

MILLER'S "NEW MODEL" VIBRATING THRESHER I

The Most Effective and Successful Combination for Saving and Cleaning Grain ever constructed.

The principle upon which the "New Model" is built provides for the thorough threshing and hulling out of all the grain and seeds, and for its complete separation from the straw, and preservation, and for its separation from chaff and filth and delivery in good marketable condition.

Inasmuch as the system of the "New Model" is unique, differing essentially from that of all other machines, we print on the first page a sectional view which illustrates the main features of the machine very clearly.

The cylinder and feed-board are set high enough so that the machine is fed without fatigue or straining effort. We have no occasion to set it low, or otherwise difficult to feed, because the cleaning and separating capacity of the machine cannot be overloaded by any amount of grain that a set of hands can furnish to the machine.

During the past two seasons this machine has been largely and most successfully used in wet oats, flax, and the most difficult crops; also in clover and timothy, and with superior results in each instance. In damp, tough grain, the cylinder and concaves must be brought nearer together than at other times. The feeder can place them at any required distance apart in a moment, and without stopping. The feeder can thresh out all the grain without breaking any by adapting the machine to the conditions of the crop.

On leaving the cylinder the straw and threshed grain fall upon the carrier. This saves all the flying kernels of grain and prevents them from "shooting" into the straw again. This short carrier also does even more valuable service, in keeping the cylinder entirely clear, conveying the threshed straw rapidly away in a thin layer, from which the grain is easily and completely separated.

FIRST—By the grate, through the holes in which a large proportion of the grain at once passes and is conveyed to the shoe.

SECOND—By the grain web, which, in its rapid ascent, shakes the grain from the straw.

THIRD—By the fall from the carrier upon the gang of beaters, by which the layer of straw is entirely disarranged and everything in the shape of a bunch pulled apart, allowing the grain to fall below.

FOURTH—By the violent motion of the five gang beaters in whipping and buffeting the straw, tossing it at different angles, pulling the straws all apart over every inch of the entire surface, so that it would seem impossible for a single grain to be left in any part of the straw.

FIFTH—By the fall from the beaters to the vibrating table, where, owing to the different movements of the beaters and the table, the straws are again pulled apart and the grain remaining, if any, then falls down into the shoe.

SIXTH—By the vibrating table, where, by a series of upward and backward throws, it is conveyed to the elevated extension.

SEVENTH—By the gang beaters working off the straw, leaving the vibrating table free over half its length to separate out the grain from the broken straw and fine stuff which, with the grain, falls down upon it through the beaters, being, in fact, a double separation.

EIGHTH—By the elevated extension, which rises up by way of final protest against the loss or waste of a single grain or seed.

The advantages of our system are obvious. If a bunch or layer of straw receives a given number of impulses or shakes in the same direction or relative position without changing or disarranging the layer, the grain cannot possibly be separated out so thoroughly as when the straw is pulled apart again and again, and all portions of it subjected equally to the separating processes. Other vibrating machines simply vibrate, the flow of straw being so little broken or disarranged that considerable grain must necessarily be carried out which might otherwise be saved.

Another great advantage of our machine over other vibrators is this: Instead of admitting the grain down on the riddle over its full length, the New Model brings the grain back, by a return shoe, to the front end of the riddle, where all the mingled grain and chaff gets the full benefit of the fan blast. Thus nearly all the chaff goes out at once, and nearly all the grain goes through, greatly reducing the work to be done by the riddles, and leaving them free to do that work in the most perfect manner.

By the aid of devices peculiar to our machine the fan furnishes both an over blast and an under blast, moving the contents off the riddles freely, preventing choking and cleaning the grain in splendid shape.

How completely and thoroughly the grain has been taken out of the straw, and how well it has been cleaned by the application of all the means we have described, we may safely leave all good threshermen to decide for themselves. Guided by our illustrations they will have to concede that the variety and effectiveness of the methods applied by the New Model for separating and cleaning grain have never yet been presented in any single machine. We can assure them, and we will assure every purchaser, in the most ample and satisfactory manner, that the operation of the machine will most fully justify every claim we have made for it.

This machine is made to last, as every good machine must be. All violent movements are counterbalanced, and the motions of the machine at work are smooth, even, and uniform. The purchaser of the New Model may fairly count upon having the longest lived vibrating machine in the market, for in respect to smoothness of running, upon which durability chiefly depends, there is none in the market to compare with it.

The arrangement of the beaters is such that they are not liable to wrap in flax, wet oats, and crops of a similar nature. The machine has given unbounded satisfaction in flax.

The motions of the Shoe and of the Vibrating Table balance each other, so that no power is lost, and the draft of the machine is very light.

We use the End Shake Shoe, and consider it a most valuable grain cleaning and saving apparatus for a number of reasons:

It is so pronounced by all who have used it.

It furnishes so much more separating capacity, admitting the use of such wide and long riddles.

It runs so much lighter and quieter.