



FARMERS' FAVORITE

GRAIN DRILLS

MANUFACTURED
BY

BICKFORD & HUFFMAN CO.

DIVISION THE AMERICAN
SEEDING MACHINE CO. INC.

SPRINGFIELD, OHIO

Farmers' Favorite Grain Drills

—1842—

PIONEERS OF
THE MODERN
GRAIN DRILL



Cut No. 1

—1908—

THE
STANDARD OF
EXCELLENCE

MADE AT MACEDON, N. Y.

“The Incubator of the Grain Drill Industry.”

MANUFACTURED BY

BICKFORD & HUFFMAN COMPANY

Division
The American Seeding-Machine Co., (Incorporated)

MACEDON, N. Y.

Convenient Transfer Stocks of Machines and Repairs to Promptly Serve the
Trade in Nearly Every State in the Union



INTRODUCTORY

THE Grain Drill industry in America, like most other American industries, has made rapid strides in the past ten years. That Bickford & Huffman were the originators of the grain drill in America sixty-odd years ago is an undisputed fact. That Bickford was the inventor of the first double internal distributor in 1867, of the first combined grain and fertilizer drill (so universally in use in the Eastern States) and many other basic and fundamental principles in the construction of modern seeding machines are facts of record.

The Farmers' Favorite Drill has always kept abreast of the times. The same genius which made modern seeding conditions possible has steadily advanced the art on a safe foundation of experience and in the face of ever increasing competition. Always in the hands of responsible, conservative but courageous management this world-renowned machine is today at the zenith of its fame and prosperity; is as universally popular; represents the standard of excellence in substantial and reliable construction, and in its recent remarkably successful invasion of the Great West has proved its ability to win the same high place in new fields as it has so long held in the Eastern and Central States of America and many foreign countries, particularly Australia and New Zealand.

Readers are requested to appreciate that we manufacture hundreds of sizes and types of drills with numerous attachments and special devices for meeting the requirements of particular localities in this country and abroad. In fact



"FARMERS' FAVORITE" GRAIN DRILLS



there is no condition in seeding of the ordinary grains which our product is not adapted to handle in any part of the grain-growing world. It is therefore impossible in the limits of this catalog to give a detailed description of all the good points of the "Farmers' Favorite." A catalog is, after all, but a poor salesman. Seeing the "Farmers' Favorite" is better than reading about it. Selling it and using it are the great tests. If we devoted every page of each one of this 100,000 annual catalog edition to the different good qualities of the "Favorite" there would still be more to say.

Respectfully,

BICKFORD & HUFFMAN CO., Div.,

The American Seeding Machine Co., (Inc.)

What the name of Edison is to Electricity, Bell to the Telephone, and Marconi to Wireless Telegraphy, so is the name of Bickford & Huffman to the Grain Drill. What's in a name? But who can gainsay its power?

"Bickford & Huffman" means

"Best and Handiest."

Combined Grain and Fertilizer Drills

The manufacture of "Plain" Grain Drills is a comparatively simple matter. But not ten per cent. of the grain drill manufacturers of the United States are known in the **combined grain and fertilizer drill** trade. Why? Because the manufacture of a satisfactory and successful fertilizer "feed" which will universally handle the thousands of different grades and conditions in which commercial fertilizers are used is a difficult problem, solved only by perseverance and experience in the business. That Bickford & Huffman have had that experience is evidenced by the fact that they have continuously manufactured and sold combined drills for forty years. We recently bought from a New York State farmer a "Farmers' Favorite" Combined Drill which was manufactured in our factory in 1870, and which had done a good season's work in the spring of 1906.

The recently rapidly growing and remarkable demand for the up-to-date manure-spreader is regarded as a certain fore-runner of a still greater demand for fertilizer drills which will do the work of seeding and fertilizing at the same time in one operation, at a great saving of horse-power, time and labor.

The "Farmers' Favorite" Combined Grain and Fertilizer Drill is conspicuous in the trade by reason of its simplicity, the ease with which different quantities per acre are regulated, the positiveness with which the feeding device will handle all kinds and conditions of commercial fertilizers and the extremely wide range of quantities—from 65 lbs. to 1200 lbs. to the acre.

An illustrated description of the "Wizard" Fertilizer Feed will be found on page 18.

A SATISFIED "HOOSIER" WITH A FERTILIZER DRILL

Fortville, Ind., May 28, 1906.

Gentlemen:

I have pleasure in stating that I bought one of your new 1906 Disc Drills this Spring. It is an 8x8 combined fertilizer and grain disc drill with grass seeder. I have used and seen many kinds of drills in my time but I never saw a machine embodying so many advantages as the "Farmers' Favorite." On account of the wheel construction the draft is extremely light and I only regret that I did not purchase a 10x8 or a 12x8 instead of an 8x8, as I am sure the "Farmers' Favorite" drill, 12x8 is as light draft as most other machines, 8 x 8. The extension chilled hub and roller bearings are simple and effective. The steel wheel is the best I have ever seen on any implement. The fertilizer device is the most positive and accurate, simple and effective in use that I have ever seen or heard of—it is truly named the "Wizard." The grass seeder is all that can be desired, and, in fact, the whole make-up of the machine stamps it in my opinion as the best machine sold in the state of Indiana, and I can positively recommend it to my brother farmers.

Wishing you every success, I am,

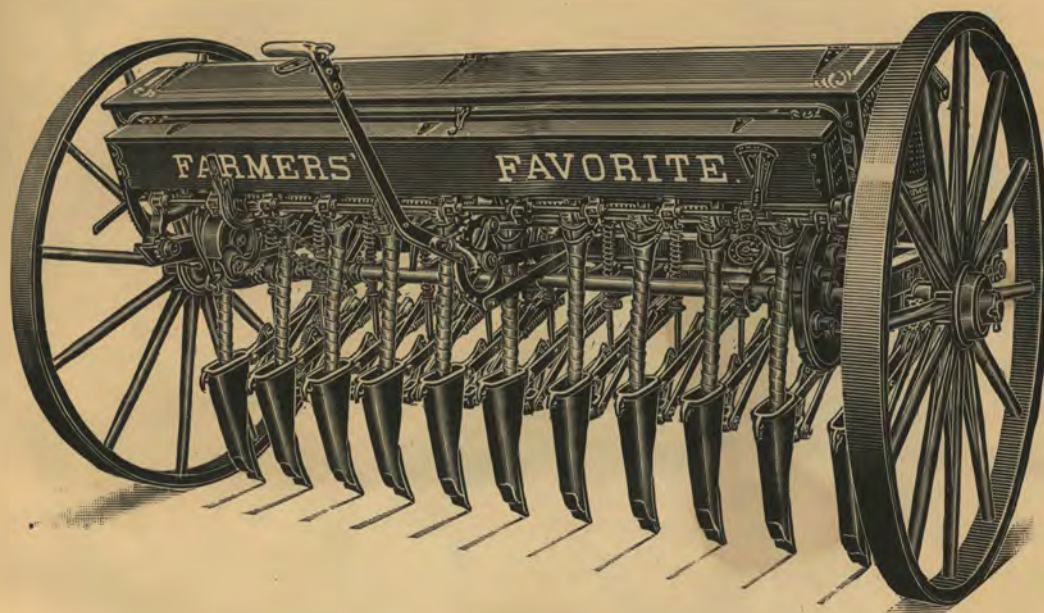
BARNEY WEAVER.



"FARMERS' FAVORITE" GRAIN DRILLS



11 x 7 "Combined" Grain and Fertilizer Spring Hoe Drill with Grass Seed Attachment



Cut No. 2

Sows Fertilizer, Wheat, Oats, Barley, Rye, Beet Seed, Buckwheat, Peas, Beans, Corn, Flax, Alfalfa, Millet, Grass Seed, etc.

The same machine supplied with either Pin Hoes, Single Discs, Double Discs, or Beet Hoe Attachments, all interchangeable.

Light draft and easy running; substantial, reliable, accurate and dependable.

WAY DOWN SOUTH IN TENNESSEE!!

Gentlemen:

Loudon, Tenn., March 2, 1906.

The 8x8 "Farmers' Favorite" Drill purchased from your agent, Mr. A. H. Gallaher, gives me entire satisfaction. I have planted three crops of all kinds of grain—wheat, oats, peas, and millet, also all kinds of grass seed successfully. The Fertilizer Device is certainly very accurate, either using dry or damp fertilizer. Your "Farmers' Favorite" is all that you claim for it.

