



Milwaukee Harvester Company.

INCORPORATED.

HIGH GRADE
GRAIN & GRASS CUTTING
MACHINERY.

MILWAUKEE, WIS.
U.S.A.

Exclusive Features of Milwaukee Harvesters and Binders.

Raising and Lowering Device, described and illustrated on page	5
Carrying Spring,	5
Cables,	5
Latchless Tilting Lever,	6
One Lever (latchless) Reel,	7
One-Piece Main Frame and Platform,	8
Adjustable Elevator Throat,	11
Self-Aligning Boxes,	12
Simple Reel Drive,	12
Binder Shift and Lever,	14
Compression Device,	15
Needle Trip,	15
Simple Truck,	22

Special Features of Milwaukee Mowers.

Strong Wide Frame; Large	
Wheels and Axle,	described and illustrated on page 25
Chain Drive,	28
Genuine Horizontal Crank Shaft,	28
Perfect Pitman and Connections,	29
Easy Foot Lift,	30
Carrying Spring,	30
MILWAUKEE DROPPER ATTACHMENT,	32
MILWAUKEE WEED CUTTING ATTACHMENT,	32
MILWAUKEE REAPER,	33-34

Index to Reference Tables.

Quantity of Seed Required to Sow or Plant an Acre,	page 17
Legal Weight of a Bushel in Different States,	" 17
United States Land Measure.	" 20
Value of Foreign Coins,	" 20
Capacity of Cisterns,	" 20
Population of Principal American Cities, 1900 Census,	" 36



MILWAUKEE

HARVESTERS, MOWERS AND REAPERS

Are offered to the farmers of the world solely upon their merits. In this, our twenty-first annual catalogue, we have confined ourselves to a complete but simple description of our machines and the manner in which they are built. No statements are made that a visit to our factory, inspection of samples, or the testimony of any farmer who has used a Milwaukee machine, will not confirm.

That the growth of our business has been phenomenal, and that our manufacturing facilities are being still further extended, are interesting and, to others as well as ourselves, gratifying facts. It is not upon these grounds, however, that we ask for patronage, but upon the superior design and construction of our machines; their unquestioned ability to do perfect work in all conditions of grain or grass and their unparalleled record for long life and durability.

Believing that these are the qualities which receive the greatest consideration by prospective purchasers, we invite a careful study of the following pages and a critical inspection of sample machines on exhibition throughout the world.

Milwaukee Harvester Company.

Milwaukee, Wisconsin,
U. S. A.





BEFORE taking up the details of the construction of Milwaukee machines, a brief mention of the methods adopted to insure their perfect operation and extreme durability may well be made.

In the first place, the work to be done by each particular part, the wear and the strain upon it, are accurately calculated, and the material for each part and its weight are determined with these requisites distinctly in view.

In selecting the material—steel, cast or malleable iron or wood, as the case may be—the one thing considered is whether or not that kind of material will do the work and stand the strain and wear required of it better than anything else that can be used. In iron and steel a certain chemical composition treated in a certain manner will always give the same results in flexibility, hardness, tensile strength, and every other quality. In buying metals we specify exactly the chemical composition we desire, the degree of hardness necessary, and every other quality down to the most minute particulars. As the material is received, it is carefully inspected, and we know that we get exactly what we specify. The cupola mixtures for castings are made according to chemical analysis, so that any variation in quality is impossible.

The completed parts, before the machine is set up, are again inspected and are subjected to severer tests than they will ever receive under ordinary circumstances. Each machine when completed is given a thorough test by electric power, and all parts are brought into proper adjustment for perfect field work. After undergoing a searching inspection, the machine is partly taken down for convenience in handling and shipping. If put together again in the field exactly as directed in our instruction pamphlet it will be found ready to handle any and all conditions of grain without further adjustment or expert assistance.

It can be readily seen that to maintain so rigid an inspection system is expensive, but it is our single aim to make Milwaukee machines the best of their kind, and no expense is considered too great if perfection is attained. In another way also it is expensive, for materials absolutely uniform in quality and free from defects cost more than if the inspection is careless and a high quality is not insisted upon. Many concerns refuse to quote us prices on material desired, claiming our demands are practically prohibitory; others, in quoting prices, repeatedly write that they will make a very substantial reduction if we will accept material that is entirely satisfactory to our competitors.



The Milwaukee in Operation.

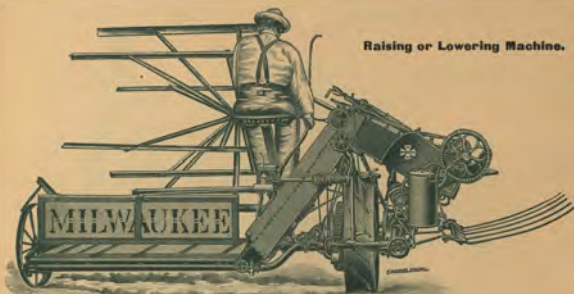
Convenience of Levers.

The cut on this page shows the advantageous position of the driver for overseeing all the operations of the machine. It also shows how easily any lever may be reached from the driver's seat, facilitating quick adjustments.

All levers, and parts controlled by levers, are so proportioned and connected that only a slight effort is required to operate them. The binder attachment rests on rollers, and shifts without friction. The sheaf carrier requires no attention, as it shifts automatically with the binder, and is always in position to receive bundles. The reel is spring-balanced, requires little effort in shifting, and cannot fall when released. All other adjustments are likewise designed for easy operation.

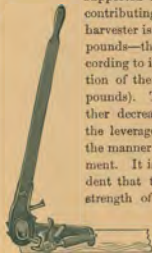
Particular attention is called to the large line guide, which, instead of confining the lines to a small loop, allows the driver as much freedom in handling them as he would have in a buggy. At the same time, they are effectually held away from the reel and gearing.

The whip-socket is secured close to driver's right hand, but remote from sprockets and gears, so lash can never become entangled.

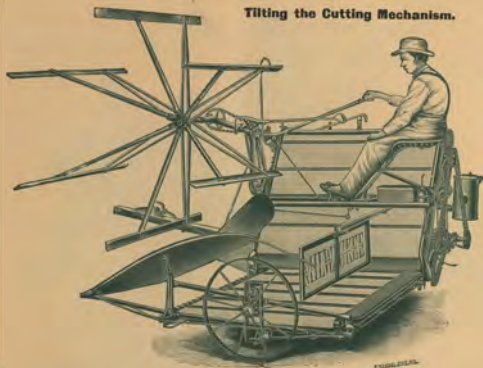


Raising or Lowering Machine.

The *Milwaukee* machine can be raised or lowered—both ends at the same time—with a single latchless lever. This lever is operated by the driver while in his seat on the machine, whether machine is standing or in motion. Thus, an operation, ordinarily so laborious and slow, is made quick and easy, and much is added to the cutting range of the machine. The cut at the left shows lever in position for lowering the machine, and at the right in position for raising it. The latter cut also shows the *Milwaukee* carrying spring and cable drum, by means of which the entire weight of the machine is supported through the cables, relieving it from disastrous shocks, and contributing to the comfort of the driver. The large raising cable on the harvester is guaranteed to withstand a direct tensile strain of over 4,000 pounds—the smaller cable, 3,000 pounds. Each cable, according to its diameter and location, supports only its proportion of the total weight of the machine, (1,250 pounds). The direct weight borne by them is further decreased one-half by the leverage resulting from the manner of their attachment. It is, therefore, evident that the ultimate strength of the *Milwaukee* cables is many times greater than the load they carry.



