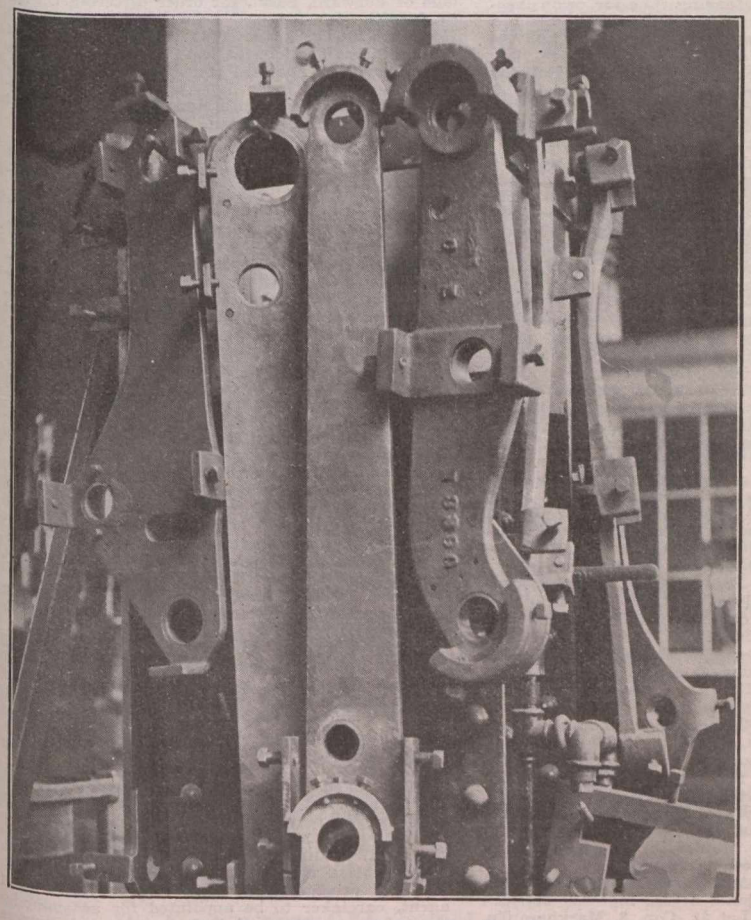
Coal Oil Storage Tank on Canadian Northern.

On account of the continual risk of accident incidental to the maintenance in sufficient quantities of inflammable oils at divisional points and terminals, it has been considered advisable by almost all good roads to develop a convenient and safe means of caring for this product, instead of allowing a multiplicity of oil cans to accumulate and be scattered around. The following arrangement is used by the Canadian Northern.

An old air brake reservoir forms the container, and is piped with air from the shop line, the oil intake being through a suitable funnel connection. The filling operation is carried out by closing the cut out valve near the reducer and opening the bleed cock, which permits the air to escape, allowing the whole of the reservoir to be filled with oil, after the cut out valve below the funnel has been opened. The reservoir being filled, it is only necessary to close the cut out valve below the funnel, open the one near the reducer and a good flow of oil will be obtained by opening the faucet. In closing down the system when tank is full of oil, it has been found advisable to shut off the reducing valve cut out, as well as the faucet, and open the bleed cock, which allows any accumulation of air to escape freely to the atmosphere. All piping and valves are located above the oil level, which makes it possible to avoid any leaking or dripping. The ½ in. supply pipe inserted inside of the reservoir is held in place by a ½ in. coupling, threaded at one end on the outside for ¾ in. The tank head, being threaded to suit, allows the whole to be inserted and held in place. The reducing valve is set at a pressure of 2 lbs. per sq. in. We are indebted to T. Clegg, Air Brake Foreman, C.N.R., Winnipeg, for the above information.

Small Rod Jigs in Grand Trunk Shops.

For most of the standard rocker arms, radius links, etc., used on the G.T.R. motive power, the company's shops at Stratford, Ont., have special drilling and reaming jigs. A number of these are shown suspended from a shop column in the accompanying illustration. They are made of either iron castings or steel forgings, with inserted hardened steel bushings at all the holes. In the jig, the article to be drilled or reamed is held and centred by various means, the principal one being by means of set screws in close proximity to the hole in the work, bearings against the work.



