

# THE Toronto Cord Binder A BRILLIANT SUCCESS!

A PERFECT CUTTER,  
A PERFECT BINDER,  
SIMPLY CONSTRUCTED,  
EASY TO HANDLE,

Three Years before the Public!

## DESCRIPTION OF THE MACHINE.

In the production of this Machine, it has been the aim of the inventor to overcome, to the greatest extent possible, the difficulties experienced by the inventors and manufacturers of other harvesters and binders, and produce a machine with which the average farmer can successfully harvest all the various kinds of grain, and, at the same time, a machine which should be simple, strong and durable and within the comprehension of the ordinary farmer, so that he would be able not only to operate it successfully when in proper order, but also to keep the machine correctly adjusted, and make all necessary repairs without the aid of a machine or expert. In this he has succeeded almost beyond his expectations, as will be fully understood after a careful examination of the machine is made.

### THE MAIN FRAME

Is very substantially constructed of straight timbers firmly secured together with malleable iron brackets, to which all of the wooden pieces are bolted (instead of being mortised and tenoned together), which not only greatly increases the stiffness and solidity of the frame, but also makes it very much more easy and convenient to repair in case of serious accident, and greatly facilitates its being packed into economical space for handling and shipping.

### THE DRIVING WHEEL

Is very large, being forty inches in diameter, and with an extra wide face or tread. The centres and gear are of iron, with a double set of spokes, which are set bracing at the hub, with iron sockets at the hub and rim, and are forced into position in the felloe after the tire is riveted

and put on the wheel under hydraulic pressure. The whole is firmly secured together by four five-eighths bolts, making the most substantial carrying and driving wheel ever produced.

### THE GRAIN WHEEL

Is also very large, and, with a lever conveniently arranged for that purpose, the height of cut can be immediately changed to suit any kind of grain. The driving wheel and grain wheel are located on the same line, which greatly facilitates the turning and backing of the machine.

### THE CUTTING APPARATUS

Is substantially the same as that used on the other Toronto Machines. The finger-bar is made of steel, or cold-rolled angle-bar, securing great strength and stiffness with the least possible weight. The guard fingers are forged of wrought iron, case hardened, and firmly riveted to the finger-bar. The pitman works on a straight line and is connected with the knife by means of a conical shaped pitman hook, and pitman bolt, with ratchet nut, and to the fly-wheel and a malleable box, fitted to a case hardened spindle substantially the same as the other Toronto Machines, the whole making a cutting apparatus equal to that used on the best single mowers.

### THE RELIEF RAKE,

At the inside front corner of the machine, at the heel of the knife, moves the grain backward and upward, thus perfectly overcoming all the difficulties heretofore experienced at this point.

### THE ADJUSTABLE REEL

Is large in diameter, has wide fans or beaters, with extension slats, which can be adjusted to suit any kind of grain. The socket for the reel-shaft is very long, causing it to run steadily and securing great strength. The reel is suspended or attached by hinged connections, so that, with a lever conveniently arranged for that purpose, the operator can instantly raise or lower, or change the angle of the reel to suit any kind of grain, either by reeling down very close over the guards and on to the conveying belt, or by moving it forward to pick up down and tangled grain, or by elevating and moving it backward, to properly reel standing or very tall grain.

### THE CONVEYING AND ELEVATING BELTS.

The grain is conveyed across the platform and elevated into the binding receptacle by a very substantially constructed conveying belt, and two elevating belts (which are run in opposite directions). The belts are all made of very extra heavy duck, to which the slats or wooden strips are firmly riveted, and five (instead of three) extra heavy leather buckle straps are firmly secured to them by the use of rivets and washers. By the use of the metal angle finger-bar, the front edge of the conveying belt is run within THREE-EIGHTHS OF AN INCH OF THE BACK OF THE KNIFE, which is of great advantage, and

in fact, necessary in very short grain. The belts are much wider than those used on the ordinary harvester, giving much more and sufficient room for conveying and elevating long grain into the binding receptacle. All the rollers by which the canvas belts are driven are large, and the belts are kept uniformly taut by the use of

### SPIRAL TENSION SPRINGS

Between the adjustable bearings for the rollers, which yield to conform to the shrinking or stretching of the belts, securing a uniform tension of one hundred pounds pressure which prevents the possibility of the belt slipping, from being too loose, or breaking from becoming too tight, and also equalizes the power required to drive it.

The three rollers which drive the conveying and elevating belts, and also the reel, are driven by one continuous sprocket chain, making the most complete, simple, convenient and durable device for that purpose ever produced.

### THE POLE

Is very substantially secured to the main frame by a hinge connection, so that, with a lever conveniently constructed, the operator can instantly raise or lower the cutter-bar, reel, etc., by tilting, so as to pick up very short, lodged, or tangled grain, or cut high in tall, standing grain.

### THE DRIVER'S SEAT

Is very conveniently located, being low down, so as to give the driver a commanding view of his team, the grain, and all working parts of the machine. The machine is well balanced, which prevents side draft, or unnecessary weight upon the horses' necks.

