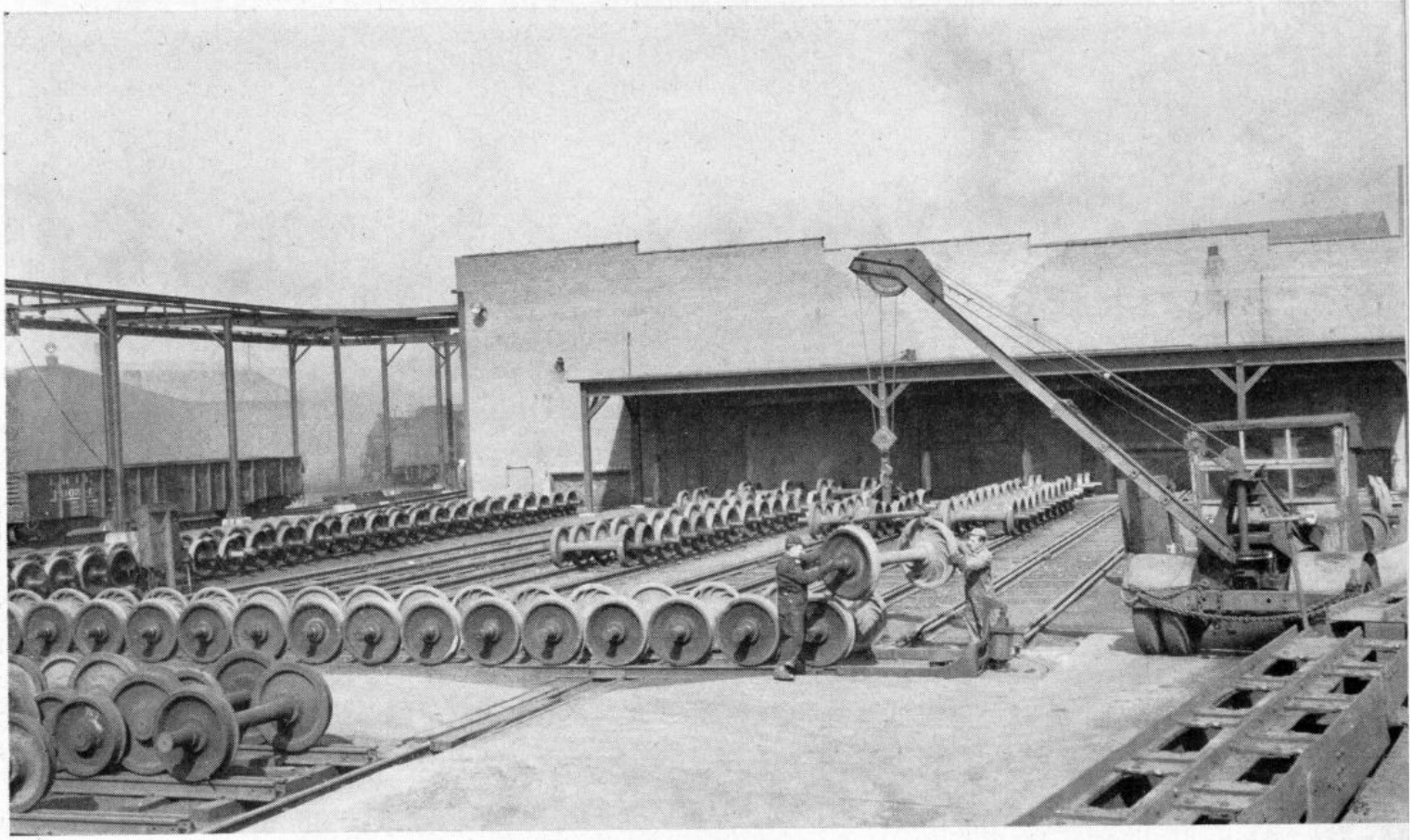


They still "Keep 'em Rolling" at

Meadville

Paul Seaman, machinist, testing car axles before they are fitted with wheels

By C. A. KOTHE,
Shop Superintendent
(retired)

MANY plants in the heart of industrial America served by the Erie Railroad displayed the slogan, "Keep 'em Rolling," during the war. The signs have disappeared in most places and the message is practically forgotten.

