

## A RETAIL COAL HANDLING PLANT ON THE PACIFIC COAST.

From time to time articles have appeared in the technical press dealing with the getting of coal. It is proposed here to discuss its handling after leaving the mine and before it reaches the consumer.

The coal here considered is mined at South Wellington, Vancouver Island. It is a semi-bituminous coal and very friable. An analysis of a sample of screenings from this coal follows:—

	%
Moisture .....	2.0
Volatile combustible matter .....	35.10
Fixed carbon .....	43.6
Ash .....	18.5
Sulphur .....	0.8

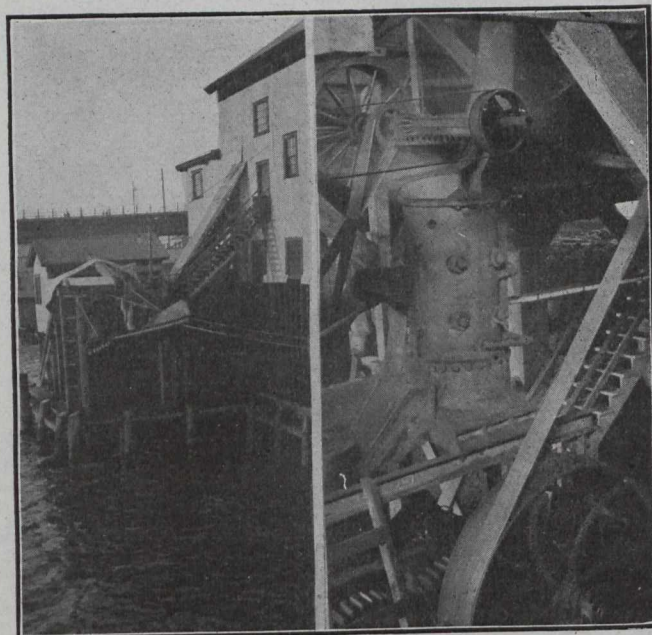
100.0

The coal is mined by means of coal cutting machines whilst the use of powder is being discontinued.

After arrival at the surface the coal is screened and picked, the screenings going to an independent screening and washing plant. The lump coal only as thus screened is dealt with in this article. The lump coal is delivered into railway cars straight from the screens, whence it travels seven or eight miles to the coast, where it is discharged from a trestle through chutes on to a belt conveyer, which carries it direct to a scow, passing over a weighing machine on the way.

Owing to the range of the tide (which is about 12 ft.); at low tide the depth from end of conveyer to deck of scow is about 20 ft. These two drops break up the coal considerably as the trestle is set high enough to take the screenings through the washing plant. The scows are towed about 55

Now the scow is brought up and made fast at end of wharf as shown in plan, the adjustable slip is lowered on to side boards of scow and the peak of the coal (coal is heaped on the scow from 10 to 12 ft. deep) taken off. The slip is then lowered to deck of scow end boards removed, and the

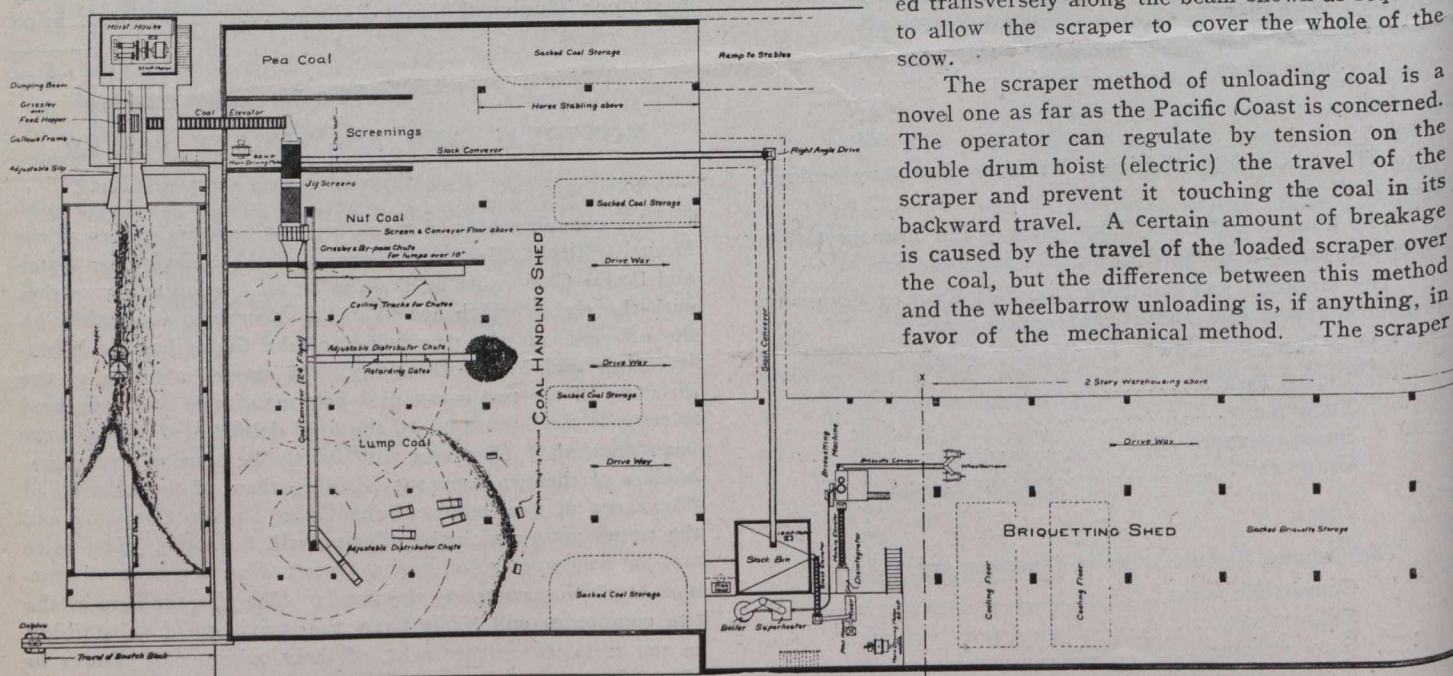


Slip for Unloading Coal on False Creek.

Vertical Heater Over Briquetting Plant.

remainder of the coal scraped off except a little in each corner near the slip. The scow is then turned end for end to permit of the remainder being removed. The operation can easily be followed from the plan, the snatch block being moved transversely along the beam shown as required to allow the scraper to cover the whole of the scow.

The scraper method of unloading coal is a novel one as far as the Pacific Coast is concerned. The operator can regulate by tension on the double drum hoist (electric) the travel of the scraper and prevent it touching the coal in its backward travel. A certain amount of breakage is caused by the travel of the loaded scraper over the coal, but the difference between this method and the wheelbarrow unloading is, if anything, in favor of the mechanical method. The scraper



Diagrammatic Plan of Coal Handling Plant With

Auxiliary Briquetting Plant on False Creek, Vancouver, B.C.

miles to Vancouver, the re-handling plant being located on False Creek, right in the heart of the city.

The requirements of the trade demand that lump coal be free from slack and delivered in 100 lb. sacks.

The method originally employed was to wheel by barrow from scow to pile in shed. It was then screened, sacked and weighed as required.

used is that patented by W. C. Weeks, and although designed for gravel handling, with minor alterations in the form of teeth, gives excellent results with the coal. It is so arranged as to dump at the rear end by running the hauling cable over a snatch block located over the grizzly.

The unloading of coal by this method has proved very economical, whilst the first cost is considerably below the