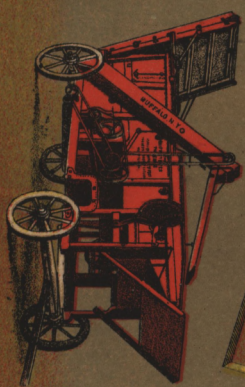


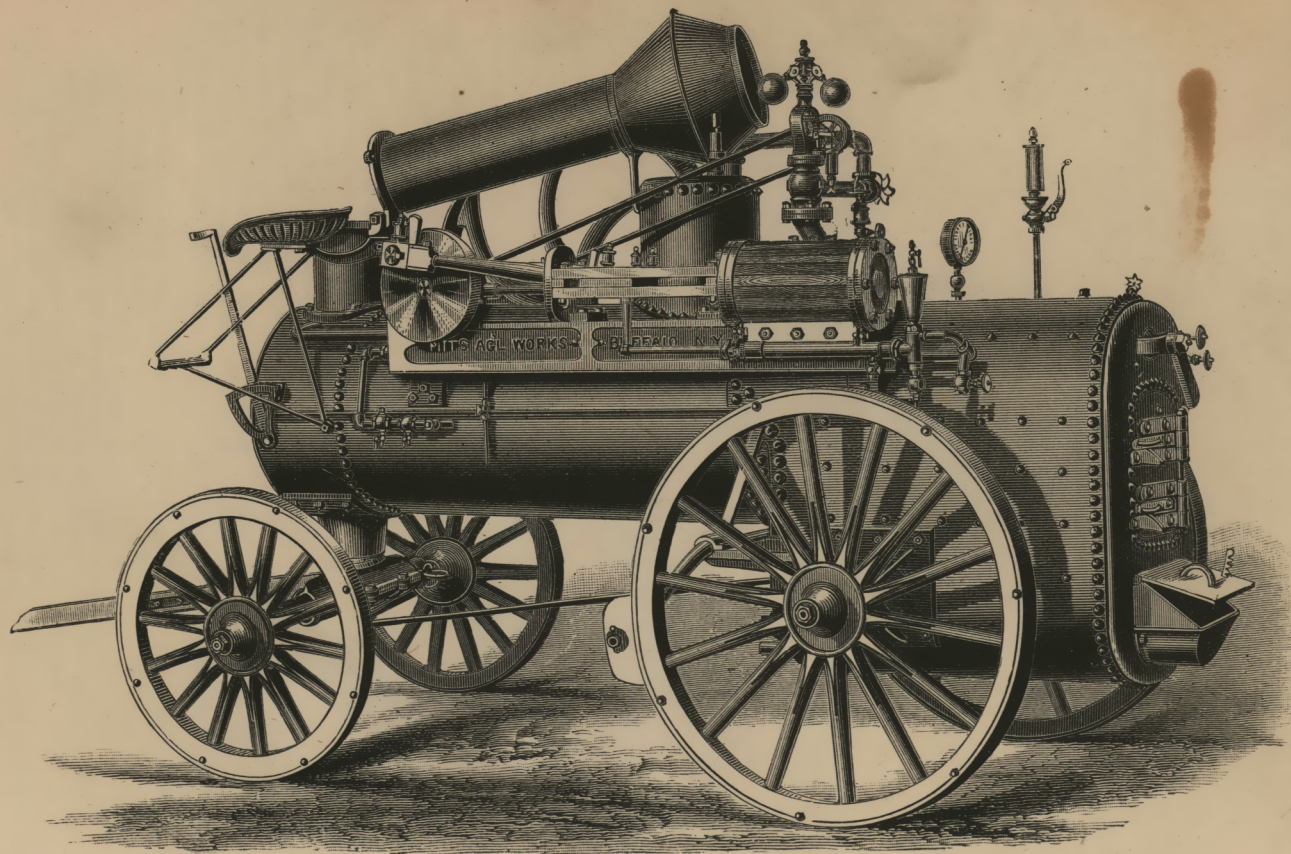
BUFFALO PITTS THRESHING MACHINERY



MANUFACTURED BY



THE PITTS AGRICULTURAL WORKS. BUFFALO, N.Y.



