

THE
O=we-go Grain Drill

WITH OR WITHOUT
FERTILIZER ATTACHMENT

SPRING HOES or DISKS
SIMPLE.
DURABLE.
ACCURATE.

MANUFACTURED BY
THE CHAMPION WAGON CO.,
Owego, Tioga Co., N. Y.

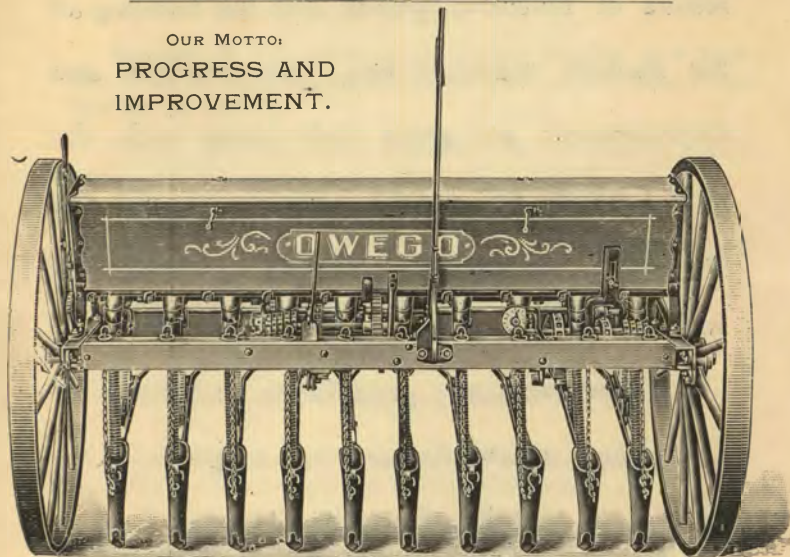
For Sale by

THE Owego Grain Drill.

....WITH....

BREAK PIN HOES, SPRING HOES, OR DISKS IN PLACE OF
HOES, AND WITH OR WITHOUT FERTILIZER ATTACHMENT.

OUR MOTTO:
PROGRESS AND
IMPROVEMENT.



ACCURATE, SIMPLE AND DURABLE.
EASILY REGULATED.

MANUFACTURED BY
THE CHAMPION WAGON COMPANY,
OWEGO, TIOGA COUNTY, N. Y.

THE busy and progressive Nineteenth Century worked great changes, and no industry more than grain growing felt the beneficial results of inventive genius and the hustling of the modern manufacturers, but changes and improvements are going right along with the new Century so recently commenced and the live drill manufacturers are all striving for supremacy.

There are many good Grain and Fertilizer Drills, and a few that are not so good. Our mission is to talk about the "Owego" as it goes to the trade in 1902 and in the following pages our claims briefly stated are worthy the perusal of any one interested in the subject.

*Requisites and Indispensable Features of a First-Class,
all Around, General Purpose Grain and Fertilizer
Drill for the Twentieth Century.*

First. It must have the most Improved Devices for positive force feed to sow accurately, small and coarse grain, clover and timothy seed and commercial fertilizers.

Second. It must Distribute any Desired Quantity, be so made that it can be easily and quickly adjusted and have no loose pieces that can be lost.

Third. The Grass Seeder should be near the ground and work either well in front or rear of the hoes as desired.

Fourth. The distributor should be capable of sowing without injury to the seed, Corn, Peas, Beans, etc. Nothing equals a good drill for Planting Corn for the Crop.

Fifth. It must be Simple in Construction and well made.

Sixth. It should have a Steel Frame.

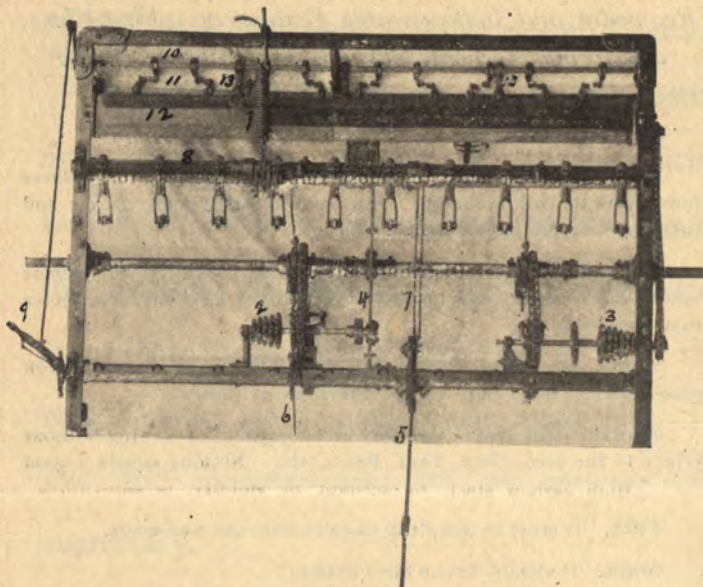
Seventh. It should be light of draught, well balanced and Easy for the Team.

