fortunately we have no knowledge of the year of their disappearance from Newnes but it was certainly prior to 1953.

## THE DEVELOPMENT OF THE OIL-WORKS AT NEWNES.

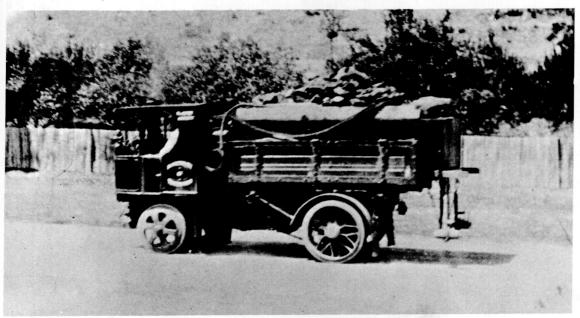
Competent geologists have expressed the opinion that the kerosene shale deposits of the Lower Capertee and Wolgan Valleys were undoubtedly the most extensive area of this basic material in New South Wales. When the leasehold rights were legally confirmed in 1906 the Commonwealth Oil Corporation immediately began driving adits into the outcrop in both valleys, the overall plan being that eventually the two tunnels would meet, thus giving easy communication between the workings. It was estimated the leases contained twenty million tons of proven oil shale, plus a presumable additional supply of thirty million tons. The shale proved exceptionally rich and averaged one hundred gallons of crude oil and twenty-eight pounds of sulphate of amonia to the ton.

The adit on the Capertee isde of the dividing mountain ridge was driven to a length of 2500 feet and then abandoned as it was found that there was a gradual thinning of the seam from about two feet at the outcrop to some eight inches in the far interior of the mine. Shale mining was now concentrated on the Newnes side of the dividing ridge where conditions at the end of the 1940 feet drive proved more favourable. Con-

sequently a new tunnel was driven about two miles further east at a place more convenient to the site of the future oil-works. Several other mines were excavated into the out-crop east of the No. 1 Tunnel.

Meanwhile the Wolgan River Valley in the vicinity of Newnes Township and east thereof became a hive of industry with the establishment of a smoky group of brick-making kilns, and the erection of a shale retorting bench, oil refinery, storage tank bays, power-house to generate electricity, together with the construction of the previously mentioned coke-works and its associated coal-mines. The crude-oil retorts and refinery were placed on the hill-slopes opposite to the shale adit. Unfortunately the retorts were based on an obsolete Scotch pattern which proved practically useless in the distillation of the rich shale and gave endless operational and maintenance troubles. The gas burnt inside the equipment before it reached the condensors, and at times exploded, endangering the lives of nearby employees.

During this expensive period of trial and error the sale of large quantities of metallurgical coke and "export" shale, together with the profits gained from the oil-works at Hartley Vale and New Hartley (Torbane) provided regular, though insufficient, income. Another detrimental factor was the consistent price undercutting in a relentless trade war sponsored by oil-importing interests, designed to force the local oil industry out of business. A prolonged industrial dispute at Newnes, which lasted for some six months during 1909,



A steam driven oil tanker reputedly delivering Newnes oil at Lithgow.