

**R. M. WADE & CO.**

INCORPORATED

PORTLAND, OREGON



**Illustrated Catalogue  
and Price List No. 26**



Jobbers of

**AGRICULTURAL  
IMPLEMENTS**

---

ESTABLISHED 38 YEARS AGO. AND AT IT YET





issued 1903 -

ILLUSTRATED CATALOGUE  
— AND PRICE LIST —

No. 26

R. M. WADE & CO.

INCORPORATED

*Established 1865*

*Incorporated 1885*

Nos. 321 to 335 East Clay Street

Nos. 330 to 336 Hawthorne Ave.

Bet. First and Second Streets,

PORTLAND, — OREGON



*We embarked in the implement business 38 years ago and are*

*AT IT YET*

*With the most complete line now carried on the Northwest Coast.*

Issued 1903





## INTRODUCTORY



### To Our Many Friends and Patrons—



IN PRESENTING OUR COMPLETE CATALOGUE, NUMBER 26, in which is exhibited our very extensive line of Agricultural Implements, Vehicles and Machinery, we take this opportunity of expressing our appreciation of, and tendering our numerous friends and patrons sincere thanks for the very large number of orders they have so kindly placed with us during the past years, and by careful attention to their future favors, hope to perpetuate the very pleasant business relations existing between us. To this end we will diligently aim to furnish them with the very best goods that

money can buy.

Please examine our catalogue carefully, and preserve it for future reference when you need anything in our extensive lines.

Most of our list prices are subject to liberal cash discounts.

Such changes as we make in the construction of our goods from time to time are for the purpose of improving them and shall not be deemed a departure from our illustrations and descriptions. When goods are sold by us for either Portland or factory delivery and we ship them and obtain shipping receipts for them in good order our responsibility ceases, and any loss by delay or damage in transportation must be claimed from the carriers.

R. M. WADE & CO.



## GREAT MEDICINE FOR PLOWERS' PANGS.

In easy chair, my corn cob pipe  
I smoke, and think with reason ripe,  
An' then I write with all my might,  
But from no other poets swipe.

Sometimes I find it hard to spell  
The "Jumbo" words I use to swell,  
To make 'em soar in style galore,  
The style that suits my theme so well.

Sometimes: ah me! ambitions' fire  
Fills my great soul with desire;  
A thunder bolt, to heave and jolt,  
The tongue from every blatant liar.

A thunder bolt, to forge an' "speel";  
With lightning flashes to reveal  
The "crackajack" from away back,  
Which I stand for with pen of steel.

But now I think that I'll just write  
An' tell you people, "honor bright",  
Of the great plow we're selling now,  
Which beats all others out of sight.

If you would walk; we have the skill'd  
Workmens' triumphs: steel or chilled,  
Fine walkers light, an' balanced right,  
Hence long felt wants can now be fill'd.

If you would ride; we have the gangs,  
An' sulkies too: complete "shebangs";  
Chill'd through an' through; an' steel ones too:  
Great medicine for plowmans' pangs.

Should you go buy the bogus breed,  
An' by its scratching loose your seed;  
Yourselves go kick, then hustle quick,  
An' buy our kind that's guaranteed.

Its great trade mark we print below,  
Then blame yourselves if you go "blow"  
Your money in for some soft, thin,  
Fake plows, an, rack your souls with woe.



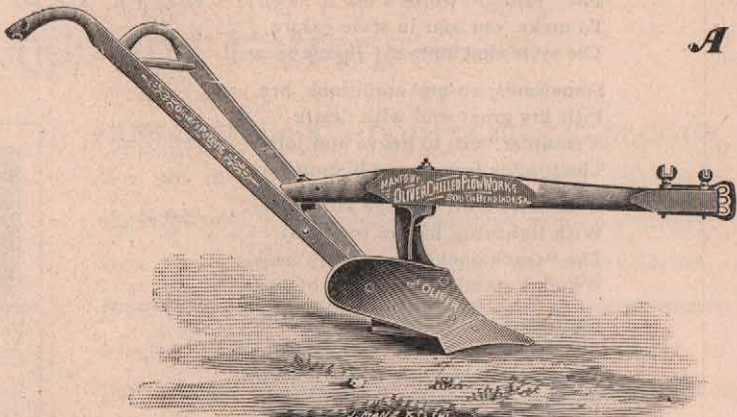


## Oliver Chilled and Steel Walking Plows.



The regular series of plows made by the **Oliver Chilled Plow Works** has met with great success, and reached a sale unparalleled in the history of plow-making. So great is the popularity of these famous plows that other parties are seeking to trade upon their good name by imitating their plow as near as possible and making bogus repairs for same. All **genuine Oliver Chilled Plows** have the above trade mark branded

on the beams and handle, and the word "Oliver" cast on all the wearing parts.

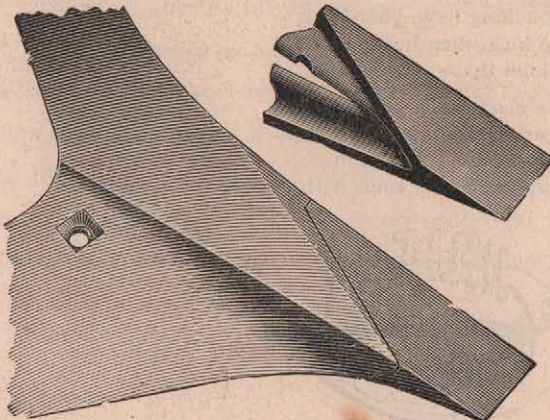


### Oliver's No. A-2 Full Chilled Plow.—9-inch cut.

The A-2 is a light one-horse plow, fitted with full chilled mouldboard, sloping landside, plain cast shares and adjustable beam.

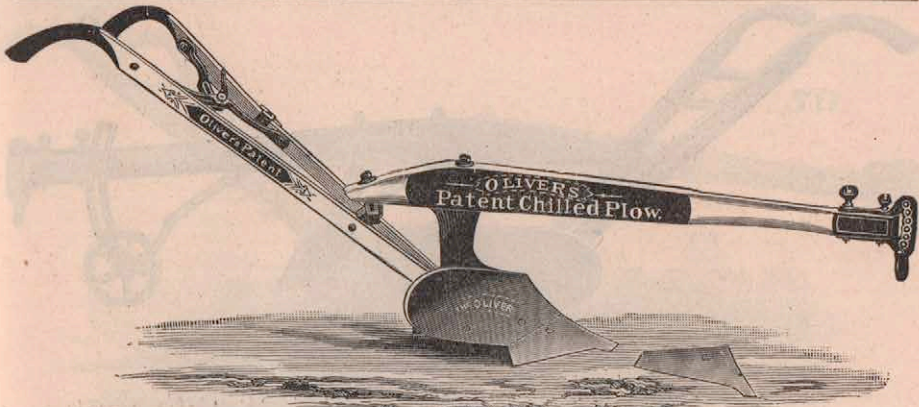
No. A. 2., with 1 extra Cast Share and Wrench, weight 53 lbs.....	\$6.00
Extra Cast Shares, weight 3 lbs.....	.35
Extra Steel Shares, weight 3 lbs.....	1.50
Extra Landsides, weight 6 lbs.....	.65
Extra Mouldboards, weight 10 lbs.....	1.75

### Oliver's Patent Slip-Nose Share.



This cut shows the **Oliver New Style Reversible Slip-Nose Share**, which represents the grandest improvement in the way of a saving device yet offered. It is well known that the nose or point of a share wears off faster than the other portions, and is also more liable to breakage. The point can be removed, reversed, or replaced readily, and the result is practically a new point. They are made for the Nos. 10-V, H-O, 20 and 40 plows, and will fit any of the old plows that have been sold of these sizes.



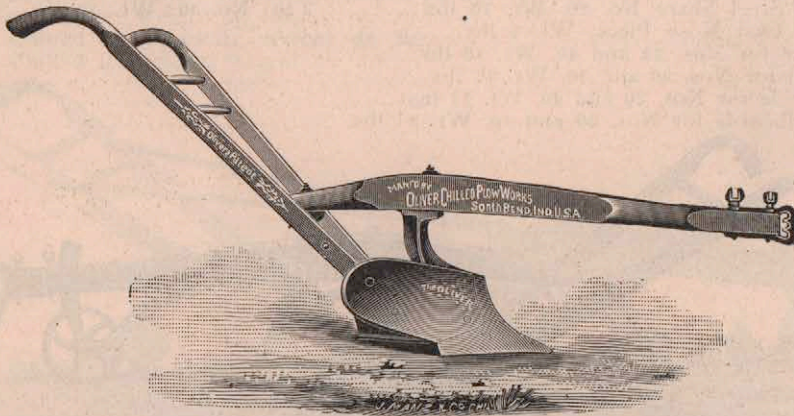


**Oliver's B Vineyard Chilled Plow.**

9-inch cut.

The Vineyard Plow is especially designed for vineyard work. The standard and beam are thrown to the center so as not to interfere with growing vines, and the landside handle, and beams are adjustable.

No. B. V., with 1 extra Cast Share and Wrench, weight 75 lbs.....	\$8.50
Extra Cast Shares, weight 4 lbs.....	.40
Extra Steel Shares, weight 4 lbs.....	2.50
Extra Slip-Nose Cast Shares, weight 6 lbs.....	.65
Extra Slip-Nose Pieces, weight 2 lbs.....	.20
Extra Landsides, weight 6 lbs.....	.90
Extra Mouldboards, weight 12 lbs.....	2.75



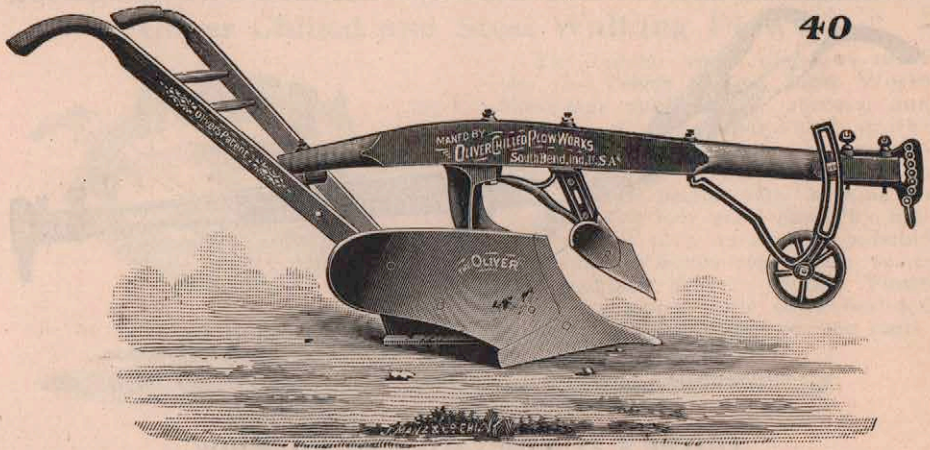
**Oliver's No. 10-V Full Chilled Plow.**

10-inch cut.—Adjustable Beam.

This is a medium one-horse plow, and is a general favorite where small plows are used, giving perfect satisfaction in any soil. It has a full chilled mouldboard, sloping landside and cutter shares, as shown on the plow.

No. 10 V., with 1 extra Cast Share and Wrench, weight 70 lbs.....	\$8.00
Extra Common Cast Shares, weight 5 lbs.....	.45
Extra Slip-Nose Cast Shares, complete, weight 7 lbs.....	.65
Extra Slip-Nose Pieces, weight 2 lbs.....	.20
Extra Full Chilled Shares, weight 5 lbs.....	.90
Extra Steel Shares, weight 5 lbs.....	2.50
Extra Landsides, weight 8 lbs.....	.90
Extra Mouldboards, weight 13 lbs.....	2.75
Extra Rolling Cutter, 11-inch, weight 19 lbs.....	3.00



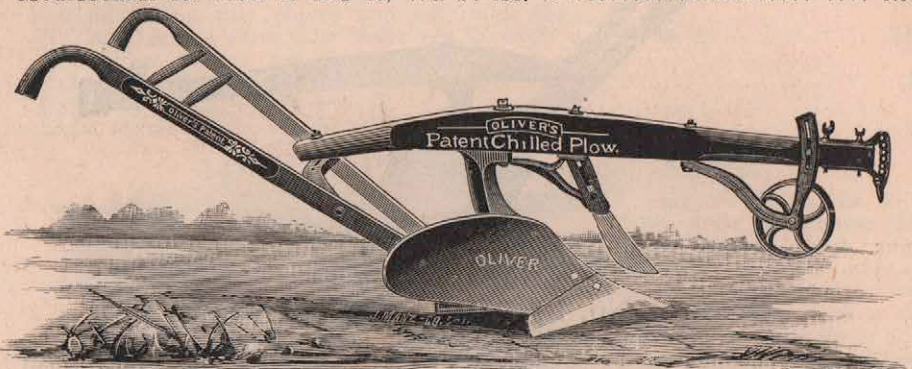


**Oliver's Nos. 20 and 40 Full Chilled Plows.**

The above cut gives a general outline of the Nos. 20 and 40 plows, and they are a general purpose plow. They have full chilled mouldboards, sloping landsides, cast cutter shares and adjustable beams.

Price, for these plows is without Jointer or Wheel.

No. 20, 12-in., with 1 extra Cast Share and Wrench, Wt. 110 lbs....	\$10.50
No. 40, 14-in., with 1 extra Cast Share and Wrench, Wt. 130 lbs....	11.00
Extra Cast Share No. 20, Wt. 8 lbs.....	.50
Extra Cast Share No. 20, wide, Wt. 9 lbs.....	.60
Extra Cast Slip-Nose Share No. 20, Wt. 10 lbs.	.75
Extra Full Chilled Share No. 20, Wt. 10 lbs.	1.00
Extra Steel Share No. 20, Wt. 10 lbs.....	3.50
Extra Cast Nose Piece, Wt. 2 lbs.....	.20
Jointer for Nos. 20 and 40, Wt. 16 lbs.....	2.25
Wheel for Nos. 20 and 40, Wt. 12 lbs.....	1.50
Landside for Nos. 20 and 40, Wt. 14 lbs.....	1.25
Mouldboards for Nos. 20 and 40, Wt. 24 lbs.....	3.50
No. 40, Wt. 10 lbs..	.55
No. 40, wide, Wt. 11 lbs	.65
No. 40, Wt. 10 lbs..	.75
No. 40, Wt. 10 lbs..	1.00
No. 40, Wt. 10 lbs..	4.00

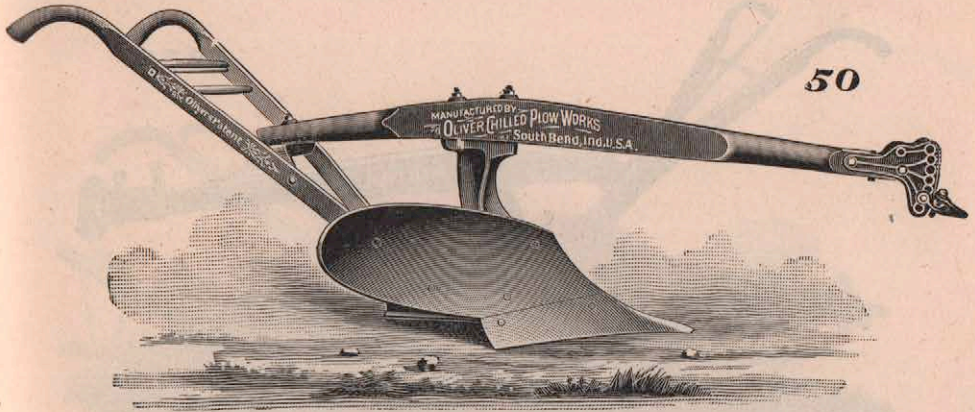


**Oliver's No. H-O Full Chilled Plow.**

The H-O Plow, shown above, is a medium two-horse plow, 14-inch cut, with sloping landside, and while it gives general satisfaction in any soil, its gradual sloped shin enables it to surpass all others in loose or trashy ground. Beam is adjustable. Price is without cutter or wheel.

No. H. O. with 1 extra Cast Share and Wrench, Wt. 130 lbs.....	\$11.00
Extra Plain Cast Share, Wt. 10 lbs.....	.55
Extra Cast Cutter Share, Wt. 11 lbs.....	.60
Extra Plain Full Chilled Share, Wt. 12 lbs	1.00
Extra Plain Steel Share, Wt. 10 lbs.....	3.50
Extra Slip-Nose Cast Share, Wt. 10 lbs	.75
Extra Slip-Nose Piece, Wt. 2 lbs.....	.20
Jointer, complete, Wt. 16 lbs.....	2.25
Hanging Cutter, complete, Wt. 12 lbs	2.50
Hanging Cutter Blade.....	1.25
Wheel, Wt. 12 lbs.....	1.50
Landside, Wt. 15 lbs.....	1.25
Mouldboards, Wt. 27 lbs.....	4.00



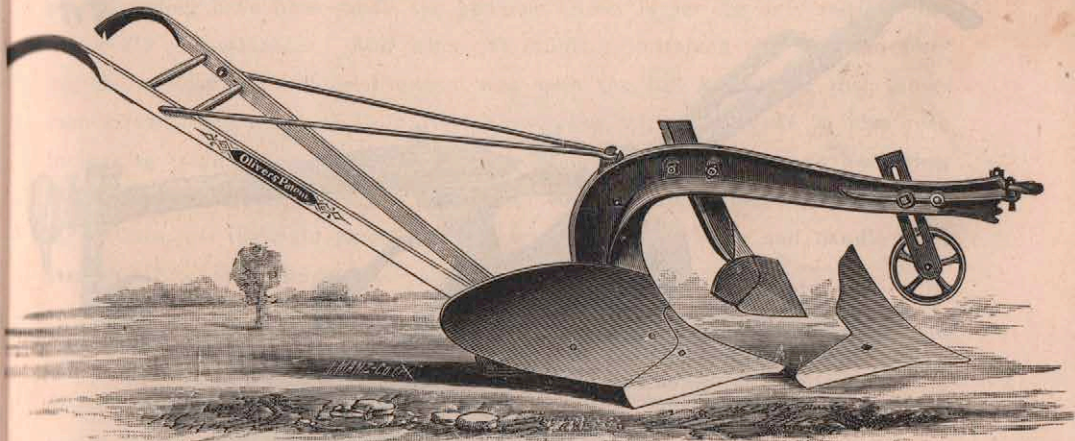


**Oliver's No. 50 Full Chilled Plow.**

Cutting 16 Inches.

Is a three-horse, general purpose plow, with adjustable beam, full chilled mouldboard, sloping landside and either steel or cast shares.

No. 50, with Cast Share on and 1 extra Cast Share & Wrench, Wt. 160 lbs.	\$14.00
No. 50, with Steel Share on (no extra share) and Wrench, Wt. 155 lbs.	16.00
Extra Plain Cast Shares, weight 13 lbs.	.80
Extra Full Chilled Shares, weight 13 lbs.	1.00
Extra Steel Shares, weight 13 lbs.	4.00
Malleable Wheel, complete, weight 15 lbs.	2.25
Chilled Metal Jointer, complete, weight 16 lbs.	2.25
Rolling Cutter, weight 22 lbs.	3.25
Full Chilled Mouldboards, weight 39 lbs.	5.50
Full Chilled Landsides, weight 18 lbs.	1.75

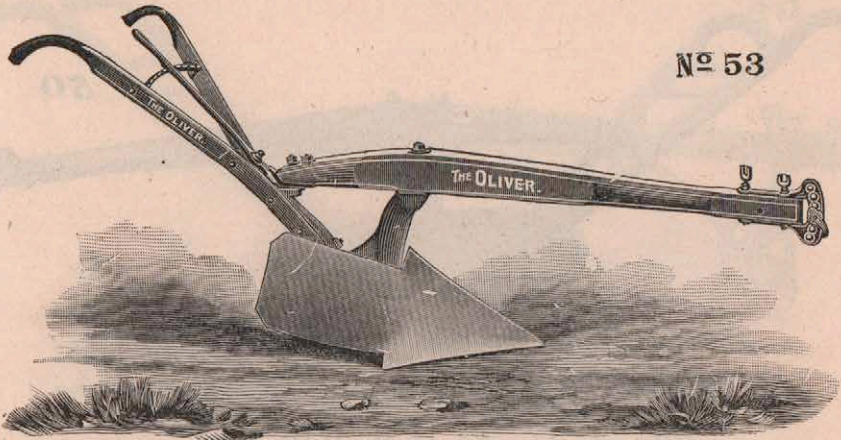


**Oliver's No. 22 Full Chilled Plow.**

Iron beam, 12-inch, straight landside chilled plow. This plow has no equal for road work, wool grass and hard land.

No. 22, with Plain Share and 1 extra Cutter Share, as shown in cut, but without Wheel or Jointer, weight 160 lbs.	\$14.00
Jointer, Wt. 16 lbs.	\$2.25
Extra Plain Shares, Wt. 13 lbs.	.55
Wheel, extra, Wt. 12 lbs.	1.50
Cutter Shares, Wt. 13 lbs.	.60
Landsides, Wt. 17 lbs.	1.25
Mouldboards, Wt. 25 lbs.	3.50





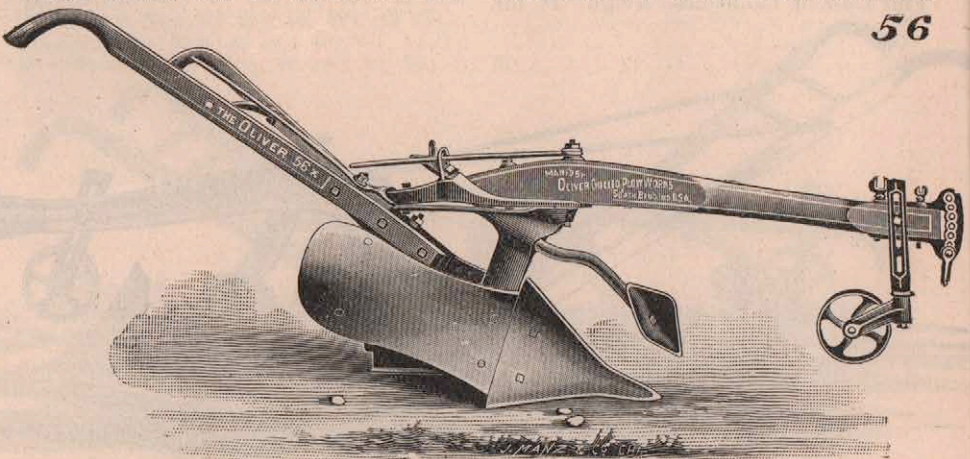
No 53

### Nos. 52 and 53 Oliver Hillside Plows.

The Nos. 52 and 53 Hillside Plows are fitted with steel mouldboards and extra Cast shares. Steel share if wanted.

No. 52 Hillside Plow, Steel Mouldboard & Cast Share, turns 10 in., wt. 90 lbs.....	\$13.00
No. 53 Hillside Plow, Steel Mouldboard & Cast Share, turns 11 in., wt. 115 lbs.....	14.50
Extra Cast Shares No. 52, Wt. 10 lbs. ....	\$ .90
Steel Mouldboards No. 52, Wt. 16 lbs. ....	3.75
Extra Chilled Landsides No. 52, Wt. 8 lbs. ....	1.00
Extra Beams, Wt. 13 lbs. ....	1.50
Extra Cast Shares No. 53, Wt. 10 lbs. ....	\$1.00
Steel Mouldboards No. 53, Wt. 16 lbs. ....	4.25
Extra Chilled Landsides No. 53, Wt. 8 lbs. ....	1.00
Standard, Wt. 30 lbs. ....	3.25

56

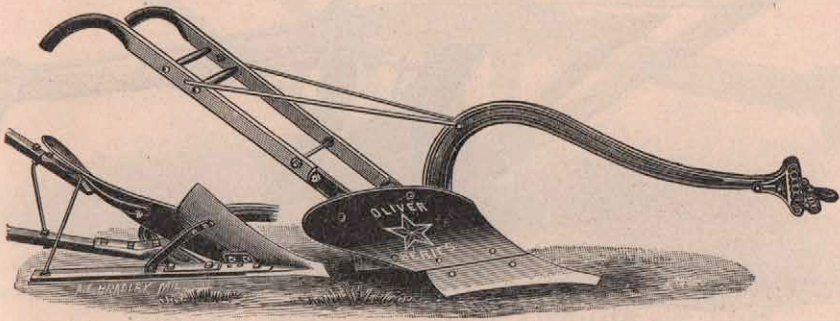


### No. 56 Oliver Hillside Plow.

Price is without Wheel or Joinder.

No. 56 Hillside Plow turns 12 inches, with Steel Mouldboard and Cast Share, Wt. 160 lbs. ....	\$15.50
Extra Steel Mouldboards, Wt. 20 lbs. ....	\$5.00
Extra Cast Shares, Wt. 11 lbs. ....	1.00
Extra Beams, Wt. 14 lbs. ....	1.50
Handles, each 3 lbs. ....	.60
Wheel, Wt. 8 lbs. ....	1.50
Joinder, Wt. 14 lbs. ....	2.75
Standard, Wt. 48 lbs. ....	3.25
Full Chilled Landsides, Wt. 15 lbs. ....	1.25





## Oliver's Steel Plows.

"Turn it Bottom Up and Examine Its Foundation."

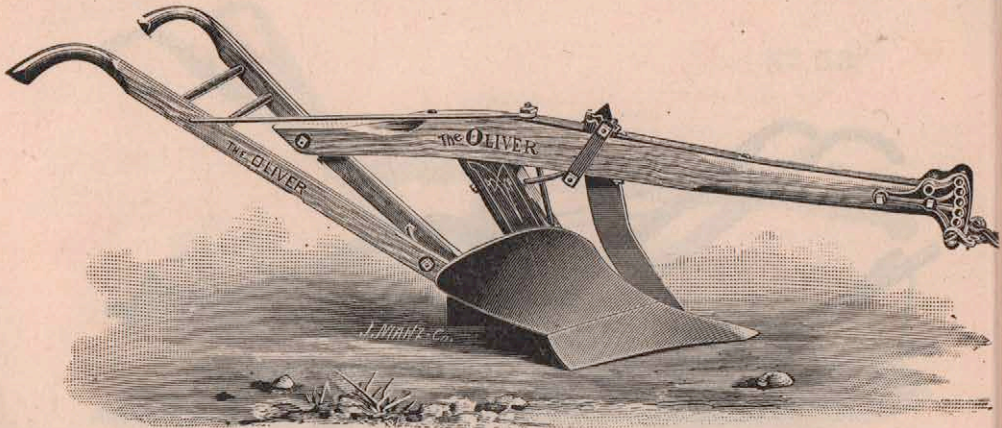
It is conceded by the world's farmers that, while many attempts at chilled plow building have been made, the genuine Oliver is yet the only reliable one under all circumstances. And when its builders conceived the idea of offering the world a line of Steel Plows, it was with the full knowledge that plowmen already had many idols in steel plows, but with confidence in the ever increasing intelligence of the people who feed us all, there was no hesitation about attempting improvements in them. A better metal and a little more of it, put into just the right places and a new departure in beam and handle construction has done the work.

Ten per cent is added to the cost of, and 33 1-3 per cent is added to the life of Steel Plows. Only a glance at an Oliver Steel Plow awakens a keen desire, but for a thrilling delight look it all over, turn it bottom up and examine its foundation and the adjustable landside heel.

You may not be a judge of the quality of metal, but you have our guarantee for that, and we are backed by the world's greatest plow builders, the manufacturers of the Oliver Chilled and Steel Plows.

For further description and illustrations of steel plows see pages 10, 11, 12, 13, 14, and 15.

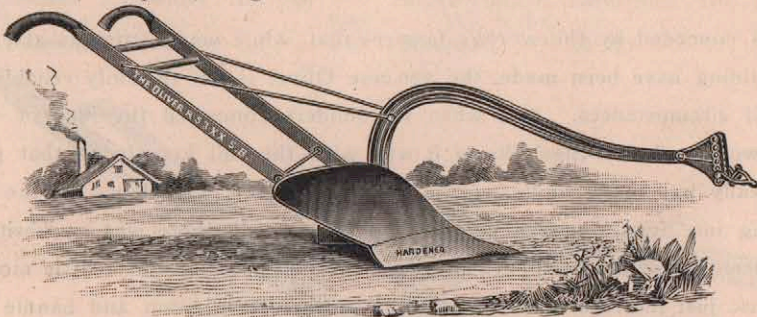




**Oliver's No. 33 Brush Plow.**

This plow is intended more especially for brush plowing, grading and heavy soils. In this class of work it is unexcelled. It has a strong wooden standard, beam well braced and strapped on both top and bottom; hardened steel mouldboard and steel bar share. All its parts are made with reference to the heavy work demanded of it. Made in 12-inch cut, double shin.

No. 33, (without Quincy Cutter) with Wrench, weight 92 lbs. ....	\$15.00
Extra Long Bar Steel Share, weight 23 lbs. ....	4.00
Quincy Cutter, complete, weight 9 lbs. ....	1.50
7-inch Wheel, complete, weight 11 lbs. ....	2.00

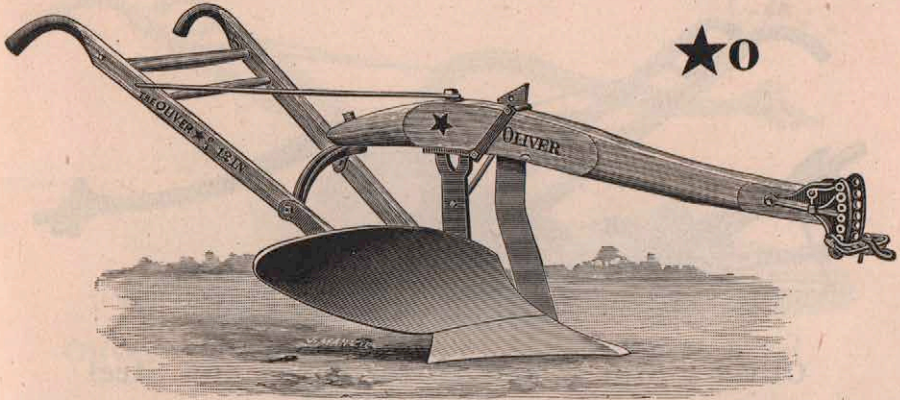


**Nos. 33 XX and 34 XX Oliver Wood and Steel Beam Brush Plows.**

The No. 33 XX series represents a late pattern which has already taken front rank and has fully met the most sanguine expectations. There are two sizes, cutting twelve and fourteen inches. They are built and finished in the most substantial and attractive manner, and the mouldboards and shares have the peculiar turning and cutting qualities that invariably give satisfaction. The wood beams are well strapped, giving them additional strength and steadiness. Cast or steel slip shares supplied as preferred.

No. 33 XX Wood Beam Plow, 12-inch, Wt. 90 lbs. ....	\$14.00
No. 34 XX Wood Beam Plow, 14-inch, Wt. 100 lbs. ....	16.00
No. 33 XX Steel Beam Plow, 12-inch, Wt. 100 lbs. ....	15.50
No. 34 XX Steel Beam Plow, 14-inch, Wt. 110 lbs. ....	17.75
Extra Steel Shares, 12-inch, Wt. 10 lbs. ....	3.00
Extra Steel Shares, 14-inch, Wt. 11 lbs. ....	3.50
Extra Plain Cast Shares, 12-inch, Wt. 10 lbs. ....	.75
Extra Plain Cast Shares, 14-inch, Wt. 10 lbs. ....	.75

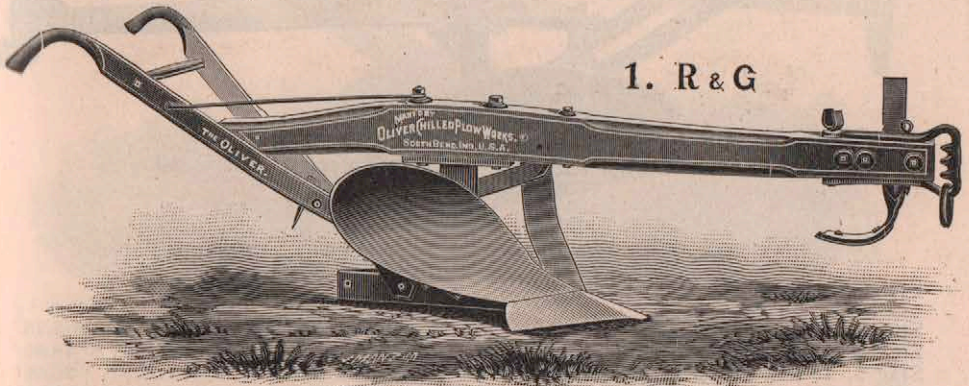




### Oliver's Star "O" New Ground or Turf and Stubble Plow.

The Star "O" is made with special reference to strength as well as utility. It has an extra high steel standard, hardened steel mouldboard, medium hardened steel share and landside, and Quincy Cutter. Beam is adjustable and has heavy Steel Strap underneath.

Star o-3, 12-inch (without Quincy Cutter)	Wt. 110 lbs. ....	\$16.75
Star o-4, 14-inch, (without Quincy Cutter)	Wt. 115 lbs. ....	19.25
Quincy Cutter, complete, Wt. 9 lbs. ....		\$1.50
Rolling Cutter, complete, Wt. 22 lbs. ....		3.25
Chilled Jointer (No. 4), Wt. 18 lbs. ....		2.25
Cast Shares, 12-in., Wt. 10 lbs. ....		.75
Cast Shares, 14-in., Wt. 11 lbs. ....		.75
Fin Cutter, Wt. 3 lbs. ....		1.00
Steel Jointer (No. 6), Wt. 17 lbs. ....		2.75
Wheel, Wt. 11 lbs. ....		1.50
Steel Shares, 12-in., Wt. 10 lbs. ....		3.00
Steel Shares, 14-in., Wt. 11 lbs. ....		3.50

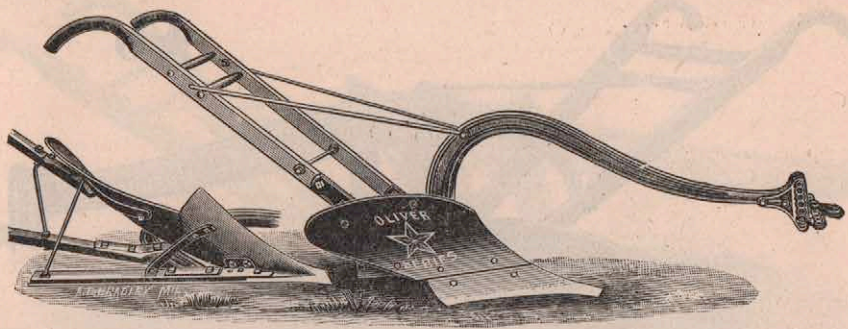


### Oliver's New Road and Grading Plow.

This plow is well constructed in all respects, steel bottom, bar share, heavy standing cutter, extra strong beam, well strapped and braced, wrought clevis; is well suited for work of the most difficult character. For heavy grading for railroad or county road work it is just the thing. Can be furnished with wheel in place of shoe, if desired.

No. 1, Road and Grading Plow, with Cutter and Shoe, cuts 10 inches, Wt. 240 lbs. ....		\$35.00
For gauge wheel in place of shoe, add \$1.50; Extra Shares ....		6.00



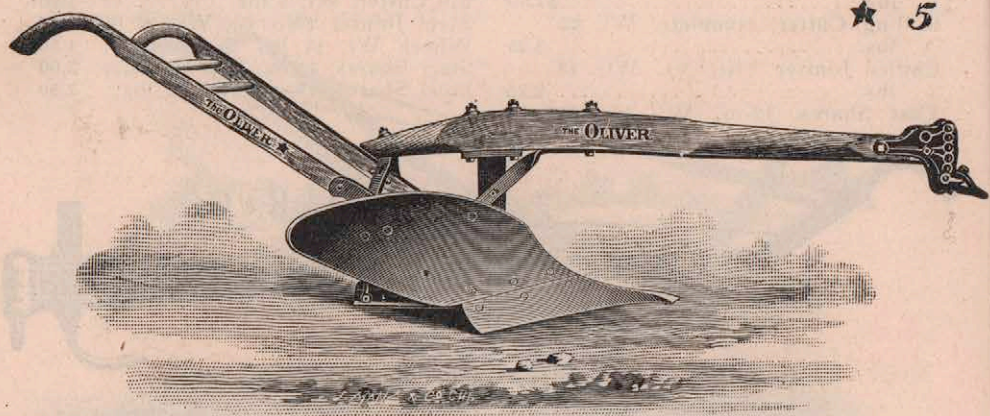


**Oliver's Star 3, 4, 5, Oliver Wood and Steel Beam Steel Plows.**

The mouldboard and share of these plows have the peculiar cutting and turning qualities required for sod or prairie work, having a long mouldboard similar to the well-known Scotch Clipper Plows. It has the solid steel landside bar and frog, steel standard, handle brace and strap under beam of wood beam plows. All wood beams are adjustable. Oliver's Star series of plows have the famous Oliver adjustable landside heel.

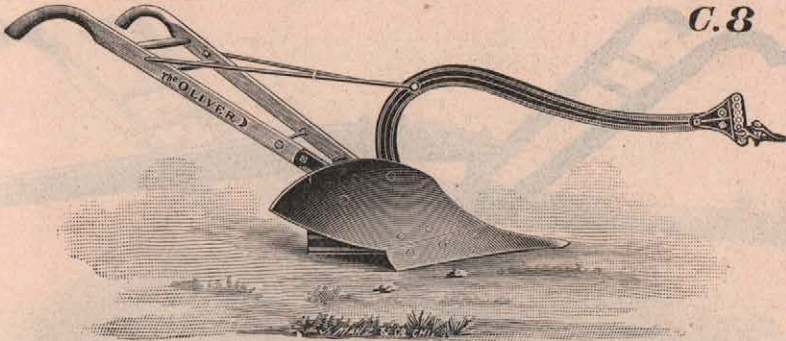
- Star 3, 12-in., Steel Beam Plow and Wrench, Wt. 110 lbs.....\$17.25
- Star 4, 14-in., Steel Beam Plow and Wrench, Wt. 115 lbs..... 20.00
- Star 5, 16-in., Steel Beam Plow and Wrench, Wt. 135 lbs..... 22.50

★ 5



- Star 3, 12-in., Wood Beam Double Shin Plow, Wt. 100 lbs.....\$15.75
- Star 4, 14-in., Wood Beam Double Shin Plow, Wt. 115 lbs..... 18.25
- Star 5, 16-in., Wood Beam Double Shin Plow, Wt. 125 lbs..... 20.50
- Chilled Jointers, No. 4, for Wood Beam Plow, Wt. 18 lbs. .... 2.25
- Steel Jointers, No. 6, for Wood Beam Plow, Wt. 17 lbs. .... 2.75
- Chilled Jointers, No. 3, for Steel Beam Plow, Wt. 18 lbs. .... 2.25
- Steel Jointers, No. 5, for Steel Beam Plow, Wt. 17 lbs. .... 2.75
- Extra Steel Shares, 12-in., Wt. 10 lbs. ....\$3.00
- Extra Cast Shares, 12-in., Wt. 10 lbs. .... .75
- Extra Steel Shares, 14-in., Wt. 11 lbs. .... 3.50
- Extra Cast Shares, 14-in., Wt. 11 lbs. .... .75
- Extra Steel Shares, 16-in., Wt. 12 lbs. .... 4.00
- Extra Cast Shares, 16-in., Wt. 12 lbs. .... .90
- Fin Cutters, complete, Wt. 3 lbs. 1.00
- Quincy Cutter, complete, Wt. 9 lbs. .... 1.50

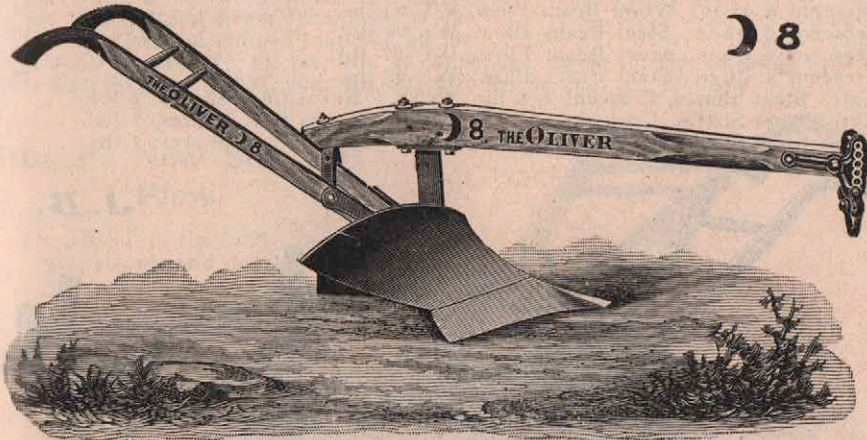




**Oliver's Crescent 7, 8 and 9 Wood and Steel Beam Steel Plows.**

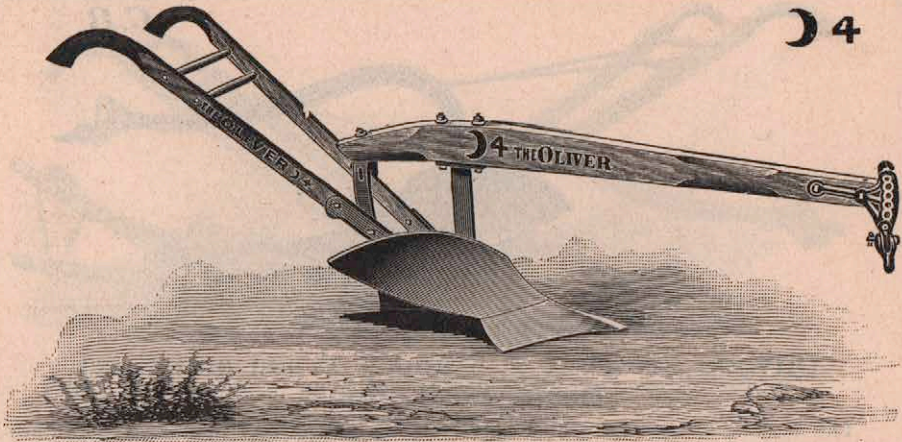
The Nos. 7, 8 and 9 are new pattern steel plows, and have had such thorough trial that their success in old ground and plowing is beyond question. They have extra hardened double shin mouldboards, solid steel landside bar and frog in one piece, and heavy steel standards. They have a brace-rod from standard bolt to furrow handle, and all wood beams are strengthened with a strap on under side. Wood beams are adjustable. Oliver's Crescent series of plows have the famous Oliver adjustable landside heel.

- Crescent 7, 12-in., Steel Beam Plow with Wrench, Wt. 105 lbs. ....\$16.25
- Crescent 8, 14-in., Steel Beam Plow with Wrench, Wt. 110 lbs. .... 19.00
- Crescent 9, 16-in., Steel Beam Plow with Wrench, Wt. 120 lbs. .... 21.50



- Crescent 7, Wood Beam 12-in., Plow with Wrench, Wt. 95 lbs. ....\$14.75
- Crescent 8, Wood Beam 14-in., Plow with Wrench, Wt. 100 lbs. .... 17.25
- Crescent 9, Wood Beam 16-in., Plow with Wrench, Wt. 105 lbs. .... 19.50
- Chilled Jointer No. 4, for Wood Beam Plow, Wt. 18 lbs. .... 2.25
- Chilled Jointer No. 3, for Steel Beam Plow, Wt. 18 lbs. .... 2.25
- Steel Jointer No. 6, for Wood Beam Plow, Wt. 17 lbs. .... 2.75
- Steel Jointer No. 5, for Steel Beam Plow, Wt. 17 lbs. .... 2.75
- Rolling Cutters, 11-in., with Universal Clamp, Wt. 19 lbs. .... 3.00
- Fin Cutters, complete, Wt. 3 lbs. .... 1.00
- Rolling Cutters, 13-in., with Universal Clamps, Wt. 22 lbs. .... 3.25
- Quincy Cutters, complete, Wt. 9 lbs. .... 1.50
- Extra Steel Shares, 12-in., Wt. 10 lbs. ....\$3.00
- Extra Steel Shares, 14-in., Wt. 11 lbs. .... 3.50
- Extra Steel Shares, 16-in., Wt. 14 lbs. .... 4.00
- Extra Cast Shares, 12-in., Wt. 10 lbs. .... .75
- Extra Cast Shares, 14-in., Wt. 11 lbs. .... .75
- Extra Cast Shares, 16-in., Wt. 14 lbs. .... .90

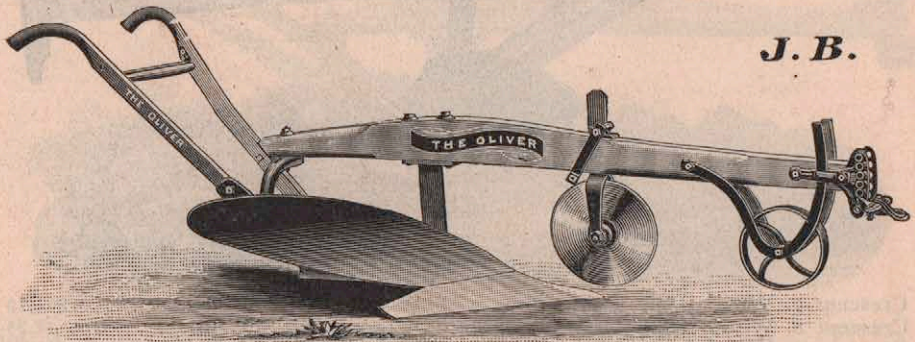




**Oliver's Crescent 4, 5 and 6, Black Land Plows.**

We have this plow in three sizes, 10, 11 and 12 inches, in both wood and steel beam. They have extra hardened single shin mouldboards and shares, also handle braces. Strap under beam on Crescent 6 Wood Beam Plow. Adjustable Wood Beams, and are intended for soils with difficult scouring qualities.

Crescent 4, 10-in., Wood Beam Plow, Wt. 80 lbs. ....	\$13.25
Crescent 5, 11-in., Wood Beam Plow, Wt. 85 lbs. ....	14.25
Crescent 6, 12-in., Wood Beam Plow, Wt. 90 lbs. ....	14.75
Crescent 6, 12-in., Steel Beam Plow, Wt. 98 lbs. ....	16.25
Crescent 5, 11-in., Steel Beam Plow, Wt. 97 lbs. ....	16.25
Crescent 4, 10-in., Steel Beam Plow, Wt. 92 lbs. ....	15.25
Extra Steel Shares, Crescent 4, 6 lbs., \$2.00.	
Extra Steel Shares, Crescent 5, 7 lbs., 2.50.	
Extra Steel Shares, Crescent 6, 7 lbs., 2.50.	
Extra Cast Shares, 6 lbs. ....	.75
Extra Cast Shares, 7 lbs. ....	.75
Extra Cast Shares, 7 lbs. ....	.75



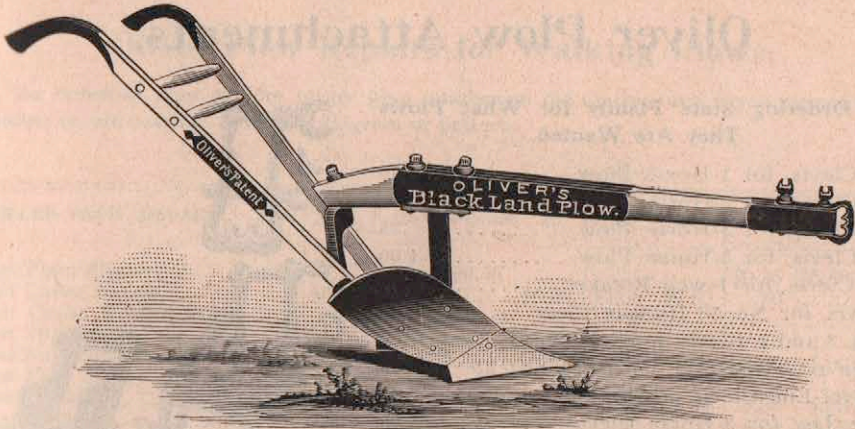
**J. B.**

**Oliver's Jewell Prairie Breaker.**

The Jewell Breaker is our new prairie breaking plow, made upon the most improved lines, and for the class of plowing intended has no superior. Fitted with rolling coulter gauge wheel, extra steel share and steel draft rod under beam.

J. 2, 12-in., Jewell Breaker, complete, with Draft Rod, Wt. 155 lbs. ....	\$22.25
J. 3, 14-in., Jewell Breaker, complete, with Draft Rod, Wt. 160 lbs. ....	24.25
J. 4, 16-in., Jewell Breaker, complete, with Draft Rod, Wt. 165 lbs. ....	27.25
Extra Steel Shares, 12-in., Wt. 8 lbs. ....	\$3.00
Extra Steel Shares, 14-in., Wt. 9 lbs. ....	3.50
Extra Steel Shares, 16-in., Wt. 10 lbs. ....	4.00
Extra Steel Mouldboards, Wt. 20 lbs. ....	5.50
Extra Steel Mouldboards, Wt. 22 lbs. ....	6.00
Extra Steel Mouldboards, Wt. 25 lbs. ....	6.50





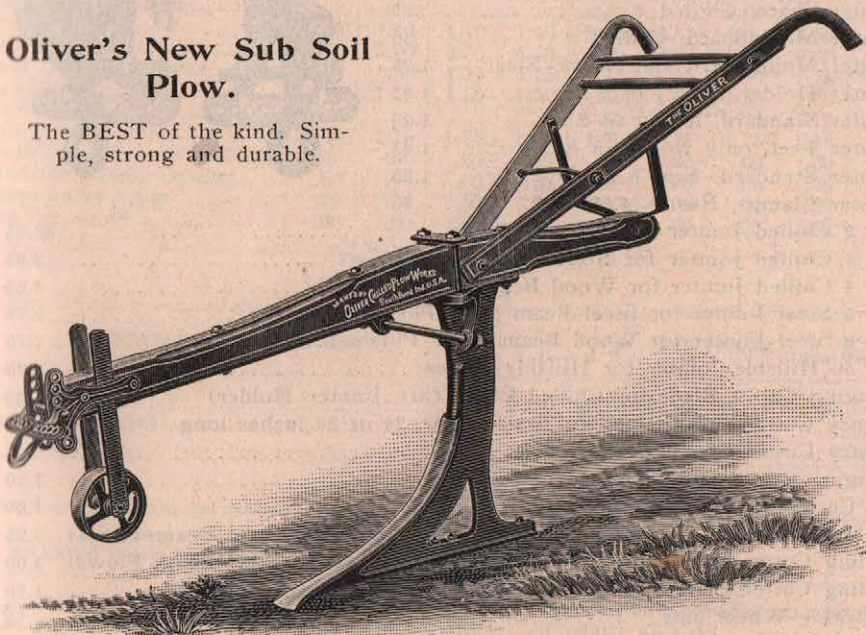
**Oliver's Nos. 61, 63, 64 and 65 Steel Plows.**

We have this pattern of plow in four sizes, cutting from 7 to 10 inches. Their long mouldboards, rakish cut and peculiar shape, adapt them for work in the most difficult soils, and like all our one-horse plows the beams can be adjusted for the horse to walk in the furrow. All single shin.

No. 61, 7-in., Wood Beam Plow, Wt. 50 lbs. ....	\$ 5.75
No. 63, 8-in., Wood Beam Plow, Wt. 52 lbs. ....	7.50
No. 64, 9-in., Wood Beam Plow, Wt. 57 lbs. ....	10.00
No. 65, 10-in., Wood Beam Plow, Wt. 60 lbs. ....	11.00
Extra Steel Shares, No. 61, 75c; No. 63, \$1.00; No. 64, \$1.10; No. 65, \$1.40.	
Extra Cast Shares, No. 61, 40c; No. 63, 50c; No. 64, 70c; No. 65, 75c.	

**Oliver's New Sub Soil Plow.**

The BEST of the kind. Simple, strong and durable.



Plow, complete, as per cut, with gauge wheel, Wt. 165 lbs.....\$16.00



## Oliver Plow Attachments.

In Ordering State Plainly for What Plows  
They Are Wanted.

A, Clevis, for 1-Horse Plow .....	\$ .30	
C, Clevis, for 2-Horse Plow .....	.60	
E, Clevis, for 3-Horse Plow .....	.75	
G, Clevis, for 3-Horse Plow .....	1.00	
H, Clevis, for Jewell Breaker .....	1.00	
Clevis, for No. 56 Hillside Plow .....	.75	
Nos. 3 and 4, Clevis, for Steel-Beam Plow.	1.00	
Plain or Twist-End Clevis or Shackle...	.10	
Swivel-End Clevis or Shackle .....	.25	
Side Jaw for 3-Horse Clevis .....	.35	
Cross Clevis for 3-Horse Clevis .....	.30	
Cast Wrench for 1-Horse Plow.....	.15	
Cast Wrench for 2-Horse Plow.....	.20	
Cast Wrench for Steel Beam Plow.....	.25	
Star and Crescent Landside Heels.....	.25	
Bolt for Beam and Standard .....	.15	
Bolt for end of Beam .....	.10	
Bolt for Spreading Handles .....	.20	
Bolt for Shares, per dozen .....	.50	
Bolt for Mouldboards and Landsides, per dozen .....	.50	
Jointer Share, Chilled .....	.25	
Jointer Mouldboard, Chilled .....	.50	
Jointer Mouldboard and Share, Steel....	1.25	
Jointer Holder, Nos. 1 or 2 .....	1.25	
Jointer Standard, Nos. 1 or 2 .....	1.00	
Jointer Feet, only Nos. 1 or 2 .....	1.25	
Jointer Standard, Nos. 5 or 6 .....	1.25	
Jointer Clamps, Nos. 3, 4, 5 or 6 .....	.75	
No. 2 Chilled Jointer for Chilled Plows .....	\$2.25	
No. 3 Chilled Jointer for Steel Beam Steel Plows .....	2.25	
No. 4 Chilled Jointer for Wood Beam Steel Plows .....	2.25	
No. 5 Steel Jointer for Steel Beam Steel Plows .....	2.75	
No. 6 Steel Jointer for Wood Beam Steel Plows .....	2.75	
No. 56 Hillside Jointer for Hillside Plows .....	2.25	
Hanging Cutter Blade for Chilled Plow, (fits Jointer Holder) .....	1.25	
Quincy Cutter and Clamp for Steel Plow, 24 or 26 inches long .....	1.50	
Quincy Cutter Clamp only .....	.45	
Hanging Cutter and Clamp for Steel Plow .....	1.50	
Fin Cutter and bolts for Steel Plow.....	1.00	
Rolling Cutter and Clamp, 13-in. (fits either Wood or Steel Beam Plows)..	3.25	
Rolling Cutter and Clamp, 11-in. (fits either Wood or Steel Beam Plows)..	3.00	
Rolling Cutter Clamp, (fits either Wood or Steel Beam Plows) .....	1.25	
Malleable Wheel only .....	.75	
Malleable Wheel, Hub .....	.15	
Malleable Wheel, Standard .....	.75	



## Oliver Plow Repairs for Walking Plows.

In ordering plow repairs please give number on old casting, and if you cannot find a number on old casting, send us a diagram or pattern.

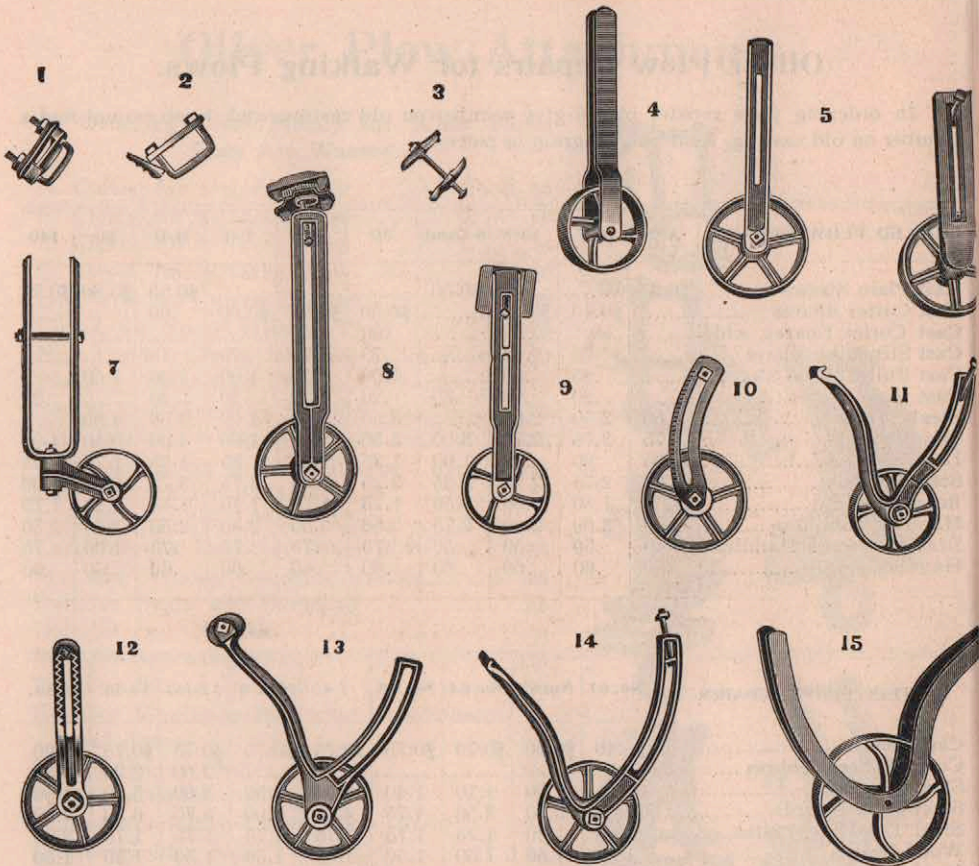
CHILLED PLOW REPAIRS	A-2	B. V.	10-V	8-Comb	20	40	E-1	H-O	50	140
Cast Plain Shares.....	\$0.35			\$0.50				\$0.55	\$0.80	\$0.75
Cast Cutter Shares.....	\$0.40	\$0.45			\$0.50	\$0.55	\$0.60	.60		
Cast Cutter Shares, wide					.60	.65				
Cast Slip Nose Share.....		.65	.65		.75	.75	.75	.75		
Cast Full Chilled Share...		.85	.90		1.00	1.00	1.00	1.00	1.00	
Cast Nose Pieces.....		.20	.20	.30	.20	.20	.20	.20		.35
Steel Shares.....	1.50	2.50	2.50		3.50	4.00	4.00	3.50	4.00	
Mouldboards.....	1.75	2.75	2.75	3.00	3.50	3.50	4.00	4.00	5.50	4.00
Landsides.....	.65	.90	.90	1.00	1.25	1.25	1.25	1.25	1.75	1.25
Standards.....	2.00	2.75	2.75	3.25	3.25	3.75	3.75	3.75	5.00	4.00
Beams.....	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.75	2.25	1.75
Handles, complete.....	2.00	2.00	2.00	2.75	2.50	2.50	2.50	2.50	2.75	2.50
Braces between Handles..	.40	.50	.50	.50	.75	.75	.75	.75	1.00	.75
Handles, single.....	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60

STEEL PLOW REPAIRS.	No. 61	No. 63	No. 64	No. 65	) 4	) 5 & 6	12-in.	14-in.	16-in.
Cast Shares.....	\$0.40	\$0.50	\$0.70	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.90
Crucible Steel Shares.....							2.00	2.25	2.50
Steel Shares.....	.75	1.00	1.10	1.40	2.00	2.50	3.00	3.50	4.00
Steel Mouldboards.....	2.50	3.00	3.50	4.75	4.50	5.00	5.75	6.50	7.50
Steel Landside Plates.....	1.00	1.50	1.75	1.75	1.75	1.75	1.75	1.75	2.00
Wood Beams.....	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Inside Frogs.....					1.75	1.75	1.75	1.75	1.85
Handles, complete.....	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Mouldboard Handle Casting...	.60	.60	.60	.60	.60	.60	.60	.60	.60
Landside Handle Casting.....	.60	.60	.60	.60	.60	.60	.60	.60	.60
Straps under Beam.....	.50	.50	.50	.50	1.00	1.00	1.00	1.00	1.00
Handles, single.....	.60	.60	.60	.60	.60	.60	.60	.60	.60

JEWELL PLOW REPAIRS.	12-in. J. B.	14-in. J. B.	16-in. J. B.	No. 33	R. & G. Plow Repairs
Steel Shares.....	\$3.00	\$3.50	\$4.00	\$4.00	\$6.00
Steel Mouldboards.....	5.75	6.50	7.00	5.00	6.00
Wood Beam.....	2.75	2.75	2.75	1.50	5.00

OLIVER HILLSIDE PLOW REPAIRS.	52H. S.	53H. S.	56H. S.	
Cast Shares.....	\$0.90	\$1.00	\$1.00	Full Chilled Landsides, all sizes. \$1.00 Standard, all sizes..... 3.25 Single Handles, each..... .60
Steel Mouldboards.....	3.75	4.25	5.00	
Wood Beams.....	1.50	1.75	1.50	

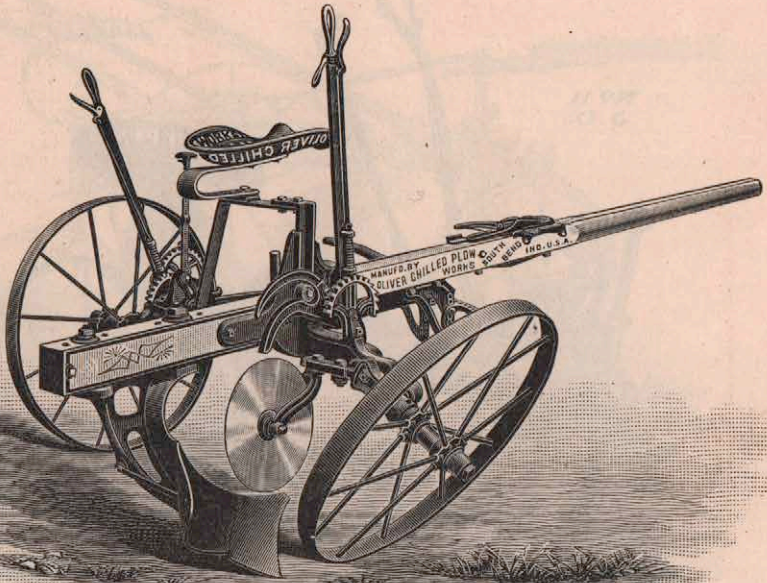




**Key to Cut of Wheels.**

	Price.
1. Clamp for Wheel used on all Steel Beam Plows .....	\$. 50
2. Clamp for No. 4 Gauge Wheel used on Steel Beam Plows .....	. 50
3. Clamp for Jewell Wood Beam Wheel used on all Breaking Plows ...	. 25
4. Star and Crescent Steel Beam Double Standard Wheel for two and three-horse Steel Beam Plows .....	1.50
5. Star and Crescent Steel Beam Straight Standard Wheel for two and three-horse Steel Beam Plows .....	1.50
6. No. 22 Iron Beam Straight Standard Wheel for No. 22 Iron Beam Road Plow .....	1.50
7. No. 56 Wood Beam Swivel Wheel for No. 56-X Hillside Plow.....	1.50
8. Two-horse Wood Beam Straight Standard Wheel for two and three-horse Wood Beam Plows .....	1.50
9. One-horse Wood Beam Straight Standard Wheel for one-horse Wood Beam Plows .....	1.25
10. No. 14-A Iron Beam Wheel for No. 14-A Iron Beam Plow .....	1.50
11. One-horse Wood Beam Brace Standard Wheel for one-horse Wood Beam Plows .....	1.25
12. No. 58 Iron Beam Straight Standard Wheel for No. 58 Iron Beam Hillside Plow .....	1.50
13. Steel Beam Brace Standard Wheel for two and three-horse Steel Beam Plows .....	1.50
14. Two-horse Wood Beam Brace Standard Wheel for two and three-horse Wood Beam Chilled Plows.....	1.50
15. Jewell Wood Beam Wheel for Jewell Breaking Plows .....	2.00
16. For No. 50 Plow with Universal Clamp and fits all Plows not shown...	2.25





### Oliver's No. 9 Sulky.

There is no landside to cause friction or heavy draft, and our new clevis absolutely prevents neck and side draft.

It cuts as deep in crossing a dead furrow as on either side of it, and for rough and uneven ground has no equal.

It works equally well in clay, loam or hog-wallow lands, and in prairie soil its work cannot be excelled. It plows a uniform width and depth, and turns weeds under and buries them out of sight better than any other plow made.

All the weight is carried on the wheels. It turns square corners without throwing the plow out of the ground, and can be changed to suit the character of the work required.

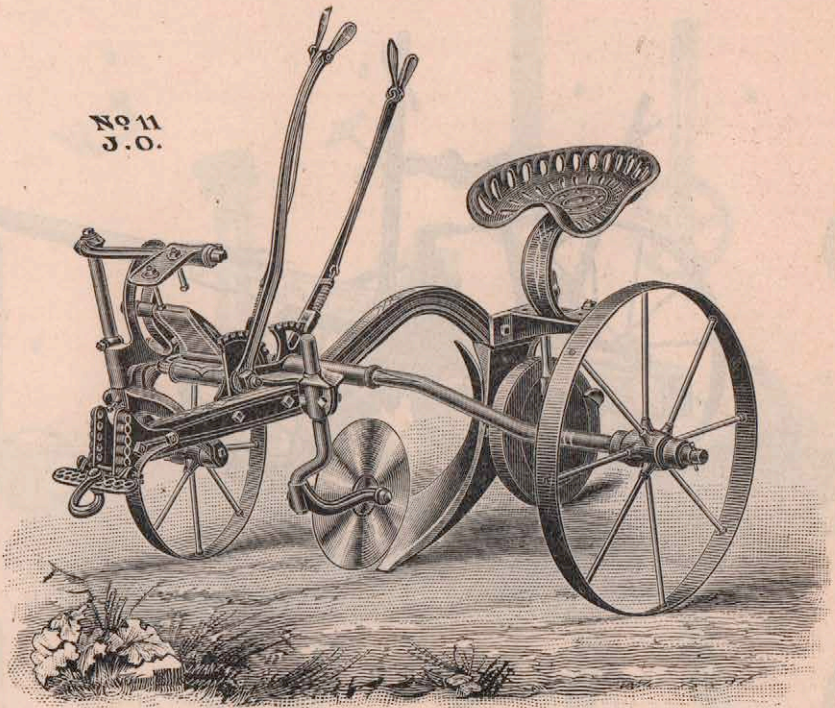
It works splendidly in hard, dry and stony land and as a prairie breaker is without a successful competitor. It opens and finishes a land to perfection, and for ease of management and lightness of draft cannot be excelled.

H. Sulky Plow, Steel or Chilled Mouldboard, Steel Share, Rolling Coulter, Weed Hook, three-horse Evener and Tongue; weight 550 lbs	.....	\$55.00
O. Sulky Plow, same as H, but with Jointer instead of Rolling Coulter; weight 535 lbs	.....	54.00
If Cast Share is wanted in place of Steel Share, deduct from list	.....	2.00
For Evener not taken, deduct from list	.....	2.50
For Tongue, Tongue Irons and Neckyoke not taken, deduct from list	.....	2.00
For Rolling Coulter not taken, deduct from list	.....	2.00
For Jointer not taken, deduct from list	.....	1.00

### Bottom for No. 9 Sulky.

No. 16, General Purpose, cuts 16 inches, Steel or Chilled Mouldboard, Steel Share	.....	16.00
No. 16, General Purpose, cuts 16 inches, Steel or Chilled Mouldboard, Cast Share	.....	12.50





### The James Oliver No. 11 Sulky.

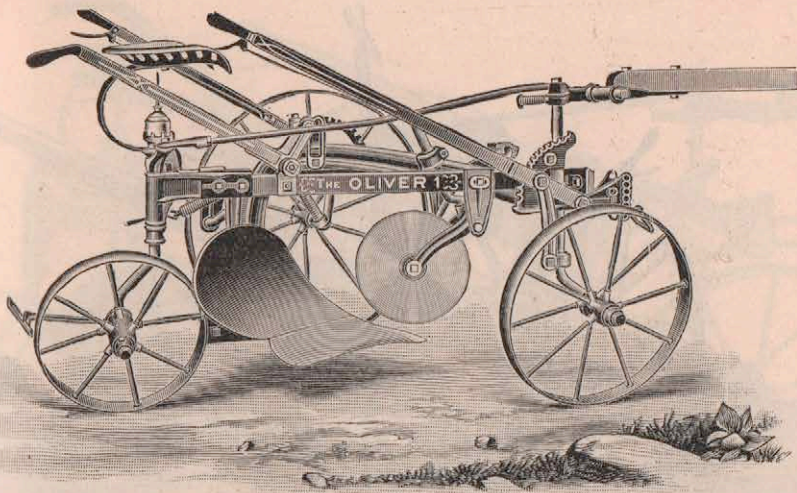
(H) Sulky Plow, Steel or Chilled Mouldboard, Steel Share, Rolling Coulter, Weed Hook, three-horse Evener and Tongue; weight 415 lbs. ....	\$50.00
(O) Sulky Plow, same as H, but with Jointer instead of Rolling Coulter; weight 445 lbs. ....	49.00
If Cast Share is wanted in place of Steel Share, deduct from list .....	2.00
For Evener not taken, deduct from list .....	1.50
For Tongue, Tongue Irons and Neckyoke not taken, deduct from list ....	2.00
For Rolling Coulter not taken, deduct from list .....	2.00
For Jointer not taken, deduct from list.....	1.00

Note—The A-52 and A-53 parts are used to operate the Sulky without a Tongue. When these parts are wanted with the plow, add to list \$1.00.

### Bottoms for No. 11 Sulky.

Crescent-8 for Stubble, cuts 14 or 16 in., Steel Mouldboard, Steel Share ...	\$16.00
Crescent-8 for Stubble, cuts 14 or 16 in., Steel Mouldboard, Cast Share ....	12.50
No. 40, General Purpose, cuts 14 in., Chilled Mouldboard, Steel Share ...	16.00
No. 40, General Purpose, cuts 14 in., Chilled Mouldboard, Cast Share.....	12.50
No. 50, General Purpose, cuts 16 in., Chilled Mouldboard, Steel Share ...	16.00
No. 50, General Purpose, cuts 16 in., Chilled Mouldboard, Cast Share.....	12.50
All bottoms with Caster Wheels attached, add to list .....	5.00
All Bottoms with Beams attached, add to list .....	6.00
For Subsoil Attachments, add to list.....	6.00





### Oliver's No. 1 Sulky.

Extra high lift; center hitch; no side draft.  
 No cramping or sliding of the wheels.  
 Turns furrows of even width and depth.  
 Is completely under control of the operator.  
 Is quickly and easily adjusted.  
 Has no equal for rough or stony land.  
 Plows a uniform depth in uneven ground.  
 Is raised and lowered with little or no exertion.  
 Is adapted to any soil and every condition of plowing.

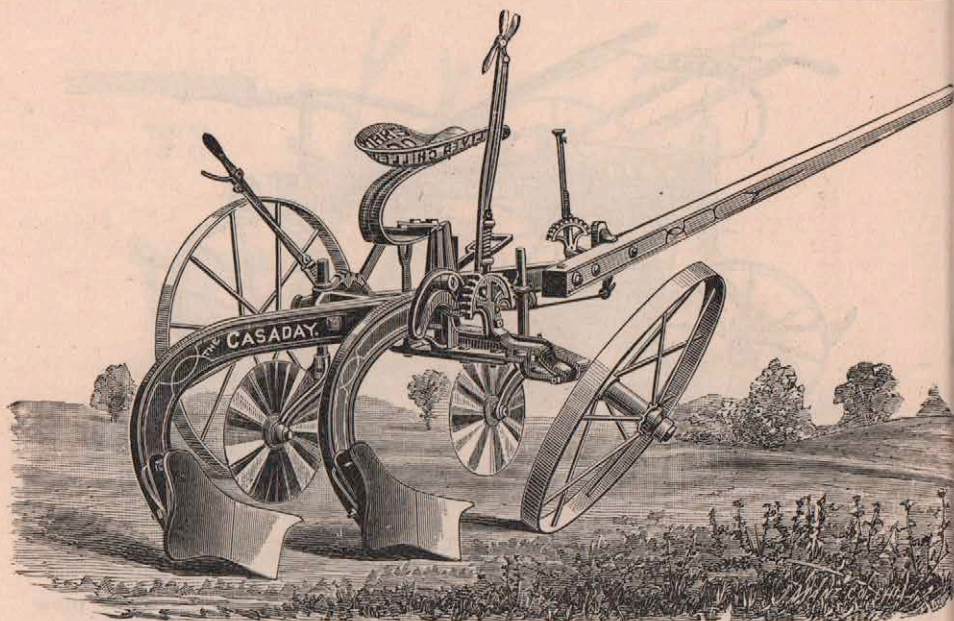
Turns to the right or left while plow bottom is in the ground.  
 Can be backed and handled as easily as a wagon.  
 Is light in draft and perfect in work.  
 In opening a land a square and level furrow is turned.  
 Wheels are large and plow runs steadier in consequence.  
 Is fitted with dust and sand proof boxes and caps.  
 Plows two to ten inches in depth as desired at will of operator.  
 Has a wrought steel standard, insuring great strength.  
 Can be used with or without landside.

(H) Sulky Plow, Steel or Chilled Mouldboard, Steel Share, Rolling Coulter, Weed Hook, three-horse Evener and Tongue; weight 550 lbs. ....	\$60.00
(O) Sulky Plow, same as H, but with Jointer instead of Rolling Coulter; weight 530 lbs. ....	59.00
If Cast Share is wanted in place of Steel Share, deduct .....	2.00
For Evener not taken, deduct from list.....	1.50
For Tongue, Tongue Irons and Neckyoke not taken, deduct from list...	2.00
For Rolling Coulter not taken, deduct from list .....	2.00
For Jointer not taken, deduct from list.....	1.00

### Bottoms for No. 1 Sulky.

NC-C7, For Stubble, cuts 12 in., Steel Mouldboard, Steel Share .....	13.00
NC-C8, For Stubble, cuts 16 in., Steel Mouldboard, Steel Share .....	16.00
NC-40, General Purpose, cuts 14 in., Chilled Mouldboard, Cast Share and Extra Cast Share .....	9.00





### Oliver's No. 6 Gang Plow.

The No. 6 Gang embraces, in principle and general construction, all the distinguishing features of our world-famous No. 9 Sulky Plow. It has the inclined wheel, and the bottoms are made without landsides, thus providing for light draft, uniform work and thoroughly satisfactory results in all respects.

Special pains have been taken to make this plow strong and durable, and so well has this been accomplished that its construction is beyond criticism.

For years it has been the leading Gang on the Pacific Coast, and it has become a prime favorite wherever introduced.

For hard, dry or stony ground, it has no equal.

Turns square corners without throwing the plow out of the ground.

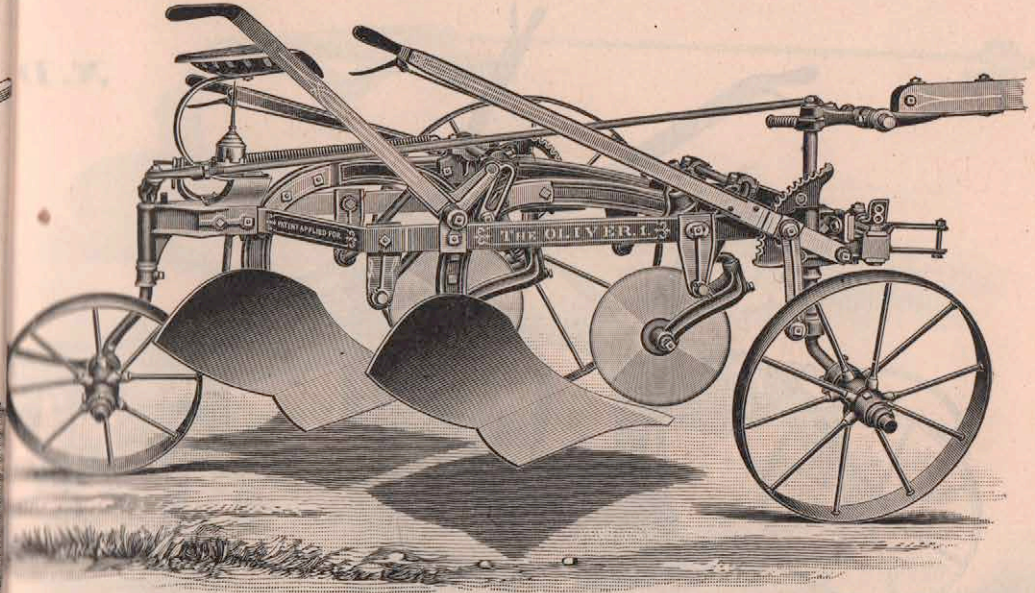
Can be furnished with chilled or steel bottoms, and with cast or steel shares, as desired.

H. Gang Plow, Steel or Chilled Mouldboards, Steel Shares, Rolling Coulters, Weed Hooks and Tongue; weight 800 lbs. ....	\$90.00
O. Gang Plow, same as H, but with Jointers instead of Rolling Coulters; weight 775 lbs. ....	88.00
If Cast Shares are wanted in place of Steel Shares, deduct from list .....	4.00
For two Rolling Coulters not taken, deduct from list .....	4.00
For two Jointers not taken, deduct from list .....	2.00
For Tongue and Neckyoke not taken, deduct from list .....	1.25

### Bottom for No. 6 Gang.

No. 77, General Purpose, cuts 14 in., Steel or Chilled Mouldboards, Steel Shares .....	15.00
No. 77, General Purpose, cuts 14 in., Steel or Chilled Mouldboards, Cast Shares .....	12.00





### No. 1 Oliver Gang Plow.

Oliver's latest and best in the line of high lift double furrow plows. Among its other good features are the following:

**EXTRA HIGH LIFT.**

**CENTRAL HITCH.**

**NO SIDE DRAFT.**

No cramping or sliding of the wheels.

Turns furrows of even width and depth.

Is completely under control of the operator.

Is quickly and easily adjusted.

Has no equal for rough or stony land.

Plows a uniform depth in uneven ground.

Is raised or lowered with little or no exertion.

Is adapted to any soil and every condition of plowing.

Turns to the right or left while plow bottoms are in the ground.

Can be backed and handled as easily as a wagon.

Is light in draft and perfect in work.

In opening a land a square and level furrow is turned.

Wheels are large and the plow runs steadier in consequence.

Is fitted with dust and sand proof boxes and caps.

Plows two to ten inches in depth as desired at will of operator.

H. Gang Plow, Steel or Chilled Mouldboards, Steel Shares, Rolling Coulters, Weed Hooks, four-horse Evener and Tongue, weight 765 lbs. .... \$90.00

O. Gang Plow, same as H, but with Jointers instead of Rolling Coulters; weight 740 lbs. .... 88.00

If Cast Shares are wanted in place of Steel Shares, deduct from list ..... 4.00

For two Rolling Coulters not taken, deduct from list ..... 4.00

For two Jointers not taken, deduct from list ..... 2.00

For Tongue, Tongue Irons and Neckyoke not taken, deduct from list... 2.00

### Bottoms for No. 1 Gang.

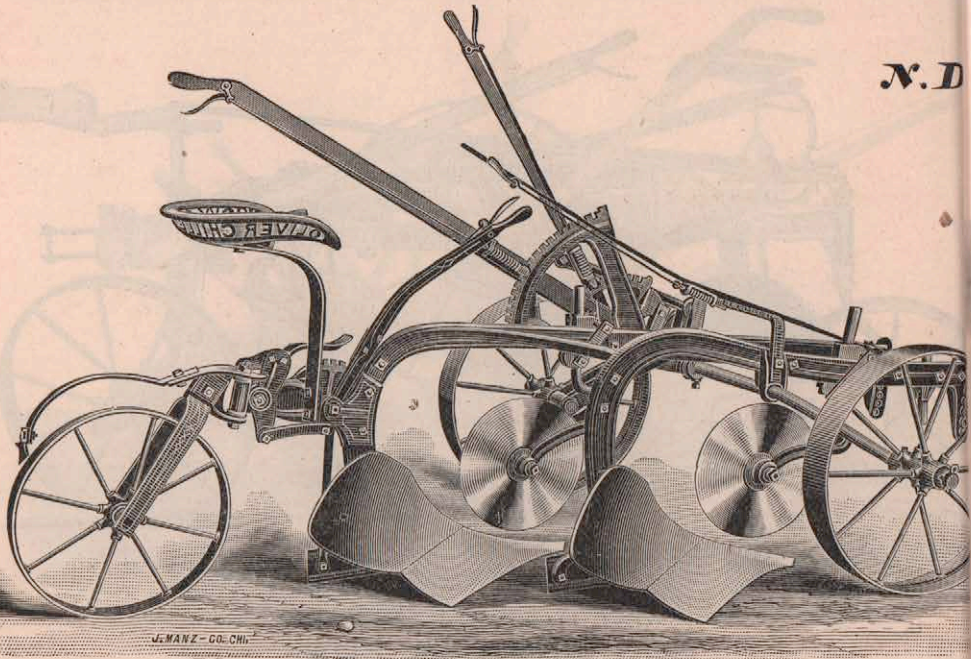
NC-C7, for Stubble, cuts 12 inches, Steel Mouldboard, Steel Share ..... \$13.00

NC-C8, for Stubble, cuts 14 inches, Steel Mouldboard, Steel Share ..... 14.00

NC-40, General Purpose, cuts 14 inches, Chilled Mouldboard, Cast Share and Extra Cast Share ..... 9.00



N.D



### Oliver's New Departure Gang Plow.

The New Departure Gang is one of our most popular and practical patterns. It is made upon correct lines, is strong and durable and will do first-class work in all respects. Made to turn two or three furrows, and fitted with steel or chilled bottoms, with either cast or steel shares. Walking or riding, with or without rolling coulters or jointers. Supplied with four-horse evener, or with three-horse evener, lead rod and equalizer bar to make five-horse tandem hitch. The above illustration shows the riding two-furrow gang with ND steel bottoms.

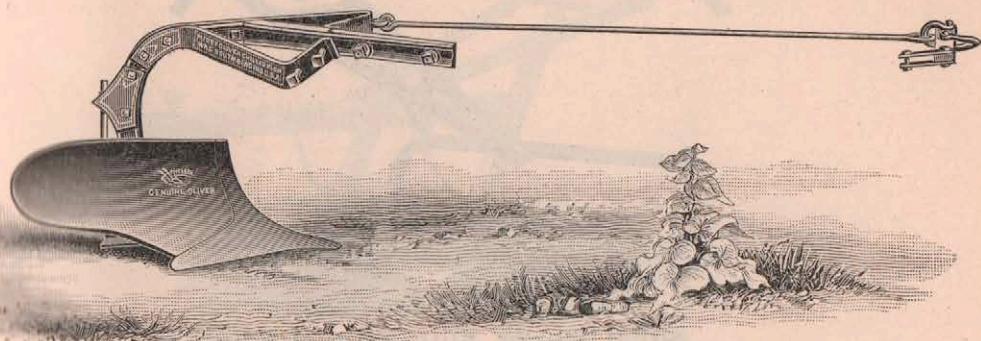
### New Departure Gang Plows.

Walking Gang, 2-Base, 20 Chilled, 12-inch, complete, weight 646 lbs. ....	\$65.00
Walking Gang, 2-Base, 40 Chilled, 14-inch, complete, weight 686 lbs. ....	65.00
Walking Gang, 2-Base, 50 Chilled, 16-inch, complete, weight 724 lbs. ....	70.00
Walking Gang, 2-base, ND-1, Steel 12-inch, complete, weight 597 lbs. ....	75.00
Walking Gang, 2-Base, ND-2 Steel, 14-inch, complete, weight 603 lbs. ....	80.00
For Riding Attachment, Wt. 89 lbs., add. ....	10.00
For Rolling Coulters not taken, Wt. 28 lbs., deduct each. ....	2.00
For Four-horse Evener, or Five-horse Tandem Evener not taken, Wt. 48 lbs., deduct. ....	2.00

### New Departure Gang Bottoms.

Bottom, ND-1 Steel, 12-inch, weight 42 lbs. ....	14.00
Bottom, ND-2 Steel, 14-inch, weight 44 lbs. ....	15.00
Bottom, 20 Chilled, 12-inch, with extra Cast Share, weight 66 lbs. ....	10.00
Bottom, 40 Chilled, 14-inch, with extra Cast Share, weight 82 lbs. ....	10.00
Bottom, 50 Chilled, 16-inch, with extra Cast Share, weight 97 lbs. ....	10.00
Bottom, 50 Chilled, 16-inch, with extra Steel Share, weight 82 lbs. ....	14.00
Bottom, Jewel-2 Steel Breaker, 12-in., with extra Steel Share, Wt. 50 lbs. ....	16.00
Bottom, Jewel-3 Steel Breaker, 14-in., with extra Steel Share, Wt. 55 lbs. ....	17.00





### Third Bottoms and Beams for ND Gang.

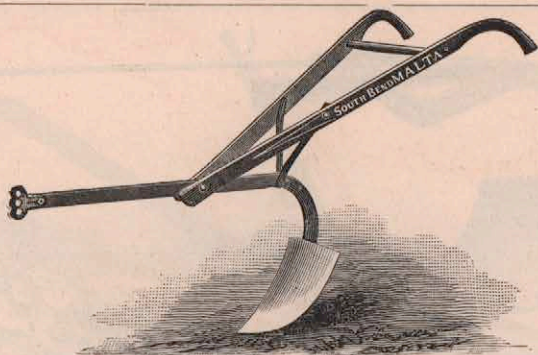
This illustration shows a No. 40 third beam and bottom, complete, with draft rod ready to attach to the two furrow plow. It is furnished with the same complete assortment of bases described on page 21. and can be attached to any two bottom New Departure Gang, thus converting it into a three-furrow plow.

Third Bottom and Beam, 20 Chilled, 12-in., complete, weight 184 lbs. ....	\$15.00
Third Bottom and Beam, 40 Chilled, 14-in., complete, weight 207 lbs. ....	15.00
Third Bottom and Beam, 50 Chilled, 16-in., complete, weight 226 lbs. ....	16.00
Third Bottom and Beam, ND-1 Steel, 12-in., complete, weight 161 lbs. ....	20.00
Third Bottom and Beam, ND-2 Steel, 14-in., complete, weight 167 lbs. ....	20.00

### Attachments and Extras for Oliver Riding Plows.

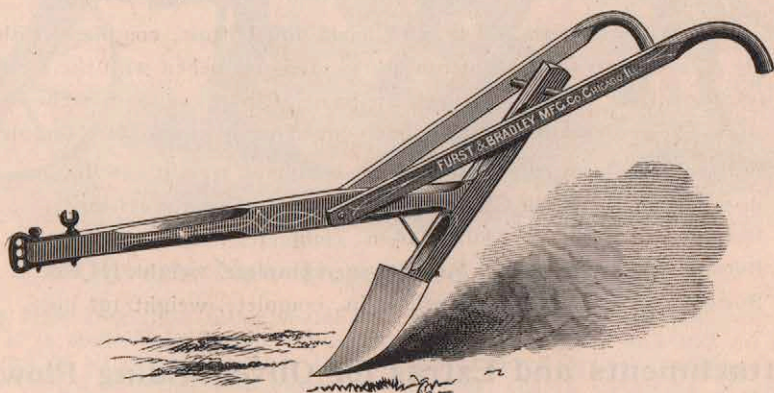
Riding Attachment for ND Gang .....	\$10.00
Three-horse Hitch, complete .....	5.00
Four-horse Hitch, complete .....	6.50
Five-horse Tandem Hitch .....	8.50
Rolling Cutter, with Clamp .....	4.00
No. 20 Chilled Mouldboard .....	3.50
No. 40 Chilled Mouldboard .....	3.50
No. 50 Chilled Mouldboard .....	6.50
Cres. 7 Steel Mouldboard .....	5.75
Cres. 8 Steel Mouldboard .....	6.50
No. 20 Cast Shares for ND Gang .....	.60
No. 40 Cast Shares for ND Gang .....	.65
B-5 Cast Shares for Bonanza Gang .....	.60
No. 77 14-inch, Cast Shares for No. 6 Gang .....	.75
No. 77 Shin Piece for No. 6 Gang .....	.50
S-16 Chilled Share for No. 9 Sulky .....	.90
B-5 Steel Shares for Bonanza Gang .....	2.00
No. 77 14-inch, Steel Shares for No. 6 Gang .....	3.50
S-16, 16-inch, Steel Shares for No. 9 Sulky .....	4.00





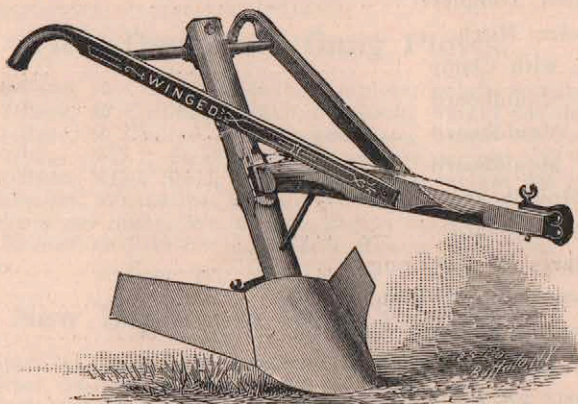
**Steel Beam, One Shovel Plow.**

Steel Beam, One Shovel Plow, weight 35 lbs. ....\$3.25  
 Extra Shovel Blades, 12-inch ..... 1.00



**Wood Beam, One Shovel Plow.**

Wood Beam, One Shovel Plow, weight 28 lbs. ....\$3.00  
 Extra Shovel Blades, 13-inch ..... 1.00

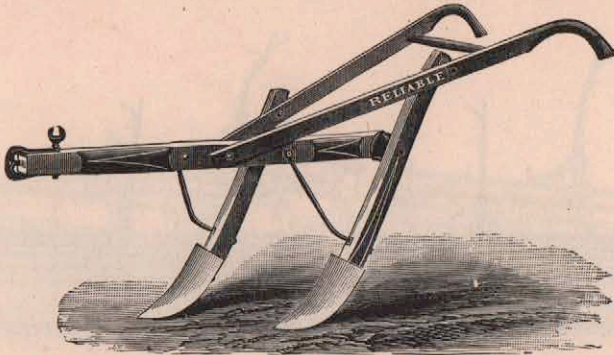


**Wood Beam, Wing Shovel Plow.**

These are admirable tools for hilling potatoes, etc., with adjustable wings which can be let out to any desired angle by means of punched spread-rods, and can be worked with one wing or the two wings simultaneously at different angles.

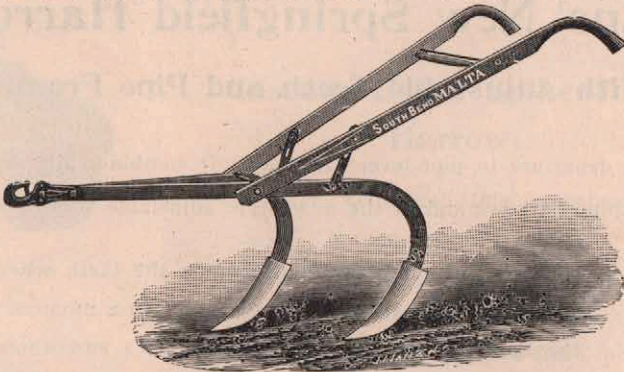
Wood Beam, Wing Shovel Plow, weight 40 lbs. ....\$5.00





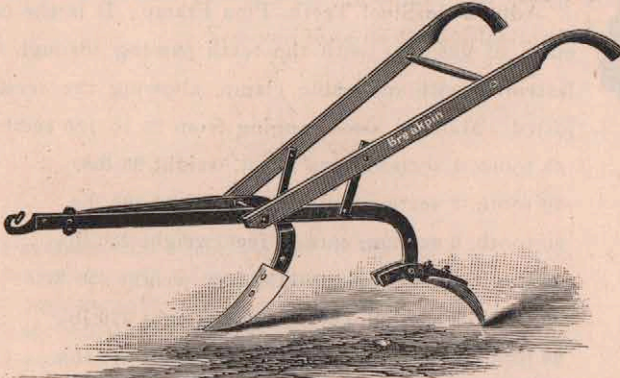
**Wood Beam Double Shovel Plow.**

This is a strong wood-beam Plow, made of selected material, and with a fine natural wood and vermilion finish. The blades are oval shaped; weight 30 lbs. ....\$3.75



**Steel Beam Double Shovel Plow.**

We GUARANTEE it superior to any shovel plow of its class. It has a malleable adjustable clevis, and the handles are natural wood with black tips. The blades have two bolts and are  $5\frac{1}{2} \times 10\frac{1}{2}$  and 7-32 thick, and oval; weight 36 lbs. ....\$4.00

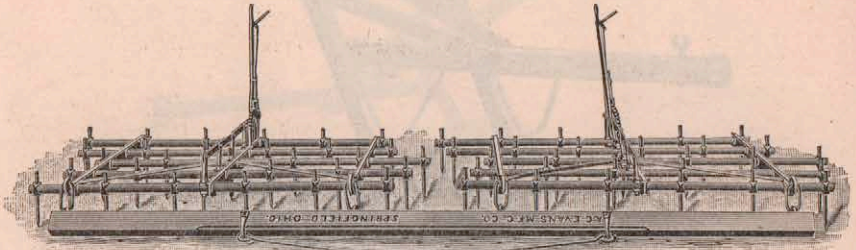


**Steel Beam Double Shovel Plow.**

**With Break Pins.**

The blades are supplied with a sleeve, which sets around the bottom of the beam, held with a large rivet and hickory pin, and on striking an obstruction the pin gives way, thereby preventing the beam or blade from springing; weight 38 lbs. ....\$5.00





## Evans' New Springfield Harrow.

### With Adjustable Teeth and Pipe Frame.

Is a new departure in pipe-lever Harrows. It combines all the features of the old style pipe harrows and of the new style adjustable tooth harrows.

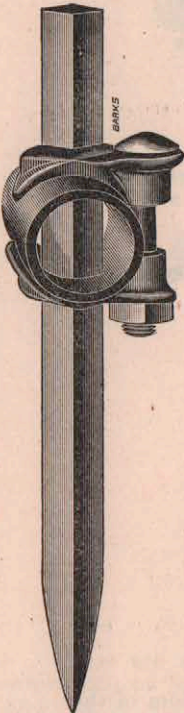
Stalks or trash accumulating on the teeth when used as a straight tooth harrow, can be cleaned in a moment by slanting the teeth by means of the lever. As a smoothing harrow it never clogs, all rubbish being cut in two or passing down and off the end of the teeth.

Acknowledged to be the most perfect harrow on the market.

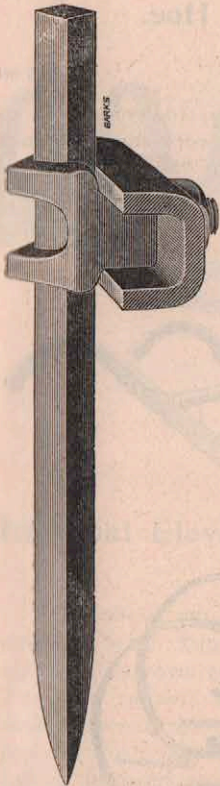
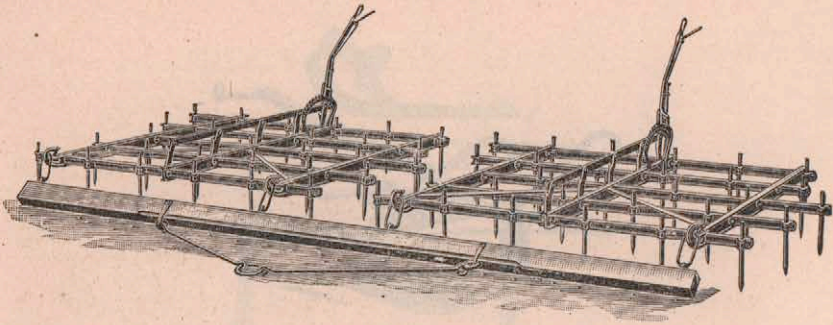
Adjustable Steel Teeth, Pipe Frame. It is the only Harrow made of gas pipe with the teeth passing through the bar and fastening with malleable clamp, allowing the teeth to be adjusted. Made in sizes ranging from 25 to 120 teeth.

25 tooth, 1 section, cuts 4 feet, weight 95 lbs. ....	\$ 8.00
50 tooth, 2 section, cuts 8 feet, weight 195 lbs. ....	16.00
60 tooth, 2 section, cuts 10 feet, weight 230 lbs. ....	17.75
70 tooth, 2 section, cuts 11½ feet, weight 250 lbs. ....	20.00
75 tooth, 3 section, cuts 12 feet, weight 310 lbs. ....	23.75
90 tooth, 3 section, cuts 16 feet, weight 355 lbs. ....	26.50
100 tooth, 4 section, cuts 17 feet, weight 420 lbs. ....	32.00
105 tooth, 3 section, cuts 18 feet, weight 100 lbs. ....	29.75
120 tooth, 4 section, cuts 20 feet, weight 475 lbs. ....	35.50

DO YOU SEE THAT CLAMP?







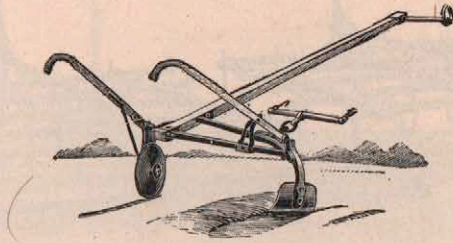
### Cascade U-Bar Spike-Tooth Harrow.

All steel, with malleable fastenings. Especially hardened teeth. Extra front braces. Solid wood eveners. Easily handled levers. Special tooth holders and teeth with specially pressed head, preventing them from getting lost in the field.

This harrow is made with from 25 to 120 teeth, or as many sections coupled together as desired. Examine our tooth fastening. You will note its special features.

25 tooth, 1 section, cuts 4 feet, weight 95 lbs. ....	\$ 7.50
50 tooth, 2 section, cuts 8 feet, weight 195 lbs. ....	15.00
60 tooth, 2 section, cuts 10 feet, weight 230 lbs. ....	16.00
70 tooth, 2 section, cuts 11½ feet, weight 250 lbs. ....	18.00
75 tooth, 3 section, cuts 12 feet, weight 310 lbs. ....	21.00
90 tooth, 3 section, cuts 16 feet, weight 355 lbs. ....	23.00
100 tooth, 4 section, cuts 17 feet, weight 420 lbs. ....	28.00
105 tooth, 3 section, cuts 18 feet, weight 400 lbs. ....	27.00
120 tooth, 4 section, cuts 20 feet, weight 475 lbs. ....	32.00

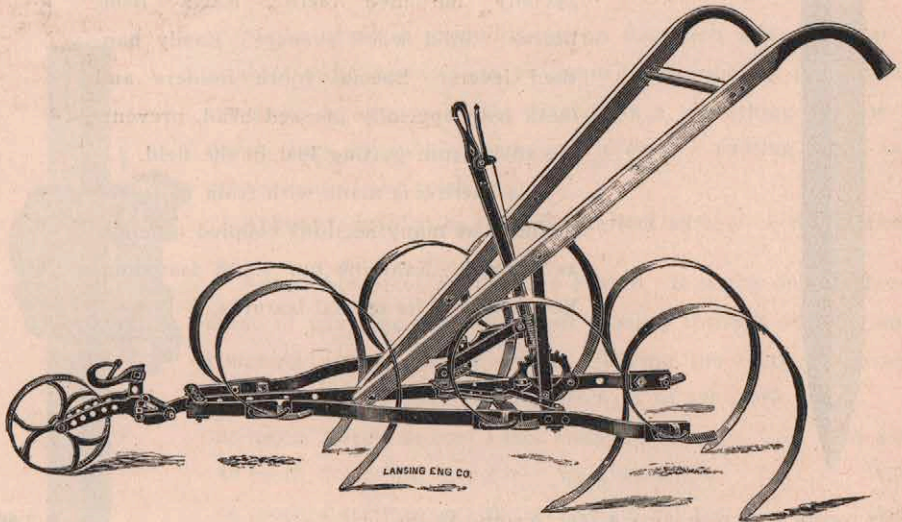




**No. 3. Grape Vine and Nursery Hoe.**

Grape and Nursery Hoe, weight 115 lbs. ....\$15.00

This Hoe has adjustable blade, and is constructed so as to work close to the vines or trees without injury by the singletree. It will work some distance outside of the line the horse follows, and is easily guided by the rudder wheel on left-hand adjustable handle.



**One-Horse Spring Tooth Harrow.**

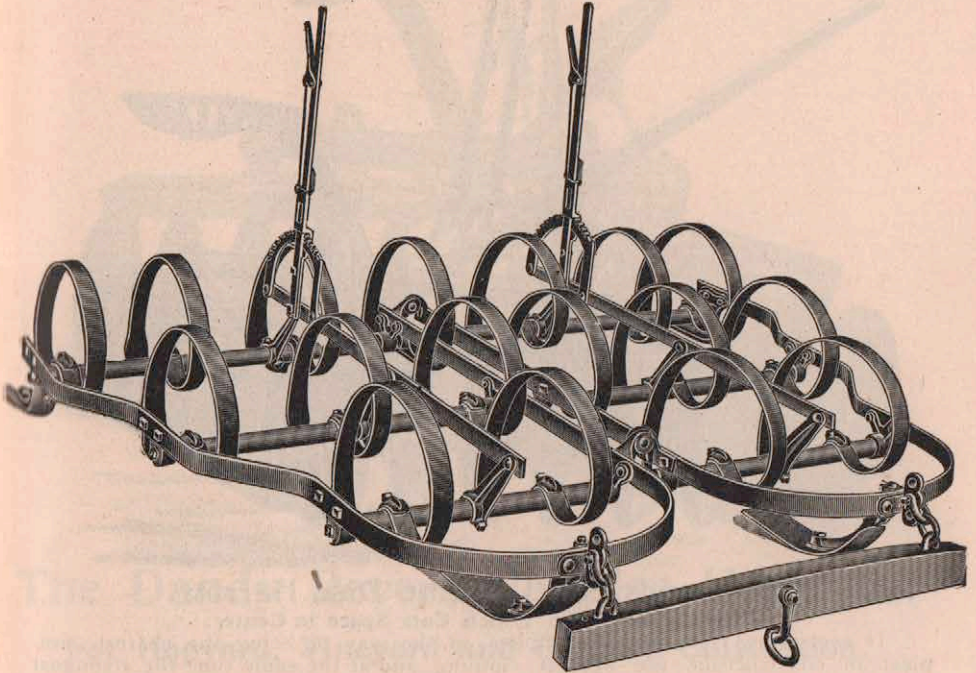
The same teeth are used on this tool as are used on our Imperial Harrows. The teeth are adjustable to any depth, from one to four inches, and the frame adjusted to any practical width.

With 7 teeth and gauge wheel, with expanding lever, weight 88 lbs. ....\$11.50





Sole made of Steel; can be renewed when worn out.



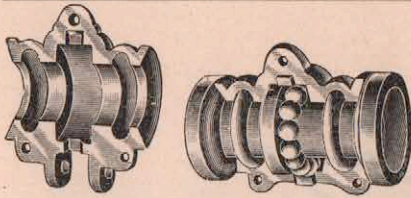
### Imperial Elevated Frame Spring Tooth Lever Harrow.

With Renewable Steel Runners.

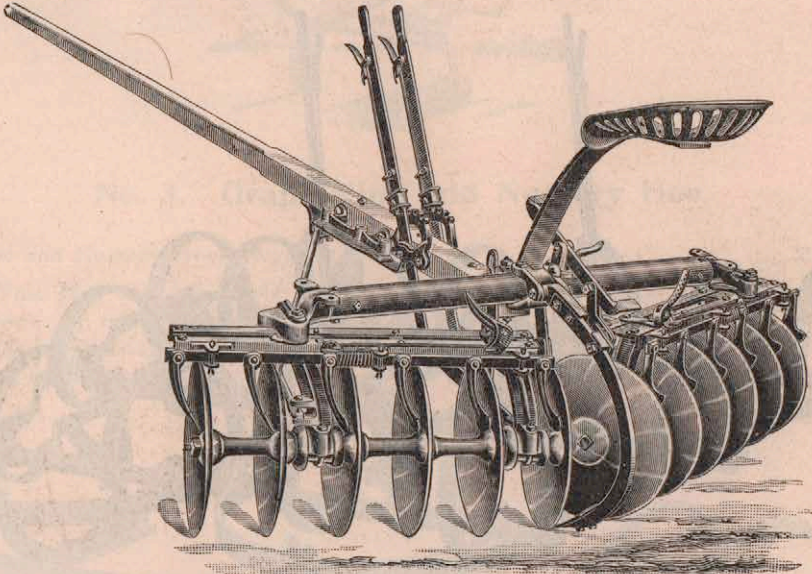
The above cut illustrates the Imperial Spring Tooth Harrow, with Renewable Steel Runners. We claim for these Runners a great advantage over old style harrows on which the entire frame comes in contact with the ground. The steel runners are oval, 2½ inches wide and 12 inches long, placed under each corner of the rear end of frame. The castor runner is attached immediately in the center of the front end of each section. By means of this castor runner in front the Harrow is easily turned about without buckling the frame, as is the case when a solid runner is used on the front corner of the harrow. The frame is heavy steel, made narrow at the front so as to readily pass obstructions. The cross bars of the harrow are round steel tubes, to which the teeth are attached. The teeth are adjusted for more or less depth by means of the lever, which can be set by the operator while the harrow is in motion.

15-tooth Imperial Harrow, with runners, weight 240 lbs. ....	\$22.00
17-tooth Imperial Harrow, with runners, weight 260 lbs. ....	24.00
25-tooth Imperial Harrow, with runners, weight 370 lbs. ....	33.00
Add for wheels instead of runners, per Harrow .....	2.00
Extra Spring Teeth for Imperial Harrows .....	.75





Improved Ball-Bearing Boxes, furnished without extra cost on Dandy Disc Harrows.



## The Dandy Steel Frame Disc Harrow.

With Center Tooth Which Cuts Space in Center.

Is everything that its name implies, in the way of being the neatest, simplest in construction, the lightest running, and at the same time the strongest and most durable harrow made. It has many advantages over the cheaper harrows, and in addition, will last longer.

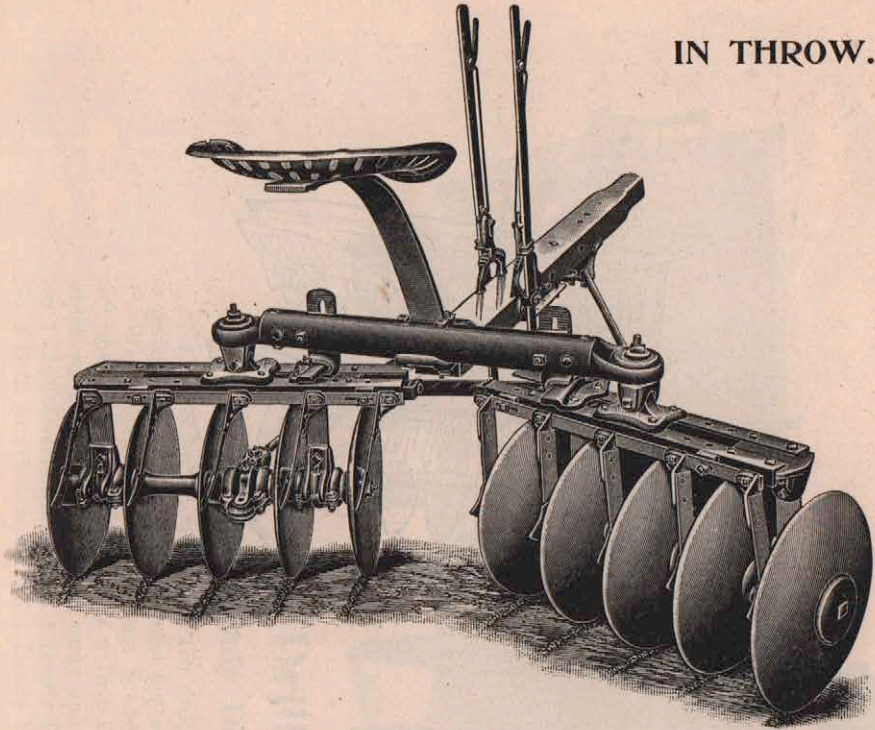
While almost any disc harrow will do fair work under the most favorable circumstances, only the best will stand the test at all times and under all the various conditions of soil. We guarantee the Dandy to be equal to any work that it is possible for a disc harrow to do, and do it well.

To give additional strength, all harrows with 20-inch discs have heavy brace rods drawing from the lower part of the stands instead of the top.

No. 0000.	10 discs, 20-inch, 5-foot cut, weight 434 lbs.	\$35.00
No. 000.	8 discs, 20-inch, 4-foot cut, weight 372 lbs.	31.00
No. 00.	8 discs, 16-inch, 4-foot cut, weight 336 lbs.	29.00
No. 0.	10 discs, 16-inch 5-foot cut, weight 373 lbs.	32.50
No. 1.	12 discs, 16-inch, 6-foot cut, weight 405 lbs.	37.00
No. 2.	14 discs, 16-inch, 7-foot cut, weight 438 lbs.	41.00
No. 3.	16 discs, 16-inch, 8-foot cut, weight 471 lbs.	43.00
No. 5.	12 discs, 20-inch, 6-foot cut, weight 460 lbs.	45.00
No. 6.	14 discs, 20-inch, 7-foot cut, weight 518 lbs.	50.00
No. 7.	16 discs, 20-inch, 8-foot cut, weight 559 lbs.	55.00
No. 1018.	10 discs, 18-inch, 5-foot cut, weight 412 lbs.	34.00
No. 818.	8 discs, 18-inch, 4-foot cut, weight 335 lbs.	30.00
No. 1218.	12 discs, 18-inch, 6-foot cut, weight 434 lbs.	42.00
No. 1418.	14 discs, 18-inch, 7-foot cut, weight 487 lbs.	45.00
No. 1618.	16 discs, 18-inch, 8-foot cut, weight 525 lbs.	50.00
	Add for 2-horse hitch, weight 18 lbs.	3.00
	Add for 3-horse hitch, weight 43 lbs.	5.00
	Add for 4-horse hitch, weight 52 lbs.	6.00



IN THROW.



## The Dandy Reversible Disc Harrows, For Hopyard, Vineyard and Orchard Cultivation.

Dandy Reversible is Furnished in Three Sizes: 4 ft., 5 ft. and 6 ft.  
Cut with 16 in., 18 in. and 20 in. Discs.

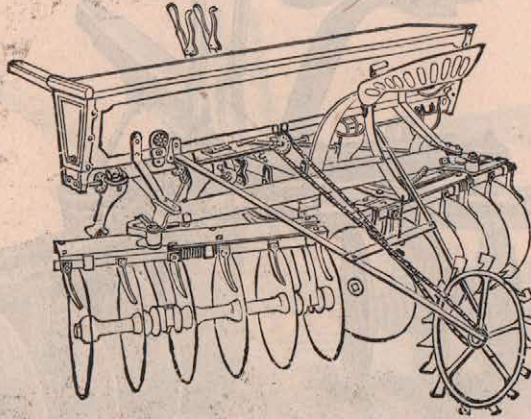
To the well known Dandy Harrow we have added the **Reversible** and **Adjustable** features above shown. The immense advantage of throwing the dirt **To** and **From** plants and trees is recognized by all farmers.

To change from one style to another is quickly done.

**Directions**—To change, switch the gangs on the pivot; take off scraper on right hand disc and change to left hand. Adjustable hold-down castings W 28 works on the rear of the tube for an out throw, on the front of the tube for an in throw. Casting No. 784 X, change on gang to receive the jaw of No. W 28.

No. 00,	8-16, 4-ft. cut, weight 336 pounds	\$30.00
No. 818,	8-18, 4-ft. cut, weight 355 pounds	31.00
No. 000,	8-20, 4-ft. cut, weight 375 pounds	31.00
No. 0,	10-16, 5-ft. cut, weight 372 pounds	33.00
No. 1018,	10-18, 5-ft. cut, weight 412 pounds	34.00
No. 0000,	10-20, 5-ft. cut, weight 434 pounds	35.00
No. 1,	12-16, 6-ft. cut, weight 405 pounds	38.00
No. 1218,	12-18, 6-ft. cut, weight 430 pounds	40.00
No. 5,	12-20, 6-ft. cut, weight 460 pounds	45.00
Add for 2-horse hitch, weight 18 pounds		3.00
Add for 3-horse hitch, weight 43 pounds		5.00
Add for 4-horse hitch, weight 52 pounds		6.00





## Broadcast Seeding Attachments.

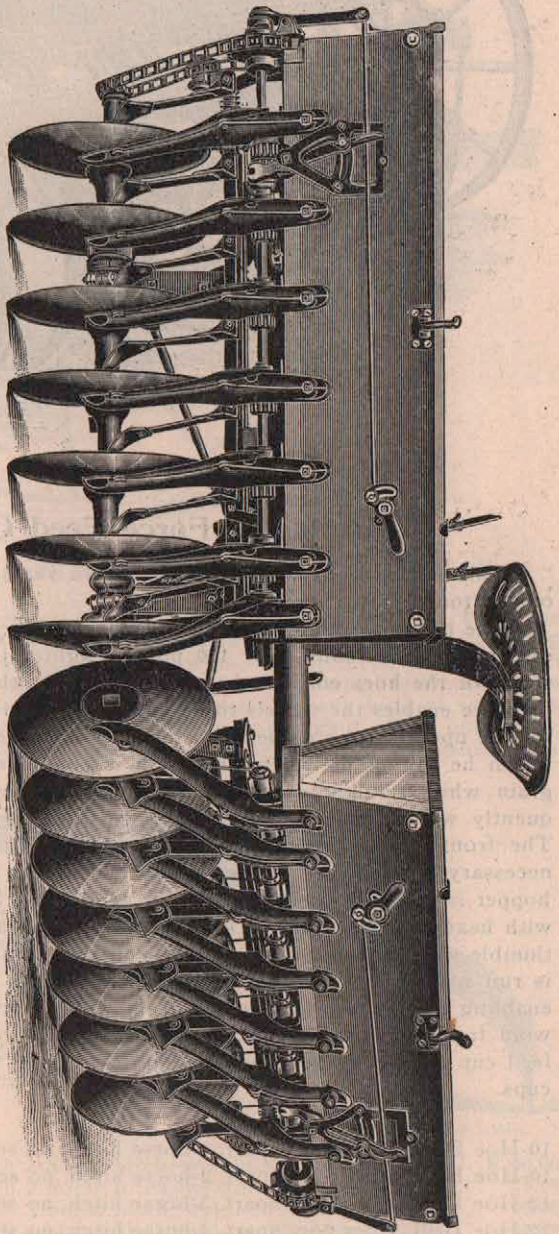
### Paddle Wheel Drive.

#### For Dandy Disc Harrows.

Above illustration shows the DANDY DISC HARROW with seeder attachment. On page 35 we show the DRILL ATTACHMENT and with the BROADCAST SEEDER ATTACHMENT it is possible for the farmer to have three machines in one, if he desires it, by purchasing this Disc Harrow with Seeder attachment and Drill attachment.

Seeder Attachment for Nos. 1 and 5 Dandy Disc Harrow, 183 pounds.....	\$22.00
Seeder Attachment for Nos. 2 and 6 Dandy Disc Harrow, 203 pounds.....	26.00
Seeder Attachment for Nos. 3 and 7 Dandy Disc Harrow, 225 pounds.....	30.00





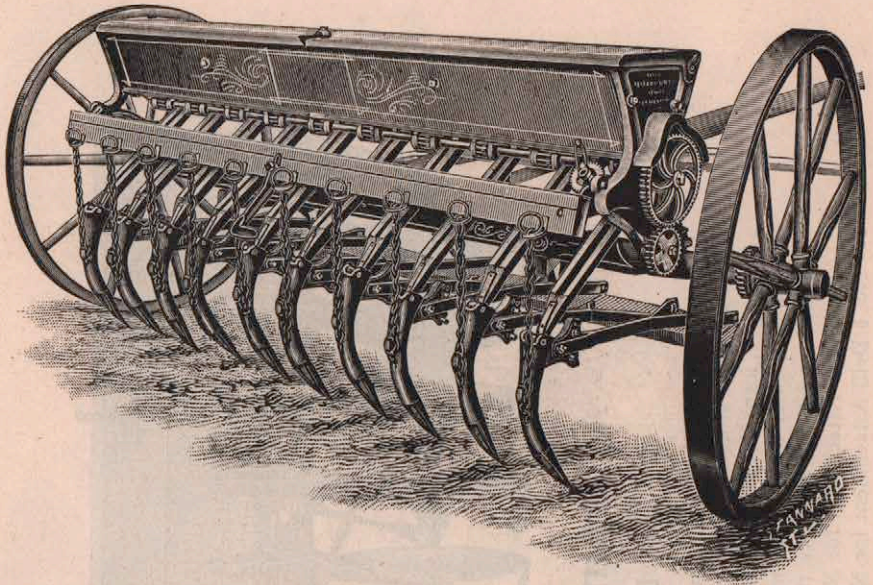
## A Grain Drill Attachment For Dandy Disc Harrows.

Full directions accompany each drill, showing how to regulate the quantity in pecks to sow each kind of grain per acre.

We introduced the Broadcast Seeder attachment for Dandy Disc Harrow, and now offer to our customers a Drill attachment for the Dandy Disc Harrow, which we believe will give the same universal satisfaction.

No. 1 Drill Attachment for No. 1 Dandy Disc Harrow, weight 260 pounds... \$25.00  
No. 5 Drill Attachment for No. 5 Dandy Disc Harrow, weight 270 pounds... 27.50





### Gunlach's Force Feed Grain Drill.

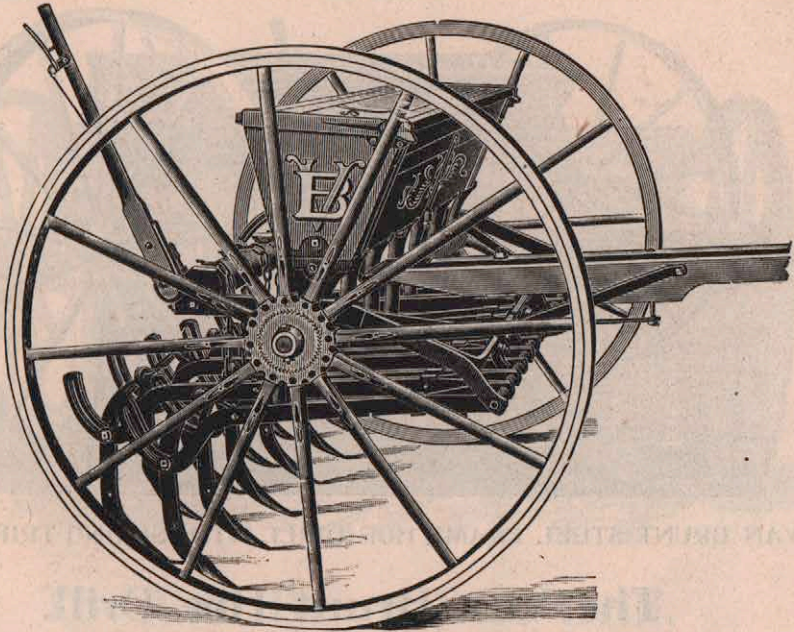
This Drill has been sold for forty-odd years, and we can recommend it to our customers.

The lightest running Drill in the market. The simplest as well as the strongest and most durable—over 100 pounds lighter than other drills. The superior shape of the hoes enables them to pass easily through the ground. The spout or chute enables the wheels to be put further to the rear, thereby making it easy for the operator to step between the hoes and keep the trash from accumulating, which he cannot do where the grain is conducted through a rubber tube; the grain while running down the slanting spout will equalize more, and consequently will distribute more regular at the bottom of the hoes in the ground. The front rail is fastened to the hounds at intermediate points—nothing else necessary to support it. Hoes shifted with lever in double or single rows. Seed hopper is fastened direct to axle and held firmly by two iron braces, doing away with heavy square frames. Improved wheels, brace-spokes and long bearing on thimble skein, making it as durable as a two-horse wagon. In feeding, the grain is run from the feed cup to the hoe, through a partially open spout or chute, enabling the operator to see the grain while running down and still prevent the wind from blowing it out. Feed cups are so constructed that any part of the feed cup can be replaced in five minutes without interfering with the other feed cups.

#### PRICES.

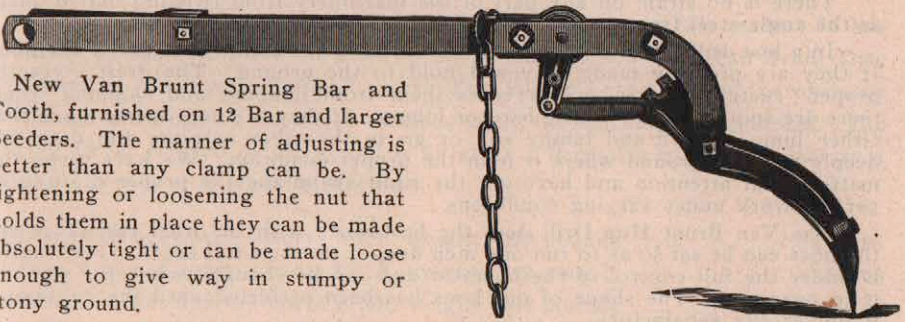
10-Hoe Drill, Hoes 7-in. apart, 2-horse hitch, no seat, weight 425 pounds....	\$68.50
10-Hoe Drill, Hoes 8-in. apart, 2-horse hitch, no seat, weight 435 pounds....	68.50
12-Hoe Drill, Hoes 6-in. apart, 3-horse hitch, no seat, weight 475 pounds....	72.50
12-Hoe Drill, Hoes 7-in. apart, 3-horse hitch, no seat, weight 485 pounds....	72.50
12-Hoe Drill, Hoes 8-in. apart, 3-horse hitch, no seat, weight 500 pounds....	73.00
14-Hoe Drill, Hoes 6-in. apart, 3-horse hitch, no seat, weight 525 pounds....	81.50
14-Hoe Drill, Hoes 7-in. apart, 3-horse hitch, no seat, weight 525 pounds....	82.00
Grass Seed Attachments, all sizes .....	5.00





### Van Brunt Steel Frame Seeder and Cultivator.

Has reversible double pointed teeth. Requires no castings to hold the teeth, rendering breaking by the cultivator impossible. Has a long axle running clear through each machine, no matter how wide. Is perfectly balanced and easy on horses. Has a perfect land measure, working only when feed wheels are running. Will sow (as will all the Van Brunt machines) any kind of seed, flax seed, grain, corn or peas, evenly, without grinding or cracking. Will outlast by years any other seeder and requires less than half the repairs. Furnished with two blades for each tooth.



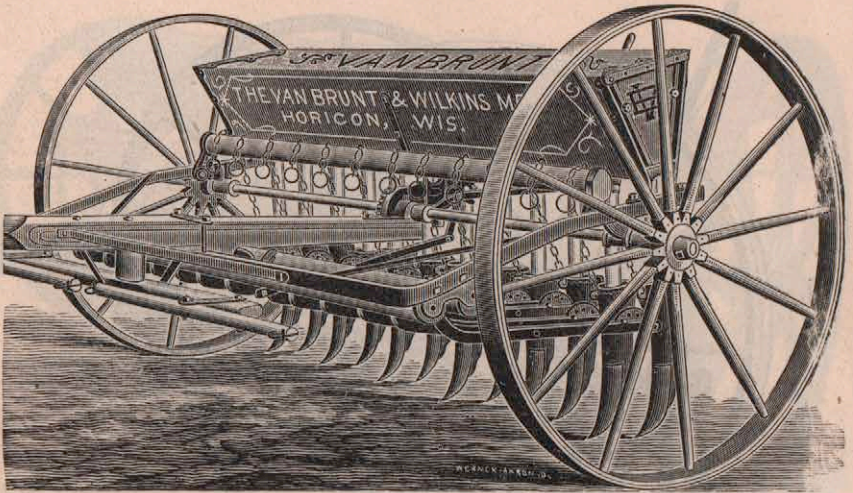
New Van Brunt Spring Bar and Tooth, furnished on 12 Bar and larger Seeders. The manner of adjusting is better than any clamp can be. By tightening or loosening the nut that holds them in place they can be made absolutely tight or can be made loose enough to give way in stumpy or stony ground.

New Van Brunt Spring Bar and Tooth.

10-teeth, sows 6 feet wide, with 2-horse hitch, weight 485 pounds.....	\$ 60.00
12-teeth, sows 7 feet wide, with 2-horse hitch, weight 610 pounds.....	70.00
14-teeth, sows 8 feet wide, with 3-horse hitch, weight 710 pounds.....	80.00
16-teeth, sows 9 feet wide, with 4-horse hitch, weight 760 pounds.....	85.00
18-teeth, sows 10 feet wide, with 4-horse hitch, weight 800 pounds.....	90.00
22-teeth, sows 11 feet wide, with 4-horse hitch, weight 850 pounds.....	100.00

Force Feed Grass Seed attachment for 10-bar, \$5.00; 12-bar, \$6.00; 14-bar, \$7.00; 16-bar, \$8.00; 18-bar, \$9.00; 22-bar, \$10.00.





VAN BRUNT STEEL FRAME HOE-DRILL WITH SPRING TRIP HOES.

## The Van Brunt Hoe Drill.

The Van Brunt Hoe Drill is carefully made. It has the solid angle steel frame that is so much more rigid than wood or gas pipe; light, strong, handsome and cannot be bent or broken. Being one solid piece there is no need for cast iron or wood braces. It has a perfectly reliable and accurate feed, simple and strong, sowing equally well all kinds of grain, corn, peas, grass or flax seeds, without grinding or cracking the grains, with the advantage that the operation of the feed can be seen by the operator as he walks behind.

Cumbersome and unsightly braces are done away with by the use of truss rods running through the box which support both box and braces. This prevents sagging and keeps the widest machines in perfect alignment and adds to the life of the drill.

There is no strain on any part of the machinery from twisting out of shape as the angle steel frame and truss rods keep it always in place.

In a hoe drill the most important matter after the frame and feed is the hoes. If they are properly made they will hold to the ground. The draft gives the proper "suction" power and prevents them from jumping and skipping where there are spots that are a little hard or lumpy. If they are improperly made they either jump in hard and lumpy soil or go to the other extreme and draw too deeply into the ground where it is in the proper condition. We have given this matter great attention and have got the right shape and the proper draft to do perfect work under varying conditions.

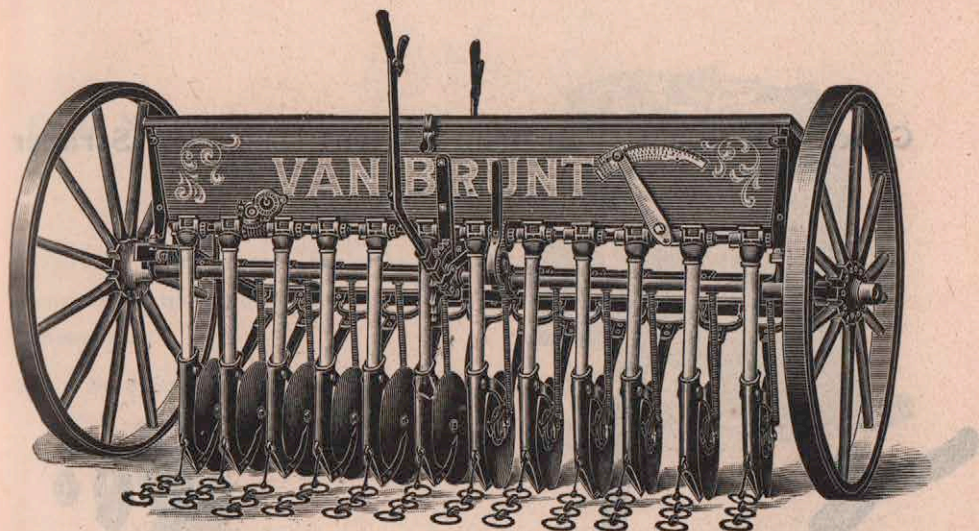
The Van Brunt Hoe Drill does the best work with the least resistance and the hoes can be set so as to run one inch deep or to their full depth. This matter is under the full control of the operator and can be changed while the machine is in operation. The shape of our hoes has been perfected until the cultivation is universally satisfactory.

For cloddy land they can be adjusted instantly to zig-zag, 11 inches apart at their points.

12-Hoe, 6-in., with 3-horse hitch, weight 680 pounds .....	\$ 92.50
14-Hoe, 6-in., with 3-horse hitch, weight 740 pounds .....	106.50
16-Hoe, 6-in., with 3 or 4-horse hitch, weight 905 pounds .....	114.00
18-Hoe, 8-in., with 3 or 4-horse hitch, weight 1000 pounds .....	125.00
Add to the above price if seat is wanted .....	2.50

WRITE US FOR PRICES ON RUBBER DRILL TUBES.





## The Van Brunt Disc Drill.

The frame is of Solid Angle, Steel, thoroughly braced. Seed box has Iron Ends, Truss Rods and Braces that effectually prevent sagging, or getting out of shape. Box Covers on all wide machines are made in two parts, with Check Hooks and Self-fastening Cover Catches; New Adjustable Force Feed that will sow all kinds of seed and grain without bunching or damaging the seed; New Feed Gauge that is accurate and can be set for the desired quantity in an instant without turning a nut; Land measure that accurately measures and registers the number of acres and the fractions of same sown.

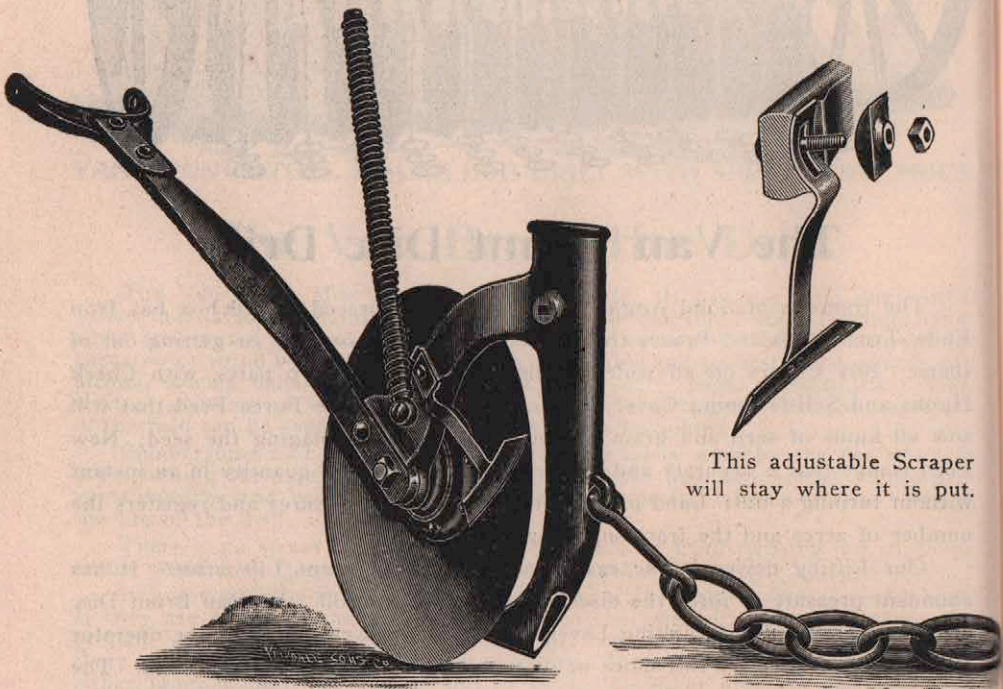
Our Lifting device is the easiest and most convenient Lift made. It has abundant pressure to force the discs or shoes into the soil. All Van Brunt Disc Drills are provided with Tilting Levers. The Tilting Lever enables the operator to change the angle of the shoes or discs while the machine is in motion. The Tilting Lever is used as often, and is as great a necessity to a grain drill as a Tilting Lever is to a Mowing Machine.

10-Disc, 6 inches apart, 3-horse hitch, weight	670 pounds	.....	\$100.00
12-Disc, 6 inches apart, 3-horse hitch, weight	749 pounds	.....	110.00
14-Disc, 6 inches apart, 3-horse hitch, weight	868 pounds	.....	120.00
15-Disc, 6 inches apart, 3-horse hitch, weight	983 pounds	.....	130.00
17-Disc, 6 inches apart, 4-horse hitch, weight	1072 pounds	.....	135.00
20-Disc, 6 inches apart, 4-horse hitch, weight	1190 pounds	.....	150.00
22-Disc, 6 inches apart, 4-horse hitch, weight	1268 pounds	.....	175.00
If seat is wanted add		.....	2.50
If Grass Seed Attachment is wanted add		.....	10.00

Write us for prices on rubber drill tubes.



## Concave Side of the Van Brunt Patent Disc, New Scraper and Chain Coverer.



The seed is conveyed into the soil through the boot, where mud or trash cannot interfere with its even distribution.

It will cut into hard ground and plant seed properly where a double disc will only make a mark.

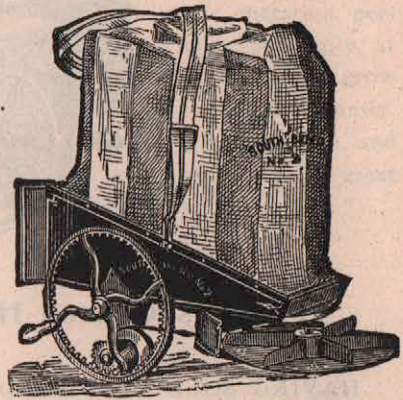
It is impossible for this disc to clog up, or run hard. Nothing comes in contact with the disc except the cleaners, and they do their work effectually.



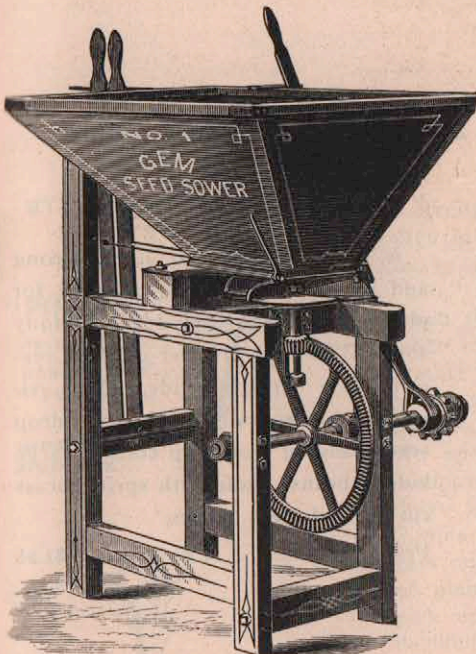
## OUR NEW GEARED SEED SOWER.

Throws in horizontal circle and overcomes objections found in perpendicular thrown seed.

No. 2 Seed Sower, weight 9 lbs.....\$3.50



## THE IMPROVED GEM SEED SOWER.

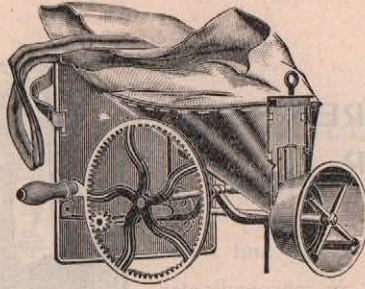


The Gem has two valves to supply the distributor with grain—one for each side; therefore, one may be closed when sowing by a fence, ditch or land that is not to be sown. The distributor revolves horizontally, and throws the seed with great force to the right and left, but does not throw it up or down. The Gem sows blue-stone grain perfectly.

This machine sows from 10 to 12 acres per hour, throwing wheat 60 feet wide at each passage. Weight, boxed, 160 pounds.

No. 1, geared .....\$20.00



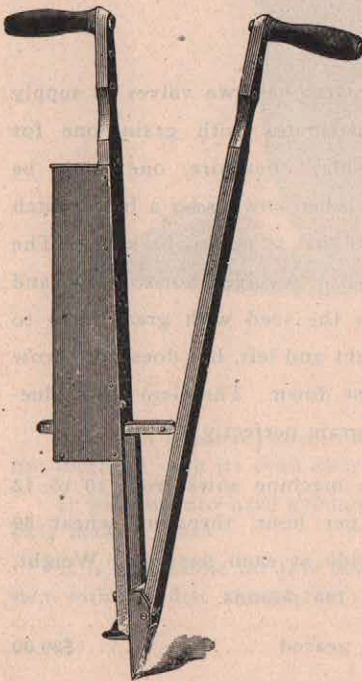


### Pearce's Cahoon Hand-Power Seed Sower.

HAVING SOLD THIS SEEDER FOR SEVERAL YEARS, WE CAN RECOMMEND IT.

For sowing wheat, oats, barley, rye, hemp, etc., with special gate for sowing grass seed. The machine at a common walking gait sows from four to eight acres per hour.

Price .....\$4.00



### The Crescent Corn Planter.

A two-hand Planter; light, strong and durable. Especially adapted for planting in heavy, cloddy or stony soils. The seed dropper of the Crescent is a straight slide, which vibrates horizontally and will drop seeds ranging from pop corn to large kidney beans. Made with spring brass cut-off and steel blades.

Price .....\$1.25



# Hand Potato Planters.

Make the excavation, drop the potato, and cover, all in one operation, performed without stopping, which means NO BACKACHE. Plant uniformly, at any desired depth, depositing the seed in moist soil. Potatoes so planted grow vigorously, withstand drought well, come up uniformly and yield abundantly. No other method produces so many merchantable potatoes, uniform in size, and without knobs or green ends. These planters are in universal use in the great potato-raising sections of Michigan, Wisconsin and Minnesota.

## The Eureka Hand Potato Planter.

The original and only successful because only self-locking tube planter. Has self-locking jaws and an adjustable depth gauge, like the PINGREE. The tube obviates the necessity of raising the planter to deposit the potato in the beak. Undeniably the most rapid planter in light soil. Record, 4 acres and 280 hills in 10 hours, in sod ground, medium soil; 2590 hills in 1 hour, in light soil. Price .....\$1.50



## The Pingree Hand Potato Planter.



OUR  
**STICK HANDLE  
PLANTER.**

THE  
**"PINGREE"**  
SELF LOCKING  
HAND POTATO  
PLANTER  
WITH  
IMPROVED  
STUDLOCK

Record, 4 acres in 9 hours and 48 minutes; 2106 hills in one hour. Both in sod ground, heavy soil. The only self-locking stick, or "bell," planter. The jaws automatically lock when the planter is picked up; unlock again when it is set down, which prevents the premature dropping of the seed, and insures the jaws entering the ground closed, thus depositing the potato the full depth, in moist soil. No springs or weighted parts are used to compass this end. The front jaw merely slips down  $\frac{3}{8}$  of an inch and engages the rear jaw. Simple; positive; never fails to work; never gets out of order. Does not add to weight of planter. Does not cause the planter to pick up the potato, as a spring does, most decidedly. The Pingree has an adjustable depth gauge. Price .....\$1.25

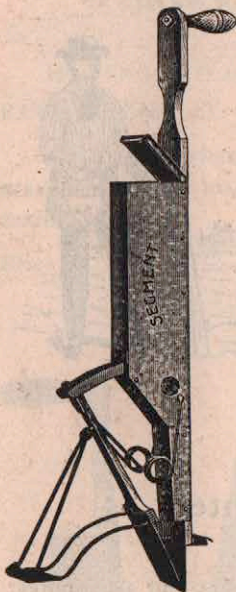


# The "Segment" One-Hand Corn and Bean Planter.

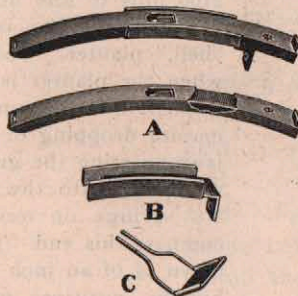
(Patent applied for.)

Manufactured only by  
**THE GREENVILLE PLANTER CO.,**  
Greenville, Mich.

Handsome. Light. Accurate. Strong. Cheap.



As the name of the planter suggests, the slide is the segment of a circle having its center where the jaws are pivoted together. In other words, the pivots on which the jaws open and shut are the hub of a wheel, of which the slide is part of the rim. There is consequently no friction nor lost motion. The seed box and hopper are of galvanized iron, which, as is well known, is better than black iron. The brush is of genuine Chinese bristles. The slide, the guide in which it travels, the latch securing it to the front arm, the clamp, holding the adjustable depth gauge, and the jaws—in short, all of the working parts—are of steel, and therefore extremely light and durable. The seed pocket is adjustable from the outside. All parts are interchangeable. The Segment is handsome, light, accurate, strong and cheap, thus possessing all the essentials of a good seller.



Explanation of cut showing working parts.

A, steel slide. B, steel guide, in which slide travels. C, adjustable depth gauge. The upper figure shows slide in position in guide.

Segment Corn and Bean Planter, weight 3 pounds .....\$1.50



BACON DRILL AND CULTIVATORS

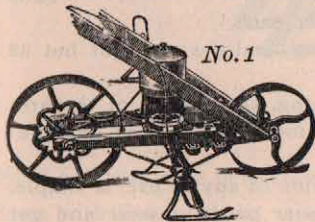
# THE BACON

SINGLE AND COMBINED

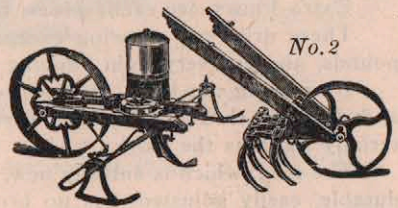
## Garden Drill and Cultivators

Guaranteed as Good as Made.

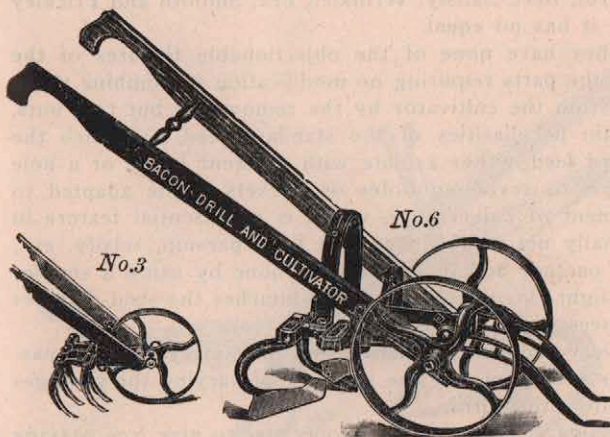
Excellent Service



No. 1



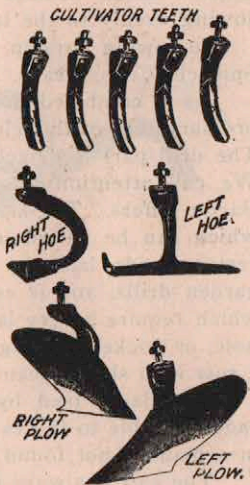
No. 2



No. 6



No. 3



CULTIVATOR TEETH

RIGHT HOE

LEFT HOE.

RIGHT PLOW

LEFT PLOW.

For Prices See Page 43.

For a long time we have wanted a GARDEN DRILL and DOUBLE WHEEL HOE CULTIVATOR that we could offer our patrons at a POPULAR PRICE. The experience we have had with the "BACON" the past season leads us to recommend this garden tool to the trade.



## BACON DRILL AND CULTIVATORS.

No. 1 shows Drill only, weight 35 lbs. ....	\$6.50
No. 2 shows Combined Drill, Drill detached; we furnish it with 5 Cultivator teeth, 1 Plow and 2 Hoes; weight 40 lbs. ....	8.00
No. 3 shows Single Wheel Cultivator, which can be made of parts of the combined Drill, or we furnish it as shown in cut with the 5 teeth shown and 2 Hoes and 1 Plow; weight 30 lbs. ....	4.50
No. 6 shows Independent, High-arched, Double Wheel Cultivator, which we furnish with 4 teeth, 2 Hoes and 1 Plow, weight 30 lbs. ....	6.25
No. 7 Drill, with combined single and double wheel cultivator. This Drill has the No. 4 cultivator, which may be used as a single or double wheel tool, working between or straddle the row. The front wheel, which is the cultivator wheel, is composed of two separate wheels forming a single broad tread wheel. This wheel may be separated, throwing the two halves to the outside of the wheel arms, making a double wheel tool for working straddle the row ....	10.00
Extra Plows, 50c each; Hoes, 40c each; Teeth, 25c each.	

These drills are showing exceptionally fine sowing qualities; weight but 33 pounds, and are very light running.

By placing the large drive wheel behind, in pushing, the weight of the arm and drill are thrown upon it, insures a regular movement of the feed and materially lightens the work.

The feed, which is entirely new, is not a modification of any in use, is simple, durable, easily adjusted, has no brushes, rubber or wire parts to wear and get out of order. Is of iron, and, from its peculiar construction, handles the most delicate seeds without bruising or breaking. Can be varied to any amount, sowing evenly to the last seed.

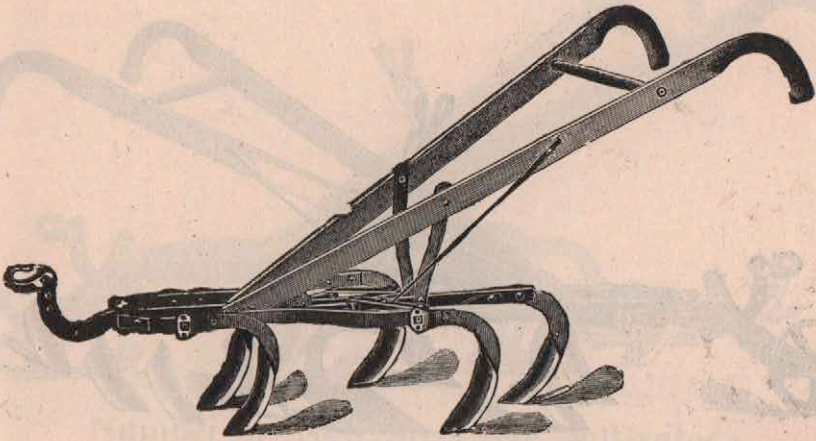
In sowing Parsnip, Carrot, Beet, Salsify, Wrinkled Pea, Smooth and Prickley Spinach, Corn, Beans, etc., it has no equal.

As a combined drill they have none of the objectionable features of the ordinary tool of this class—the parts requiring no modification to combine them. The drill part is detached from the cultivator by the removal of but two nuts. We call attention to certain peculiarities of the standard feed, to which the Bacon differs. The standard feed, either a plate with different holes, or a hole which can be varied in size, or revolving holes or pockets, while adapted to certain seeds, lack the element of universality, which is an essential feature in garden drills, and is especially noticeable in sowing beet, parsnip, salsify, etc., which require a very large passage and in adjusting is done by using a smaller hole, or pocket, causing a slight clogging which either bunches the seed or gives a row with short vacant spaces.

The Bacon feed, by a very simple combination, not only gives holes or passages suitable to the various seeds, but also the property of varying the passages in a manner not found in any other drill.

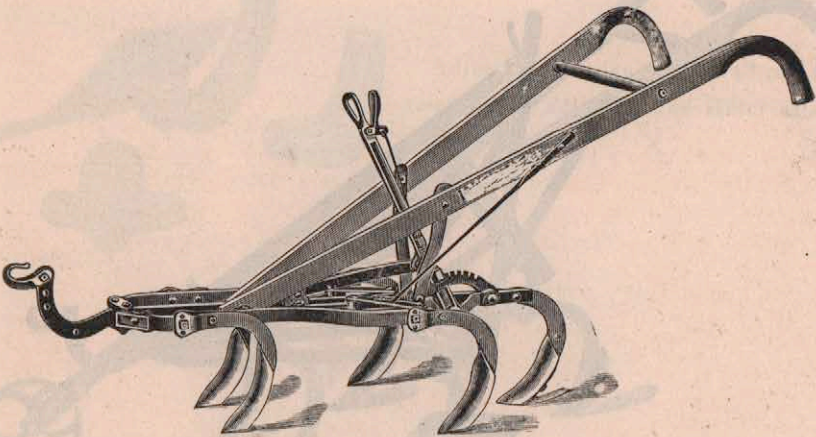
The exit is always the same diameter and of proper size to give free passage to the most difficult seeds. The variation of feed being accomplished by a variation of position of certain parts of the passage. This gives better results in easily handled seeds, and is absolutely necessary in handling successfully such seeds as parsnip, beet, carrot, salsify, prickley spinach, wrinkled pea, etc. This feature, peculiar to this drill, makes it universally successful in handling all seeds. While the standard drills are strong in one or two kinds, they fail entirely, or give indifferent results, especially in parsnips, salsify, beets, etc. This particular feed and combination gives a universal drill of unequalled excellence.





**No. 0. New Steel Age Cultivator.**

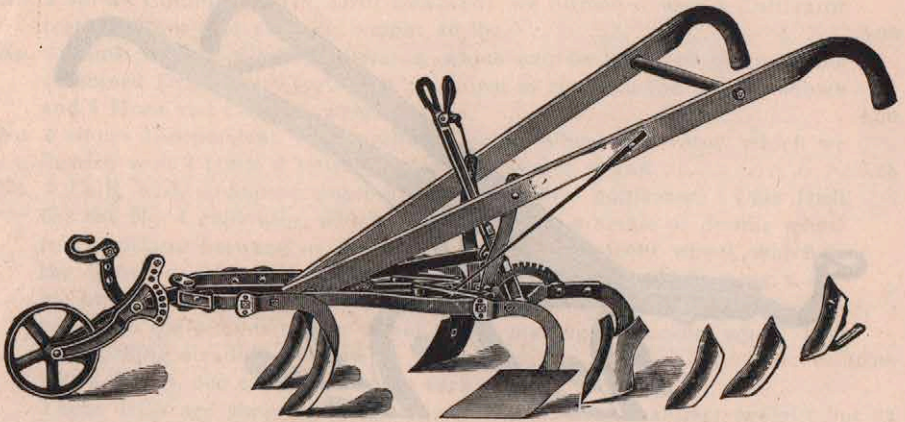
No. 0 Cultivator, as per cut, with Wheel Expander, weight 47 lbs. ....	\$4.50
Same with Gauge Wheel, weight 54 lbs. ....	5.00
Extra Shovels or Hillers, complete, each .....	1.25



**Number 1. New Steel Age Cultivator.**

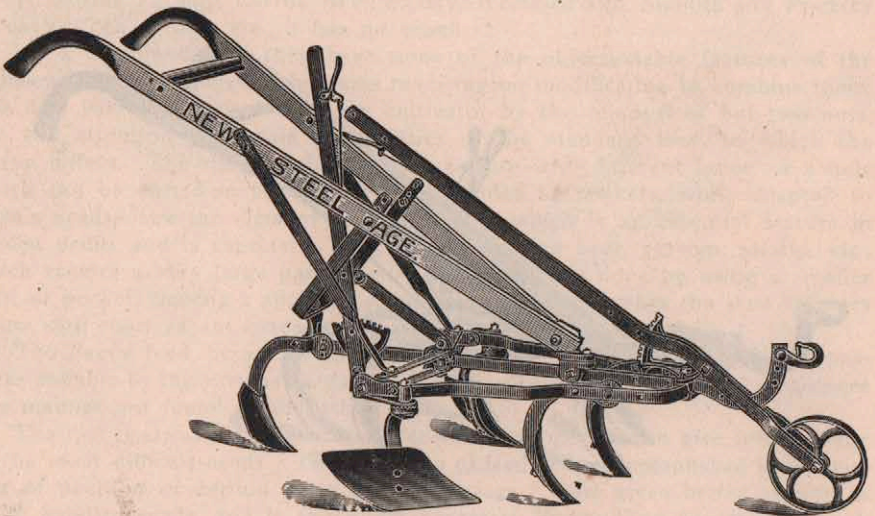
No. 1 Cultivator, as per cut, with Lever Expander and Gauge Wheel, weight 55 lbs. ....	\$6.00
Same, without Gauge Wheel, weight 50 lbs. ....	5.50





**Number 2. New Steel Age Cultivator.**

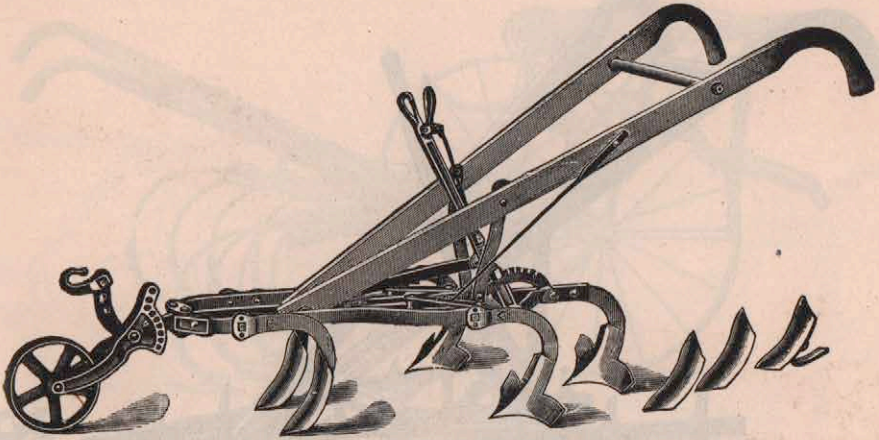
No. 2 Cultivator, complete, as shown in cut; weight 65 lbs. ....\$8.50



**Number 3. New Steel Age Cultivator.**

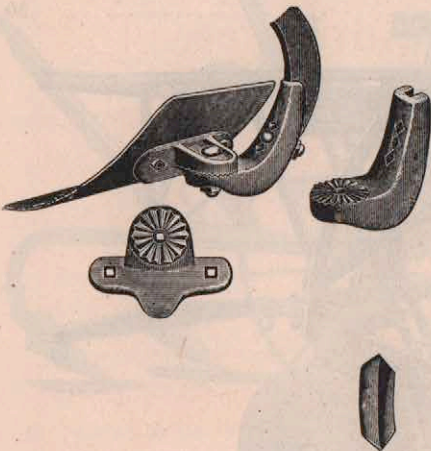
No. 3 Cultivator, Wheel Lever, Expanding Lever and Horse Hoe attachment, complete, as per cut, and with 3 extra Cultivator Teeth; weight 70 lbs. . . \$10.50





**Number 4. New Steel Age Cultivator.**

- No. 4 Cultivator, with 2 10-inch Weeders, one for each side; 1 12-inch Weeder for rear center; and 5 cultivator teeth, as shown in cut; weight 80 lbs...\$11.00  
 No. 4, as per cut, and with Wheel Lever; weight 85 lbs..... 12.00



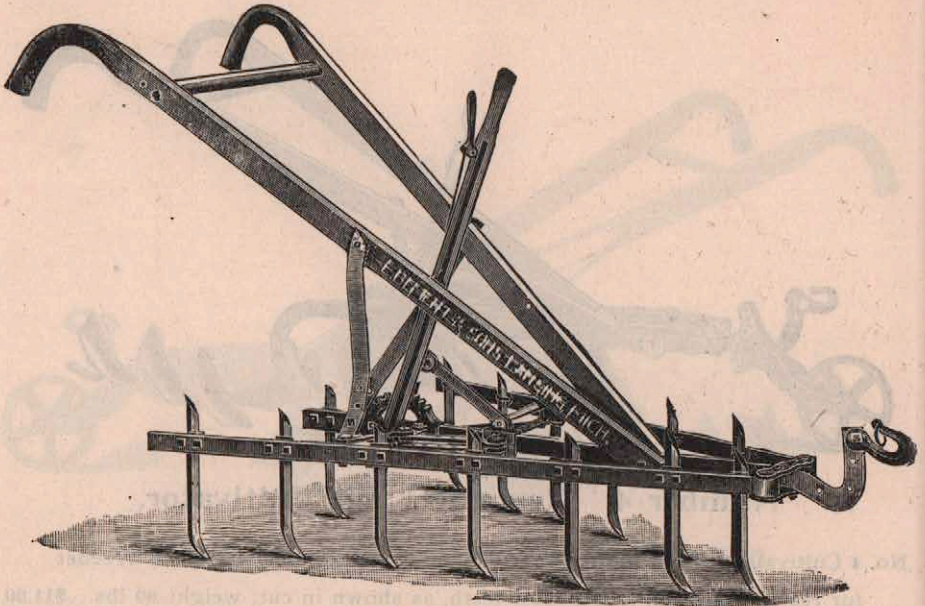
Adjustable Shanks used on all our Cultivators for adjusting the Hiller attachment, or Hoes.

Extra Cultivator Blades—1¼-inch, 15c; 2½-inch, 25c; 3-inch, 35c.

- Extra 10-inch Weeders, each, as shown on No. 4 .....\$ .60  
 Extra 12-inch Weeders, each, as shown on No. 4 ..... .75  
 Extra Horse Hoe attachments, as shown on Nos. 2 and 3 ..... 1.25

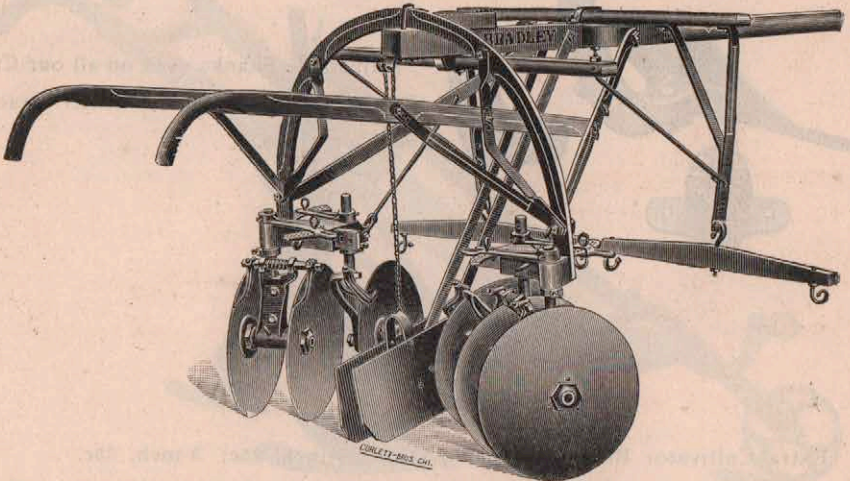
We carry in stock a full line of extra SHOVEL BLADES in different sizes.  
 EXTRA WEEDERS and EXTRA HORSE HOE ATTACHMENTS.





**Number 5. New Steel Age Cultivator.**

14-tooth Cultivator, with Wheel Expander instead of lever shown in cut,  
 Gauge Wheel and Handle Braces; weight 62 lbs., each .....\$8.00  
 Gauge Wheel extra ..... .50

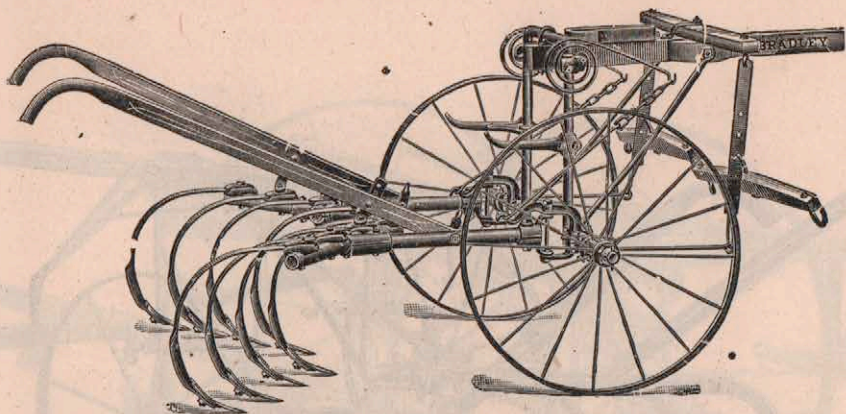


**Bradley Walking Disc Cultivator.**

This walking Disc Cultivator can be used for cultivating hops, potatoes and corn.

Bradley Walking Disc Cultivator, with six 16-inch Discs; weight 265 lbs. . . \$30.00

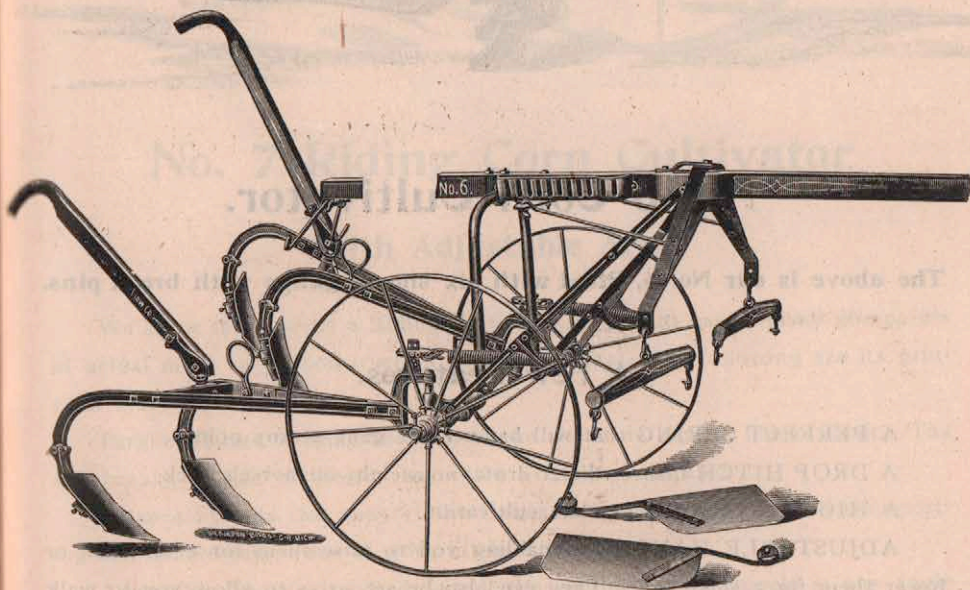




**Daisy Walking Spring Tooth Cultivator.**

It is just what its name implies—A DAISY.

Daisy Walking Cultivator with 8 spring teeth; weight 243 lbs.....\$28.00



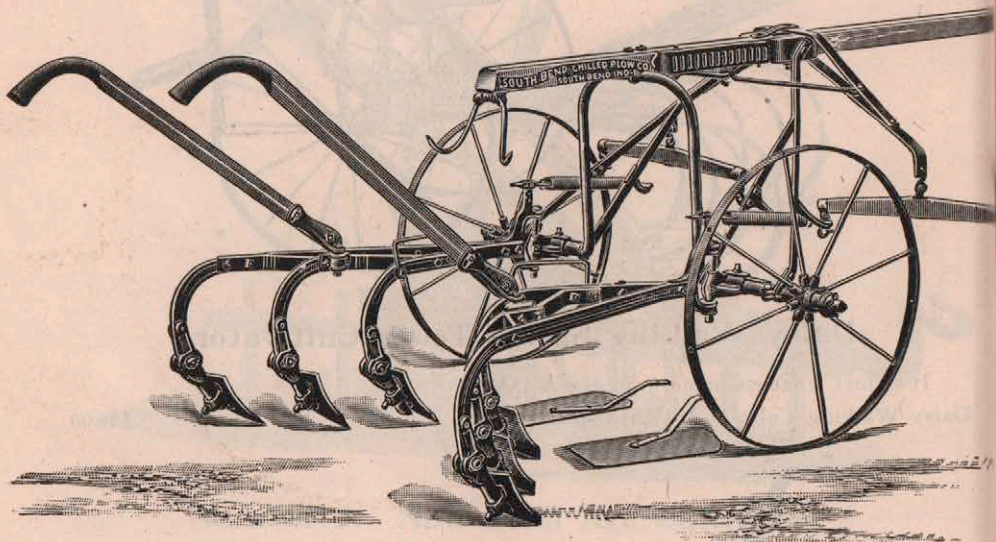
**Number 6. Wheel Walking Corn Cultivator.**

A Cultivator that is guaranteed to answer every purpose. Simple and strong, easy to operate and perfect in construction. The finest finished Cultivator on the market. Is fitted with break pins.

Furnished with four 5½-inch adjustable shovels and two 2¾-inch shovels; weight 235 lbs. ....\$25.00

Fifth shovel and beam extra for 4-shovel Cultivator..... 3.50





## No. 6 Corn Cultivator.

The above is our No. 6, fitted with six shovel gangs with break pins.

### A Few Features.

A PERFECT SPRING that will balance the gang at any point.

A DROP HITCH insures direct draft, no weight on horse's neck.

A HIGH ARCH, allowing late cultivation.

ADJUSTABLE HANDLES, enabling you to raise them for a tall man or lower them for a small boy. They can also be set so as to allow you to walk between them when cultivating close to the plant. These are great features and will readily be appreciated.

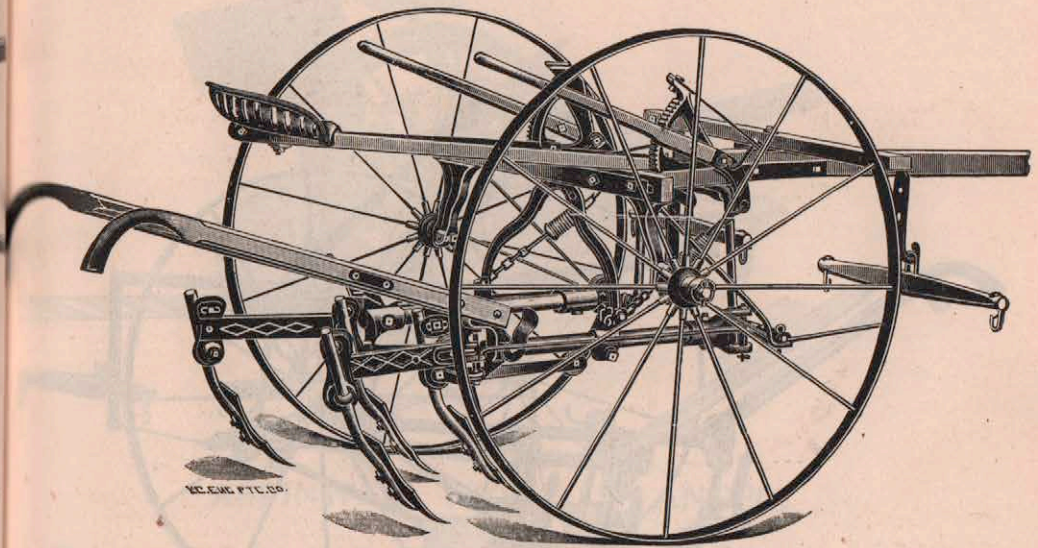
GANGS are made of CHANNEL SPRING STEEL, thoroughly braced, giving great strength.

SHOVELS are made of the highest quality steel made for plow purposes.

If you are looking for a PERFECT CULTIVATOR buy our No. 6.

No. 6 Corn Cultivator, with 6 shovels; weight 250 lbs. ....\$30.00





## No. 7 Riding Corn Cultivator

### With Adjustable Arch.

We know there is not a Riding Cultivator made that has as many fine points of actual merit in its construction as this tool has. The following are its principal features:

Parallel Gangs, keeping the face of the shovel in perfect line of draft. The full beauty of this movement has often been demonstrated.

Balance Springs that support the Gangs make them raise easy in transporting and handle easy when at work in the ground.

Adjustable Shovel Standards admit the setting of the shovels at any angle desired, and also allow dirt to be thrown to and from the plant as desired.

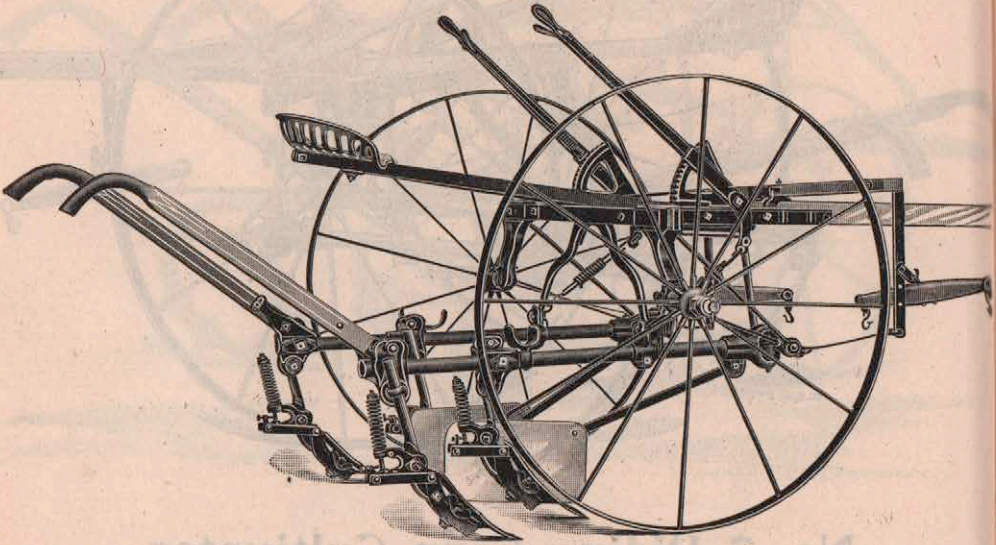
Adjustable Arch to accommodate any width of row.

Joints are long and have good bearings, so that cramping is impossible, and makes handling with the feet extremely easy.

Steel used entirely in the construction, except where the malleable iron is necessary.

No. 7 Riding Corn Cultivator, weight 350 lbs. ....\$40.00





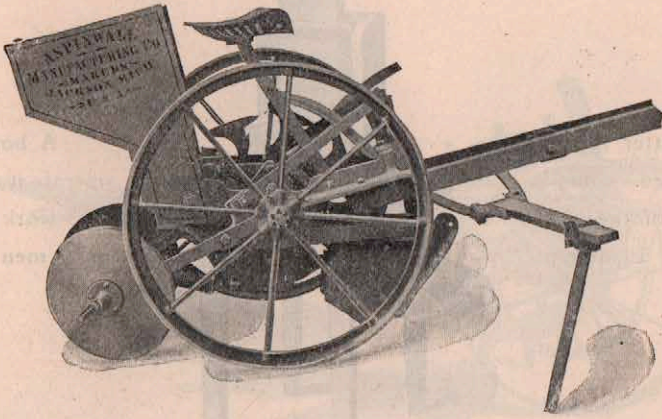
## No. 8 Riding Corn Cultivator.

Built on similar lines to the No. 7 Cultivator, except it has spring trip on the shovels, making it the best machine made for land where there is roots or stones; the springs allow the shovels to give away when they strike an obstruction, and brings them back to their position as soon as the obstruction is passed, which gives it a decided advantage over the break pin cultivator. Gangs are set regular, not parallel like the No. 7.

For a complete description see the No. 7.

No. 8 Corn Cultivator, weight 514 lbs. Price .....\$40.00





## ASPINWALL POTATO PLANTER.

### Points of Superiority in the Aspinwall Potato Planter.

#### The Aspinwall Potato Planter Being Automatic Requires but a Team and Driver in its Operation.

There are no pockets or feeding attachments required to handle the various sized seed cuttings; nor is it necessary to depend upon an additional operator perched on the machine or walking in the rear to complete the work the machine itself should do. Our Planter DOES NOT CUT OR INJURE FINGERS or in any way endanger the safety and comfort of the operator. The principle of the picker is very simple, and acknowledged by thousands of leading growers the world over to be perfect, in fact this is one of the strong features which have made our Planter standard.

The Aspinwall Potato Planter marks the row, opens the furrow, drops and covers the seed, either shallow or deep, or any way desired, all in one operation.

It deposits the seed at any desired depth from three to nine inches, and always uniformly.

It will plant from five to nine acres per day with ONE man and a team, and will work satisfactorily on side hills, stony ground, bottom land or clover sod.

It covers the seed with moist or under-earth, and thus insures an early and a good start.

It deposits the seed in a V-shaped furrow, perfectly straight and at a uniform depth, and is adjustable to plant cut or whole seed at any desired distance apart from ten to twenty-six inches, and every row will be exactly the same distance from the next one.

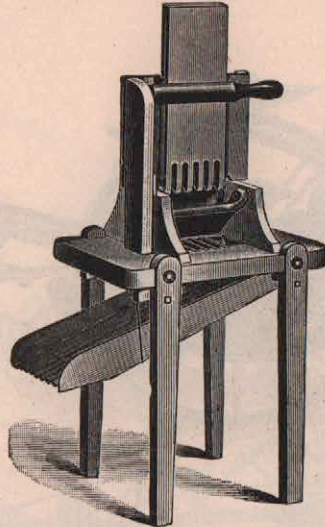
It will do the work of ten men and pay for itself in a single season on a very moderate acreage.

It is recognized as the most satisfactory and useful planter the farmer can own.

Corn-Planter Attachment is also provided which plants corn, peas, beans and corn for ensilage. This costs extra, weight 50 lbs. ....\$15.00  
 Aspinwall Potato Planter, with Runner Coverers, weight 485 lbs. .... 70.00  
 Aspinwall Potato Planter, with Disc Coverers, weight 485 lbs. .... 70.00



This Cutter is the advance companion of the Aspinwall Planter.



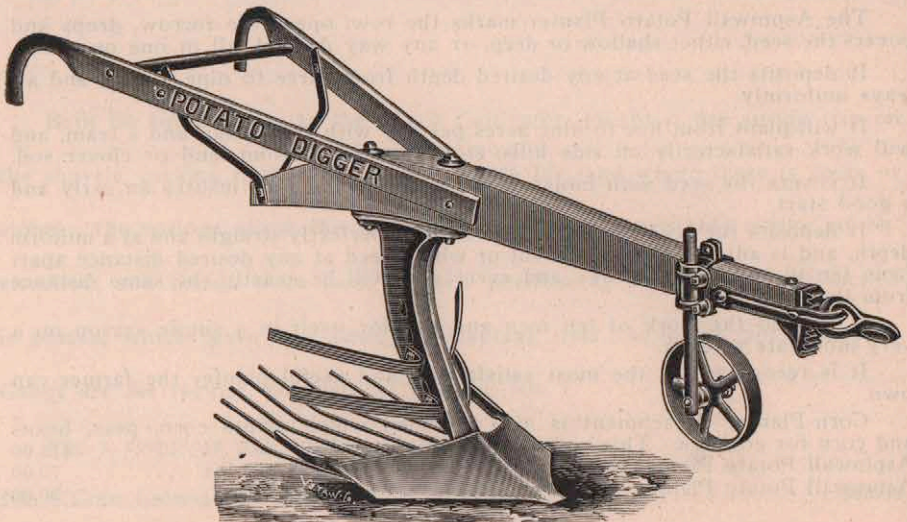
A boy can operate it and do the work of 7 or 8 men by hand.

**Aspinwall Potato Cutter.**

Price, weight 41 lbs. ....\$7.50

**Directions for Using the Aspinwall Potato Cutter.**

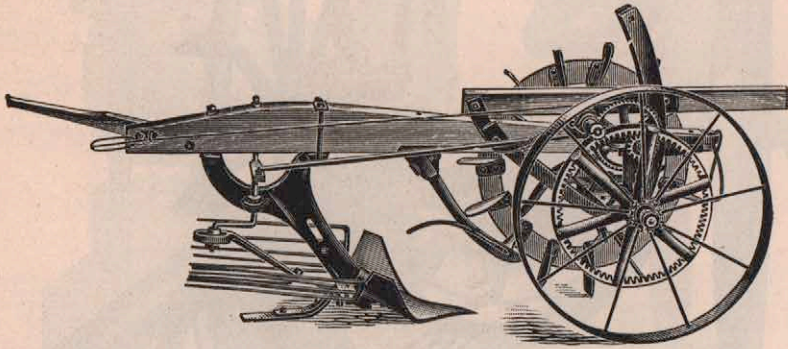
Raise the plunger with one hand, using the other to place the potato between the jaws, being careful to bring the seed end against the plug. The plug is adjustable, and may be set to the first or second knife. A light tap with a hammer is sufficient to move it. By setting it near the second knife the seed will be cut the largest; while with an adjustment near the first one, a smaller size seed may be cut. This adjustment, if not too close to the knife, will also serve to slice off the seed end, which will be screened from the seed. To obtain the best division of eyes the seed end should be placed against the plug. Placing the thumb on the seed end of the potato will bring it in position. Press the plunger down with sufficient force to cut the potato. Little experience will determine the force required. Cut one potato at a time. To cut the potato in halves, place the seed end down in the concave of the jaws. If they are to be quartered, place the seed in adjoining concave at end of jaws. To enable rapid work, a small feed table placed at side of machine will be found convenient.



**Imperial Potato Digger.**

Weight, with Gauge Wheel, 105 pounds ....\$15.00





## Hallock's "O. K." Potato Digger.

The "O. K." Digger leaves the ground practically level, leaves the potatoes in compact rows all thoroughly separated from the soil, digs every row straight as you go, ordinary draft for one team, easy to handle, exceedingly simple, built to wear. The standard is a little to the left of the center; this, in connection with the vine turner, makes it impossible to clog it, no matter how big and green the vines may be.

Arranged so you can throw out of gear.

Arranged so you can hitch to it at barn and drive to field or tow it back of wagon.

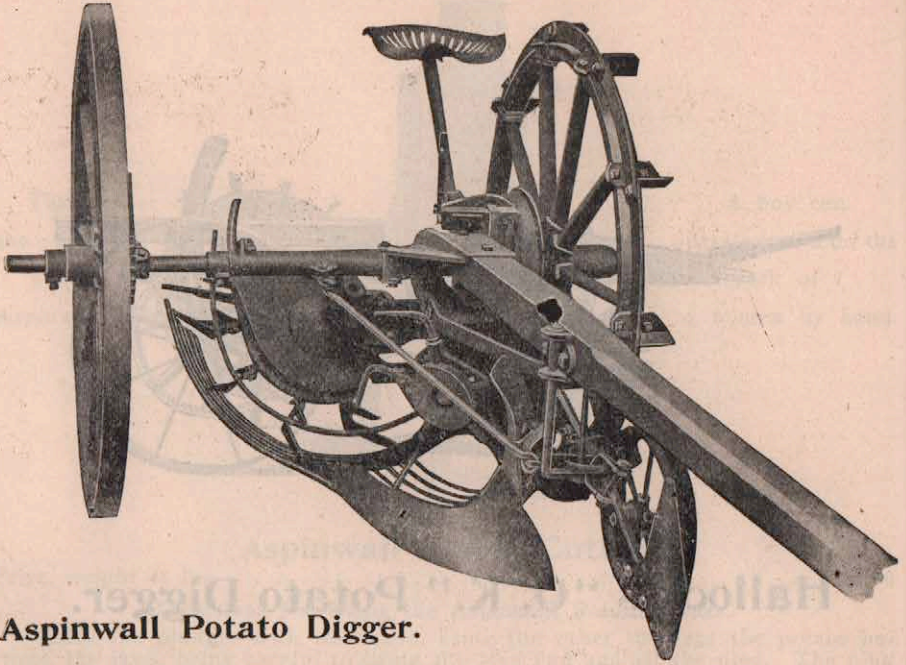
Today the bulk of the potato crop is dug by hand, not because the potato growers prefer that method, but because a successful digger at a price within their reach, has never been offered the potato growers.

We know the "O. K." fills the bill and will meet the requirements of all potato growers.

GUARANTEED to do as good work in the same field as any four-horse elevator digger on the market; price, one-half; draft, one-half; cost per year for repairs, one-fifth. Guaranteed to dig as clean as a man can with fork. Will make digging potatoes as easy, simple and inexpensive as cutting grass.

O. K. Potato Digger, weight 350 lbs. ....\$60.00





### Aspinwall Potato Digger.

The Aspinwall Potato Digger is the growth and development of innumerable experiments conducted for many years over a wide range of territory, both in this country and abroad. Recognizing that the all-purpose Digger, of great strength, light draft and lasting quality is demanded, all our best effort has been directed towards its accomplishment, with the result that we have succeeded. It should not be necessary to present a digger of altered construction for varied soils, such as loam, marsh, muck and gravel, nor should it cost a small fortune annually for repairs.

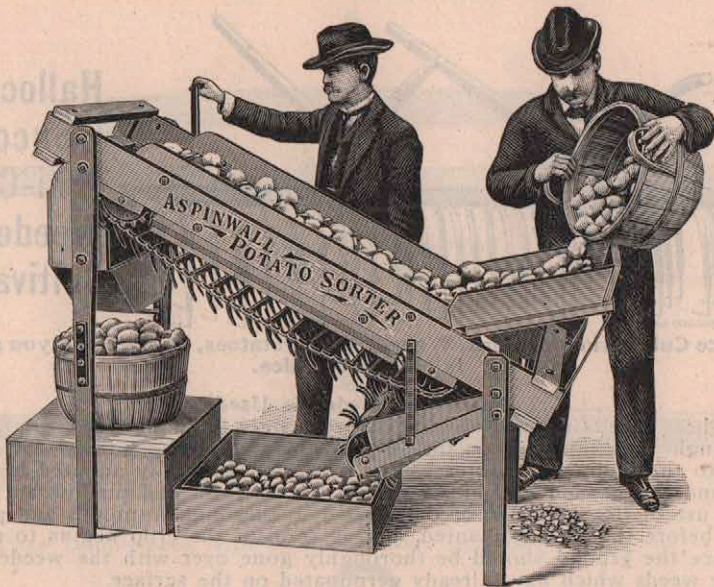
Our digger certainly is a companion machine to the world-famous Planter. The latter machine, with its accurate and automatic action, picks the potato with a thumb and finger-like movement, and even so the Digger may be described as having a system of fingers arranged to separate the potatoes from the earth, which is first pulverized by the first movement.

The Digger is adapted to all kinds and conditions of digging, on hillsides and level fields, among green or ripe tops, and wet or dry ground. It works in all soils in which potatoes can be grown; does not clog, and reasonably small, loose stones and trash do not phase it.

The principle of working is entirely new. The plow is concave, with a draw-cutting edge, which is calculated to lessen the draft. An important feature consists of a pulverizing wheel, peculiar in construction, which automatically removes the tops and weeds, delivering them to one side, previous to making a separation of the potatoes from the earth. This feature lessens the power in separating, which reduces the draft, bringing it within the power of two horses. It is the lightest draft wheel digger made, and withal is a model of simplicity and durability. It is adjustable to all widths of planting, and arranged to dig around the piece in lands or the number of rows required, leaving the potatoes at one side very convenient for picking up.

Aspinwall Potato Digger, weight 800 lbs. ....\$125.00





## The New Aspinwall Potato Sorter.

Will Also Sort Onions.

Pronounced by many of the largest potato shippers and growers in the United States to be the best Potato Sorter ever put on the market.

The capacity of this machine is very great, being upwards of two thousand bushels per day.

It will pay you to investigate the comparative merit of this Sorter.

We have made a new departure in Potato Sorters, using an elevator with long distance travel, which enables very rapid sorting, combined with excellent work.

In the construction we gain another admirable feature in having the hopper down low, making easy work in shoveling and feeding the machine. The entire work is under control of the operator, and any potatoes which are decayed or ill-shaped may be removed while the work is progressing; there is no bruising or injuring the potatoes in the least.

The machine makes a separation, or sorting, into three sizes: the marketable or large potatoes; the second sorting or seed (for which a shallow box should be placed in position to receive them, as shown in the illustration), and the third sorting falls through with the sand and dirt, in which case a small box with a wire screen bottom could be advantageously used and the potatoes saved and sifted from the dirt.

The dimensions of the Sorter are as follows: Length, 54 inches; width, 30 inches; height, rear end, 36 inches; front end, 55 inches; length of sorting bed, 47 inches; width of sorting bed, 21½ inches.

### DIRECTIONS FOR SETTING UP AND OPERATING THE NEW ASPINWALL POTATO SORTER.

This machine is sent out ready for operating, with the exception of attaching the crank handle and extension legs. The legs, which must be bolted to the front pair, serve to give the correct elevation.

The adjustment as to size will be found in the ends of malleable sorting plates. There are three holes in each end and one in the hinge piece. The position of sorting plates may be changed up or down, either to reduce or enlarge the openings, being held by a bolt in each end which should be firmly fastened. After being adjusted for the size required will seldom need changing.

Oil the bearings of each shaft through holes in wood frame.

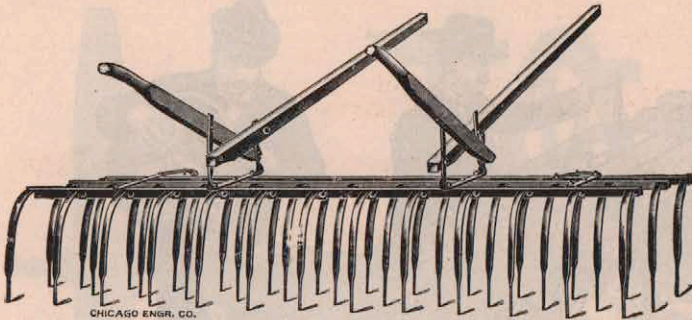
The chain should receive a little oil before starting the machine, and the agitating wheels under the top side of chain should be oiled occasionally.

To insure the best work care should be exercised in feeding. Do not shovel in too fast or unevenly.

If desirable, hooks may be attached to the large potato chute for holding bags or sacks.

Aspinwall Potato Sorter, weight 365 lbs. ....\$50.00





**Hallock's  
"Success"  
Anti-Clog  
Weeder and  
Cultivator.**

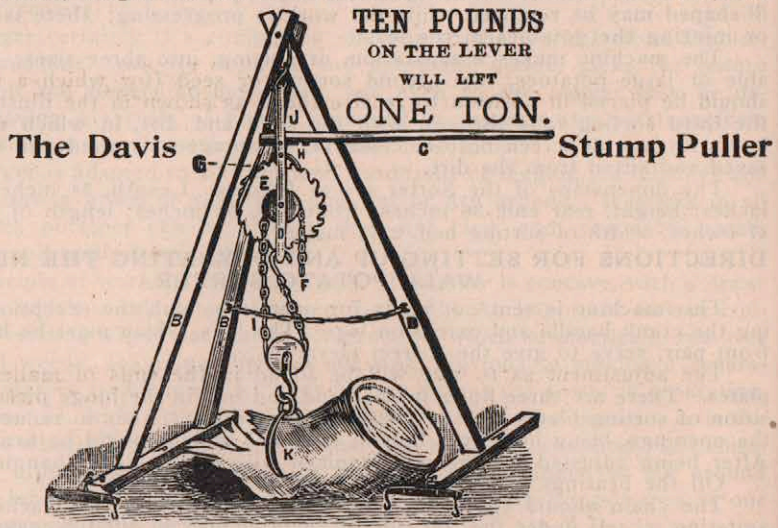
**Surface Cultivation for Corn, Wheat, Oats, Potatoes, or anything you grow.  
Is Not a new idea.**

**How the Weeder Is Used.**

The best results in cultivating a crop can only be obtained when the soil is in thorough condition before the crop is planted. The conditions vary according to the crop, but progressive farmers have generally adopted level cultivation, and the ground should always be left as level and mellow as possible. The use of the weeder is recommended to thoroughly smooth and pulverize the soil before the crop is planted, and as soon as the crop begins to make its appearance the ground should be thoroughly gone over with the weeder to destroy the weeds which have already germinated on the surface.

