

displaced by the Glen Callum fault, and is itself cut by the Kainozoic intrusives. These consist of numerous north-north-east dolerite dykes and the large composite sill. The sill is normally of five sheets, arranged B A B A B (B=hypersthene dolerite, A=quartz-oligoclase-porphyry). The dolerite contains xenocrysts of quartz and oligoclase, due to admixture with the acid magma prior to intrusion, for the acid rock was intruded later and picked up xenoliths of the dolerite. At one point (four hundred yards north-west of Roinn Clumhach) the acid magma has pushed out beyond the protecting dolerite, and the consequent rapid cooling has given rise to a pitchstone-porphyry facies.

At Dunagoil can be seen a vitrified fort, while in one of the sea caves of the 50-ft. raised beach a kitchen midden has been excavated.

REFERENCES.

- Geol. Surv. Map, Sheets 21, 29.
N. Arran Mem., 1903.
 1915. SMELLIE.

VI.—THE KILPATRICK HILLS.

By G. W. TYRRELL, A.R.C.S., F.G.S.

Kilpatrick Hills.—In Western Glasgow is a famous Fossil Grove in the Victoria Park, Whiteinch, where trunks and roots of *Lepidodendron veltheimianum*, Sternb., are preserved in their original position. Further west, above Clydebank, rise the Kilpatrick Hills, a plateau built of terraced basalt lavas and mugearites (Cochno Hill). One of the vents may be seen at Black Loch. This vent is sealed by a plug of basalt of Craiglockhart type. South of these hills are the quartz-conglomerates of Douglas Muir at the base of the Carboniferous Limestone Series. The rocks near the Hurlet Limestone horizon may be examined in this district, where is also a very fine exposure of cup and ring markings near Auchnacraig.

REFERENCES.

- Geol. Surv. Map, Sheet 30.
 1897. A. GEIKIE.—"1911, Glasgow Memoir" (Map of Pre-Glacial Kelvin)
 1912. TYRRELL.—No. 2.
 1909. TYRRELL and MARTIN.