EXCURSION TO FELDAY, HOLMBURY HILL, AND THE HURTWOOD.

JUNE 20TH, 1903.

Director: R. S. HERRIES, M.A., F.G.S.

Excursion Secretary: E. W. SKEATS, D.Sc., F.G.S.

(Report by THE DIRECTOR.)

The day turned out fine after an unpromising morning, but as it followed a week of almost continuous rain, of a character hitherto unrecorded in or near London during the summer months, only a small number of members assembled at Charing Cross for the 9.24 train. On arrival at Gomshall Station at 10.59 the fine section of Folkestone Sands in the adjoining railway cutting was pointed out.

Avoiding the field-paths as too wet, the party proceeded by road through Abinger Hammer, beyond which the pebbly-series associated with the Bargate Beds was seen by the side of the road. Turning south at Crossways Farm the gravel pit visited by the Association on the excursion to Abinger, under the leadership of Mr. Leighton, was inspected (Proc. Geol. Assoc., This is a gravel of the existing River vol. xiii, p. 163). Tillingbourne, and is noticeable for being composed almost entirely of greensand materials, chalk-flints being very scarce. Proceeding to Raikes Farm, the steep and deeply-cut lane, known as Raikes Hollow, was descended, and the fine sections afforded by the sides were examined. These were fully described by Mr. Leighton in the report of the excursion already mentioned, suffice it to say that the Bargate Beds are probably represented in the upper part of the section, and the sandstones of the undisputed Hythe Beds in the lower part. The road was continued up the valley towards Felday (now officially called Holmbury St. Mary), and shortly before reaching the village a cart road was followed up the hill on the west side of the valley to a stone quarry, where the beds worked consist of sandstones and sandy partings, quite unfossiliferous. This is the southern character of the Hythe Beds in this district, and though little or no chert was seen in this quarry the beds are otherwise similar to those at Leith Hill and those seen later in the day at Holmbury Hill and Pitch Hill. The exact relationship of these beds to those in the more northerly part of this district, where so wide an area is occupied by the lower greensand, is difficult to determine, but they would seem to be lower than the beds at Raikes Hollow, and farther west, near Chilworth, Dr. Gregory considered that he had established a succession (Proc. Geol. Assoc., vol. xiv, p. 120). PROC. G OL. ASSOC., VOL. XVIII, PARTS 5 AND 6, 1904.]

From this point a good view was obtained of the deep ravine in which Felday is situated, one of a series of parallel valleys cutting through the beds on the dip-slope side, down to the Atherfield Clay. This latter was formerly worked for bricks in Felday, but the sections are now grown over. Descending to the village a brief halt was made for luncheon, and then the party turned up a small cross valley to the right which brought them up on to the open common, whence the ancient camp on the top of Holmbury Hill was soon reached. Though not quite so high as its immediate neighbour, Leith Hill, the tower on which was conspicuous on the left, across the head of the Felday valley, the view from this hill of the South Downs and intervening Weald country is very fine on a clear day; to-day the atmosphere was still too thick to admit of much detail being seen, and the outline of the South Downs could only just be made out. Some sections in old sandstone quarries on the escarpment were examined, the character of the rock being similar to that seen above Felday, but with rather more chert.

The party then came down the escarpment side of the hill, and walked westwards across the head of the Peaslake valley, another of the parallel ravines already alluded to, and passed over the outcrop of the Weald Clay under Pitch Hill. One of the large sand pits was examined which forms the base of this hill, the structure of which is described under the name of Coneyhurst Hill in the Geological Survey Memoir "The Geology of the Weald," p. 121. The Director stated that similar thick beds of sand underlie the harder beds of Holmbury Hill, as may be seen in the Peaslake valley and at Felday.

Proceeding round the hill, the extensive sandstone quarries which overlie the sands were entered, and the thick beds of chert, alternating with the courses of sandstone, were pointed out. So far as the Director knew there were no fossils except fragments of wood to be found in these beds.

The road northwards towards Shere was then taken, and the same beds, with layers of chert, were again seen in the road-side section near Hound House. Just before reaching the railway, the Folkestone Sands come on, and they are well seen in the railway cutting through Shere Heath resting on the Hythe Beds. At Drydown, close to this cutting, Miss Augusta Spottiswoode welcomed the party most hospitably, and gave them a very much appreciated tea.

The members afterwards proceeded to Gomshall Station by way of Shere village, and returned to London by the 6.59 train.

REFERENCES.

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EXCURSION TO DUNTON GREEN AND SEVENOAKS.

JUNE 27TH, 1903.

Director: P. A. B. MARTIN, F.G.S.

Excursion Secretary: E. W. SKEATS, D.Sc., F.G.S.

(Report by THE EXCURSION SECRETARY.)

THE party, about twenty-five in number, first examined the gault pit just south of Dunton Green Station. The section, which has been often described, showed the lower part of the Upper Gault and the top of the Lower Gault. About 12-15 feet of the latter was exposed. The condition of the pit was not very favourable for examination owing to the recent heavy rains. A large number of fossils, including crabs and reptilian vertebræ, besides the common gault fauna, have, from time to time, been found in the section. On this visit some of the commoner forms were found in considerable abundance, and a band of phosphatised and pyritised nodules was very conspicuous. In one part of the pit the top of the section consisted of a capping of 5 or 6 feet of re-sorted gault. This was curiously inclined, and had at its base a thin band of gravel separating it from the gault which was in sitû. Some time was spent in the pit, and then the party walked across some fields to an exposure of the Folkestone sands near Bradbourne. After a short examination of this section, a visit was paid to the quarry in the Kentish Rag (Hythe Beds) near the Sevenoaks tunnel and railway station. The beds were seen to be almost horizontal, and the contrast between the more resistant calcareous bands and the less consolidated siliceous beds has been emphasised by atmospheric erosion.

After tea the party was conducted through the picturesque scenery of Knole Park. Here were found surface indications of the local presence of the Sandgate Beds. The clay was not