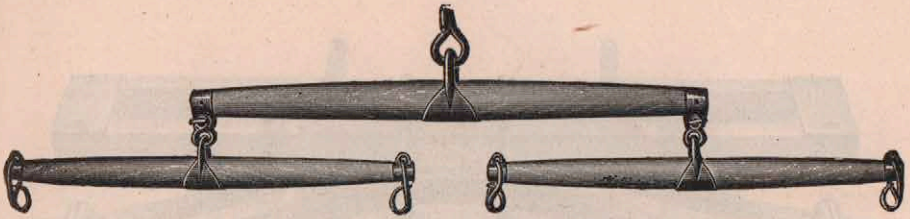
**What the Weeder Does.**

It should always be borne in mind that frequent stirring of the soil is very beneficial to the crop, and that the expense of cultivating the crop ten times with the weeder is no greater than the expense of one hand hoeing. The weeder will thoroughly cover one acre in from thirty to forty minutes. It will easily perform work of from ten to twenty men. When putting in Hungarian, millet, grass seed, etc., it has no equal, leaving the seed evenly distributed and at a uniform depth. The teeth may be removed at intervals, as desired, and the weeder used on crops after they have reached considerable size. The weeder is so simple in construction and its uses, and the adaption thereto so obvious that directions for operating are unnecessary. Hallock's Weeder, weight 100 lbs. .... \$15.00



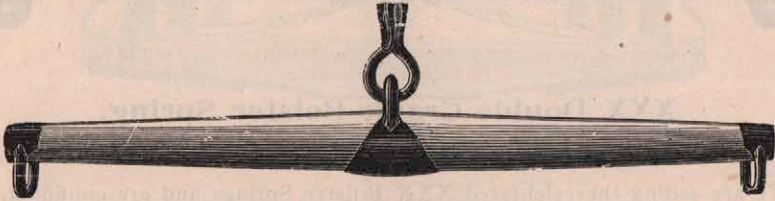
No. B. 9-inch wheel, will lift about 3 tons, weight 100 lbs. .... \$20.00  
 No. 4, 23-inch wheel, will lift about 40 tons, weight 385 lbs. .... 65.00  
 Prices are for irons complete, but no wood-work.





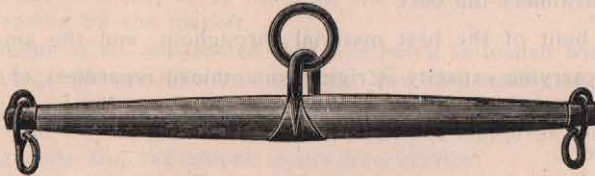
**Gem Plow Sets.**

36-inch Gem Plow Sets .....\$ 2.00



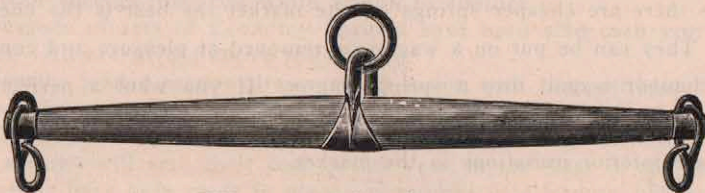
**Plow Doubletrees.**

36-inch Plow Doubletrees, with hook in center; per dozen .....\$ 6.00



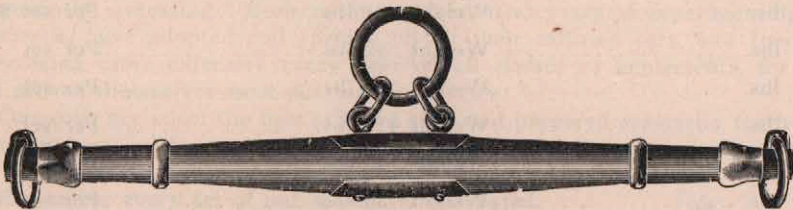
**Plow Singletrees.**

26-inch Plow Singletrees, with ring in center, oiled; per dozen.....\$ 3.25  
 28-inch Plow Singletrees, with ring in center, oiled; per dozen..... 3.75  
 30-inch Plow Singletrees, with ring in center, oiled; per dozen..... 4.35



**Wagon Singletrees.**

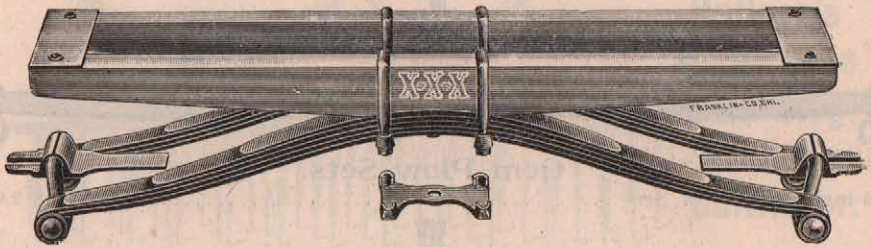
36-inch Wagon Singletrees, oiled; per dozen .....\$ 5.00



**Wagon Neckyokes.**

40-inch Wagon Neckyokes; per dozen .....\$ 9.00  
 44-inch Wagon Neckyokes; per dozen ..... 12.00  
 48-inch Wagon Neckyokes; per dozen ..... 15.00  
 52-inch Wagon Neckyokes; per dozen ..... 18.00





### XXX Double Crank Bolster Spring.

We are selling the celebrated XXX Bolster Springs and are confident, after carefully considering the various Bolster Springs in the market, that we are offering our customers the best.

They are built of the best material throughout, and the amount of steel necessary for carrying capacity is rigidly maintained regardless of cost.

They are carefully put up, and every spring is thoroughly tested before it leaves the factory.

We guarantee them from any defects in either workmanship or material and will replace for one year any breakage that may occur.

The cuts show that these are the only "common sense" bolster springs made, and while there are cheaper springs on the market the best is the cheapest in the end. They can be put on a wagon or removed at pleasure and convert the common lumber wagon into a spring wagon. If you want a perfect bolster spring—one that is durable and efficient as well as beautiful, buy the genuine, as there are inferior imitations in the market.

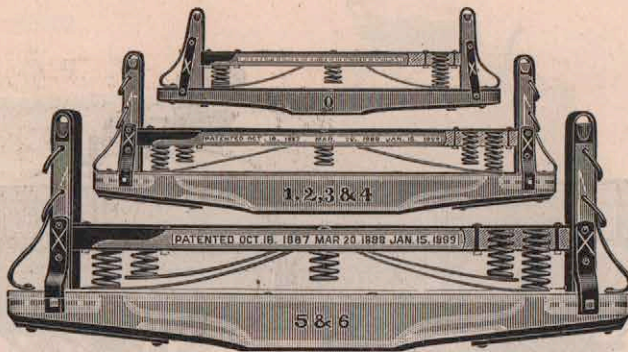
#### PRICE LIST.

1,000 lbs. ....	Weight 83 lbs. ....	Per set \$10.00
1,500 lbs. ....	Weight 92 lbs. ....	Per set 11.00
2,000 lbs. ....	Weight 105 lbs. ....	Per set 12.00
2,500 lbs. ....	Weight 118 lbs. ....	Per set 13.00
3,000 lbs. ....	Weight 125 lbs. ....	Per set 13.50
4,000 lbs. ....	Weight 150 lbs. ....	Per set 14.00

In ordering give distance between Bolster Stakes.

These Springs have been in the market twenty-five years and are unquestionably superior to all others.





## The Economy Bolster Spring

Is a combination of elliptic and spirals so adjusted that a light or heavy load rides with equal buoyancy.

We claim the Economy to be the most successful and the only truly graduated vehicle spring on the market.

The Economy is so constructed that whether it is loaded with 100 or 1,000 or 8,000 pounds, it always affords a spring. You will readily observe how this is accomplished. In the case of no load or only a light load, the outer coils alone are brought into action. As the load begins to compress these outer coils, the remaining coils and the elliptic come into service.

Another important feature of our spring is our patent malleable iron extension end. Although we make the spring to suit any regular width of wagon from 36 to 44 inches, with our extension end you can extend in width two inches, which is a great convenience in case your bolster stakes should spread or you change your springs from one width wagon to another.

Thousands of sets of Economy Springs have been sold each year for over ten years. All are giving entire satisfaction.

A heavily loaded wagon draws much easier with than without them. A wagon will be much more durable as the spring saves all rack and strain. The many advantages of the spring can only be appreciated by their use. Farmers say the springs will save their cost in one year, in the wear of the bags alone.

Attempts have been made to place coil springs in disrepute, but we are glad to say their efficiency and durability is too well established to have any effect. Any manufacturer of coil springs will tell you their trade on that class of springs is constantly increasing. Modern car builders, after years of experimenting and experience, have adopted coil springs on all their railroad cars, and their use is becoming more extensive every year on all classes of implements, for they have proven themselves most durable and efficient.

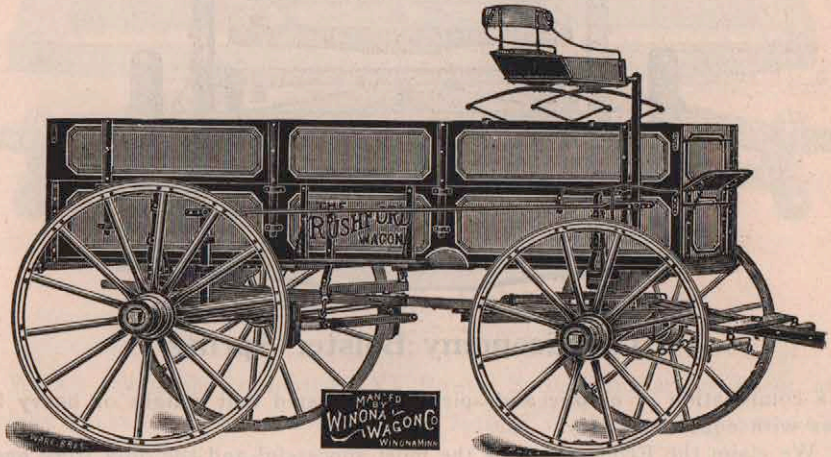
Our coils are all of the best selected steel and prepared especially for bolster spring purposes. We warrant every set of springs, and if you have any doubt or fear of their reliability give us an opportunity and we will allay it.

**Remember every set of our springs is warranted.**

### PRICE LIST.

No. 0—1,500 pounds capacity, per set .....	\$5.00
No. 1—2,500 pounds capacity, per set .....	6.50
No. 2—3,000 pounds capacity, per set .....	7.50
No. 3—4,000 pounds capacity, per set .....	8.50





**Winona Rushford Mountain Wagon,**  
**3¼, 3½ and 3¾-inch Sizes.**

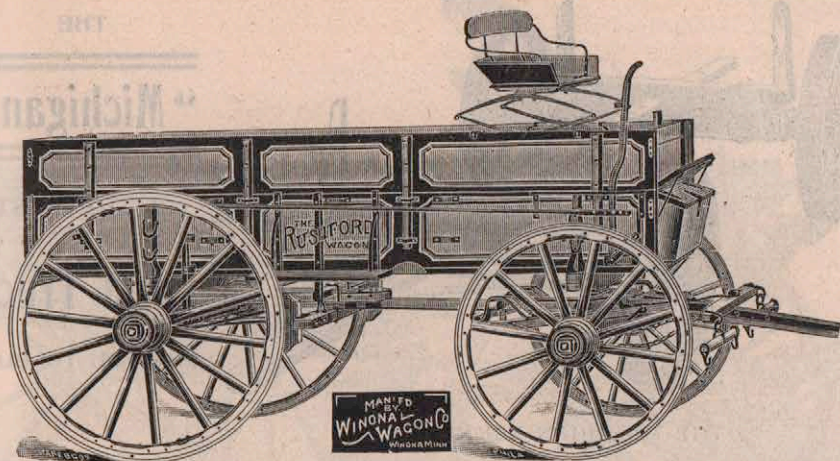
With wheels 3 ft. 8 ins. front and 4 ft. 6 ins. hind. WITH STEEL SKEINS.

Complete, with Double Bed, 3-Leaf Spring Seat with Lazy Back, Roller Brake, Neckyoke, Doubletrees and Stay Chains.

Size of Skeins Inches	Size of Reg'l'r Tires, Inches	Length of Com. Bed.	Estimated Ca- pacity, Lbs.	Weight with Double Bed, Lbs.	Price with Double Bed and Seat
3¼ x 10	1¾ x ¾ x 7/8	10 ft. 6 in.	3500	1370	\$119 00
3½ x 11	2 x ¾ x 7/8	11 ft.	4500	1495	127 00
3¾ x 11	2 x 7/8 x 1	12 ft.	6000	2015	155 00

- 3¼x10 S. S. Wagon, Complete with 3x5/8 Tire, weight 1510 pounds.....\$130.00
- 3½x11 S. S. Wagon, Complete with 3x¾ Tire, weight 1640 pounds..... 142.00
- 3¾x12 S. S. Wagon, Complete with 3x¾ Tire, weight 2080 pounds..... 163.50
- 3¼ Steel Skein Wagon, gear only with brake and regular tires, wt. 1050 lbs. 100.00
- 3½ Steel Skein Wagon, gear only with brake and regular tires, wt. 1150 lbs. 110.00
- 3¾ Steel Skein Wagon, gear only with brake and regular tires, wt. 1400 lbs. 125.00
- 3¼ Steel Skein Wagon, gear only with brake and 3x5/8 tires, wt. 1150 lbs... 110.00
- 3½ Steel Skein Wagon, gear only with brake and 3x¾ tires, wt. 1250 lbs... 120.00
- 3¾ Steel Skein Wagon, gear only with brake and 3x¾ tires, wt. 1500 lbs... 135.00
- 10-foot Bed, with brake parts and 2-leaf spring seat, weight 350 lbs..... 30.00
- 10½-ft. Bed, with brake parts and 3-leaf spring seat, weight 400 lbs..... 35.00
- 11-foot Bed, with brake parts and 3-leaf spring seat, weight 450 lbs..... 40.00
- 12-ft. Stake Rack Beds with brake parts and 3-leaf spring seat, wt. 500 lbs. 40.00
- 14-ft. Stake Rack Beds with brake parts and 3-leaf spring seat, wt. 600 lbs. 50.00
- 16-ft. Stake Rack Beds with brake parts and 3-leaf spring seat, wt. 700 lbs. 75.00





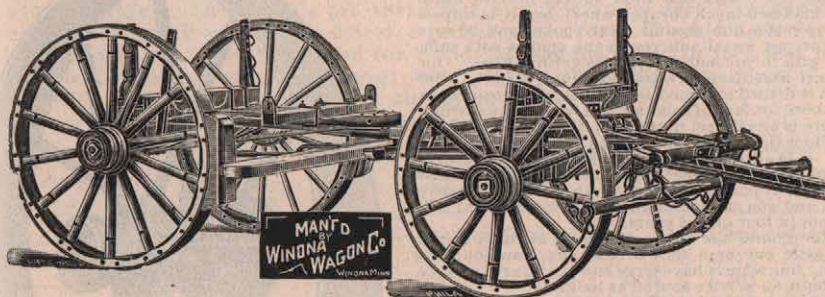
**Rushford Farm Wagons, 2½, 2¾ and 3-inch Sizes.  
WITH STEEL SKEINS.**

**Price List of Wagons Complete, with Bed, Brake and 2-leaf Spring Seat.**

2½x8	Steel Skein Wagon, with regular tires, weight 1000 lbs.....	\$ 90.00
2¾x8½	Steel Skein Wagon, with regular tires, weight 1100 lbs.....	95.00
3 x9	Steel Skein Wagon, with regular tires, weight 1150 lbs.....	97.50
2½	Steel Skein Wagon, with 3x½-inch tires, weight 950 lbs.....	95.00
2¾	Steel Skein Wagon, with 3x½-inch tires, weight 1050 lbs.....	100.00
3¼	Steel Skein Wagon, with 4x¾-inch tires, weight 1100 lbs.....	105.00
3	Steel Skein Wagon, with 3x½-inch tires, weight 1150 lbs.....	110.00

**Price List of Wagon Gears Only, Complete With Brake.**

With Regular Tire.		With Wide Tire.	
2½x8	Steel Skein, wt. 689 lbs. \$75.00	3-inch Tire, wt. 922 lbs.....	\$ 92.50
2¾x8½	Steel Skein, wt. 750 lbs. 80.00	4-inch Tire, wt. 910 lbs.....	90.00
3 x9	Steel Skein, wt. 809 lbs. 82.50	3-inch Tire, wt. 1000 lbs.....	103.00



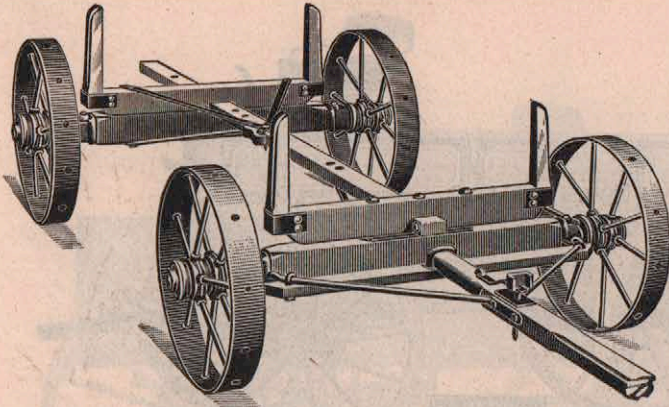
**Rushford Half Truck Gear.**

With Steel Skeins, Front Wheels 3 feet 4 inches, Hind Wheels 4 feet high with 3-inch wide Tires, including Doubletrees, Neckyoke and Stay Chains.

3 x 9	Steel Skein Half Trucks, with Brake, weight 900 lbs.....	\$ 90.00
3¼x10	Steel Skein Half Trucks, with Brake, weight 1200 lbs.....	99.00
3½x11	Steel Skein Half Trucks, with Brake, weight 1250 lbs.....	106.50

Our Half Trucks are built in every respect the same as the regular wagon, the only difference being in the height of wheels, hence price for Half Trucks and Header Gears, with or without Beds, are the same as high wheel wagons and wagon gears with corresponding sizes of tires.





THE MICHIGAN FARM TRUCK.

THE  
 "Michigan"

IS THE BEST

Farm Truck

FOR YOU TO BUY.

### A NECESSITY, HENCE A SELLER.

We venture the statement that in five years every successful farmer in America will have purchased some kind of a low-down, broad-tire farm truck. Why? Because such a truck when once placed upon the farm is used more than any other implement. It works not for a few weeks as do the plows, the binders and other tools, but every day in the year.

It pulls easily because the wide tires roll over the surface and cut no ruts that drain off the fertilizer or juices of the manure. The low wheel saves half the lifting—and the Top Half, too! Such a wagon saves the wages of one man in loading. It will last a generation and you will have no tire setting or repair bills. It does away with strained backs from lifting over high wheels. It is a Road Maker and not a Road Breaker. It will not upset on side hills and it is great on marshes. It is the poor man's wagon—and the rich man's, too.

It can be used for anything that any two-horse wagon can be used for, and for the majority of work it will do it at a very great saving of time and labor. It costs only about half as much as the ordinary wagon, and is made of just as good stock as the best. No matter how many high-wheeled wagons you have, you ought to have at least one "Handy truck" with wide tires.

We price the wagon just as it is shown in this catalogue. The farmer can use the same box, hay rack, dump-boards, doubletrees, etc., that he has for his high-wheeled wagon, or can use a broad platform extending over the wheels.

#### NO LOOSE TIRES ON THIS WAGON.

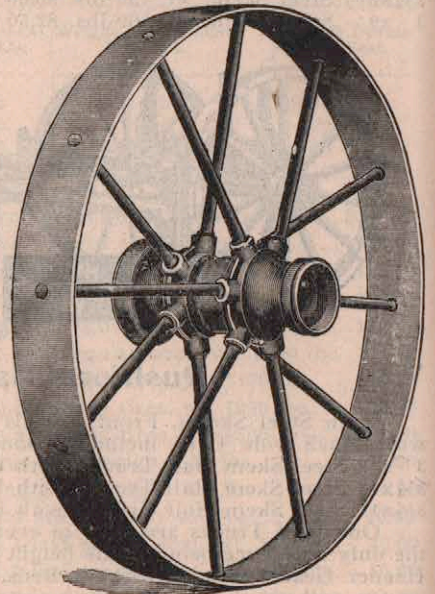
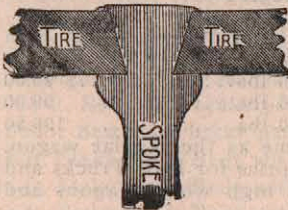
QUALITY.—Judge not the quality of these trucks by other trucks, for ours is not a pipe or steel axle truck, but the good old fashioned Lake Superior thimble skein fitted to the very best of wood axles.

DESCRIPTION.—Diameter of skein  $3\frac{1}{2}$  in., capacity two tons, wide or narrow track. Height of wheels 28 in. front, 30 in. rear, tires 4 in. wide. Top of bolsters only 22 in. from the ground.

THE BEST STEEL WHEEL EVER MADE, differing materially from the wheels used on other trucks. All others cast their spokes into the hubs. This makes a much cheaper wheel, but it is impossible to cast a hub around steel spokes and be sure that the cast metal adheres to the spokes with sufficient grip to prevent the spokes getting loose. Our hubs are first cast with solid spoke lugs, then the solid metal is drilled to receive the spokes. We do not even use a core for fear of concealing a flaw in the casting. If there is any defect in the iron, the press drill finds it. Then the spokes are riveted hot into the drilled hub. It is all done by special machinery that secures the spoke in a way that it can never get loose. Just note this difference, as a poor wheel is dear at any price, and you cannot afford to buy a truck that will give out in four or five years.

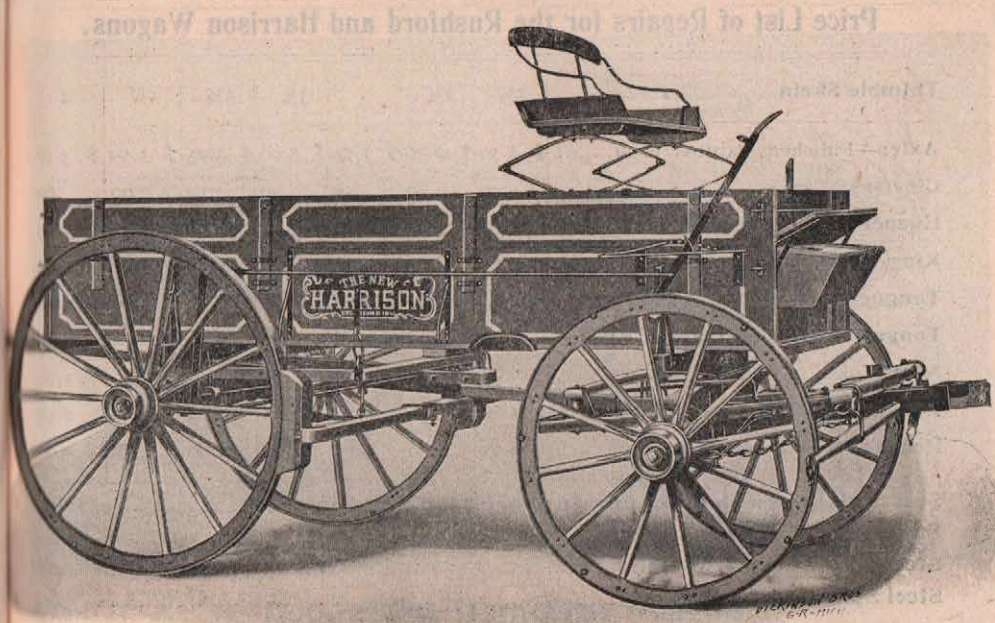
Now comes the spoke fastening at the tire end. The little cut here shown tells you how ours is made. Our wheels have large bands and are in every way built for service as well as looks.

For prices and further information ask your dealer about this truck, or write direct to us.



MICHIGAN FARM TRUCK, Weight, 500 lbs., \$40.00.





### The New Harrison Wagon.

This Wagon, built expressly for us, has no superior. White oak wood is used in all parts of the running gear, except the axles and eveners; wheels have bent oak rims riveted on each side of every spoke and tires are fastened with "California Tire Rivets." The reach is better adapted to stand the downward pressure of the brake than any reach we have seen, and the brake is made after our own patterns. Only steel skeins with riveted collars are used, and we give our own warranty against inferior material or workmanship with every one of them, and carry both wide and narrow track, in sizes  $2\frac{1}{2} \times 8$ ,  $2\frac{3}{4} \times 8\frac{1}{2}$ ,  $3 \times 9$ ,  $3\frac{1}{4} \times 10$  and  $3\frac{1}{2} \times 11$ . All wheels are three feet 8 inches and 4 feet 6 inches high, excepting half truck wheels are 3 feet 4 inches and 4 feet. Double beds for  $2\frac{1}{2}$  and  $2\frac{3}{4}$  wagons are 10 feet long, and for 3 and  $3\frac{1}{4}$  wagons they are  $10\frac{1}{2}$  feet long; for  $3\frac{1}{2}$  wagon beds are 11 feet long; 3-leaf spring seat with lazy back is furnished with each complete wagon at the price quoted.

#### PRICE LIST.

SIZE OF SKEIN.	Estimated Capacity	Regular Tire	Weight lbs.	LIST PRICE	Wide Tire	Weight lbs.	LIST PRICE
$2\frac{1}{2} \times 8$ .....	1,500	$1\frac{1}{2} \times \frac{1}{2}$	1,150	\$ 90.00		1,200	\$ 95.00
$2\frac{3}{4} \times 8\frac{1}{2}$ .....	2,000	$1\frac{1}{2} \times \frac{9}{16}$	1,175	95.00		1,275	100.00
$3 \times 9$ .....	3,000	$1\frac{5}{8} \times \frac{5}{8}$	1,285	97.50	$3 \times \frac{1}{2}$	1,383	110.00
$3\frac{1}{4} \times 10$ .....	4,500	$1\frac{3}{4} \times \frac{3}{4}$	1,452	119.00	$3 \times \frac{5}{8}$	1,548	130.00
$3\frac{1}{2} \times 11$ .....	6,000	$1\frac{7}{8} \times \frac{7}{8}$	1,600	130.00	$3 \times \frac{3}{4}$	1,700	140.00

#### Price List of Gears Only With Brake.

With Regular Tire.		With Wide Tires.	
$2\frac{1}{2} \times 8$ , weight 800, .....	\$ 75.00	$3 \times \frac{1}{2}$ , weight 1039, .....	\$ 90.00
$2\frac{3}{4} \times 8\frac{1}{2}$ , weight 845, .....	80.00	$3 \times \frac{5}{8}$ , weight 1195, .....	110.00
$3 \times 9$ , weight 930, .....	82.50	$3 \times \frac{3}{4}$ , weight 1400, .....	120.00
$3\frac{1}{4} \times 10$ , weight 1100, .....	100.00		
$3\frac{1}{2} \times 11$ , weight 1250, .....	110.00		

Half truck gears same price as regular wagon gears.



### Price List of Repairs for the Rushford and Harrison Wagons.

Thimble Skein.....	2½	2¾	3	3¼	3½	3¾	4
Axles—Finished, Painted, each.....	\$ 2.50	\$ 2.50	\$ 2.75	\$ 3.00	\$ 3.25	\$ 3.50	\$ 3.50
Clevises—Pair.....	.50	.50	.50	.50	.50	.60	.60
Evener—Ironed and Painted.....	1.00	1.00	1.00	1.00	1.00	1.15	1.15
King Bolt—Each.....	.75	.75	.75	.80	.80	.90	1.00
Tongue—Stick.....	2.20	2.20	2.30	2.30	2.40	3.00	3.00
Tongue—Complete, Ironed & Painted	6.00	6.00	6.50	6.50	6.50	7.00	7.50
Neck Yoke.....	.95	.95	.95	.95	.95	1.00	1.10
Reach—(Valley).....	1.60	1.70	2.00	2.00	2.25	2.50	2.50
Reach—Extra Long (Mountain).....	2.25	2.50	2.75	3.00	3.00	3.50	4.00
Seat Springs—Two leaf, per pair, \$1.50; three leaf, per pair.....	\$2.20						
Stay Chains—Per pair.....	1.00						
Steel Spring Seat—Two leaf.....	4.00						
Steel Spring Seat—Three leaf.....	5.00						

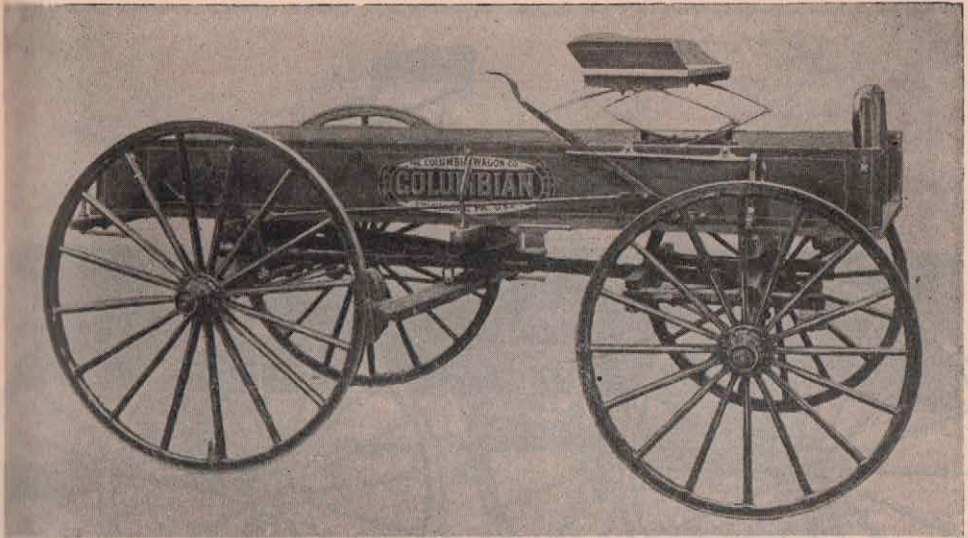
### Cast Skeins.

SIZE	Skein & Nut Only. Each.	Boxes Only Each.	Nuts Only Each
2½x8.....	\$ .80	\$ .35	\$ .25
2¾x8½.....	.90	.40	.25
3x9.....	1.00	.50	.25
3¼x10.....	1.20	.60	.25
3½x11.....	1.30	.65	.30
3¾x12.....	1.50	.75	.40
4x12.....	1.70	.80	.40

### Steel Skeins.

SIZE	Skein & Nut Only. Each.	Boxes Only Each.	Nuts Only Each.
2½x8.....	\$1.75	\$ .50	\$ .25
2¾x8½.....	1.85	.55	.25
3x9.....	2.00	.65	.25
3¼x10.....	2.15	.75	.25
3½x11.....	2.70	.85	.30
3¾x12.....	3.25	1.05	.40
4x12.....	3.90	1.25	.50

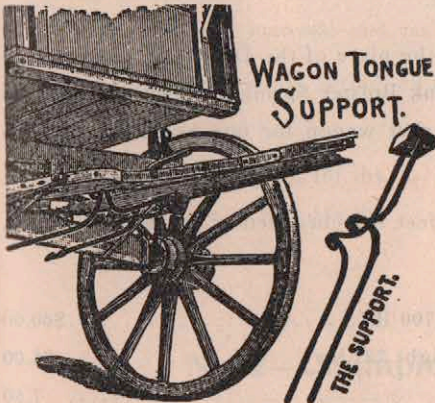




**Columbian Democrat Wagon.**

There is no trade that cannot use this wagon to advantage; farmers, gardeners, carpenters and merchants find it to be just the wagon for them. It is an excellent creamery wagon. It is a fine wagon for hunting trips, picnics and all kinds of excursions.

Complete with Pole and Double Crank Springs, wt.750 lbs.,	\$70.00
If Shafts are wanted instead of Pole, deduct .....	5.00
If Double Crank Springs are not wanted, deduct ....	5.00
Extra Poles, Complete .....	10.00
Extra Shafts, Complete .....	7.50
Extra Seats, Complete .....	5.50



**WAGON TONGUE SUPPORT.**

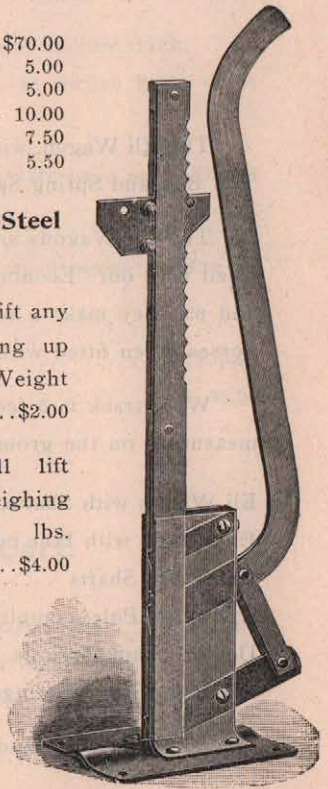
**Linquist's Tongue Support.**

A horse cannot have sore neck from carrying the pole of the wagon where the Lindquist is used. It relieves the animal from the annoying weight of the pole. It saves wear on team and harness. Can be applied in one minute.  
 Weight 10 lbs. ....\$2.25

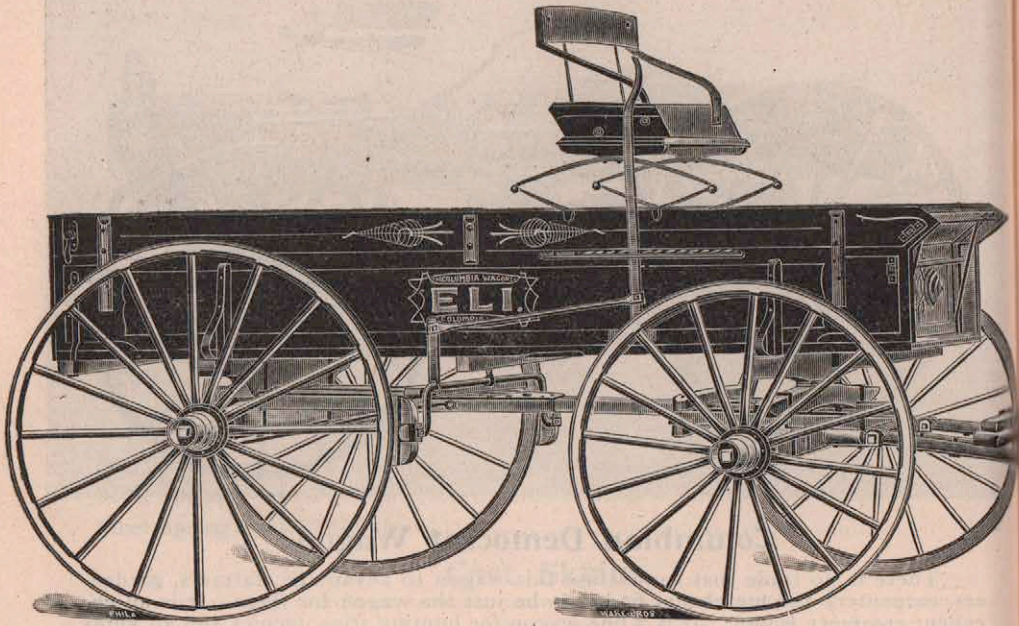
**The Lane All-Steel Jack.**

No. 1 Lane will lift any vehicle weighing up to 1000 lbs. Weight 13 lbs.....\$2.00

No. 2 Lane will lift any vehicle weighing up to 2000 lbs. Weight 20 lbs..\$4.00







## Eli Wagon.

The Eli Wagon, with  $1\frac{1}{4}$  Steel Axles, Sarven Wheels, Gear Brake, 9 foot Bed, Top Box and Spring Seat, with Lazy Back.

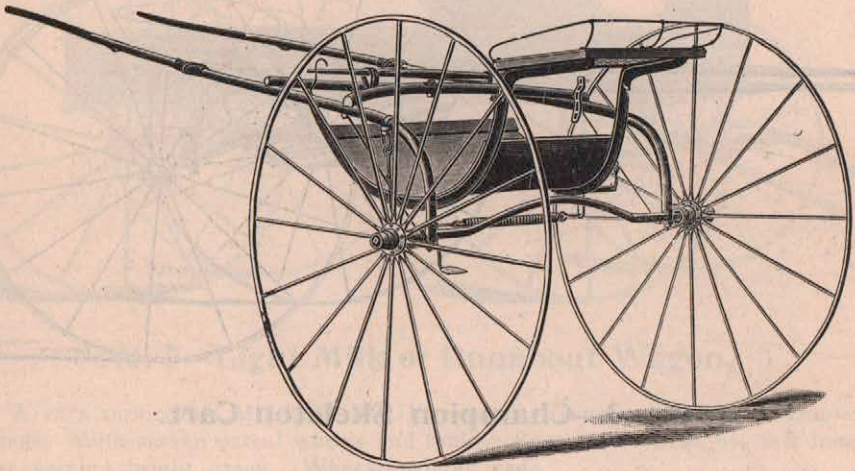
The Eli Wagons are intended to take the place of the Democrat wagons, and fitted with our "Economy" or Double Crank Bolster Springs, shown on pages 62 and 63, they make a nice, easy riding market wagon for one horse, or for two horses when fitted with pole.

Wide track is 5 feet, narrow track 4 feet 8 inches, center to center of tires, measuring on the ground.

Eli Wagon with Shafts, Complete, weight 700 lbs.....	\$60.00
Eli Wagon with Pole instead of Shafts, weight 721 lbs.....	65.00
Extra Eli Shafts .....	7.50
Extra Eli Pole, complete .....	10.00
Double Crank Springs, 1000 pounds capacity .....	10.00
Economy Spiral Springs, 1000 pounds capacity .....	5.00

For description and illustrations of Bolster Springs, see pages 62 and 63.





**No. 1—Champion Cart.**

With  $1\frac{1}{4}$  and  $1\frac{1}{8}$  double collar steel axle in the wide and narrow track.

Sarven pattern wheels of selected Northern hickory, 48 inches high, extra heavy and strong, suitable for all kinds of roads.

Body painted in wine color, with carmine gear. Perforated cane seat. Shafts good second growth material and leathered.

Long, oil tempered coil spring, adjustable for one or two persons, making an easy riding cart.

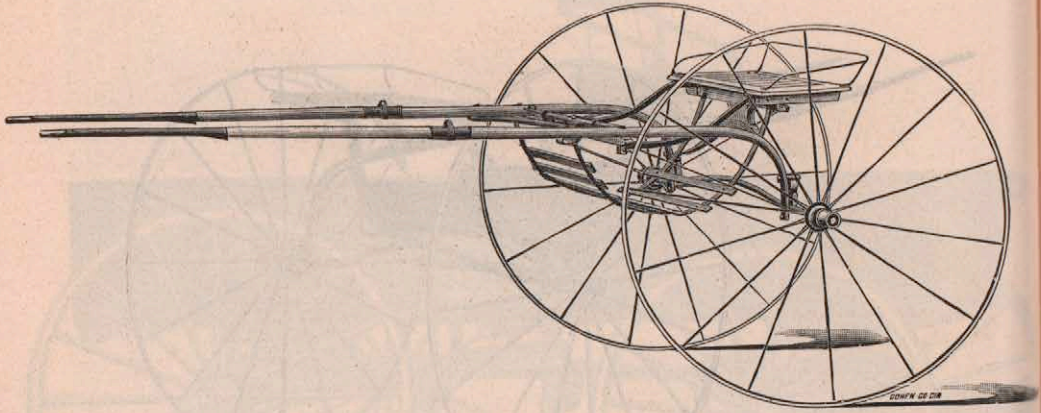
Price, with $1\frac{1}{8}$ axle, weight 161 lbs. ....	\$30.00
Price, with $1\frac{1}{4}$ axle, weight 189 lbs. ....	35.00

**No. 2—Champion Breaking Cart.**

With  $1\frac{1}{8}$  double collar steel axle, in the wide and narrow track;  $1\frac{1}{8}$  sarven wheels, 48 inches high and heavy. Shafts 10 feet 4 inches long, making an ideal cart for breaking horses; otherwise description same as the No. 1 cart.

Price, with $1\frac{1}{8}$ axle, weight 175 lbs. ....	\$32.00
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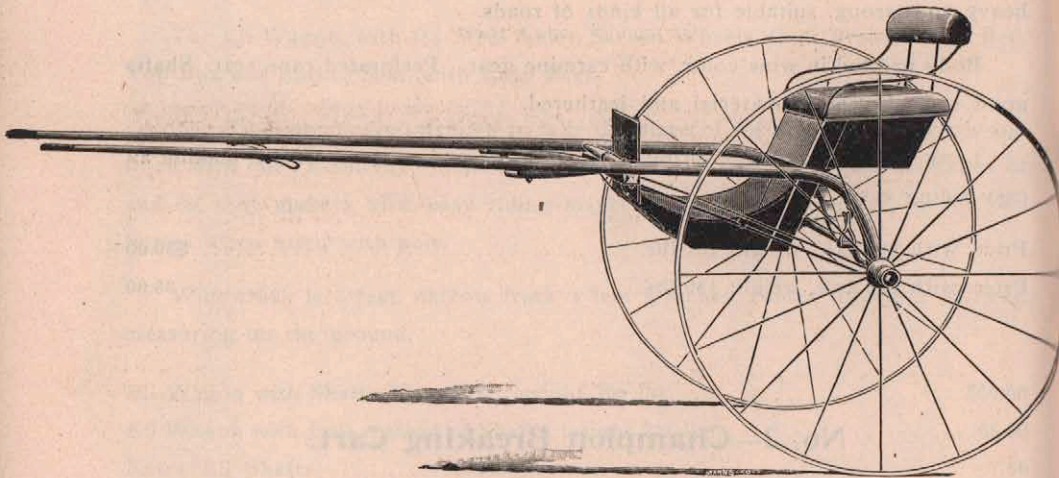




### No. 3—Champion Skeleton Cart.

Our Champion Carts are fine looking and seem to please our trade better than any other cart we have ever carried. Have 1-inch double collar steel axles, sarven pattern, selected Northern hickory wheels, 48 inches high. Body is painted black, with carmine gears.

No. 3. Champion Skeleton Cart, weight 140 lbs. .... \$20.00

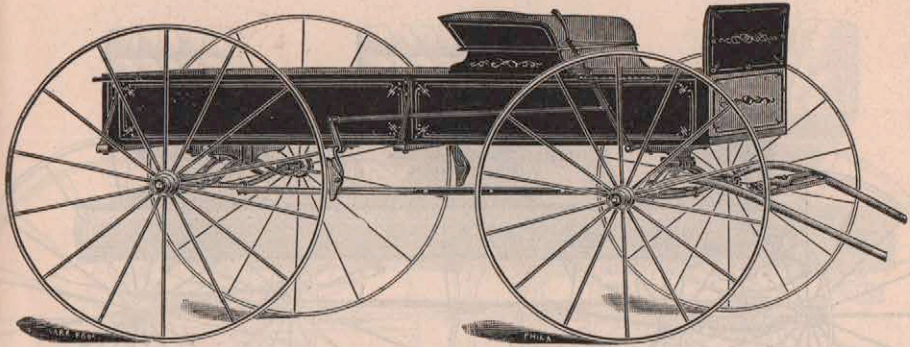


### No. 4—Champion Phaeton Cart.

Has 1-inch double collar steel axle, sarven pattern wheels, 48 inches high. Body painted black, carmine gear. Springs four leaf, oil tempered.

No. 4. Champion Phaeton Cart, weight 150 lbs. .... \$25.00

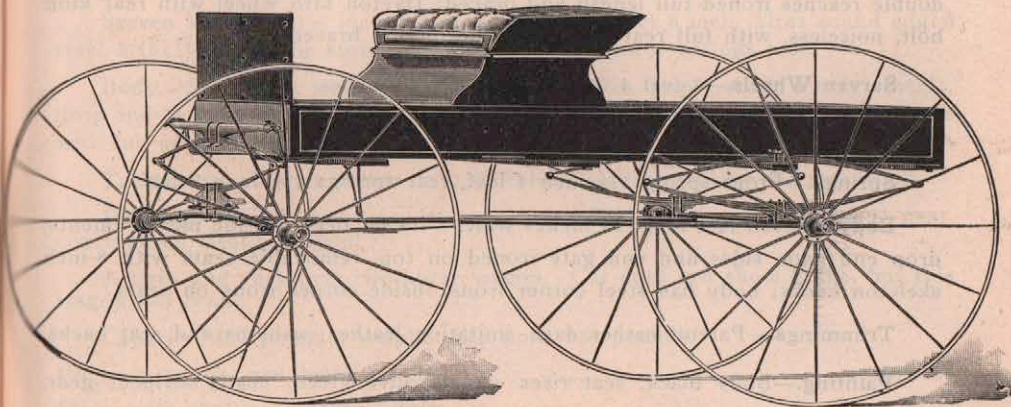




**No. 5—Light Milk or Runabout Wagon.**

A very serviceable MILK or FRUIT wagon. Hung on Double or Duplex springs. With sarven patent wheels and brake. Body 3 feet wide, 6½ feet long. Gear painted bright green. Wheels painted red.

No. 5. Axle, 1 inch, with shafts, capacity 800 lbs., weight 500 lbs.....\$70.00  
 For Pole in place of Shafts, add ..... 3.00

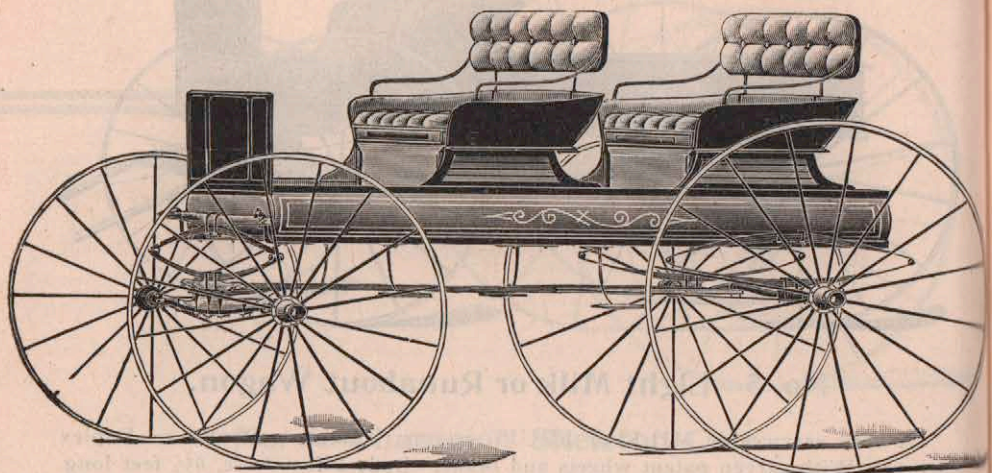


**No. 6—Milk Wagon.**

A light Milk or Fruit Wagon, with three elliptic springs. Has sarven patent wheels and one-inch axle, with brake. Painting, body black, with carmine gear. Body is 7½ feet long and 36 inches wide, 7 inches deep.

No. 6. With shafts, capacity 1000 lbs., weight 550 lbs. ....\$75.00  
 For Pole in place of Shafts, add ..... 3.00





### No. 7 Three-Spring Wagon.

**Gear.**—1 1-16 in. double collar steel axles; front axle capped, rear axle coached; double reaches ironed full length and braced; Dayton fifth wheel with rear king bolt, noiseless, with full rear circle and thoroughly braced.

**Sarven Wheels.**—3 feet 4 inches and 3 feet 8 inches.

**Tires.**—Round edge steel, 1 inch by 5-16.

**Springs.**—Front spring 1¼ inch 4 leaf, rear springs 1¾ inch 3 leaf.

**Body.**—Seven feet long, 33 inches wide, 8 inches deep outside measurements, drop end gate, sides and end gate ironed on top, removable seats with 8-inch skeleton backs; body has steel corner irons, inside corner irons on seats.

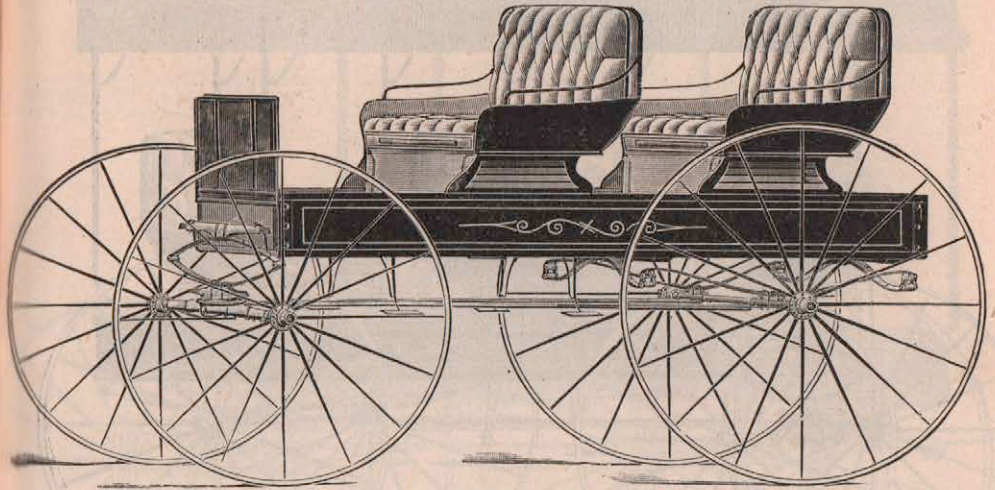
**Trimmings.**—Patent leather dash, imitation leather cushions and seat backs.

**Painting.**—Body black, seat riser panels olive green, neatly striped; gear, coach green, neatly striped.

Capacity, 800 pounds; weight with shafts, 600 pounds.

Price, with shafts .....	\$80.00
Price with pole in place of shafts .....	85.00
Deduct for one seat not taken .....	7.50





**No. 8—Combination Spring Wagon, with Brake.**

**Gear.**—1 1-16 in. double collar steel axles, front axle capped, rear axle coached. Double reaches, ironed full length and braced. Dayton fifth wheel with rear king bolt, noiseless, with full rear circle and thoroughly braced. Brake with outside ratchet.

**Sarven Wheels.**—1 1/8 inch, 3 feet 4 inch and 3 feet 8 inch. Tires round edged steel 5-16x1 1/8. Elliptic spring front and full platform springs rear.

**Body.**—Seven feet long, 32 inches wide, 8 inches deep, outside measurements, drop end gate, square corners, sides and end gate ironed on top; removable seats with full panel backs; steel corners on body and seats; iron posts inside of body.

**Trimmings.**—Patent leather dash, imitation leather cushions and seat backs.

**Painting.**—Body black, seat riser panels olive green, neatly striped; gear, coach green, neatly striped.

A light and very neat two-horse wagon. Cut does not show brake, but this wagon has brake.

Capacity, 800 pounds; weight with pole, 650 pounds.

Price, with pole and brake.....\$100.00  
 Price, with shafts in place of pole..... 95.00

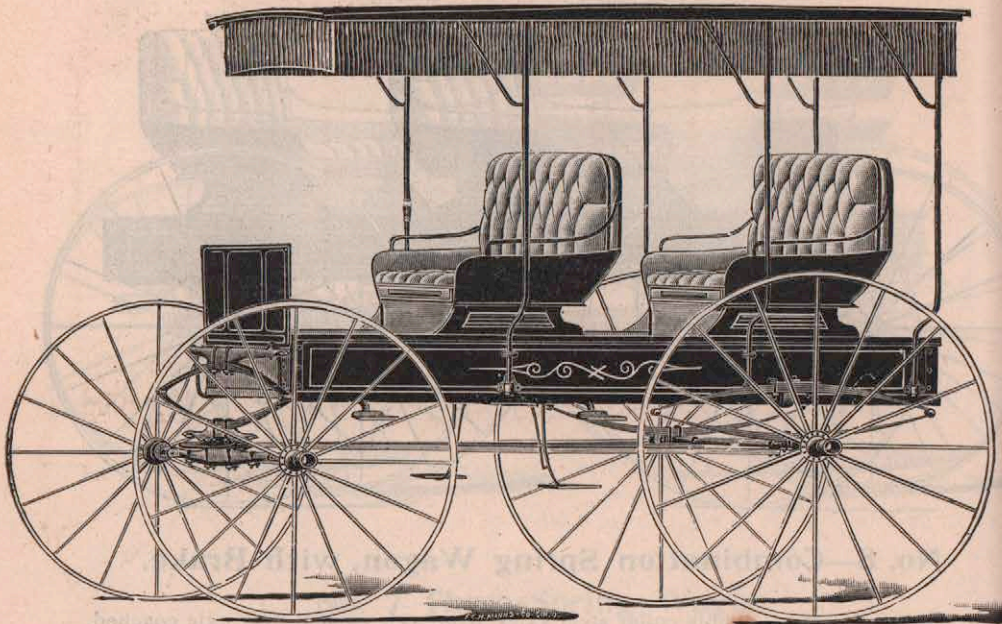
**No. 9.**— Same as above but with canopy top; for picture of top see page 76.

**Top.**—Six post canopy top, adjustable braces at top of posts, bottom of posts double ironed to outside of body. Side and rear curtains. A very strong and serviceable top.

Weight, with pole, 800 lbs.

Price, with pole and brake.....\$140.00  
 Price, with shafts in place of pole..... 135.00





### No. 10—Three Spring Wagon, With Canopy Top and Outside Ratchet Brake.

**Gear.**—1 1-16 inch double collar steel axles. Front axle capped, rear axle coached. Double reaches ironed full length and braced. Dayton fifth wheel with rear king bolt, noiseless, with full rear circle and thoroughly braced. Brake with outside ratchet.

**Sarven Wheels.**—1½ inch, 3 feet 4 inch and 3 feet 8 inch.

**Tires.**—Round edged steel 5-16x1½.

**Springs.**—Front springs 1½ inch 5 leaf, rear springs 1¾ inch 4 leaf.

**Body.**—Seven feet long, 33 inches wide, 8 inches deep, outside measurements. Iron posts inside of body, drop end gate, square corners, sides and end gate ironed on top. Steel corners on body and seats, removable seats with full panel backs.

**Top.**—Six post canopy top. Adjustable braces at top of posts; bottom of posts double ironed to outside of body. Side and rear curtains. A very strong and serviceable top.

**Trimming.**—Patent leather dash, imitation leather cushions and seat backs.

**Painting.**—Body, black; seat riser panels olive green, neatly striped; gear, coach green, neatly striped.

A light and very neat two-horse wagon, similar to No. 8 Combination Wagon, except as to springs. Cut does not show brake, but this wagon has brake.

Capacity, 900 pounds; weight, with pole, 800 pounds.

Price, with pole and brake.....\$125.00

Price, with shafts and brake..... 120.00

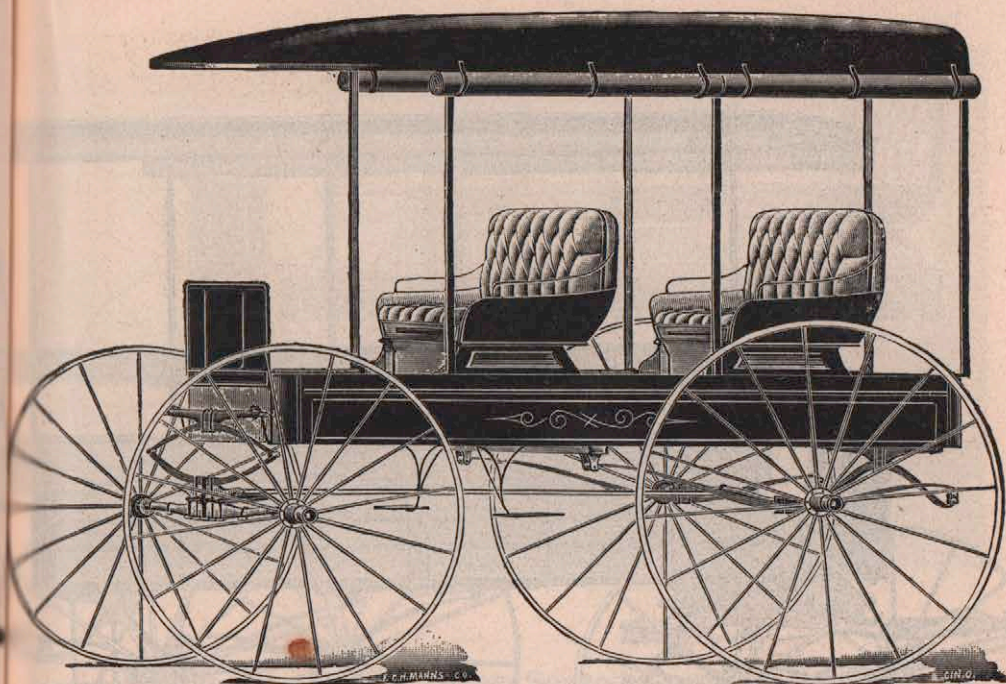
**No. 11—Three Spring Wagon.** Same as above, but without canopy top.

Capacity, 900 pounds; weight, with pole, 650 pounds.

Price, with pole and brake.....\$105.00

Price, with shafts and brake..... 100.00





## No. 12—Combination Wagon, With Brake and Canopy Top.

**Gear.**— $1\frac{1}{8}$  inch double collar steel axles. Front axle capped, rear axle coached. Single reach ironed full length and well braced. Strong front king bolt, fifth wheel, well fastened to axle, reach and spring. Brake with outside ratchet.

**Sarven Wheels.**—3 feet 4 inch and 3 feet 8 inch; rims double riveted at each spoke; tires, round edged steel  $1\frac{1}{4} \times \frac{3}{8}$ ; elliptic spring front, three platform springs at rear.

**Body.**—Seven feet long, 33 inches wide, 8 inches deep, outside measurements; round corners, with steel plates; iron posts inside of body, drop end gate, sides and end gate ironed on top; removable seats with full panel backs; steel corners on body and seats.

**Trimming.**—Patent leather dash; leather cushions and seat backs.

**Painting.**—Body, black; seat riser panels olive green, neatly striped; gear, coach green, neatly striped.

**Top.**—A very strong and serviceable 6 post canopy top; adjustable braces at top of posts; bottoms of posts fastened with an outside socket and clamp, making a neat and strong top. Side and rear curtains. Note.—The top shown above is not the style we carry in stock. For correct cut of top for this wagon see page 76.

Weight, with pole, 850 pounds.

Price, with pole and brake.....\$135.00

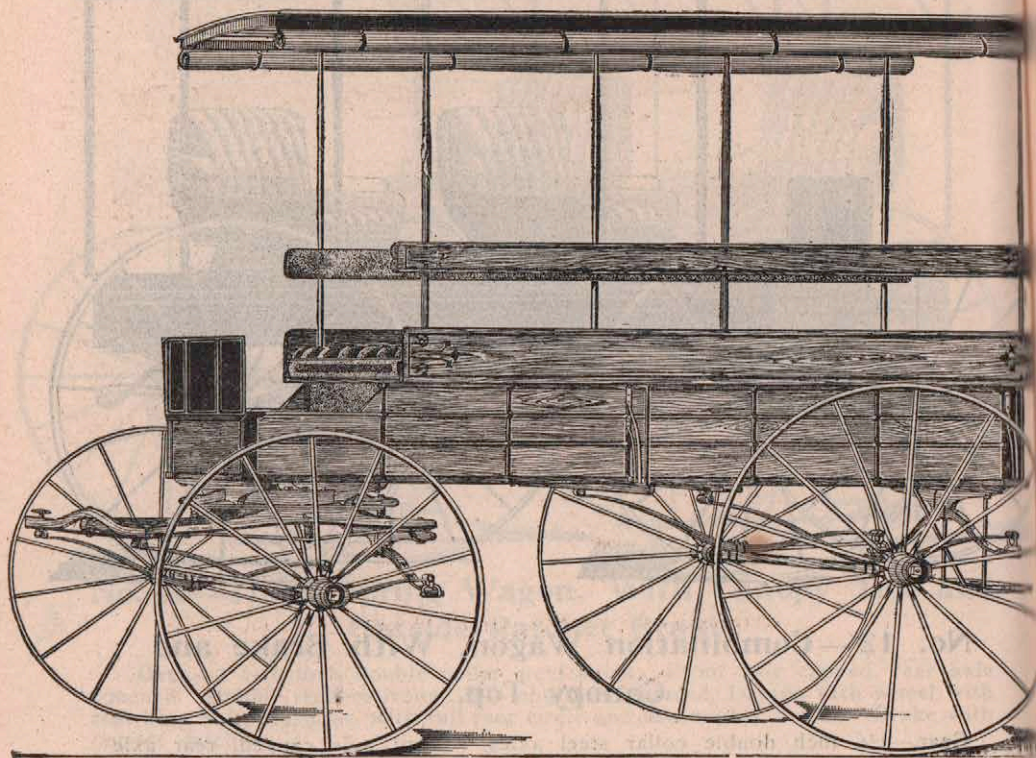
**No. 13.**—Same description as above, except without top.

A medium size and very neat two-horse wagon.

Capacity, 1000 pounds; weight, with pole, 680 pounds.

Price, with pole .....\$115.00



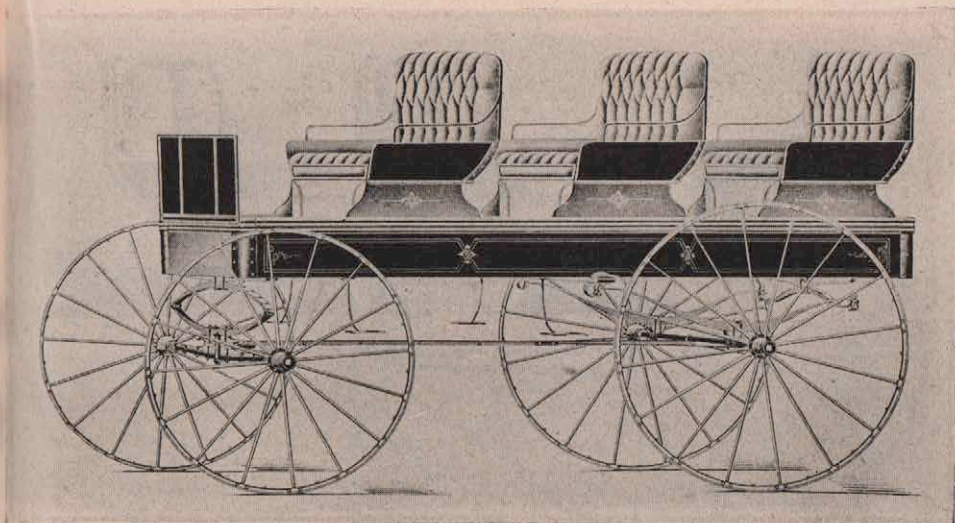


### No. 14—Passenger Wagon.

This makes a very convenient passenger wagon for hotel, stage or picnic use. The seats are made to fold up, and consequently the wagon is handier than an omnibus, as either passengers or luggage can be carried. Seats eleven persons conveniently.

No. 14— $1\frac{3}{8}$ -inch axles, with full platform springs, pole and brake. . . . . \$320.00





### No. 15—Parry Three-Seated Combination Spring Wagon, with Brake.

**Gear.**— $1\frac{1}{4}$  inch double collar steel drop axles; front axle capped, rear axle coaxed; heavy single reach heavily ironed and braced heavy fifth wheel and coupling arrangement heavily clipped and with front king bolt. Elliptic oil tempered spring in front, three platform springs in rear.

Selected hickory sarven wheels,  $1\frac{1}{4}$  inch tread, 3 feet 4 inch and 3 feet 8 inch, rims double riveted at each spoke; tires  $\frac{3}{8} \times 1\frac{1}{4}$  inch, full bolted.

**Body.**—8 feet 4 inches long, 36 inches wide, 9 inches deep, outside measurement; drop end gate, round corners full ironed; sides and rear panels full ironed on top; strong frame with iron posts inside of body; wide removable seats with ironed corners and high full panel backs.

**Trimming.**—12 inch genuine patent leather dash, spring backs and cushions, trimmed with Brewster green leather.

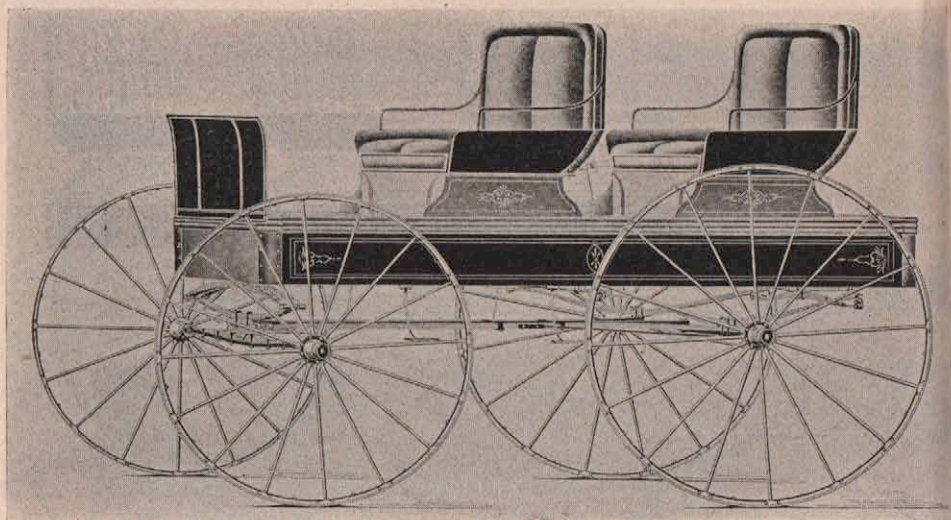
**Painting.**—A fine shade of green or a rich shade of red, nicely striped; elegant decorations on body.

A good strong spring wagon, suitable for stage lines, and beach passenger work. Cut does not show brake, but this wagon has brake.

Capacity, 1100 pounds; weight, with pole and brake, 880 pounds.

Price, with pole and brake ..... \$150.00





### No. 16. Parry Combination Spring Wagon, with Brake.

**Gear.**— $1\frac{1}{4}$  inch double collar steel drop axles; front axle capped, rear axle coached; double bent reaches, reinforced with center reach, full clamped, clipped and braced; full circle oscillating fifth wheel with rear king bolt; Hayes spring in front, three platform springs at rear, with full length equalizing rod; selected hickory sarven wheels  $1\frac{1}{4}$  inch tread, 3 feet 4 inch and 3 feet 8 inch; rims double riveted at each spoke; tires  $\frac{3}{8} \times 1\frac{1}{4}$  inch full bolted.

**Body.**— $7\frac{1}{2}$  feet long, 34 inches wide,  $8\frac{1}{2}$  inches deep, outside measurements; drop end gate, round corners, full ironed; sides and rear panels full ironed on top; strong frame with iron posts inside of body; wide removable seats with corners ironed and high full panel backs.

**Trimming.**—12-inch genuine patent leather dash; spring backs and cushions, trimmed with Brewster green leather.

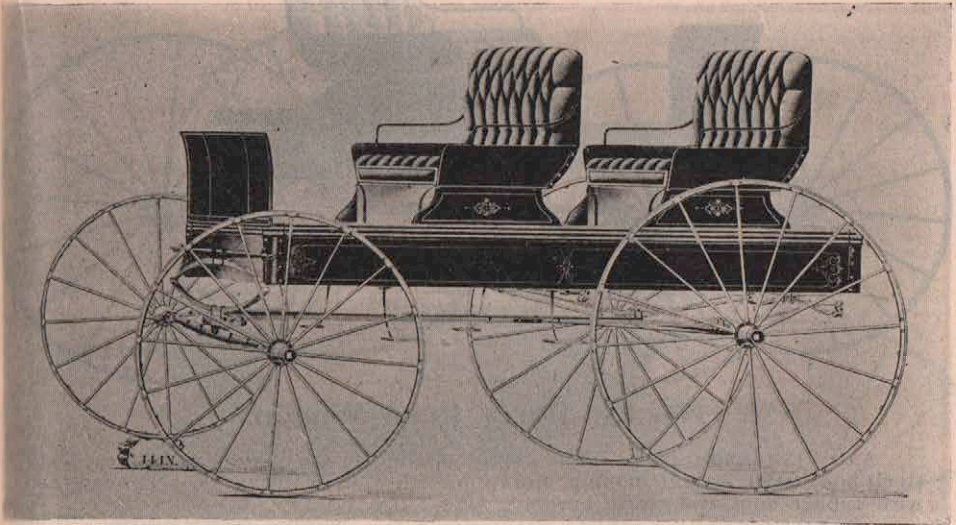
**Painting.**—A fine shade of green or a rich shade of red, nicely striped; body handsomely decorated.

A fine full sized two-horse spring wagon; cut does not show brake, but this wagon has brake.

Capacity, 900 pounds; weight, with pole and brake, 758 pounds.

Price, with pole and brake .....\$130.00





### No. 17—Parry Combination Spring Wagon, with Brake.

**Gear.**— $1\frac{1}{8}$  inch, double collar, steel drop axles, front axle capped, rear axle coached; double bent reaches full clamped, clipped and braced; full circle oscillating fifth wheel with rear king bolt, elliptic oil tempered spring in front; three platform springs at rear, with full length equalizing rod.

Selected hickory sarven wheels,  $1\frac{1}{8}$  inch tread, 3 feet 4 inch and 3 feet 8 inch; rims double riveted at each spoke; tires, 5-16x $1\frac{1}{8}$  inch, full bolted.

**Body.**—Seven feet long, 34 inches wide,  $8\frac{1}{2}$  inches deep, outside measurements; drop end gate, round corners full ironed; sides and rear panels full ironed on top; strong frame, with iron posts inside of body; wide removable seats, with corners ironed and high full panel backs.

**Trimming.**—12-inch genuine patent leather dash; spring backs and cushions, trimmed with Brewster green leather.

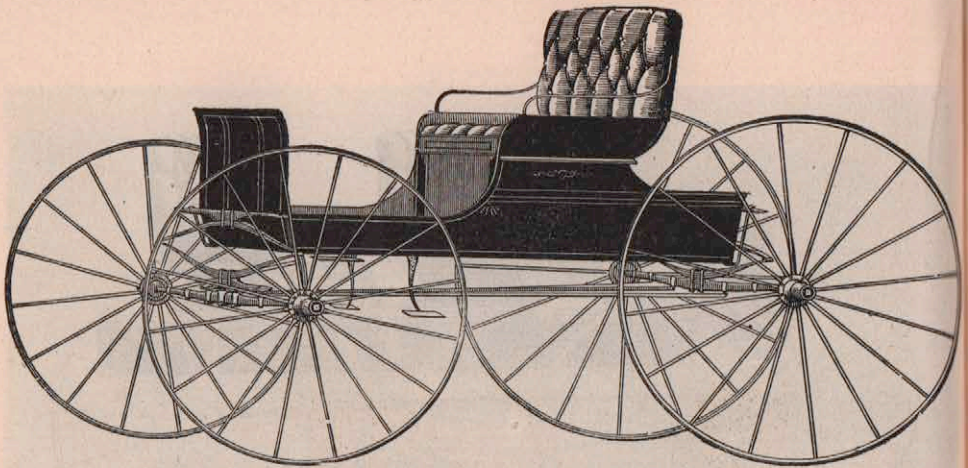
**Painting.**—Gear, a fine shade of green or a rich shade of red; nicely striped, handsomely decorated body.

A fine medium sized two-horse spring wagon. Cut does not show brake, but this wagon has brake.

Capacity, 800 pounds; weight, with pole and brake, 696 pounds.

Price, with pole and brake .....\$125.00

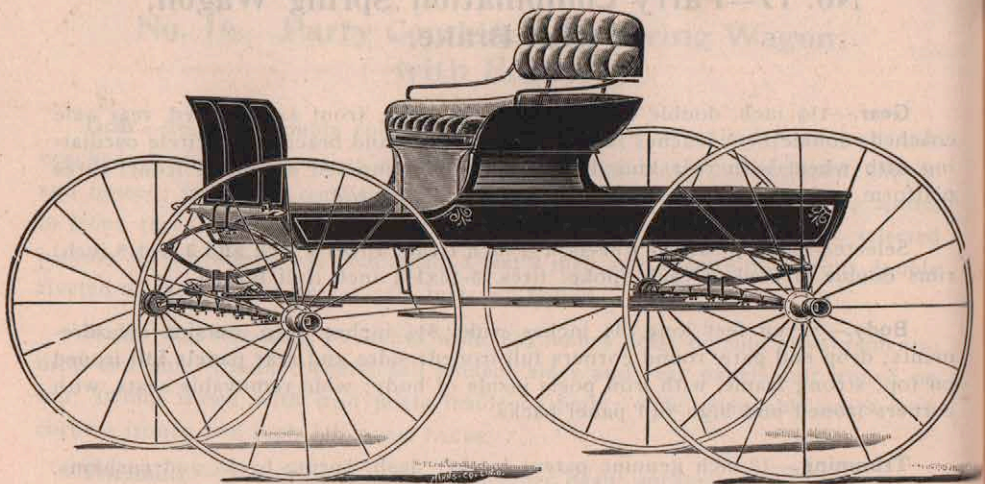




**No. 18—Parry Road Wagon.**

Axles 15-16, fine steel, sarven wheels 40 and 44 inches high, with tires  $\frac{7}{8} \times \frac{1}{4}$  steel; body 24 in. wide; trimming, imitation leather; body, black; gear, red or green with rubber boot and storm apron.

No. 18, with shafts .....	\$50.00
Extra shafts .....	5.00
Extra poles, complete .....	8.00



**No. 19—Parry Road Wagon.**

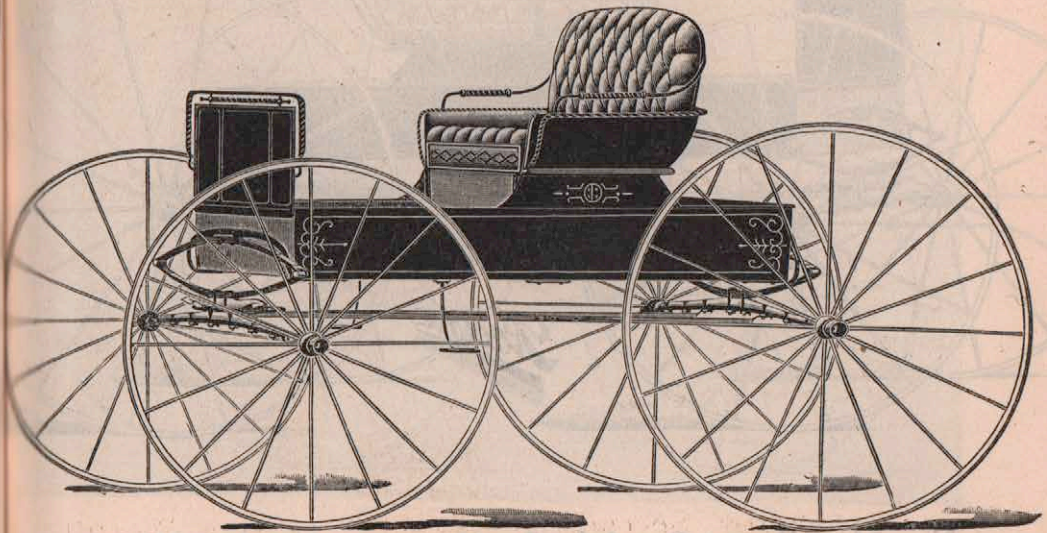
B. grade, open long body road wagon.

Body.—26x72 in., plain black, trimmed imitation leather.

Gear.—Oil tempered elliptic spring in front, Hayes spring in rear; 1 1-16 inch double collar steel drop axles, Wood spring bars, painted Brewster green, sarven wheels 40 and 44 inches high; tires  $1 \times \frac{1}{4}$  inch.

No. 19, with shafts .....	\$65.00
Extra, for shafts, complete .....	5.00





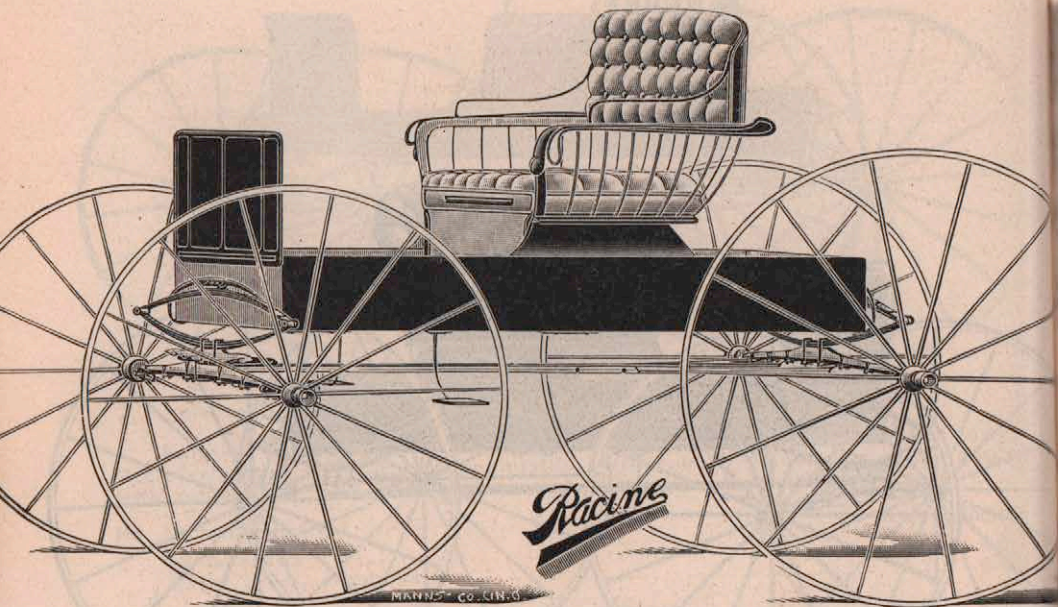
**No. 20—Parry Piano Body Road Wagon.**

**Body.**—24x54 inches, panel back, spring cushion, patent leather dash, swell panels, concave seat risers, painted black and decorated, wood spring bars, rubber storm apron and boot.

**Gear.**—Oil tempered elliptic springs, 15-16 long distance drop axles, reaches, ironed full length; painted Brewster green; wheels, sarven, 40 and 44 inches high; tires 1x¼ full bolted; dark green leather cushion and back; silvered rope pattern arm rests; silvered tufting buttons.

No. 20, with shafts and steel tire .....	\$60.00
Extra for pole in place of shafts .....	3.00
Extra for pole, complete .....	8.00
Extra for shafts, complete .....	5.00
Extra for quick shifters instead of bolts .....	.50





### No. 21.—Parry Special, Gentleman's Driving Wagon.

**Gear.**—Elliptic, open head, oil tempered, easy riding springs; 15-16 inch long distance, dust proof drop axles, full clipped with Norway wrought iron clips, one piece wrought iron Bailey body loops, rear king bolt fifth wheel; reaches full ironed and braced; axle caps perfectly fitted and cemented.

Second growth hickory sarven wheels,  $\frac{7}{8}$  inch tread, 3 feet 4 inch and 3 feet 8 inch; tires,  $\frac{1}{4} \times \frac{7}{8}$  round edged steel, full bolted, quick shifter shaft couplings.

**Body.**—22x54 inches, with steel corners, swell panels, screwed, glued and plugged, concave seat risers, swell spindle stick seat with jockey fenders, iron seat handles, genuine patent leather dash with hand holds in dash, Brewster green leather, spring cushion, seat back trimmed with Brewster green leather, front side panels full ironed.

**Painting.**—Gear, perfection red or Brewster green, three line stripes, felloes striped inside and out; body, plain black.

**Equipment.**—Whip socket, full length carpet and wrench.

Weight, with shafts, 426 pounds.

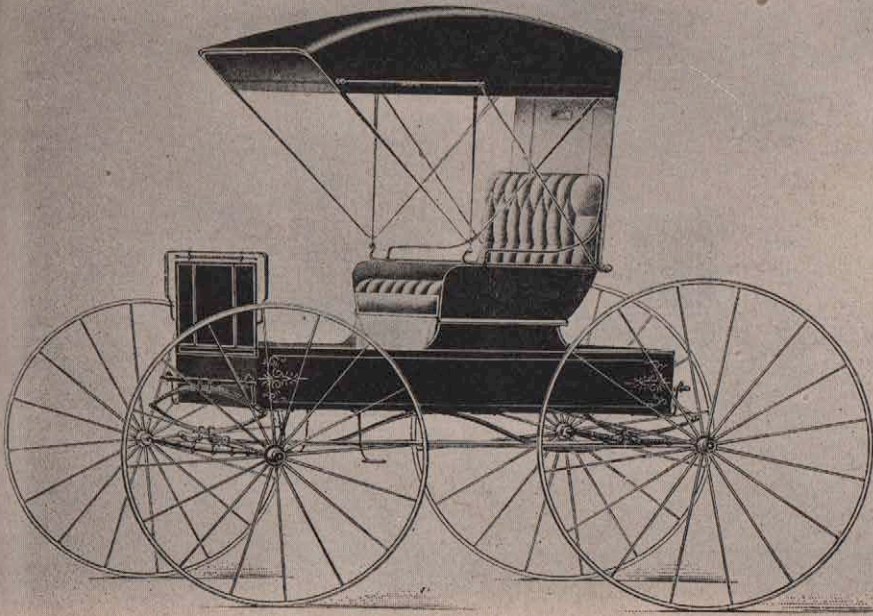
Price, with shafts, only .....\$100.00

**No. 22.**—Same description as above, with solid rubber tires, either perfection red or Brewster green gears.

Price, with shafts, only .....\$150.00

Weight, with shafts, 456 pounds.





### No. 23.—Parry Special Buggy.

**Gear.**—Elliptic, oil tempered, easy riding springs with longitudinal center spring; 15-16 inch double collar swedged steel drop axles; axles full clipped, reaches full ironed and braced; rear king bolt fifth wheel; axle caps cemented. Selected hickory sarven wheels, 1 inch tread, 3 feet 4 inch and 3 feet 8 inch; tires,  $\frac{1}{4}$ x1 round edged steel, full bolted.

**Body.**—24x54, with steel corners, swell panels, screwed, glued and plugged, concave seat risers, padded seat ends; genuine patent leather dash, leather cushion and seat backs; front side panels full ironed.

**Top.**—Four bow, full rubber top, cloth lined, sewed valance.

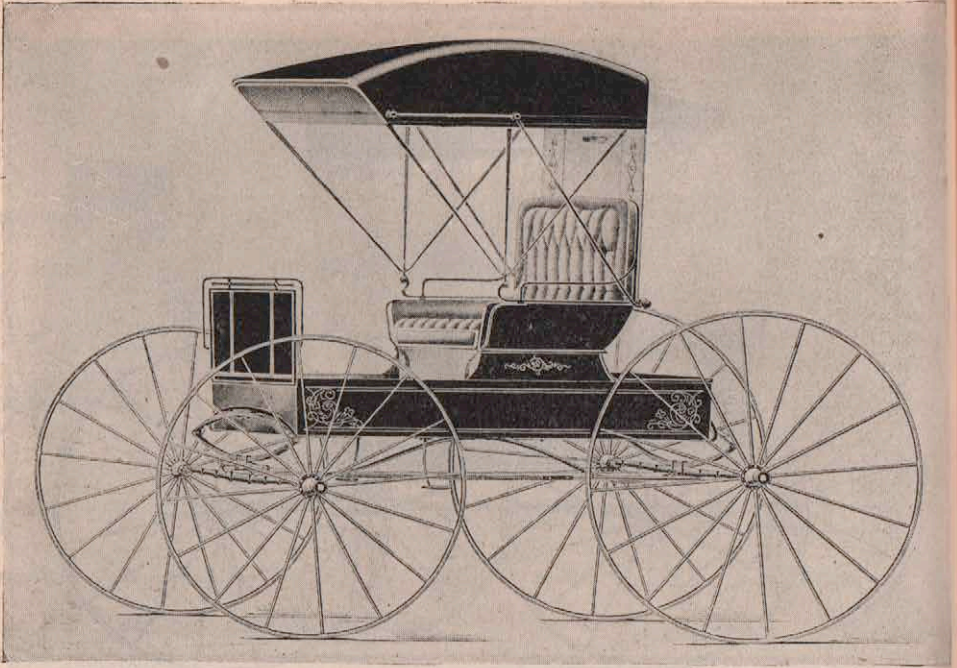
**Painting.**—Gear a fine shade of green or a rich shade of red, neatly striped; body black, neatly decorated.

**Equipment.**—Rubber boot with spiral steel springs, storm apron, whip socket, half length carpet, side curtains and wrench.

Weight, with shafts, 400 pounds.

Price, with shafts, only .....	\$75.00
For Pole instead of shafts, add .....	3.00





### No. 24—Parry Special Buggy.

**Gear.**—Elliptic, open head, oil tempered, easy riding springs with longitudinal center spring; 15-16 inch, long distance, dust proof drop axles, full clipped with Norway wrought iron clips, one piece wrought iron Bailey body loops; rear king bolt fifth wheel; reaches full ironed and braced; axle caps cemented.

Second growth hickory sarven wheels, 1 inch tread, 3 feet 4 inch and 3 feet 8 inch; tires,  $\frac{1}{4}$ x1 round edged steel, full bolted; quick shifter shaft couplings; nickel plated hub bands.

**Body.**—24x54 inches, with steel corners, swell panels, screwed, glued and plugged, concave seat risers, padded seat ends, high spring back and soft spring cushion, genuine patent leather dash, fancy leather cushion and seat back; fancy nickel rail on dash and seat back, nickel handles on seat, front side panels full ironed.

**Top.**—Four bow top, with leather quarters and back stays, rubber roof and curtains, cloth lining, with fancy trimmings in lining, sewed valance; silver plated top prop nuts.

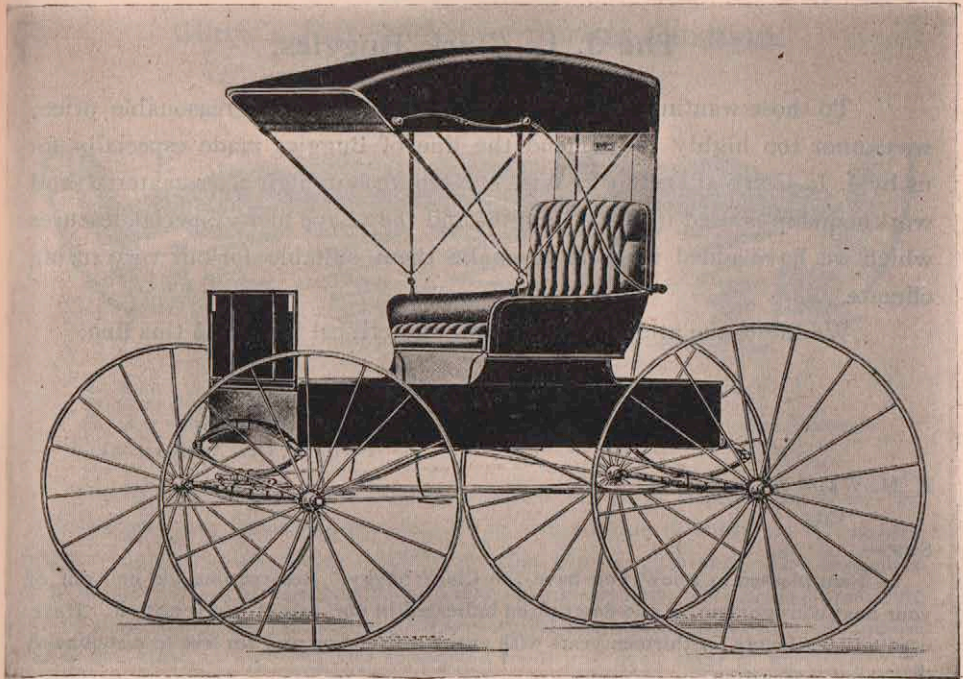
**Painting.**—Gear, perfection red or Brewster green, nicely striped; body, black, nicely decorated.

**Equipment.**—Rubber boot, with spiral steel springs, storm apron, whip socket, full length fancy carpet; inside front panels lined with fancy carpet; side curtains and wrench.

Weight, with shafts, 511 pounds.

Price, with shafts, only .....\$100.00  
 Price, for pole add ..... 3.00





**No. 25— Parry Special Buggy.**

**Gear.**—Elliptic, open head, oil tempered, easy riding springs with longitudinal center spring; 15-16 inch, long distance, dust proof drop axles, full clipped with Norway wrought iron clips; one piece wrought iron Bailey body loops, rear king bolt fifth wheel; reaches full ironed and braced; axle caps perfectly fitted and cemented.

Second growth hickory sarven wheels, 1 inch tread, 3 feet 4 inch and 3 feet 8 inch; tires, 1/4x1, round edged steel, full bolted; quick shifter shaft couplings.

**Body.**—24x54 inches, with steel corners, swell panels, screwed, glued and plugged; concave seat risers, padded seat ends; high spring back and soft spring cushion; genuine patent leather dash, with hand holds in dash; Brewster green leather cushion and seat back, rubber covered steps, front side panels full ironed.

**Top.**—Four bow top, leather quarters and back stays, leather back curtain, rubber roof and side curtains, cloth lining, sewed valances front and rear; bows covered with patent leather.

**Painting.**—Gear, perfection red or Brewster green, three line stripe, felloes striped inside and out; body, plain black.

**Equipment.**—Leather boot, with spiral steel springs, storm apron, whip socket, full length Brussels carpet, inside panels lined with carpet, side curtains and wrench.

A neat and tasty job.  
Weight of shafts, 497 pounds.

Price, with shafts, only .....\$110.00

**No. 26.**—Same description, with solid rubber tires, either perfection red or Brewster green gear.

Weight, with shafts, 510 pounds.

Price, with shafts, only .....\$140.00



## The J. L. Clark Buggies.

To those wanting a strictly high grade Buggy at a reasonable price, we cannot too highly recommend the line of Buggies made especially for us by J. L. Clark at Oshkosh, Wis. Nothing but high class material and workmanship is used in these Buggies and they have many special features which we have added to them to make them suitable for our very trying climate.

We invite the attention of careful and critical buyers to this line:

Portland, Or., April 17, '03.

R. M. WADE & CO.

City

Sirs:—

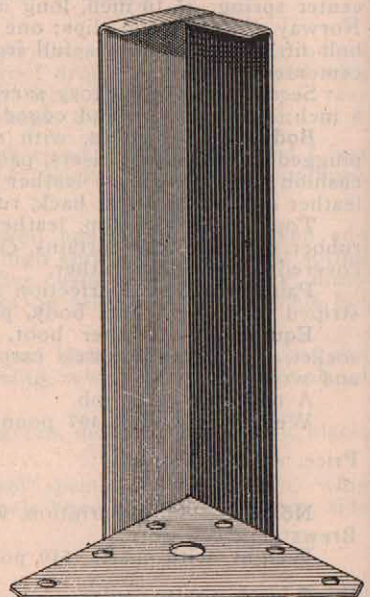
I am pleased to know you have the Clark buggy. Reserve one for me, out of your next consignment, of the description indicated in our recent conversation. Have used a Clark buggy for thirteen years with entire satisfaction and am free to recommend it without reservation.

Yours truly,

R. Kelly, M. D.

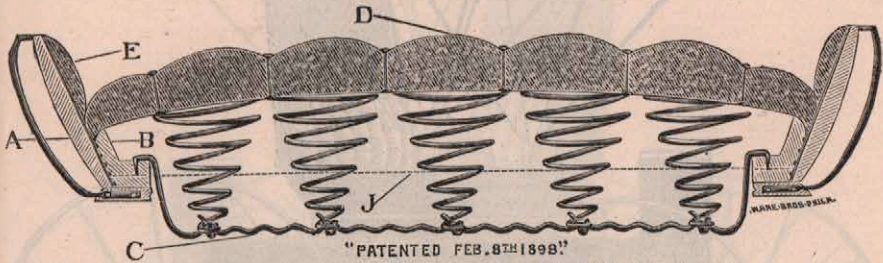
### WADE'S CORNER IRON.

This illustration shows Wade's Extra Wide Pattern Steel Corners, as used on our **J. L. Clark Buggies**. While there are various styles of Corner Irons, it will be apparent that none of them are of equal merit to this one. It is broad enough to afford ample protection to the panels, and in addition has a broad solid foot firmly secured under the bottom of the body at the corners, making the strongest corner protection yet devised.



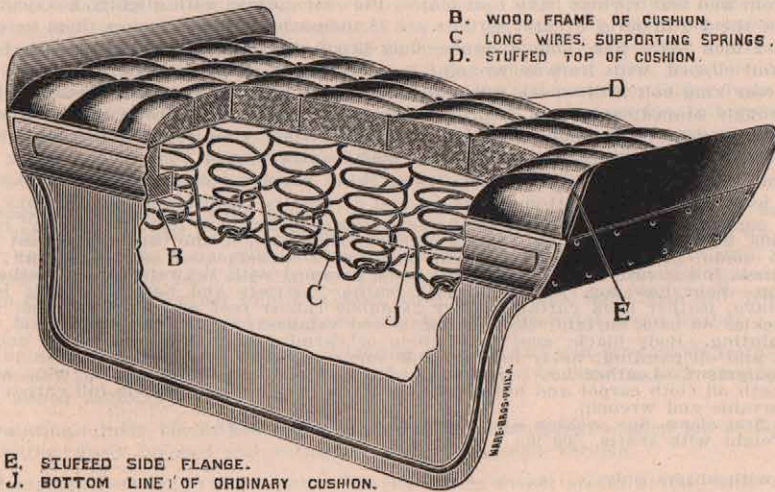


### Clark's Patent Long Spring Cushion.



- |                                    |                                     |
|------------------------------------|-------------------------------------|
| A. SEAT.                           | D. STUFFED TOP OF CUSHION.          |
| B. WOOD FRAME OF CUSHION.          | E. STUFFED SIDE FLANGE.             |
| C. LONG WIRES, SUPPORTING SPRINGS. | J. BOTTOM LINE OF ORDINARY CUSHION. |

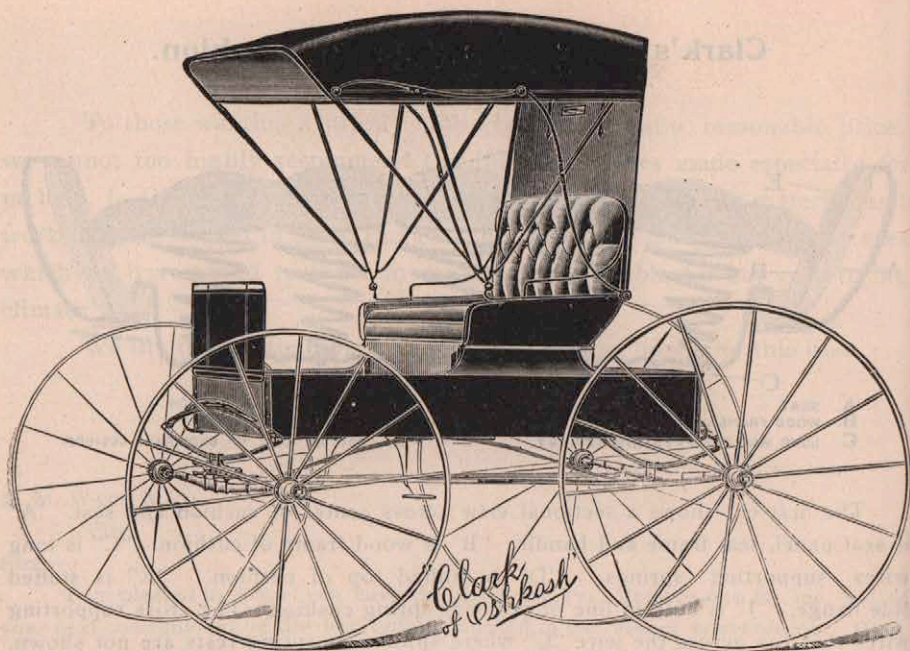
The first cut shows a sectional view across center of cushion and seat. "A" is seat panel, seat frame and handle. "B" is wood frame of cushion. "C" is long wires supporting springs. "D" is stuffed top of cushion. "E" is stuffed side flange. "J" is bottom line of ordinary spring cushion. The cross supporting wires that run across the wire "C" where spiral seat spring rests are not shown. They are same as wire "C" and supported front and back same as wires "C" are.



- |                                     |
|-------------------------------------|
| E. STUFFED SIDE FLANGE.             |
| J. BOTTOM LINE OF ORDINARY CUSHION. |

The second sketch shows a finished cushion, with a part broken out to show sectional construction, and the same letters apply to parts as in first sketch, and shows ends of cross wires supporting springs where they cross the long wires "C."





### No. 27. J. L. Clark Buggy.

**Gear.**—Elliptic, oil tempered, easy riding springs, with longitudinal center spring; both front and rear springs have four plates, the rear springs with slightly heavier plates to cause the job to carry evenly; springs are 38 inches long, which makes them very easy riding; 1-inch extra fine, long distance, dust-proof, fan-tailed drop axles, with felt oil pads; full clipped, with Norway wrought iron clips; one piece wrought iron Bailey body loops; rear king bolt fifth wheel, full braced and with full rear circle; reaches full ironed and strongly braced; axle caps firmly fitted and cemented; high-grade sarven wheels, 1 inch tread, 3 feet 4 inch and 3 feet 8 inch, screwed rims; tires round edged steel 9-32x1, full bolted; quick shifter shaft couplings; shafts extra braced.

**Body.**—25x54 inches, with Wade's extra wide pattern steel corners, fully securing corner joint at sides and bottom, a special and distinctive feature not found on any other buggy; convex panels, heavy sills, strong seat frames and all put together to stay; padded seat ends, high spring back and Clark's patent spring cushion, the best and easiest riding cushion made; patent leather solid foot dash, with nickel plated solid dash rail; front side panels full ironed; cushion and seat back trimmed with Brewster green leather.

**Top.**—Four bow top, with solid rail, leather quarters and non-stretchable leather back stays; leather back curtain; heavy 26-ounce rubber roof and side curtains; straps and buckles on back curtain; cloth lining, sewed valances; curved top prop joints.

**Painting.**—Body black; gear dark green or carmine, with fine striping; a good job of lead and oil painting; finely finished and varnished with good coach varnish.

**Equipment.**—Leather boot, with steel rim nicely fitted; storm apron; whip socket; full length oil cloth carpet and half length Brussels carpet; front panels full carpet lined, side curtains and wrench.

A first-class, fine looking and thoroughly reliable buggy.

Weight with shafts, 500 lbs.

Price, with shafts only.....\$130.00

Price, with pole, add..... 3.00

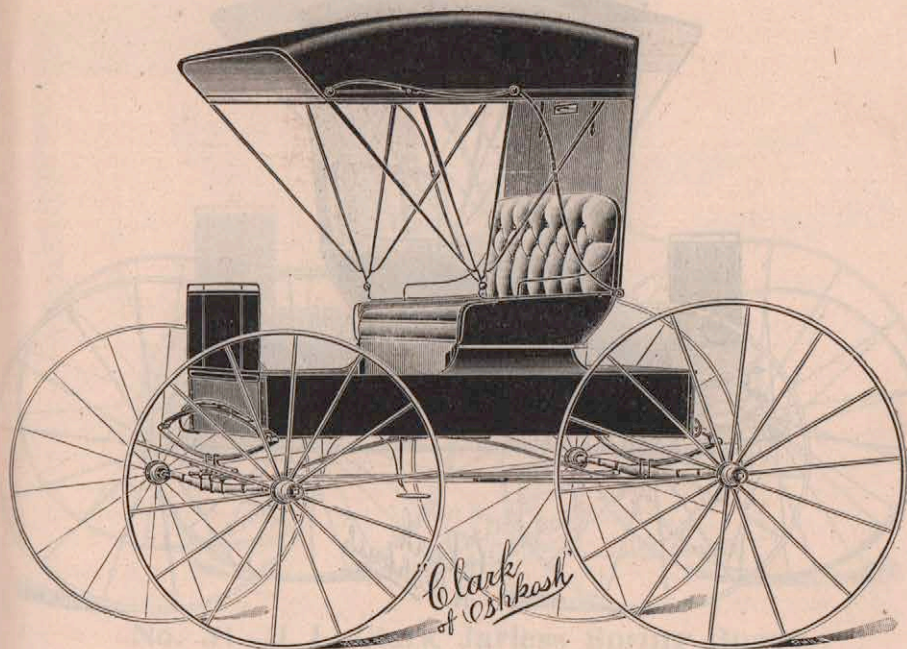
No. 28.—Same description, with  $\frac{3}{8}$ -inch first-class solid rubber tires; either dark green or carmine gear.

Weight with shafts, 530 lbs.

Price, with shafts only.....\$160.00

Price, with pole, add..... 3.00





### No. 29—J. L. Clark Buggy.

**Gear.**—Elliptic, oil tempered, easy riding springs, with longitudinal center spring; both front and rear springs have four plates, the rear springs with slightly heavier plates to cause job to carry evenly; springs are 38 inches long, which makes them very easy riding; 1 1-16 in. extra fine, long distance, dust-proof, fan-tailed drop axles, with felt oil pads; full clipped, with Norway wrought iron clips; one-piece wrought iron Bailey body loops; rear king bolt fifth wheel, full braced and with full rear circle; reaches full ironed and strongly braced; axle caps finely fitted and cemented; high-grade sarven wheels, 1½-inch tread, 3 feet 4 inch and 3 feet 8 inch; screwed rims; tires round edged steel 5-16x1½ full bolted; quick shifter shaft couplings; shafts extra braced.

**Body.**—27x54 inches, with Wade's extra wide pattern steel corners, fully securing corner joint at sides and bottom, a special and distinctive feature not found on any other buggy; convex panels, heavy sills, strong seat frames and all put together to stay; padded seat ends; high spring back and Clark's patent spring cushion, the best and easiest riding cushion made; patent leather solid foot dash, with nickel-plated solid dash rail; front side panels full ironed; cushion and seat back trimmed with Brewster green leather.

**Top.**—Four bow top, with solid rail leather quarters and non-stretchable leather back stays; heavy 26-ounce rubber roof and curtains, straps and buckles on back curtain; cloth lining, sewed valances; curved top prop joints.

**Painting.**—Body black; gear dark green, with fine striping; a good job of lead and oil painting, finely finished and varnished with good coach varnish.

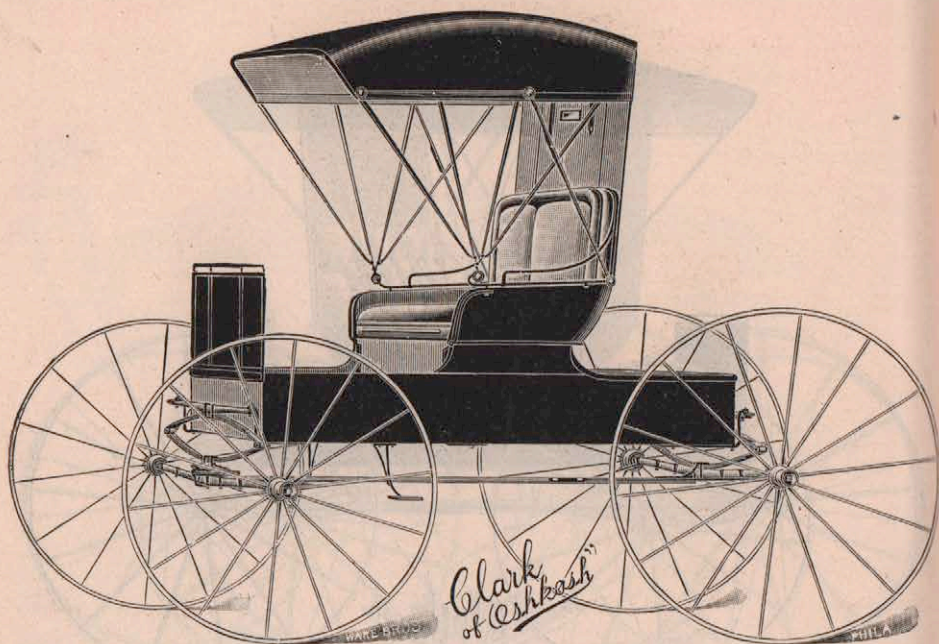
**Equipment.**—Leather boot, with steel rim nicely fitted; storm apron; whip socket; full length oil cloth carpet and half length Brussels carpet; front panels full carpet lined; side curtains and wrench.

The Clark quality, a roomy and very desirable buggy for large or elderly people.

Weight, with shafts, 541 lbs.

Price, with shafts only.....\$140.00





### No. 30—J. L. Clark Buggy.

**Gear.**—Elliptic, oil tempered, easy riding springs; both front and rear springs have four plates, the rear spring with slightly heavier plates to cause the job to carry evenly; springs 38 inches long, which makes them very easy riding; extra heavy selected hickory spring bars; body loops clipped (not bolted) to spring bars; Clark's center body loops, which absolutely prevent end thrust;  $1\frac{1}{8}$ -inch extra fine, long distance, dust-proof, fan-tailed drop axles, with felt oil pads, full clipped with Norway wrought iron clips; single reach, heavily ironed and double braced; large wrought iron fifth wheel with anti-rattler; axle caps finely fitted and cemented; high-grade sarven wheels,  $1\frac{1}{8}$ -inch tread; riveted rims, 3 feet 4 inch and 3 feet 8 inch; tires, round edged steel 5-16x $1\frac{1}{8}$ , full bolted.

**Body.**—28x58 inches, with Wade's extra wide pattern steel corners, fully securing corner joints at sides and bottom, a special and distinctive feature not found on any other buggy; convex panels, heavy sills and panels and a complete inside frame in body; heavy bottom, 12 inches clear room under seat and all put together to stay; seat  $38\frac{1}{2}$ x17 inches, high panels; padded seat ends, high spring back and Clark's patent spring cushion, the best and easiest riding cushion made; patent leather solid foot dash, with nickel-plated solid dash rail; front and rear side panels and rear cross panel full ironed; cushion and seat back trimmed with Brewster green leather.

**Top.**—Heavy four bow top, with solid rail, leather quarters and non-stretchable leather back stays; leather back curtain; extra heavy rubber roof and side curtains; straps and buckles on back curtains; cloth lining, sewed valances; curved top prop joints.

**Painting.**—Body black; gear dark green, with fine striping; a good job of lead and oil painting, finely finished and varnished with good coach varnish.

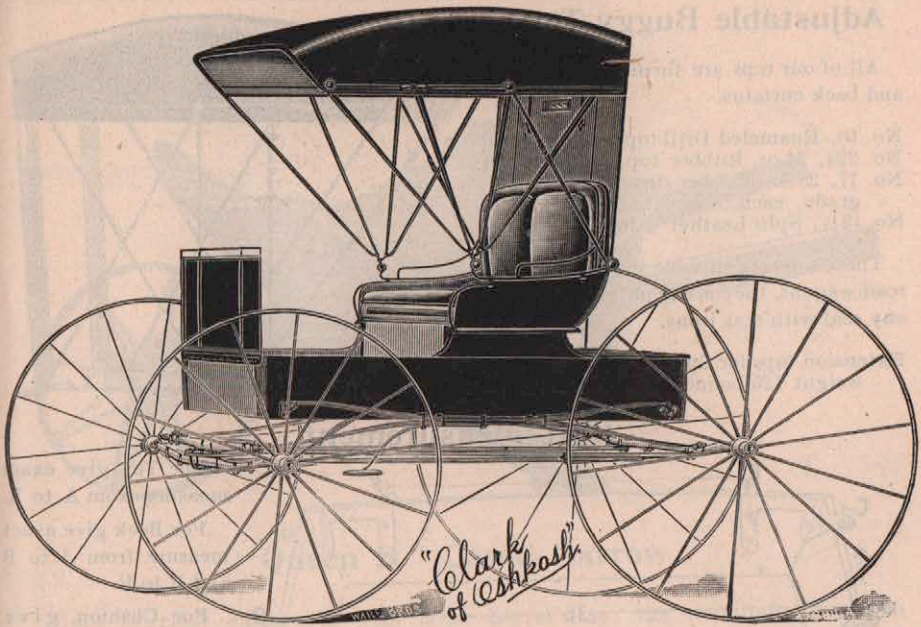
**Equipment.**—Leather boot, with steel rim nicely fitted; storm apron; whip socket; full length oil cloth carpet and half length Brussels carpet; side curtain and wrench.

A first-class, heavy, strong job for two horses for heavy livery work.

Weight, with pole, 625 lbs.

Price, with pole only.....	\$155.00
Price, with shafts, deduct.....	3.00
Extra J. L. Clark shafts.....	10.00
Extra J. L. Clark poles.....	15.00





**No. 31—J. L. Clark Jarless Spring Buggy.**

**Gear.**—Three-reach gear. Reaches full ironed and braced; Jarless springs, an improvement on the well-known Concord style of side springs, carrying more evenly and being free from jar, hence the name "Jarless." Springs hung in loops with full length cross rods on gear and body; 1-inch extra fine, long distance, dust-proof, fan-tailed drop axles, with felt oil pads, full clipped with Norway wrought iron clips; large heavy double fifth wheel with anti-rattler; axle caps finely fitted and cemented; high-grade sarven wheels, 1-inch tread, 3 feet 4 inch and 3 feet 8 inch, screwed rims; tires round edged steel, 9-32x1 inch full bolted; quick shifter shaft couplings; shafts extra braced.

**Body.**—25x54 inches, with Wade's extra wide pattern steel corners, fully securing corner joints at sides and bottom, a special and distinctive feature not found on any other buggies; convex panels, heavy sills, strong seat frames and all put together to stay; padded seat ends, high spring back and Clark's patent spring cushion, the best and easiest riding cushion made; patent leather solid foot dash, with nickel-plated solid dash rail; front side panels, full ironed; cushion and seat back trimmed with Brewster green leather.

**Top.**—Four-bow top, with solid rail; leather quarters and non-stretchable leather back stays; leather back curtain; heavy 26-oz. rubber roof and side curtains; straps and buckles on back curtain; cloth lining, sewed valances, curved top prop joints.

**Painting.**—Body black, gear dark green or carmine, with fine striping; a good job of lead and oil painting, finely finished and varnished with good coach varnish.

**Equipment.**—Leather boot, with steel rim, nicely fitted; storm apron, whip socket, full length oil cloth carpet with half length Brussels carpet; front panels full carpet lined; side curtains and wrench.

A very handsome and comfortable buggy. It only needs to be tried to be appreciated.

Weight, with shafts, 550 lbs.

Price, with shafts only.....\$125.00  
 Price, with pole only..... 130.00

No. 32.—Same as above, but with rubber tires.

Price, with shafts.....\$160.00  
 Price, with pole..... 165.00



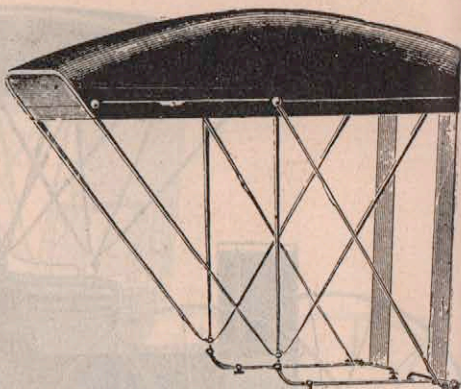
### Adjustable Buggy Tops.

All of our tops are furnished with side and back curtains.

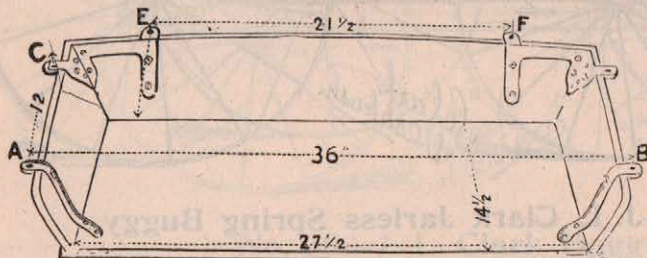
- No. 10, Enamelled Drill top, each... \$10.00
- No. 224, 24 oz. Rubber top, each... 14.00
- No. 17, 28 oz. Rubber top, special grade, each..... 18.00
- No. 12½, Split Leather ¼ top, each 17.00

These tops are suitable for buggies and road wagons, they are readily attached to any seat with seat irons.

Extension tops for Spring Wagons, weight 125 pounds, each..... \$32.50



### Seat Measurement.



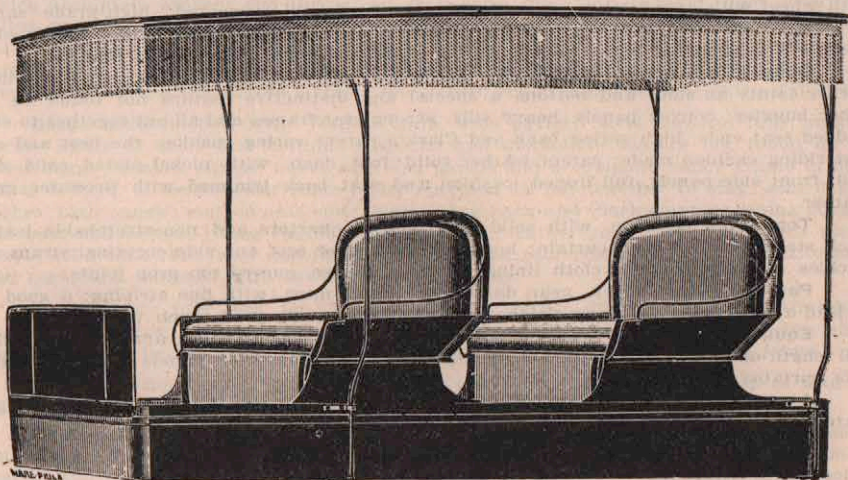
For Top give exact measure from A to B.

For Back give exact measure from A to B and E to F.

For Cushion give exact length and width on bottom.

For Fall give inside width of body.

For Extension Top for Spring Wagon give width of seat, distance from front of front seat to front of back seat. If ironed, give distance between goose-necks of front and back seat. Give difference in height if any.



### Canopy Top for Two-Seat Spring Wagon.

With curtains, weight 100 pounds..... \$24.00

We can furnish on short notice extra canopy tops for any of our Spring Wagons or Surreys.



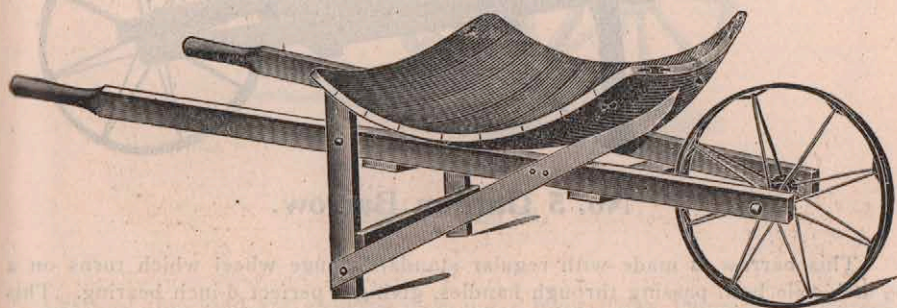


**“Queen B” Canal Barrow.**

Built of clear hardwood, with large barrel tray; the two bolts that run through the tray makes it the strongest barrow known. No nails to pull out and let your barrow come to pieces when you dump it.

Handles, selected rock elm; extra heavy, 16-inch Hubbard wheel; weight, 45 pounds.

Price, each .....\$3.00

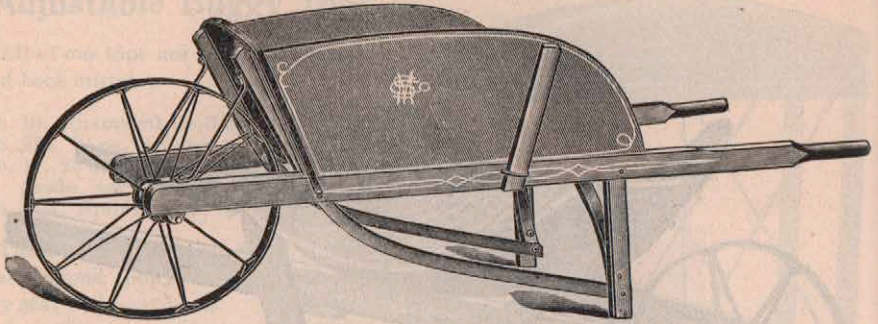


**“I. X. L.” Canal Barrow.**

Similar to the Queen Bee, except it is built lighter; weight 40 pounds.

Price, each .....\$2.75





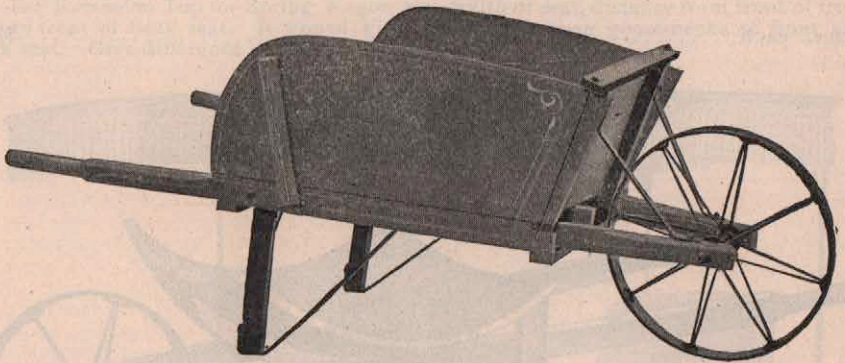
**“Flour City” Garden Barrow.**

Made from selected seasoned hard wood. Light, roomy, well proportioned, strong; bent braces; handsomely painted, striped and varnished. Size of box, front, 19 inches; rear, 24 inches; length, 28 inches; side boards, 12 inches; 19-inch steel wheel; solid steel axle. Packed one in a package.

No. 1, weight 46 pounds .....\$4.00

Extra large size as above, front, 22 inches; rear, 27 inches; length 32 inches; 19-inch wheel.

No. 2, weight 50 pounds .....\$4.25



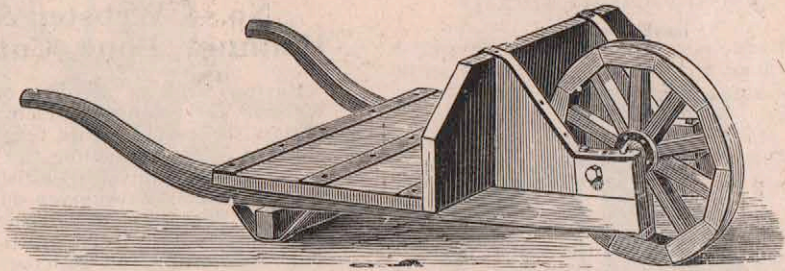
**No. 5 Garden Barrow.**

This barrow is made with regular standard gauge wheel which turns on a 1/2 inch axle bolt, passing through handles, giving a perfect 6-inch bearing. This plan holds the handles together, so that in dumping load the strain is carried on both.

The size of deck is 20 inches at wheel, 24 inches at rear, 26 inches long. It is all well braced. Painted two coats, hand-striped and varnished, and is an easy barrow to set up. Equipped with 19-inch Hubbard steel wheel.

Price, each, weight 42 pounds .....\$3.50

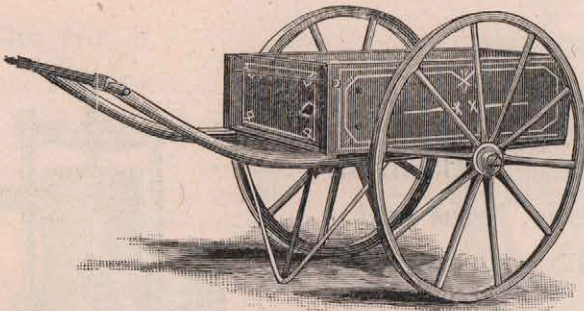




### Bent Handle Stone Barrow.

Handles, 6 feet long; bottom, 26x27 inches; dash, 11 inches high; wheel, 19 inches in diameter.

With Jacobs' patent steel or wood wheel, weight 74 pounds.....\$6.50



### Hand Carts.

Carts of this kind are growing in popular favor daily. Painters, carpenters, bill posters, masons, etc., find they are ahead of anything else for carrying tools and light material. Farmers, too, use them to good advantage about the orchard or garden.

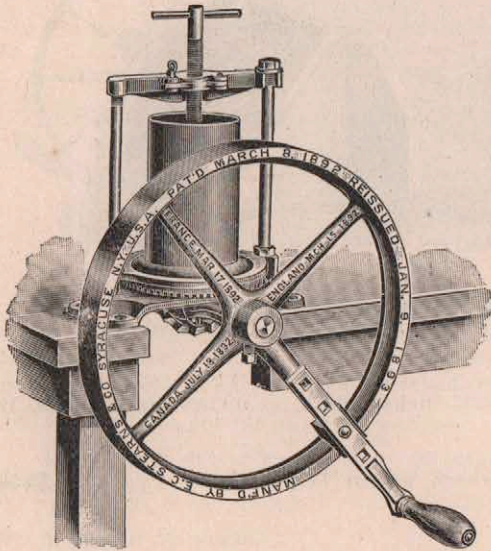
No. 1 wood wheels, 36-inch, axle  $\frac{7}{8}$ -inch, box 40x23x10, weight 90 pounds..\$10.00

No. 2 wood wheels, 30-inch, axle  $\frac{7}{8}$ -inch, box 32x20x9, weight 80 pounds.. 9.00



### No. 4 Webster & Hannum Bone Cutter.

Having sold a number of the Webster & Hannum Green Bone Cutters the past year, we take great pleasure in recommending the same, owing to the universal satisfaction these machines have given our customers. They are well made and easy to operate; will cut green bones with the meat on and not clog. The feed is automatic. We shall be glad to mail to any address manufacturers' circular, giving full description of the machine.



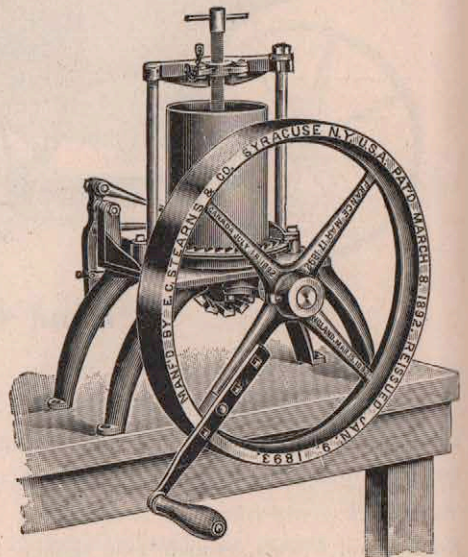
No. 4.

- No. 4 Webster & Hannum Green Bone Cutter with crank only (no fly wheel), weight, 26 lbs..... \$ 7.50
- No. 4 Webster & Hannum Green Bone Cutter with fly wheel, weight, 47 pounds 10.50
- No. 5 W. & H. Green Bone Cutter, same as No. 4, except has a heavier and stronger fly wheel; weight, 60 lbs..... 15.00

### No. 2 Webster & Hannum Green Bone, Meat and Vegetable Cutter.

The No. 2 is of very large capacity and has adjustable feed by which the operator can instantly, without the use of tools, change from fine to coarse work as may be required in cutting bone or vegetables. This machine can be operated either by hand or power. Webster & Hannum Cutters do not clog.

- No. 2 Improved Webster & Hannum Bone Cutter, for either hand or power, weight 56 pounds..... 0



No. 2.

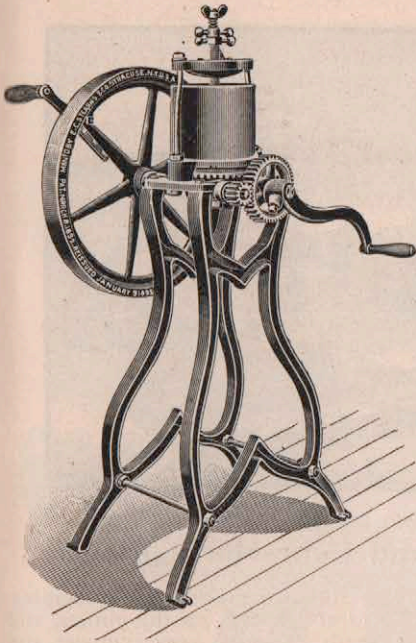


### No. 6—Webster & Hannum Green Bone Cutter.

The No. 6 Webster & Hannum Green Bone Cutter is the best of its kind. One new feature about this machine is its SELF-FEED, feeding itself rapidly when the machine turns easiest. As soon as the bones become compact in the hopper, and just before the machine would turn hard, the feed stops automatically when the pressure of the follower reaches any desired degree. The machine will not turn any harder than it is set for, which is regulated by turning the thumb nut at the top of the follower.

No. 6 Webster & Hannum Green Bone Cutter with fly wheel for bench, weight 50 pounds.....\$18.00

No. 6 Webster & Hannum Green Bone Cutter, with fly wheel on legs, weight 140 pounds..... 22.50



No. 6.

### The No. 3.

The No. 3, the power cutter.

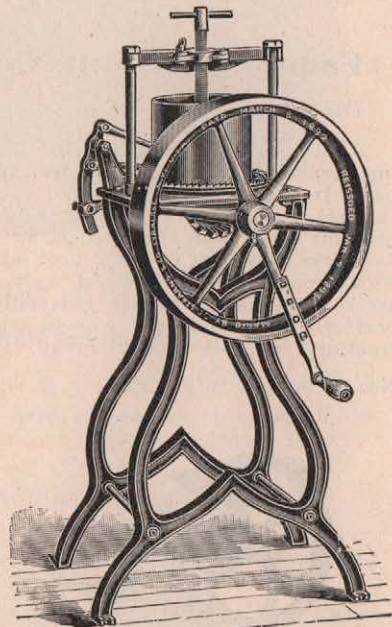
The hopper holds 10 pounds of bone and has a capacity of from 150 to 200 pounds per hour, according to the speed given the machine. It should be speeded at from 250 to 300 revolutions per minute.

