EXCURSION TO LIMPSFIELD (SURREY).

SATURDAY, JULY 13TH, 1889.

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

(*Report by MR. TOPLEY.*)

This Excursion was intended to supplement that to Ightham on June 1st (see p. lxvi), and to give an opportunity of examining gravels at the western end of the Darent Valley, partly within that valley, partly on the watershed between the Darent and the Medway.

The gravels are much more important, in thickness and area, than those near Ightham; both, however, have this point of interest in common, that they have yielded large numbers of Palæolithic implements.

Mr. A. M. Bell, by whom the implements have chiefly been found, received the party at his house (Manor House, Limpsfield), and exhibited his collection. Here the Members were joined by Prof. Prestwich and Mr. Leveson Gower, of Titsey Park. They then proceeded to Limpsfield Common, where the most important deposit of gravel occurs. This gravel lies at 500 feet above the sea.* A little to the south there is a considerable quantity of brickearth, also on the watershed; the lower part of this is perhaps formed of re-arranged clayey bands of a Lower Greensand (equivalent of the "Sandgate beds"), but the upper part is a true brickearth, deposited from water.

The more important areas, as regards implements, are a little to the east of the places just named, where the gravels are not now so extensive; indeed, it seems to be generally near the bottom of a gravel that most implements occur; and hence they are found most abundantly where the gravel has been in great part removed by denudation.

* Since the visit of the Association, Mr. Bell has obtained several implements out of gravel taken from this pit, and has himself found one *in situ* near the bottom of the gravel.

On Limpsfield Common, Mr. Leveson Gower pointed out the remains of British tracks and embankments. Walking eastwards, and passing by other implement-yielding gravels, the party arrived at Westerham. Here tea was provided. Some Members went to London from Westerham, others returned up the Darent Valley to take the return train at Limpsfield.

REFERENCES.

- Geological Survey Map, Sheet 6.
 Ordnance Survey Map, New Series, Sheet 287.
 BELL, A. M.—'The Later Age of Stone, especially in connection with remains found near Limpsfield.' 8vo. Westerham, 1888.
 SPURRELL, F. C. J.—"A Sketch of the History of the Rivers and Denudation of West Kent," &c. 'Rep. W. Kent Nat. Hist. Soc.,' 1886, p. 53.
 TOPLEY, W.—"The Geology of the Weald," 'Mem. Geol. Survey,' 1875.

EXCURSION TO UPTON AND CHILTON.

SATURDAY, JULY 20TH.

Director: W. WHITAKER, F.R.S., F.G.S., of the Geological Survey.

(*Report by THE DIRECTOR.*)

The morning was so stormy in London that the President was almost alone in his journey down, being, however, joined by the Director at Reading. The unusually select character of the party enabled the whole to do more than the usual amount of walking, and in perfect comfort, the rain leaving off at the right time.

On reaching Upton Station the Members walked along the line, examining the long cutting, which for some way is in the Lower Chalk, with some peculiar hard beds, and then shows a great mass of freshwater Drift near Chilton. As the whole of these beds have been described in detail by Mr. Jukes-Browne, in a paper written expressly with a view to this Excursion,* it is needless to say more here.

There being plenty of time disposable, the party walked up

* 'Proc. Geol. Assoc.,' Vol. xi, No. 4, pp. 198-209.