THE BUFFALO PITTS PLAIN ENGINE.

The feed water is led in large pipe through the

HEATER

(into which the exhaust steam from Cylinder is discharged) and is thus heated to boiling heat before entering the boiler, which is a great economizing of fuel.

The Main Shaft is of the best machinery steel, and of large size.

The Main Shaft Boxes are brass, and are adjustable sideways and down.

The Piston Rod is the best machinery steel, finely finished.

The Valve Stem is also of steel, with hardened end.

The Crank Pin is of steel.

The Eccentric Rod is of best wrought iron, and is case hardened at end connecting to Valve Stem.

The Connecting Rod is of the very best iron, forged and finished in the most workman-like manner and fitted with brass boxes, which are adjustable for wear.

The slides are of steel, are of ample size to resist all liability to spring, and are finished in the most perfect manner.

The Cylinder and Steam Chest are cast in one piece, by which we avoid a troublesome joint for even a man of experience to pack well.

The Valve is held in position on stem by wide collars held by set-screws giving an extra wide bearing on each side of the valve. It is adjusted to work the steam expansively, so that power and fuel are economized to the utmost.

The Cylinder is jacketed so as to prevent contact with cold air which would tend to lower the heat to condense the steam.

The Piston is fitted with self-adjusting packing rings, and will with any decent usage never require attention.

The Pump is of the simplest style, not liable to get out of order, and has all the cocks and valves usual in an A No. 1 Pump.

The Plunger is of the best cast steel and is driven from the cross-head.

The Air Chamber and Pump Valve are polished brass, and are of the very latest pattern.

The Governor is the Judson, the most perfect governor in use. It has speeder, by which the speed of engine may be varied.

The Pop Valve, Water Gauge, and Steam Gauge are of the best makes.

In short, we have studied to build an engine that would excel in safety, strength, durability and convenience, and would accomplish its work with greatest ease and the least expense of fuel.

We furnish either Wooden or Iron Wheels as may be ordered. The Wooden Wheels are very strong, substantial, durable and have heavy tire. The Iron Wheels are wide cast iron rims with wrought iron spokes and cast iron hub, and are as durable as any wheels made.

The Brackets which hold the spindles of the hind wheels are trussed with a wrought iron rod running under the boiler, and drawn tight by nuts so as to form a kind of sling, which relieves the boiler of the strain from the brackets.

The front axle is of very best wrought iron.

The Tongue is entirely independent of Axle (that is, not rigidly attached to it), so that the pole is not fretting and bruising the horses when driving over a rough road,—and the axle always has the same set whatever the position of the tongue.

A strong brake is within easy reach from the driver's seat.

IN MATERIAL AND WORKMANSHIP,

our Boilers are first-class in every respect. The shell is of No. 1 C. H. Shell iron of a tensile strength of 55,000 pounds U. S. Standard. They are tested by hydraulic pressure and by steam at 150 pounds to the square inch.

The front is of wrought iron, with double doors, damper, etc.

No Boiler in the market is more thoroughly stay-bolted and braced than ours.

The long seam and the throat seam are double riveted, which adds greatly to their strength. The Dome is wide and *Extra high* which insures *Dry Steam*. Dome is made of C. H. No. 1 Flange Iron, and is placed in middle of boiler.

One Hand hole in front, two under throat and one in smoke chamber, give ready access to cleaning *all* parts of the inside of boiler.

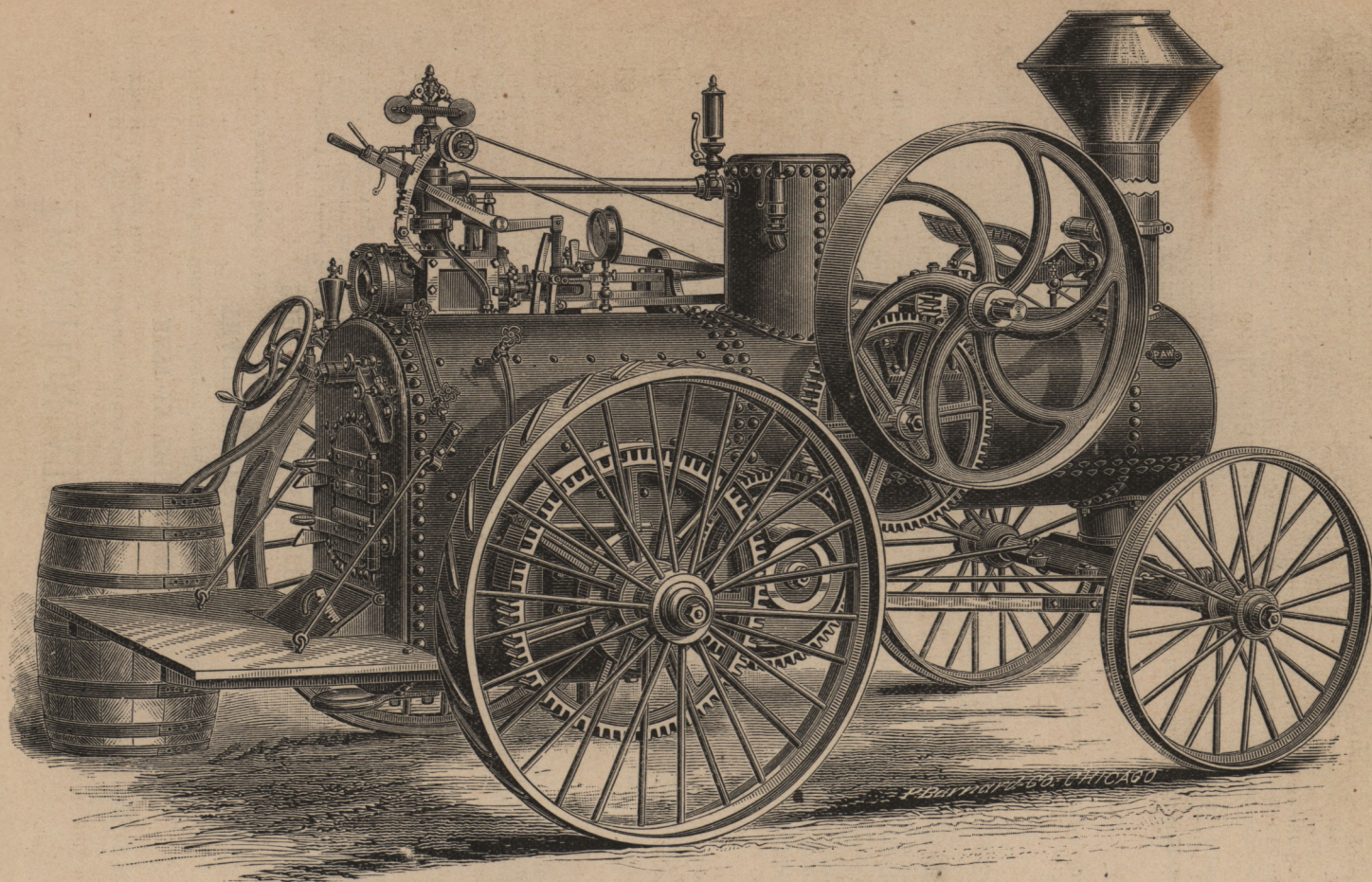
A Fusible Plug in the crown sheet, prevents possibility of accident from low water.

The Flues are the best Lap welded from the most reputable makers in the United States, and are fastened into Flue sheet with copper thimbles. Following out our idea of using the Best Material for the purpose, we build our Fire-Boxes of

No. 1 FIRE-BOX STEEL,

which metal is considered by the best engine builders to be far superior to iron, and is used exclusively in all of the Best and Finest Locomotive and Marine Engines. The Smoke Stack is made of the best sheet-iron, and sets on a cast iron base, which is riveted to the boiler.

Our Spark Arrester works perfectly, and is a complete safeguard against sparks. We have arranged it so that *the throat may be opened wide, so as to give plenty of draft* when getting up steam, and then close when steam is up.



THE BUFFALO PITTS TRACTION ENGINE.

TRACTION ATTACHMENT.

We feel very proud of having, in the first season, turned out an Engine that at once took rank as among the

BEST IN THE MARKET,

but we must say that we think we deserve extra credit for turning out a

TRACTION ATTACHMENT

that was acknowledged to be

SUPERIOR TO ALL OTHERS.