W. C. DUFF.



“Plain” Grain Drill without Fertilizer Attachment

The manufacture of a “Plain” Drill, while not calling for the same degree of mechanical skill and wide and costly experience as a “Combined” Drill, demands an extensive familiarity with sowing conditions as to soil and seed, the vital elements being the grain distributor (or feed) and the furrow-opener (hoe or disc).

In the matter of grain distribution Bickford & Huffman have in 65 years passed through all the stages of experiment and construction, from the wooden roller with cups and brushes, the fluted feed (still used by us in some special localities), and the various types of “internal wheel” devices, up to our present distributor. For wide range of quantities of all classes of seed grain—from flaxseed to beans—and from a low minimum to a high maximum in any variety, handled in a safe and positive manner, our present internal wheel double distributor is unsurpassed and unequaled in the many copies and variations of Bickford’s original device patented in 1867.

Of furrow openers we manufacture all the accepted and successful designs of Pin Hoe, Spring Hoe, Single and Double Discs, and our famous “Plowfur” Disc (the disc with all the good qualities of other discs and hoes combined) particular reference to which is made on page 10.

Our “Plain” Drills embody all the unique features of construction found in our “Combined” Drills, including substantiability, light draft, accuracy, and reliability.

The name “Bickford & Huffman” on a grain drill is the hall-mark of experience in seeding machinery—of excellence, simplicity, combined with durability and an effective, up-to-date implement.



"FARMERS' FAVORITE" GRAIN DRILLS



9 x 7 "Plain" Pin Hoe Drill with Grass Seed Attachment



Cut No. 3

Sows Wheat, Oats, Barley, Rye, Beet Seed, Buckwheat, Peas, Beans, Corn, Flax, Alfalfa, Millet, Grass Seed, etc.

The same machine supplied with either Spring Hoes, Single Discs, Double Discs or Beet Hoe attachments, all interchangeable.

Light draft and easy running; substantial, reliable, accurate and dependable.

Gentlemen:

Trusting you will overlook my delay in replying to your request for a testimonial letter, when I tell you that I waited only because I wished to test the drill in every possible way.

The "Farmers' Favorite" which I purchased from you last June is a model machine. The draft on the team is so little in comparison with the old style machines, that I can sow several acres more in a day, without injury to my team, than was possible before I purchased the improved machine. The fertilizer department works splendidly, and the oat rod is so convenient to remove, and is the best arrangement to keep corn and peas well mixed when sowing together that I have ever seen. I sowed sixteen acres of ground, not previously harrowed, in peas, and the seed was evenly and accurately distributed, and the ground left in fine condition for mowing. Next I tried the drill in sowing twelve acres of winter oats, and when they came up I never saw a more regular stand. Then I sowed ten acres of wheat land for myself, while five of my neighbors came and took my drill (almost by force) and have used it to sow not less than forty acres of land—in two instances leaving their drills, of different makes, but in sowing condition, standing in their sheds. My machine is in perfect condition and trustworthy for the accurate distribution of the various seeds and fertilizers.

North Wilkesboro, N. C., Nov. 14, 1905.

WALTER W. FINLEY.



Disc Drills, both "Plain" and "Combined"

The use of the disc drill has grown rapidly in favor in the past few years. Nearly sixty per cent. of our trade is on disc drills, where but a few years ago the hoe drill was universally popular. The disc drill will go into trashy, stubbly, rough and ill-prepared land, where a hoe drill would clog and otherwise fail to work or require constant attention. Disc drills were designed originally to cut through trash and stubble, and otherwise "foul" land, making a V shaped seed-bed, more or less "acute" according to the angle of the disc. While we manufacture what is technically known as the "Regulation Open Delivery Disc" (see page 12) our most extensive trade demands the "Plowfur" Disc (see page 10)—the disc which makes a broad, flat seed-bed—covers the seed perfectly—leaves the land "flat" and in perfect condition for the harvester. The "Plowfur" Disc will do good work in most conditions of soil where a hoe was formerly used, except in stony land where a hoe by "dodging" and pushing away the obstructions has an advantage over the rolling, cutting disc. The "Plowfur" also operates successfully in fairly hard and unplowed land and stubble, the chilled iron mouldboard of the "boot" acting like a plow-share, leaving a broad, flat seed-bottom and covering the seed perfectly.

Our double disc drills of tried design (see page 12) are generally used in loose, sandy or gravelly soils, particularly on unlevel land and hill sides.

SAYS THE "PLOWFUR" DISC PRODUCES BIGGER AND BETTER CROPS

Gentlemen:

Cochran, Pa., April 5, 1906.

If any one doubts the merits of your "Plowfur" Disc Drill, I would invite them to my farm and see the growth of wheat I have. Also to my corn-house which is far from empty after feeding my stock all winter. All of my grain is sowed with your drill. I don't bother with corn-planters since I bought your disc drill of your agents, Devon Bros.

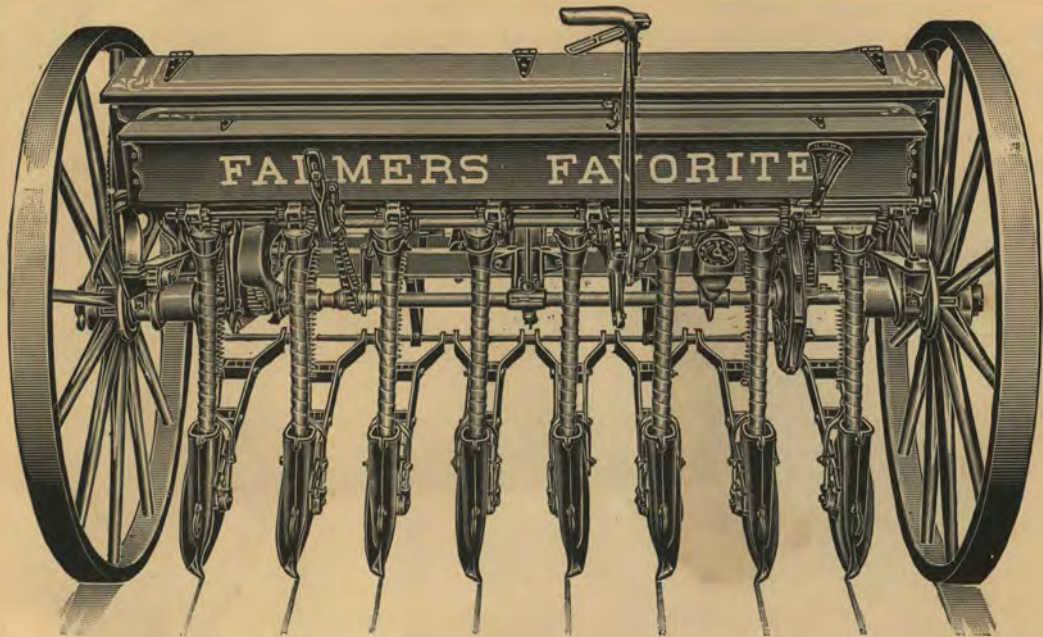
A. T. BROWN.



"FARMERS' FAVORITE" GRAIN DRILLS



8 x 8 Combined "Plowfur" Disc Drill with Grass Seed Attachment



Cut No. 4

Sows Fertilizer, Wheat, Oats, Barley, Rye, Beet Seed, Buckwheat, Peas, Beans, Corn, Flax, Alfalfa, Millet, Grass Seed, etc.

The same machine supplied with either Pin Hoes, Spring Hoes, Regulation Open Delivery Discs, Double Discs, or Beet Hoes, all interchangeable.

Light draft and easy running; substantial, reliable, accurate and dependable.

A Farmer without a "Farmers' Favorite" Grain Drill is like a soldier without a rifle. The days of bows and arrows, tomahawks and spears have passed. The modern rifle occupies no better-earned reputation in Warfare, than the "Farmers' Favorite" Drill in Agricultural Mechanics.



Furrow Openers

The "Plowfur" Disc

In foul, trashy, ill-prepared or fairly hard land the "Plowfur" Disc Drill will do perfect work as well as under more favorable conditions. It will "go" wherever a hoe drill will "go," except in stony land, where any disc would naturally ride over flat stones and leave the seed on top of them. Except under those conditions the "Plowfur" disc is "par excellence" in cutting its way through stubble and trash, making a broad, flat, hard-bottomed seed-bed, perfect covering for the grain, and leaving the seeded land "flat" and in ideal condition to

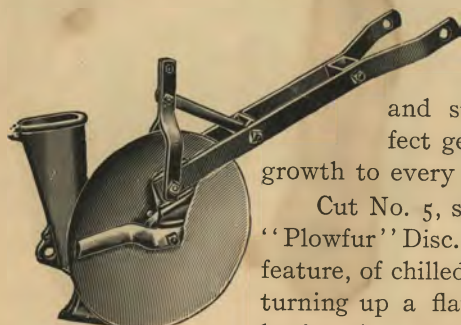
receive the alternate gifts of Nature—snow, frost, rain and sunshine—insuring perfect germination and a lusty growth to every healthy seed of grain.

