3. *On the Occurrence of the REMAINS of INSECTS in the TERTIARY CLAYS of DORSETSHIRE.* By the Rev. P. B. BRODIE, M.A., F.G.S.

THE Tertiary strata of sands and clays at Corfe in Dorsetshire, which have been for some time known to contain a numerous and interesting flora, have afforded a large collection of remains of plants, chiefly dicotyledonous leaves, to the researches of my cousin, W. R. Brodie, Esq., and my friend, the Rev. G. H. Austen. In addition to the plants, the former discovered a few small elytra of Coleopterous Insects which belong to the families *Curculionidæ* and *Buprestidæ*. Mr. Westwood, who has kindly examined them, states that they belong to the ordinary types of the existing fauna*. This discovery is the more interesting on account of the extreme rarity of any relics of Insects in our British Tertiaries; and it appears to be their first occurrence in this portion of the series, although Dr. Mantell, in his ‘Geology of the Isle of Wight,’ mentions that Mr. Webster had observed traces of Insects in the London Clay near Parkhurst†, but no description or figures are given. It should be observed that the Curculionideous elytron was obtained two or three feet below the leaf-bed, where leaves are comparatively scarce, but the other elytra were associated with the plants.

Mr. Prestwich informs me that he considers the Corfe clays and sands to belong, probably, to the lower part of the “Bagshot Sand,” but he does not feel quite confident as to their true position, which is rendered the more difficult to determine, from the apparent absence of the London and Mottled Clays in that district. The following section, in descending order, of one of the numerous clay-pits which are opened between Corfe and Wareham, is given in the Rev. Mr. Austen’s valuable monograph on “the Geology of the Isle of Purbeck and the South-west Coast of Hampshire‡” :—

	feet.
Bed of lignite, about	10
Grey clay with carbonized leaves	2
Yellow sandy clay with leaves	2
Ferruginous band, a few inches.	
White sand, about	30
Pipe-clay	11 to 14
Total.	58

Many varieties of leaves have been obtained from this pit, especially one very fine specimen belonging to a plant, apparently allied to the Date-palm, and others belonging to several species of Willows. The leaves are often of large size, and in a beautiful state of preservation,

* These interesting Insect-remains will be figured and described at some future opportunity.

† Geology of the Isle of Wight, p. 140.

‡ Pamphlet, 8vo. Blandford, 1852.

far more so than those which I obtained many years ago at Bournemouth*. A fine collection has been made by Mr. W. R. Brodie, and is now deposited in the Museum at Dorchester. It is to be regretted that this remnant of our Tertiary flora has not yet been figured or described, but there appears to be a considerable difficulty in determining the species. This, however, is more desirable, inasmuch as a large number of plants have been procured in different parts of the series, both above and below the London Clay, and, in many cases, they appear to belong to distinct groups.

In one of the pits in the neighbourhood of Corfe an unusually rich bed of pipe-clay has lately been found.

4. *On the GEOLOGY of LABUAN†.* By J. MOTLEY, Esq.

[Communicated by Sir H. De la Beche, F.G.S.]

[Abstract.]

THE Island of Labuan is composed of alternating beds of clays and sandstones, the former sometimes containing ironstone. Coal-seams are found in several places, and appear to be associated in groups. The principal beds of coal occur in the northern part of the island, between two ridges of sandstone hills, one of which, the most southerly and in some places upwards of 300 feet high, runs from the South Bluff of Tanjong Kubong (near the northern extremity of the island) in a S.S.W. direction to Luke Point on the western coast; and the second ridge, less regular, though at places higher than the first, commences a few hundred yards to the north of this Bluff, and runs parallel to the first ridge towards Heath Point. The beds dip conformably to the N.N.W., at angles varying from about 25° (at Tanjong Kubong) to about 70° (at Sawangan Pagar). The following is the succession of beds (in ascending series) seen in the cliffs at Tanjong Kubong, going northward from South Kubong Bluff:—

1. Blue shale, including many extremely thin layers of very argillaceous sandstone; with indistinct traces of shells‡:—probably 50 or 60 yards thick.	
2. Coarse white sandstone	feet. in.
10 0
3. Very coarse conglomerate of water-worn pebbles of quartz, coal, hard red sandstone, white sandstone, and hæmatite, cemented by siliceous oxide of iron.....	3 0
4. Sandstone	12 0
5. Coaly sandstone with quartz pebbles	4 0
6. White sandstone, with pebbles of coal, sandstone, and blue shale, the last still containing traces of fossil leaves	21 0
7. Hard reddish sandstone	1 6
8. Hard, close, white sandstone	9 6

* Proceedings of the Geological Society, vol. iii. p. 592.

† This paper has been printed in full in the 'Journal of the Indian Archipelago,' vol. vi. No. 10. October 1852.

‡ Fragments of shells, that apparently belong to one species of small bivalve, nearly orbicular, very thin, and smooth.