One of the few places where the words "Keep 'em Rolling" still have meaning is our wheel shop at Meadville, approximately in the middle of the Erie's main line between Chicago and New York. Hundreds of wheel pairs move through the plant every day in order to keep freight and pas-

sengers rolling between widely separated places.

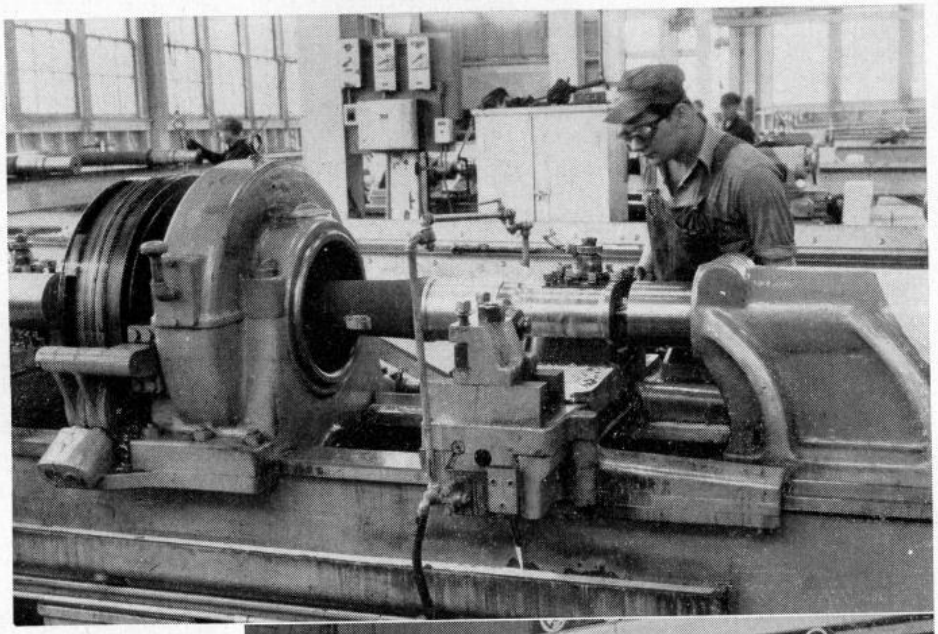
Converted from a segment of a roundhouse, the wheel shop was completed about 18 months ago. It is one of the most modern railroad wheel reconditioning plants in the world. Visitors from practically every railroad in the country have inspected the layout and equipment which were designed to enable employes to perform their duties efficiently, safely, accurately, and with the minimum of exertion.

The main line of production follows a huge loop from the arrival of defective wheel pairs until they depart in perfect condition. Modern handling equipment is strategically located to carry the work from machine to machine during the entire process.

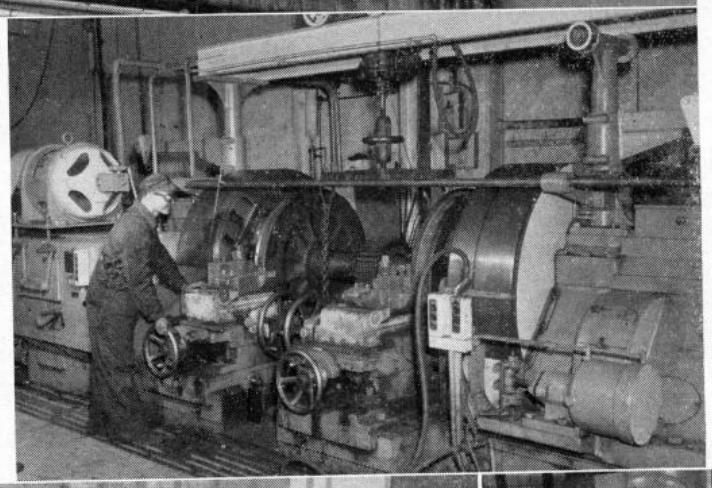
Arriving at Meadville in specially designed flat cars, the wheel pairs are unloaded by a mobile crane to incoming storage tracks equipped with automatic starters and turntables. Once inside the shop, wheels are immediately stripped from the axle and their courses separate.