We simplified the gears, and, by bringing the bearings closer to the shell of boiler, did away with much of the strain which is so great a detriment to most of the traction attachments in the market. Believing that the

BEST IS THE CHEAPEST,

we adopted the Locomotive Link as the

VERY BEST REVERSE

that could be devised.

Our link for this year will be of double-refined iron, case-hardened so that it has toughness and strength of iron, with a shell of steel that cannot be worn. It will have broader bearings, and be greatly improved in its hanging. It will be a *fac simile* of the very Best Locomotive Engine Link.

ANOTHER GREAT IMPROVEMENT

for this year will be a new Throttle Valve and the connection of the reverse lever with the throttle valve, by which the throttle and reverse lever are operated simultaneously.

The new throttle is a simple slide valve, which is the most perfect and least liable to get out of order of all valves, and the arrangement would in this respect alone be a

GREAT ADVANTAGE

over the general run of throttles.

Our improvement (for which we have applied for patent) consists in connecting the Throttle Valve Stem to the Reverse, so that both are operated by the Reverse Lever and simultaneously.

The Reverse Lever is on centre notch of quadrant so that there is no movement of main valve, the throttle valve is closed. As the lever is moved toward one extreme or the other, the valve gradually opens, and when lever is at either extreme of quadrant the throttle is wide open. The closing of main valve simultaneously with throttle (instead of after throttle, as in all other Traction Engines,) "cages" steam in cylinder, which forms a cushion and acts as a brake on the momentum of the fly-wheel, so that Engine cannot run one quarter as long after reversing as where throttle is operated independently. This is a great advantage over all other Traction Engines, as it enables the operator to stop almost instantaneously.

As an experiment in running Engine on the road, we have run at full speed to within a foot of an obstacle, and stopped Engine before it reached the obstacle. Another

GREAT BENEFIT

from this improvement is, that the caging of live steam in the cylinder renders it next to impossible to stop on center. In fact, this improvement makes our

TRACTION ENGINE

the only perfect Locomotive among Farm Engines—one that an ordinarily intelligent engineer can drive all day, without necessity of getting off of foot-board.

Our Clutch Reverse is the simplest and at same time the most durable of all the substitutes for the Link.

The Pulley, on main shaft, driving governor, is attached to Eccentric Block, and both are loose on the shaft. One side of the governor pulley has a clutch projection on its side, extending one-third of its circumference. A pulley, keyed on to main shaft, next to governor pulley, has clutch on its side, next to clutch-side of governor pulley, which works against clutch in governor pulley, but allows a movement of one-third of a circle. When Engine is to be reversed, the steam is to be shut off. Then, by means of a hand-wheel, the governor pulley is thrown one-third around, reversing the valve and bringing the clutch of governor pulley against clutch of pulley keyed to shaft, and this drives the valve reverse way.

THE NEW BUFFALO PITTS VIBRATING THRESHERS:

WHY AND HOW WE BUILD THEM.

Our new Buffalo Pitts (Vibrating) Thresher is no new or experimental machine. It has been thoroughly tested during several years past in all kinds and conditions of grain and seed, and has given *better satisfaction* than any other Vibrator. And the universal experience of all who used our *New Buffalo Pitts* last season was that it *Threshed, Cleaned and SAVED* Wheat, Oats, Barley, Flax or Millet, either *Wet or Dry*, in a manner that surprised those who were accustomed to the work of other Vibrators. In fact, many acknowledged that our New Buffalo Pitts did work that would do credit to any Thresher, Apron or Vibrator.

In our new Buffalo Pitts will be combined all the Best Points of the most improved style of Vibrators, with the many excellent points which have made our Apron Machines so popular, viz. : LARGE, WIDE-FACED PULLEYS, WIDE BELTING, STIFF SHAFTING, WIDE BEARINGS, SUBSTANTIAL, WELL-SEASONED FRAME, AND FINE FINISH.

SPECIAL IMPROVEMENTS

WHICH MAKE THE

NEW BUFFALO PITTS SUPERIOR to all OTHER VIBRATING THRESHERS.

It stands steadier—Does not jar so much.

In our New Buffalo Pitts we propose to utilize, as far as possible, the many years of hard work we have spent in keeping the "Old Reliable" at the head of the

THRESHING MACHINE FAMILY,

by incorporating in our Vibrating Thresher *all* the good points which are common in Apron and Vibrator Threshers.

In the New Buffalo Pitts we not only offer an

EXTRA STRONG FRAME

to resist what jar there may be, but we have REDUCED THE JAR TO A MERE NOTHING.

Our end-shake shoe is driven *independently of the bolts*, and its motion is adjustable. We have so arranged it that the motions of the shoe and of the bolts NEUTRALIZE EACH OTHER to a very great extent.

We have also introduced an ingenious device by which the motion of the bolts is cushioned at the end of stroke, and the crank is assisted over the center at the same time. This is as great an improvement in the working of the Vibrator as the end-shake shoe was over the side-shake, and it is an improvement found in *none* but the NEW BUFFALO PITTS.

EXTRA BEATER.

In our New Buffalo Pitts, the Beater not only stops the grain *immediately* back of the Cylinder, and thus gives it the benefit of the whole length of the Separating Table, but the fingers assist the movement of the straw away from the back of the Cylinder. We think that threshermen will think this *preferable to shooting the grain directly from Cylinder into Straw on Stacker*—as so many of the Threshers do.

THE MILL AND END-SHAKE SHOE.

Superior to those in any other Thresher. Unequaled for cleaning. Blows nothing over. Never clogs.

In our New Buffalo Pitts we have incorporated, with perfect success, the two GRAND POINTS which have made our Old Buffalo Pitts the king of Threshers.

The mill and sieves are *extra large*, and so nicely proportioned to each other that, while the strong, even blast holds the chaff off the sieves and carries it over the tail, *not a kernel of grain goes over with it.*

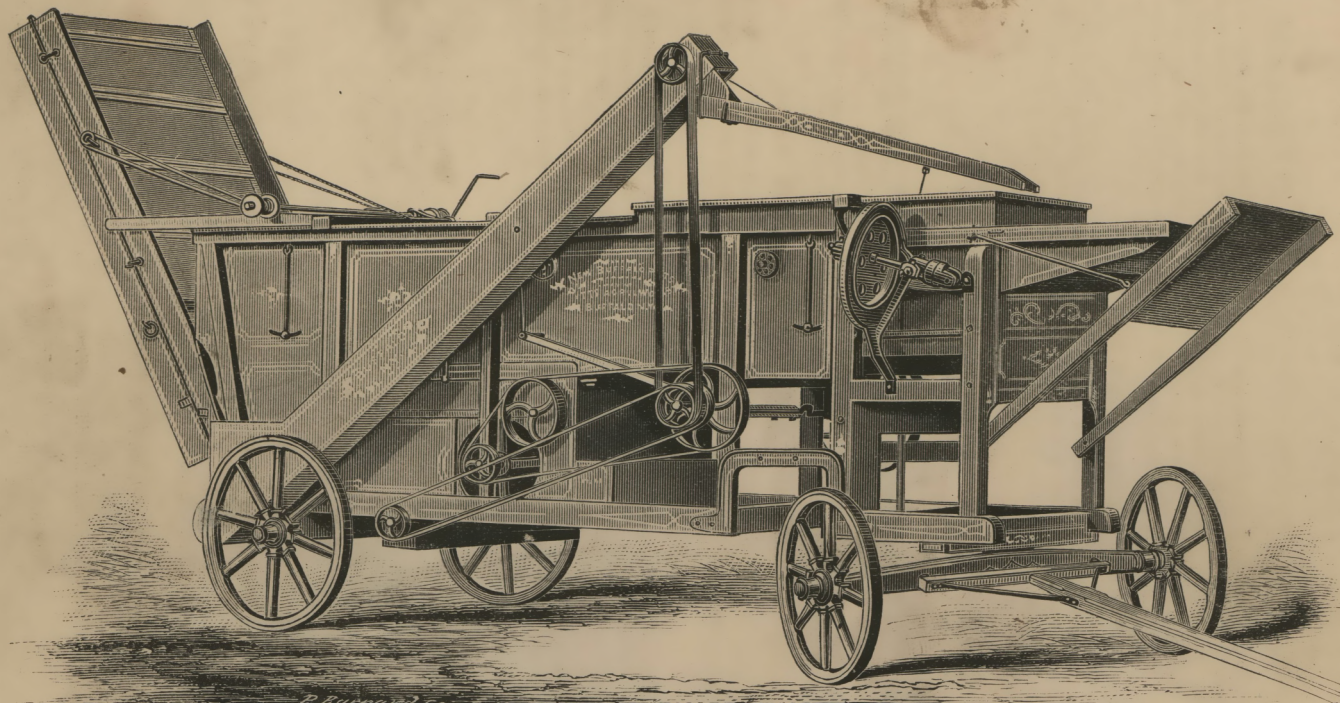
In perfection of Mill and Shoe, and in perfect proportion of each to the other, the New Buffalo Pitts is unequaled.

