

This Hart-Parr Drive Wheel Unbroken By A Pile Driver Blow Of 216,000 Pounds

The drive wheels on our small, light oil tractor are not built as we once might have built them, and as other manufacturers of small tractors still build them.

Painstaking experiments and rigid tests showed us the fallacy of trying to make any built up wheel do efficient reliable duty on a small tractor. For the drive wheels must be light to keep down weight, and still be strong enough to stand up under the constant, racking strains of every-day field service. And so, before we even offered our small tractor for sale, we experimented, at our own expense, and discarded the various drive wheels commonly used, and which other tractor builders still cling to.

How Hart-Parr Drive Wheels Are Built

The drive wheels on the small, light Hart-Parr Oil Tractor are Solid Steel Castings—not built up or pieced. Casting them of tough steel does away with hundreds of small parts and insures lightest weight, yet greatest strength. Moreover, these drive wheels are cast with our wonderful, self-cleaning wave form lugs, which afford a bull dog grip on soft ground, but do not injuriously pack the soil. No built up drivers on a small tractor combine all these vital, necessary features.

Hub Undented By A 216,000 Pound Blow

One of these steel drive wheels was picked at random from a batch of 50 or more, made during an ordinary day's work in our steel foundry. This drive wheel was placed on a solid foundation, absolutely without give, and laid in the position shown in the illustration to the right. A 3,600 pound cast iron weight was then dropped from a height of 60 inches, full on to the hub of the driver. As it fell, it gathered speed and struck the hub a crushing blow of 216,000 pounds. Close inspection of the hub showed hardly a dent in it. The wheel was uninjured.

Here's What Happens In Field Service

In actual service, the tractor travels over rough road and uneven fields, many of them with quite deep ruts. When it hits the bottom of these hollows, the drive wheels are compelled to sustain the tractor's weight exactly in the same manner as the driver, on test,

A Size For Every Farm

Hart-Parr Oil Tractors are built in three sizes, and are big money makers on farms of 100 acres or 1,000 acres. They are strictly One-Man Outfits, use cheapest KEROSENE for fuel at all loads, and are oil cooled.

Get Our Literature

Consult us on your power requirements. We'll gladly send you our fine catalog and other interesting literature on power farming costs, and advise you the size tractor best suited for you.

Hart-Parr Company

26 Main Street, Portage la Prairie, Man.
53 West 23rd Street, Saskatoon, Sask.
1612 8th Avenue, Regina, Sask.
The Chaplin Co., 321 8th Ave. W., Calgary, Alta.

The Tests We Made

The remarkable strength, toughness and durability of these all-steel, single piece Hart-Parr drive wheels, are clearly shown by severe drop tests recently conducted at our works. These tests will interest every farmer who intends buying a power equipment.

Rim Stands 216,000 Pound Blow Without A Crack or Break

This same wheel was then placed upright, as shown in the illustration to the left. The 3,600 pound weight was again dropped from a height of 60 ins., striking the rim a 216,000 pound blow. Careful examination of every inch of the wheel showed not a break or crack anywhere. Rim, spokes and hub—all remained absolutely unharmed. The tests this wheel withstood would send an ordinary wheel to the scrap pile.

This test bar shows the high quality and strength of the steel used in the Hart-Parr Oil Tractor drive wheels. It has a tensile strength of 70,000 pounds per sq. inch—the elastic limit is 40,000 pounds per sq. inch. A steel bar, when cold, should bend to an angle of slightly more than 90° around a 1-in. rod, without showing cracks. The above test bar is bent double without showing a single crack.

Big Margins Of Safety and Strength

We could build cheaper drive wheels. We could even build a smaller margin of strength and safety into them and still make them as good as the drivers found on other makes of small tractors. But our policy and aim is to give the farmer the best that can be had in material, workmanship, efficiency and reliability. And it's just the same with every other part of this small, light Hart-Parr Oil Tractor. No skimping in quality—nothing left undone which will ensure the farmer the utmost in tractor satisfaction. The reason Hart-Parr Oil Tractors are superior to all others is because they are built so from the drive wheels, up.

Position of Wheel - Second Test

Position of Wheel - First Test