

the driver would be harassed more than ever.

The advocates of the system maintain that it should be used for special work, such as the guarding of the fastest expresses. It might be applied to distant signals, so as to distinguish them completely from the home signals; or, on the other hand, the steady light might be retained for the distant signal, and the flashlight restricted to the home and through station signals. In the latter event the driver, even if he overran the distant signal, would pick up the flashing home signal, and from a more distant point, so that he would be in a position to act more quickly, if the necessity arose, and with less risk of accident. Moreover, there would be another advantage in this application. In running through a busy junction, guarded possibly by forty lights, the driver would search only for the flashing lights. They would be installed for the protection of his road only, and therefore the task of watching for signals would be reduced very appreciably.

If used in this connection, running through the busiest and largest junctions would be facilitated, even if the main lines branched off into half-a-dozen different express tracks. Each road probably would have only two express tracks—one up and one down—so that only twelve lights would have to be installed—six facing either direction. Therefore the driver would only have to single out his particular flashing light from among six, instead of, as at present, detecting his particular green signal from forty or more fixed lights, many of which may be showing "line clear" intimation for different roads at one and the same time.

The "Aga" system, as that invented by Dr. Dalen is called, is absolutely automatic in its action, and is used in conjunction with acetylene gas. It is cheap, while a single charge is adequate for two months' working without attention. The light burns both night and day, so that

the signal is always lighted—a distinctive advantage in countries susceptible to fog visitations. The essential feature is the flasher, whereby the distinctive light characteristic is obtained. It comprises a small



PUTTING IN A FILLED ACCUMULATOR (OLD TYPE OF BOX).

reservoir, into which the gas flows from the accumulator, fitted with a burner. When this reservoir is charged a valve is opened by the gas pressure, and the charge of gas escapes to the burner, where it is ignited by the pilot flame. This flasher has been in use in connection with lighthouses, lightships, and buoys for many years past, so that its practicability, efficiency, and reliability are assured. The apparatus can be adapted to produce as many flashes per second as may be required. The complete installa-