

## THE COAL RESOURCES OF THE EAST AFRICA PROTECTORATE

COMPILED BY

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No important deposits of coal have yet been discovered in the East Africa Protectorate, but between Sumburu and Mackinnon Road on the Mombasa-Uganda railway, at a point about latitude  $4^{\circ} 13' N.$  and longitude  $39^{\circ} 15' E.$ , 53.3 miles inland from Kilindini, a mass of shaly coal has been found filling a pocket about two feet in diameter in a compact grey grit, interstratified with brown and grey shales and forming part of the Taru Grits of H. B. Maufe. These occur in a belt about twelve miles wide, parallel with the coast, and, where traversed by the railway, extend from the forty-first to the fifty-seventh mile from Kilindini. The coal is supposed to be a boulder derived from older beds. A boring sunk at Sumburu, near the summit of the Taru Grits, penetrated them to a depth of 500 feet, but did not reach the horizon at which the boulder occurred. No coal was found, but black carbonaceous shales and sandstone with "coaly specks" were met with. Maufe describes the Taru Grits as massive, current-bedded, feldspathic grits, formed of the materials composing the underlying gneiss, and states that they include obscure plant remains. He believes them to be of Karroo age. E. Fraas, who subsequently made a brief examination of the line of railway, and whose account of the geology of the region differs in many respects from that of Maufe, refers them to the Middle Dogger (Inferior Oolite).

Samples of the coal were examined at the Imperial Institute and found to be of inferior quality. An analysis gave 18.74 per cent. of volatile matter, including water, 30.01 per cent. of fixed carbon, and as much as 51.25 per cent. of ash.

Carbonaceous material has also been discovered near Mwele to the southwest of Mombasa (latitude  $3^{\circ} 41' N.$  and longitude  $39^{\circ} 22' E.$ ). It is black or brown on the weathered surface, but where fractured is a lustrous black. It does not soil the fingers. The structure is coarsely vesicular, with indications of woody structure. The material readily floats in water, its specific gravity being only 0.91, on account of its porosity. It burns without emitting a flame, and requires a fairly high temperature for ignition. It does not caking.

Two analyses made in the Scientific and Technical Department of the Imperial Institute gave the following results: