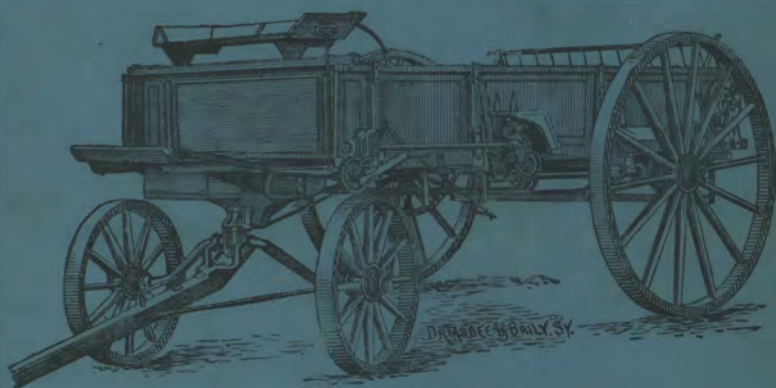


THE • EMPIRE
MANURE
• SPREADER •



MANUFACTURED BY

THE PHOENIX SPREADER CO.,

SUCCESSOR TO EMPIRE SPREADER CO.

PHOENIX, N. Y.

FOR SALE BY

F. Porter Thayer & Son, Eastern Agents
18 Warren St., New York City.

Empire Manure Spreader.

The manure spreader has now been fifteen years before the public and holds a position squarely up to the mower and binder. It is no longer an experiment, but, on the contrary, has been proven to be a great labor saving machine. By its use the value of manure is doubled by reason of being perfectly pulverized and evenly distributed. No farming implement will ever prove of more financial advantage to the farmer. Whether a manure spreader is a paying machine on a farm is no longer a question. The only question is—Where can the best spreader be found?

The inventors of the EMPIRE MANURE SPREADER have been connected with the manufacture, sale and use of manure spreaders from the time of their first introduction, and have, at a large outlay of time and money, produced a spreader which in many respects is superior to all others. It is four hundred pounds lighter by superior mechanical construction, is twenty-five per cent. stronger and one-third lighter draught than any other spreader of equal capacity in use. Its wonderful merit and sterling worth is conclusively shown in the many testimonials received, several of which are here presented. A high standard of excellence in point of material and workmanship has been reached, and with recent improvements in some of the working parts, we unhesitatingly commend our machine in every respect. It will meet all the requirements in spreading manure either broadcast or in drills. No farmer can appreciate what a valuable implement our Spreader is until he has seen it at work in the field; neither can he realize what an enormous saving of time, money and labor can be effected by its use.

FACTS ABOUT MANURE.

Prof. Levi Stockbridge of the Massachusetts Agricultural College, writes: "The more thoroughly manure is comminuted and the more evenly it is distributed through the entire surface soil the more effective it will be in producing a rapid growth and a large crop. Prime cost and the cost of handling makes manure a very expensive substance. It is no inconsiderable part of the capital in the business of farming, and if it is thrown upon the land in such a manner that it does not feed crops at once it is dead capital. If a farmer applies a hundred dollars' worth of manure to his land the quicker he can have the money returned in crops the better for him. To apply it in such a manner that he will be obliged to till his land two or three years and wait that time for the return is very poor economy. To throw manure upon land with no regard for its even distribution results in losing a large part of its value as a plant food—of its power to develop food from the soil, to gather and retain the same for plant growth."

T. B. Terry in an article, "Wasted Fertility that may Prove Fatal," (New York Tribune, Feb. 24, 1886), writes: "The farmer who wishes to make as much money as possible out of his business must take better care of the home manure supply and make better use of it. Particularly would I urge that manure be spread very evenly, finely pulverized and mixed with the soil. Ten loads may be made to give more immediate return than twenty carelessly applied."

A writer in the Canadian Agriculturist says: "Nothing will contribute so much to success in farming as plenty of manure properly applied."

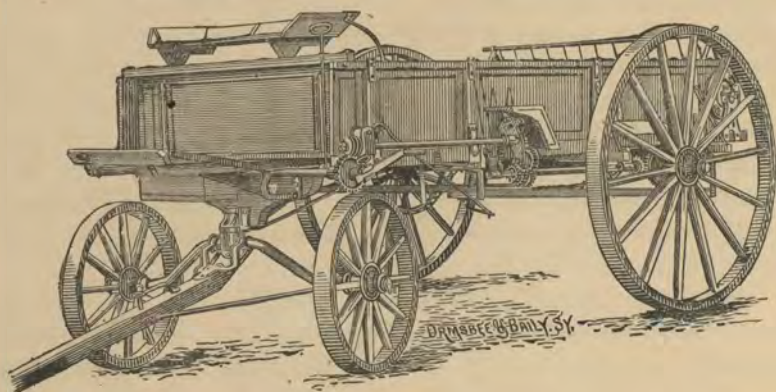
Prof. I. P. Roberts of Cornell University Agricultural Experiment Station, Ithaca, N. Y., writes: "I beg leave to call your attention to the great advantages secured by the even distribution of farm manures. Just how much the effective

value of a given quantity is enhanced by even distribution over ordinary hand spreading I am unable to say, but I think a modest estimate would place it at twenty-five per cent. Barring unusual conditions the best place to spread manure is upon grass lands in the months of September, October and November. The winter make of manure should be carefully housed and protected from firing and leaching, and fairly well rotted that the weed seeds may be destroyed, and then evenly applied at the time nature applies her top dressing. If you can induce the farmers to properly save all of the farm manures, and build a machine that will economically and properly apply them you will deserve a monument erected to your memory."

Manure is essential for all land which has suffered any degree of impoverishment. The better the land, if in the least reduced, the greater will be the profits of light manuring. Cropping without manuring in some manner should never be thought of; from this comes the poverty of farm and farmers. But the inability to make a small amount of manure widely and completely useful without an impossible amount of labor has led to discouragement and neglect in the saving and use of our best, most valuable and cheapest fertilizer. It has led to the production of machinery to preform this work, which hand labor could never accomplish, and the use of such machinery has in turn given the farmer new and more intelligent ideas of manures when made fine and evenly distributed. Many farmers who have given the matter attention are able to write us that their manures are fully doubled in value by perfect spreading. Yet the time and importance of making them fine and spreading them evenly is only beginning to be understood. Uneven distribution of manure is sadly wasteful in every point of view, and the work of spreading by hand laborious and unsatisfactory.

To meet this need and preform this labor the EMPIRE MANURE SPREADER has been produced after years of careful labor. The several years of trial also which have been given it have established its utility and afforded us the experience needed for the production of a perfect machine.

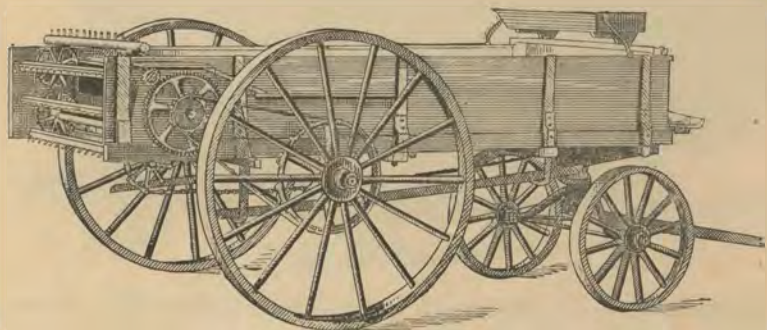
Empire Manure Spreader.



It is a substantial wagon of strong construction and carries a full two horse load. The floor of our spreader is a revolving apron which is carried back by the gearing, bringing its contents against a rapidly revolving beater which thoroughly pulverizes and evenly distributes the manure. The machine is put in operation by a single lever at the left of the driver's foot rest, and automatically throws itself out of gear when the load is discharged. It may also be thrown out of gear at any time by a lever at the left of the driver's seat.

