

Filling in Trenches by Machinery

One man can back-fill the largest trench in the shortest possible time

THE two new vehicles shown in the illustrations below are designed to reduce the cost of back-filling trenches by eliminating shovelers, horse-drawn wagons or costly overhead cableways. The smaller of the two machines is intended for working on small trenches where the material to be back-filled is near the trench. The larger apparatus is equipped with a boom and an automatic scraper on the boom cable, so that one man operating the machine is sufficient to back-fill even the very largest trenches.

The special feature of the machines is that they are self-propelling and move along with the work as it progresses. The larger vehicle is equipped with caterpillar rear wheels to enable it to negotiate uneven ground. It has a low frame, with small wheels, and a low center of gravity to prevent it from tipping over when the boom is in use.

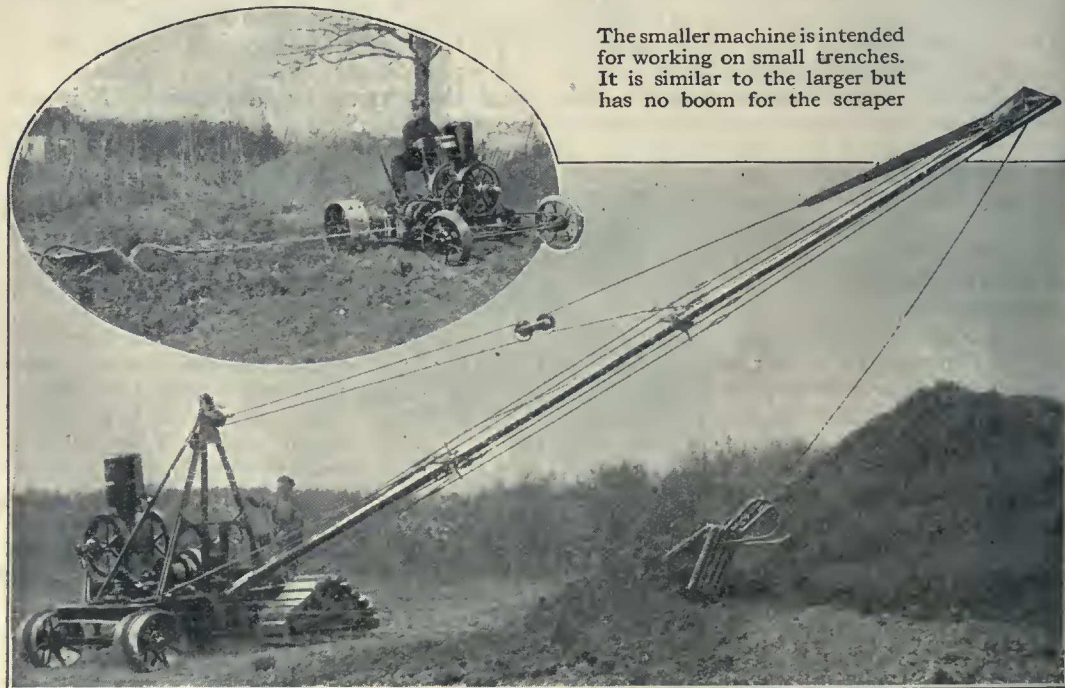
The boom telescopes, so that it can be adjusted in length to suit the work, and is fitted to swing around to the side of the machine while still attached. Hence the

vehicle can travel along streets or roads without the delay that would invariably be caused were it necessary to dismantle the boom each time the location of the work is changed.

A one-cylinder gasoline engine is used to propel the apparatus and to operate the boom cable. One man is sufficient to run both the machine and the scraper. The scraper is pulled from the dirt-pile to the trench by means of a rope over the boom; it is brought back to position for the next load by a second cable on the back of the scraper.

The smaller machine is similar to the larger, except that it has no boom and requires the services of a second man to pull the empty scraper back into position for loading.

Equipped with the caterpillar-tread the machine can approach the very edge of a trench without causing a cave-in, or it can work in soft ground or in a plowed field with comparative ease. It is preferred to the larger machine for small jobs and is, of course, less expensive.



The smaller machine is intended for working on small trenches. It is similar to the larger but has no boom for the scraper

A one-cylinder gasoline engine is used to propel the apparatus and to operate the boom cable which pulls the scraper to and from the trench. One man can run both machine and scraper