Cut No. 5, shows a rear view of the "Plowfur" Disc. Note the mouldboard feature, of chilled iron like a plow-share, turning up a flat-bottomed furrow, following the cutting disc and depositing the seed with a perfect soil covering.

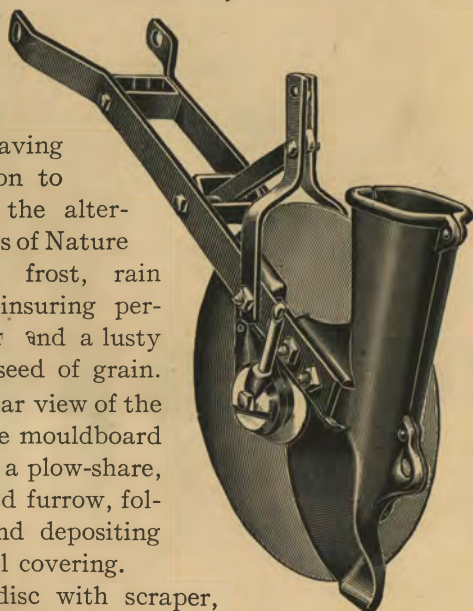
Cut No. 6 shows the concave side of the disc with scraper, scouring perfectly and keeping the cutting disc in proper order and clear of soil accumulations.

Cut No. 7 shows the convex side of the disc. Note again the "Plowfur" mouldboard—the perfect furrow-maker.

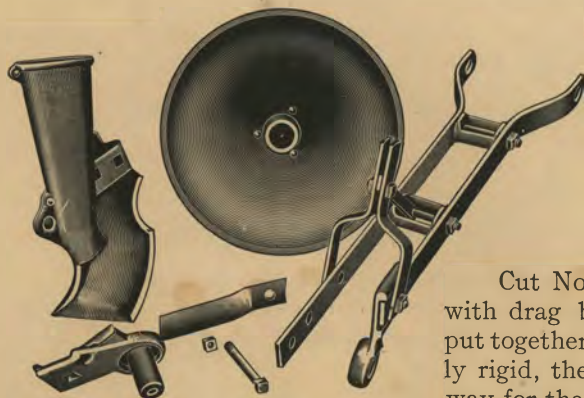
Cut No. 8, shows the "Plowfur" Disc parts with drag bar dissembled—easily repaired, easily put together, easily oiled; strong, durable; perfectly rigid, the disc is held to its work of cutting the way for the perfect furrow-maker to deposit and effectually cover the seed.



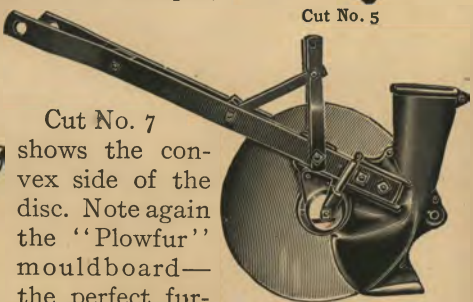
Cut No. 6



Cut No. 5



Cut No. 8

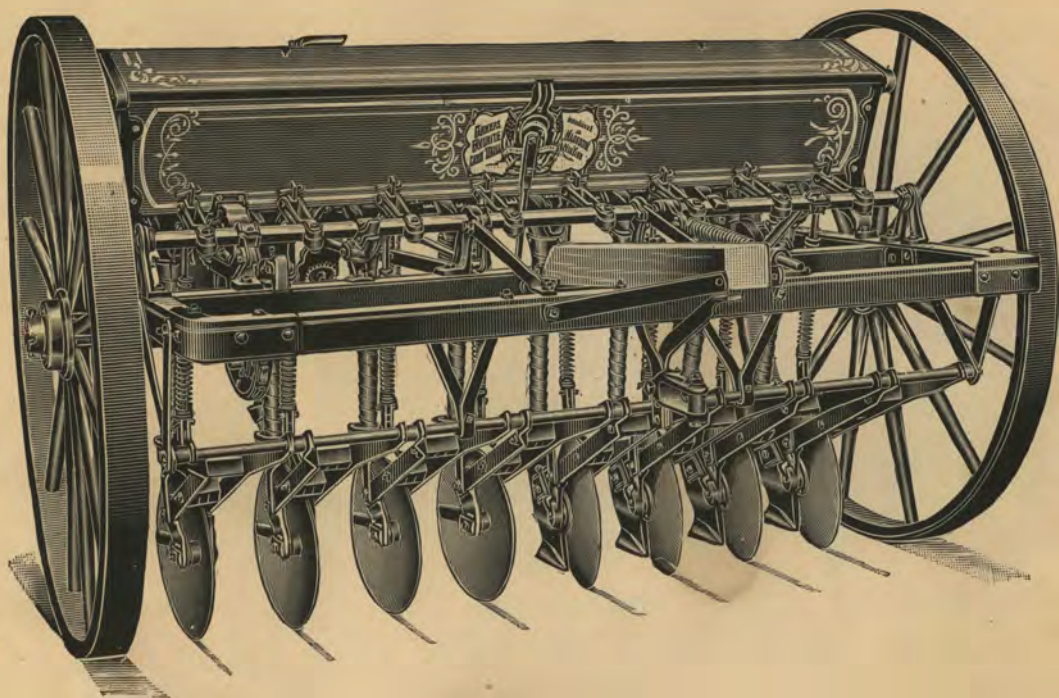


Cut No. 7



8 x 8 Combined "Plowfur" Disc Drill

(Front View)



Cut No. 9

To the same frame can be attached either Pin Hoes, Spring Hoes, Beet Hoes or Double Discs by simply removing the discs and drag bars and replacing the other attachments and necessary parts.

Note the adjustable drop hitch; the low drag bar to the disc insuring even distribution in dead furrows. Note the "helper spring" assisting in the raising of the discs—the strongly braced frame with malleable corners rivetted—the bracing of the pole—the front lift and pressure taking the load off the horses' necks when the drill is in operation with pressure on the discs, and when they are otherwise doing the hardest work. Note also the high wheel (48 inches)—light draft, easy running, the "Horses' Friend" as well as the "Farmers' Favorite."

A BUCKEYE'S OPINION OF THE "PLOWFUR" DISC

Troy, Ohio, July 30, 1906.

Gentlemen:

I purchased one of your 10x7 "Plowfur" Disc Drills from your agent, C. M. Hunt, of Troy, Ohio, and it is the most accurate sower I ever hitched to. The "Plowfur" disc certainly beats anything I ever saw on a drill, positively covering in any kind of soil. I can certainly recommend the "Farmers' Favorite" to any one in need of a drill.

CHAS. E. ROSS.



Furrow Openers

(Continued)

Regulation Open Delivery Disc



Cut No. 10

In addition to the matchless "Plowfur" Disc, for some localities we also manufacture what is technically known as the "Regulation Open Delivery Disc," with single drag bar. The Open Delivery Disc, with straight shield, chilled tapered boxing, hard or soft oiler, etc., but without the "Plowfur" feature is of the ordinary accepted design, built correctly, more carefully fitted and assembled than 90 per cent. of discs of this kind, tried and not found wanting under the most exacting conditions in many

localities where farmers often desire to seed without plowing—in stubble and trashy, hard land. The cut (No. 10) above shows the convex side of the open Delivery Disc. The disc travels at an angle to the line of draft, opening a broad V shaped furrow. The shield or grain conduit holds the soft earth and trash in such a manner that no dirt is mixed with the seed and nothing obstructs its passage to the bottom of the seed trench.

Double Disc

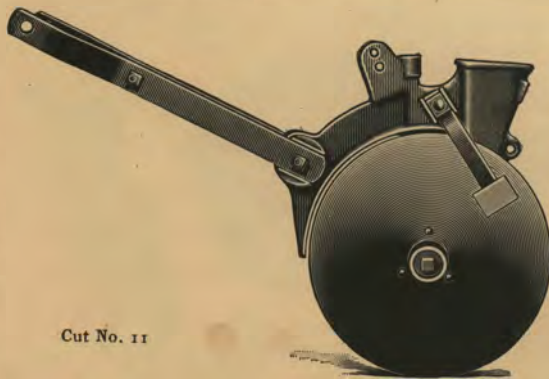
Double Disc Drills are favored in sandy, loamy soils—on side hills and in conditions where a hoe drill would plant unevenly or where a single disc would cause side draft and cover imperfectly. The

"Farmers' Favorite"

Double Disc is of tried design, has been in successful use several years under widely differing conditions in many localities and has "made good."