Tilting the Cutting Mechanism.



The latchless tilting lever is composed of a steel and malleable tubular portion, inclosing a steel rod with a crank-shaped end, which is held in engagement with the sector notches by a spring, and is turned out of the

Tilting Lever.



notches by a slight twist of the handle, when the driver desires to

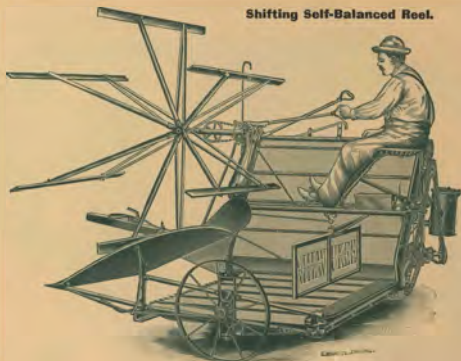
change the tilt of the platform. The pawl lies between the pivot and the connecting rod, so there is no lost motion—a valuable feature found only on the *Milwaukee*.

The outside divider parts a clean swath, and has wide enough gather to prevent grain from being tracked down by the wheel. The supplemental divider, provided with each machine, satisfactorily meets the most difficult conditions of grain.

The *Milwaukee* grain shield is light but strong. It can be shifted to any position with the foot, and is so constructed that it always stands parallel with the cutter bar. It can be swung clear of the platform

for tightening or removing the platform canvas.

Shifting Self-Balanced Reel.



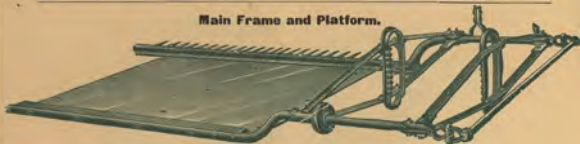
The neatness of the sheaves depends largely upon the position of the reel. The *Milwaukee* reel mechanism is unapproached in its simplicity and effectiveness. A single lever makes all adjustments, without finger-latch or

Reel Jacks with Lever.



The reel has the widest range, is perfectly balanced, and will not fall if released, at any position.

foot-latch. Turning the handle to left or right, allows the reel to be moved respectively up and down or forward and back. The lever handle is convenient for either hand, as it is placed directly in front of the driver's seat. It is often found desirable in the field to operate the reel and tilt levers simultaneously; the *Milwaukee* latchless lever handles are easily grasped with the hand holding the lines.

Main Frame and Platform.

A notable feature of the *Milwaukee* machine is its substantial and rigid foundation, composed of a jointless tubular sill at the rear, heavy steel trusses on the right, tubular sill and cold-rolled guard-bar in front, and trussed divider frame on the left, the whole being further strengthened by the steel platform with its angle ribs.

The powerful clamping devices, which cannot work loose, connecting the trusses and sills, are shown in cut.

Section of Corner Clamped.

The most important part of a harvesting machine is the cutting apparatus.

The *Milwaukee* guards and clips are securely bolted to a specially-designed Z-steel bar. Points of guards can be tilted to the ground for low cutting.

The compact and substantial construction of the *Milwaukee* main frame and platform is well illustrated in the cut. A man's weight on the outer corner of the platform will not spring it perceptibly.

**Testing Firmness of Milwaukee Frame.**

Main Wheel.

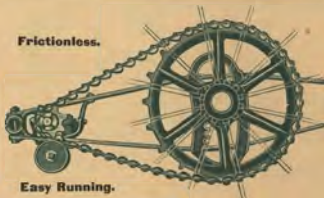
The rim of our steel main wheel prevents side-sliding to or from the grain on hilly land, and it does not carry up sand or mud to drop on chain and sprockets. Its recessed lugs travel smoothly on the road, and afford powerful traction in the field. The axle-sleeve is removable, and carries a special oil cup, which can be filled with the wheel in any position and feeds oil gradually to the axle. This driving wheel can be easily inserted in the machine.

Self Oiler.**Removable Sleeve.**

Its recessed lugs travel smoothly on the road, and afford powerful traction in the field. The axle-sleeve is removable, and carries a special oil cup, which can be filled with the wheel in any position and feeds oil gradually to the axle. This driving wheel can be easily inserted in the machine.

Chain Drive Gearing.

We were the first to see that a flexible driving connection was necessary for field machinery, and intro-

Frictionless.**Easy Running.**

duced the perfect chain-drive. Our chain is of special design, with large bearing surfaces and short pitch. The arrow on each link shows direction chain should run. Our idler wheel guide brings the links positively to the sprockets without increasing the draft of machine.

**Sectional View.
Main Wheel.**

duced the perfect chain-drive. Our chain is of special design, with large bearing surfaces and short pitch. The arrow on each link shows direction chain should run. Our idler wheel guide brings the links positively to the sprockets without increasing the draft of machine.

Chain Link.**Short Pitch.****Large Wearing Surface.**

Pitman and Connections.

The *Milwaukee* maple pitman is very long, and its thrust nearly level with the knife. The crank-shaft runs in self-aligning bearings, and cannot become cramped. The knife heel is steadily guided by the heavy main shoe.

A very heavy tie-piece is used to connect the main frame and platform at the front.

**Rigid and
Unbreakable.**



**Tubular
Sills.**

**Outside
Divider
Frame
and Steel
Grain
Wheel.**

The tubular-trussed outside divider frame connects the outer ends of the rear sill and cutter bar. It is built to withstand the shock of accidental encounters with stumps or stones. It carries the supporting frame for the steel grain wheel.

The grain wheel is raised and lowered by cable connection from the driver's seat simultaneously with the main wheel, with which it is always in line. The grain wheel is provided with a removable sleeve, chilled as hard and smooth as glass, to prevent wear, and carrying a self-oiling device similar to that on the main wheel.



**Chilled
Grain Wheel
Sleeve—
Removable.**



**Grain Wheel
Stud.**

Elevator Drive-Chain and Gear Shifter.



Our elevator drive-chain drives only two sprockets, while on other machines the elevator chain drives four or more sprockets, some of which are driven by the wrong side of the chain, causing unnecessary and rapid wear and frequent jumping from the sprockets. The *Milwaukee* chain never winds straw, as

the lower sprocket is provided with a protecting flange.

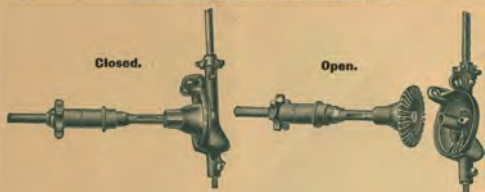
The gear-shifting lever, shown at top of cut, cannot be thrown out of place by accident. The clutch is moved to clutch sprocket, instead of sprocket to clutch,

so that the sprocket is never thrown out of line. This removes the principal cause for cutting and wear of chain and sprockets.

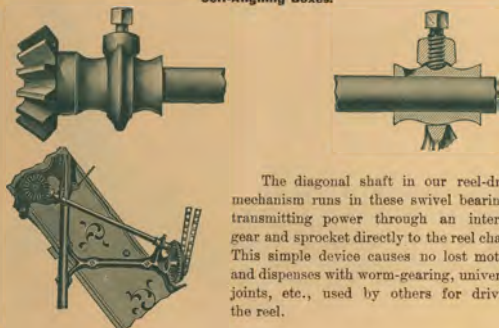
The adjustable throat of our elevator offers a great advantage in heavy or tangled grain. The dotted lines in cut give some idea of the range of adjustability for heavy grain, and show why our elevators do not choke. At the same time, this flexibility causes the elevators to close upon light or short straw and elevate it without waste. This adjustment is entirely automatic, the elevators accommodating themselves instantly to any quantity of grain delivered to them.