No clogged sieves. No grain blown over.

SINGLE GEAR.

With our new Buffalo Pitts Machines we shall furnish our new *Single Gear*, which is the strongest and most complete single gear ever put out on any Thresher.

It consists of a large bevel wheel and a bevel pinion on Cylinder Shaft—all hung in an iron frame with boxes adjustable. It is speeded to run with our Double Pinion Powers.



THE "NEW BUFFALO PITTS" VIBRATING THRESHER.

THE BUFFALO PITTS APRON THRESHER.

GREAT IMPROVEMENT.

Our *last year's Buffalo Pitts* was acknowledged to be *The Most Perfect Thresher* that ever threshed a bundle; we expect to *do better yet* for the coming season, and to offer you a machine that in **PERFECTION OF WORKMANSHIP, IN CAPACITY FOR FAST AND GOOD WORK, IN CONVENIENCE AND IN COMPLETENESS**, throws all other threshers into the shade. We are sure that our threshermen friends will believe that the millenium has come, and with it a perfect threshing machine.

THE PICKER.

We have the simplest kind of Picker and the most successful. Its form, location and motion are such as to agitate the passing straw thoroughly. Its location is at just the right place to deliver the straw to the Straw Belt without throwing the grain over, too. The *adjustability* of the Picker is another grand point in our Machine.

PATENT AGITATOR.

We desire to call your special attention to the Patent Agitator—the most perfect and the final means of sifting what little grain may be in the straw at this point. It consists of two arms fastened by set-screws to a rocking shaft that passes between the upper and lower halves of the straw belt, working by a pitman. The rocking of the shaft raises the arms against the under side of the belt, somewhat like the beating of carpets. This is a matter of great advantage, as it so effectually agitates the straw, as to shake out any stray kernels still remaining there. With this it is next to impossible for any grain to go over in the straw.

SPACE OVER GRAIN APRON AND STRAW RAKE.

The space between belts and decking is extra deep, allowing no chance for straw to pack sufficiently to hold or carry a kernel of grain. This extra depth is continued over Straw Rake as well as Grain Apron.

VIBRATING RETURN BOARD.

Ordinarily the grain, especially if it be wet or damp, is apt to load up on the Return Board, and after awhile falls on the Sieves in a mass, causing them to load. In the Buffalo Pitts this is entirely avoided. The Board is hinged on its upper edge, and at the lower edge is attached by rods and hooks to the Shoe, so that the longitudinal motion of the Shoe continually shakes the Board, and the grain and chaff, whether wet or dry, is discharged on to the Finger Bar as evenly as it falls from the Straw Rake, and it is impossible for it to pile up or lodge on the Board.

STRAW RAKE.

The Straw Rake at its lower end runs over double sets of pulleys, so that if straw should require more fall from picker than when running on both sets of pulleys, the upper ones may be taken out and the belt tightened. This is an adjustability which no other machines have, and which Threshers will fully appreciate.

The two sets of pulleys in the Buffalo Pitts give so much more room inside as to permit of such agitation as will, without any danger of clogging, **SURELY** take out every kernel of grain. It has this advantage over every other Thresher.