Cut No. 11 shows a side view of the Double Disc—note the double drag bar, rigid and durable, the spring oiler, scraper, etc. Cut No.

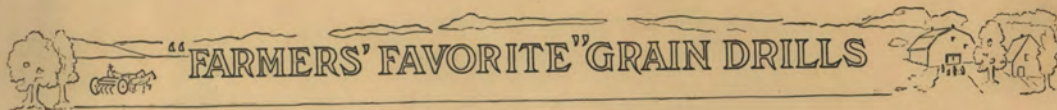
12 shows rear view of double disc. Note the broad furrow, the seed conduit dropping the grain at just the right point, insuring perfect covering.



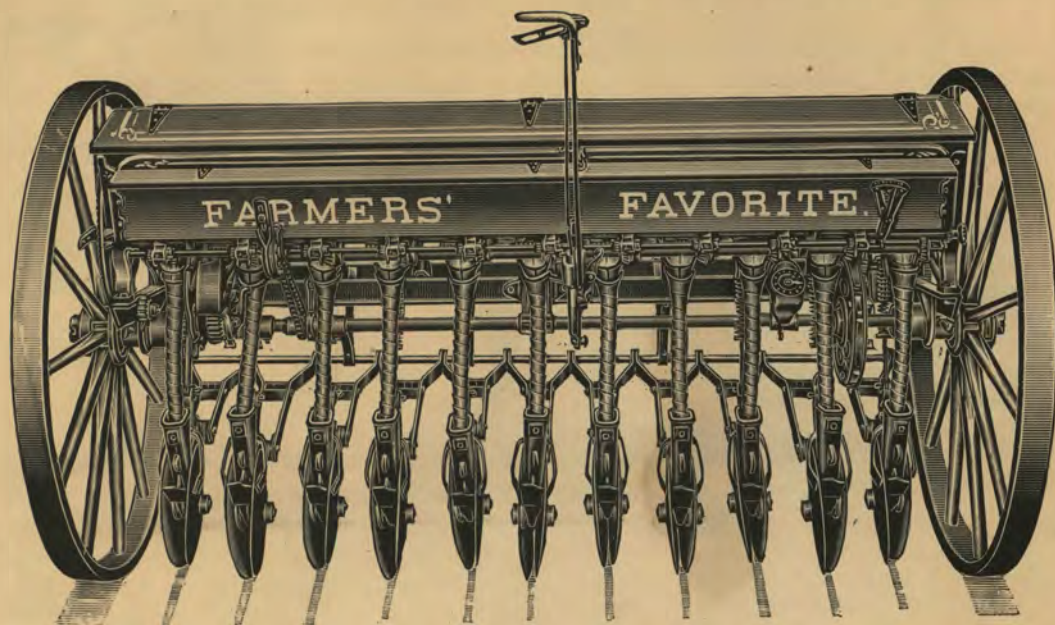
Cut No. 11



Cut No. 12



11 x 7 Combined Double Disc Drill with Grass Seed Attachment



Cut No. 13

Sows Fertilizer, Wheat, Oats, Barley, Rye, Beet Seed, Buckwheat, Peas, Beans, Corn, Flax, Alfalfa, Millet, Grass Seed, etc.

The same machine supplied with either Spring Hoes, Pin Hoes, Single Discs or Beet Hoe attachments, all interchangeable.

Light draft and easy running; substantial, reliable, accurate and dependable.

SOWED 800 LBS. OF FERTILIZER PER ACRE FOR POTATOES ON THE STATE FARM

Ogdensburg, N. Y., June 22, 1906.

Gentlemen:

This is to certify that I leased of W. C. Hall a "Farmers' Favorite" Drill in 1905 to sow 100 acres of corn for ensilage, and was so well pleased with the working of the drill and excellent crop that I purchased of your agent, Wm. Dorgan, one for the State Farm and one for my farm at Rensselaer Falls in April, 1906. I have sowed 100 acres of oats and 80 acres of corn this year on the State Farm and cheerfully say that the drill has given perfect satisfaction. I used the drill to sow 800 lbs. of fertilizer per acre on a portion of our potato land with success.

CHAS. BARTHOLOMEW, Farm Supt.

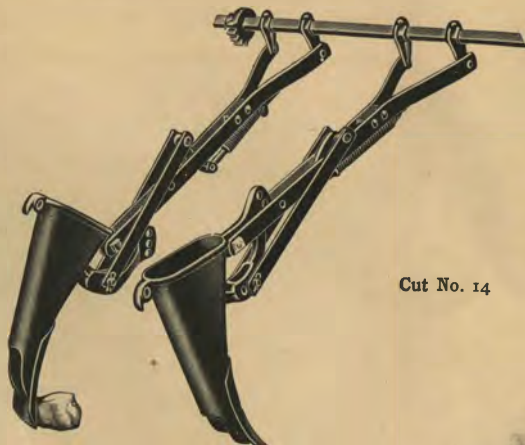


Furrow Openers

(Continued)

Combined Spring and Pin Hoe

The soil of many farms in America is peculiarly suitable to the use of the Hoe Drill on account of the flat stones and slates mixed therewith. Our Spring Hoes are simple, strong and durable; certain in operation; rigidly held to line of travel, few parts and great endurance. The drag bars are of steel and the hoes of an improved pattern. Just the right kind of a seed bed with the least amount of friction. Hoe points are double and reversible, true shaped as the result of sixty years' experience with this device, with absolutely true curves, permitting them to enter the ground like a wedge, lifting up the soil as the furrow opens—no abrupt angles to break and compact the soil and increase draft.



Cut No. 14

Pin Hoe

In sections where the land is light and free from stumps and obstructions the Pin Hoe is often used—the same correct shape, the same point as our Spring Hoe. Note that the drag bars of all hoe drills are of the same length—the hoe always assumes its proper and natural position without cramping the conductor or affecting the pitch or furrow opening angle whether in straight rank or zig-zagged.



Cut No. 15

Beet Hoe Attachment

Sugar Beets should be planted in narrow furrows or "drills" to save labor in thinning and to more effectually permit of proper and close cultivation. Cut No. 16 shows our Beet Hoe with chilled forward extension point and follow cover wheels. This device, which may be attached to either hoe or disc drills has proved immensely popular and many large growers of sugar beets have discarded special beet drills for the "Farmers' Favorite."



Cut No. 16

Depth of planting adjustable by follow wheels.



Frame Construction



Cut No. 17

In the construction of this improved steel frame we have a *solid foundation*, a feature of great importance in the manufacture of a grain drill. We obtain the maximum of strength with a saving in weight by use of high carbon angle steel. High carbon steel is rigid and strong, and by the use of angle steel we are enabled to attach the hopper and all other parts without special castings, as will be observed by illustration above.

No bends or cuts to the "Farmers' Favorite" frame. The corners are neatly fitted and securely held in place by malleable iron caps, precluding the possibility of breakage.

The advantages of a frame with front rail and side arms, which are in three separate pieces are at once apparent. The *wood-filled steel bedpiece* or "backbone" is a unique feature in "Farmers' Favorite" construction. All bolts can be kept tight by use of but one wrench.

We do not use a cheap wooden bedpiece which permits of "elasticity," incidentally resulting in the improper alignment of gears and consequent hard draft—a condition that "claims" cannot overcome. No cheap compromises on the "Farmers' Favorite."

AXLE—This part is 1 5-16 *cold-rolled* steel, amply strong enough to drive the mechanism of the drill, which is all the work required of it on the "Farmers' Favorite." The proper function of the axle of a grain drill is solely and only to drive its mechanism. The drill which depends on the axle for "backbone" is a reversion to the principle of lifting oneself by the boot straps.



Double Force Feed Grain Distributors



Cut No. 18
Small side for wheat and smaller grains



Cut No. 19
Showing the "Angles" which constitute a real force feed.



Cut No. 20
Larger side for oats, peas, corn, etc.