Elevator Side.

Harvester Cross Shaft and Main Gear.

The cross shaft and main gear are, on all machines, necessarily close to the master wheel and therefore catch a considerable amount of mud and dirt. The spring of the gear shifter, the bearings and gears are completely shielded by the dust-proof case. The large gear has a bearing at the center of its thrust so it always runs true. On each side of the pinion are long bearings which prevent side play. Ample facilities are provided for lubrication. The cross shaft and crank shaft are provided with self-aligning or swivel boxes which effectually prevent the cutting of the parts. The self-aligning boxes are also used on other bearings. They prevent cramping and the consequent hard draft and wear.

Self-Aligning Boxes.**Reel Drive.**

The diagonal shaft in our reel-drive mechanism runs in these swivel bearings, transmitting power through an internal gear and sprocket directly to the reel chain. This simple device causes no lost motion and dispenses with worm-gearing, universal joints, etc., used by others for driving the reel.

The illustrations on this page show the capacity of the *Milwaukee* reel for handling all conditions of grain. For the sake of clearness the outside divider is omitted from the pictures.

The reel is large and has great range of adjustment. It can be raised well above extremely long grain, so as to operate on heads of grain, forcing them back upon the platform. The reel, at any height, can be moved directly forward or back. If desired, the platform can be raised to leave long stubble without tilting guards. Grain shield can be set well to rear of plat-

Tall.



form, out of the way of the long grain. These adjustments are all made easily and quickly from the driver's seat.

For very short grain the reel is dropped to its lowest position and drawn back over the cutter bar, leaving a clearance of about two inches; the platform is low-

Short.



Tangled.



ered and guards tilted close to ground and grain shield set forward.

For lodged and tangled grain the platform is placed the same as for short grain, and the reel is set forward at its lowest point to pick up and straighten the grain against the knife. With the above combinations it is evident that the *Milwaukee* gathers in all the grain—no matter what its condition may be.

Binder Attachment.



The binding attachment shows in all its parts the strength and lightness and handsome modeling which are *Milwaukee* characteristics.

The shift lever is near the driver's right hand. The binder shifts on rollers, and is therefore easily moved for the purpose of placing the bands in proper position around the sheaves, the wide range of shift insuring satisfactory bundling of any length of grain. The bundle carrier holds the sheaves in plain view of the operator, and a glance at them suffices to show him if the bands are correctly placed. The weight of the binder is so well balanced and distributed upon the frame that its extreme forward position throws no neck-weight upon the horses.

The binder is held in position above the decks by an anti-friction roller on the breast-plate pipe, which avoids a complication of parts below the decks. The driving sprocket is located between the packer boxes, so that there are no overhung bearings to cut out the rear packer box; a more expensive construction, but more positive, and less annoying to operator.

The binder arm is extremely long, enabling operator to center his bands upon any length of grain.

If necessary, to pass through a narrow gate, the stripper board can be quickly removed by unscrewing thumb nut on brace rod and unhooking the board from breast-plate.

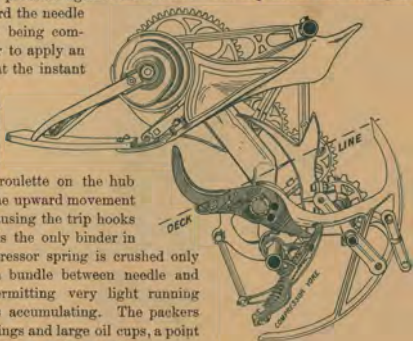
Needle Trip.

The *Milwaukee* needle trip is simple, and it is sensitive. When a sufficient amount of grain has accumulated in the binder to form a bundle, the pressure upon the trip hooks starts the needle in the

direction of closing, which trips the compressing mechanism into action.

The binder is easily adjustable for any size bundle by moving the trip hooks in or out and regulating spring on the needle pitman. The spiral cam on large gear prevents binder from repeating.

The compressing mechanism is compact and powerful. Unlike all others, the compressing spring is located directly opposite the compressor hooks and has a direct pressure against the bundle. The trip hooks are arranged to draw up toward the needle when bundle is being compressed in order to apply an extra pressure at the instant of forming the knot. This is accomplished by means of a cam on the compressor, and a roulette on the hub of the needle, the upward movement of the needle causing the trip hooks to rise. Ours is the only binder in which the compressor spring is crushed only when there is a bundle between needle and compressor, permitting very light running while bundle is accumulating. The packers have large bearings and large oil cups, a point generally neglected on other machines.

**Compressor.**

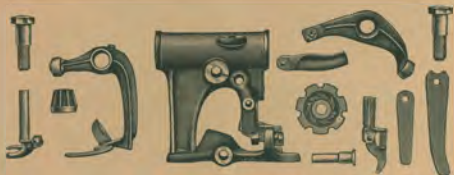
The *Milwaukee* knotter, practically unchanged, has stood the test of thirteen harvests. It is composed of as few parts as are consistent with durability and effective work. The knotter is light, but has ample strength where strength is needed. It is solidly made, and therefore accurate—and is compact, but not complicated.

A convincing proof of the superiority of our knotter is the fact that several of our competitors have purchased shop-rights and are now manufacturing it for use on their own binders. This further substantiates our statement that "**The Milwaukee Leads.**"

**Knotting Hook.****Knotter—Complete.****Disk Mechanism.**

The knotting hook is set off-center to pass around the twine when tying, which prevents straining the band, and saves twine. The disk is revolved by a positive mechanism which has little motion and is adjustable for wear.

The twine knife is made of the best tempered steel, and can be easily removed for sharpening.

**Knotter—Dissected.**

The above cut shows all the component parts of the *Milwaukee* knotter; there are few pieces, and they are strong and accurately adapted for reliable and durable operation.

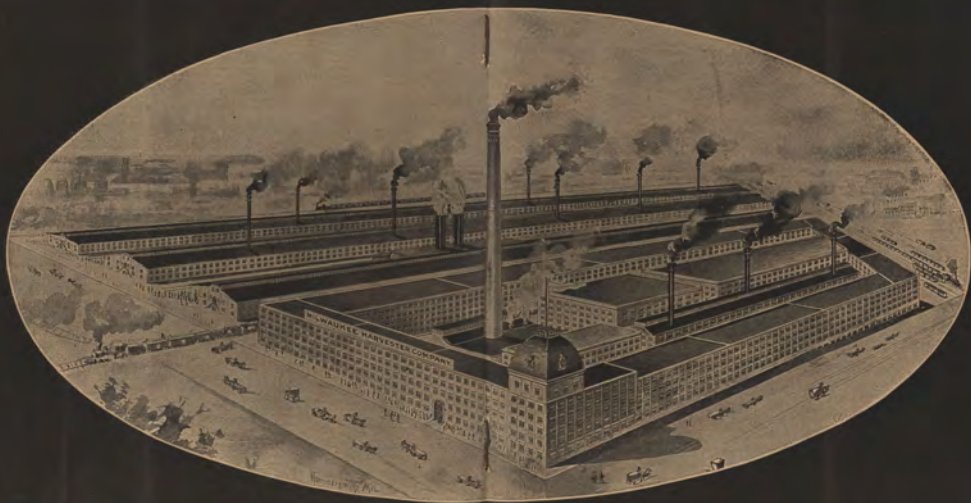
Quantity of Seed Required to Sow or Plant an Acre.