Wheels found to be beyond the possibility of reconditioning are immediately placed in an automatically operated overhead conveyor which deposits them into waiting gondola cars. From here they are moved to the scrap plant for further disposition. Wheels scheduled for repairs are moved a few feet to lathes, or grinding or boring mills by means of specially adapted hand trucks.

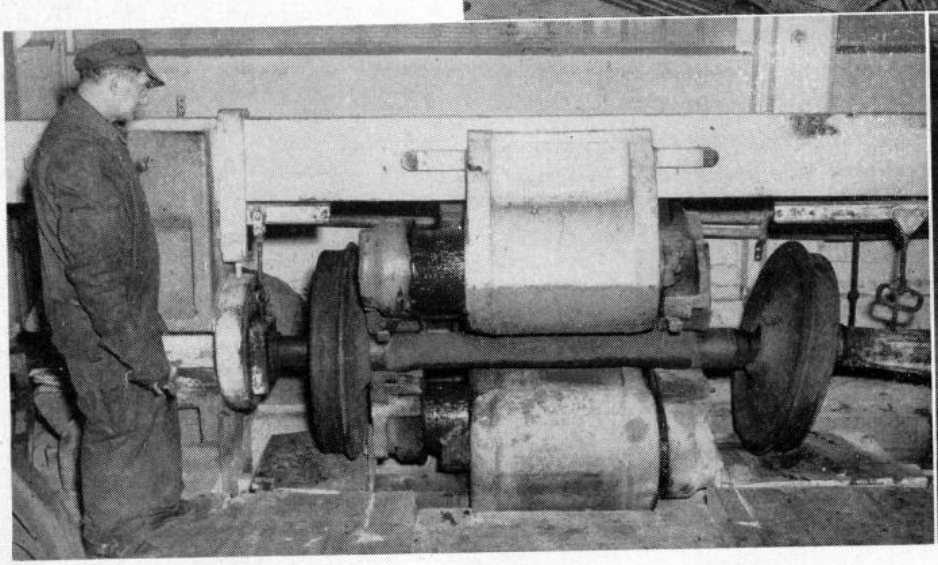
Scrap axles, those with readily apparent defects, are likewise removed from the plant automatically and placed on storage racks where they



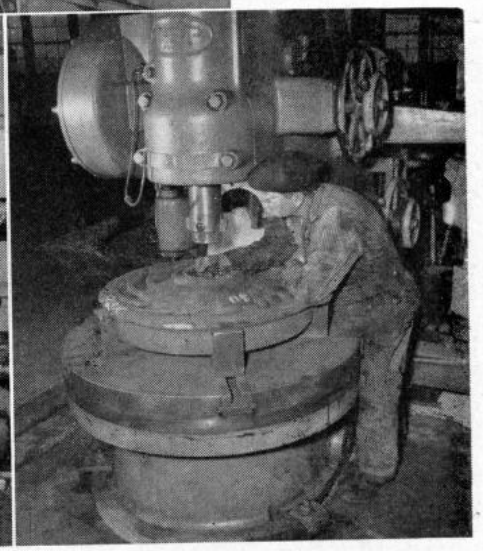
Carman Rich turning the axles on a lathe to fit new wheels. This is exacting work



On a wheel lathe, Fred Schwab, machinist, turns car wheels. Although it is large, the lathe is very accurate



Hydraulic pulling machine removes damaged car wheels from their axles. Machines painted in light colors give a neat touch to the shop



Willard E. Boyles boring car wheels to fit newly prepared axles

Wheel Shop *CONTINUED*

Left to right, Dominick A. Petruolo, Henry O. Schwab and Tony Pero distributing the car wheels and axles by hand truck after their separation

are accessible for loading into cars by the mobile crane.