If a machine of large capacity is desired, and steam, water or other power is not available, we can furnish this bone cutter with gearing and an extra balance wheel so that it can be operated by two men.

It weighs 260 pounds crated.

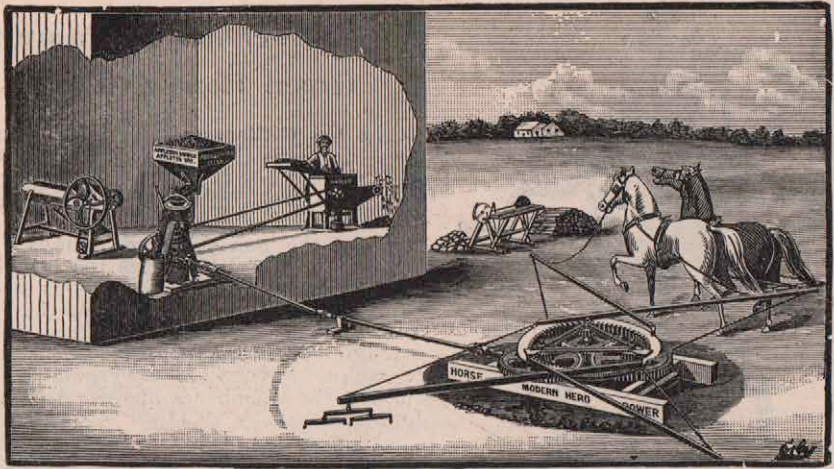
We will guarantee this machine to cut more bone and cut it finer in a given time, and with the same number of revolutions than any other power cutter, although some of them cost twice the money.

No. 3 Bone Cutter, weight 260 lbs. \$50.00



No. 3.





### The "Modern Hero" Two and Four-Horse Power.

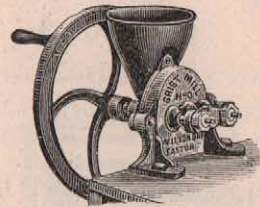
A triple-gearred power constructed on the best-known mechanical principles. It has three bearings on the bull wheel, three central bearings on the pinion, and is exceptionally strong in every part. It runs very light and is very compact and strong. It is particularly adapted for running our Modern Hero Mill. (See opposite page). Speed 56 revolutions to one round of the horses. Tumbling rod turns against the horses.

Hero, 2 or 4-horse power; weight 845 pounds.....\$80.00

### Family Grist Mill No. 0.

Diameter of Hand Wheel, 20 inches.

This mill is especially made for grinding Graham flour or corn meal for table use. It can also be adjusted for cracking the grain if desired. It is a valuable implement to have in the kitchen, as you can have fresh Graham or corn meal when wanted. This mill is not to be compared with those made on the old style coffee-mill principle. The grinding surfaces are of very hard material, especially made for this purpose, and are ground off perfectly true on emery wheels, and will last for years. The shaft is made of steel and will not bend or break.



No. 0 Mill.

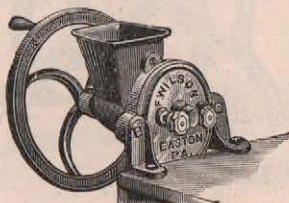
No. 0; weight 30 pounds .....\$6.00

### The Poulterers' No. 1 Mill.

For Grinding dry bones, shells, grain and many other substances for poultry.

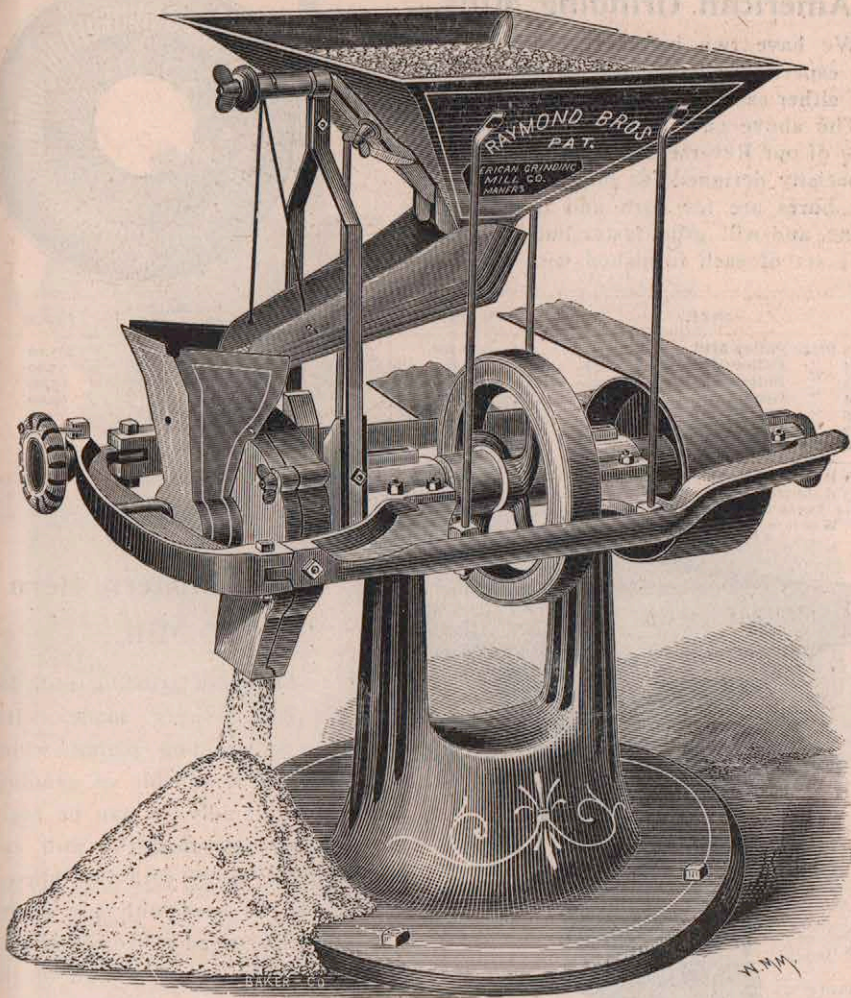
Everyone who raises poultry, even on a small scale, ought to have one. They are made in the very best manner and will last for years.

No. 1, Dry Bone Mill; weight 35 lbs..\$6.00



No. 1 Mill.





## American Grinding Pulley Mill No. 5.

### Why the American Grinding Mills are the Best.

Built of iron and steel, they are durable and do not require frequent repairs.

They do not break when nails and other hard substances enter the burrs, as they are protected by our patent safety break pins, which are made of wood and easily replaced.

The dress of the burrs is such that they will not become clogged, and no grain can pass through without being ground.

One set of burrs will grind from 1800 to 3000 bushels of grain. The wear of a set depends upon the fineness of meal ground.

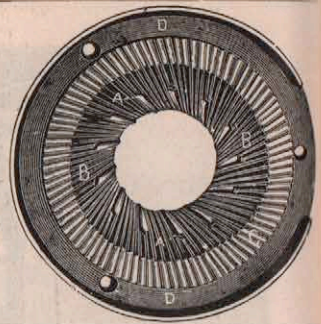
Our shake feed and shoe attachment is a great improvement over other styles of feed, as it allows grain to be fed according to the speed and power, thus avoiding the stoppage of the mill when used with light power.



### American Grinding Mills.

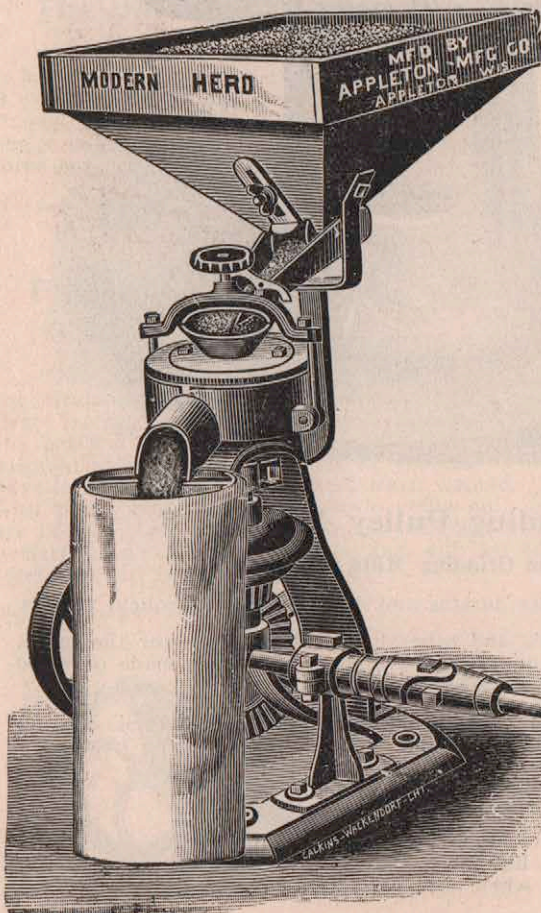
We have two patterns of burrs which are especially adapted for certain purposes, but either can be used for all kinds of grain.

The above cut shows the grinding surface of our Reverse Dress Burrs, which are especially designed for fine grinding. The oat burrs are for corn and oats, or oats alone, and will grind faster but not so fine. One set of each furnished with each mill.



SIZE	WEIGHT	Horse-power Required.	Capacity Bush. p. H'r.	PRICE
No. 3 Prize Pulley Mill.....	240 lbs.	2 to 3	10 to 15	\$35.00
No. 4 " Pulley Mill.....	310 lbs.	3 to 4	15 to 20	55.00
No. 5 " Pulley Mill.....	385 lbs.	4 to 8	20 to 35	65.00
No. 4 " Geared Mill.....	300 lbs.	3 to 4	15 to 20	60.00
No. 5 " Geared Mill.....	445 lbs.	4 to 8	20 to 30	70.00
No. 7 " Double Pulley Mill.....	400 lbs.	8 to 10	30 to 50	80.00
No. 8 " Double Pulley Mill.....	425 lbs.	10 to 12	50 to 75	110.00

No. 1 R, burrs 6 inches in diameter, for No. 3 and 4 mill, per set.....\$2.00  
 No. 3 R, burrs 7 inches in diameter, for No. 5 mill, per set..... 2.50  
 No. 14, burrs 14 inches in diameter, for No. 4 pulley mill, per set..... 2.50  
 When ordering burrs state number and letter on each burr.



### The Modern Hero Mill.

The best grinding mill for sweep powers made. His large grinding plates, which makes it capable of grinding very rapidly, or can be regulated so that the mill can grind nicely with two horses. Can be used with any power with a speed of from fifty revolutions to one round of the horses up to one hundred.

This mill can be run with a belt if desired, or when run with tumbling rod, the pulley can be used for driving other machinery.

It will grind from ten to fifteen bushels of good feed per hour with two horses, and fifteen to twenty bushels with four horses, and do as good work as anyone needs.

Weight, 320 lbs.; price..\$50.00  
 No. 14, burrs, per set... 2.50





### Bowsher's No. 40 Geared Sweep Mill.

Is designed for use with four horses and will turn out the greatest amount of work that can be secured from this amount of power. By a simple change of grinders the same mill is adapted to two horses. The horses are hitched to our patented Tandem Sweeps in spans; the load is equalized, each span must pull its own share and the mill is rotated steadily. Any party who has the number of horses required can go to work without further expense. The mill is mounted on a strong hardwood box, deep enough to permit a bushel basket being placed under the mill. There is plenty of time for the operator to get to and from the mill.

With four horses we guarantee the mill to grind 35 to 40 bushels per hour of ear corn that is husked. Wheat 30 to 35 bushels per hour; shelled corn 35 to 40 bushels per hour; half oats and half shelled corn 25 to 30 bushels per hour. Oats alone 18 to 20 bushels per hour; and it is only necessary to use two horses for this capacity on oats alone. The above figures are the bushels by weight of the unground grain.

It is a difficult matter to give a definite guaranty because capacity depends on so many different features, but the figures above will hold good the way feed is ground by the average feeder. In proportion to the power used this output cannot be excelled by a belt power mill. In grinding fine grain, such as wheat, oats and rye, its performance in all features, as well as in the matter of capacity, is much more reliable and satisfactory than any other sweep mill.

### The No. 20 Geared Mill

Is similar in all respects to the No. 40; so nearly alike are they, except in size, that one set of cuts serve to illustrate both. The No. 20 mill is designed for those who do not desire to use more than two horses and it has capacity corresponding. Grinds ear corn, with or without shuck, and all kinds of small grain. Is fitted with one plain, rigid sweep.

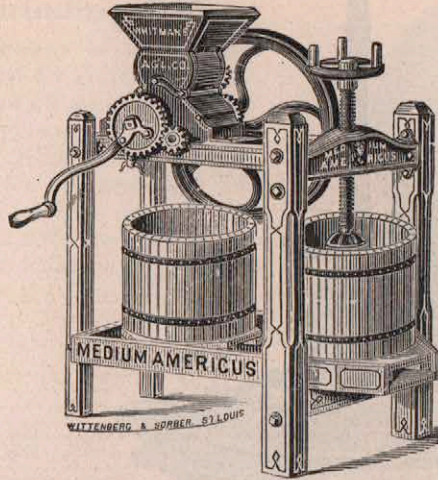
The No. 40 mill is mounted on box, complete with Tandem Sweep, Equalizer and Stay (or guy) rods. Neither doubletrees or singletrees are included in the price. With the No. 40 mill is given free one extra set of grinders of lighter draft, which adapt the mill for use with two horses. The distance from center of mill to the end of the equalizer is 13 feet 3 inches.

The No. 20 mill is mounted on box, complete with single sweep. Neither singletrees or doubletrees are included in price. No extra grinders are given free with the No. 20 mill. Distance from center of mill to end of sweep is 11 feet 4 inches.

### Price List.

No. 40 mill, without tumbling rod attachment; weight 1050 lbs.	\$80.00
No. 40 mill, with tumbling rod attachment; weight 1100 lbs.	85.00
No. 20 mill, without tumbling rod attachment; weight 750 lbs.	55.00
No. 20 mill, with tumbling rod attachment; weight 800 lbs.	60.00
New grinders, 2 pieces, full set No. 20 or 40; weight 30 lbs.	5.00





### The Americus Cider Mill.

Fewer joints and bearings than any other mill. Guaranteed to give the best of satisfaction.

This mill is made in three sizes—Junior Medium and Senior. The Junior Mill will answer the purpose of a small orchard with a limited quantity of cider to make. The Senior will make as much cider as anyone will care to grind and press on a hand-power mill. The Medium is adapted to ordinary wants, being a size midway between the other two. All mills are furnished with iron beams and screws, adjustable throat, adjustable grinding rollers; two slatted, well made tubs go with each mill. The strainer board under the tub allows the cider to pass off freely from the pulp.

#### Points of Superiority.

1st.—The throat is adjustable, thereby adapting it perfectly to all kinds and sizes of fruit.

2d.—The grinding rollers are also adjustable.

3d.—The most perfect grinding apparatus, having the serrated ribs on one roller working against the straight ribs on the other, thus giving a shearing cut and requiring a smaller consumption of power, and also grinding finer than any other mill.

4th.—The strainer board under the tub, allowing the cider to pass off freely from the cheese.

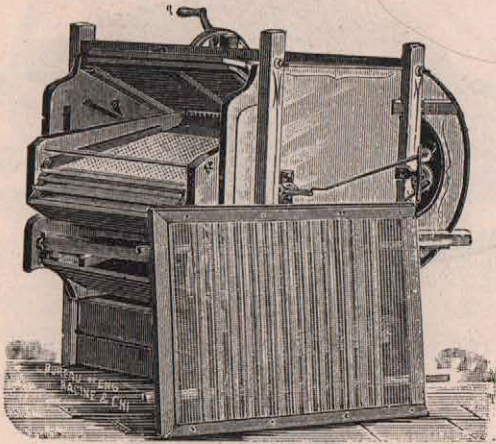
5th.—The most solid and compact Mill and Press.

6th.—The strong iron beam and screw, warranted to stand the severest application of the lever.

The extensive sale of these Mills, and the popular favor they have attained in the past years, are sufficient guarantees of their worth. But years of experience have enabled us to add to their good qualities; and with our present NEW ROLLERS and other improvements in the grinding apparatus, we are warranted in the statement that OUR MILLS WILL GRIND THE FRUIT BETTER AND FASTER THAN ANY OTHER HAND-POWER MILLS IN THE MARKET. We will guarantee them to grind as many apples in a given time, and produce as much cider from a given quantity of apples as any other hand-power mill in America, AND DO IT WITH LESS LABOR.

Senior, with 2 tubs; capacity 4 to 8 bbls. per day; wt. 355 lbs. .... \$45.00  
 Medium, with 2 tubs; capacity 3 to 5 bbls. per day; wt. 235 lbs. .... 32.50  
 Junior, with 2 tubs, for family use; capacity 2 to 3 bbls. per day; wt. 150 lbs. 25.00





### The Mt. Hood Fan Mill.

For cleaning and separating all kinds of grain, we guarantee our mill to be equal to, and in fact superior, in all respects, to any other now in use. It is well known that the wheat berry of Western Oregon and Washington is larger than grows in other sections and that wild oats are accumulating in the fields, and the demand was for a mill that would separate such wheat from wild oats rapidly. To meet this want we sent samples of these grains to our factory to test, and the result was placing in the mill an end shaker sieve, and zinc hurdle, with proper size mesh and holes to suit such work.

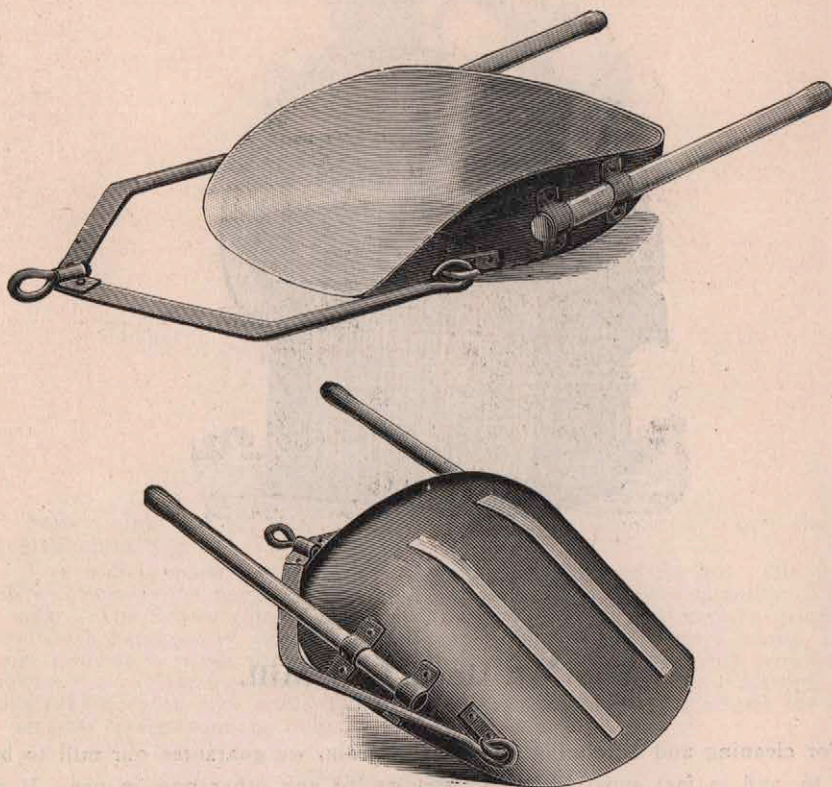
The fan and wind boards are so arranged that the wind strikes the hurdle in such a manner as to blow all foul stuff and light grain over the hurdle. The side spout delivers the No. 1 grain at the side, and the No. 2 grain at the front of the mill. The grader can be so adjusted as to separate and deliver, through the side spout, a greater or less portion of the best grain. The wheat screens and graders are so arranged as to effectually take out cockle, chess or cheat.

Each mill is furnished with one wheat hurdle, one wheat screen and grader, with side spout, one barley sieve and two oat sieves.

Capacity for cleaning, per hour: No. 1, 60 to 90 bushels.

No. 1, with sieves 24 inches wide; weight, 195 lbs. .... \$25.00





## Road Scrapers.

Stamped from a SINGLE piece of SPECIAL STEEL.

It's all Steel, except handles, which are wood.

It has a perfect cutting edge and therefore it fills easily. The back is shaped to prevent the dirt from going over the top of the back while filling.

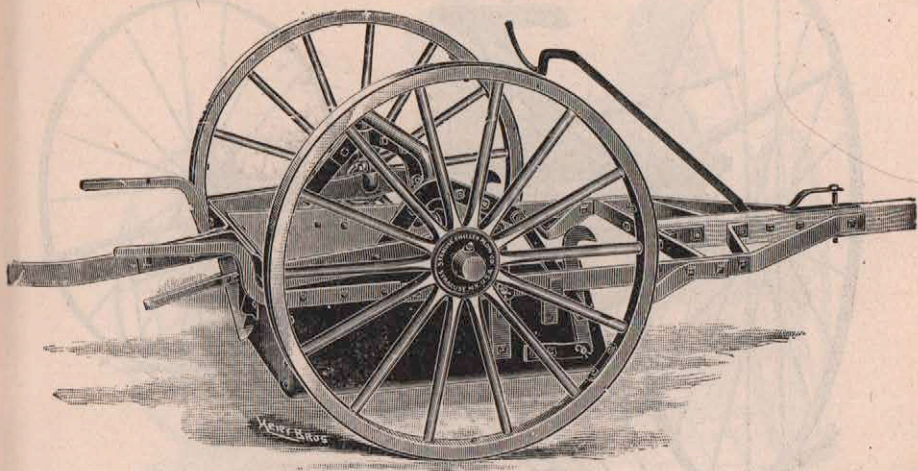
This Scraper carries steadier and loses less dirt in going to the dump than other round-back scrapers.

With steel runners, steel hooks, steel bail and a perfect working steel swivel, this Scraper is a good seller and gives entire satisfaction.

No. 2 carries five feet of earth, and is the best size for all ordinary railroad grading, ditch, farm or road work. No. 1 carries seven feet of earth.

No. 1, with Steel Runners; weight 110 lbs. ....	\$10.00
No. 2, with Steel Runners; weight 105 lbs. ....	9.00





## American Wheel Scrapers.

### Description.

**Wheels**—Best wood hub wheels, made of thoroughly seasoned stock, 42 inches high, with extra heavy tires, 3x3¼ inches. These wheels will outlast the other parts of the scraper.

**Axle**—Of hammered steel. Arched high to give more room for the dirt in filling.

**Tongue**—Best quality of oak, very strongly ironed, with additional brace to draft bars.

**Cross Bar**—Heavy wooden cross bar, which not only serves as a brace to the draft bars, but prevents draft bars from bending down at the corners.

**Draft Bars**—Special Steel. Very strong. Securely braced.

**Bail**—Conforms to shape of the top of the bowl, thus increasing its capacity, and avoiding the difficulty experienced with the old style bail when pulling down the lever.

**Hooks**—The hooks to prevent the scraper from dumping while filling are of ample strength, and carefully adjusted to enable the scraper to fill readily, and at the same time prevent the bowl from going too deep.

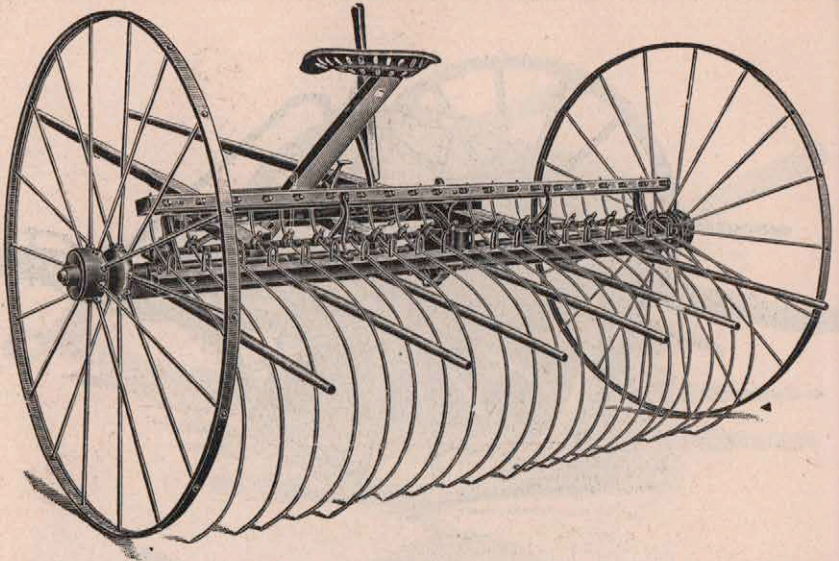
**Sand Excluders** on axles are simple, practical and efficient. No trouble to take wheel off to properly oil the spindles.

No. 2; size, 37 inches by 38 inches, by 13½ inches deep; weight 600 pounds.....\$55.00

No. 3; size, 41 inches long; 44 inches wide, and 16 inches deep; weight 750 pounds..... 65.00

Doubletrees and neckyokes are not furnished with these Scrapers. When ordered we charge extra for them.



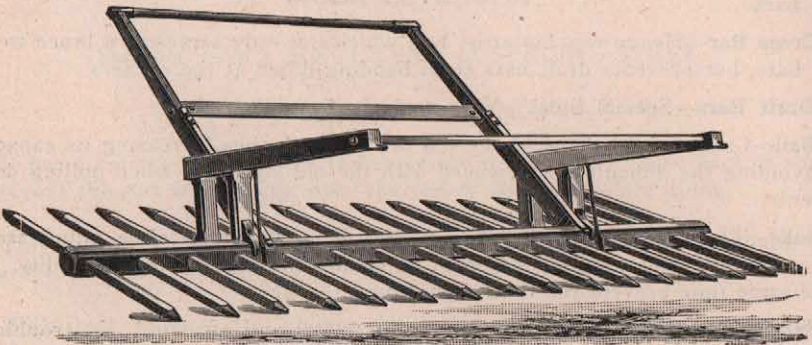


### The Hollingsworth-Tiger Sulky Rake, with Steel Wheels.

So called because it is a combination of the best and distinctive features of the Hollingsworth and the Tiger rakes. It takes from the Hollingsworth its rocker frame and peculiar shaped tooth, with its spiral spring attachment, and unites with it the iron revolving axle and dumping device of the world-renowned Tiger.

- 8-foot Hollingsworth-Tiger Self Dump Rake, with combination pole and shafts, 20 teeth, steel wheels; weight 365 pounds .....\$35.00  
 10-foot Hollingsworth-Tiger Self Dump Rake, with pole, 26 teeth, steel wheels; weight 400 pounds ..... 40.00

In ordering repair pieces for Rakes be sure and state whether for Tiger Rake, Hollingsworth, or Hollingsworth-Tiger Rake.

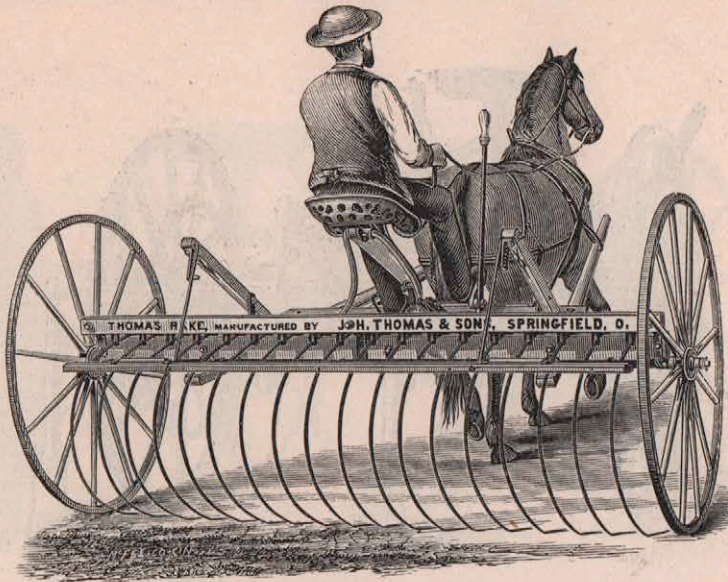


### Bob White Rake.

The Best Revolving Rake made. It is made of select, air-dried oak, ash, maple and hickory. The teeth are square, sharp pointed and made of the best seasoned hickory.

- No. 1 Rake, 9-foot head, 16 teeth; weight 94 pounds.....\$7.50

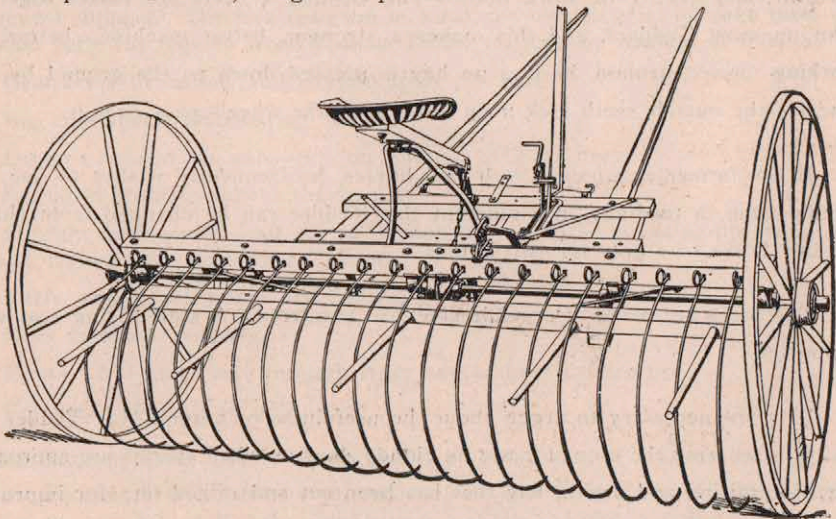




**The "Thomas" Wood Hand-Dump Rake.**

The Thomas Rake has been in the market twenty-eight years, and it is admitted to be one of the best hay rakes ever made. Easy to dump, and the teeth adjust themselves to the ground.

- 8-Foot Hand Dump Wood Frame Thomas Rake, 20 teeth and combination pole and shafts; weight 350 pounds. . . . . \$30.00
- 10½-Foot Hand Dump, Wood Frame Thomas Rake, 26 teeth and combination pole and shafts; weight 375 pounds . . . . . 40.00

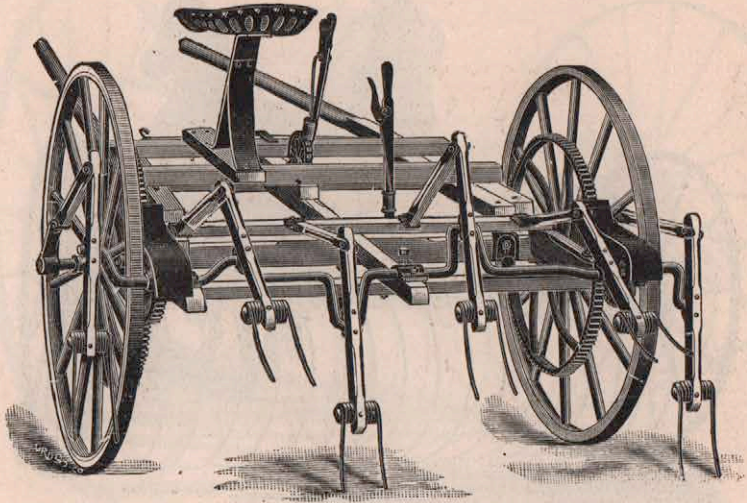


**The "Wood Reliable" Self-Dump Rake.**

**With Loose Coil Teeth.**

- We also have the All-Steel Reliable Rake.
- 8-Foot All-Steel Reliable Self-Dump Rake, 20 teeth; wt. 350 lbs. . . . . 30.00
- 9-Foot All-Steel Reliable Self-Dump Rake, 23 teeth; wt. 375 lbs. . . . . 35.00
- 10½-Foot All-Steel Reliable Self-Dump Rake, 26 teeth; wt. 400 lbs. . . . . 40.00
- 8-Foot Wood Frame Reliable Self-Dump Rake, 20 teeth; wt. 350 lbs. . . . 30.00
- 9-Foot Wood Frame Reliable Self-Dump Rake, 23 teeth; wt. 375 lbs. . . . 35.00
- 10½-Foot Wood Frame Reliable Self-Dump Rake, 26 teeth; wt. 400 lbs. . . . 40.00





### The "O. R. C." Wood Frame Hay Tedder.

THE "O. R. C." TEDDER is unexcelled for strength and durability, ease of draft, and quality of work done. The Ground Wheels are closer together than on most Tedders, and this makes a stronger, better machine; better for working uneven ground, besides no hay is pressed down to the ground by the wheels—the outside teeth kick it up loose after the wheels pass over it.

If the farmer is mowing with two horses, he frequently wishes to use the double team in tedding; in a moment this Tedder can be changed from shafts for one horse to a pole for two horses.

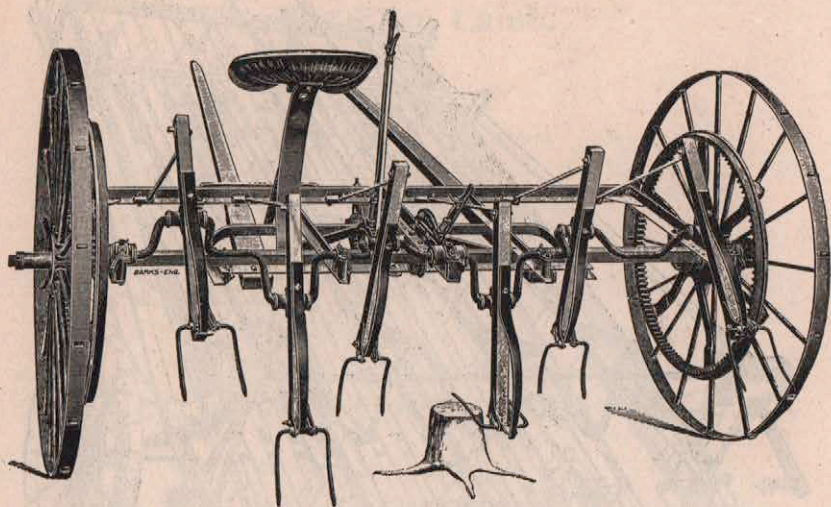
The forks are made of crucible steel, oil tempered. A steel spring seat well supported.

It is not necessary to argue about the usefulness of a good Hay Tedder for speed in securing the crop; for use on cloudy days or when storms are approaching; for raising and drying hay that has been cut and rained on; for improved quality of the hay for feeding or selling; for use in air drying.

"O. R. C." Tedder, 6 forks, with combined pole and shafts; wt. 470 lbs. . . \$48.00

"O. R. C." Tedder, 8 forks, with combined pole and shafts; wt. 525 lbs. . . 55.00





### Thomas Steel Frame Hay Tedder.

The cut shows the general appearance. The frame is made of extra heavy steel angle bars. The wheels are extra heavy steel, with large channel out tires to prevent slipping. The fork arms are of wood, the best material to make them of. In other parts the regular Wood Thomas Tedder features are retained as follows:

Gear lever in center, and worked from the seat.

Big cog-wheels fastened to hub.

Driver's weight on axle—not on horse's back or neck.

Spring in front to relieve the frame.

Straight fork—long fork spring, which allows forks to raise up from the ground higher than any other Tedder.

Extra wide crank boxes and bearings.

Nuts fastened securely.

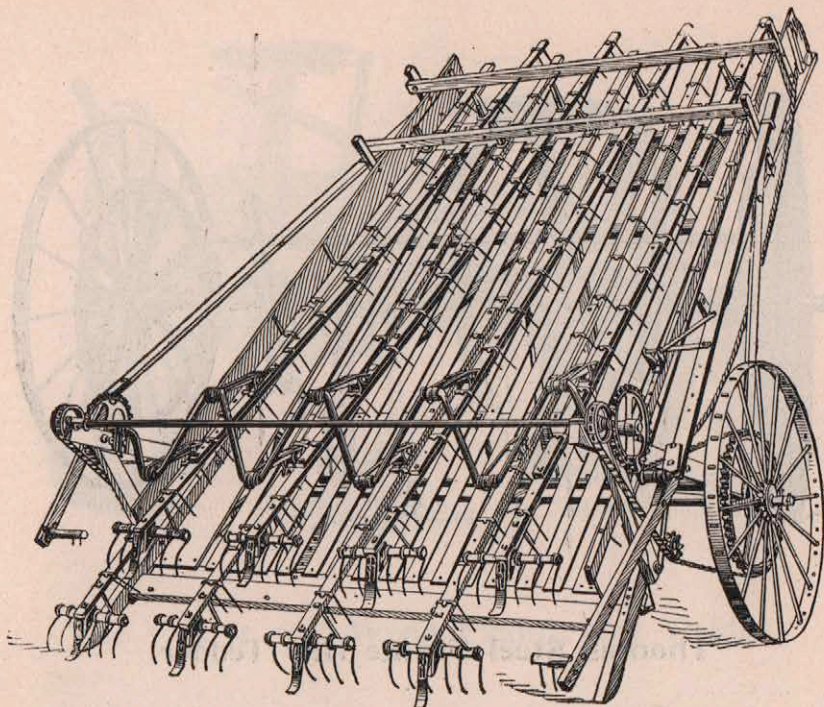
Heavy steel axle clear through from one wheel to the other.

Combined shafts and pole.

6-Fork Thomas Steel Tedder, combination pole and shafts; wt. 610 lbs...	\$55.00
8-Fork Thomas Steel Tedder, combination pole and shafts; wt. 665 lbs...	60.00
6-Fork Thomas Wood Tedder, combination pole and shafts; wt. 525 lbs...	55.00
8-Fork Thomas Wood Tedder, combination pole and shafts; wt. 600 lbs...	60.00

In ordering repair pieces for "Thomas Tedders," be sure and state whether they are for Plain Thomas Tedder, or for Thomas Royal Tedder, and whether Steel or Wood Frame.





## The "Thomas" Hay Loader.

**Complete, Durable, Successful.**

The cut shows its general appearance. It is well braced in front and rear and will stand the strain a loader is bound to get in heavy hay.

It is simple, too—has direct gearing, from drive wheel to crank, without any intermediate gear. The small sheave wheel below the chain is used as a belt tightener.

It rakes 8 feet wide, runs on metal wheels, and having a slow crank motion, is light draft.

The crank is hung in a box supported in a ball and socket joint, so the boxing adjusts itself to any spring of the shaft, avoiding the friction and wear of a solid box.

It is good looking—painted handsomely with the best of material, and finest workmanship, it makes a good appearance, and does its work like a first-class loader ought to. Takes hay direct from the swath, don't need to rake it into windrows, and while it will rake and load from light windrows, it is not made for a windrow loader.

Has a cross chain, so the chain will more nearly wind around the gear wheel and run steadier and give better power. It won't come off.

Thomas Hay Loader; weight 1100 lbs. .... \$100.00



## The Ellen Lamb.

---

No doubt you all have read about  
The lamb that Mary had,  
But not about Miss Ellen's lamb,  
Which soon went "to the bad."

Well, Ellen's lamb was little, too,  
When the poor thing was found,  
Tuck'd in the corner of the fence  
Upon the frozen ground.

But Ellen warm'd him by the stove,  
And fed him some warm milk,  
And then she rubb'd his woolly coat  
Which was as fine as silk.

When well, the milk of Texas cows  
And the wild cactus pear  
Were all the foods he car'd to eat,  
And they became his fare.

Ellen comb'd his silky wool,  
And painted his feet red,  
And swip'd all of her Ma's bay rum  
To perfume his head.

The lamb made a most wonderous growth,  
And soon became a sheep,  
With two monstrous rainbow horns  
And fog-horn voice deep.

He first attack'd the poultry,  
Then cattle he would chase,  
And next he smashed the fences down  
Around the Ellen place.

Then he charged over the prairie,  
With gladiator airs,  
On a still hunt for buffaloes  
Or some big grizzly bears.



### The Ellen Lamb—Continued.

---

He thought he was L. Napoleon,  
Corsica's stem winder,  
When lo, he spied upon the road  
A Deering Steel Binder.

Returning with blue ribbons from  
Great trials at the fair,  
And quite promptly he tackled it  
Exactly then and there.

And soon his big horns went flying  
High o'er that binder's reel,  
Smoothly swiped off by the sickle  
Of that machine of steel.

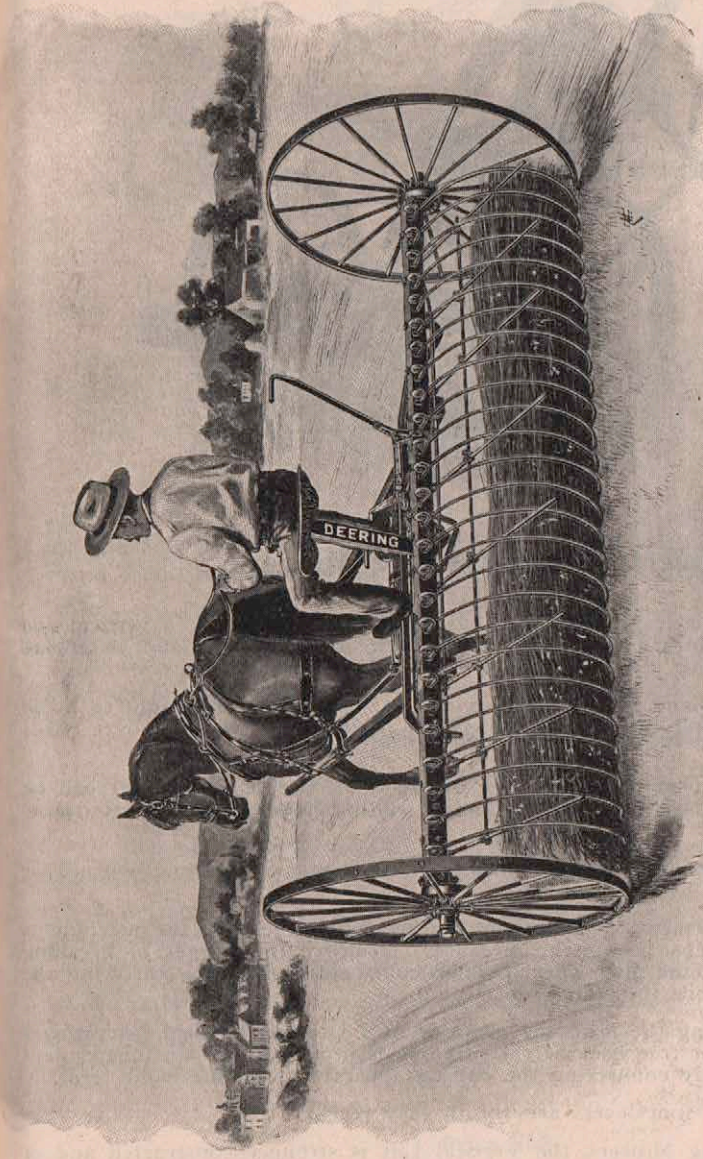
And now his head bone is lying  
Bleaching in the weather.  
And tanners have his skin to make  
Some fine calf-skin leather.

The Binder made a bundle neat,  
Of his wool, soft and fine,  
And tied it tight with Wade & Co.'s  
Long fiber Binder Twine.

Then the wool was mixed with cotton,  
And the hair of pigs and goats.  
To sell to honest farmers in  
Fine "all-wool" overcoats.

And Ellen sold the mutton for  
One dollar and a quarter,  
And blew it in for chewing gum  
And cold soda-water.





All Ideal Rakes except the eight-foot sizes are built with a substantial truss rod, which prevents springing and greatly strengthens the axle.

The Ideal Rake wheels are interchangeable, can be used upon either side of the rake, and are provided with renewable sleeves that can be replaced at small expense.

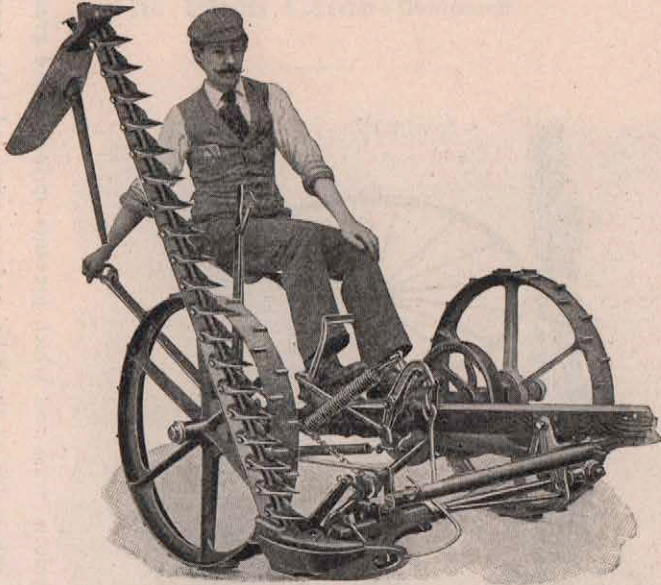
**Hand Dump.**

- 8-foot, 20 teeth, weight 348 pounds; price .....\$25.00
- 9-foot, 24 teeth, weight 360 pounds; price ..... 27.50
- 10-foot, 26 teeth, weight 385 pounds; price ..... 30.00
- 12-foot, 30 teeth, weight 500 pounds; price ..... 35.00

**Horse Dump.**

- 8-foot, 20 teeth, weight 348 pounds; price .....\$32.50
- 9-foot, 24 teeth, weight 360 pounds; price ..... 35.00
- 10-foot, 26 teeth, weight 385 pounds; price ..... 37.50
- 12-foot, 30 teeth, weight 500 pounds; price ..... 40.00





### Deering Vertical Lift Mowers.

The Deering Vertical Lift Mower has two distinct lifts, viz: a vertical and a horizontal lift, which adapt it especially for work on stumpy land, in groves and on hill sides.

By the use of hand and foot levers, the bar can be lifted upright to avoid high obstructions and can be latched in that position for traveling over roads and bridges.

To turn corners or pass over low obstructions, the horizontal lift can be employed by pressing the foot lever and so raising both inner and outer ends of the bar.

The outer end of the bar can be lifted independently of the inner end. This action is controlled by the hand lever.

All of the aforementioned motions are accomplished while the machine is in action; an immense advantage, because it removes the danger of breaking clutches or teeth in the gear wheels, which could easily result by throwing the mower into gear while the team is in motion.

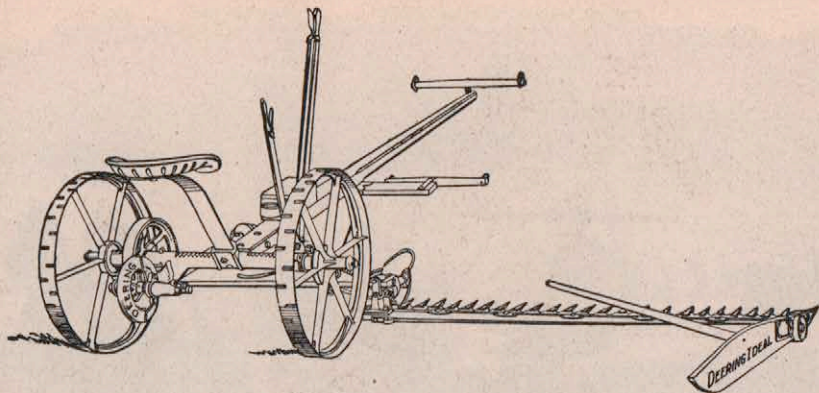
Without checking the team the operator of a Deering Vertical Lift Mower can pass a stump or tree because the machine is provided with an independent lifting spring directly connecting the cutting apparatus with the hand lever.

Both hand and foot levers are within easy reach.

Like all Deering Mowers, the Vertical Lift is strongly constructed and of extremely light draft, being thoroughly equipped with the famous Deering bicycle bearings.

4½-foot Deering Ideal Vertical Lift Mower; weight 645 lbs.....	\$57.50
5-foot Deering Ideal Vertical Lift Mower; weight 650 lbs.....	60.00





## Deering Ideal Mower.

The extraordinary demand for the Deering line of Ideal Mowers is unprecedented in the annals of harvesting machine manufacture.

They are manufactured at the Deering Works at the rate of more than 600 per day.

The Ideal Mowers were the first to be equipped with roller and ball bearings and possess so many genuine points of merit as to make them the leading and favorite mowers of the world. The sickles of all Deering Mowers give a full stroke from the center of one guard to the center of another.

The Ideal Giant Mower and the Ideal One-Horse Mower share in the popularity of the regular Ideal Mower, and the new Deering Vertical-Lift Mower is a favorite with farmers who have not yet cleared their lands, as it is a machine that can be depended upon.

### Please Notice the Following Features.

1. Unusually light draft and noiseless action, due to bicycle bearings and the direct and positive action of gears, crank shaft and pitman.
2. Unusual strength and durability, due to excellence of materials and workmanship, simplicity of parts and provisions for preventing wear.
3. Serrated Ledger plates, which enable the Ideal to cut grasses that completely baffle all other mowers.
4. Horizontal crank-shaft and pitman, and vertical crank-wheel, causing the incomparable pitman to move back and forth like the piston of a locomotive.
5. Adjustable drag bar that keeps the cutter-bar in line, the knives in register and at the same time protects the pitman.

Furnished either with wood or steel pitman.

### Price List.

Ideal Deering two-horse Mower, cuts 4½ feet; weight 645 pounds.....	\$ 55.00
Ideal Deering two-horse Mower, cuts 5 feet; weight 650 pounds.....	57.50
Ideal Giant Deering two-horse Mower, cuts 5 feet; weight 760 pounds....	65.00
Ideal Giant Deering two-horse Mower, cuts 6 feet; weight 770 pounds....	67.50
Ideal Deering Reaper, cuts 5 feet; weight 1000 pounds.....	110.00





### Deering Ideal Binder.

The machine shown on this page is the Deering Ideal Binder. It is the out-growth of years of earnest effort by the world's greatest experts in this line. Under the most trying conditions the Ideal Binder has emerged triumphant. No harvest has yet been found so difficult as to try its capacity. Its fame has penetrated to the furthestmost ends of the civilized world and has made the name "Deering" a household word in all quarters of the globe.

In the evolution and perfection of the Deering Binder, the farmer has played no small part. Its manufacturers attribute much of the success this machine has achieved to practical suggestions received from the agriculturist.

They endeavored to adapt and develop his practical ideas, to improve parts that he had found wanting, and to make changes where he thought they were necessary or advantageous. The result is the modern and perfect Deering Binder.

The Deering Harvesters were the first machines to be equipped with roller and ball bearings, and to Deering belongs the credit for their introduction.

Deering rollers and balls are manufactured with the utmost care and painstaking; when finished, they are perfect and true and fit to be used in operating the finest mechanism. The rollers are constructed of high carbon steel and the balls of the finest hardened crucible steel. So well and favorably known has the Deering method of constructing these bearings become that they are quoted by many manufacturers of high-grade machinery in designating the highest standard of excellence possible to attain in this line.

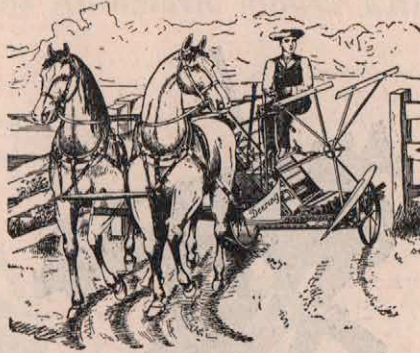
Even mechanical experts have been amazed at the extreme strength and enormous capacity for work exhibited by the Deering machines when taken in connection with their extreme lightness of draft.

Deering Self-Aligning Bushings, within which the roller-bearing cages are carefully fitted, hold the crank and gear shafts in position. These shafts readily adapt themselves to every position without binding.

If necessary the bushings can be easily removed and replaced.

The Deering Elevators have sixty-seven inches of clearance, ample to handle the largest grain that grows. Curved canvas slides allow the canvasses to expand when the straw is unusually thick and the journey of the heaviest grain from platform to binder-deck is accomplished without crowding or threshing.





### Deering Ideal Binder.

The machine shown on this page is the six-foot Ideal jointed platform, with platform coupled up for traveling on the road. Carried in the six-foot size only.

The Deering Main Wheel is practically a one-piece wheel.

The supporting truss of the main wheel is made from the finest steel joined together by means of hot rivets and held securely to the finger-bar by five 1½-inch steel bolts. It is a tension spoke wheel, the spokes being riveted both in the hub and tire. The tire is corrugated and has its edges turned up, thus forming ribs that give the stiffest tire consistent with weight and strength and a tire that is admirably adapted to carry the machine over stones, stumps and other rough places. The main wheel is supported in its frame by two main-wheel hangers, which permit the raising or lowering of the machine to suit the crop conditions. This is accomplished by means of a worm wheel and worm hung from the axle by a malleable casting which forms a shield for worm and wheel, completely enclosing them and shutting out mud and dust.

A loose platform canvas is frequently the source of considerable annoyance. It disarranges the grain and carries it in disorder to the elevators, contributing to an ill-shaped bundle in addition to binding the rollers and incurring heavy draft. Dew or rain will loosen a platform canvas which is often of necessity exposed to the weather. Ready relief is afforded by a convenient self-regulating platform canvas adjuster spring, which keeps the canvas at the proper tension and by means of which it can be loosened or tightened instantly. A small, handy lever controls the device.

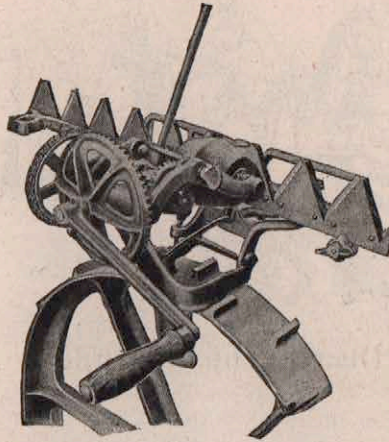
Perfectly down grain is successfully harvested by the Ideal Binder, which can be adjusted by means of its perfect tilting device to handle badly lodged fields. The machine is so nicely balanced that the driver is able to maneuver it with great facility by operating a convenient lever within easy reach of his right hand. This lever is located close to the driver's seat instead of away in front of machine. Many tilting devices have been constructed so clumsily and their location made so inaccessible as to render almost useless an otherwise good machine. All that is asked for the Deering tilting device is a trial. It will demonstrate its own advantages.

However quickly the condition of the grain may vary, the machine can be made to instantly conform to every change. Any height of stubble is possible with this adjustment.

The Deering Knotter, introduced in 1883, is the oldest knotter in existence. It is an unfailling tyer, positive of action, and an economizer of twine; it represents, as it has from the first, the acme of knotter perfection; it is absolutely free from complicated parts and perfectly adjustable; the amount of twine and time it has saved farmers is almost incalculable.

Deering Ideal Binder, 6-foot jointed platform; weight 1630 pounds.....\$170.00  
Deering Ideal Binder, 7-foot rigid platform; weight 1650 pounds..... 175.00





### Deering Ideal Knife Grinder.

The Deering Ideal Knife and Tool Grinder is a useful machine for the farm, shop, or kitchen. It possesses several novel features peculiar to it alone. Three movements can be employed in its operation, viz: the automatic, the rocking, and the hand movement. It will grind a sickle made of sections of different sizes and shapes. It imparts a bevel equal to new, grinding the sections from point to heel. It grinds out nicks and broken edges. It can be easily attached to mower wheel, bench, or table. By substituting a flat stone for the sickle stone it can be transformed into a tool grinder, which will grind cutlery, the axe, the plowshare, the plow-point, the harrow-disc, in fact any tool about the farm, shop, or kitchen which requires sharpening. By the use of a narrow stone it will gum a cross-cut saw. The field of the Deering Ideal Knife Grinder's usefulness is very extensive. It is one of the best-paying investments a farmer, blacksmith, butcher, or house-keeper can make.

Ideal Knife Grinder; weight 35 pounds .....	\$7.50
Bevel face stones .....	1.50
Flat face or tool stones .....	1.50



Found in all Deering Ideal Machines.



## The Bolens Automatic Mower Knife Grinder.

The Bolens Automatic Grinder, illustrated in Fig. 1, is the result of years of experience in the sickle grinding business. It will grind a sickle perfectly and completely, from heel to point and from end to end. It will do its work quickly and above all, automatically.

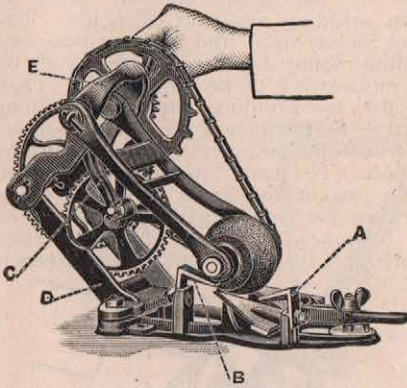


Fig. 1.

The Adjusting Gauges "A" and "B" when properly set will prevent the stone from grinding away the point of the sickle, or into its heel. The machine is adjusted for new sickles, but by raising or lowering these gauges it can be adjusted to fit any sickle, old or new. "A" lifts stone at heel of section and "B" at point.

The Upright Standard "D" rides on a pivot and is fastened to base by a bolt on either side. The purpose of this is to adjust the machine so as to grind with equal weight on both sides of section. If stone should grind too heavy on one side, you have only to loosen the bolt on that side of standard "D" and correspondingly tighten the bolt on opposite side until stone runs square on sickle sections.

The Automatic Bar "C," connecting the Bail "E" with the Lever Cog Wheel, is a most important feature of the machine, as it furnishes the automatic movement to the grinding stone. By this means, when the machine is operated, the stone is made to pass rapidly backward and forward over the sickle, grinding it equally in all parts—and all the operator has to do is to turn the crank. With this machine it is absolutely impossible to take the temper out of the knives of section, no matter how fast you turn, as the stone does not stop at any point on the knives long enough to heat or burn them. The pressure of the stone on knives is governed entirely by weight, and the sickle section is fastened at such an angle to base that the pressure of stone on knives is exactly right. There is no delicate spring to get out of order, and no possibility of injuring knives by too great a hand pressure.

Fig. 2 illustrates manner of operating when grinding a nick out of sickle knife. To do this, Automatic Bar "C" is first removed by slipping it from the lugs. Then sickle bar is moved so as to bring nick nearly under center of stone. Then you grasp Bail "E" with one hand, hold the stone on nick, and a few turns of the crank will do the rest.

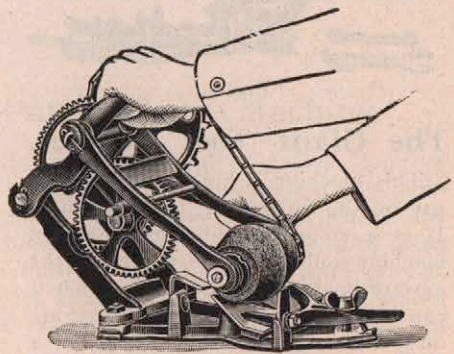


Fig. 2.

For further description see page 93.

Bolens Sickle Grinder, with one stone .....	\$ 7.50
Bolens Sickle Grinder, with two stones .....	10.00



## The Bolens Automatic as a Tool and Knife Grinder.

For Prices See Page 121.

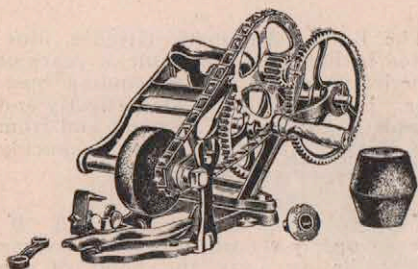


Fig. 3.

Fig. 3 shows the machine set up for tool or knife grinding. The Automatic Bar "C" has been removed, same as when grinding nick out of sickle. The bevel Sickle Stone and the small journal holding same have been removed by the unscrewing of the shaft bolt. Then the flat tool-grinding stone and a long journal, that comes with each machine, have been put in place and screwed tight by bolt. The small sprocket wheel and chain remain the same as when using machine for sickle grinding and need not be taken off when making change from sickle to tool grinder. The wrench

has then been hooked on a lug projecting from right side of base, and the frame holding stone supported thereon. This places the stone in a perfectly rigid position and makes an ideal machine for grinding knives and tools. The tool-grinding stone is 4 inches in diameter and 1 inch thick. Fig. 4 represents the tool grinder in operation and shows it from the opposite side.

A great feature of this machine is, that

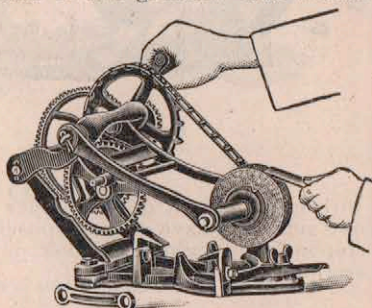


Fig. 4.

the tool grinding stone can be operated in three different positions. first, as shown in Fig. 4; second, as shown in Fig. 5, with frame thrown partly back so as to bring stone directly over body of machine; and, third, with frame thrown entirely back, bringing stone about a foot to the rear of base of machine.

For Prices See Page 121.

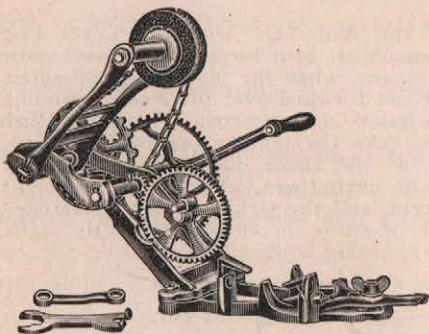
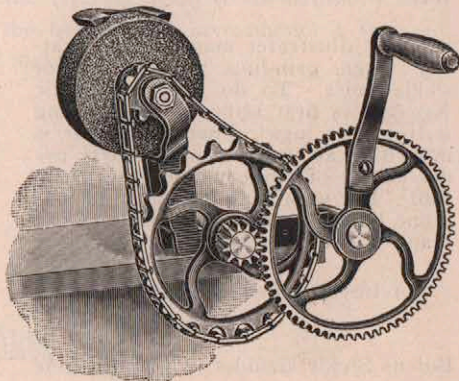


Fig. 5.

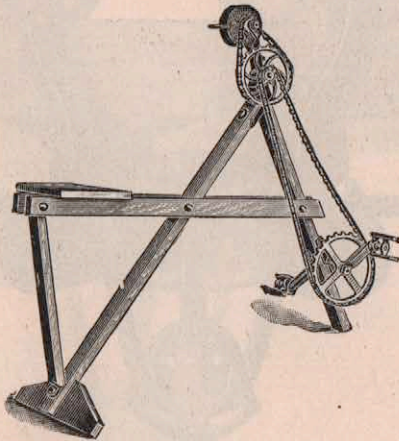
## The Giant Tool Grinder.

