A Combined Manure Spreader and Farm Wagon.

The Hawkeye Detachable Spreader is the Newest and and Greatest Advancement ever made in the line of Manure Spreader Construction.

Built on right principles,-Stands in a class by itself and is a spreader that solves the

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It simply means that it is a Manure Spreader and Wagon Box combined, that you can use it to spread your manure and in ten minutes time, you can remove the beater, put in an end gate and you have as good a farm wagon box as it is possible to make, it then being a complete farm wagon which can be used for all uses on the farm. In other words, it is two machines in one, selling at the price of one. It is built to fit the ordinary farm wagon gear, either standard or wide tread with any size or style of wheels.

The Hawkeye Spreader will spread from five to twenty loads of manure to the acre.

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To convert the Detachable Manure Spreader into a wagon, all that is necessary to do is to unhook the chains, remove the apron, then by simply removing two bolts which are fitted with hand nuts, the entire spreading mechanism can be removed, leaving a regular farm wagon box.

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There are several other things which must be taken into consideration when figuring on buying a manure spreader. In the first place, we take it for granted that all will concede that the only way to get the full benefit out of your manure is to put it on your land with some kind of a spreader. You might as well leave it lay in your barnyard as to pile it out on the ground with a pitch-fork. As many know to their sorrow. There are many spreaders for sale which require at least three or four horses to pull and can be used for no other purpose except for spreading manure, which makes it a piece of machinery that is laying idle and in the way at least eleven months in the year, and costs at least twice as much as the Hawkeye Detachable Spreader which will do all the work that any heavy, high-priced, horse-killing manure spreader will do and can be used every day in the year as an ordinary farm wagon.

Two horses can handle it easily. It will hold as many bushels as any spreader costing twice the money. You can put it anywhere you can, an ordinary farm wagon, you can drive right into your barn. You can go through any farm gate. Any boy who is large Parsons Hawkey Mig Co. Winnings Ma.

When Man, Jane 2004, 1906,

Gentlemen.—I have given your Detechable Manure Spreader a good testa and have some on continuous and the specific and the spe



enough to drive a team can handle it.

The boxes are built out of the best wagon box lumber that can be bought. The sides are one solid piece, not two as is the case with some others. The bottoms are made of narrow matched lumber about three inches wide. In fact all the material used, whether wood, iron or steel, in the construction of the Hawkeye spreader is the best that money can buy and the workmanship is unexcelled.

This is the same spreader we had on exhibition at the Winnipeg Exposition last July and we believe that it attracted as much attention and caused as much favorable comment as any piece of machinery that was exhibited. We have sold a large number of these spreaders who have used them.

have used them.

In addition to these letters we will state that one of these spreaders was taken to the Agricultural College Farm at Winnipeg and was given every test that could be thought of by practical farmers and it was pronounced as being the most complete Manure Spreader that was ever offered for sale in Canada, regardless of price. If you are intending to buy a spreader this year write us for full information as to the price as well as to the terms on which you can buy them. Any responsible Farmer in Canada, and by "responsible" we mean a person who either owns his farm or is able to give satisfactory Bank references, can get one of these spreaders on more favorable terms than was ever offered by any farm machinery manufacturer in Canada before.

Do not put off writing us. The time will soon be here when you should get the manure on your land. Be ready when that time comes. Parsons lawkeys Mg.cs., Waingley, Mas..

Parsons Hawkeye Mfg Co., Winnipeg, Man., Lyleton, Man., June 25th, 1909. snawaye ang oo., munupg, ann.

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Bygender which you shipped us March Sist. We find this machine salitated by in every may

recognized it to highly. It is exactly what we have been wanting to buy for our own use for

die we are positive that we will be able to sell a large number of them to our customers as the

securible. You'ver truly, E. MURBAY 4' 8 8058.

Built, Sold and Warranted by the Parsons Hawkeye Mfg. Co. All shipments for Canada made from Winnipeg, and as we carry a large stock there is no delay.

rsons Hawkeye Mfg. Co.

Winnipeg, Canada

not to infer, however, that all large beams are soft. But large beams from high carbon steel are usually special and found on plows made for territories where soil conditions are extremely difficult, like the heavy gumbo soils of the northwest.

It may interest you to know that a large per cent of the beams on the market do not contain above 30 to 40 points carbon, while on plows of the highest quality the beam stock has from 60 to 70 points, occasionally testing as high as 80. What is the answer?

A high carbon steel not only has great strength but elacticity as well. When the plow strikes an obstruction solid enough to spring the beam, high carbon steel will come back to place, while low carbon stock will "set." steel Suppose that a plow strikes a rock or stump which is so firmly embedded that it cannot readily be dislodged. Naturally the plow goes one way while the team is pulling the other, thus forcing the beam out of the line of draft and placing a twisting strain on it. If the beam is made of high carbon stock, say 60 to 70 points, it will spring back to place and no damage result, but if made from 30 to 40 point carbon stock, it will not spring back entirely to place. Very frequently the bend is quite inperceptible to the eye, but the proper landing of the beam is changed and the suck of the plow more or less destroyed. This condition may not put the plow out of commission, but it does add to the draft and interference with its general good working qualities.

Manufacturers using soft beams get hundreds of damaged plows returned for repair. Such manufacturers do not reheat sprung beams, but fit the plows with new beams, throwing the old ones in the scrap. Why? Certainly not because beams cannot be put in proper shape if once sprung. Every manufacturer of plows has facilities at hand for doing such work at trifling expense; but when a low carbon steel beam is bent the grain of the inside stock is fractured and the molecules separate. heating can never make such a beam as strong as it was before.

Right here is where you are likely to ask your self a question so I will beat you to it by asking the question myself. If high carbon steel beams are such an advantage, why are not all plows equipped with such beams? There are many reasons why. I can name a few and you can guess the rest.

In the first place, there is a difference in the price of the material itself, consequently high carbon beams add to the manufacturing cost of the finished In these days when the price of an article is used as a selling argument, this one reason assumes importance. Second, the equipment for handling high carbon stock is much more expensive to install and maintain and the labor charge is greatly increased.

Here are a few examples as a

High speed drills are necessary to make holes 60 to 70 point carbon stock. These high speed drills cost about \$1.25 a lb. as against \$0.15 a lb. for drills to work in the ordinary beam steel, running 30 to 40 points carbon, and all machinery used must be heavier. Again, one man can drill about 200 soft beams in a day, while 75 to 80 is a good day's work on beams running 60 to 70 points carbon, and frequently a man working on this high carbon stock will drop as low as 25 beams a day, because this high grade steel is sensitive to numerous outside influences which do not affect, in such a marked degree, the soft steel. For instance, after beams are heated and shaped they are cooled gradually and while in the cooling

room, high carbon stock is affected by three things.

First—the amount of moisture in the air.

Second-by the way air currents strike them.

Third—sudden or wide fluctuations of temperature.

If beams cool too rapidly, high carbon stock gets exceedingly hard and frequently, under such conditions, one man cannot drill more than 25 in a day.

While the beam is the backbone of the plow, the heart—the most delicate and highly finished portion of the entire machine, is

Воттом.

High grade plow bottoms, for the central agricultural districts, are made of steel that can be divided and classifled under two heads, namely, crucible and soft In general, there are centre. two distinct grades of crucible and two kinds of soft centre steel. The highest grade soft centre steel is made by taking a soft steel plate and fusing an equal thickness of crucible steel on each side of it-then this ingot or block, is rolled out to proper thickness for moldboards and shares and the three layers are of practically the same thickness,