

ine Plows

An Engine Plow that is all plow. Carried on wheels with long distance axies. Made in sections with patent flexible connections, conforms to uneven surfaces.

Turns either way, right or left, and plowing all the time. No stops to turn corners-

Either Moldboard or Disc or both moldboards and discs for the same frame at little

16-inch bottoms are used regularly, but either 12 or 14-inch can be furnished if required.

24-inch discs are used regularly, but 26-inch can be furnished if desired.

moldboard plow can be equipped with discs, or the disc plow with moldboards at but little additional cost.

Old ground bottoms or prairie breaker bottoms or discs interchangeable on the same

Equipped with safety trips so that the bottom is automatically released when the share comes in contact with a solid rock or other obstruction that would break or spring the plow.

Close Centre hitch to engine makes light draft and an even pull on each engine driver. Means long life for your engine.

Quickly uncoupled from engine in case you strike a soft spot. No miring down of engine when using the Emerson plow.

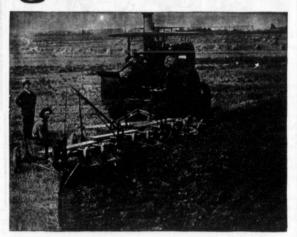
Carried on wheels equipped with oil-tight, dust-proof wheel boxes running on long distance axles reduces triction and saves expense.

Wheel bearings are chilled where greatest wear comes and turning in oil must run light and prove durable.

Furrow Wheels run at an angle same as the three wheel sulky and gang, doing away with all landside friction and making the 10 foot Emerson run lighter than the 8-foot of any other make.

Bottoms, beams and castings interchangeable on the sections. Everything as strong as can be made. Should you break a part, take the same part off the rear end of the plow and tip up the rear bottom and go ahead. No time lost waiting for repairs.

Adjust the load to suit your power all the time. If the footing for the engine is bad, tip up up one or more bottoms until the engine has the right load and keep plowing. Each bottom is equipped with either spring trip or friction stip; insures against breakage.



Rolling Coulters, fin cutters or jointers may be used as preferred. A spring coulter yoke prevents breakage of rolling coulters. Made in sizes to cut 4 ft., 5 ft., 7 ft., 8 ft., 10 ft., 12 ft., 15 ft., 16 ft. and 20 ft.

the size best suited to your present needs and any time you have use for a larger plow you are only out the additional parts necessary to add to your first purchase. You can't lose when you take the Emerson.

COMPANY, LIMITED TUDHOPE ANDERSON

Winnipeg

Regina

Saskatoon

Calgary

heating must be done carefully in a receptacle protected from the fire by a layer of dry sand.

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There is no easy way to tell a good oil from a poor one. About the only way to do is to buy from a reputable dealer and take his word for the quality of the oil. When you find a brand that is perfectly satisfactory in all ways stick to it.

C. R., Q. How should prepare leather belts Q. How should one for storing away when not in use?

2. Is it good practice to put tar or valve oil on a drive belt to prevent slipping?

3. Is soap injurious to leather belts?

4. Should belts be run any tighter than really necessary to perform their work?

5. Please give a good formula to prevent scale on boiler and flues.

6. When cleaning up engine for storing through the winter, would you remove the cylinder? Should the injector and lubricator be taken off and cleaned?

7. Please explain how to line up the main shaft on a traction engine so that both pillow block boxes can be rebabbitted.

8. What is angularity of the main rod? As it is spoken of in locomotive practice.

9. I have taken notice of several traction engines, and when the friction is in, ready to transmit power to the drive wheels, the reverse lever is always at the front end of quadrant when the engine is moving ahead and at the rear end when the engine is backing up. But the other day I saw a Port Huron 14 h.p. simple engine running a saw mill. The flywheel was running under the same as it should when going forward on the road, but the reverse lever was at the rear end of quaqrant or back motion. Are all Port Huron engines made to run that way?

Will some of our readers please answer these uestions. —EDITOR.

Q. I have notic-CARDSTON, ed at times the oil ALTA. in a lubricator will turn brown when going up through the sight feed glass, which gives trouble, fogging the

A. It may be your oil is not of a good quality. It often happens, when the sight glass is not full of water, that the oil adheres to the glass. This can be blown out without taking the oil out of the lubricator. The glass should have time to fill up full of water before the feed is started.

L. B., Q. Will you preason bunkae, tell me if a traction engine crown sheet is nine inches from top to crown sheet, or not so deep? Does the depth of a crown sheet make any difference in the pressure on a boiler? I should think a crown would be greater on an eleven inch than on a nine inch space between the top and the crown sheet.

A. Usually the distance from the top of crown sheet to the top of the boiler is greater than nine inches, the depth varying for dif-ferent sizes of boilers. The disferent sizes of boilers. The distance between these two sheets can make no difference either in the pressure on the boiler or the strength of the boiler.

BOW ISLAND Screen in my stack ALTA. and when I use it, it retards the draught so that the boiler steams very hard. Can there be anything done to help the steaming quality of the boiler when using the screen?

A. The draught can be increased by reducing the exhaust nozzle. Another way to help the draught while using the screen is to invert it. Instead of having it to extend downward in the stack, turn it upward. Thus the smoke will have an easier outlet and you will find the draught much stronger, and good results may be had in this way without reducing the exhaust nozzle.

If the frame on which the screen is fastened will not permit of being reversed, the screen can be taken off and fastened on the top side of frame.

The Manitoba Windmill and Pump Company Enlarging Their Plant.

There is no better evidence of prosperity, industry and thrift in Western Canada than the fact that a manufacturing concern sees it necessary to enlarge its plant, in order to take care of its increase in business.

Some few years ago the Manitoba Windmill and Pump Company was a comparatively small concern. Their motto was, how-ever, Reliable Goods, and they soon won the confidence of the farmer to such an extent that it became necessary for them to enlarge their quarters. They purchased the plant of the old Brandon Binder Twine Company, thinking that this would be ample for their requirements for several years to come, but their business has increased at such a rapid pace that they have again found it necessary to enlarge their plant. They now have in the course of construction a brick foundry, 110 x 60, equipped with travelling crane and all modern foundry appliances. The estimated cost of this new building will be \$10,000, and will be equipped with over \$5,000 worth of new machinery. The old foundry will be used as an addition to the machine shop.