This machine is built especially for use on the farm or in the workshop. It is a strongly built and powerful machine and its special feature is the extraordinary high speed at which it can be run. You can grind anything on it from a pen-knife to an axe or a plow share. It is universal in its usefulness. The emery stone is 1 1/4 inch in thickness and 4 inches in diameter.



The Giant Tool Grinder, with one stone .....\$2.50





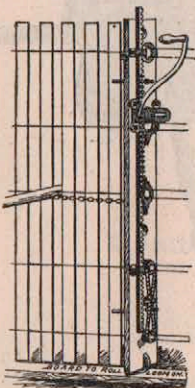
**The Bi-Pedal Sickle and Tool Grinder.**

This machine is suitable for grinding plow and cultivator shovel points, axes, scythes, knives and any grinding, sharpening or polishing a farmer has to do.

Bi-Pedal Sickle and Tool Grinder; weight 38 pounds .....\$8.50  
 Emery Saw Gummer Wheel, extra ..... 1.25



Spring Colters, 100 assorted in box; per box.....\$1.00



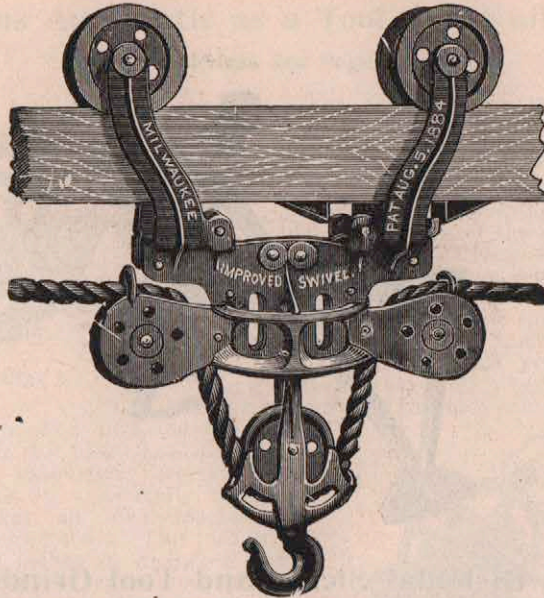
**Lowden's Patent Fence Machine.**

This machine will weave any kind of pickets, long or short, thick or thin, sawed or split. It will twist any number of cables from 2 to 5, and pickets can be placed any distance apart. The loom weighs only 35 pounds, thus being adapted to work on hillsides as well as on level ground. The tension device (not shown) is the simplest and easiest regulated device ever invented, and it holds the wires taut and even.

The wires can be stretched from 40 to 100 rods, and woven that distance without cutting in sections.

Price .....\$12.00





**Milwaukee Improved Double Swivel Hay Carrier.**

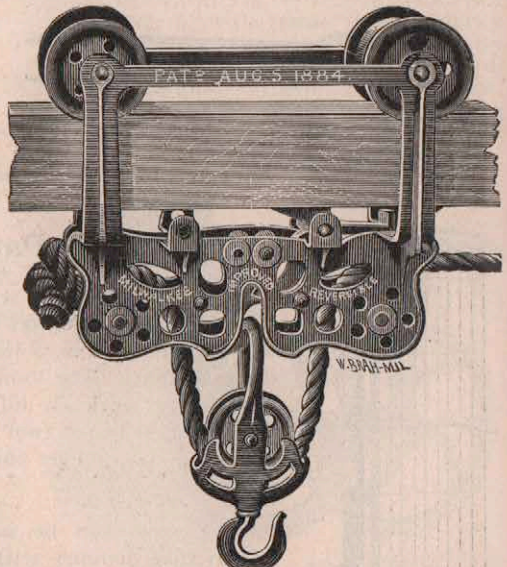
Our Double Swivel Hay Carriers are the best working Carriers placed upon the market. They have but two pieces in the lock, which makes it a positive lock.

All that is necessary to work it either way, is to take off the pulley from end of barn and place same on opposite end of barn. Do not unstring rope from other pulleys. This simple method saves annoyance and time.

Wood Track Swivel Hay Carrier; weight 33 pounds .....\$5.00  
 Extra Stops ..... .25

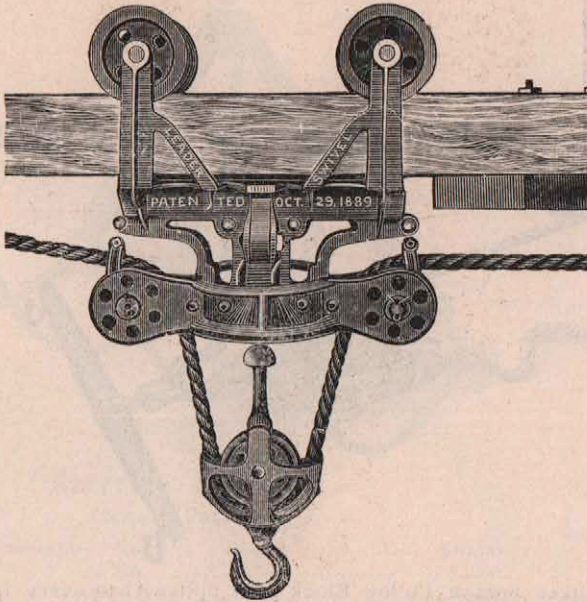
**Milwaukee Improved Reversible Carrier.**

This Carrier will run on 4x4, 3x4 or 2x4 track, and will work either way from the stop without change—as it will pass the stop to right or left as well. All that is necessary to work it either way, is to draw the main rope through and hitch to the end extending in the direction you wish to draw your hay.



Wood Track Reversible Hay Carrier; weight 30 pounds .....\$4.50  
 Extra Stops ..... .25



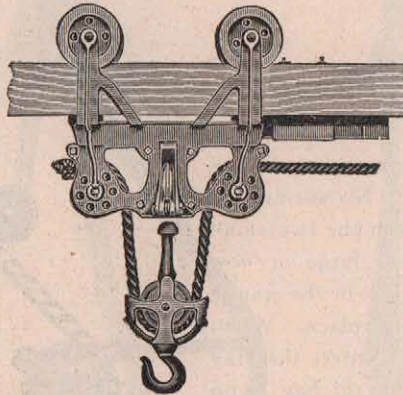


**New Leader Double Swivel Wood Track Hay Carrier.**

Patented October 29, 1889.

The best Hay Carrier on the market, the knob fork pulley being a positive lock, the large funnel-shaped opening allows the knob to catch the lock every time; works on the same track as the Milwaukee Carrier.

Wood Track Leader Swivel Carrier, weight 23 lbs.; price .....\$5.00



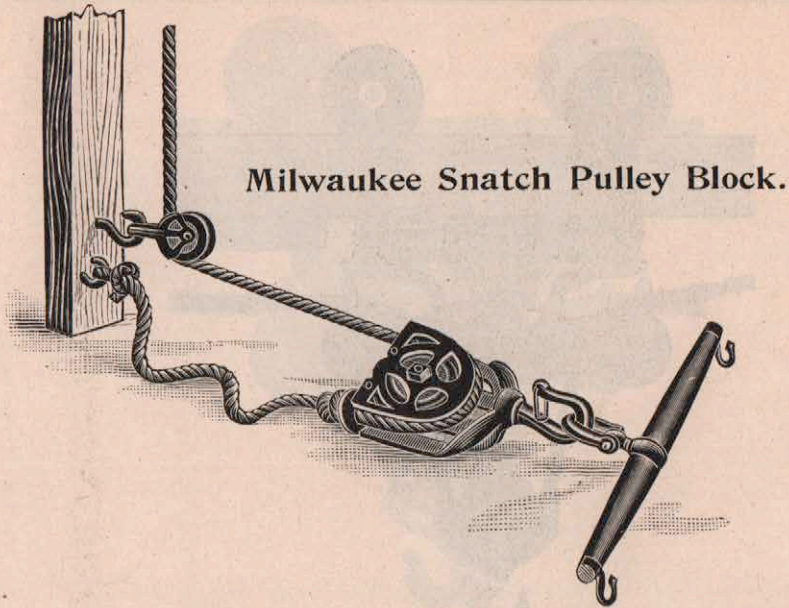
**Leader Reversible Wood Track Carrier.**

Patented October 29, 1889.

Leader Reversible Wood Track Carrier. Uses the same knob catch as the Leader Swivel. Works on same track as the Milwaukee Improved Reversible Carrier. Positively the best Reversible Carrier made.

Leader Reversible Wood Track Carrier, weight 30 lbs.; price .....\$4.50





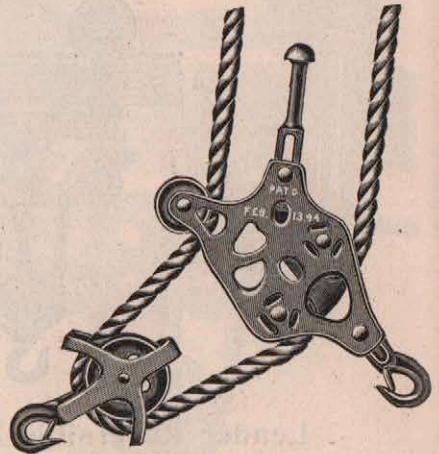
### Milwaukee Snatch Pulley Block.

The Milwaukee Snatch Pulley Block is a pulley that every farmer should have if he has a Hay Fork and Hay Carrier. This device shortens the travel of the horse without reducing the elevating power. Tie a knot in the rope and put washer in front of the knot so that when the hay is going up the horse has a direct pull; but when the Carrier is unlocked and the hay begins to move along the track, the rope doubles around the snatch pulley attached to the whiffletree; you will see that the horse travels only one-half the distance the hay is carried, a great saving; also the rope can be thrown off of the snatch pulley and fork be instantly returned to the load without waiting for the return of the horse.

Snatch Pulley Block for Hay Carrier; weight 10 lbs.....\$1.00

### Sling Pulley.

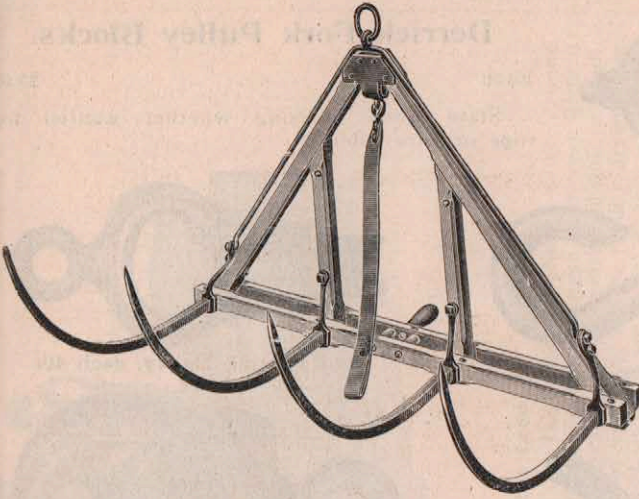
Our Sling Pulley is the best and simplest pulley on the market. It has two pieces in the lock. No springs on same. Its lock is between the two small pulleys. No matter how large or how small the amount of hay is in the wagon sling, it will lock at any place. When the knob of Sling Pulley enters the Hay Carrier, the entire weight of hay is on this knob and draws the lock against the rope between the two pulleys, and when



load is dumped and Hay Carrier is returned and strikes the stop block, the knob drops and the Sling Pulley is unlocked and is ready for another load. The Pulley shown above is made for our Leader Carriers. If wanted for Milwaukee Reversible or Milwaukee Swivel Carriers, in ordering Sling Pulley mention same, for the Milwaukee Reversible Carrier has a large loop instead of a knob, and the Milwaukee Swivel Carrier has a small loop instead of a knob.

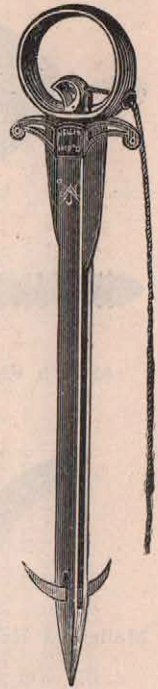
Sling Pulley; weight 10 pounds .....\$3.00



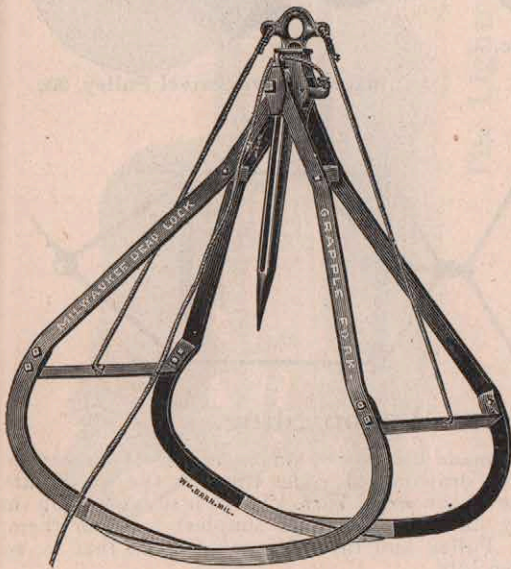


**Derrick Forks.**  
Jackson Pattern.

3 feet, 4 tine, weight	42 lbs.....	\$10.00
3½ " 4 " "	46 lbs.....	11.00
4 " 4 " "	46½ lbs.....	12.00
4½ " 4 " "	47½ lbs.....	14.00
5 " 6 " "	62 lbs.....	15.00
5½ " 6 " "	63 lbs.....	16.00
6 " 6 " "	65 lbs.....	17.00

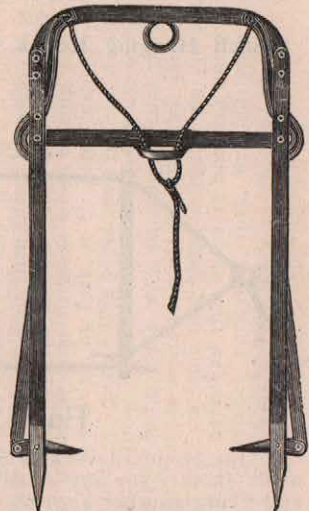


**Nellis Hay Fork.**  
Weight, 14 lbs... \$2.80



**Grapple Forks.**

4-tine Grapple Fork, weight,	40 lbs.....	\$ 7.50
6-tine Grapple Fork, weight,	50 lbs.....	10.00

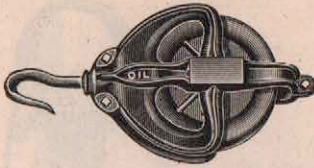


**Double Harpoon Hay Fork.**

Weight 18 lbs.....	\$1.50
Double Harpoon Hay Fork, with tines, 6 inches longer, weight 21 lbs.....	2.00

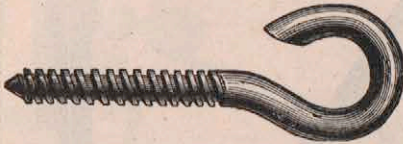


### Derrick Fork Pulley Blocks.

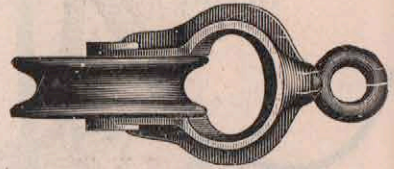


Each .....\$5.00

State when ordering whether wanted for rope or wire cable.



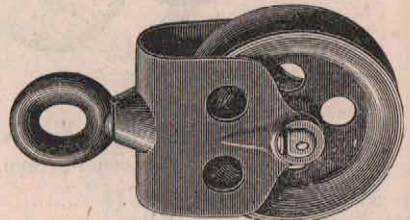
3/4-inch Floor Hooks, each 10c.



Knot Passing Pulley, each 40c.



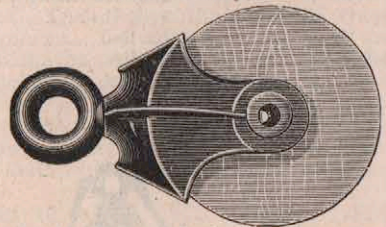
Malleable Rafter Brackets, each 10c.



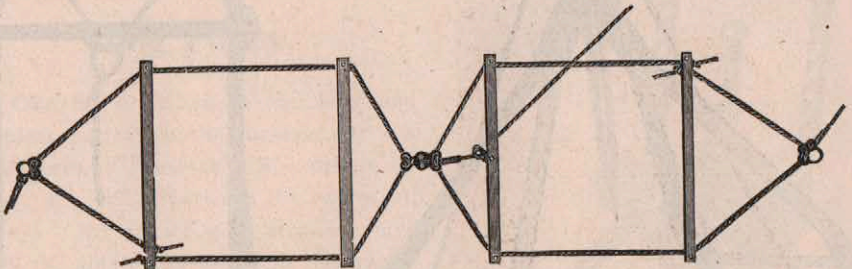
Iron Swivel Pulley, each 35c.



16-inch Hanging Hooks, each 10c.



Maple Sheave Swivel Pulley, 30c.

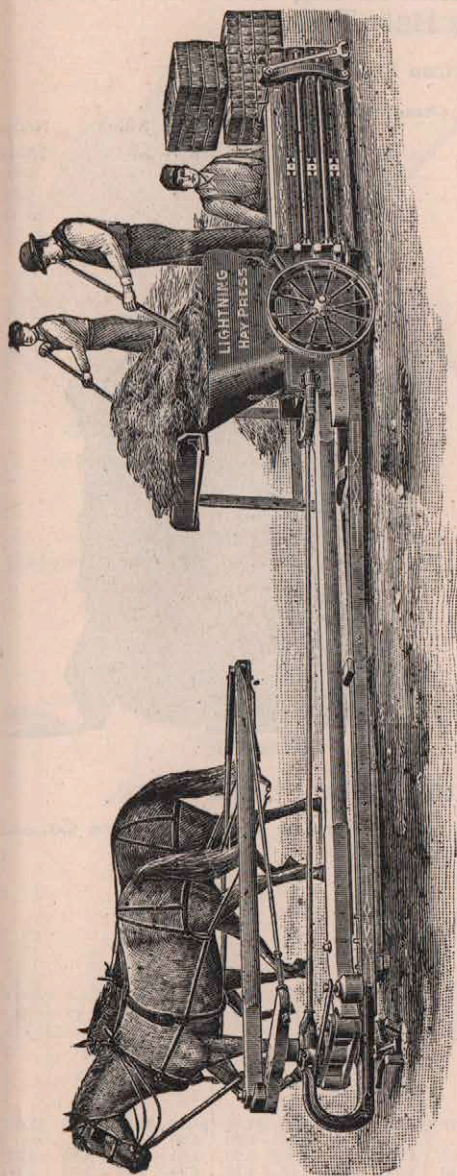


### Four Spreader Wagon Sling.

Our Standard Wagon Slings are made for 18-foot wagon racks. They can be made shorter for any sized wagon by drawing the ropes through the wood bars and tying another knot on each side of the wood bars. There is a center trip on the above Wagon Slings, and they have the best and simplest lock on them. For an outfit it requires one Sling Pulley and three Wagon Slings, that is, so as to take off an entire load in three lots.

4 Spreader Wagon Slings, weight 18 pounds, 4-foot.....	\$3.00
4 Spreader Wagon Slings, 6-foot, weight 25 lbs.....	5.00
Wagon Sling Trip Locks.....	.75





### The Lightning Hay Press.

#### A Few Reasons Why the Lightning Hay Press Takes the Lead.

It has a full circle sweep, and no turning or reversing team is necessary. It makes two full strokes of plunger to each round of sweep or team, giving greater capacity. Pitman, by means of a joggle joint, has direct force on plunger, with very little if any friction. Being made almost entirely of steel, it is not susceptible to change in the weather, and will neither shrink or swell, besides being more durable by half than other presses. It is much stronger than any other press, yet can be readily drawn from place to place by one span of horses. It can be set up ready for use in five minutes, which saves a good deal of time. There is no staking or bolting to be done to press when setting. Windy weather does not interfere with the baling, as press lies flat on ground and can be fed either by fork or by hand instead of from a high platform, where wind can get at the hay and blow it off. It takes fewer hands to operate this press than others, as the team needs no driver. The tying and threading can be done from the same side of the press by one man or boy, without walking around, as tying chamber is made of steel angles and is only 24 inches high, thereby doing away with passing around press or employing two men. It has a draw rod from one side of the sweep stand that creates a circle pull, relieving all jars and strain from sweep stand and lever. The power is so nicely arranged that it is easy on team and there is really no jar whatever in passing the center. The tying chamber is made of steel angles, so compactly arranged that there is nothing unnecessary or in the way about the press.

We furnish doubletrees, neckyoke, fork, wrench, oiler, etc., with each press.  
 17x22 Mounted Press, weight 3600 lbs. . . . . \$440.00  
 Send for special descriptive circular.





## Washburn & Moen Manufacturing Co.'s All-Steel Oiled Wire Bale Ties.

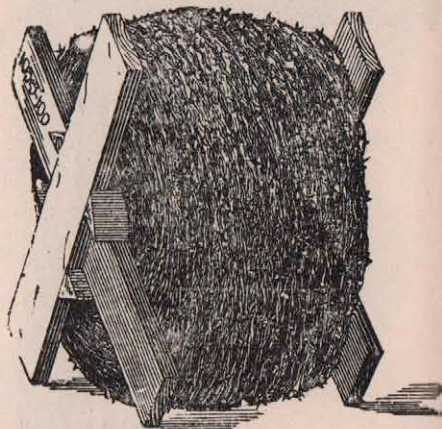
Manufactured by American Steel and Wire Co.

Better than Wire. Cheaper than Rope.

Length		No. 15	No. 14
8¼ feet per bundle of 250 ties.....		\$4.80	\$5.45
8½ feet per bundle of 250 ties.....		4.92	5.60
9 feet per bundle of 250 ties.....		5.16	5.88
9½ feet per bundle of 250 ties.....		5.40	6.18



WAUKEGAN CHIEF.



## Waukegan, Baker and Glidden Barb Wire.

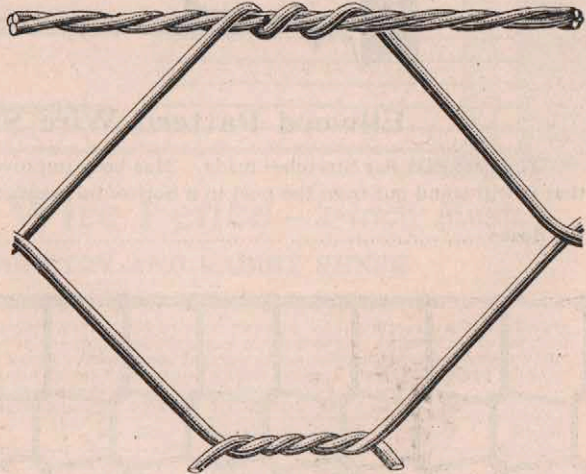
We handle all brands of wire made by the American Steel and Wire Co. and because of the quantity we buy can name you low prices.

FENCING	{ Galvanized Glidden, Barbed Galvanized Staples Galvanized 2-Ply Twisted Painted Glidden, Barbed Plain Staples	} Per 100 lbs.....	
		} Per 100 lbs.....	

	Nos.	6 to 9	10	11	12	13	14	15	16	17	18
<b>MARKET WIRE.</b>											
High Grade Special Stock, even-weight bundles, papered and wrapped.											
Annealed Market .....		\$4.05	\$4.10	\$4.15	\$4.25	\$4.50	\$4.60	\$4.85	\$4.95	\$5.10	\$5.35
Annealed Baling .....					4.00	4.10	4.20	4.30	4.40		
Galvanized Market .....		4.35	4.65	4.70	4.80	5.10	5.20	5.55	5.65	5.85	6.20
Bright Market .....		4.15	4.20	4.25	4.35	4.60	4.70	4.95	5.05	5.20	5.40
Coppered Market .....		4.45	4.75	4.80	4.90	5.20	5.30	5.65	5.75	5.95	6.35
<b>FENCE WIRE.</b>											
Catch-weight Bundles, unwrapped. No. 5 and coarser, add 5c per 100 lbs.											
Plain Fence .....		3.80	3.85	3.90							
Galvanized Fence.....		4.20	4.25	4.30	4.35	4.45	4.55	5.00	5.10		



# Victor Poultry Netting.



Galvanized Before Weaving. : : : : Three-Strand Twisted Selvage.

Put up in bales of 150 lineal feet. : : 3/4-in. to 3-in. mesh.

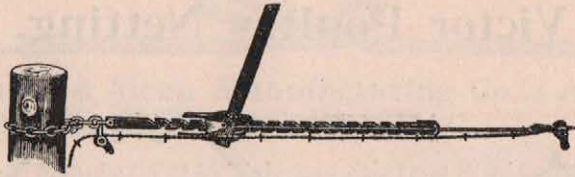
MESH.	WIRE.	LIST.	STOCK WIDTHS.
3 -Inch.	14	6 1/4 c square foot	24, 30, 36, 48.....Inches.
3 "	15	4 3/4 c " "	* " " " " " " " " " " " "
3 "	16	3 3/4 c " "	24, 30, 36, 48, 60, 72, 84, 96..... "
3 "	17	3c " "	* " " " " " " " " " " " "
3 "	18	2 1/4 c " "	24, 30, 36, 48, 60, 72, 84, 96..... "
2 "	14	9 1/2 c " "	24, 30, 36, 48..... " "
2 "	15	7 1/4 c " "	* " " " " " " " " " " " "
2 "	16	5 1/2 c " "	24, 30, 36, 48, 60, 72..... " "
2 "	17	4 1/2 c " "	* " " " " " " " " " " " "
2 "	18	3 1/4 c " "	18, 24, 30, 36, 48, 60, 72, 84, 96..... " "
2 "	19	2 1/2 c " "	12, 18, 24, 30, 36, 48, 60, 72, 84, 96.. " "
2 "	20	2 1/4 c " "	12, 18, 24, 30, 36, 48, 60, 72, 84, 96.. " "
1 1/2 "	17	7 1/4 c " "	* " " " " " " " " " " " "
1 1/2 "	18	4 1/2 c " "	24, 30, 36, 48, 60, 72..... " "
1 1/2 "	19	3 1/2 c " "	12, 18, 24, 30, 36, 48, 60, 72..... " "
1 1/2 "	20	3c " "	12, 18, 24, 30, 36, 48, 60, 72..... " "
I "	18	7 3/4 c " "	24, 30, 36, 48..... " "
I "	19	6 1/2 c " "	12, 18, 24, 30, 36, 48, 60, 72..... " "
I "	20	5 1/2 c " "	12, 18, 24, 30, 36, 48, 60, 72..... " "
3/4 "	20	9c " "	12, 18, 24, 30, 36, 48..... " "

\*Not kept in stock, but we can order it for you.

Discount.....

In ordering, give width, size of mesh and gauge of wire.

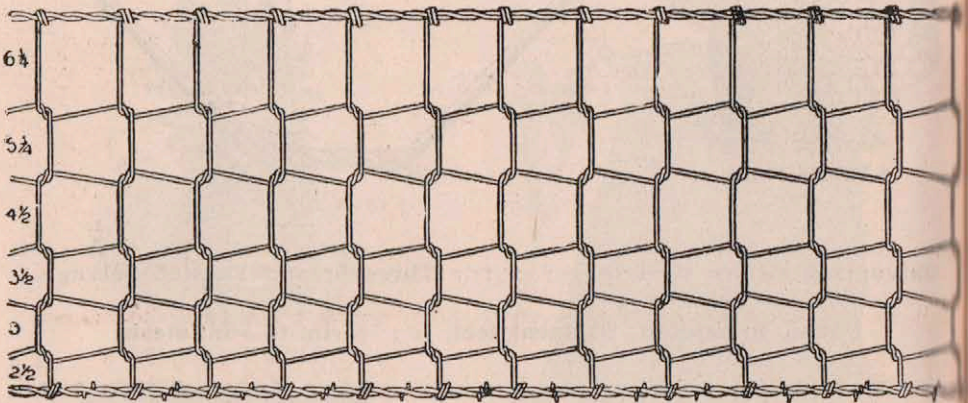




### Ellwood Pattern Wire Stretcher.

The best Flat Bar Stretcher made. Has been improved by the use of the point, so that it will stand out from the post in a horizontal position ready for use.

Per dozen.....\$12.00



### The Henley Hog Fence.

Manufactured exclusively by the American Steel & Wire Company.

The Henley Fence is made throughout of No. 12 1/2 wire, with twisted cable at the top and barbed wire at the bottom. Made only in 26-inch height.

Furnished with stay wires 5 1/2 inches apart in rolls of 20 rods each.

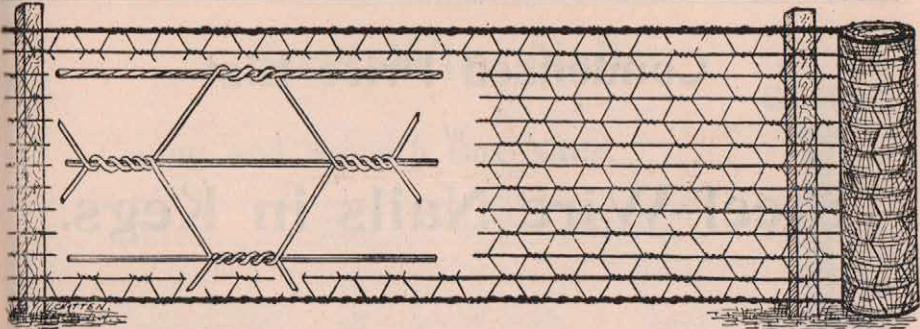
“ “ “ “ 8 “ “ “ “ 20 “ “  
 “ “ “ “ 11 “ “ “ “ 20 “ “

HENLEY HOG FENCE—A square mesh hog fence with graduated meshes. At the top we use a strong twisted cable and at the bottom barbed wire. The other wires are all No. 12 1/2 wire. Best quality galvanized wire No. 12 1/2 used throughout this fence. A strong and durable hog fence, easily adjusted to uneven ground.

(Prices Subject to Change Without Notice.)

STYLE.	Height in inches.	Pounds per rod.	Price per rod.
Henley Hog Fence.	Stay 5 1/2 in. 26	7	56 cts.
	“ 8 in. 26	6	48 cts.
	“ 11 in. 26	5.25	42 cts.





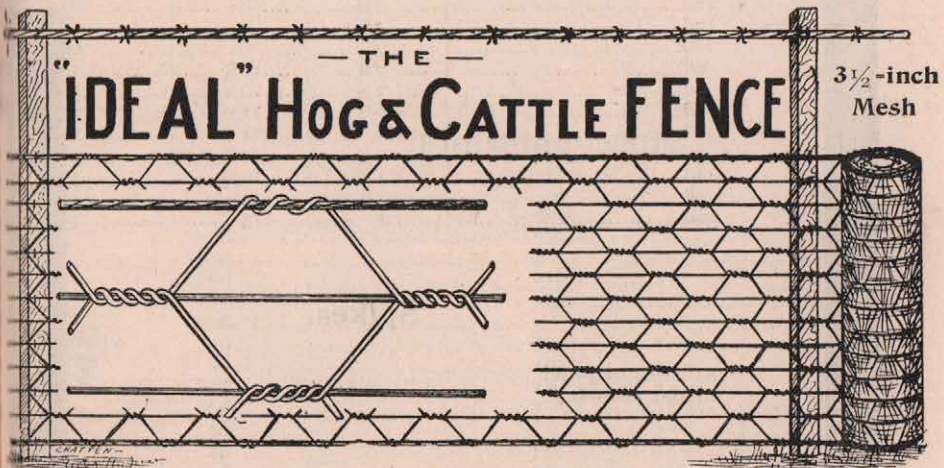
## The "Ideal" Wire Fence—2-Inch Mesh.

### THE IDEAL POULTRY AND RABBIT FENCE.

#### Stretches in Firm Straight Lines Without Rail Supports.

This style is built especially for poultry yards and to turn rabbits. As compared with ordinary setting of same gauge wire, the "Ideal," in the completed fence, is much cheaper, as fewer posts are used and no top or bottom rail is required to keep the fence from sagging or narrowing together between the posts. We also use the cabled selvage in the "Ideal Poultry and Rabbit Fence," which, combined with the great multiplicity of horizontal wires, makes a very strong, closely woven, durable fence. Made in different heights and gauges as listed. PUT UP IN 10 ROD ROLLS.

LIST PRICES (BARS).		No. 20.	No. 19.	No. 18.	No. 17.	No. 16.
inches high, per rod	- - - - -	\$0.21	\$0.23	\$0.28	\$0.39	\$0.44
" " "	- - - - -	.37	.40	.52	.73	.88
" " "	- - - - -	.55	.59	.77	1.08	1.32
" " "	- - - - -	.72	.79	1.03	1.44	1.76
" " "	- - - - -	.89	.99	1.30	1.80	2.20
" " "	- - - - -	1.09	1.18	1.54	2.16	2.64



The "Ideal Hog and Cattle Fence" is designed for general use where a perfect horse, cattle and hog fence is desired.

This fence is stronger and closer woven than most other fences now on the market. Bear in mind the bars in the "Ideal Hog and Cattle Fence" are only two inches apart, with a 3/4-inch triangular mesh throughout, thus making a closely woven, strong and complete fence to stand with the animal and the elements.

We make this fence in the different heights and sizes of wire as listed.

LIST PRICES (BARS).		No. 17.	No. 16.	No. 15.
inches high, per rod,	- -	\$0.27	\$0.33	\$0.43
" " "	- -	.48	.60	.81
" " "	- -	.72	.90	1.17
" " "	- -	.96	1.20	1.53
" " "	- -	1.20	1.50	1.95
" " "	- -	1.43	1.80	2.35

All mesh wires one size smaller than bars.

Both selvages composed of two wires uniformly twisted together.

PUT UP IN 10 AND 20 ROD ROLLS.



# Condensed Price List

of

## Steel Wire Nails in Kegs.



### Common Nails.

SIZE	Length Inches	Gauge No.	Advance Over Base Price
60d.....	6	2	.....
50d.....	5½	3	.....
40d.....	5	4	.....
30d.....	4½	5	.....
20d.....	4	6	.....\$
16d.....	3½	8	..... .05.....
12d.....	3¼	9	..... .05.....
10d.....	3	9	..... .05.....
9d.....	2¾	10¼	..... .10.....
8d.....	2½	10¼	..... .10.....
7d.....	2¼	11½	..... .20.....
6d.....	2	11½	..... .20.....
5d.....	1¾	12½	..... .30.....
4d.....	1½	12½	..... .30.....
3d.....	1¼	14	..... .45.....
2d.....	1	15	..... .70.....

### Spikes.

	Advance Over Base Price
All sizes to 9-inch .....	\$ .10
10 and 12-inch .....	.25

### Fine Spikes.

	Advance Over Base Price
2d.....	\$1.00
3d, 1½x15 .....	.50
3d, Extra fine, 1½x16 .....	.65



# Steel Wire Nails.

## Casing and Smooth Box Nails.

Casing.

Size	Length Inches	Gauge No.	Advance Over Base Price
40d	5	8	\$.15
30d	4½	9	.15
20d	4	9	.15
16d	3½	10	.15
12d	3¼	10½	.15
10d	3	10½	.15
9d	2¾	11½	.25
8d	2½	11½	.25
7d	2¼	12½	.35
6d	2	12½	.35
5d	1¾	14	.50
4d	1½	14	.50
3d	1¼	14½	.70
2d	1	15½	1.00

p 8



Barbed Box, 15 cents advance over smooth nails.

## Finishing.

## Finishing Nails.

Size	Length Inches	Gauge No.	Advance Over Base Price
20d	4	10	\$.25
16d	3½	11	.25
12d	3¼	11½	.25
10d	3	11½	.25
9d	2¾	12½	.35
8d	2½	12½	.35
7d	2¼	13	.45
6d	2	13½	.45
5d	1¾	15	.65
4d	1½	15	.65
3d	1¼	15½	.85
2d	1	16½	1.15



16 d.



# Juniata Steel Horse Shoes.

## EXTRA LIGHT.



FRONT.

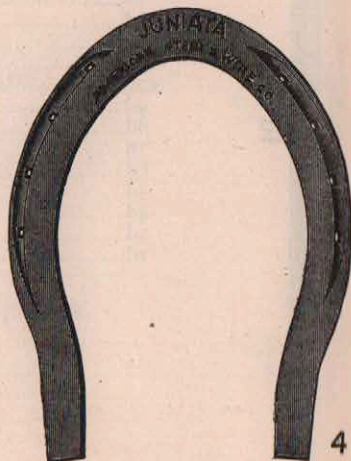
SIZE.	Weight, Ounces.	Average No. of Shoes in Keg.
0 .....	10	160
1 .....	13	123
2 .....	15½	103
3 .....	18½	86
4 .....	22	73
5 .....	25½	63
6 .....	30	53

Base Price per Keg \$.....

## EXTRA LIGHT.

SIZE.	Weight, Ounces.	Average No. of Shoes in Keg.
0 .....	9	178
1 .....	10½	152
2 .....	13	123
3 .....	16	100
4 .....	19½	82
5 .....	23	70
6 .....	27	59

Base Price per Keg \$.....



HIND.



# Juniata Steel Horse Shoes—Cont'd.

## LIGHT.



FRONT.

5

SIZE.	Weight, Ounces.	Average No. of Shoes in Keg.
0.....	11	145
1.....	14	114
2.....	17	94
3.....	20	80
4.....	25	64
5.....	29	55
6.....	36	44
7.....	41	39
8.....	48	33

Base Price per keg \$.....

## LIGHT.

SIZE.	Weight, Ounces.	Average No. of Shoes in Keg.
0.....	9	178
1.....	11	145
2.....	14	114
3.....	18	89
4.....	22	73
5.....	27	59
6.....	31	52
7.....	35	46
8.....	40	40

Base Price per keg \$.....



HIND.

6



# American Horse Shoes.

## EXTRA LIGHT.



FRONT.

NOS.	Weight per Shoe, Ounces.	No. of Shoes in Keg.
1.....	11	145
2.....	15	106
3.....	19	84
4.....	22	73

Base Price per Keg \$.....

## EXTRA LIGHT.

NOS.	Weight per Shoe, Ounces.	No. of Shoes in Keg.
1.....	10	160
2.....	13	123
3.....	16	100
4.....	19	84

Base Price per Keg \$.....

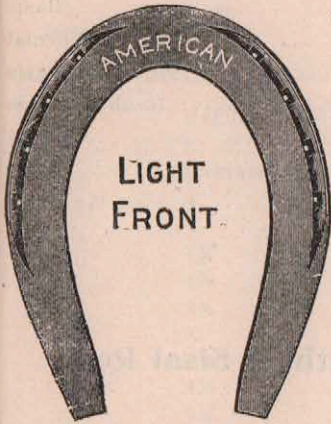


HIND.



# American Horse Shoes—Cont'd.

## LIGHT.



FRONT.

NOS.	Weight per Shoe, Ounces.	No. of Shoes in Keg.
1.....	14	114
2.....	17	94
3.....	20	80
4.....	25	64
5.....	30	53
6.....	36	44

Base Price per Keg \$.....

## LIGHT.

NOS.	Weight per Shoe, Ounces.	No. of Shoes in Keg.
1.....	13	123
2.....	15	106
3.....	18	89
4.....	21	76
5.....	26	61
6.....	32	50

Base Price per Keg \$.....



HIND.



## Manila and Sisal Rope.

Fine 6 thread or 3-16 inch diameter .....	2c above basis
6 and 9 thread or $\frac{1}{4}$ and 5-16 inch diameter .....	1c above basis
12 thread or $\frac{3}{8}$ inch diameter .....	$\frac{1}{2}$ c above basis
Bale rope, 1, 2, 3, and 4 strands, reels or coils .....	Basis
Hop twine .....	Special
Paper twine, unoiled, reels or coils .....	$\frac{1}{2}$ c above basis
Lariat rope, hard twist, unoiled, 3 and 4 strand .....	1c above basis
Lath yarn, tarred, single or double .....	Special
Lath yarn, untarred, same price as bale rope .....	Basis
Unoiled cordage .....	$\frac{1}{2}$ c extra

### Approximate Weight and Strength of Sisal Rope.

Diameter in inches.	Circumference in Inches.	No. of Feet in One Pound.	Length of Coil in Fathoms.	Weight of Coil in Pounds.	Working Strength Estimated in Pounds.
	2 st. bale	140	1,600	70	200
	3 "	80	1,000	70	300
	6th fine	60	200	20	250
	6-thread	40	165	25	300
$\frac{3}{16}$	9 "	28	165	35	450
$\frac{1}{4}$	12 "	18	165	45	600
$\frac{5}{16}$	1 $\frac{1}{4}$	13	165	60	750
$\frac{3}{8}$	1 $\frac{1}{2}$	11	165	75	900
$\frac{7}{16}$	1 $\frac{3}{4}$	10	165	110	1,200
$\frac{1}{2}$	2	7	165	150	1,400
$\frac{5}{8}$	2 $\frac{1}{4}$	6	135	160	1,600
$\frac{3}{4}$	2 $\frac{1}{2}$	5	135	190	2,100
$\frac{7}{8}$	2 $\frac{3}{4}$	4	135	225	2,400
1	3	3	135	240	3,000
1 $\frac{1}{16}$	3 $\frac{1}{4}$	3	135	280	3,600
1 $\frac{1}{8}$	3 $\frac{1}{2}$	2 $\frac{2}{3}$	135	325	4,200
1 $\frac{1}{4}$	3 $\frac{3}{4}$	2 $\frac{1}{3}$	135	400	4,800
1 $\frac{3}{8}$	4	2	135	445	5,400
1 $\frac{1}{2}$	4 $\frac{1}{2}$	1 $\frac{5}{8}$	135	540	6,800

Quotations, unless special, refer to basis. IN ORDERING, PLEASE STATE WHETHER DIAMETER OR CIRCUMFERENCE. Coast dealers and ship masters usually order by circumference, interior dealers by diameters.

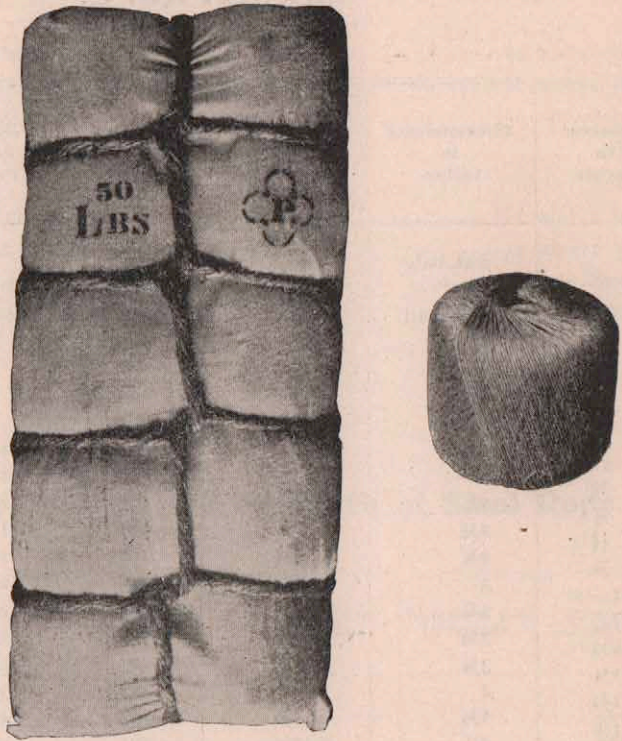


## APPROXIMATE WEIGHT AND STRENGTH OF MANILA ROPE.

Diameter in Inches.	Circumference in Inches.	No. of Feet in One Pound.	Length of Coil in Fathoms.	Weight of Coil in Pounds.	Working Strength Estimated in Pounds.
	2 st. bale	160	1,600	70	250
	3 " "	100	1,000	70	375
	6 thread	50	165	25	500
$\frac{1}{4}$	9 " "	33	165	35	800
$\frac{5}{16}$	12 " "	25	165	45	1,100
$\frac{3}{8}$	$1\frac{1}{4}$	19	165	60	1,500
$\frac{7}{16}$	$1\frac{1}{2}$	14	165	70	1,800
$\frac{1}{2}$	$1\frac{3}{4}$	10	165	100	2,400
$\frac{3}{8}$	2	$7\frac{1}{2}$	165	140	2,700
$\frac{5}{8}$	$2\frac{1}{4}$	6	165	160	3,300
$\frac{3}{4}$	$2\frac{1}{2}$	5	165	190	4,200
$\frac{13}{16}$	$2\frac{3}{4}$	$4\frac{1}{8}$	165	215	4,800
$\frac{7}{8}$	3	$3\frac{1}{2}$	125	255	6,000
1	$3\frac{1}{4}$	3	125	280	7,200
$1\frac{1}{16}$	$3\frac{1}{2}$	$2\frac{2}{3}$	125	300	8,100
$1\frac{1}{8}$	$3\frac{3}{4}$	$2\frac{1}{3}$	125	350	9,600
$1\frac{1}{4}$	4	2	125	390	10,800
$1\frac{3}{8}$	$4\frac{1}{2}$	$1\frac{5}{8}$	125	490	13,500
$1\frac{1}{2}$	5	$1\frac{1}{3}$	125	525	16,800
$1\frac{5}{8}$	$5\frac{1}{4}$	$1\frac{1}{8}$	125	600	18,300
$1\frac{3}{4}$	$5\frac{1}{2}$	$1\frac{1}{4}$	125	650	20,100
$1\frac{7}{8}$	6	$11\frac{1}{4}$ in.	125	765	24,000
2	$6\frac{1}{2}$	10 "	125	950	27,900
$2\frac{1}{8}$	7	8 "	125	1,150	32,700
$2\frac{1}{4}$	$7\frac{1}{2}$	$7\frac{1}{2}$ "	125	1,250	37,500
$2\frac{1}{2}$	8	6 "	150	1,900	42,900
$2\frac{3}{8}$	$8\frac{1}{2}$	$5\frac{1}{2}$ "	150	2,100	48,000
$2\frac{1}{2}$	9	5 "	150	2,300	54,000
$3\frac{1}{4}$	10	4 "	150	3,000	66,600
$3\frac{1}{2}$	11	3 "	150	3,300	81,000
4	12	$2\frac{1}{2}$ "	150	4,200	96,000
$4\frac{1}{4}$	13	$2\frac{3}{8}$ "	150	5,000	111,600
$4\frac{3}{8}$	14	$1\frac{3}{4}$ "	150	5,800	130,800
5	15	$1\frac{1}{2}$ "	150	6,400	150,000

The WORKING STRENGTH is estimated 100 pounds to the thread, in a new rope. BREAKING STRAIN, 50 per cent. more.





## Clover Leaf Binding Twine.

To get twine that will give satisfaction under practical tests—that is, in the field—requires especially selected fiber, so as to be free from tow.

The **Portland Cordage Company** buy certain packings of manila hemp with special reference to manufacturing the **Four Leaf Red Clover** brand of binding twine, so as to have the twine even and as free as possible from tow bunches.

The good reputation of this twine speaks for itself louder than we can.

In Purchasing this brand you can rely on getting an even, full-lengthed twine.



## Binding Twine Trade Marks.

### TRADE MARKS.



#### Pure Manila:

650 feet to the pound.



#### Diamond Manila:

600 feet to the pound.



#### Pure White Sisal:

500 feet to the pound.



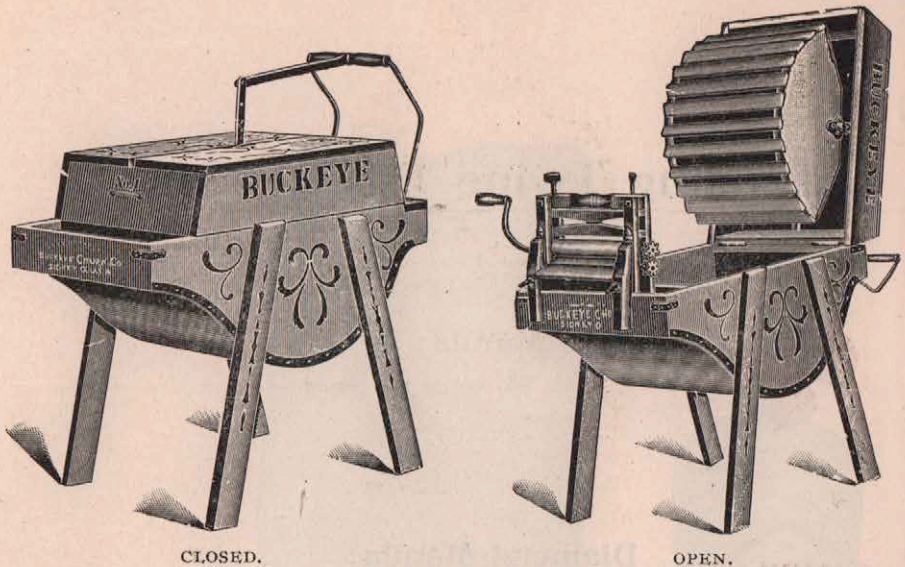
#### Colored Sisal:

500 feet to the pound.

Packed 50 pounds to a sack. From experience we have learned that a 5-pound tightly wound ball is the most convenient size for the harvester cans.

When using in the field, keep twine slightly damp, as the hot sun and dry atmosphere cause the fibre to become brittle.





CLOSED.

OPEN.

## The "Buckeye" Washing Machine.

HAS NO EQUAL. Constructed on scientific principles, which give it the largest amount of rubbing surface for less labor than any other washer on the market.

Is acknowledged by all to be the most PERFECT WASHER and the greatest LABOR SAVING MACHINE on the market today. It robs wash-day of its horrors.

With this machine you can wash the finest as well as the coarsest clothes CLEANER and EASIER, in LESS TIME than on any other washer made, without tearing and less injury to the clothes.

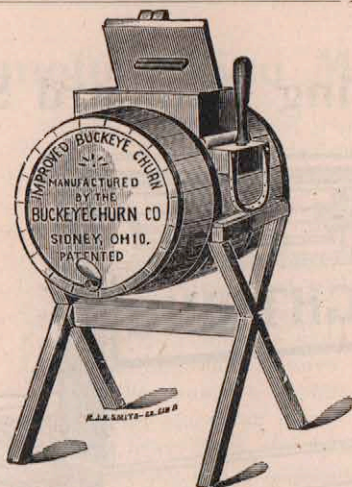
By following our directions on the machine your clothes will always stay white. DON'T BUY ANY OTHER.

We claim for it the following points of superiority over all others:

1. It is easier to operate.
2. It cannot tear the clothes, and washes them perfectly clean.
3. It adjusts itself to the size of the wash, and you can wash one shirt as well as more.
4. The wringer can be attached to the machine allowing the water to run back into it.
5. It will wash the finest clothes, lace curtains and needlework without tearing them, and better than you can do it by hand on a wash-board.
6. It is simple in construction, and has no complicated machinery to get out of order and be a source of trouble and expense.

Buckeye Washing Machine; weight 65 pounds .....\$10.00





## The Improved Buckeye Churn.

Something New for Butter Makers.

We now offer the farming community the Improved Buckeye Churn, which for cheapness, simplicity, strength, durability and ease of operation cannot be excelled.

### HARD WORK MADE EASY

By using the Buckeye Churn, for it only requires one-fourth the power of crank or dash churns, and many a farmer's wife has dated an injury to her constitution, from which she will never recover, by over-exertion at the crank or old dash churn.

Again, there are women who possess all the requisite knowledge and skill, but not the strength to use the crank or dash churn, or properly salt and work butter after it is churned. Just at this point, so all important to be accomplished, the ingenuity of man steps in to perform as thoroughly and more easily this difficult part of butter making.

So simple is the construction of the Buckeye Churn, and so easily operated, that any child eight years old can prepare butter for market. Let us

### LOOK AT THE ADVANTAGE.

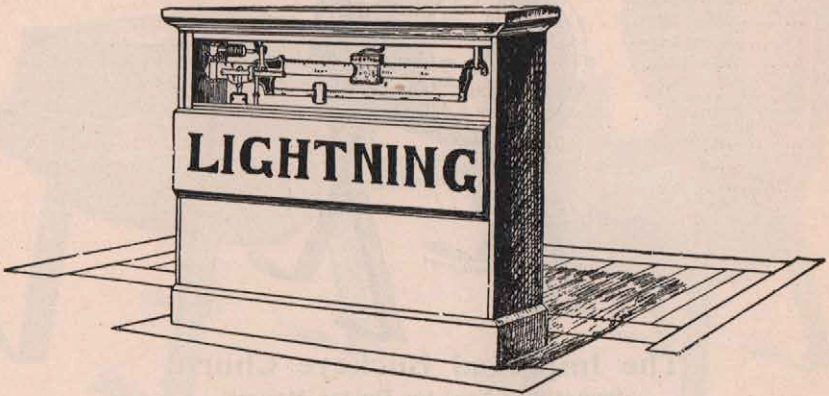
To be gained by this great Labor Saving Invention. Any one can see from the construction of the churn, or better by trial of it, that by throwing the churn forward and back, by this means the vessel is thrown on an inclined plane alternately from one end to the other, forcing the cream to be churned by its own weight, and this can be done without contending but very little with the weight, from the fact that the fulcrum at the bottom of the rockers changes from one to the other in accordance with the change of weight, consequently balancing the weight in its motion, thereby saving three-fourths the labor required by all other churns.

It is not as hard work to throw the churn forward and back as it is to raise a dash or turn a crank, or to hold the bowl and work the butter with a ladle, or to hold the butter in the hands to work it. The latter should always be avoided, for the best hands for working butter become warm by spitting it; this warmth makes the butter look and taste bad. The churn does not heat by exercise, and the butter may be worked and washed in ice or cold spring water, so that instead of the heat of the hands raising the butter above the temperature of the surrounding air, it may actually and literally be worked as cold as ice.

No. 9—10 gallons, churns 1 to 4; weight 40 pounds.....	\$ 6.00
No. 10—13 gallons, churns 2 to 6; weight 40 pounds.....	7.00
No. 11—17 gallons, churns 2 to 8; weight 50 pounds.....	8.00
No. 12—25 gallons, churns 4 to 12; weight 50 pounds.....	9.00
No. 14—30 gallons, churns 8 to 15; weight 60 pounds.....	14.00
No. 16—45 gallons, churns 10 to 20; weight 60 pounds.....	16.00
No. 18—60 gallons, churns 15 to 30; weight 65 pounds.....	20.00



## Lightning Standard Scales.

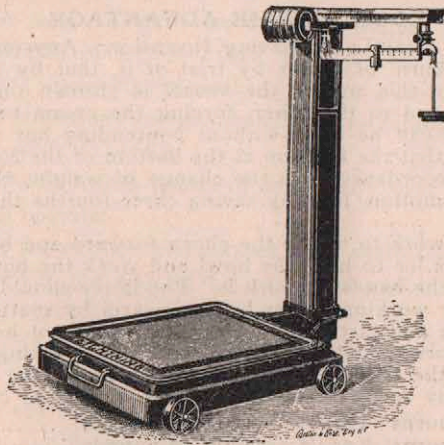


Compound Beams on all Wagon Scales.

Write for Special Circular About Scales.

- |                                    |               |
|------------------------------------|---------------|
| Made in 4-ton Platform, 8x14 ..... | List \$180.00 |
| Made in 5-ton Platform, 8x14 ..... | List \$200.00 |
| Made in 6-ton Platform, 8x14 ..... | List \$210.00 |

## Lightning Platform Scales.

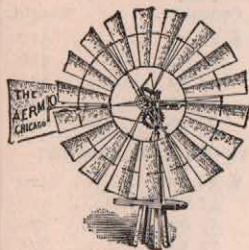


- |                 |          |                 |          |
|-----------------|----------|-----------------|----------|
| 400-pound ..... | \$26.00. | 600-pound ..... | \$33.00. |
|-----------------|----------|-----------------|----------|

Write for Special Circular About Scales.



## Aermotor Wind Mills.



In the 1903 Model Pumping Aermotor we have assembled all the features that fifteen years of windmill building have shown to be the best.

The base of the new combination is the old Original Model Aermotor with its long, sensitive regulating spring, giving the most perfect regulation ever devised; the furling device which pulls the wheel out of the wind, the heavy round plunger rod with its swivel at the top of the wood pump pole, and large buffer springs.

The important features taken from the '99 Model are: The removable babbitt bearings, machine molded hub with automatic oiling pocket, the tension wheel arms, automatic brass oil cups, extra heavy gears, and, in addition to these, a threaded brake rod with locknuts insuring positive and permanent adjustment of the brake. This is an entirely new feature.

Believing this model to be the best pumping windmill that can be built, we shall ship it on all orders unless some other model is specified. The Power Aermotor remains unchanged.

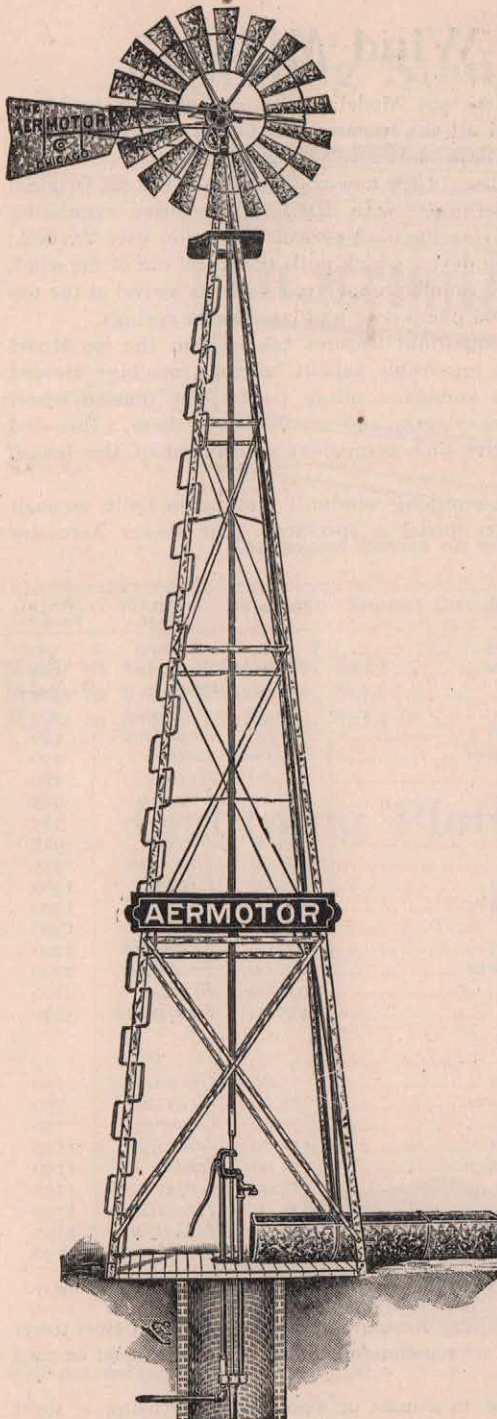
PUMPING AERMOTORS.		Price.	Telegraph Name.	Weight. Pounds.
*8-ft. for 3-post	Wide Spread Steel Tower.....	\$ 35.00	<i>Aurora</i>	300
8-ft. "	Narrow Spread Steel Tower.....	35.00	<i>Astoria</i>	300
*8-ft. for 4-post	Steel Fixed Tower.....	35.00	<i>Arabia</i>	300
8-ft. "	Solid Wood Mast.....	36.50	<i>Aukland</i>	300
*10-ft. "	3-post Wide Spread Steel Tower.....	47.00	<i>Bradford</i>	450
10-ft. "	3 " Narrow Spread Steel Tower.....	47.00	<i>Boston</i>	450
*10-ft. "	4 " Steel Fixed Tower.....	47.00	<i>Butte</i>	450
12-ft. "	3 " Wide Spread Steel Tower.....	75.00	<i>Decatur</i>	925
12-ft. "	3 " Narrow Spread Steel Tower.....	75.00	<i>Dunmore</i>	925
*12-ft. "	4 " Steel Fixed Tower.....	75.00	<i>Dover</i>	925
12-ft. "	Solid Wood Mast.....	78.00	<i>Durham</i>	925
14-ft. "	3-post Wide Spread Steel Tower.....	115.00	<i>Elkhart</i>	1300
14-ft. "	3 " Narrow Spread Steel Tower.....	115.00	<i>Elmira</i>	1300
14-ft. "	4 " Steel Fixed Tower.....	115.00	<i>Exmoor</i>	1300
16-ft. "	3 " Wide Spread Steel Tower.....	190.00	<i>Franklin</i>	2200
16-ft. "	3 " Narrow Spread Steel Tower.....	190.00	<i>Fredonia</i>	2200
16-ft. "	4 " Steel Fixed Tower.....	190.00	<i>France</i>	2200
20-ft. "	4 " Steel Fixed Tower.....	435.00	<i>Louisiana</i>	3900
POWER AERMOTORS.				
12-ft. for 3-post	Wide Spread Steel Tower.....	75.00	<i>Grinnell</i>	750
12-ft. "	3 " Narrow Spread Steel Tower.....	75.00	<i>Grayson</i>	750
*12-ft. "	4 " Steel Fixed Tower.....	75.00	<i>Georgia</i>	750
14-ft. "	3 " Wide Spread Steel Tower.....	115.00	<i>Jamaica</i>	1150
14-ft. "	3 " Narrow Spread Steel Tower.....	115.00	<i>Joplin</i>	1150
*14-ft. "	4 " Steel Fixed Tower.....	115.00	<i>Jersey</i>	1150
16-ft. "	3 " Wide Spread Steel Tower.....	190.00	<i>Hamilton</i>	1750
16-ft. "	3 " Narrow Spread Steel Tower.....	190.00	<i>Houston</i>	1750
16-ft. "	4 " Steel Fixed Tower.....	190.00	<i>Honduras</i>	1750

Mills marked \* are carried in stock at Portland. Other sizes and styles can be furnished promptly.

The 14-foot, 16-foot and 20-foot Pumping Aermotors are made only for steel tower or steel stub. Where a mast is desirable, we recommend that the four-post mast be used in all cases.

A mill is most conveniently attached to a mast or wood tower by using a short steel stub tower.





### 3-Post Steel Fixed Towers.

#### For 8 or 10-Foot Aeromotor.

Height.	Price Complete.	Weight.
*25 feet.....	\$ 26 00 .....	310
*30 " .....	33 00 .....	410
*40 " .....	44 50 .....	540
50 " .....	57 00 .....	720
60 " .....	71 00 .....	840

#### For 12 or 14-Foot Aeromotor.

25 feet.....	\$ 38 00 .....	420
30 " .....	47 00 .....	510
40 " .....	57 00 .....	670
50 " .....	72 50 .....	875
60 " .....	91 00 .....	1,100

#### For 16-Foot Aeromotor.

25 feet.....	\$ 70 00 .....	850
30 " .....	77 00 .....	980
40 " .....	98 00 .....	1,230
50 " .....	124 00 .....	1,520
60 " .....	155 00 .....	1,820

For 3-post towers ordered without anchor posts deduct from the list price of the towers for 8-ft. mill, \$2.00; for 12-ft., \$4.00; for 16-ft., \$8.00. For prices of extra anchor posts, see repair list.

