alternation of sands, loams, and clay, but they are not so extensive as in a brickyard east of the Station Road that was open during the time when the Geological Survey was made.*

Most of the Members accepted the invitation of Mr. and Mrs. Tower to Weald Hall, where a plentiful tea was provided; while a small party found their way to the White Hart, at Brentwood, and terminated the proceedings by an inspection of that interesting old hostelry.

REFERENCES.

Geological Map, Sheet 1, N.W.

Ordnance Map, New Series, Sheet 257.

WHITAKER, W.—‘Memoirs of the Geological Survey,’ Vol. iv, pp. 320-328.
(Notes by H. B. Woodward and F. J. Bennett.)

MONCKTON, H. W., and HERRIES, R. S.—“On some Bagshot Pebble-beds and Pebble Gravel.” ‘Proc. Geol. Assoc.’ Vol. xi, p. 13.

EXCURSION TO IGHTHAM (KENT).

SATURDAY, JUNE 1ST, 1889.

Directors: Prof. J. PRESTWICH, D.C.L., F.R.S., and W. TOPLEY, F.R.S.

(*Report by W. TOPLEY.*)

The object of this Excursion was to examine the gravel beds at and near Ightham, from whence a large collection of flint-implements has been made during the last ten years by Mr. B. Harrison. The gravels are partly on the watershed of the Darent and the Shode (a tributary of the Medway), partly within the valley of the Shode itself.†

The watershed referred to is 320 feet above mean sea-level (O.D.). The Shode falls to about 120 feet above O.D., near Shipbourne, and near here there are gravels at 150 feet above it, at 270 feet above O.D. The most important patch of gravel is at Highfield, just east of Ightham. The surface here is 320 feet above O.D., and 60 feet above the Shode. The gravel here is over eight feet in thickness. Other important patches are at Fane Hill and Bayshaw, near Oldbury, and at Coney Field, on the opposite bank of the stream. These places range from 300 to

* See ‘Geology of the London Basin,’ p. 322.

† These gravels are fully described by Prof. Prestwich in ‘Quart. Journ. Geol. Soc.’ for May, 1889, p. 270.

330 feet above O.D. Remnants of gravel terraces are scattered about elsewhere, from nearly all of which implements have been obtained, over 400 having been found by Mr. Harrison.

The gravels lie for the most part on the Lower Greensand, but partly on the Gault. The Gault, as usual, forms a flat, narrow plain, but the Folkestone Beds rise into bold hills, the most prominent being that on which Oldbury Camp stands. The "Ightham stone,"* a peculiar variety of Sandstone, cemented by chalcedonic silica and coloured by silicate of iron, occurs here; the outcrops of it being visited.

The Members of the party alighted at Kemsing Station and walked to Broomsleigh, where they were most hospitably entertained by Mr. Thos. Johnston; they then walked to Oldbury Hill to examine the fine camp and the sections around it. On the north-east side of the camp are the remains of what are believed to be "Rock-shelters;" and the importance of having these fully explored was much discussed.†

From Oldbury the party walked north to examine the gravel-pits, full explanations being given by Prof. Prestwich and Mr. Harrison.

At Ightham Mr. Harrison's large collection was inspected, and then, after visiting the gravel at Highfield, the party took train for London at Ightham Station.

ORDINARY MEETING.

FRIDAY, JUNE 7TH, 1889.

T. V. HOLMES, Esq., F.G.S., President, in the Chair.

The donations to the Library since the previous meeting were announced, and the thanks of the Association accorded to the various donors.

The following gentlemen were elected Members of the Association:—J. M. Collett, F.C.S.; W. Richards, F.C.S.; Dr. R. Schäfer, Ph.D.; P. O. Wilson, F.G.S.

* This rock and other hard beds of the Lower Greensand in the neighbourhood are described by Prof. Bonney, 'Geol. Mag.,' July, 1888, p. 297.

† At the last meeting of the British Association (Newcastle, September, 1889) a committee was appointed (Prof. Prestwich, President, and Mr. Harrison, Secretary) to assist in the exploration of these rock shelters, and a grant of £16 was placed at their disposal for this purpose.