Eighth. Cog gears on account of wear, friction and lost motion should be avoided and Sprockets and Chain substituted.

Ninth. When desired a drill should have the best Spring Hoes or Disks with adjustable pressure.

Tenth. The distributors in fertilizer sower should be finished so smoothly that fertilizer will not adhere, and the material used should be non-corrosive so as not to be effected by the acids which are so frequently present in commercial fertilizers.

A careful examination or practical test will show that the O-WE-GO fills all of the above requirements.



Parts designated by numbers on above cut are as follows:

- No. 1. Relief Spring used on large hoe drills and on all Disk Drills to aid in raising hoes or disks.
- 2. Change pinions to regulate Fertilizer Feed.
- 3. Change pinions to regulate Grain Feed
- 4. Steel Cross Beam supporting center axle bearing.
- 5. Lever for raising or lowering hoes or disks.
- 6. Lever for disconnecting fertilizer gearing.
- 7. Double Steel Pitman connecting lifting lever with steel roller which raises or lowers hoes or disks.
- 8. Steel Lifting Roller.
- 9. Lever for shifting hoes.
- 10. Front Hoe Shifter Roller.
- 11. Rear Hoe Shifter Roller.
- 12. Grass Seeder.
- 13. Connecting Bearings to hold Shifter Rollers,

Frame. No change in construction of agricultural machinery has accomplished more for strength and lightness than the substitution of steel frames for the clumsy, wooden frames.

Without becoming tiresome by going into a minute description of construction, locating this cog and that pinion, this bolt and that brace, pointing out the convenient position of this lever or that part, we ask you to examine the cuts herein, particularly the one on preceeding page, showing the solidity and simplicity of the frame upon which the Owego is built, made of heavy high carbon angle steel bars, firmly bolted to heavy malleable corner irons, braced with wooden cross sills, in the best possible manner, the whole forming, as we believe, the most substantial and reliable foundation for the hopper and working parts ever used on a drill, and yet without superfluous weight.

The wooden cross sills give strength and afford sufficient elasticity to absorb the shocks and strains to which every heavy implement is subjected.

High carbon steel, on account of rigidity, is substituted for wrought iron. Malleable iron is used in place of gray iron castings, in short the best materials only are used.

The quality of paint is of the best and applied only with the brush. The finish is admirable.

Axles are of cold rolled steel which is acknowledged by all mechanics as the strongest and best material for the purpose.

Bearings, Gears, Etc. The greatest care is taken in fitting bearings ; workmanship is of the highest order and all parts can be duplicated. All gearing is located between or inside the frame and under the box, easy of access, in plain sight, and at the same time protected from dirt, stones or trash that cause so much trouble to drills having the gearing between box and ground wheels.

Drawbars are of steel; hoes of most approved shape, with reversible steel points.

Hoe Shifter. Two steel shifter bars to which hoes are attached, work opposite each other in shifting; one half the hoes are moved forward and one half backward by a very conveniently located and easily operated lever, with spring thumb latch, working on a segment ratchet which allows the hoes to be left in either a straight line, in two ranks, or partially shifted. Shifting *all* the hoes as we do, their relative positions are always the same, and the pitch of the hoe is not changed by shifting—a very important feature, affecting as it does, the depth the hoes run in the ground. A drill moving only one half the hoes *requires greater effort to shift*, and at the same time the hoes do *not* maintain the same relative position and pitch.

The Lifter. The lever for lifting the hoes or disks is very conveniently located in rear of grain box within easy reach. It operates a steel lifter roller with malleable arms which are connected with the hoes or disks. So much leverage being secured, very little effort is required in raising the hoes or disks.

Ground Wheels, from which driving power is obtained are both ratcheted to the axle, absolutely avoiding side draft, and being independent drivers, a positive and continuous operation of the distributors is effected, thus giving results which cannot be obtained with side geared drills. Wheels are well made of good material, having tires three inches wide.

