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EXCURSION TO LEWES.

SATURDAY, JUNE 23RD, 1906.

Director : G. E. DIBLEY, F.G.S.*

(Report by THE DIRECTOR.)

THE party, numbering seven, arrived at Lewes in glorious midsummer weather, and proceeded to the pits at the eastern end of the town. The first two, locally known as the Navigation Pits, are situated in the *Micraster cor-anguinum*-zone. The dust and heat from the factory prevented the second being visited. At the southern end of the first pit a fine layer of subsequently formed tabular flint was noticed cutting the beds at about 40°.

A few yards farther to the east the celebrated Southerham Pit of Mantell exhibited features of special interest. Upon entering, the *Micraster cor-anguinum* beds revealed the same horizontality as in the former pits, but at about 100 ft. from the Lewes end the chalk dips northwards, which brings the lower beds up at nearly 30°, and thus exposes the whole of the *Holaster planus* and the greater part of the *Terebratulina gracilis*-zones.

A very interesting section in the *Holaster planus* chalk, formerly overgrown with ivy, had been specially cleared for the party through the kindness of the manager, Mr. Weller. This section had been noticed by Mr. Strahan,† and the particular band referred to in the programme consisted of an exceedingly hard layer 1 ft. 6 in. in thickness, very like the Chalk Rock. Overlying this is the band of distinctly phosphatic chalk of Mr. Strahan. Samples were taken, but only one fossil—a fragment of *H. planus*—was discovered. A few hundred yards to the south-east, owing to the rapid dip, a pit was reached revealing Lower Chalk. The Director had observed a large Ammonite the previous evening, but owing to extensive blasting operations just prior to the entrance of the party it had been obscured by the débris. The Director and certain members have much cause to be thankful, for just before leaving the pit an enormous mass of

* Owing to the unfortunate indisposition of Mr. C. Davies Sherborn, F.G.S., F.Z.S., who had arranged for this excursion, it was undertaken, at his request, by G. E. D.

† “On a Phosphatic Chalk with *Holaster planus* at Lewes,” *Quart. Journ. Geol. Soc.*, vol. lii, p. 463.

chalk weighing many hundreds of tons fell where only a very short time previously they had been exploring.

At the southern end of the pit the beds are distinctly observed to dip again to the south, which readily accounts for the position of the beds on the other side of the valley—visited by the Director earlier in the morning—and for the position of the *Marsupite* and *Bel. quadratus*-zones at Seaford, only a few miles distant.

After a short walk and climb, lunch was taken on the edge of a lynchett amid delightful surroundings.

A move was then made to Ranscombe Pit, which is a large excavation of about 200 ft. exposure, situated in the *Rhynchonella cuvieri*, *T. gracilis*, and, in all probability, part of the *H. planus*-zone. Specimens of *Spondylus spinosus*—the flattened form—*Inoceramus cuvieri*, a tooth of *Ptychodus mammillaris*, all indicative of this horizon, and a tooth of *Notidanus microdon* were obtained by the Director.

Evidently the beds near here have been much folded to allow of the exposure of these zones, as the pit visited just before is in Lower Chalk.

Upon leaving this pit, a few yards down the tramway, Mr. Whitaker drew attention to the luxuriant vegetation and somewhat moist character of the soil, which evidently marked the site of the *Actinocamax plena*, March. (The entrance to this pit is through a farmyard on the left side of the Glynde Road.)

The map indicated Lower Chalk at this horizon, which line when carried across the valley brings one to the pits in Lower Chalk. In the Glynde Pit, which was next visited, an interesting oblique seam of weathered pyrites, extending from summit to base in the north-east corner, was pointed out by Mr. Whitaker. A few of the typical fossils of the *Holaster subglobosus*-zone were obtained, comprising *H. subglobosus*, *Pecten beaveri*, a cast of *solarium*, a tooth of *Ptychodus decurrens*; and a large specimen of *Discoidea cylindrica* was given to the Director the previous evening by Miss Wynn, who kindly allowed an inspection of her collection.

After an interval for refreshments the party (a truly enthusiastic one of *veteran* geologists, four of the members being seventy years of age and upwards), proceeded by the path over the downs to Glyndebourne Pit, which consisted of beds—apparently by their lithological character and position—wholly in *R. cuvieri* and *T. gracilis* chalk. Unfortunately no fossils of any zonal value were procured. Several beautiful coombes were passed during the ramble, but at this point the Glynde Bourne is specially noteworthy, the source and course of the bourne being distinctly visible. Time did not permit for a visit to the Malling Pit, which consists of chalk of *H. planus* and *T. gracilis* age as mentioned in the circular.

An exceedingly pleasant walk over the downs by Cliffe Hill

to the head of The Coombe and then along the northern slope into Lewes, where tea was served at Messrs. Paravaceni's, brought a very enjoyable day to a close, the members returning by the 8.27 p.m. train.

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EXCURSION TO SHERE AND ALBURY.

SATURDAY, JUNE 30TH, 1906.

Director: THE PRESIDENT (R. S. HERRIES, M.A., V.P.G.S.).

Excursion Secretary: A. C. YOUNG.

(*Report by THE DIRECTOR.*)

THE party left Cannon Street by the 1.2 p.m. train, arriving at Gomshall at 2.34, where it mustered 34. The well-known section of false-bedded Folkestone Sands at the station was first examined, and the little capping of gravel pointed out. The members then walked westwards through Shere to Sherbourn Farm, where there is a chain of ponds just at the foot of the chalk, the uppermost of which is generally known as "The Silent Pool." The Director mentioned that the level of the water in the pool had a year or two ago sunk very low, and this had been locally attributed to the tapping of the chalk for water by the Woking Waterworks authorities on the other side of the escarpment. He did not think, however, that this could be the cause, and the fact that the pool was once more full seemed conclusive on this point. When the Director last visited the pool, about Christmas time, it was full, but the water was very thick and dirty-looking, but it was now quite clear. Mr. Whitaker confirmed the Director's view as to the impossibility of the Woking Waterworks affecting the level of the water in the pool. The level, he said, was no doubt dependent on the variation in the amount of rainfall from time to time. The down was then climbed to a quarry in Upper Chalk, which Mr. G. W. Young, who was present, believed to belong to the lower part of the zone of *Micraster cor-testudinarium*. Some fossils were