Jigs for Drilling and Reaming Rod Pin Holes.

Machining Hub Liners in Grand Trunk Shops.

The jig on which locomotive hub liners are machined at the G.T.R. shops, Stratford, Ont., is shown in the accompanying illustration. It is an old back cylinder cover, faced on the two ends to sit on the boring mill table, and receive the liner blank. There are 4 holes in the upper flange, corresponding to 4 stud holes that are drilled and tapped in the blank prior to the boring mill operation. By means of these the liners are held on the jig for facing and boring.

The Toronto University Engineering Society has 411 members on active military service.

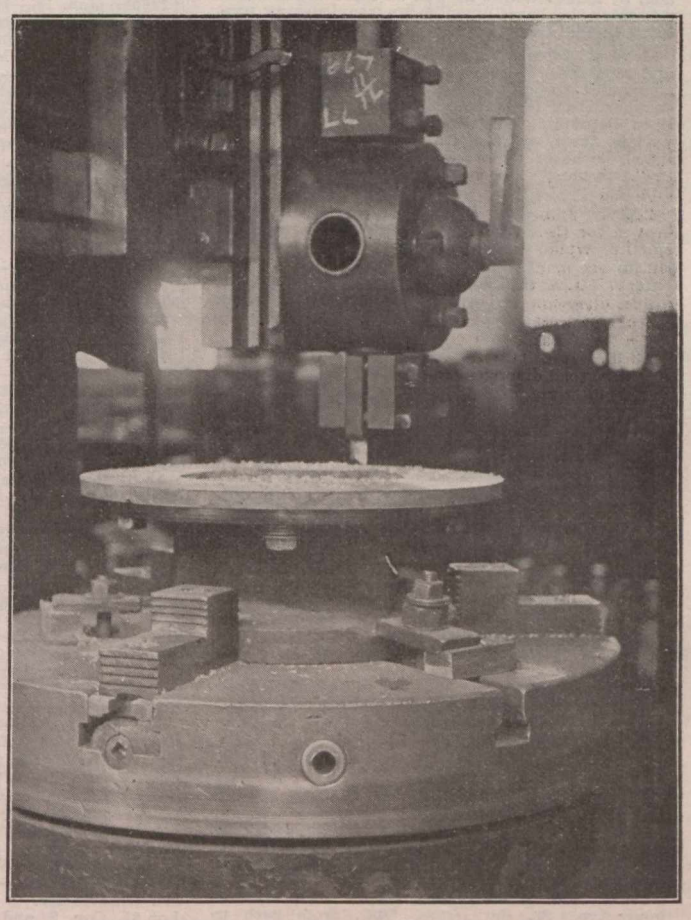
Russian Freight Rates.—It is announced that rates on grain traffic, except oats, between Russia and China, for export, have been considerably reduced.

Car Wheel Handling Truck on Canadian Pacific.

D. Condell, Car Foreman, Canadian Pacific Ry., Nelson, B.C., has built a unique car wheel handling truck, which, as far as the writer knows, is the only one of its kind in use. As illustrated herewith, it is composed of two small trucks of four wheels each. The lower or main truck runs along a narrow gauge track parallel with and between the main repair tracks, while the upper and smaller truck, which carries the wheels, is placed on a combined revolving table, track and telescoping track section. The latter is adjustable to different distances to be bridged from the truck to repair tracks.

When wheels are to be changed the wheel truck is run along the narrow gauge track until opposite the storage, where the table is turned around and the telescoping track section pulled out until it engages the main repair track. This is bridged by a separate section carried on the truck at all times. The upper truck is then moved along its track until opposite the storage. The storage being parallel with the repair tracks the truck can be run until it comes in line with the storage, where wheels can be placed on the truck with very little effort, the tracks being level with the truck. The truck and wheels are then returned to the main narrow gauge truck, track sections replaced, table turned round into position, and the truck run along its track until opposite the car requiring wheels. When in position the table is turned at right angles to the repair track and the operation of extending the track sections and running the upper truck into position on the repair track is repeated.

Two hardwood wedges, having boiler plate shoes to cover the track and hold



Jig for Machining Hub Liners in the Boring Mill.