KIND OF SEED.	QUANTITY.	KIND OF SEED.	QUANTITY.
Asparagus, in 12-inch drills.....	16 qts.	Kale, German greens.....	3 lbs.
Asparagus Plants, 4x1½ feet.....	8,000	Lettuce, in rows 2½ feet.....	8 lbs.
Barley.....	2½ bu.	Leek.....	4 lbs.
Beans, bush, in drills 2½ feet.....	1½ bu.	Lawn Grass.....	35 lbs.
Beans, pole, Lima, 4x4 feet.....	20 qts.	Melons, water, in hills 8x8 feet.....	3 lbs.
Beans, Carolina, prolific, etc., 4x4 feet.....	10 qts.	Melons, citrons, in hills 4x4 feet.....	2 bu.
Beets and Mangold, drills 2½ feet.....	9 lbs.	Oats.....	20 lbs.
Broom Corn, in drills.....	12 lbs.	Oats, in drills 2½x½ feet.....	50 lbs.
Cabbage, outside, for planting.....	12 oz.	Onion, in beds for sets.....	7 lbs.
Cabbage, sown in frames.....	4 oz.	Onion, in rows for large bulbs.....	5 lbs.
Carrot, in drills 2½ feet.....	4 lbs.	Parasit, in drills 2½ feet.....	17,500
Celery, seed.....	8 oz.	Pepper, plants, 2½x1 foot.....	4 qts.
Celery, plant, 4x½ feet.....	25,000	Parsnip, in drills 2 feet.....	2 bu.
Clover, white Dutch.....	13 lbs.	Parsley, in drills 2 feet.....	1 to 1½ bu.
Clover, Lucerne.....	10 lbs.	Peas, in drills, short varieties.....	8 bu.
Clover, Alsike.....	6 lbs.	Peas, in drills, tall varieties.....	10 lbs.
Clover, large red, with timothy.....	12 lbs.	Peas, broadcast.....	8 bu.
Clover, large red, without timothy.....	10 lbs.	Radish, in drills 2 feet.....	10 lbs.
Corn, sugar.....	10 qts.	Rye, broadcast.....	14½ bu.
Corn, field.....	8 qts.	Rye, drilled.....	1½ bu.
Corn, salad, drills 10 inches.....	25 lbs.	Salsify, in drills 2½ feet.....	30 lbs.
Cucumber, in hills.....	3 qts.	Squash, bush, in hills 4x4 feet.....	3 lbs.
Cucumber, in drills.....	4 qts.	Squash, running, 8x8 feet.....	2 qts.
Egg Plant, plants 8x3 feet.....	4 oz.	Sorghum.....	4 qts.
Kidney, in drills 2½ feet.....	3 lbs.	Turnips, in drills 2 feet.....	3 lbs.
Flax, broadcast.....	20 qts.	Tomatoes, in frames.....	3 oz.
Grass, timothy with clover.....	6 qts.	Tomatoes, seed in hills 3x3 feet.....	8 oz.
Grass, timothy without clover.....	19 qts.	Tomatoes, plants.....	3,800
Grass, orchard.....	25 qts.	Wheat, in drills.....	1½ bu.
Grass, red top with berds.....	20 qts.	Wheat, broadcast.....	2 bu.
Grass, blue.....	28 qts.		
Grass, rye.....	20 qts.		
Grass, millet.....	32 qts.		
Hemp, broadcast.....	½ bu.		

Legal Weight of a Bushel in Different States.

States & Territories.	Wheat	Rye	Oats	Barley	Buckwheat	Shelled Corn	Corn on Cob	Potatoes	Peas	Beans	Turnips	Peas	Flax Seed	Timothy	Rye	Clover
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Arkansas.....	60	56	82	48	52	...	70	60	50	57	...	60	46	55	45	60
Arizona.....	60	56	82	48	52	54	...	60	...	...	...	60	...	...	...	...
California.....	60	56	82	50	40	52	...	60	...	...	...	60	...	45	14	60
Colorado.....	60	56	82	48	52	56	70	60	...	57	...	60	...	...	...	...
Connecticut.....	60	56	82	48	48	56	...	60	...	...	...	60	...	...	...	...
N. and S. Dakota.....	60	56	82	48	42	50	70	60	46	52	60	60	60	56	42	60
Delaware.....	60	56	82	48	48	50	...	60	...	...	...	60	...	...	...	...
Dist. of Columbia.....	60	56	82	...	...	56	...	60	...	...	...	60	...	...	...	...
Georgia.....	60	56	82	47	52	56	70	60	55	57	55	60	60	56	45	14
Illinois.....	60	56	82	48	52	56	70	60	55	57	55	60	...	56	45	14
Indiana.....	60	56	82	48	50	56	...	60	...	...	...	60	...	...	...	...
Iowa.....	60	56	82	48	52	56	70	60	46	57	...	60	...	50	45	14
Kansas.....	60	56	82	48	50	56	70	60	50	57	55	60	...	54	45	14
Kentucky.....	60	56	82	47	55	56	70	60	55	57	60	60	60	56	45	14
Louisiana.....	60	56	82	47	50	56	...	60	...	...	...	60	...	...	...	...
Maine.....	60	56	82	47	48	56	70	...	56	56	...	60	...	45	14	64
Maryland.....	60	56	82	47	48	56	...	60	...	...	...	60	...	...	...	...
Massachusetts.....	60	56	82	47	48	56	...	60	...	...	...	60	...	...	...	...
Michigan.....	60	56	82	48	48	56	70	60	56	54	58	60	60	56	45	14
Minnesota.....	60	56	82	48	42	56	...	60	...	...	...	60	...	56	45	14
Missouri.....	60	56	82	48	52	56	...	60	...	...	...	60	...	56	45	14
Montana.....	60	56	82	48	52	56	...	60	...	...	...	60	...	56	45	14
Nebraska.....	60	56	82	48	52	56	70	60	50	57	55	60	60	56	45	14
Nevada.....	60	56	82	50	40	52	10	60	...	...	...	60	...	...	...	...
New Hampshire.....	60	56	82	...	...	56	...	60	...	...	...	60	...	...	...	...
New Jersey.....	60	56	82	48	50	56	...	60	54	57	...	60	60	55	44	64
New York.....	60	56	82	48	48	56	...	60	...	...	...	62	60	55	44	60
North Carolina.....	60	56	82	48	50	54	...	60	...	...	...	60	...	56	45	64
Ohio.....	60	56	82	48	50	56	70	60	50	50	...	60	60	56	45	60
Oregon.....	60	56	82	46	42	56	...	60	...	...	...	60	...	...	...	62
Pennsylvania.....	60	56	82	47	48	56	...	60	...	...	...	60	...	...	...	...
Rhode Island.....	60	56	82	48	...	56	...	60	...	...	...	60	...	...	...	...
South Carolina.....	60	56	82	48	56	56	70	60	50	57	...	60	60	44	...	...
Tennessee.....	60	56	82	48	50	56	72	60	50	56	...	60	60	56	45	60
Vermont.....	60	56	82	48	48	56	...	60	...	...	...	60	60	56	45	14
Virginia.....	60	56	82	47	52	56	70	60	56	57	55	60	60	56	45	60
Washington.....	60	56	82	45	42	56	...	60	...	...	...	60	60	56	45	60
West Virginia.....	60	56	82	48	52	56	...	60	...	...	...	60	...	56	45	60
Wisconsin.....	60	56	82	48	50	56	70	60	...	...	42	60	...	56	45	60

Some States, not here mentioned, only legalize and recognize the Standard United States bushel, without reference to weight.