Other axles are moved straight ahead by overhead traveling hoist to the cleaning and magnetic inspection department. Here, electric currents seek out hidden flaws which might be lurking within the axle, unseen by the naked eye. Following inspection, the axles roll forward on a rack to a turntable which changes the production course by 90 degrees.

Coming off the turntable, the approved and rejected axles are separated. Approved axles roll along the top level of a storage rack from where they can be lifted by jib hoist and placed into a lathe for reconditioning of their journals and wheel seats. In the case of a rejected axle, the inspector presses a button which opens a trap and the unwanted axle is lowered by an automatic elevator to a bottom rack. The rejects roll by gravity on the lower rack toward a door through which they are removed in quantities of four by a fork lift truck.

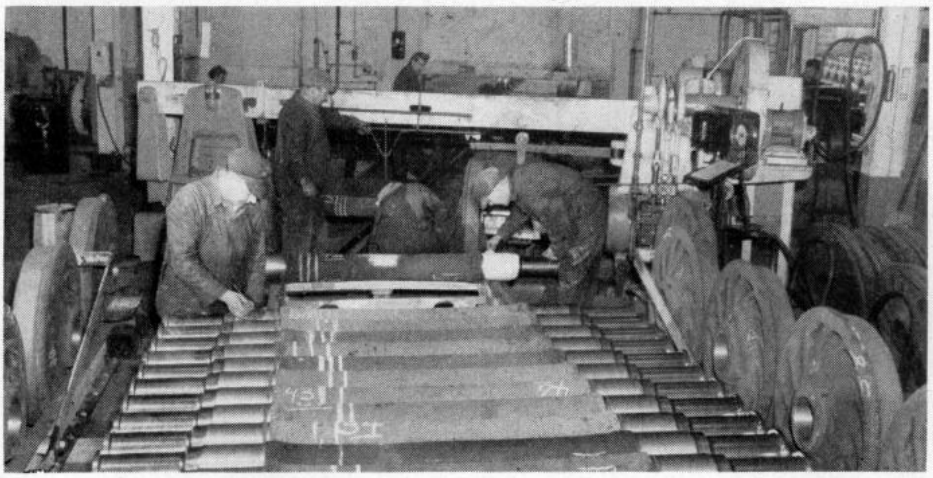
Reconditioned axles are lifted from the lathe by hoist and placed on another rack on which they travel toward the mounting press.

At the mounting press, the axles meet new or reconditioned wheels which have been matched for uniformity. Special dollies are used to place the axles and wheels into the press and perfect wheel pairs are again ready for installation on cars.

The wheel pairs are rolled out of the press and down a pair of sloping rails out of the building to the storage yard. The compact layout of the storage yard permits the same mobile crane which earlier unloaded the defective wheel pairs to load the reconditioned units in outgoing cars.

Several features have been devised to promote the safe handling of the work in process through the plant. Hook grabs used to move the axles by hoist have steel beads welded on the carrying surfaces to prevent slipping or turning of the material during transit. Forks of the lift truck are notched to hold the flanges of wheels during transfers from place to place. Pneumatic and electric limit switches have been installed in strategic places to stop movement of materials automatically and prevent machine damage and employe injury.

The streamlined production layout has a unique feature which promotes good housekeeping and contributes to safe and efficient operations. This feature is the provision for immediate removal of scrap material from the building. As was pointed out earlier, wheels are conveyed into gondolas without additional handling and axles are placed on an outdoor rack for removal by the mobile crane. The absence of accumulated scrap materials in aisles near machines contributes to free and safe movement by men and mobile equipment throughout the shop.



This is the assembly line at the Meadville wheel shop, for car wheels and axles before they are again fitted together for use on the railroad