Our Double Force-Feed Grain Distributors furnish practically two drills in one. They are adapted to the distribution of every variety of field grain or seed, from flax to corn and beans, distributing them equally well and uniformly, with little or no breakage (even in peas and corn), without bunching, clogging or skipping in the distribution. They work equally positively when sowing large or small quantities, up hill or down, without variation, never altered in size or shape, but simply running faster or slower to regulate the quantities sown per acre. In operation the grain rests within and upon the flange or lower edge rim of vertical feed wheel within the distributor case. With the movement of the wheel it is carried irresistibly forward to the discharge opening, falling in an even, continuous stream, and is carried out to the last spoonful. The bottom of the body or grain box of drill consists of a series of hoppers, one over the mouth of each distributor. One side of the double distributor is especially adapted to the distribution of coarse bulky grain, such as peas, beans, corn, oats and barley, while the other side is equally well adapted to the proper distribution of fine grains such as wheat, rye, flaxseed, etc. Since Lyman Bickford patented the first double distributor, now nearly 40 years ago, we have used many types of the internal double distributor. Experience taught us nearly 20 years ago that the wheel of the distributor must be of large diameter. Ambitious and inexperienced experimenters with double distributors often fall into the errors which we corrected 20 years ago in this matter of the diameter of the feed wheel. A feed wheel of comparatively small diameter is certain to produce bunching, clogging and skipping in the distribution of grain, by reason of the sharp angle of the periphery of the wheel to the wall of the case at the outside opening. For the sowing of corn, peas and beans of ordinary standard size, our regulation distributor acts perfectly. *No special distributors necessary.*

For sowing long-nosed Texas or Southern rust-proof oats, we furnish an effective agitator which insures uniform distribution. This must be ordered with the machine and built as part of same at the factory. It cannot be attached to drills already out. To make this device more comprehensive we supply, at small additional cost, a reducer for the sowing of small seeds such as flax, hemp, Hungarian or millet. This reducer must be specially ordered.

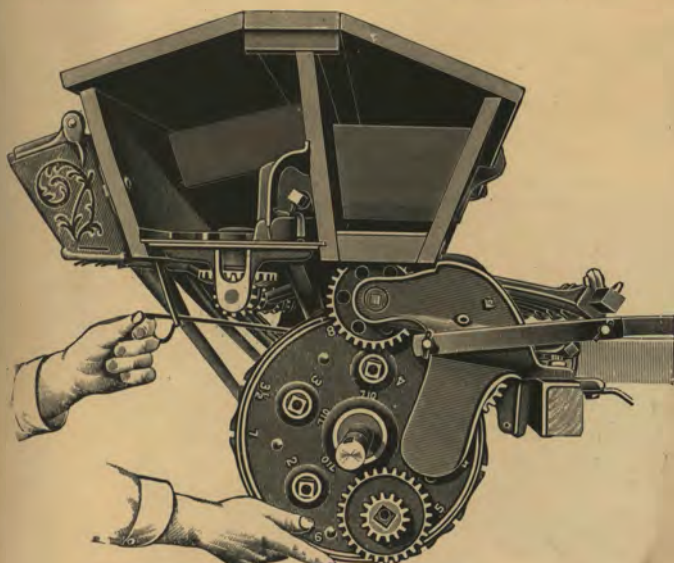
Note in Cut No. 19 the angles of our distributor. It is a well-known fact that the "Farmers' Favorite" Distributor is the fastest running device of its type. The water in a river running between straight banks or banks with easy "curves" and running at a slow speed is finding its way to the sea by "gravity." With such a river the turbulent, forceful stream, rushing round quick bends (angles) at great velocity is a fair comparison of the Bickford & Huffman Distributor to the imitations with easy "curves" or slow speeds—the gravity "spillers" and "bunchers."

CAUTION

Beware of flimsy and fictitious claims on double distributors. The "Farmers' Favorite" Distributor is made at the home of double distributors, where they originated in 1867. The "Farmers' Favorite" Double Distributor will do all and more than any other double distributor on any other drill manufactured anywhere.



Grain Speed Device



Cut No. 21

The grain distributors (or feeds) are never altered in size or shape at the discharge opening whether sowing large or small quantities of any kind of seed—from flax to beans. The variation in quantities is obtained by change in the speed at which the distributor wheels revolve. The device for obtaining these changes is located on the axle of the machine (See Cut No. 21) inside of frame, directly underneath the hopper. It is out of the way of soil, stones, sticks or trash and easy of access to change the speeds. This device is a simple arrangement of mathematically-calculated, straight spur gear wheels of different sizes, mechanically arranged

around a self-oiling steel driving gear, which, attached to the axle, transmits motion and power to each gear independently. Note the interior mechanism of the device (See Cut No. 22). The bearing of each gear is chilled—hard as glass, and durable—the case bearings are machine turned (true fitting), the projecting studs also are chilled. This variable speed device is mechanically correct in principle and practically correct in the field—a combination of mechanical principles convenient to the farmer and characteristic of the Farmers' Favorite. The five gears carry five projecting studs and change of quantity is obtained by placing change wheel on any one of these studs according to quantity desired, revolving device on axle and locking it in necessary position as indicated in directions. The change wheel is double and by use of this one gear only it is possible to obtain ten variable speeds and a range of quantities from 24 quarts of fine grain (wheat, rye and flax) to 240 quarts of coarse grain (oats, barley, corn, etc.)

No Nuts to lose—No Gears to slide—All straight spur gears, no bevels—All changes made from rear of drill.



Cut No. 22

INFLUENTIAL FARMER SAYS "ENTIRELY SATISFACTORY"

Gentlemen:

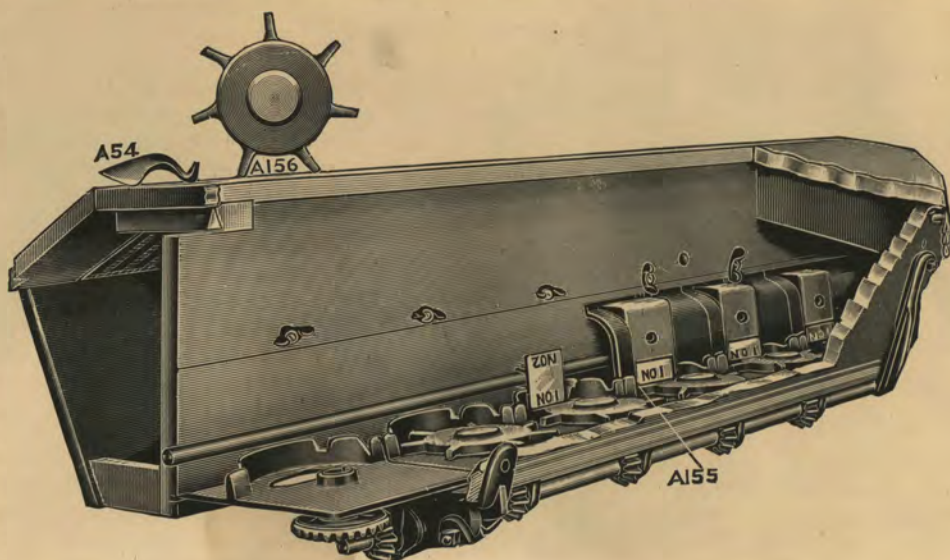
Cordova, Talbot County, Md., July 8th, 1906.

I have been using your drills for twenty-seven (27) years and have found them entirely satisfactory.

P. T. LEONARD.



Wizard Fertilizer Force Feed



Cut No. 23

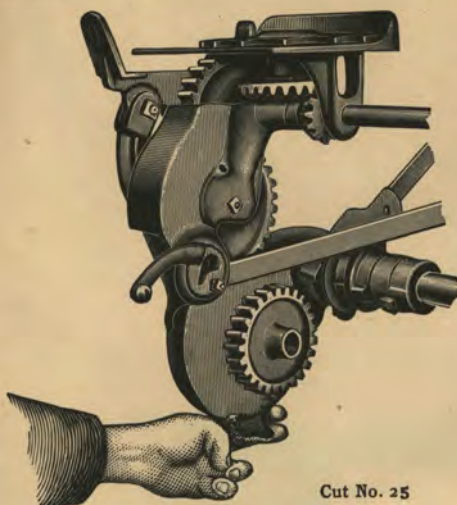
There is nothing **new** about the Bickford & Huffman "Wizard" Fertilizer Feed. First in the field with a fertilizer drill in 1867, we have always led the van in the Fertilizer Drill Trade—particularly where commercial fertilizers are largely used in a semi-plastic state. Abandoning the "Marks" and other feeds over twenty years ago, we produced the first "Wizard," which we have developed and improved from time to time to meet new and changing conditions and the consequent demands of the trade. The "Wizard" of today is the acme of simplicity, combined with effectiveness and durability. The revolving prongs (fingers) A 156 (the stirrer or wheel) cut off the under side of the body of the fertilizer and carry the desired quantity to cut-off gate A 155. Beyond this gate the fertilizer is carried (by means of stirrer A 156) to the large discharge opening. The discharge of the fertilizer is made **certain** by the operation of the hinged cleaner, A 54 (knocker) acting automatically with the revolution of the revolving prongs, A 156. This cleaner rises and falls positively with the passage of each prong, thus cutting out and forcing downward through the conductors into the soil, with the grain, the fertilizer carried around under cut-off gate, A 155. Note the circular iron rim back of feeders and cleaners which confines the fertilizer within the sweep of the prongs. The cut-off gates, A 155, hinged on a rocking, cold rolled, rigid bar, are raised simply to increase, or lowered, equally simply to decrease the quantity of fertilizer to the acre.