Factory of the Milwaukee Harvester Company.

United States Land Measure.

TOWNSHIP.

8	5	4	3	2	1
7	6	5	36	11	12
18	17	16	13	14	13
19	20	21	22	23	24
26	29	28	27	26	25
31	32	33	34	35	36

SECTION.

N. W.	N. E.
S. W.	S. E.

Each section has four quarter-sections, designated as above, each containing 160 acres.

IN SEVERAL STATES.

The township is six miles square, divided into 36 square miles or sections, numbered as above, each containing 360 acres.

SMALLER LAND DIVISIONS.

The following table will assist in making an estimate of the amount of land in fields and lots:

*10 rods by 16 rods	1 acre	15 yards by 96 yards	1 acre
1220 feet by 108 feet	1 acre	15 feet by 125 feet	.0717 acre
4,356 square feet	.10 acre	10,890 square feet	.25 acre
21,780 square feet	.50 acre	32,670 square feet	.75 acre

*Or any two numbers whose product is 160.
 †Or any two numbers whose product is 4,840.
 ‡Or any two numbers whose product is 43,560.

Value of Foreign Coins.

Country.	Monetary Unit.	Standard.	Value in U. S. Money.	Standard Coin.
Austria	Florin	Silver	\$.37	
Belgium	Franc	Gold and Silver	.19.3	5, 10 and 20 francs.
Bolivia	Boliviano	Silver	.50	Boliviano.
Brazil	Milreis of 1000 reis	Gold	.37	
British Poss. in N. A.	Dollar	Gold	1.00	
Chili	Peso	Gold	.50	Condor, Condillon and escudo.
Denmark	Crown	Gold	.26.8	10 and 20 Crowns.
Honduras	Peso	Silver	.50	Peso.
Egypt	Piastre	Gold and Silver	.04 2/3	5, 10, 25 and 50 piasters.
France	Franc	Gold and Silver	.19.3	5, 10 and 20 francs.
Great Britain	Pound Sterling	Gold	4.86 5/16	1/2 sovereign and sovereign.
Greece	Drachma	Gold and Silver	.10	5, 10, 20, 50 and 100 drachmas.
German Empire	Mark	Gold	.23.8	1, 10 and 20 marks.
India	Rupce of 16 annas	Silver	.26	
Italy	Lira	Gold and Silver	.19.3	5, 10, 20, 50 and 100 lire.
Japan	Yen (gold)	Gold and Silver	.95	2, 5, 10 and 20 yen.
Liberia	Dollar	Gold	1.00	
Mexico	Dollar	Silver	.52	
Netherlands	Florin	Gold and Silver	.40.2	Peso-ordelr. 5, 10, 25 & 50 centavo.
Norway	Crown	Gold	.26.5	10 and 20 crowns.
Peru	Sol	Silver	.50	Sol.
Portugal	Milreis of 1000 reis	Gold	1.08	2, 5 and 10 milreis.
Russia	Rouble of 100 copecks.	Silver	.65.8	1/2, 1/4 and 1 rouble.
Sandwich Islands	Peseta of 100 centimes.	Gold	1.00	
Spain	Escudo	Gold	.19.3	5, 10, 20, 50 and 100 pesetas.
Sweden	Crown	Gold	.26.5	10 and 20 crowns.
Switzerland	Franc	Gold and Silver	.19.3	5, 10 and 20 francs.
Tripoli	Mahbub of 20 piasters.	Silver	.74.3	
Turkey	Piaster	Gold	.04 2/3	25, 50, 100, 250 and 500 piasters.
U. S. of Columbia	Peso	Silver	.50	Peso.
Venezuela	Boliviar	Gold	.19.3	5, 10, 20, 50 and 100 Boliviar.

Capacity of Cisterns.

In calculating the capacity of cisterns, 31½ gallons are estimated to one barrel and 63 gallons to one hoghead.

CIRCULAR CISTERN, ONE FOOT IN DEPTH.

5 feet in diameter holds	4½ barrels
6 feet in diameter holds	6½ barrels
7 feet in diameter holds	9 barrels
8 feet in diameter holds	12 barrels
9 feet in diameter holds	15 barrels
10 feet in diameter holds	18½ barrels

SQUARE CISTERN, ONE FOOT IN DEPTH.

5 feet by 5 feet holds	6 barrels
6 feet by 6 feet holds	8½ barrels
7 feet by 7 feet holds	11½ barrels
8 feet by 8 feet holds	15½ barrels
9 feet by 9 feet holds	19½ barrels
10 feet by 10 feet holds	23½ barrels



**Binder Deck
Drop Leaves.**



Spring Controlled Drop Decks.

The *Milwaukee* drop-leaves, at ends of decks, are self-acting and positively separate the bound sheaves. They can be instantly depressed for the free passage of tangled grain.

The twine can is attached to the binder in such manner that it guards the grain in the binder from entanglement with chain or sprockets. A hole in the side towards driver permits him to see the twine ball. The tension device adjusts itself automatically to uneven twine.

Twine Can.



Top View.



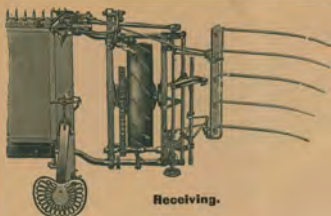
Side View.

Flax and Clover Dump.



**Flax
Dump**

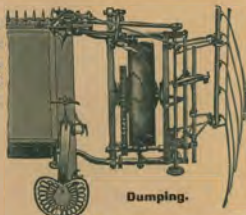
The *Milwaukee* Flax or Clover Dump is a convenient attachment to replace the binder part when cutting crops for seed. It discharges the grain or grass in bunches. This attachment is extra, and is furnished only when ordered.

**Receiving.**

the shocking easy and quick. Extra, and furnished only when ordered.

The carrier fingers fold backward and downward, swinging the bundles gently to the ground and trailing from under them without loss of kernels of grain. This carrier works equally well on hilly and level land.

Milwaukee Transportation Truck.

**Dumping.**

The extreme simplicity of our truck is shown in the cut. It is easily handled and moved to the machine by the brace rods. The machine can be mounted upon it by one person, without the use of a wrench and without unhitching the team, in a fraction of the time required to place other trucks in position or to fold a jointed platform. The operation of placing the binder on truck is illustrated in detail on the next page.

Extra, and furnished only when ordered.

Mounting Truck.

The operator, having raised the machine on its wheels with his lift lever, and having tilted it at the light end and put the truck in position, hooks the truck rods into their proper places upon the main frame of binder, as shown in cut, and secures the hooks with our simple drop-latches.

The pole is then brought round and secured to end of platform, and the machine is ready for transportation.

**Drop Latch.****Method of attaching pole to platform.****Perfectly Balanced.****Machine loaded on truck.**



Mower in Operation.

The Milwaukee Chain Drive Mowers.

In these mowers are embodied all the elements necessary to the production of a perfect grass-cutter. Like the *Milwaukee* binders, they are a combination of strength, easy operation, lightness and graceful outlines.

The mower trucks are made in three sizes, to carry bars for five widths of cuts—3½ ft., 4½ ft., 5 ft., 6 ft. and 7 ft. The general size and strength of the trucks, and the speed of the crank wheels are carefully adapted to the swath widths.

*Milwaukee No. 6 Mower.
For Heavy Work.*



The frame, being cast in one piece, is strong and rigid, and holds the mechanism in perfect and permanent alignment.

There are no parts to work loose.

The wheels are large with well lagged, wide rims, and will not slip on any condition of soil. They are connected by an unusually large axle, made of cold rolled steel.

