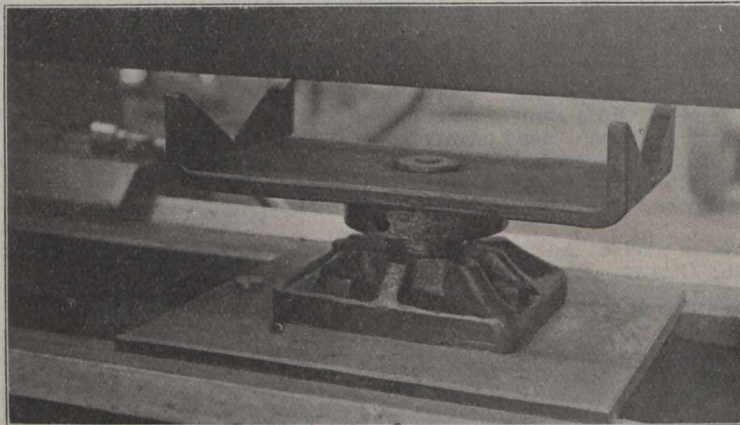


# Railway Mechanical Methods and Devices.

## Work Swivel on Lathe in Grand Trunk Railway Stratford Shops.

The swivel stand for swinging work end for end in the lathe, is in use in the G. T. R. shops at Stratford, Ont. A plate with ribs on the underside to guide it along the lathe ways, carries a screw jack base, through which there passes a screw jack. The top of the screw jack carries a V plate, which

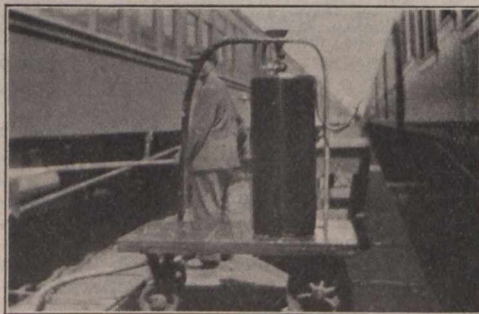


Work Swivel on Lathe.

can be raised up under the work to be turned. The customary practice is to screw the swivel up under the work while the latter is still between the centres, then unscrew the tailstock spindle and swing the work. From the lathe carriage there is a link connection, which may be fastened to the swivel base when it is desired to move the latter along the ways, the wheel of the latter making the moving very easy.

## Cleaning Canadian Pacific Railway Car Trucks at Glen Yards, Montreal.

Instead of cleaning passenger car trucks in the common manner with a pail and broom, J. C. Kenny, Car Foreman, Glen Yard, C. P. R., Montreal, has devised the arrangement shown in the accompanying illustrations for accomplishing the task in



Passenger Car Truck Cleaning Outfit.

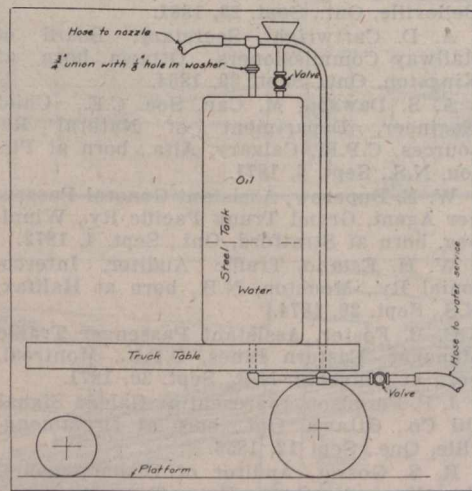
a fraction of the usual time. A steel cylinder, mounted on a truck for transportation through the yard, contains oil and water, the oil on account of its lower specific gravity floating on the water and occupying the upper portion of the cylinder. The tank is piped as shown, water entering at the bottom, a by pass leading up the outside of the tank and across the top, where a connection is made in the top of the tank for drawing off the oil. In this latter connection there is a

$\frac{3}{4}$  in. union, with a brass washer between, pierced with a  $\frac{1}{8}$  in. hole, through which the oil is drawn off from the tank. The water pressure on the bottom of the tank, acting in conjunction with the injector action of the water across the top of the tank, causes a steady flow of oil to leave the tank, water replacing the oil drawn off. This flow of oil mixes with the stream of water, which is directed on the truck to be cleaned, a special nozzle being employed. It is claimed for

the outfit that as much work can be performed in a day with it by one man as by 4 men working on the old bucket and broom method.

