

This looks like a giant hat-rack; actually the "hats" are engine domes in the depot at Swindon. They are stored here after being taken from old engines that have been scrapped.

In every locomotive shed of a great railway hangs a big blackboard, upon which is chalked the name of each driver and fireman coming on duty. Against each pair of names is recorded the number of the engine they are to drive, the place where it is to be found, and the trips it is to make.

In addition to all this, there are mysterious chalk marks against many of the engine-numbers, indicating to various gangs of workmen that certain tasks must be performed upon the selected locomotives, before the driver and fireman come on duty.

Perhaps some minor repair needs to be executed; or, more probable still, the monster needs to be cleaned.

Passenger engines are, as a rule, thoroughly "bathed" every day, whilst haulage or goods engines have to be content with a "weekly."
But whether the engine is "passenger" or "goods," the procedure of the cleaners varies little. First of all, they fix up a huge board marked "Not to Go," in order to protect themselves while at work. Until that board is expendist taken down the locomotive will remain stationary, for neither driver, fireman, nor anyone else has authority to interfer. Nor

## Before the Driver Comes

All about what happens before a railway engine leaves its "stable"

must any other locomotive or vehicle be brought near enough to cause movement by contact.

Operating in gangs of five, the cleaners start their gigantic task systematically, as is very necessary. Two of them tackle the boiler brasses, buffer-plant, and driving

wheel. Another takes the motion wheels, whilst the remaining two set about the sides, framing, coupling-rods, and running wheels.

After rubbing all dirt from the paint-work with a dry cloth, vaseline is applied by means of a sponge-cloth. Sometimes mineral oil is substituted for the vaseline, but its constant use blackens the paintwork, and on this account is not generally favoured.

Burnt and hardened dirt is removed by a judicious mixture of bathbrick and elbow-grease, and all steel parts are polished with emery paper and coated with vaseline.

On an average, each gang of five men will clean three engines per day, and the cost is, at the present time, slightly over three pounds, or one pound per engine. This, of course, includes the provision of the necessary materials, and it is interesting to note that upon each engine three to four pounds of mineral oil, four pounds of sponge cloth, one pound of vaseline, and a pound of emery paper is expended. The sponge cloths, however, are afterwards put through a process that compels them to restore some of the oil and vaseline!

Having thoroughly completed their task, the cleaners carefully rub from the engineboard that particular sign applicable to them, and proceed to tackle their next victim.

Whilst they are so employed, the boilerforeman notices the existence of another cryptic sign which orders the scouring of the

boiler.

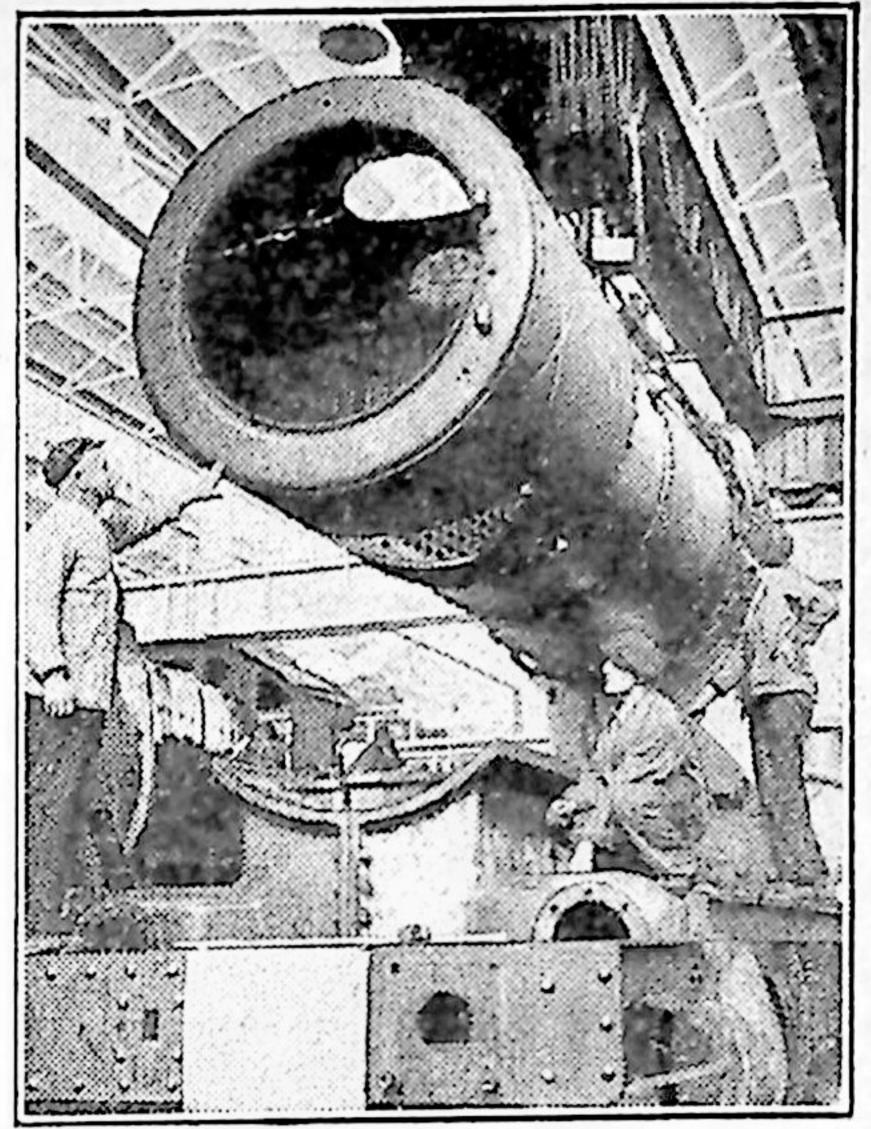
In some districts special men are employed on this job, the water being so full of impurities as to demand a "scour" after every long-distance run. Thick layers of rust and lime form on the inside, making the raising of steam more and more difficult, so that unless the residue is constantly scraped away, the task of the fireman becomes impossible.

Once the job is completed, another secret chalk-sign on the engine-board is deleted, and by the time the driver arrives there is nothing at all left opposite his name except the engine number, its hiding-place, and its

work.

Whilst the fire is being lit for him, and the boiler filled with water, our driver collects a supply of lubricating oil, a quantity of waste-cloths and dusters, one or two lamps, quite a number of tools, and, lastly, the key of the engine-locker.

He oils and trims the lamps, makes a careful examination of every detail of the locomotive



Here is shown a "surgical operation" on a G.W.R. express engine. The boiler has been lifted bodily from its bed.

mechanism, testing all the brakes and outlets. Then, by the time he has "coaled," the first trip will be about due.



This magnificent L.M.S. tank engine took part in the Railway Centenary at Darlington last year.