The seat spring is easily adjustable to prevent neck weight. The levers are like all *Milwaukee* levers—simple, convenient and easily operated.

The chain-drive permits the use of a genuine horizontal crank-shaft, avoiding absolutely all side motion of the pitman connection.

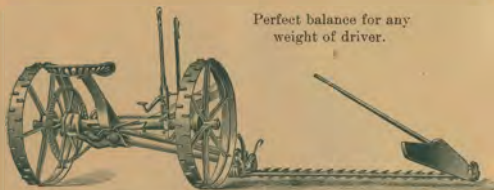
The *Milwaukee No. 6 Mower*, shown on this page, is a big machine built for heavy work, and it will carry a 7 ft. bar through the heaviest cutting.

Milwaukee No. 5 Mower.**4½ and 5 ft. Cut.**

Every user states that these
Mowers have no equal.

**No. 5. Front View.**

This is our medium-size mower—the most popular machine for ordinary cutting. It is modeled like the No. 6 mower, but is somewhat smaller and lighter. It has ample capacity for a full 5 ft. swath.



Perfect balance for any
weight of driver.

No. 5. Rear View.

Milwaukee No. 3 Mower. 3½ feet Cut.**Front View—No. 3 Mower.**

Our No. 3 Mower is modeled upon the lines that have proved so successful and popular in our larger machines, but it is lighter and is adapted to be drawn by one horse.

On account of the short cutter bar, we have been enabled to dispense with the hand lever for raising cutter bar, a simple, self-locking foot-lever taking its place. The tilt is controlled by a hand lever.

The thills are so placed that the horse can walk close to the standing grass, following the path made by the swather.

This is a very light, compact and durable mower, and will meet the demands of many who have not enough work for a larger mower. It will save the grass in many difficult places where a longer bar cannot be used.

**Rear View—No. 3 Mower.**

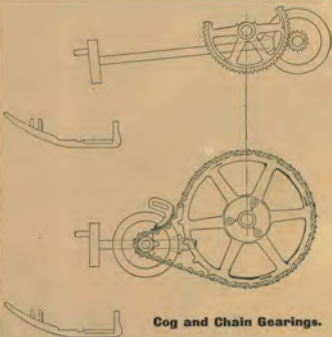
**Complete Gearing.**

teeth of each wheel results in a considerable amount of lost motion between drive wheel and knife. This lost motion naturally increases every day the machine is used, so that the mower must be backed away from standing grass before starting to cut. The Milwaukee Chain Drive mower starts the knife the instant the horses move ahead, because the chain is always tight and there is no lost motion.

It is a well known mechanical fact that sprocket wheels and chain are more efficient than gears in conveying power. By referring to the illustration this is easily understood. The chain wraps round the circumference of the sprocket wheels, on the No. 5 mower, the links engaging with fifteen teeth of the large wheel and four teeth of the pinion. Compare this with the contact of gear wheels—a full bearing on only one tooth of each wheel and a partial bearing on two or three other teeth. In one case the strain is distributed over two-thirds of the circumference of the wheel; in the other it must be all withstood at one point.

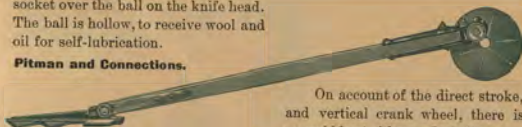
With the use of a chain drive a horizontal crank shaft has been attained. This is impossible with the types of gearings used on other mowers, unless the crank wheel is raised so high that the thrust of the pitman is far out of line with the knife. Unless the crank shaft is perfectly horizontal, the pitman cannot be made to run without wobbling and consequent friction, loss of power and wear. The crank shaft runs in long bearings in an easily removable box. The shaft has a bearing on both sides of the pitman which prevents twisting strain.

On the Milwaukee Chain Drive mower the power is applied to the crank shaft in the most direct manner possible and with less bearings than can be used with cog gears. The power is communicated through a bevel gear directly to the crank shaft pinion. In transmitting power through a train of gears, very slight play in the

**Cog and Chain Gearings.**

The *Milwaukee* pitman is made of selected hickory, and is very long. It is attached to the wrist-pin box by an adjustable cone-bearing connection, and to the knife by an adjustable socket over the ball on the knife head. The ball is hollow, to receive wool and oil for self-lubrication.

Pitman and Connections.



On account of the direct stroke, and vertical crank wheel, there is no wobble at either end of pitman.

Steel Crank Pin.



Brass Bushing.



Malleable Box.



Pitman Head.



Especial care is used in the construction of the connection between the crank-wheel and pitman. The wrist-pin is cold rolled steel and provides a long bearing for the malleable pitman box with its hard brass bushing. The bushing revolves both on the crank-pin and inside the box, making essentially a double bearing. The brass bushing protects the pitman box from wear, the thrust of the knife remains steady, uniform and without pounding.

To render the connection dust proof, the pitman box is closed at the outer end by an inset washer; at the inner end by being set into the crank-wheel, effectually closing all apertures through which dust could enter. The pitman box has a very large oil chamber, so constructed that oil is forced to the bearing and cannot be thrown out of chamber when rotating. It supplies an abundance of oil to both surfaces of the perforated brass bushing.



The cutter bar may be lifted either by hand or foot, with the greatest ease. A heavy man standing on the cutter bar, can be raised by the foot lift.

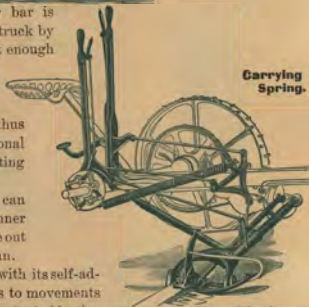
The weight of the cutter bar is flexibly carried on the mower truck by our carrying spring, with just enough ground friction to enable both ends of the bar to follow any surface, however inclined. The traction of the mower is thus increased, while no additional neck-weight is caused by lifting bar from the ground.

The outer end of the bar can be raised 28 inches above the inner end without throwing machine out of gear or cramping the pitman.

Our large steel drag bar, with its self-adjusting end connections, yields to movements of the main shoe. It positively holds the cutter-bar in line with pitman.

We consider it better to make a very strong, durable, well-designed drag-bar, than to provide a complicated adjustment for taking up the wear and lost motion of a flimsily constructed bar. Our drag-bar is located in front of the pitman, protecting it and the pitman connections from all obstructions.

Carrying Spring.



Drag-bar.



Cutter Bar.

The cutting apparatus is acknowledged to be the vital part of a mower. The *Milwaukee* bars and knives are the best that can be made. The guards and clips are secured to the bar by countersunk bolts, the nuts fitting into the recessed guards, and the bolt ends ground off flush with the nuts. This forms absolutely smooth upper and lower bar surfaces, eliminating side draft, and adding much to the utility of the cutting mechanism. Hardened steel wearing plates hold the knife flat, and tempered steel ledger plates afford a durable shear contact for the sections, insuring clean cutting.

**Top View of Cutter Bar.****Wearing Plate.****Sectional View—
Guard, Bar, Knife and Wearing Plate.**

The steel subsoles at each end of bar are adjustable in height.

The shape of the swather board, and the angle at which it is set, are designed for the greatest efficiency under all conditions. The swather board will not catch and break when team is backed.

**Swather Board.**

The Milwaukee Dropper Attachment.

This is a very convenient attachment for cutting grain with a mower and dropping it in gavels. The steel outside divider is pivoted to the end casting in such a manner that it is free to follow the uneven surface of the ground, a valuable feature in cutting down and tangled grain.