To Change and Regulate Quantities of Seed and Fertilizer. Quantities shown on regulator by changing small sprocket wheels on countershaft. No loose pieces to be lost as all sprocket change gears are attached to shaft. Change is quickly and easily made without the use of tools—is positive and accurate—nothing left to chances.

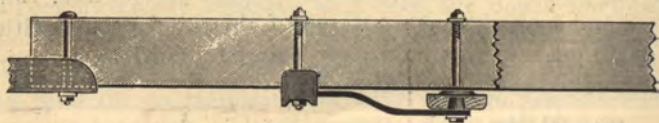
It is admitted by practical and experienced men, not interested in some other device, that a chain gearing is more accurate, durable and runs easier than cog gearing. as the points of the cogs on spur gears wear off, giving play to the mesh, besides if not in perfect line, run hard and soon cut out ; nothing of this kind occurs with a chain gear, friction and wear being reduced to a minimum and without *any* lost motion.

Simplicity of the Owego Drill is also an *important feature* when setting up for use. To insure safe delivery, and to save freight, the drill is shipped knocked down, but in such shape that very little time and effort are needed to make it ready for use—in fact we make the *broad claim* that no grain drill can be so easily and quickly set up.

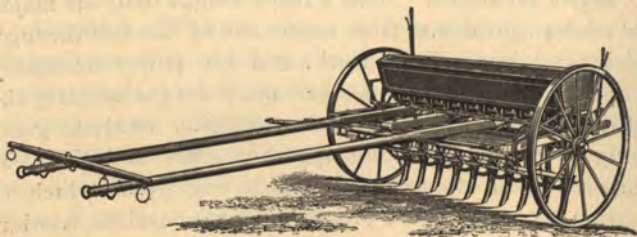
Light Draught. With a light weight drill the major part of draught comes from resistance of the soil through which the hoes or disks work, and the power necessary to operate the feeding mechanism, more particularly the fertilizer sower. And in this connection we claim great saving of power, by using sprocket gears and chain, as compared with almost innumerable cog gears which in addition to rapid wear, create so much useless friction,

which is avoided with our construction. With drawbars of good length, and the way the pole and whiffletrees are attached, the *line of draught is direct*, thus relieving the horses' necks from heavy weight, securing a perfectly balanced and steady running drill. A drill not balanced is heavy on horses' necks, runs irregularly and does uneven work. Our claim that the *Owego is the easiest running and lightest handled drill* is substantiated by all who have used it.

The cut below represents sectional view of pole and eveners showing how doubletrees are attached.

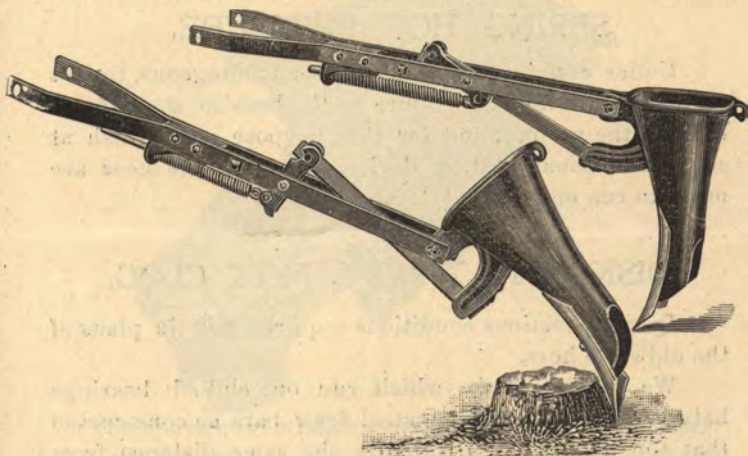


In some sections there is a desire for drills having shafts by which three horses, instead of two, can be used. At slight additional cost, attachments of this kind are furnished, by which three horses can be hitched to the drill as shown in the following cut.



SPRING HOES.

The spring hoes, which are furnished at a slight additional cost on the O-WE-GO, are as nearly perfect as mechanical devices can be, and enable the drill to be used in rough, rooty, and stony places without injury to the drill or having any seed left on top of the ground as is often the case with a drill that has break pin hoes.



Many years of constant use have given us unbounded confidence in this spring hoe. The pitch of the hoe, which regulates the depth seed is sown, is very easily changed without the use of any tools.

When at work, the hoe is held firmly by the lock and runs steadily. No strain is on the spring except when in contact with an obstruction; then the spring is compressed and after passing obstruction, the hoe comes

back and is locked in position as before. The draw bars and pitman are of steel, the lock is of malleable iron, making it the most desirable device of the kind. The spring hoe is almost indispensable when drill is used on land not free from obstructions, and is worth many times the slight additional cost over the price of drill with ordinary break pin hoes.

