

GENERAL NOTES MADE DURING A VISIT TO MOUNT
SASSAFRAS, SHOALHAVEN DISTRICT, BY MESSRS.

R. ETHERIDGE JUNR., AND J. A. THORPE.

By R. ETHERIDGE, JUNR., Palæontologist to the Australian
Museum and Geological Survey of N. S. Wales.

THE following "Notes" were collected during a ten days' trip from Tarago, on the Cooma Branch of the Southern Railway to Mayfield, the residence of Mr. C. H. Roberts, J.P., on Boro Creek, a tributary of the Shoalhaven River, and thence to Mount Sassafras, in the Parish of Sassafras, County St. Vincent. The rapid movements of the party render the "Notes" but imperfect and tentative at the best, but as such, it is hoped they may be found of some service to future travellers in that district.

Geology.—Between Tarago and Mayfield the country is gently undulating, speaking generally, and but little rock is visible in place, the aspect of the ground, however, is that generally assumed by rocks of Silurian age, hidden by a surfacing of local drift or wash.

At Mayfield the configuration of the ground is more rugged, grits, greywackes, and altered mudstones being exposed along the flanks and summits of the ranges, and these I take to be without doubt of Silurian age. The average height of these ranges, taking the Mayfield Trigonometrical Station as an example, is about 500 feet above the flat, although of course some of the hills ascend to a much greater altitude.

Immediately opposite Mayfield Homestead pinkish ternary granite occurs in the creek bed, and is traceable along the alluvial flat for some little distance down the creek.

In the home paddock to the west of the homestead occurs a low hillock of ironstone. An opportunity did not permit of my ascertaining the precise relations of this deposit to the surrounding Silurian rocks. It may be a reef in them, or form a capping of Tertiary ironstone, unconformable to the former, and I am rather inclined to favour this view. In the Boro Creek, in a direct north-easterly line from this point occurs a highly altered white siliceous grit of a very remarkable character. The soil on the western side of the Boro Creek is of a very sandy nature, of that peculiar appearance assumed by drift derived from granite disintegration, and it is possible that a considerable area of that rock may be concealed here.

The track from Mayfield towards the Sassafras passes over much of this sandy country, extending as far as the crossing over the Boro Creek at Virginia Water, the residence of Mr. Peter Roberts. Here a fine alluvial flat has been formed. From this point onwards rough Silurian country is traversed as far as