“FARMERS’ FAVORITE” GRAIN DRILLS

Note the lever (Cut No. 24) operating the rocking bar carrying the cut-off gates. Fifty quantities of fertilizer, from 65 to 1,200 lbs. to the acre may be obtained by the use of this lever and one speed change, **without any change of the stirrers or feed wheels.** The change of speed is obtained simply by the use of two gears—fast and slow—easy to understand, to change and to operate. See cut No. 25. Note the **straight spur drive gearing** direct from the axle. No gears to slide along a shaft, no bevel gears of changing pitch and position to strip. The meshing of gears may be simply and readily adjusted by releasing or tightening lock nut in hook bolt



Cut No. 24



Cut No. 25

attached to bed rail of the machine. All gears in perfect alignment, no slipping, stripping or riding possible. If desired to “throw out” the fertilizer drive entirely in certain places **while the drill is in motion** the small hand eccentric lever does the business. If desired to increase or decrease quantity in bad spots without stopping raise or lower the lever. We claim in the “Wizard” feed as made by us, with over twenty years’ experience, to have the acme of fertilizer drills. The fact that many plausible imitations, claiming superior constructive merits (in our opinion of doubtful efficiency) have appeared in recent years, is the best indication of the popularity of the “Wizard”—the only perfect distributor of commercial fertilizers in all conditions.

FROM THE INVENTOR OF THE “WIZARD”

Bickford & Huffman Company, Macedon, New York.
Gentlemen:

November 17, 1904.

As requested I beg to confirm your statement that all of my patents, known as the “Everett” or “Wizard” Fertilizer Distributer patents, were disposed of by me to your Company and I believe are at present your property. These patents are as follows:

No. 222478	issued to Samuel H. Everett,	Dec. 7, 1879.
No. 337843	“ “ “	Feb. 15, 1881.
No. 439495	“ “ “	Oct. 28, 1890.
No. 479637	“ “ “	July 26, 1892.

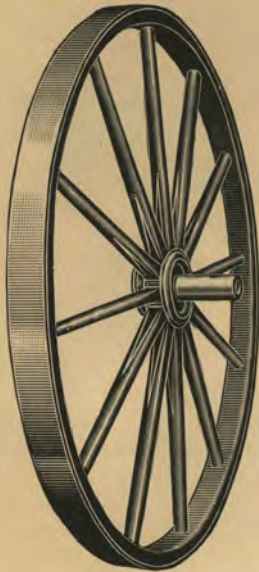
The two first named patents have expired by limitation, BUT THE TWO LAST NAMED ARE, OF COURSE, STILL IN OPERATION AND I BELIEVE OF VALUE TO YOUR COMPANY IN PREVENTING COMPETITORS FROM COPYING THESE IMPROVEMENTS ON THE “EVERETT” OR “WIZARD” FERTILIZER DISTRIBUTER.

The present construction of your machine, known generally as the “Farmers’ Favorite” Grain Drill, embodies the devices covered by the above named patents, which I believe constitute the best, most positive and generally satisfactory Force Feed Distributer of commercial fertilizers in use.

Very truly yours, S. H. EVERETT.

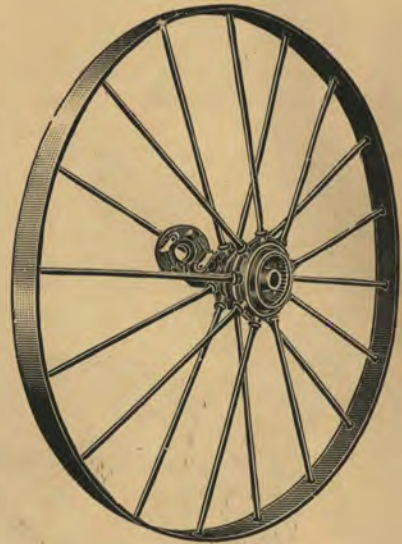


Wheels



Cut No. 26
(Wood Wheel)

Too much importance cannot be attached to the ground wheels of a grain drill. "Farmers' Favorite" Drills are equipped with either wood or steel wheels with 3-inch faced tires. See cuts Nos. 26 and 27. Wood wheels are made of selected material; steel wheels with malleable hubs and staggered spokes, insuring the greatest strength and durability. Note the extension hub. This long bearing insures permanent and proper alignment of the wheels, which greatly reduces draft and adds to the life of the machine.



Cut No. 27
(Steel Wheel)

The chilled extension hub passes into the roller bearings and is carried in the self-aligning hanger box (Cut No. 28) making it impossible to cramp any of the driving mechanism when passing over uneven ground.

Practically the entire weight of the machine is carried over the extension hub, roller bearings and self-aligning box, thus obtaining the best use of the roller bearings, it being a well established fact that these bearings are of most service when used where weight and slow motion combine.

In cut No. 27 we show the new style ratchet hub and hub cap, the pawls being permanently fastened into the cap, making it practically impossible to ever get out of order. Two pawls in each wheel; each wheel a driver. Machine starts instantly when thrown in gear.



Cut No. 28

PRAISES ITS LIGHT DRAFT

Gentlemen:

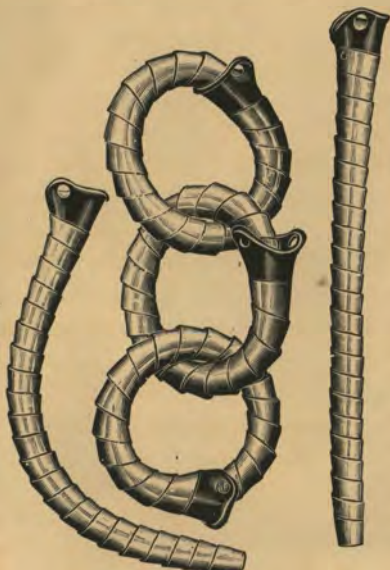
Nashville, Mich., August 29, 1906.

Your agent here, Mr. C. L. Glasgow, asked me how I liked my "Farmers' Favorite" Drill after using it a few years. Replying, I am pleased to say it does the most perfect work of any drill I have ever seen. There is no bunching of the grain, your seeding device being the best I ever saw. Its simplicity and accuracy should commend it to any person taking the time to examine. It covers even and nice, is not a heavy log on the team, and on the whole is admittedly the best drill in my neighborhood.

JOHN OFFLEY.



Steel Ribbon Grain Tubes



Cut No. 29

The great and constantly growing popularity of our Steel Ribbon Grain Tubes and the fact that competitors with the facilities have rapidly copied this excellent feature, warrant us in unhesitatingly claiming that the spiral steel tube (properly made) is far and away the best grain conductor in use. Bickford & Huffman Co. introduced the tube into America in 1898 and the result has warranted the price we paid for this remarkable device. The tube is made of one continuous piece of cold rolled strip steel, perfectly flexible and perfectly collapsible—cannot buckle or stop the flow of grain or fertilizer. There is nothing else like it. When large quantities of grain or fertilizer are required in one furrow, the construction of this tube permits of three tubes being placed in one hoe or disc—a decided advantage over rubber tubes, which would buckle and stop the flow. With proper usage the spiral steel tube will outlast the machine.

“Farmers’ Favorite” Drills are the thoroughbreds of the drill world. They are absolutely and always dependable, built on lines that attract, light running, trim, neat and well finished. Truly the “Favorite.”

Are you *sure* that the drill you have is “good enough”? Would you be satisfied today with the same means of traveling that you put up with twenty years ago? On investigation of the “Farmers’ Favorite” you may find just as much difference.

FROM MARYLAND—OUR OLD STAMPING GROUND

Hagerstown, Md., July 3, 1906.