SPRING HOE PRESSURE.

Under certain conditions, it is advantageous, in fact necessary, to apply pressure to the hoes so as to force them in the ground, and for this purpose we furnish at small additional cost, a device by which the hoes are made to run any desired depth.

DISKS THAT WILL NOT CLOG.

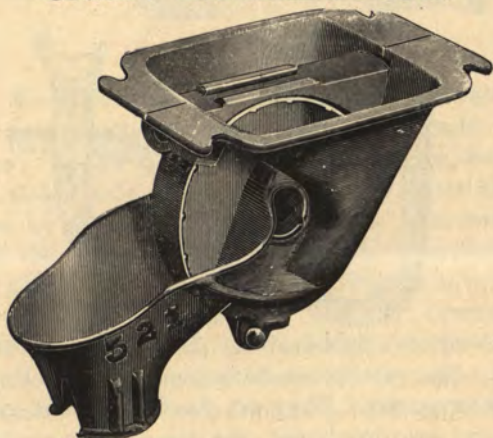
In many sections conditions require Disks in place of the old style hoes.

We furnish Disks which run on chilled bearings between two high carbon steel draw bars so constructed that the disks always maintain the same distance from each other and their original positions. Long experience has conclusively shown that a single draw bar is a failure. No further argument is needed to conclusively show the great advantage of the double draw bar for simplicity, strength, durability and overcoming wear and strain of parts. Ample pressure can be easily applied to make the disks work deep enough in trashy and hard ground.

RELIEF SPRING.

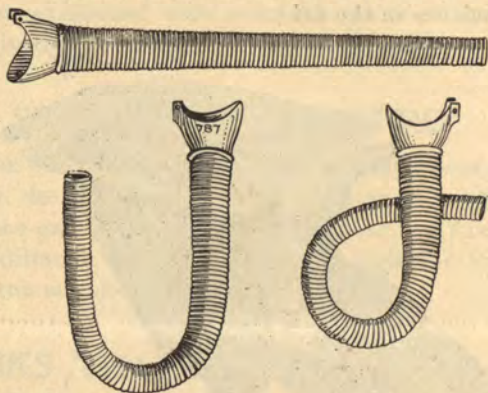
Lifting levers on all Disk and the larger hoe drills are supplied with a most ingenious relief spring and the disks or hoes can be raised with *very* slight effort. The advantages of this arrangement are obvious to any one who has had experience in the field.

GRAIN DISTRIBUTORS.



The above cut shows our *double force feed* grain distributor which is adapted for sowing or planting all kinds of field grain including mixed cow peas and oats, beans, corn for ensilage or the crop—the smaller side of the distributor being used for wheat and small grain, the larger side for oats and coarse grain, thus enabling the drill to sow a wide range of quantities with a small number of change of feed wheels, beginning as low as one-half bushel of wheat or buckwheat, and up to nearly four bushels of oats to the acre, with small intermediate changes.

This distributor has a *positive force feed*; the stream or flow of seed is continuous and unbroken, thus preventing any skips or bunching, and the grain having a perpendicular fall. The work up and down hill or on uneven surfaces is as regular as on level land.



Rubber or Spiral Wire Tubes are furnished as desired. The wire tubes have been successfully used for the past two years. They are flexible, do not get out of shape, and are long lived, the atmosphere producing no special changes as is the case with rubber.

In ordering, the kind should be designated.

ACRE MARKER.

A reliable Acre Marker or land measure is attached to the frame which readily shows the operator the exact number and fractions of acres that have been sown.

The Acre Marker is thrown in and out of gear automatically in connection with the distributors, and registers only the land actually seeded.

GRASS SEEDER.



At the right-hand [and left-hand] sides above are shown the complete grass seeder distributors in different positions; in the center is the fluted force feed wheel and on either side are represented the parts that form the case or shell. The seed box has a movable iron slide at the bottom and just over the distributors, permitting the use of such of the sub-divisions as are needed to sow the desired quantity, and by reversing the sprocket wheels driving the seeder, a wide range in quantities can be accomplished. It is made with the greatest care and will sow from two to twenty-two quarts of seed on an acre.

In every sense of the term the distributors are what is known as *force feed*, and no other drill in the market has a grass seeder which as a perfect mechanical device will compare with it.