The above view of the spreader is presented to show the gearing which moves the revolving bottom or floor, also the device to regulate the quantity or number of loads to the acre. It may be regulated to distribute two, four, six, eight, twelve or sixteen loads to the acre. The farmer may know just how much manure he is using without the trouble of measuring his field and his manure pile. It meets the demand, which has become universal for a better application of manure, and cannot be brought into any place in its work where it will not testify to its own merits.

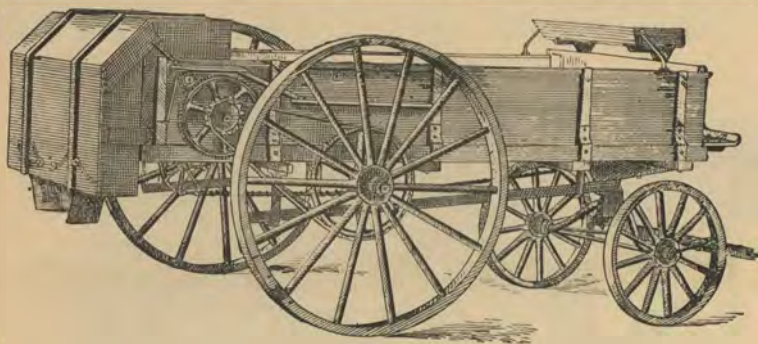
Empire Manure Spreader.



The above illustration shows revolving beater and method of operation. It will evenly and thoroughly spread all kinds of manure, from the roughest and toughest down to the finest, including ashes in all conditions, lime, cotton seed compost, etc.

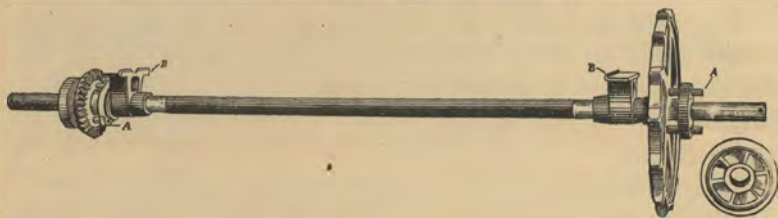
The revolving cylinder has been believed to be the only device which would pulverize or distribute manure. But as the result of years of experience and study place before the public a new departure in manure spreaders superior to any other manufactured. Our new device for pulverizing and spreading consists of two endless chains working over sprocket wheels, to which are attached bars armed with steel teeth, making a perpendicular cut up through the load. By this arrangement the teeth are engaged while traveling only 15 inches, while with the cylinder as used in all manure spreaders the teeth are engaged while making half a revolution, 22 inches, or 50 per cent. more and requiring a corresponding additional power to do the work. Nor is the saving in the length of cut all we save. The cylinder in making its concave cut continually forces the lower half of the load backward, while the upper half of the load, in most grades of material, acts as a brake by pressing down upon the cylinder. In creased resistance means increased strain on the machinery. In short, by our new device we save 40 per cent. of the power required to pulverize and distribute a load.

DRILL ATTACHMENT.



The Drill Attachment is a device with adjustable shutes, made to attach to the rear end of the spreader, which catches the manure after it leaves the beater and distributes it in single or double rows. These shutes may be adjusted to rows from two and one-half to four feet apart. The Drill Attachment is quickly converted to a wind brake by removing the shutes and lime hood, with the addition of a lime board.

DRIVING AXLE.



The above illustration shows the main driving axle and steel pins A A, which, when the machine is thrown into gear, are driven into the ratchets in the hub C. The sprocket wheel at the right end drives the beater and the bevel gear at the left end operates the shaft for moving the bottom of the wagon. When properly adjusted and out of gear the steel pins should set back about an eighth of an inch into the shoulder to prevent catching into the ratchets in the hub.

REASONS WHY YOU SHOULD PURCHASE

The Empire Manure Spreader.

1. Manure spread by this machine will, by reason of being thoroughly pulverized and perfectly spread, produce from forty to one hundred per cent. better results than when distributed by hand.

2. It will distribute either broad cast or in drills.

3. It carries a full two horse load and will draw more easily than any other spreader of equal capacity.

4. It will distribute a load of manure in one eighth of the time required to do the work by hand.

5. By a peculiar form and set of teeth in the beater it spreads equally the full width of the machine, which is a strong point over all other spreaders.