THE MANY POINTS OF SUPERIORITY

OVER ALL OTHER THRESHERS WHICH ARE FOUND IN BOTH

THE "OLD RELIABLE" BUFFALO PITTS and THE NEW BUFFALO PITTS

Cylinders and their belongings—concave adjusters, shafting, pulleys, belt guides and the mill and end-shake, all of them giving our Machines the

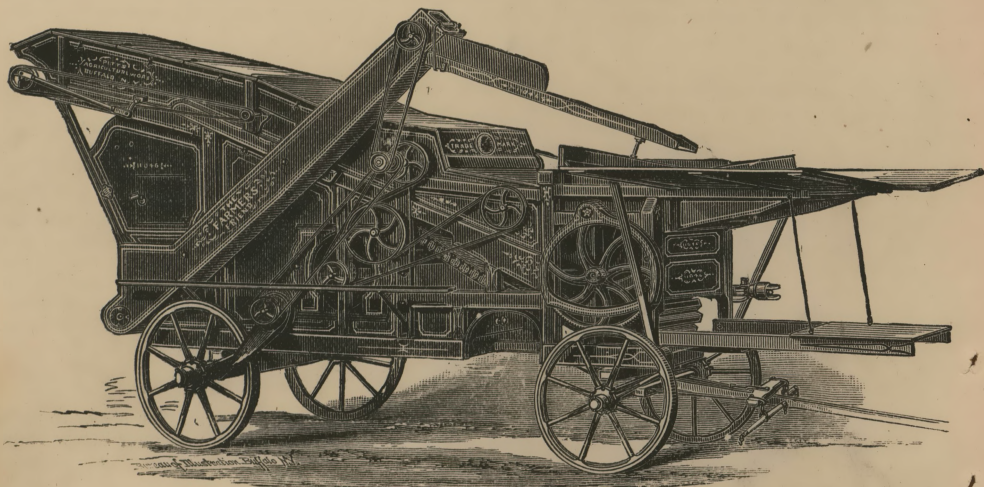
GREAT REPUTATION

they have always had, will be found in this year's APRON AND VIBRATING THRESHERS in *very much improved shape*.

Following we note some of the improvements and superior points of the several parts, common to both styles of machines.

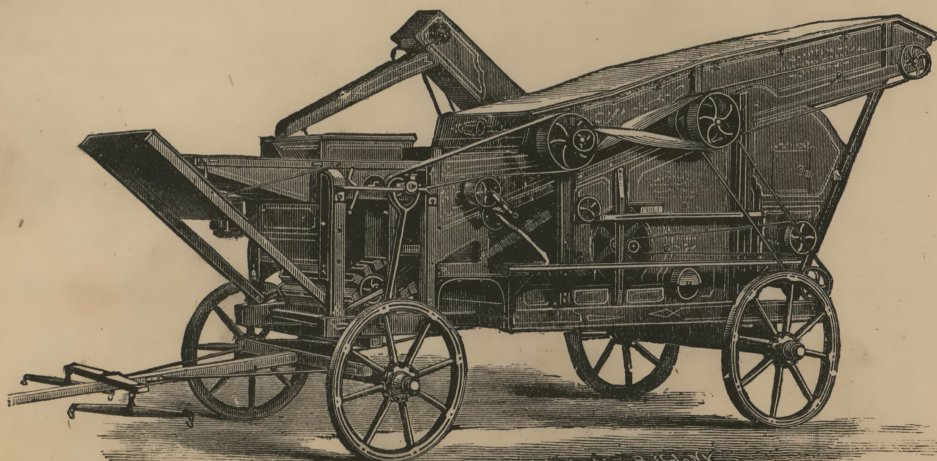
THE BUFFALO PITTS APRON THRESHER.

(GEAR.)



THE BUFFALO PITTS APRON THRESHER.

(BAND.)



1882

ESTABLISHED 1851. INCORPORATED 1877.

DESCRIPTIVE CATALOGUE
OF

BUFFALO PITTS

THRESHING MACHINERY

MANUFACTURED ONLY AT

THE PITTS

AGRICULTURAL WORKS

BUFFALO N.Y.

INCLUDING

VIBRATING & ENDLESS APRON THRESHERS,

MOUNTED & DOWN HORSE POWERS

COAL, WOOD AND

STRAW BURNING FARM ENGINES,

BOTH PLAIN & TRACTION.

FOR SALE BY

BARKER & STOUFFER, Minooka, Ills.