Gentlemen:

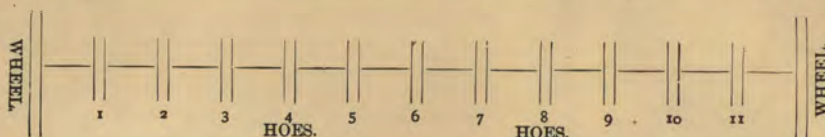
In reply to your favor of June 21st, would say I have been selling the “Farmers’ Favorite” Grain and Fertilizer Drill for the past fifteen years. My experience is that the drill is a general “Favorite” with the dealer as well as the farmer. Indeed the fact that it has behind it more than sixty years of existence and the concentrated efforts of two generations of men “who do things right,” is an indisputable evidence of its superiority. Its durability is unexcelled, its evenness of distribution of grain is unsurpassed, but where it excels even its own excellence is in the “Wizard” Fertilizer distributor. The “Wizard” is the only actual force feed distributor that ever came under my observation. It is a well authenticated fact that the “Wizard” will force commercial fertilizer through the large opening in bottom plates and to the conductors regardless of lumpy or bad condition—no clogging, absolute regularity, a continuous, even flow. One customer in his enthusiasm, born of an actual demonstration after using a “Farmers’ Favorite” on his farm, said, “When I have set my drill to the amount I desire as shown by indicator, I fill the hopper and drive off, knowing full well that the particular quantity indicated will be evenly distributed over my field.” Another said, “I have no more worry or calculating to get my fertilizer all on, the “Wizard” sows the same on the last acre as on the first.” The wide range of quantity that can be sown by the “Wizard” without change of gear is a feature that is especially appreciated by farmers. The “force-feed” grass seeder with its simple adjustment of quantity, the steel ribbon tubes or conductors, the roller bearings, self-aligning boxes, are all special features which are specially gratifying to your many well satisfied customers.

J. W. DRAPER



Sowing Corn, Peas and Beans with Drill

The "Favorite" is largely used for the drill planting of field crops for cultivation, such as corn, peas and beans, the rows of which can be made to stand any distance apart desired within the limit of range in your drill, as shown in diagram. For instance, using an 11-hoe drill, and planting only from numbers 3 and 9, if the hoes are 7 inches apart in



the drill, the rows of seed will be $3\frac{1}{2}$ feet apart, and with an 11-hoe, 8-inch drill, 4 feet apart, the wheel track serving as a guide for the return bout. Two rows of corn are generally planted with drills of these sizes. Any size drill can be used by providing a simple guide or marker for driving. With our **fertilizer drills** the most desirable method is to run one stream of fertilizer into the row **with the seed**, and an **additional stream** through one hoe on each side. This is more beneficial than when the entire amount of fertilizer is sown with the seed. **Be careful not to plant too much seed.**



Drill Planted Corn for Field Crop by Old Method.



Corn Planted by New Method.

Another Step Forward

A very simple device, used on the "Farmers' Favorite," enables the operator to plant corn and beans approximately in hills. A limited number of seeds is dropped through the hoes, in lines from 5 to 7 inches in length, and then a space is passed in the trenches without dropping seed, these spaces varying in length from about 11 to 46 inches, according to the various adjustments quickly and easily made. While this device will not drop the corn quite as well as an expensive check-rower planter, still we believe that it will do practically as good work as the one-horse single-row planters, and do the work much more speedily. It is generally conceded that corn or beans so planted are more easily cultivated, can be kept freer from weeds, and the growing crop is afforded better sun and air exposure than is possible where the seed is planted in continuous lines.



Bean Growers' Delight

In order to secure the best and most satisfactory results, it is advisable to have the seed bed in good condition, and care should be taken to keep the hoe points free from rubbish. Otherwise, in trailing, they will catch and strew, or improperly bunch, the falling seed. To every purchaser of "Favorite" Drills, our patent corn wheels, Nos. 1369 and 1370, are furnished free of charge, when ordered. This device is especially valuable for the planting of sweet corn for canneries. In planting beans they are bunched so as to be more convenient to pull, permitting the growing plants to branch out and better sustain an upright growth, and produce a largely increased yield.



Beans Planted by New Method



No. 1370

These simple wheels, furnished free with every "Farmers' Favorite" Grain Drill, enable the operator to plant corn or beans approximately in hills as follows:

Wheel No. 1369, hills 11 in., 13 in., 15 in.,
17 in., 19 in. apart.

Wheel No. 1370, hills 18 in., 21 in., 25 in.,
29 in., 33 in. apart.



No. 1369

A special wheel is also furnished, at a small additional expense, which will plant corn or beans in hills at distances ranging from 36 inches to 46 inches apart.

At a glance it is apparent why these wheels will do this work. When attached to grain speed device they revolve continuously, and when cogs or gear on these wheels engage with intermediate gear to feed shaft, they cause the feed wheel in the distributor to move just enough to discharge a small number of kernels of corn or beans. The number of seeds or kernels per hill depends wholly upon the size of same. The smaller the kernels, the larger number to the hill, or vice versa.

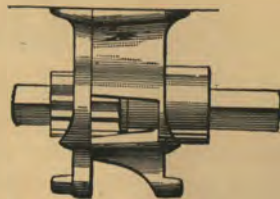
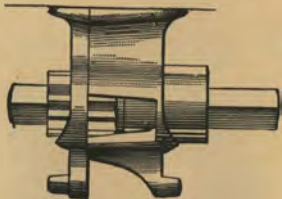
The ease by which these wheels can be attached (in place of A76) is shown on page 17 of this catalog. While it is not claimed that this device will equal the work of the check-rower corn planters, we are confident that it does as good work as many of the one-horse single-row corn planters now on the market. Not only this, but it will do twice as much work, owing to the fact that it hills two or more rows at a time. It is now well known that corn or beans thus planted are easily cultivated and can be kept freer of weeds; this feature being more than appreciated at the time of bean harvest, when many bean growers experience difficulty in getting crop properly harvested. In addition to this, the young plants are afforded better light and air exposure than is possible where seed is planted by the old method of stringing along in rows.

This device is so extensively used in large bean-growing sections of this country, that it has been termed "The Bean Grower's Delight."

We number among our customers for machines having this attachment hundreds of canning factories where these drills have been used for the purpose of hilling corn or beans, and in all cases they have given universal satisfaction. A trial of the "Farmers' Favorite" Grain Drill having this attachment will soon convince the most skeptical that it is a most simple and accurate device. At the same time, do not overlook the fact that they are supplied gratis to all purchasers of this machine.



Our Force-Feed Grass Seeder



In the grass seeder on the "Farmers' Favorite" Drill we applied the best known adjustable force feed—that of the fluted type—which has been used on the Bickford & Huffman Drill during the past eight years with eminent satisfaction. This seeder has a wide range of quantities and very simple adjustment, it being even possible to regulate the quantity of seed sown while the drill is in motion. For the convenience of the operator, the seeder is attached to the rear of the drill, thus making it possible to fill the hopper without the inconvenience of reaching in front of the machine. The hopper of the seeder also can be filled without any leakage whatever while attached to the rear of the machine. Grass seed can be sown ahead of the furrow openers for the purpose of cultivation by the attachment of long metal spouts, which are furnished with each machine. Should the operator wish to sow grass seed in the rear of the furrow openers, or as is commonly called "broadcast," the spouts may be detached. The hopper is of large capacity and is free from any delicate or small parts likely to get out of order.

The construction of the "Farmers' Favorite" Fluted Force-Feed Grass Seeder makes it possible to sow the minimum quantity of the smallest seed, such as timothy, or the largest seed, such as millet. It will also sow perfectly any of the desired mixtures of grass seed, including orchard grass.

Note that This is a Positive Force-Feed

There is nothing in the "Farmers' Favorite" Grass Seeder embodying the hour glass principles of gravity feeds requiring chain agitators, etc. No mouse-trap springs, flip-flops or toggle.



Correct Space Between Hoes and Wheels

Hoe Chain Attachment

Comparatively few drills are sold today with a lift-chain for hoes. We can furnish such a device, when ordered with drill, at a small additional price.

The advantages of the "Farmers' Favorite" center lever in connection with spring pressure on each hoe are responsible for the rapidly decreasing call for hoe chains.

“In Old Virginia”



The above picture shows Mr. A. M. Lanier and Mr. D. C. Edwards, who purchased one of our “Plowfur” Disc Drills from our agents, the Holland-Wooding Co., Danville, Va., last year. There are thousands of other satisfied users of the “Favorite” in Virginia and other states in the land of Dixie.