## Air Hose Connection Box in Grand Trunk Railway Car Repair Yards at Stratford.

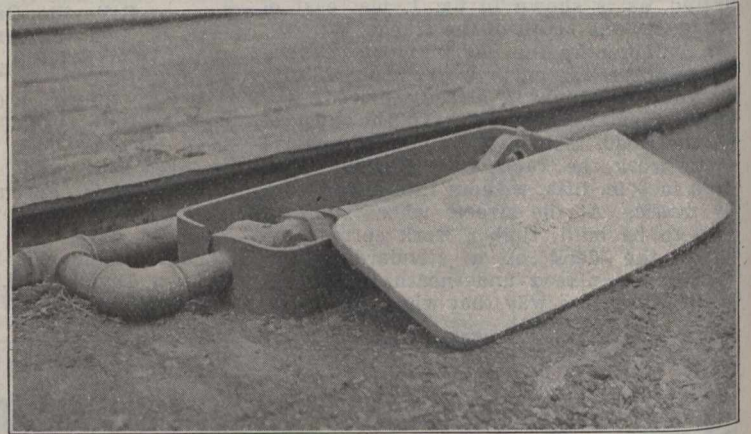
Nearly all the more important car repair yards of the different railway systems have air piped throughout the main trackage area for the use of the car repairers, operating



Passenger Car Truck Cleaning Outfit.

their tools, etc. This is usually done by running a pipe along the surface of the ground, with taps at intervals, with air hose connections at these points, usually at car length intervals. The G. T. R. car repair tracks at Stratford, Ont. have an air main along the full length of the main track. At each of the connections there is a special cast iron box with cover, as shown herewith, of sufficient size to cover valve and hose connection, making it to all practical pur-

cover has a slight flange around the edge to keep it in place. This arrangement is of great value in the winter when the connections become covered with snow and ice, as with this arrangement it is always possible to get at the air supply at any point in the yard. From the safety first standpoint it is also a very desirable feature, as the loose hose attached to the air main is a fruitful source of accident to trainmen when shunting cars, whereas the compact box does not

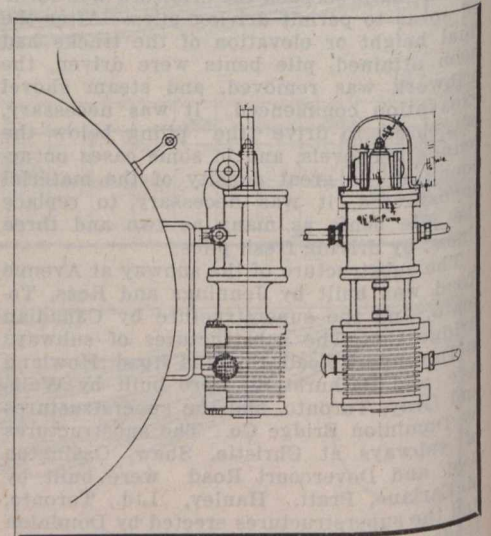


Air Hose Connection Box for Repair Yards.

poses impervious to the weather. The present is great a danger. Other G. T. R. yards are also equipped with the same box.

## Air Pump Lifting Yoke on Canadian Northern Railway.

The Canadian Northern Ry. mechanical department has adopted as standard the lifting yoke shown in the accompanying illustration. It consists of a  $\frac{1}{2} \times 2$  in. piece of



Air Pump Lifting Yoke.

bar iron, bent to a U shape, with right angle feet for attaching to the cylinder head by the latter's bolts. By this simple little device, one of the most awkward jobs encountered on locomotive house practice has been overcome, as it always proved an awkward task slinging the air pump up and down for a locomotive with the limited facilities to be had at such places. With this simple device it is now possible to raise or lower the pump with small loss of time for rigging up.