The grass seeder can be attached to the frame either in front or in the rear of the hoes as desired, so low down that it is not affected by the winds blowing, and so far from the hoes, that the seed is broadcasted and under no circumstances can it fall among the hoes in drills.

CORN PLANTER.

Too much cannot be said as to the benefits derived from using a fertilizer drill for putting in corn for ensilage or the crop, it having been long since conceded that *drilled* corn will yield a better crop than when check rowed or planted in hills. Each stalk when drilled has its individual chance, there being no minor stalks or "suckers" as is the case with corn planted in hills.

With our distributor, any quantity of corn can be planted or drilled and the fertilizer can be put either through the same hoe with the corn or through any or all the hoes as may be desired.

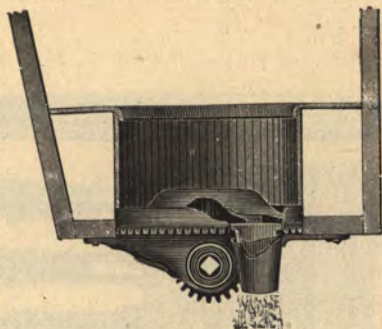
FOR PLANTING BEANS.

What is said about planting corn for the crop applies equally to the use of the Owego Drill for planting beans, and in either case the work is done with great regularity and without injury to the seed.

FERTILIZER SOWERS.

The device known as the Mark's feed is used on the O-WE-GO, and all familiar with machines of this class, know it to be the best attachment on grain drills for distributing the many kinds of commercial fertilizers.

The Owego Drill has been *greatly improved* in this particular, all the parts coming in contact with fertilizer are *smoothly finished and heavily galvanized*, thus avoiding the sticking of fertilizers to the parts and preventing the corrosion that is sure to occur when acids come in contact with ordinary unprotected iron. All parts can be easily removed for cleaning which is so essential and absolutely necessary after using sticky fertilizer.



Sprocket Gears and Chain are used. The arrangement for driving this attachment on the Owego, is simple, strong and durable, and can be easily and quickly set to sow small or large amounts, as desired, with slight variations as to quantity. A very ingenious as well as simple device is used by which the distribution of fertilizer can be stopped or started while the drill is in motion, which enables the operator to stop the feeding of fertilizer when going over portions of a field where fertilizers are not needed.

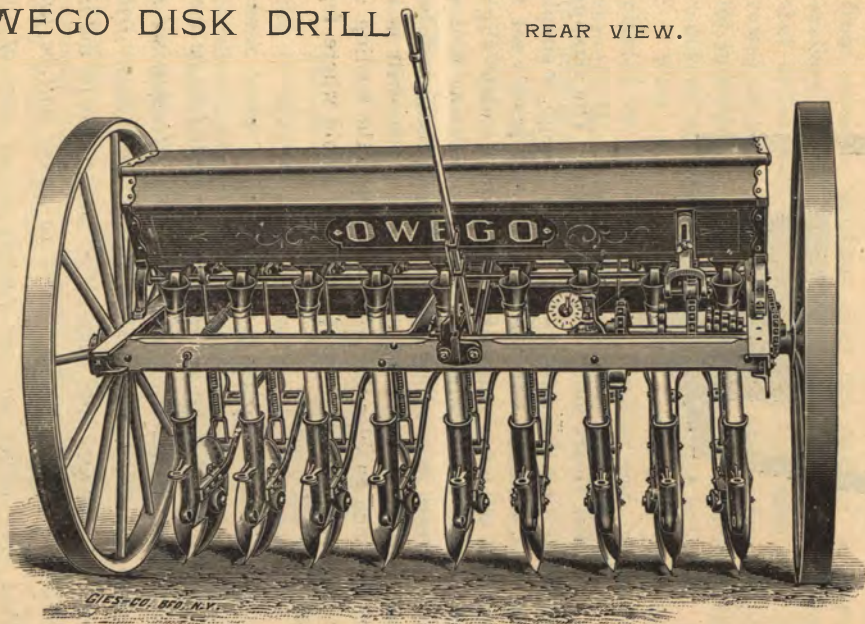
WARRANTY.

Every O-WE-GO Drill is warranted to be well made, of good material and to work well when set in accordance with the instructions sent with each drill. Should breakages, on account of defect, occur within one year from purchase, parts to repair will be furnished free either at our factory or at any of our distributing houses.

OWEGO DISK DRILL

REAR VIEW.

16



The above cut represents the plain drill for sowing all kinds of grain and grass seed,
but does not have the Fertilizer attachment.

