

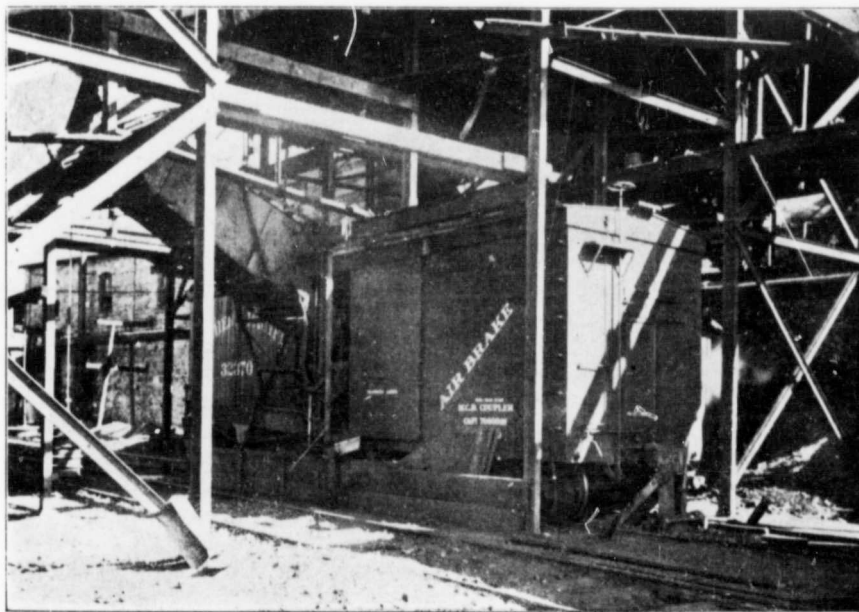
THE SMITH GRAVITY HYDRAULIC BOX CAR LOADER.

(By E. Jacobs.)

ONE of the most interesting features of the equipment of the Crow's Nest Pass Co.'s collieries, East Kootenay, is the Smith Gravity Hydraulic Box Car Loader, illustrations of which, showing a car in three different positions, accompany this description. It would be a decided advantage to many consumers of coal if there were no necessity for the use of any such contrivance, that is to say, if the companies owning the railways provided sufficient dump cars in which to ship coal instead of using by far the larger proportion of box and gondola cars for this purpose in British Columbia. It will be evident to any one giving

this connection have already been made to the railway company carrying most of the coke used in the interior of the Province, but for the time there are only box cars in use for carrying coke. Similar objections to the use of either gondola or box cars for the shipment of coal hold good, but since the quantity of coal used by mines and smelters is not nearly so large as that of coke the additional cost in unloading does not in the aggregate amount to anything like so high a sum of money. So long, however, as existing conditions shall be continued there will remain the necessity for the use of an expeditious and economical mechanical car loader, and this being so, the colliery owners will continue to seek the most efficient machine for this purpose.

The Smith Box Car Loader is the invention of the



No. 1.—Smith Gravity Hydraulic Box Car Loader.

the matter a little consideration that if it were practicable to use dump cars instead for the shipment of coal and coke from the collieries to the mines and smelters, a considerable saving would thereby be effected in the cost of unloading the fuel at the places to which it is delivered for consumption. In fact one of the serious difficulties the larger smelters are now facing, as they extend their operations and considerably increase their treatment capacity, is the excessive cost, in time as well as in money, of unloading coke from the box cars in which it is shipped, by the present very slow and expensive means of shovelling by hand, whereas if it were carried in dump cars the whole carload of 20 tons or thereabouts could be dumped in two or three minutes. Strong representations in

patentee, Mr. S. Kedzie Smith, C.E., well known at some of the larger collieries in the State of Washington, and now of Billings, Montana. Mr. Smith's device for loading box cars is both ingenious and thoroughly effective. It does its work quickly and can be operated by one man. It is singular in comparison with other mechanical loaders in that it provides for placing the car in the machine instead of the machine in the car as other contrivances previously invented do. In the operation of this loader the box car is run on to a tilting platform and securely locked thereon. The first of the illustrations shows a car on the platform before being tilted. As will be seen, the rails on the platform constitute a part of the railway track, and the empty cars are pushed on one at a time and