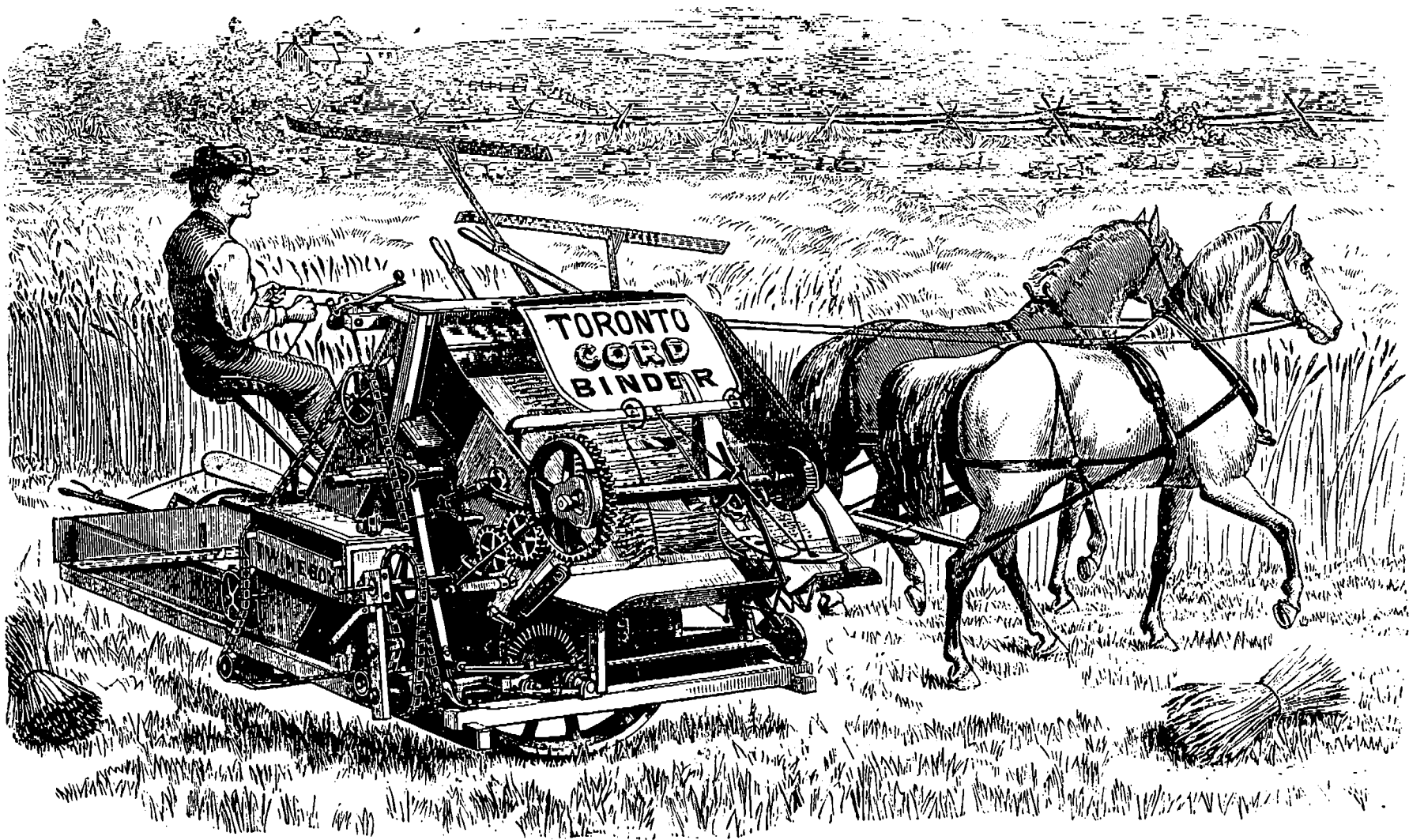
### THE BINDING ATTACHMENT

Is similar in general features, to what is known as the Appleby, or bill-hook tyer, with many valuable improvements, made in connection with and adapting it to the Toronto, which include, among other things, the packers for straightening the grain and compressing the sheaf; the shield and support for the knoter; the convenient arrangement for shifting the binder forward and backward, to suit different kinds of grain, by the use of a crank lever, very conveniently located near the driver's seat; the improved tension; the new twine-box located in the rear of the machine, in view of the operator; the outer support for end of driving shaft, and many other valuable features and devices, which must be examined to be fully appreciated. For this purpose, we invite a very full and careful examination of the machine by all farmers contemplating the purchase of a binder.

The excellent record made by the Toronto Harvester and Cord Binder during the past season has attracted the attention of farmers everywhere and with the late improvements put upon it, which will go into practical use for the first time next year, it is predicted that the machine will take a remarkable hold on the affections of all grain growers.

Our illustration of the Toronto Cord Binder shows two horses only. While three horses are required where the land is rough, or the grain heavy, two are considered sufficient when circumstances are otherwise.

1,000 Binders being made for 1883.



Now is the time to order.

THE TORONTO CORD BINDER.