

	Engine truck wh'ls.							
	No. 1.		No. 2.		No. 3.			
Diam. wheel finished...	34 $\frac{3}{4}$ in.		34 3-16 in.		34 11-16 in.		30 $\frac{1}{2}$ in.	
Diam. Wheel rough...	35 $\frac{1}{4}$ in.		34 15-16 in.		34 $\frac{1}{4}$ in.			
	Min.	Sec.	Min.	Sec.	Min.	Sec.	Min.	Sec.
Floor to chuck.....	1	5	2	6	1	18	1	2
Turning.....	17	8	16	2	18	17	13	55
Machine to floor....	1	2	1	17	..	50	..	4
Total time	19	47	18	45	19	85	15	15
Cutting speed ft.min	15	and	16	16	..	14	..	19

Time to change from turning tender to engine truck wheels, 6 min. 1 sec.

The operation of the machine during these tests was in the hands of William Anthony of the Reading shops of the Philadelphia and Reading Railroad.

In these tests the final finish was remarkably fine. There was not a trace of chatter to be found, and the surfaces of the treads were free from those fine cracks, extending down into

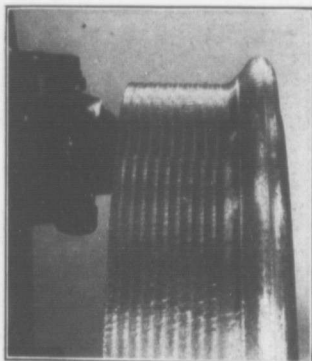


FIG. 6

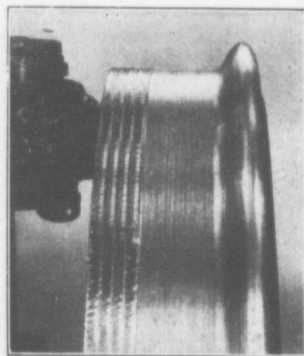


FIG. 7

the metal that are so characteristic of surfaces from which metal has been removed in heavy cuts at high speeds. The reproductions of photographs of these surfaces taken first after roughing and then after the finishing cut, show the effect very clearly. Fig. 4 is a worn wheel taken from service, mounted in the chuck. Fig. 5 shows the first operation completed. In Fig. 6 the next tool has roughly formed flange, and taken off large corners. Fig. 7 shows condition of wheel at the end of cut of third tool. Fig. 8 shows the wheel ready for service.

The method of procedure is the usual one. The wheels