6. It is a great labor saving machine, doing its work rapidly and in a complete manner.

7. By using the drill attachment manure may be distributed in rows from two and one-half to four feet apart.

8. In distributing manure in drills for row crops two men with one team will do as much as eight men and three teams by hand, and the work is much better done.

9. With the advantages we now offer no farmer who spreads one hundred loads of manure annually can afford to be without our Manure Spreader.

Notice to Purchasers.

To avoid errors and delay, customers, when ordering will confer a favor by observing the following:

State whether drill attachment is wanted, as we always ship the plain spreader unless we receive instructions to the contrary.

Be particular to give plain shipping directions, and if unknown to us, give references or accompany the order with a remittance.

We warrant all our machines to be of good material and well made in every particular. Should any breakage occur within one year from date of purchase by reason of defective workmanship, material or weakness of construction, return the part to us by freight or express prepaid and repairs will be furnished free of charge.

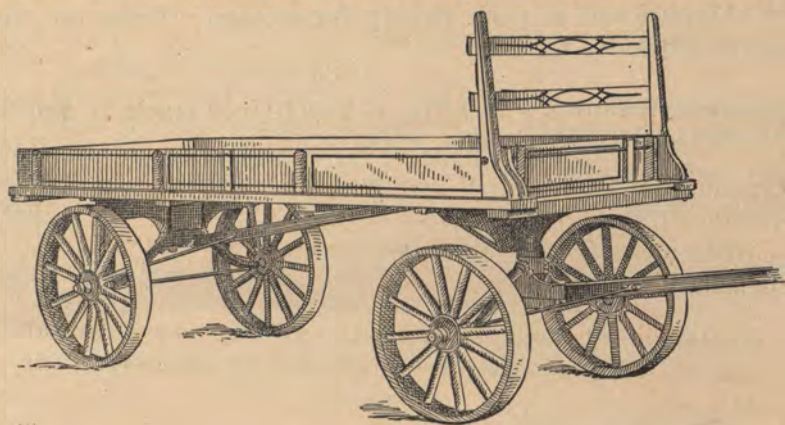
We deliver all machines in good condition on the cars at Phoenix, N. Y., getting a receipt to that effect, whereupon our responsibility ceases.

We forward duplicate bills of lading with all machines. We secure the lowest freight rates, but never deliver to destination.

PRICES.

Size No. 1, capacity thirty bushels,	\$ 65 00
Size No. 2, capacity forty bushels,	100.00
Size No. 3, capacity fifty bushels,	120.00
Drill Attachment, extra,	6.00
Slow feed for lime, ashes, etc., extra,	1.20

Empire Farm Wagon.



The above illustration represents a low down, wide and broad tired farm wagon we are making in connection with our spreaders. The platform is twelve feet long by four feet three inches wide and has side boards forming a box which may be taken off or put on in a minute's time. The side boards are ten inches wide. The frame is made of the very best second growth white ash or maple, two inches thick by four deep, and consists of two side pieces and six cross pieces strongly and firmly morticed and bolted together. The wheels are twenty-nine and thirty-four inches high and have a four inch tire. The front wheels turn square under the body, thus the wagon can be turned in a space the length of the platform. The truck is built on the strongest principle, and while it is the lightest farm wagon made it is strong enough for farm use, and with

the advantage of the wide tire the load is drawn with less power than on a wagon with high wheels and narrow tire. The ease with which it is loaded and unloaded is giving it the preference for farm use.

We can also furnish, when desired, a hay rack for the wagon. It is an extension of the width with tray shaped flaring sides, making the width nearly seven feet, fits snugly to the platform so that nothing can rattle through and one bolt fastens it to its place. It is made in sections to come apart for shipping and to pack closely for storage. Price, on the cars at Phoenix, N. Y.:

Complete as shown, 4 inch tire, 4 foot 10 inch track,	\$40.00
Whiffletrees and neckyoke, extra,	2.00
Hay rack, extra,	5.00
Thills, extra,	5.00

TESTIMONIALS.