The operator sits directly over the inner wheel, throwing no extra weight on horses' necks, and is in a correct position to handle the grain to the best advantage.

The bar can be raised and lowered at either end so as to cut any desired length of stubble.

The dropper basket or platform is operated by a steel foot lever, which is held in position by the foot and released when gavel is dropped.

The grain is kept out of the inner mower wheel by a long, wide fender, supported by the foot-support casting.

The Milwaukee mower with dropper attachment also provides a very advantageous way of opening or cutting the outside swath of large fields of grain where a binder is to be used.

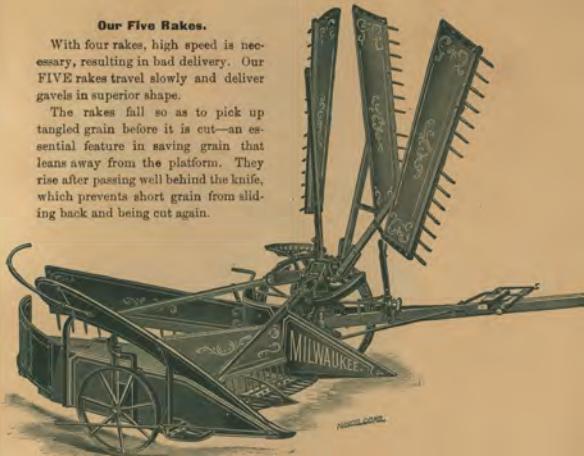
By using the subsoles and outside divider, which form a part of the Milwaukee dropper attachment, a most effective and satisfactory weed cutting attachment is produced in connection with our mower.

**Weed Cutting Attachment.**

The Milwaukee Reaper.**Our Five Rakes.**

With four rakes, high speed is necessary, resulting in bad delivery. Our FIVE rakes travel slowly and deliver gavels in superior shape.

The rakes fall so as to pick up tangled grain before it is cut—an essential feature in saving grain that leans away from the platform. They rise after passing well behind the knife, which prevents short grain from sliding back and being cut again.

**Dividers.**

You handle long, tangled grain with ease with our high and long dividers.

The inside divider can be taken off for folding platform by simply removing one thumb nut.

Platform.

The platform is heavily timbered, strong and rigid. The cutter bar is formed of angle steel, with steel wearing strips for the knife. The raising and lowering device at both ends of the machine consists of bevel gears and threaded connecting rods operated by convenient cranks. A child can raise or lower it. The tilting device is strong, rigid, and easily adjusted by a convenient lever. The platform is easily and quickly folded for transportation, without disconnecting pitman, by our peculiarly constructed ball joint. The seat and foot rest may also be folded.

Rake Control.

A conspicuous feature—it is simple, effective. Shielded from dust and dirt. Frictionless, durable. Regulated by convenient hand latch. With latch in notch No. 1, every rake will rake off a gavel; in notch No. 2, every second rake; No. 3, every third; No. 4, every fourth; No. 5, every fifth; No. 6, every sixth rake; and placed at No. 0, the rakes all act as beaters only, and allow the grain to accumulate on the platform. The rakes can be controlled by the foot lever, independently of the automatic control, by pressing down lever and releasing it whenever it is desired to rake off a bundle. Thus, any desired interval can be obtained.

Rake Control.
**Features of
Our Rake
Construction.**
**Rake
Arm
Casting.**

A broken rake tooth may be quickly replaced by driving out the old stub, as the hole is bored entirely through the head. On other reapers it is necessary to drill out the stub, requiring much time and trouble.

The rake arms can be put on correctly by anybody, as either side up is right side up. They are adjustable, and can be set close to platform or with clearance.

The rake arm casting, with friction roller, is constructed in a manner peculiar to the Milwaukee. The pivot stud is clamped with two bolts in the casting, has a bearing on each side, gives more leverage and makes a

substantial, solid coupling. The friction roller is larger and has more wearing surface than those of our competitors.

Main Gear.

Is separate from the main frame, and can be repaired separately. Strong bevel gears give steady motion to rakes. The machine can be thrown out of gear by a touch of the foot upon either of the three prongs at the hub of the main wheel, one of which is always in reach; pushing a prong in opposite direction throws machine in gear. Our shafts are large and long. Provided with extra large oil cups. Gearing is perfectly shielded.

Bevel Gear.**Main Gear.**

One-half Cent per Acre.

On page 2 we explained at length the methods adopted to insure the use of a uniform, high quality of material and of securing perfect work in our factory. In the succeeding pages we have explained the various parts of our machines in detail and pointed out the mechanical perfection of their design and construction. Every possible precaution having been taken to produce strong and durable machines, they could not be otherwise than long lived and requiring but little expense for repairs.

In May, 1900, in order to learn the average cost of keeping our machines in repair, we selected at random from our records names of a large number of farmers who had bought our machines in 1894, 1895 and 1896, and asked them to write us the acreage cut with their machines and the amount spent for repairs. Upon tabulating the replies we found that the average repair expense on harvesting machines had been seven-twelfths of one cent for each acre cut and on mowers but one-sixth of one cent, the average of both being considerably less than one-half cent per acre.

It is a record of which we are exceedingly proud, as it shows conclusively the unparalleled durability of our machines.

Milwaukee Harvester Oil.



It is well known that no machinery can be satisfactorily operated without proper lubrication. This fact is particularly applicable to harvesting machinery, which must often be run in extremes of heat and of dry weather. Under such conditions, common oil fails to effectually reduce the friction—and friction means more work for the horses, and shorter life for the machines.

Milwaukee Harvester Oil is the best lubricant to have in the field, because it is compounded especially for use on agricultural machinery. It is strictly high grade, and is the result of series of carefully conducted tests in our laboratory and in the field. Among its good qualities are: freedom from grit and impurities, requisite fluidity, and the property of maintaining smooth, cool bearings wherever applied.

Milwaukee Harvester Oil can be obtained at any of our agencies in barrel and half-barrel lots, and bears our trade mark.

Population and Growth of American Cities as shown by U. S. Census of 1900.

