ; from that Society.

“Transactions of the Leicester Literary and Philosophical Society,” Part 1 (1835-38) and Part 2 (1838-41) ; from that Society.

“Education and Culture : Address delivered to the Leicester Literary and Philosophical Society, 1876,” by the Rev. A. Mac-kennel, President ; from that Society.

"Journal of the Society of Arts," November, 1876; from that Society.

"Note on the Pleistocene Deposits at Crayford and Erith," by Messrs Cheadle and Woodward; from the Authors.

"L'Age de la Pierre de Totternhoe," by Dr. Charles Barrois; from the Author.

"Le Gault dans le bassin de Paris," by Dr. C. Barrois; from the Author.

"Taylor's Calendar of the Meetings of the Scientific Bodies of London for 1876-7;" from Messrs. Taylor and Francis.

The following were elected Members of the Association:—

William I. Balston, Esq., F.G.S.; Oliver Daniel Belsham, Esq.; Alexander Bessemer, Esq., B.A.; Robert Harland, Esq., F.C.S.; Alfred Spalding Harvey, Esq., B.A.; Colonel John Davenport Shakespear, F.G.S., Assoc. Inst. C.E.; Arthur I. Walmisley, Esq., Assoc. Inst. C.E.; and John Johnston Winsor, Esq.

The following Paper was read:—

ON THE COMPARATIVE AGES OF THE ENGLISH AND SCOTTISH
COAL FIELDS, ILLUSTRATED BY THE GEOLOGY OF THE
LOTHIANS AND FIFE, AND THE STRUCTURE OF ARTHUR'S
SEAT.

By ANDREW TAYLOR, Esq., F.C.S.

The natural sections in and around Edinburgh rendered classic by the descriptions of Hutton and Playfair, must always incite a more than local interest. Arran is the only other Scottish locality offering such a succession of field studies within a very narrow area. Professor Judd has recently invited renewed attention to the structure of Arthur's Seat, showing that past labours only suggest more difficult and, therefore, more interesting inquiries. I venture to describe some local sections at some distance from the hill itself; because of their bearing on the question thus raised as to the chronology of the eruptions of Arthur's Seat.

Salisbury Crags, perhaps, most distinctly of the many sections in the Edinburgh Queen's Park, afforded the Wernerians pegs for ventilating their peculiar theories. Indeed, the petrological peculiarities of many of the traps there as well as round Edinburgh favour the idea of their metamorphism. The presence of prehnite, pectolite, analcime, chalcedony, and allied minerals