6. THE ORGANIZATION OF THE DISTRIBUTION OF COAL.

The great bulk of the coal disposed of is sold by the mines wholesale, the companies arranging contracts, as with gasworks, shipping companies, the railway, &c., or selling either directly or through agents to merchants or other purchasers f.o.b. or f.o.r. In only a few cases does the coal company retail part of its own coal, the Westport Coal Company, the Blackball Coal Company, the Pukemiro Collicries, and the State mines being the chief examples. The coal is in each instance graded according to size as it comes off the mine screening plant, the selling-price varying with the grade. In the majority of cases there are only three or four grades—viz., house or best screened; steam-coal (of smaller size); slack or small; and through coal or the run of the mine (the coal as it comes from the working-face). It has already been noted that the small coal is difficult to sell; the price obtained for it is low and inelastic; and as it costs the same to mine as the large coal, much of any increase in the cost of mining must be borne by the grades other than small, for which the demand is less elastic. In many of the mines a very great amount of small coal is absolutely wasted for lack of a market.

The freight charges from the mine to the merchant's depot are usually paid by the merchant. In some cases (the Westport, Blackball, Northern) the coal companies own colliers that carry part of their own coal, but in general the coal is transported by carriers separate from the mining companies. The impossibility of the mines obtaining the controlling interest in the internal means of transport in New Zealand has been a third powerful obstacle to the growth of monopoly in mining.

The process of distribution to each of the chief consuming centres is described in detail in Chapter III. Only the most general features need mention here. At some of the West Coast mines the coal is stored in bins whilst waiting shipment. It is run down to the wharves in railway-hoppers carrying about $8\frac{1}{2}$ tons, which are lifted over the steamer's hold and emptied by automatic opening of the lower part, and then replaced on the body of the truck. At the port of arrival, discharge may be into either hulks, or trucks, or drays, by the slow sling process. In most cases the retailer carts from ship or truck, as the case may be, to his yard, loose or bagged. In his yard the loose coal is trimmed, screened, and bagged, after which it is carted to the consumer. Cartage is mostly by horse and dray. The wholesale merchants have contracts with large consumers requiring coal all the year round for industrial or semi-industrial purposes, and in most cases they also compete as retailers for the house trade. In very few cases is the business of a coal merchant or retailer restricted to dealing in coal; it extends usually to other forms of fuel, to general carrying, and to produce. In only two or three cases is the distribution of coal undertaken by a co-operative society.

7. SOME CHARACTERISTIC FEATURES OF COAL AND THE COAL TRADE.

Before passing on to the main topics of costs of production, prices, profits, and earnings, we should mention certain leading acts regarding coal itself, and the trade in it, that must be borne in mind in considering these subjects.

(i.) In the first place the definition of "coal" is not so clear as it appears at first sight. When the "man in the street" talks of coal, he has in mind the coal he burns at home in the range and grate; but this is only one out of many "coals," several of which are used for the same purpose he has in view. There are the coals differentiated according to chemical composition—anthracite or semi-anthracite; bituminous; semi-bituminous, glance, pitch; brown; and the lignites; and these are in reality, from the economic standpoint, different commodities. But in addition there are the imported coals; and, in respect of nearly every class of coal as defined, there are the further distinctions alluded to in the previous section between large coal, steam-coal, through coal, and small coal or slack. These classifications or grades of coal may be combined in all possible ways. It should therefore be recognized that before any deduction be drawn from the mention of "coal," inquiry must be made as to the precise thing meant. From some mines seven or eight kinds of coal are obtained. These have all different uses, though, with relative prices changing, one may be substituted for another. The demand for them is of varying elasticity, elasticity of demand being measured by the degree to which it changes for a given alteration in price.

(ii.) Comparison of the prices of "coal" cannot be trustworthy unless the facts under (i) are taken into consideration. But when comparing prices at one date with those of another we must further ascertain whether there has been any change in the nature of the particular kind of coal in question. For example, the house coal of 1918 in many localities was different from the house coal of 1915 or 1916, even though from the same mine, because of the omission of the second screening in the dealer's depot, thus resulting in a much larger proportion of small. In comparing prices it is also necessary to ascertain any alterations in quality, or in the amount of discount allowed, or in the arrangements as to who shall pay carriage or incidental charges.

(iii.) The New Zealand coals are peculiarly friable, breaking easily at every handling. Some are so friable that they cannot be screened with profit. It is therefore necessary to reduce handling to the minimum, from the desire both to keep down cost and to preserve the quality of the coal. If, for example, a certain coal is screened at the mine, it may yield 40 per cent. large and 60 per cent. small. The large, after being handled *en route* to market, when screened in a dealer's yard may yield 15 to 20 per cent. of small.

(iv.) The high water-content of many of our coals unfits them for storing anywhere for any appreciable period except in the mine itself. The best brown coal will not last even under cover from four to six months without very considerable waste. Consequently, even when production is abundant, the stock of such coal in existence at a given date can never be a large proportion of the total amount