	1880	1890	1900	1880	1890
New York, N. Y.	3,347,292	1,515,301	Portland, Maine	50,145	50,425
Chicago, Ill.	1,098,575	1,099,850	Yonkers, N. Y.	47,931	32,033
Philadelphia, Pa.	1,293,997	1,046,964	Norfolk, Va.	46,624	34,871
St. Louis, Mo.	575,238	451,770	Waterbury, Conn.	45,859	28,946
Boston, Mass.	590,892	448,477	Holyoke, Mass.	45,712	35,637
Baltimore, Md.	508,967	434,439	Fort Wayne, Ind.	45,115	35,260
Cleveland, O.	381,768	261,353	Youngstown, O.	44,885	33,220
Buffalo, N. Y.	352,219	235,664	Houston, Texas	44,633	27,557
San Francisco, Cal.	342,782	268,997	Covington, Ky.	42,928	37,371
Cincinnati, O.	325,902	296,908	Akron, O.	42,728	27,901
Pittsburg, Pa.	321,616	238,617	Dallas, Texas	42,628	38,067
New Orleans, La.	287,104	242,039	Saginaw, Mich.	42,345	49,322
Detroit, Mich.	285,704	205,876	Lancaster, Pa.	41,459	32,911
Milwaukee, Wis.	285,315	204,498	Lincoln, Neb.	40,169	55,154
Washington, D. C.	278,718	229,596	Brockton, Mass.	40,063	27,584
Newark, N. J.	246,070	151,830	Augusta, Ga.	39,441	33,900
Jersey City, N. J.	206,433	163,061	Pawtucket, R. I.	39,231	27,633
Louisville, Ky.	204,731	161,129	Altoona, Pa.	38,973	30,337
Minneapolis, Minn.	202,718	164,738	Wheeling, W. Va.	38,878	34,522
Providence, R. I.	175,307	132,140	Mobile, Ala.	38,660	31,676
Indianapolis, Ind.	169,164	165,436	Birmingham, Ala.	38,415	26,178
Kansas City, Mo.	163,752	132,716	Little Rock, Ark.	38,307	25,674
St. Paul, Minn.	163,632	133,156	Springfield, O.	38,253	31,895
Rochester, N. Y.	162,435	133,806	Galveston, Texas	37,789	29,684
Denver, Col.	133,859	106,715	Haverhill, Mass.	37,175	27,412
Toledo, O.	131,822	81,484	Spokane, Wash.	36,848	19,922
Alleghe, Pa.	129,895	105,287	Terre Haute, Ind.	36,673	30,217
Columbus, O.	125,569	88,150	Dubuque, Ia.	36,297	30,311
Pyracuse, N. Y.	108,374	88,143	Quincy, Ill.	36,252	31,494
Syracuse, N. Y.	105,171	78,347	South Bend, Ind.	35,999	21,819
Fall River, Mass.	104,893	74,398	Salem, Mass.	35,966	30,801
St. Joseph, Mo.	102,979	52,324	Johnstown, Pa.	35,930	21,993
Omaha, Neb.	102,555	140,452	Elmira, N. Y.	35,872	30,893
Los Angeles, Cal.	102,479	50,295	Allentown, Pa.	35,416	25,228
Memphis, Tenn.	102,320	64,495	Davenport, Ia.	35,254	26,872
Scranton, Pa.	102,025	75,215	McKeesport, Pa.	34,227	20,741
Lowell, Mass.	94,969	77,696	Springfield, Ill.	34,159	24,963
Albany, N. Y.	94,451	94,923	Chelsea, Mass.	34,072	27,900
Cambridge, Mass.	91,886	70,028	Chester, Pa.	33,868	20,226
Portland, Oregon	90,429	62,046	Malden, Mass.	33,664	23,061
Atlanta, Ga.	89,872	65,533	York, Pa.	33,554	20,761
Grand Rapids, Mich.	87,565	60,278	Topeka, Kan.	33,508	31,067
Dayton, O.	85,333	57,978	Newton, Mass.	33,587	24,379
Richmond, Va.	85,050	81,288	Sioux City, Ia.	33,111	37,806
Nashville, Tenn.	80,985	76,168	Bayonne, N. J.	32,722	19,033
Seattle, Wash.	80,671	42,873	Knoxville, Tenn.	32,637	22,835
Hartford, Conn.	79,850	58,230	Chattanooga, Tenn.	32,490	29,100
Reading, Pa.	78,101	58,661	Schenectady, N. Y.	31,682	19,992
Wilmington, Del.	76,908	61,431	Fitchburg, Mass.	31,631	22,667
Camden, N. J.	73,935	58,313	Superior City, Wis.	31,091	11,983
Trenton, N. J.	73,207	57,458	Rockford, Ill.	31,051	23,584
Bridgeport, Conn.	70,996	48,896	Taunton, Mass.	31,030	25,448
Lynn, Mass.	68,513	55,727	Joliet, Ill.	30,720	23,294
Oakland, Cal.	66,990	48,682	Canton, O.	30,667	25,189
Lawrence, Mass.	62,559	44,654	Butte, Mont.	30,470	18,000
New Bedford, Mass.	62,442	40,733	Montgomery, Ala.	30,346	21,883
Des Moines, Ia.	62,139	50,093	Auburn, N. Y.	30,345	23,858
Springfield, Mass.	62,059	44,179	East St. Louis, Ill.	29,655	15,169
Somerville, Mass.	61,643	40,152	Sacramento, Cal.	29,282	26,586
Hoboken, N. J.	59,364	43,648	Racine, Wis.	29,102	21,014
Evansville, Ind.	59,067	50,759	La Crosse, Wis.	28,825	23,060
Manchester, N. H.	56,987	44,129	Williamsport, Pa.	28,757	27,132
Peoria, Ill.	56,100	41,024	Newport, Ky.	28,604	24,918
Charleston, S. C.	55,807	54,955	Oshkosh, Wis.	28,284	22,836
Savannah, Ga.	54,244	43,180	Woonsocket, R. I.	28,204	20,893
Salt Lake City, Utah	53,531	44,843	Pueblo, Colo.	28,157	24,558
San Antonio, Texas	53,321	37,673	Atlantic City, N. J.	27,838	15,055
Erie, Pa.	52,733	40,634	Bay City, Mich.	27,628	27,839
Elizabeth, N. J.	52,139	37,764	Fort Worth, Texas	26,688	26,076
Wilkesbarre, Pa.	51,721	37,718	Gloucester, Mass.	26,121	24,961
Kansas City, Kansas	51,418	38,316	South Omaha, Neb.	26,060	8,092
Harrisburg, Pa.	50,167	39,386	New Britain, Conn.	25,998	19,067

The Milwaukee Harvester Company's Branch Offices

AND DISTRIBUTING POINTS FOR MACHINES AND REPAIRS.

Chicago, Ill.	Columbus, O.	Cleveland, O.
Cedar Rapids, Ia.	Denver, Col.	Des Moines, Ia.
Fond du Lac, Wis.	Fargo, N. D.	Harrisburg, Pa.
Helena, Mont.	Indianapolis, Ind.	Jackson, Mich.
Kansas City, Mo.	Madison, Wis.	Minneapolis, Minn.
Nashville, Tenn.	Omaha, Neb.	Peoria, Ill.
St. Louis, Mo.	Wichita, Kans.	

Alton, Ill.	Baltimore, Md.	Burlington, Ia.
Buffalo, N. Y.	Chillicothe, Mo.	Clinton, Ia.
Crookston, Minn.	Cincinnati, O.	Creston, Ia.
Charles City, Ia.	Charleston, Mo.	Dallas, Texas.
Dubuque, Ia.	Decatur, Ill.	Eldorado, Ill.
Elmira, N. Y.	Evansville, Ind.	Ft. Wayne, Ind.
Fleetwood, Pa.	Ft. Dodge, Ia.	Henderson, Ky.
Hannibal, Mo.	Kalamazoo, Mich.	Louisville, Ky.
Muscatine, Ia.	Marshalltown, Ia.	Mason City, Ia.
New Hampton, Ia.	Portland, Oregon.	Paducah, Ky.
Pittsburg, Pa.	Quincy, Ill.	Rochester, N. Y.
San Francisco, Cal.	St. Joseph, Mo.	Sioux Falls, S. D.
Sioux City, Ia.	Union City, Tenn.	Vincennes, Ind.
Watertown, N. Y.	West Detroit, Mich.	
	Oklahoma City, O. T.	

Foreign.

Hamburg, Germany.	Berlin, Germany.	Danzig, Germany.
Koënigsberg, Germany.	Kiel, Germany.	London, England.
Liverpool, England.	Paris, France.	Bordeaux, France.
Havre, France.	Norrköping, Sweden.	Moscow, Russia.
Gjovik, Norway.	Helsingfors, Finland.	Buenos Aires, So. Am.
Montevideo, So. Am.	Sydney, N. S. W., Aus.	Cape Town, So. Africa.



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