

by hydraulic stowage. It would be difficult, if not impossible, to use these methods of working in the older sections of the mine, and the introduction of hydraulic stowage is dependent upon sections being specially developed with this practice in view.

At the present time there is a loss of coal from some of our opencast mining operations where thin rider seams occur separated from the main seam by dirt bands. In order to make a higher percentage of recovery of coal from such seams, some form of coal washing is necessary, and arrangements have been made with the Mineral Dressing Laboratory of the Otago School of Mines to test samples from these mines by various washing methods.

A problem that is occasioning concern at the present time is the difficulty of pillar-extraction in thick seams due to mining operations being confined in many cases to a single shift. A high degree of extraction is not possible under this arrangement, as pillars are apt to crush as they take weight, the coal take fire, and the section of the mine affected must then be sealed off. The more rapidly the pillar can be extracted the greater will be the proportion of coal recovered. While confinement of operations to a single shift has much to commend it as a matter of general principle, it is desirable that pillar extraction, once it is commenced, be completed as quickly as possible. This fact is appreciated by the miners, and it does not seem impossible that recognition will be given by the unions concerned in agreeing to work at least double shift while on this class of work.

During the year the undertaking of Taupiri Coal-mines, Ltd., was purchased by the State. Six other smaller properties were also purchased, two for development by opencast methods and two for the protection and proper working of contiguous coal areas. The remaining two will be worked as State coal-mines and operations steadily expanded.

The most important development of the year as far as coal-mining is concerned was the passing of the Coal Act, 1948.

The Act vested all privately-owned coal, together with the rights or servitudes annexed to the coal, in the Crown as from 1st April, 1949.

As in England when by virtue of the Coal Act, 1938, the coal was acquired by the Crown, compensation to the owners is to be paid out of a "global" sum determined by reference to the average royalty and rent income. In this country the "global" sum is fixed by taking fifteen years' purchase of the average royalty and rent income obtained from the privately-owned coal and associated rights in respect of the calendar years 1941 to 1947.

The Coal Valuation Commission, which consists of —

Deputy Judge O. G. Stevens (Chairman),

Hon. T. O. Bishop, M.L.C.,

Mr. G. Duggan,

Mr. J. S. Jack, and

Mr. D. H. Steen,

is charged with the responsibility of assessing the value of the coal and servitudes which in terms of the Coal Act, 1948, have been vested in the Crown and of paying the various claimants out of the "global" sum.

The Coal Act also provides for the granting of coal-mining rights to owners and lessees who on the passing of the Act were carrying on coal-mining operations on the privately-owned lands. Section 42 of the Act cancelled the private leases and other contracts, but in their place authorized the granting, on notice to the Under-Secretary of Mines and on application to the Warden or the Commissioner of Crown Lands, of coal-mining rights under the provisions of Part I of the Coal-mines Act, 1925, on terms which were not more onerous or less advantageous than those previously held.