Before buying investigate the “Farmers’ Favorite.”

Mount Cross, Va., March 9, 1906.

Gentlemen:

Replying to your request of recent date, beg to say we think the “Farmers’ Favorite” Grain and Fertilizer Drill has no superior, and we might go farther and say we think it has no equal. When we went to Danville last Fall to purchase a drill, we went with the intention of buying the best. We looked at and examined every drill sold on the Danville market. We bought the “Farmers’ Favorite” because it is the best. It runs light, drills grain accurately and as a fertilizer feed we think none can equal it. We especially praise the “Plowfur” disc. It leaves the seed in a broad bed; also in a furrow which is so desirable for protection to the roots in the hard winter months. We shall always take very great pleasure in recommending the “Farmers’ Favorite” to our brother farmers when in need of a drill.

A. M. LANIER,
D. C. EDWARDS.



A Few Words to the Local Dealer

Yes! It's only a drill after all—the "Farmers' Favorite." But! If you had a well of fine water and couldn't get it out you'd want a pump. Now if ten different kinds of pumps were offered and you could examine them all, wouldn't you buy the one that would bring the most water with the least effort quickly? It's the water you want; you wouldn't care whether the pump had a crooked handle or a straight nozzle. You have a local implement business: that's why you need a drill. You might get along without one but your business would drift to your competitor across the street. And you want a drill you can depend on—one which when sold stays sold, gives the purchaser and yourself nothing but satisfaction, pleasure and profit. A pump then is valuable for the water it will bring up; a mill for the grain it will grind and a drill is valuable to you for the reputation it will give you among your customers, the profit it will bring into your business and the general satisfaction of knowing you are handling a staple implement. You can't afford to take a chance. Any salesman can say his is the "best" drill; the copyright has run out on "best." But the "Farmers' Favorite" will **do** more things, do them **better** and **simpler** than is possible with any other drill. Furthermore you can easily demonstrate this after a little examination and comparison of the machine with others. All we ask of you is to give our salesman fifteen minutes of your time. He will convince you that **you can have the largest share of the drill trade in your locality**, no matter what other drills are being sold around you nor who is selling them. A fair hearing is all we ask.

A DEALER WHO INVESTIGATED

Gentlemen:

Boyd's, Md., June 24, 1906.

When I went into the agricultural machinery business, fifteen years ago, I made up my mind to get the agency for the best machinery on the market. After looking over and examining all the drills I selected the Bickford & Huffman and after selling them for fifteen years have not had cause to regret my choice. The "Farmers' Favorite" is a name peculiarly adapted to this drill since it is a favorite of the farmer. You can hear the farmers say all over the country, "Give me the Bickford & Huffman Drill with the 'Wizard' feed." The "Wizard" is the best feed on any drill in the market today. It is the most positive and evenest distributor of fertilizer in existence. I would sell none but the Bickford & Huffman drill.

ANDREW SMALL.



A Few Words to the Farmer

The Farmer—the man who moves the World! How utterly dependent upon the Farmer are all our industries in Mines, Factories, Forests, Railroads, Ships and the thousands of trades and occupations that absorb the brawn and brain of the multitude. Without him none can live. How honorable, how necessary, therefore, the industry which legitimately caters to his wants, seeks to make his work lighter, the rewards for his labor greater. That this is accomplished by modern agricultural machinery is best appreciated by the older generation of farmers who have lived to see the many improvements of the past sixty years. Our founder, Mr. Lyman Bickford, over sixty years ago brought from the farm his practical knowledge and experience to build the first American Grain Drill in 1842. Samuel Everett, likewise a farmer, gave us the “Wizard” Fertilizer Feed over twenty years ago. We have dozens of farmers and sons of farmers on our staff of traveling salesmen and among our organization of highly specialized and trained, but **practical**, corps of skilled designers and mechanics. To the farmer we offer our Drill, confidently conscious that he can buy no better implement to seed his crops, no implement that will **do** more things, and do them **simpler** and **better** and earn a bigger percentage of profit for him than the “Farmers’ Favorite” Drill. To the farmer we commend the foregoing pages. Of the farmer we request consideration and investigation; we invite correspondence. All questions freely, fully and willingly answered. If you have any seeding or planting problems, let us try to help you. Our wide and varied experience in selling seeding machinery in every State of the Union and many foreign countries may be of some value to you.

A FARMER WHO ASKED QUESTIONS

Macedon, N. Y., August 2, 1906.

Gentlemen:

As a farmer with a warm spot in my heart for Bickford & Huffman Co., I desire to express my appreciation of the “Farmers’ Favorite” Drill. Its name tells a true story, in fact as well as on paper. I have known the Bickford & Huffman Co. and its management for many years. I enjoyed a personal acquaintance with the “grand old man” of American Grain Drills, Lyman Bickford, whose sterling practical qualities as an agricultural implement genius no one can gainsay. The same broad minded, liberal policy, the same practical ability and keen insight into agricultural mechanics, seems to govern your management to this day. I am indebted to you for information and assistance you have given me in connection with the sowing of sugar beets based on your wide experience with this crop and your knowledge gained by supplying drills for the extensive culture of turnips in New Zealand. I wish your Company every success and to my brother farmers all over the world I commend the “Farmers’ Favorite” Drill—a machine with which we can **do** more, do it **better** and **simpler** and at a greater saving of time, labor and expense than any other seeding or planting device within my knowledge.

JOHN L. ALLYN.



What Others Say

Our own opinion is naturally prejudiced in favor of the "Farmers' Favorite" Drill. We have, however, thousands of testimonials to the merits of the machine from independent users whose opinions are of interest. We print a few within the narrow limits of this catalog.

ENTIRELY UNSOLICITED

Gentlemen:

Bay City, Mich., June 25, 1906.

We wish to state that we have had a personal interview with Conlee Bros., of Clio, Mich., and they informed us that they sold 16 drills to farmers who are growing sugar beets in their vicinity and that sugar beets are directly responsible for the sales of these machines. **Your seeder is especially adapted for sugar beets** and we especially request that you give our invitation to advertise in our publication your careful consideration, as we reach every beet grower in this state.

SUGAR BEET PUBLISHING CO.,
(Publishers of the Sugar Beet Culturist.)
S. O. BURGDORF.

IN OLD KENTUCKY

Gentlemen:

Rockport, Ky., March 1, 1906.

We purchased last season from Mr. W. G. Haynes, one of your "Farmers' Favorite" Grain Drills and we drilled 83 acres of wheat and 15 acres of timothy. We can truly say that there is no other drill made that will do the work like the "Favorite." It is accurate and one of the lightest draft made by any manufacturer of grain drills.

M. R. & J. L. R. MADDOX.

FROM SOUTH CAROLINA

Gentlemen:

Orangeburg, S. C., June 14, 1906.

Replying to your favor of the 13th inst. beg to say that I have had great success in selling the "Farmers' Favorite" Grain Drill throughout this section. The farmers prefer it on account of the fine material that it is made out of, the "Wizard" fertilizer feed, and the all round practicability of the machine. I have used one of these machines personally for three or four years and do not know how I would get along without one to plant oats, rye, wheat and peas.

M. O. DANTZLER.

NORTH DAKOTA

Gentlemen:

Edgeley, N. D., April 18, 1906.

This is to certify that I have used one of the "Farmers' Favorite" single disc drills and must say that it works to my entire satisfaction. It has the best constructed frame and the best wheel with chilled extension hub and roller bearings, making light draft. It has the best funnels I have ever seen on a drill.

M. L. BLANCO.

KANSAS

Gentlemen:

Russell, Kansas, Feb. 29, 1906.

I am glad to hand you herewith a few words of well deserved praise for the "Farmers' Favorite" Disc Drill. I handled them for the first time last season and could have sold a larger number than I did but for the fact that I had quite a number of other makes on hand I wanted to close out. As it was, I sold five of your 10x8's. They gave my customers good satisfaction and I shall continue to handle them. They have a perfect feed, are simple in construction and have the greatest wheel I ever saw on a drill. The roller bearing axle together with the high wheel makes it an unusually light draft drill. I certainly will recommend it to any of my fellow dealers who are looking for something good.

JOHN F. WORLK.

A Very Sincere Statement

If you knew what we know about Grain Drills, we are confident you would as a dealer want to handle the "Favorite," as a farmer you would want to use it. There's a reason.

"As Ye Sow, so Shall Ye Reap"

1842



1908

BY OUR WORKS ARE WE KNOWN.