HIGHGATE, VT., December 1, 1890.

Empire Spreader Co., Phoenix, N. Y.:

GENTLEMEN.—I have just received a diploma on your Spreader from the County Fair at Sheldon, Vt. It is a beauty. Yours, B. F. NYE.

WEST LEYDEN, N. Y., May 26, 1890.

Empire Spreader Co., Phoenix, N. Y.:

GENTLEMEN.—We received the spreader in due time. Enclosed please find check as payment for same. We expect to sell more spreaders later in the season as people buy them mostly for fall use.

Yours truly,

V. POHL & SON.

CHARLOTTE, VT., October 13, 1890.

Messrs Phoenix Spreader Co.:

I saw your spreader at the fair and I think I liked it better than the one I am handling. I write for catalogue, prices, etc. Please quote me your best terms to the trade and oblige. Yours truly, H. C. ROOT.

BENTON, OHIO, April 9, 1890.

DEAR SIR:—I received your letter dated April 8th, and in reply would say I am pleased with your machine. I prefer your goods to anything I have come across yet. But still have my spreader made at Springfield, Ohio, and would like to dispose of it before buying another.

Yours respectfully,

H. T. SCHNELL.

UNION HILL, ILL., October 18, 1890.

Empire Manure Spreader Co., Phoenix, N. Y.:

SIRS.—I bought one of your spreaders from Mr. W. N. Stage of Peoria, Ill. I have the spreader on the farm using it and I like it first rate.

THOMAS HOUGHTON.

FITCHBURG, MASS., May 6, 1890.

Empire Spreader Co., Phoenix, N. Y.:

GENTLEMEN.—Will say that the spreader has arrived and works good as far as tried. Think it beats any that I have ever seen.

Yours respectfully,

C. E. ADAMS.

DE MOINES, IOWA, October 6, 1890.

W. N. Stage, Agent for Empire Manure Spreader, Madison, Wis.:

DEAR SIR.—We bought two spreaders of you at the State Fair. They are the thing for the farmer, and should be in the hands of every one that has much manure to haul out.

PIONEER HAY CO., Jas. P. Forrester, Manager.

WEST WINSTED, VT., May 25, 1890.

Empire Spreader Co.:

GENTS.—Enclosed please find draft for spreader. The spreader is giving very good satisfaction.

S. T. DICKERSON.

SHREVEPORT, LA., December 23, 1890.

Empire Spreader Co., Phoenix, N. Y.:

DEAR SIR.—I loaned my spreader to one of my neighbors last week and he is so pleased with it that he wants to buy one. So you will please write me the best you can do for one laid in Shreveport. Want two horse machine the same size as the other two bought of you. Let me hear from you at once.

Yours respectfully,

C. C. HERNDON.

SUFFIELD, CONN., March 3, 1889.

Empire Spreader Co., Phoenix, N. Y.:

DEAR SIR.—I have found the Empire Manure Spreader perfectly satisfactory in every way. It does the best work of any machine I have ever used, and is also the least liable to breakages. I shall take great pleasure in recommending it to all farmers desiring a first class manure spreader.

Yours truly,

H. K. WRIGHT.

PHOENIX, N. Y., May 11, 1890.

Empire Spreader Co., Phoenix, N. Y.:

GENTLEMEN.—In regard to the Empire Spreader purchased of you I would say that I have used it in all kinds of manure from the finest for manuring in the hill to the very coarsest, including corn and tobacco stalks, with perfect satisfaction in each case. I regard it as one of the greatest farming implements in use.

Yours truly,

FRANK W. BUTTS.

CHESTER, N. Y., July 1, 1890.

Messrs. Jos. Van Cleft & Co., Newburg, N. Y.:

GENTS.—Enclosed find draft for amount of your bill for the Empire Manure Spreader purchased of you last spring. I have given it a thorough trial on both sod and ploughed ground and with coarse and fine manure. It has worked satisfactorily under all conditions, and would soon pay for itself on most of our dairy farms.

Yours truly,

J. E. WELLS.