### 4-Post Steel Fixed Towers.

#### For 8 or 10-Foot Aeromotor.

Height.	Price Complete.	Weight.
*25 feet.....	\$ 32 00 .....	420
*30 " .....	39 50 .....	500
*40 " .....	52 50 .....	650
50 " .....	67 00 .....	820
60 " .....	84 00 .....	1,025
70 " .....	104 00 .....	1,250
80 " .....	129 50 .....	1,500

#### For 12 or 14-Foot Aeromotor.

25 feet.....	\$ 44 00 .....	530
*30 " .....	52 00 .....	640
*40 " .....	68 00 .....	840
50 " .....	91 00 .....	1,100
60 " .....	116 00 .....	1,375
70 " .....	142 00 .....	1,675
80 " .....	173 00 .....	2,000

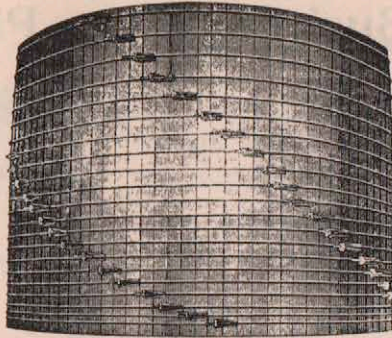
#### For 16-Foot Aeromotor.

25 feet.....	\$ 83 50 .....	1,240
30 " .....	97 00 .....	1,400
40 " .....	129 00 .....	1,775
50 " .....	152 00 .....	2,200
60 " .....	191 00 .....	2,700
70 " .....	238 00 .....	3,300
80 " .....	292 00 .....	3,780

For 4-post towers without anchor posts deduct from the list price of towers for 8-ft. mill, \$2.50; for 12-ft., \$5.00; for 16-ft., \$10.00. For prices of extra anchor posts, see repair list.

Towers marked (\*) are carried in stock at Portland. Other towers can be furnished promptly.





30,000 Gal. Size 20-2½ x 14 feet high.

## Adjustable Round Hoop Redwood Tanks.

Are made from clear dry redwood (if not otherwise ordered) and are supplied with three times as much strength in hoops as is necessary to withstand any water and swelling pressure of the wood that can come against them.

The hoops are of steel and have upset thread ends six inches long. They are stronger in the thread portion than in the smooth part, and equivalent in strength to a rod ⅛ of an inch larger with thread cut in the usual way.

They have no perishable devices for keeping the staves wet for they are always water-tight, whether empty or full.

They are specially adapted to hot climates.

They are "Nonshrinkable," for when tightened properly the wood is squeezed beyond its shrinking possibility.

Including one extra stave and sufficient round steel hoops with from two to four screw lugs to each hoop, according to size of tank.

Capacity, Gallons	Capacity, Barrels (oil)	Outside Diameter	Outside Height	Estimated Weight of Wood Por- tion	Estimated Weight of Hoops and Lugs	Finished Thickness of Wood	Price
500	12	5 ft.	4½ ft.	375 lbs.	87 lbs.	1¾ in.	\$ 24 00
1,000	25	5 ft. 10½ in.	6 ft.	549 lbs.	113 lbs.	1¾ in.	29 00
1,500	37	7 ft. 1 in.	6 ft.	700 lbs.	131 lbs.	1¾ in.	35 00
2,000	48	8 ft. 1½ in.	6 ft.	830 lbs.	146 lbs.	1¾ in.	41 00
3,000	72	9 ft. 1½ in.	7 ft.	1,070 lbs.	222 lbs.	1¾ in.	52 50
4,000	97	9 ft. 10¾ in.	8 ft.	1,310 lbs.	262 lbs.	1¾ in.	60 00
5,000	120	10 ft. 11 in.	8 ft.	1,450 lbs.	284 lbs.	1¾ in.	70 00
6,000	144	11 ft. 11½ in.	8 ft.	1,660 lbs.	306 lbs.	1¾ in.	79 00
7,000	168	12 ft. 1½ in.	9 ft.	1,840 lbs.	371 lbs.	1¾ in.	87 00
8,000	192	12 ft. 3¼ in.	10 ft.	2,020 lbs.	407 lbs.	1¾ in.	98 50
10,000	240	12 ft. 5¼ in.	12 ft.	2,360 lbs.	537 lbs.	1¾ in.	120 00
10,000	240	12 ft. 8¼ in.	12 ft.	4,040 lbs.	744 lbs.	2¾ in.	180 00

Send for estimates on odd sizes.



## The Buckeye Force Pump.

The value of a pump is determined by its durability, simplicity of construction, ease of operation in deep wells, protection from frost, etc.

These pumps possess all these valuable qualities in a greater degree than any other pump on the market. There are thousands of them in use in all parts of the world, and the great demand created for them wherever introduced attests their value.

The working and wearing part of a pump is the cylinder; if that be defective, the pump cannot work well, no matter how substantial the balance of the pump may be or how attractive in appearance. The cylinders of these pumps are made of brass, or iron lined with porcelain, which, being as smooth and hard as glass, does not wear the leather packing of the plungers. We use only the best leather for the valves, and all material used in the manufacture of the Buckeye Pump is calculated to do good service for years. All Buckeye Pumps are fitted with our New Patent Brass Valve Seat.

We call especial attention to the simplicity of construction of this pump. We do not use a stuffing or packing box as in most force pumps; and this fact alone should recommend the Buckeye above all others. The valves are simple and substantial and not liable to clog with sand and dirt.

As but one-half of the water in cylinder is discharged with each motion of the handle, the friction of the water passing through the pipe is greatly reduced. This is an important consideration, as a woman or child can use them in ordinary wells.

Each pump is provided with a small waste hole, not larger than a darning needle, in the discharge pipe, four feet below the platform. This will always allow the water to settle down to that point in the pipe after pumping, and is a sure protection against frost.

The water starts with the first or second motion of the handle, and the flow ceases the moment you stop pumping, leaving no drippings to form mud or ice on or around the platform. It throws a steady stream and will force water forty feet from the end of the hose nozzle.



### The Buckeye Force Pump, Standard.

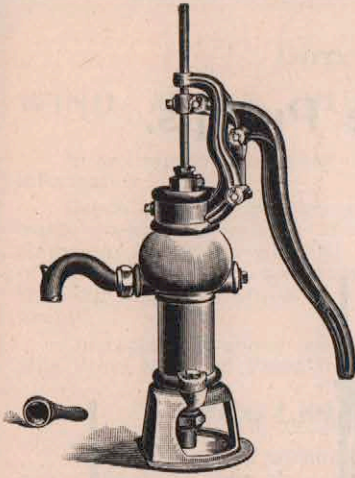
For hand or wind mill use.

Tapped regular for 2-inch pipe.

Price, No. 80, 10-inch stroke .....\$11.00

Write for circulars of the Buckeye Pump Standards.





No. 52.

### Buckeye House Force Pump.

This pump has brass-lined cylinder and galvanized working parts. Is tapped in the back for discharge pipe to elevated tank or bath room. Has large air chamber capacity and is convenient to set.

No. 52 Pump, 3-inch brass-lined cylinder. \$ 8.00

No. 52 Pump, 3-inch brass-lined cylinder.

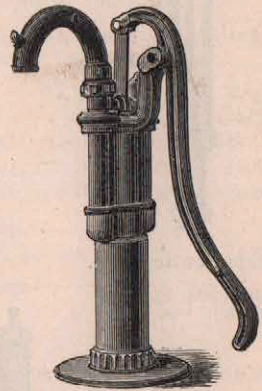
(cock in spout) ..... 10.50

### Buckeye Cistern Pump.

The Buckeye Cistern Pump is also suitable for shallow well; is double acting and pumps a continuous stream.

No. 70 3-inch double cylinder, above platform; weight 38 pounds ..... \$ 9.00

No. 75 3-inch double cylinder, 2 feet below platform; weight 45 pounds ..... 12.00



No. 70.

### Pitcher Spout Cistern Pump.

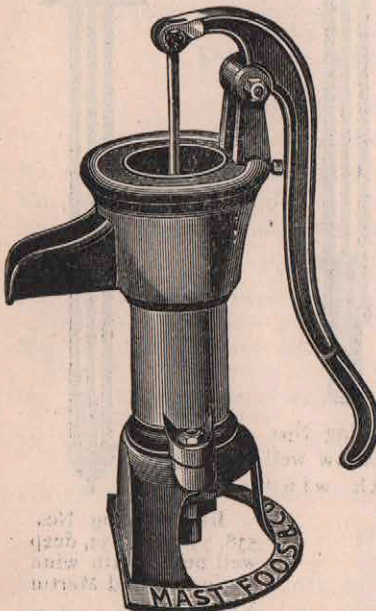
These well-known pumps are suitable for cisterns and shallow wells, and need no description. We simply say that they are made in the very best manner, with all modern improvements attached.

No. 2 3-inch bore for 1¼-inch pipe.....\$4.75

No. 3 3½-inch bore for 1¼-inch pipe..... 5.25

No. 4 4-inch bore for 1½-inch pipe..... 6.25

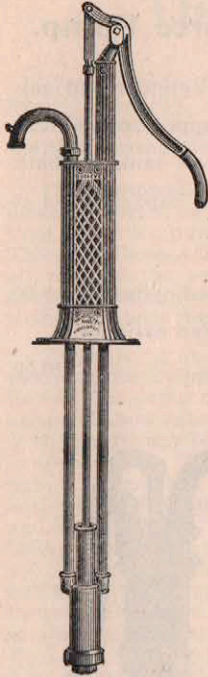
No. 5 4½-inch bore for 2-inch pipe..... 9.50



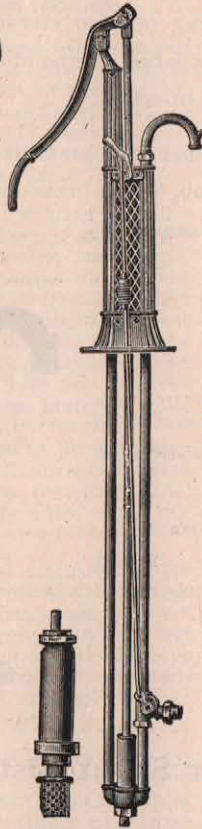
☞ The Buckeye Pumps are the best in the world, and you should not neglect to write us for prices of same. We cheerfully answer all inquiries relating to any of the goods handled by our firm (or any other firm, for that matter), by return mail, if possible.



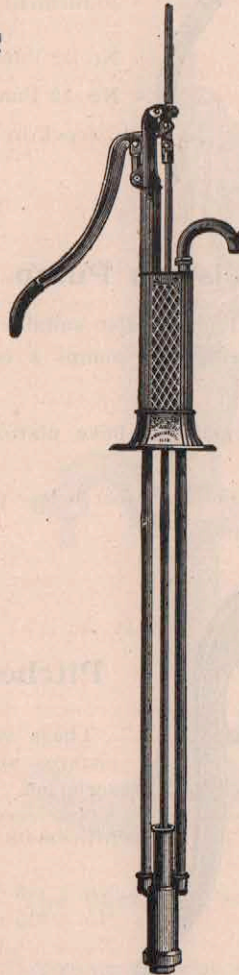
# Buckeye Force Pumps.



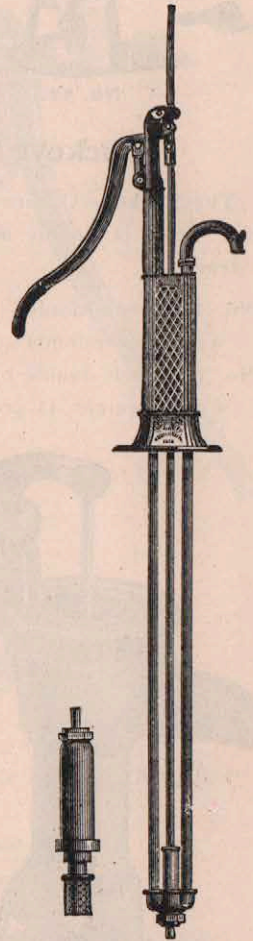
Representing Nos.  
201, 204, 254, 202.



Same as above,  
with Martin 3-way  
cock.



Representing Nos.  
525, 240, shallow well  
pump with wind  
engine top.



Representing Nos.  
538, 537, 536, 539, deep  
well pump with wind  
engine top and Martin  
3-way cock.



## Directions for Ordering

### WIND MILLS, PUMPS, TANKS, PIPE, Etc., Etc.

In writing for estimates or ordering Wind Mills, please give the following information:

Depth of well, and whether well is dug, drilled or driven, and if drilled, give inside diameter of casing; amount of water in well in dry season; distance and elevation, if any, to which it is desired to force water, measuring from center of platform of well to center of bottom of supply tank. Also send a pencil sketch showing relative position of well, tank and each place where water is to be delivered.

On receipt of above information we can intelligently quote prices on a suitable Wind Mill and Pump for purposes for which they will be required.

### Price List of Pumps for Hand Use.

Pumps are priced without suction pipe. If pipe is wanted state so in order, giving the depth from the top of the platform to the bottom of the well.

NOTE.—All 3-inch cylinders or smaller fitted for 1¼-inch pipe; all 3½-inch cylinders fitted for 1½-inch pipe; all 4-inch cylinders fitted for 2-inch pipe.

#### For Wells Under 26 Feet Deep.

	Plain.	3-Way Cock.
No. 201, 3-inch cylinder, 5½ feet below the platform; wt. 81 lbs.	\$14.00	\$17.00
No. 204, 3½-inch cylinder, 5½ feet below the platform; wt. 100 lbs.	16.00	19.00
No. 254, 4-inch cylinder, 5½ feet below the platform; wt. 105 lbs.	17.00	20.00

#### For Wells From 26 to 30 Feet Deep.

No. 202, 3-inch cylinder, 9½ feet below the platform; wt. 94 lbs.	15.50	18.50
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#### For Wells From 30 to 40 Feet Deep.

No. 216, 3½-inch lower cylinder; weight 108 pounds	17.00	20.00
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#### For Wells From 50 to 70 Feet Deep.

No. 215, 3-inch lower cylinder, 5 feet below platform; wt. 90 lbs.	15.00	18.00
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### Pumps with Wind Engine Tops.

Adjustable from 6-inch to 9-inch stroke.

#### For Wells Under 26 Feet Deep.

No. 525, 3-inch cylinder, 5-feet 10 in. below platform; wt. 96 lbs.	16.50	19.50
No. 540, 3½-inch cylinder, 5½ feet below platform; wt. 115 lbs.	18.50	21.50
No. 555, 4-inch cylinder, 5½ feet below platform; wt. 125 lbs.	19.50	22.50

#### For Wells From 30 to 100 Feet Deep.

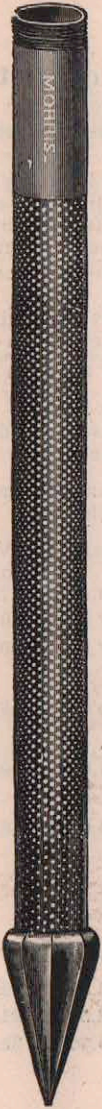
No. 538, 3½-inch lower cylinder, under 50 feet deep, long stroke; weight 119 pounds	19.00	22.00
No. 537, 3-inch lower cylinder, under 60 feet deep, long stroke; weight 107 pounds	17.00	20.00
No. 536, 2½-inch lower cylinder, under 70 feet deep, long stroke; weight 104 pounds	17.00	20.00
No. 539, 2¼-inch lower cylinder, under 100 feet deep, long stroke; weight 100 pounds	17.00	20.00

For 13-inch brass body lower cylinder, instead of porcelain, add... 1.00

### Pump Extras.

Martin's Patent 3-Way Cock, for 2¼, 2½ and 3-inch cylinder pumps	\$3.00
Martin's Patent 3-Way Cock for 3½ and 4-inch cylinder pumps	3.00





## Brass Jacket Drive Well Points.

No. 86, 20 inches long, 80 holes, fits 1/4-inch pipe; each.....	\$1.25
No. 90, 24 inches long, 100 holes, fits 1/4-inch pipe; each.....	1.50
No. 94, 30 inches long, 125 holes, fits 1/4-inch pipe; each.....	1.75
No. 100, 42 inches long, 175 holes, fits 1/4-inch pipe; each.....	2.50
No. 136, 24 inches long, 120 holes, fits 1/2-inch pipe; each.....	2.00
No. 140, 30 inches long, 160 holes, fits 1/2-inch pipe; each.....	2.50
No. 144, 36 inches long, 200 holes, fits 1/2-inch pipe; each.....	2.75

## Iron Pipe for Steam, Gas or Water.

Standard Price List adopted February 2, 1899.

Butt Welded—	Black.	Galv.
1/2-inch, per foot .....	10 1/2 cts.	17 cts.
3/4-inch, per foot .....	11 1/2 cts.	19 cts.
1-inch, per foot .....	16 1/2 cts.	26 cts.
1 1/4-inch, per foot .....	22 cts.	36 cts.
Lap Welded—		
1 1/2-inch, per foot .....	27 cts.	44 cts.
2-inch, per foot .....	36 cts.	59 cts.

Discount or net prices quoted on application, subject to market changes.

Wrought Drive Caps, 1/4-inch, 35 cents each; 1/2-inch 40 cents each. Galvanized rod couplings, beaded pattern, for 3/8-inch rod, 5 cents each; 1/2-inch, 10 cents each. Galvanized pump rod, 3/8-inch, per foot, \$....; Galvanized pump rod, 1/2-inch, per foot, \$....

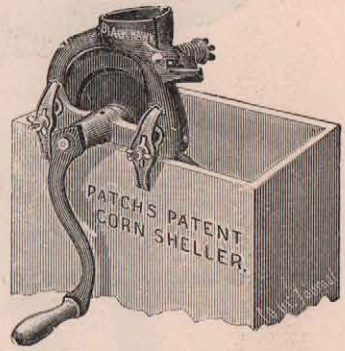
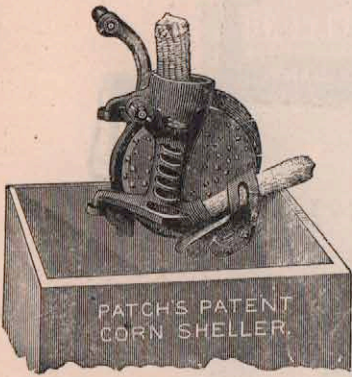


## Seamless Brass Tube Cylinders.

Regular.			"Our Special."		
Size.	Fitted for	Price.	Size.	Fitted for	Price.
2 1/4 x 13	1/4-inch pipe	\$4.00	2 1/2 x 12	1 1/2-inch pipe	\$ 4.75
2 1/2 x 13	1/4-inch pipe	4.25	3 x 12	1 1/2 and 2-in. pipe	5.25
3 x 13	1/4-inch pipe	4.75	3 1/2 x 12	2-inch pipe	6.00
3 1/2 x 13	1/2-inch pipe	5.50	4 x 12	2-inch pipe	8.00
			4 x 16	2 1/2-inch pipe	10.00



The "Black Hawk" Corn Sheller.



These Shellers are simple, durable and cheap. They will shell all sizes of corn easily and rapidly. Made mostly of malleable iron, and with fair usage is good for 10 to 20 years' service. Capacity, 6 to 8 bushels of ears per hour. Weight, 15 pounds; price .....\$3.00

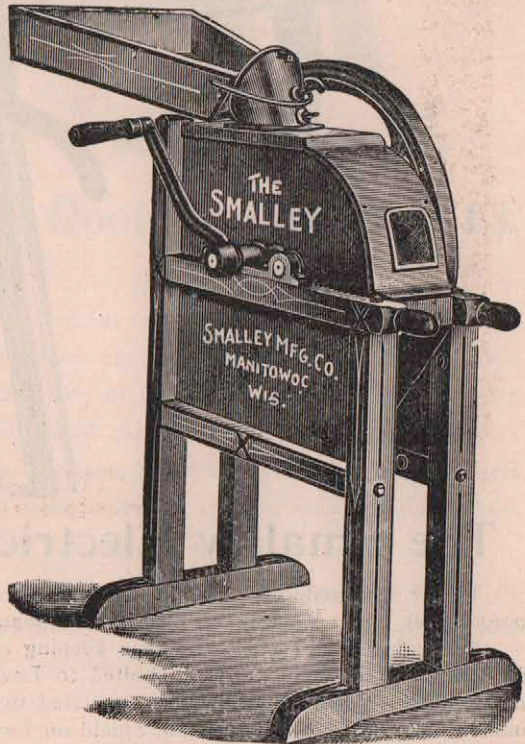
The New Smalley Corn Sheller.

With Table.

You stand erect when you turn this sheller simply because it is six inches higher than any other.

Made in two sizes: one hole for hand only, and two hole for hand and power.

In our new one hole, hand only, Corn Sheller, we have aimed to produce a strictly hand sheller that should be light, yet strong and durable. A ten minutes' trial of the Smalley in actual work will prove that it possesses merits found in no other hand sheller.



One hole Sheller, plain .....	\$10.00
With Fan and Feed Table complete .....	12.00
Fly wheel Pulley, extra .....	2.00
Two hole Sheller, plain .....	15.00
With Fan and Feed Table .....	16.00

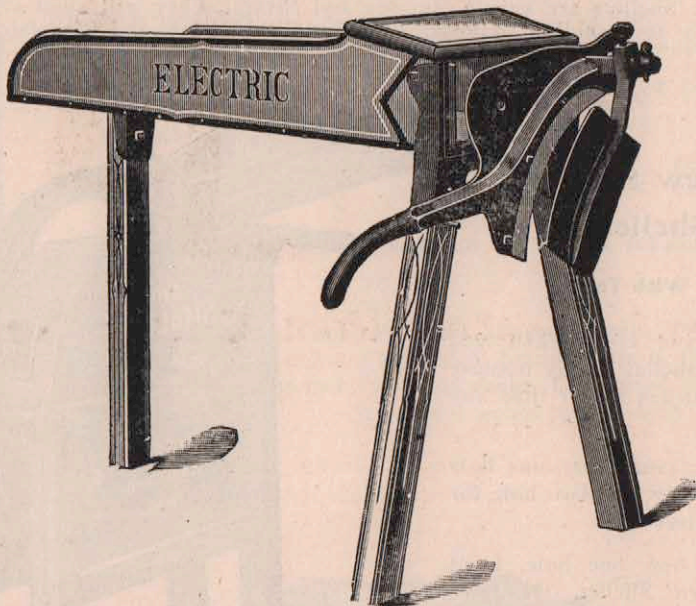




## Lightning Hay Knife.

Solid Cast Steel.

Weymouth's patent, each \$1.50; per dozen .....\$17.50



## The Smalley Electric Lever Cutter.

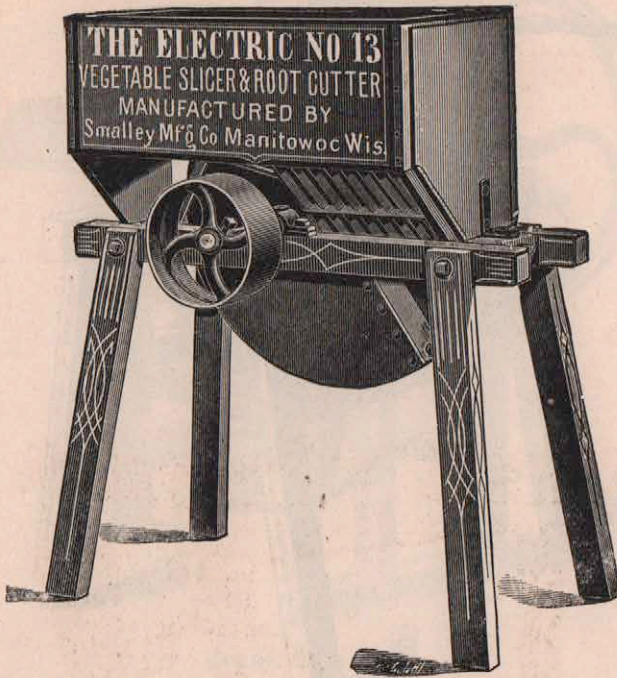
Power required, one man at lever. Capacity, Green Fodder, 150 to 200 pounds per hour; Dry Fodder, 50 to 100 pounds per hour.

A reliable machine for any man keeping one or two horses or cows. Has an 11-inch Steel Knife strongly bolted to Lever. The cut is shearing, and by means of an Adjustable Gauge is regulated to any desired length from  $\frac{1}{4}$  to 2 inches. Has 5x9-inch Throat and Shield on Lever, which keeps the uncut fodder from falling out.

Has three Hard Wood Legs securely fastened to Box, and is well built and finished throughout. Is easily taken apart and compactly packed for shipment. This cutter will do excellent work and pay for itself in a short time.

Price, each, weight 50 pounds .....\$8.00





## Smalley Electric Root Cutter No. 13.

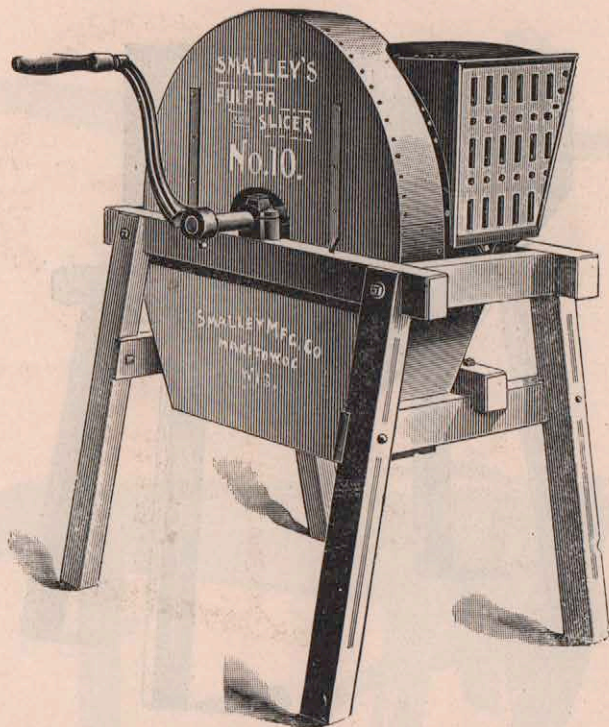
Canadian farmers have for years fed cut roots extensively with the best results, and during the past few years their use has been rapidly gaining in favor among the more progressive stockfeeders of the United States. The difficulty has been to secure a machine which would quickly and cheaply reduce the roots to the proper size for feeding; this Vegetable Slicer and Root Cutter fully meets this need. They are strongly built with hardwood frames, heavy cast fly wheel and have crank and pulley for either hand or power use.

The knives are attached to fly wheel, and consist of three long slicing or cutting knives and twelve small splitting knives; the latter are set just in front of the large ones and cut the roots into pieces not larger than one inch square, thus reducing them to just the proper condition for feeding, either alone or mixed with cut hay or straw.

Capacity, 50 bushels per hour.

Price, for Hand only; weight 180 pounds .....\$20.00  
 Price, for Hand or Power; weight 180 pounds ..... 25.00





## Smalley No. 10 Root Pulper and Slicer.

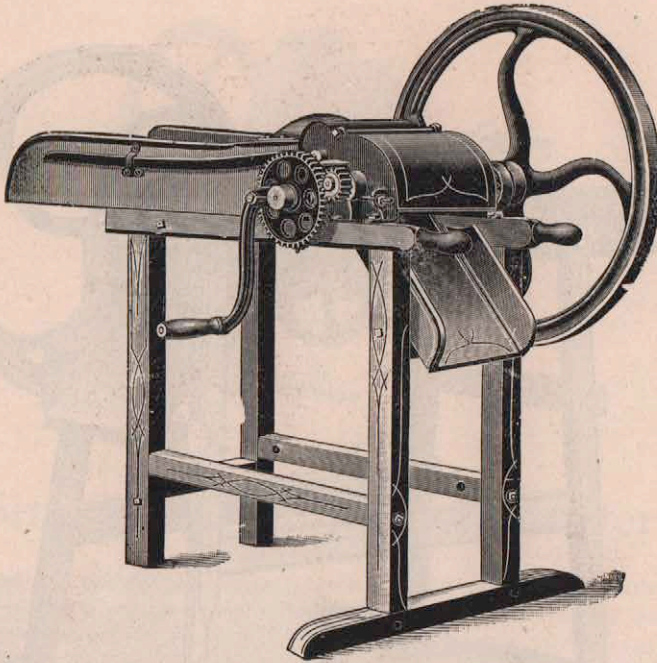
The Smalley Root Cutters are a real necessity to every farmer, and offer great advantages to every farmer who has roots to feed. Our new Pulper and Slicer, No. 10, does not slice or cube the roots, but cuts them into very small pieces of uniform size, and so fine that even the smallest animals, chickens, ducks, calves, etc., may eat them freely without any danger of choking.

The demand for a machine that would prepare roots, vegetables, etc., sufficiently fine for poultry feeding is one that we are able to meet the present year, and the question of a constant supply of succulent food for the poultry during the winter months is completely solved if you have a Smalley Pulper, No. 10, in your barn. These machines are of unusual capacity, 40 to 60 bushels per hour when operated by hand, while our large power machines have a capacity of from 150 to 300 bushels per hour. All of these machines are provided with open Cast Iron Grates over which the roots pass before reaching the Cutting Knives, and all dirt, gravel or other refuse is thoroughly eliminated before the roots are cut. The machines will be shipped to any responsible party subject to ten days' trial, and to return with refund of purchase money if they fail to fulfill our representations in every particular.

No. 10, Hand only; capacity, bushels per hour, 30 to 40; weight, 200 lbs. . . . \$20.00

No. 10, Hand or Power; capacity, bushels per hour, 150 to 300; wt. 210 lbs. . . 25.00





Crank Side View.

## Smalley Cutters No. 0 and 00.

Smalley Cutters Nos. O and OO are excellent low-priced machines for hand use only. Have strong hard wood frame, heavy fly wheel and one knife which makes three revolutions to each turn of the crank. Feeding device adjustable to cut any length from  $\frac{1}{4}$  to 1-inch. Have two feed rollers and springs so arranged that the Cutter will feed correctly at all times whether the rollers are parallel or not. The knife has a shearing down cut, and is well bolted to knife heads, which are extra heavy. The Nos. O and OO are in all respects the same in general construction, except the OO has two inch larger throat, giving this machine fully one-quarter greater capacity. Capacity No. OO, green fodder, 250 to 500 pounds; dry fodder, 125 to 250 pounds. Capacity No. O, green fodder, 400 to 600 pounds; dry fodder, 200 to 300 pounds.

NOTE.—Where it is desired we can furnish a neat fly wheel pulley for the No. O and OO for light horse-power. Extra for pulley, \$1.50.

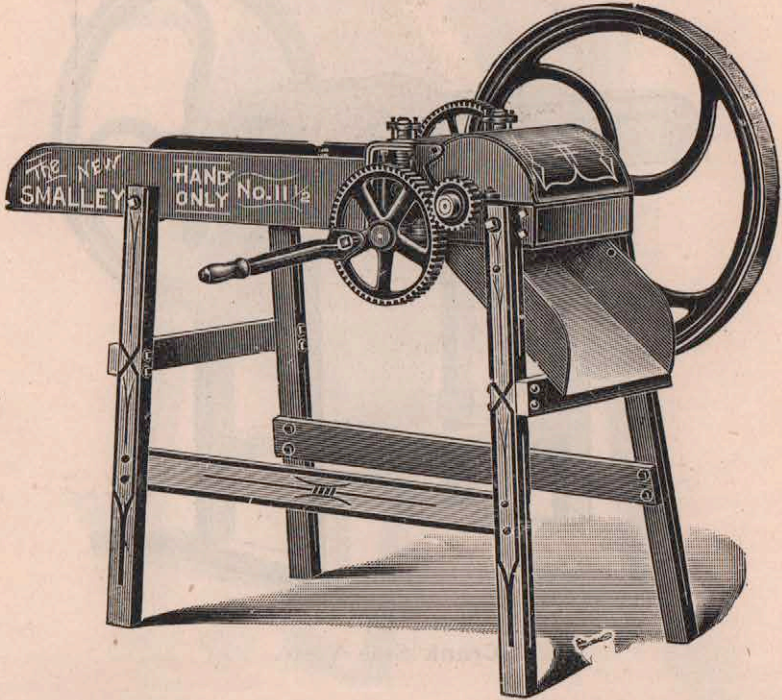
Smalley Feed and Ensilage Cutters are made in 16 sizes with capacities from 250 pounds to 25 tons per hour. All Smalley knives are warranted to be perfect, both in construction and in temper.

Floor space needed to operate, 2 feet 3 inches by 4 feet 7 inches.

### PRICE LIST.

	Weight.	Price.
No. OO—Smalley Cutter, 1 Fly Wheel, 1 Knife 8 inch.....	132 lbs.	\$18.00
No. O —Smalley Cutter, 1 Fly Wheel, 1 Knife 9½ inch.....	142 lbs.	22.00





## New No. 11½ Smalley Feed Cutter.

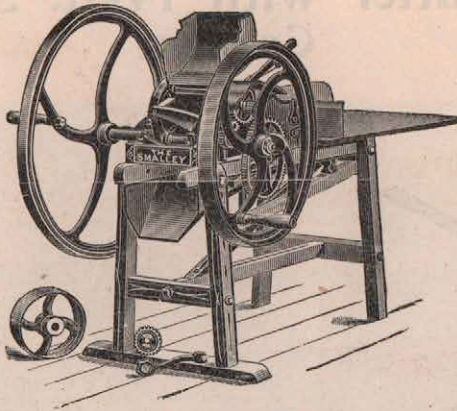
Floor space needed to operate, 2 feet 8 inches by 4 feet 4 inches.

Many farmers who own large power cutters find the New Smalley a good investment because it is a machine of such wonderful capacity that it can be used for cutting a feeding or two for a large sized herd of stock, thus saving the necessity of "steaming up" a power cutter or getting out teams in bad weather to operate the big machine. This machine is of the latest improved style, and fills the requirements for a complete Farm Cutter. It has an extra heavy hard wood frame and box, and two steel knives 11½ inches long, and cuts ¼, ½ and 1-inch lengths. Its capacity is, per hour, green fodder, 600 to 800 pounds; dry fodder, 300 to 400 pounds. While this is a "hand-only" machine, and is so recommended, we can, when desired, furnish a fly wheel pulley, and the Cutter can be driven by power. Do not overlook the Famous Smalley Patent Safety Fly Wheel. This Cutter has it and it is warranted the best and most rapid hand power Feed Cutter on earth.

### PRICE LIST.

	Weight.	Price.
No. 11½—New Smalley Cutter, hand only .....	204 lbs.	\$25.00
No. 11½—New Smalley Cutter, with Fly Wheel Pulley .....	204 lbs.	27.06





Nos. 9 and 10.

## Smalley Combination Cutter.

For hand and power. No other cutters can, for quality or quantity of work, equal these Cutters, which possess unusual merit when driven by hand power, yet are strong enough to stand driving by 10 or 12-horse power engine at high speed. These machines make the Smalley line complete. They are of the same design and have all the patented features of the larger machines. They are combined hand and power machines. Fitted with two fly-wheels, as shown in cut, they are positively the best and easiest running hand cutters on the market. The extra large fly-wheel greatly increases their capacity as hand machines and enables them to be operated advantageously by either one or two persons. By simply substituting the pulley shown in cut for the large fly-wheel, the machine is readily changed into a power cutter, ready for either wind, steam or tread power.

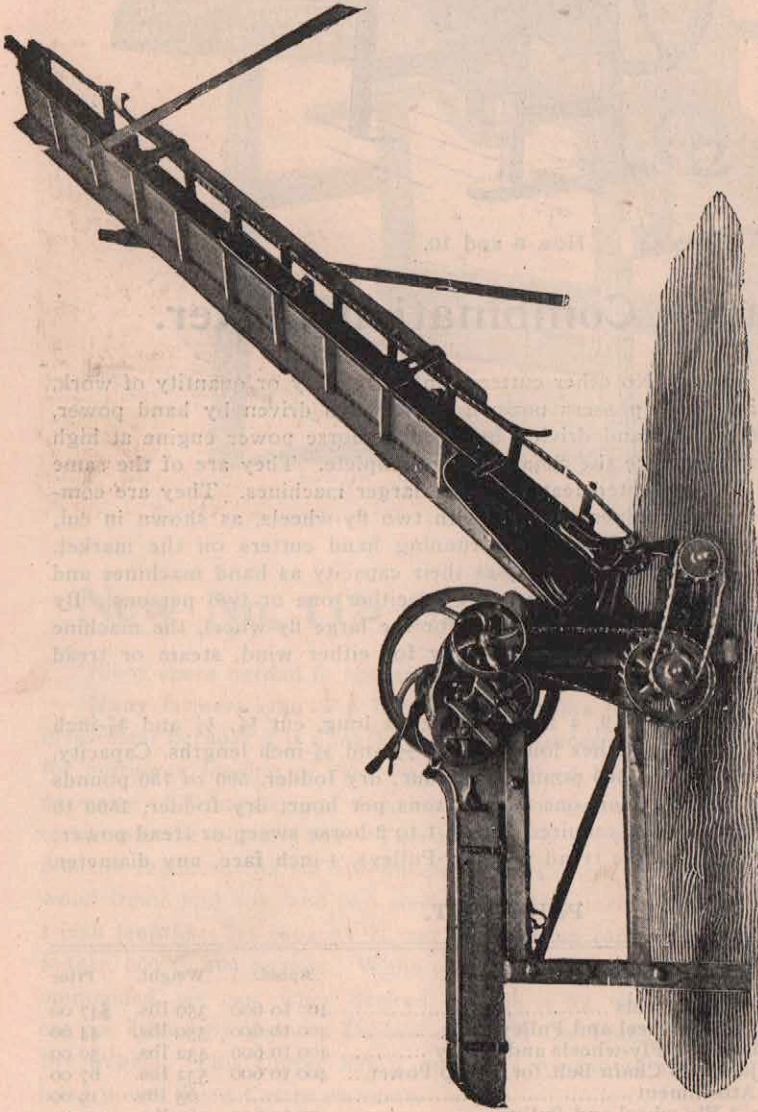
General Description—No. 9, 4 knives 9 inches long, cut  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$ -inch lengths; No. 10, 4 knives 10 inches long, cut  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$ -inch lengths. Capacity, No. 9, green fodder, 1000 to 1500 pounds per hour; dry fodder, 500 to 750 pounds per hour. No. 10, green fodder, one to two tons per hour; dry fodder, 1500 to 2500 pounds per hour. Power required, No. 9, 1 to 2-horse sweep or tread power; No. 10, 2-horse sweep, 2-horse tread power. Pulleys, 4-inch face, any diameter.

### PRICE LIST.

Number.	DESCRIPTION.	Speed.	Weight.	Price
No. 9	Hand only, 2 Fly-wheels .....	400 to 600	350 lbs.	\$47 00
No. 9	Power only, 1 Fly-wheel and Pulley.....	400 to 600	350 lbs.	44 00
No. 9	Hand and Power, 2 Fly-wheels and Pulley .....	400 to 600	432 lbs.	50 00
No. 9	With Iron Jack and Chain Belt for Sweep Power....	400 to 600	532 lbs.	67 00
No. 9	Shredding Attachment .....		65 lbs.	19 00
No. 10	Power only, 1 Fly-wheel and Pulley.....	450 to 650	360 lbs.	54 00
No. 10	Hand only, 2 Fly-wheels .....	450 to 650	360 lbs.	57 00
No. 10	Hand and Power, 2 Fly-wheels and Pulley.....	450 to 650	442 lbs.	60 00
No. 10	With Iron Jack and Chain Belt for Sweep Power....	450 to 650	542 lbs.	77 00
No. 10	Shredding Attachment.....		75 lbs.	21 00



# No. 10 Cutter with 14-ft. Semicircle Carrier.



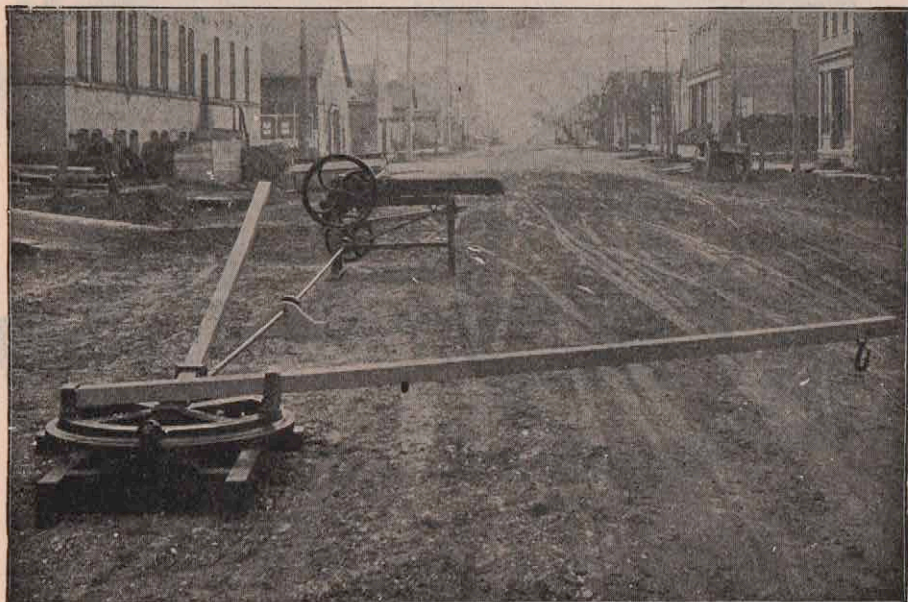
A still better idea of the wonderful strength and capacity of our Nos. 9 and 10 Cutters will be had when we say that both sizes have been used quite extensively the past ten years for ensilage work, and for silos under 100 tons in capacity, either our Nos. 9 or 10, with suitable carrier, and driven by horse or steam power, will be found very satisfactory. We recommend, however, larger size Cutters for ensilage work, but we can say emphatically, that many of our competitors are furnishing cutters for silo work that will not equal in either strength or capacity our Nos. 9 and 10 Cutters.

Price, No. 9 Cutter, weight 500 pounds.....\$47.00  
 Price, No. 10 Cutter, weight 650 pounds.....\$60.00  
 Price, 14-ft. Carrier..... 36.00  
 Price, 14-ft. Carrier..... 34.00

For a full description of Carriers see page 166.

Speed 400 to 600 Revolutions per Minute.



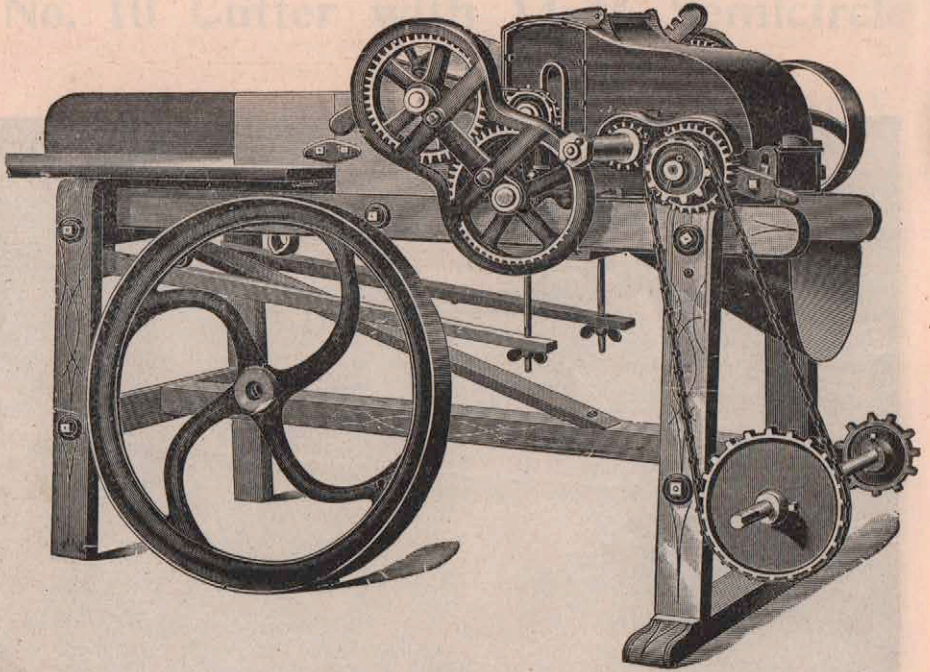


## No. 9 Cutter with Two-Horse Power.

In our No. 9 Iron Jacket Sprocket Chain Belt and No. 2 Sweep Horse Power will be found one of the neatest and best low-priced outfits ever made. The Cutter is ample capacity for farms keeping 20 to 30 head of stock, and for silos of 50 to 75 tons. The Power will do any kind of farm work requiring one to two-horse power, and no more convenient or useful Power can be found.

Weight, complete, 1600 pounds. Capacity, 1 to 2 tons per hour green fodder;  $\frac{1}{2}$  to 1 ton per hour dry fodder. Price, Cutter alone, \$47.00; Jack alone, \$10.00; Power alone, \$35.00. Price, when complete outfit is ordered, \$80.00.





## No. 12 Smalley Dry Fodder Cutter.

### No. 12 Cutter, Showing New Style Carrier Drive.

Floor space required, 3 feet 4 inches by 6 feet 8 inches.

We cannot praise too highly our Smalley Dry Fodder Cutter No. 12. It is a machine sold more largely to farmers than any other size we build. Machines that have been in use ten, fifteen and twenty years are still doing good work. They have made for themselves a record that we do not believe has an equal in any farm implement in this country. You can always depend upon our No. 12 Cutter being just large enough and just strong enough for your needs. It will prove ample capacity for farmers keeping 100 to 200 head of stock, or for silos 150 to 200 tons capacity. This machine is for power only, and is the world's standard for a Dry Fodder Cutter. No other machine can equal it in strength, work or capacity, and it will be found perfect as a general purpose power Cutter. It has four twelve-inch knives. Capacity green fodder, 3 to 4 tons per hour; dry fodder,  $1\frac{1}{2}$  to 2 tons per hour. Speed required, 500 to 700 per minute.

Power required, 2 to 4-horse sweep power or 2-horse tread power. Pulleys 4 to 6-inch face, any diameter. Can be furnished with chain or wind elevators.

Smalley Power Cutters are made in six sizes. See next page for further descriptions of this line, and page 166 for Smalley Cutters equipped with self-feed attachment.

### PRICE LIST.

Weight, 655 lbs.	
No. 12—Smalley Dry Fodder Cutter, price.....	\$84.00
Add for Self-Feed Attachment.....	36.00
Add for Shredder Attachment.....	39.00
Add for Snapping or Husking Attachment.....	35.00
See page 166 for Carriers.	

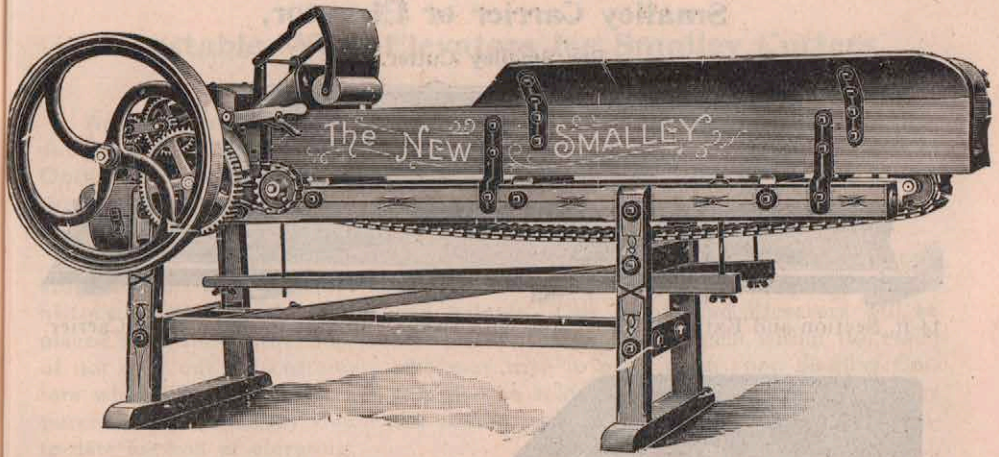
Do not order self-feed attachments when cutters are to be used with shredder or husker attachment.

### OUR WARRANTY.

The Smalley Ensilage and Fodder Cutter is warranted to cut as much green or dry fodder as any machine built in the world of equal size; that it will run as easily with less power than any other Cutter of equal capacity, less trouble to the feeder or operator, less danger of breakage, and to give better satisfaction than any other machine in every particular.

It is further warranted to be well made of good material, and durable, with proper care, and any breakage occurring within one year from defective or imperfect material or workmanship will be replaced free of charge to the purchaser, except transportation charges from the factory.





### Smalley Built-for-Business Cutter.

Six sizes: Nos. 12, 14, 16, 18, 20 and 26. Showing patent automatic self-feed. This line of Smalley Cutters is "built for business." They are of unusual strength, combined with enormous capacity and reasonable price, making them the most desirable machines for the use of stock-raisers and dairy farmers. Provided with automatic self-feed table, the capacity is increased and the labor of feeding decreased.

Our illustration shows our patent safety feed roller, which does the work of at least one man in distributing the fodder before it enters the regular feeding rolls of machine. It obviates entirely the necessity of the operator getting his hands to the feed rollers, and is thus an absolute guarantee against any danger of accident to the person feeding the machine.

Our automatic self-feed and this safety roller are both recent inventions, thoroughly tried in practical work, and pronounced by all those who have seen them as placing the New Smalley head and shoulders above all competitors. We can say the whole story in a single phrase, it is built for business.

The No. 14 has four 14-inch knives, the No. 16 has four 16-inch knives, the No. 18 has four 18-inch knives, the No. 20 has four 20-inch knives, and the No. 26 has four 26-inch knives.

#### PRICE LIST.

No.	Power Required	Weight, Regular Table.	Speed	Capacity Tons per hour.		Price, Regular Table	With Self-Feed	Shredding Att. Extra	Snapping Att. Extra
				Green	Dry				
14	{4-H. Sweep.....} {2 H. Tread.....}	700	700	3-5	1 1/2-3	\$104 00	\$140 00	\$45 00	\$41 00
16	{6-8 H. Sweep ..} {3-H. Tread .....	770	800	6-10	3-5	130 00	180 00	51 00	47 00
18	{6-8 H. Sweep...} {3-H. Tread.....}	850	1000	8-12	4-6	154 00	204 00	61 00	53 00
20	10-12 H. Engine ...	1400	1200	10-15	5-7	204 00	274 00	71 00	66 00
26	12-16 H. Engine ...	1600	1200	12-18	6-10	254 00	324 00	91 00	78 00

Do not order self-feed where Cutters are to be used with snapping or husking attachments. All machines are furnished with 6-inch face pulley, any diameter. Tight and loose pulleys are furnished at an extra cost of \$5.00.

See page 166 for cuts, sizes and descriptions with prices on carriers.

#### Four-Wheel Truck Mountings for Cutters.

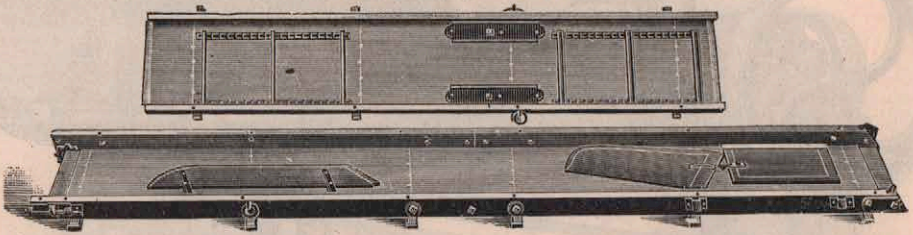
	No. 16.	No. 18.	No. 20.	No. 26.
Weight .....	1000 lbs.	1000 lbs.	1200 lbs.	1200 lbs.
Price .....	\$56.00	\$56.00	\$65.00	\$65.00.

Trucks include pole, but do not include neckyokes and whiffletrees.

If you want a Tread Power, send for Manufacturer's Circular.



## Smalley Carrier or Elevator, For Smalley Cutter.



14-ft. Section and Extra 10-ft. Section, with Iron Couplings to make 24-ft. Carrier.

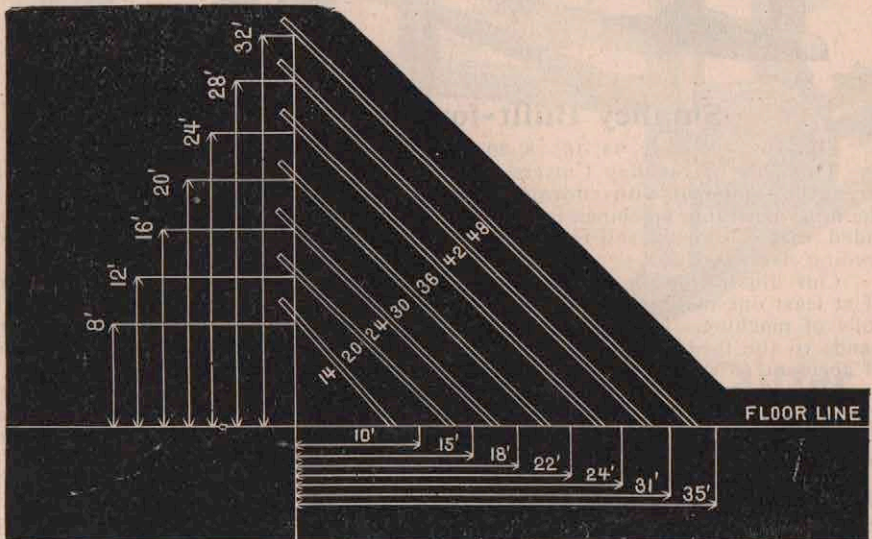


Diagram showing proper length of Carrier.

Explanation.—Vertical lines show height of opening in silo; angle lines, length of Carrier required, and horizontal lines below floor line show distance Cutter should stand from silo wall. Be careful to order Smalley Carriers according to above diagram, and no trouble will be had when you are ready for silo filling.

### Smalley Carrier.

For the past two years we have been furnishing the Smalley Semi-Circle Carrier at the same price usually charged for the common style carriers. This Carrier is warranted to do perfect work at an elevation of 45 degrees or under, and will deliver at any point within the radius of a complete semi-circle.

#### PRICE LIST.

	Price.		Price.
No. 9 Carrier, 14 feet or under.	\$34.00	No. 16 Carrier, 14 feet or under.	\$42.00
No. 10 Carrier, 14 feet or under.	36.00	No. 18 Carrier, 14 feet or under.	44.00
No. 12 Carrier, 14 feet or under.	38.00	No. 20 Carrier, 14 feet or under.	50.00
No. 14 Carrier, 14 feet or under.	40.00	No. 26 Carrier, 14 feet or under.	60.00

Above prices are for Carriers complete for straight and angle delivery, common or semi-circle pattern.

Over 14 feet long, sizes 10, 12, 14, 16 and 18, extra, per foot.....\$2.30  
 Over 14 feet long, sizes 20 and 26, extra, per foot ..... 2.70



## Adjustable Wind Elevators for Smalley Cutters.

Another season of careful and practical experimenting has enabled us to produce an adjustable Wind Elevator capable of being attached to any of our Power Only Cutters, and which we have demonstrated to be equal to any reasonable demand that may be made upon them for the elevating of either ensilage or dry fodder.

Many of the wind elevators made by our competitors, and for which utterly absurd claims have been set forth the past two years, have already passed into history as absolute and unqualified failures. Our New Wind Elevators will be placed upon the market for 1903 at prices that will bring them within the reach of not only our old customers who may wish to place them upon Smalley Cutters which they now own, but will also be sold at prices that will enable every purchaser of a Smalley Cutter the coming season to get the benefit of this up-to-date method of elevating.

It will be made in three sizes, as per list below, and will be sold absolutely guaranteed to do the work for which we recommend them, in a thoroughly satisfactory manner.

### PRICE LIST WIND ELEVATORS.

	Size of Fan.	Size of Pipe.	Elevating Capacity per Horse.	Size of Cutters for which Recommended.	
No. 1	20 in. by 3 in.	7-inch.	1 to 5 tons.	9, 10 and 12	
No. 2	26 in. by 4 in.	8-inch.	5 to 10 tons.	14, 16 and 18	
No. 3	32 in. by 5 in.	10-inch.	10 to 20 tons.	20 and 26	
Price Blowers, No. 1	\$40.00	No. 2	\$50.00	No. 3	\$75.00
Price Pipe, per ft., No. 1	.40	No. 2	.50	No. 3	.60
Power required, No. 1	2-horse	No. 2	3-horse	No. 3	6-horse

Steam Engines, 10 to 12 horse power, are recommended for driving all Cutters with Blowers except Nos. 9 and 10, which can be driven by 4-horse Sweep, or 2-horse Tread, to advantage. With adequate power you will find our Wind Elevators to do just what we say, ELEVATE ANY QUALITY ANY DISTANCE IN ANY DIRECTION.

When YOU WANT A TREAD POWER WRITE US FOR PRICES AND GENERAL INFORMATION ABOUT TREAD POWERS.

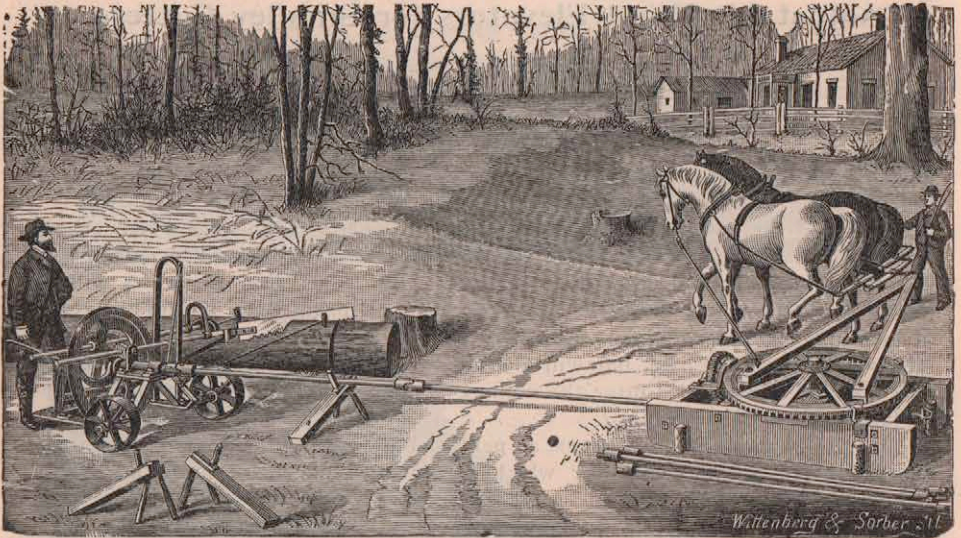
## Link Chain Belting.

No.	Price, per foot.
25	13 cts.
33	12 cts.
45	16 cts.
55	22 cts.

Other sizes quoted on application. If you don't know the number of chain send sample link.







## R. M. Wade & Co.'s Steel Frame Drag Saw

With Two Speed Hitches and Two Lengths of Stroke.

After the tree is felled and trimmed, the Horse Power is placed near the stump, where it remains stationary. A Wrought Iron Frame, mounted on wheels, to which the saw is attached, is moved along the log by means of an Extension Shaft as each cut is sawed off. This obviates the necessity of moving either the power or the log, and saves three-fourths of the labor. It can be used on soft or uneven ground, or on a hillside. With two good horses a man and a boy can cut from fifteen to forty cords a day after the trees are felled and trimmed.

The machine has been thoroughly tested in all kinds of wood, and is pronounced a complete success by all who have used it. It will be found especially useful in cutting Stave and Shingle Timber, Cord Wood and Saw Logs. The machines are strong and durable, and not liable to get out of order. When at work the machine is securely held to the log by two dogs, as shown in the cut.

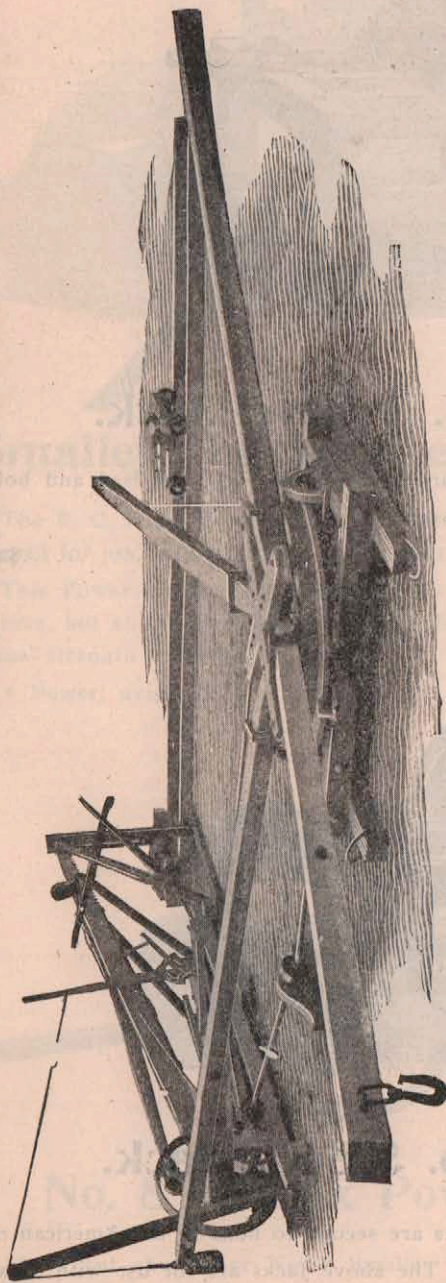
The double joints at each end of the Tumbling Shafts allow the machine to saw at an angle with the power. This is a very important feature, as there are many cases where it is desirable to so use the machine.

Drag Saw, complete with Power, four Plain Tumbling Shafts, one Extension Shaft and 6-foot Saw Blade; weight 1150 pounds.....	\$150.00
Drag Saw Frame, with 6-foot Blade and Tumbling Shafts as above, no power; weight 520 pounds .....	88.00
Horse Power only, no Tumbling Shafts; weight 630 pounds.....	62.00
Plain Tumbling Shafts, with Couplings; weight 40 pounds.....	6.00
Extension Tumbling Shafts, with Couplings; weight 65 pounds.....	12.75
Drag Saw Blades, 5-foot; weight 14 pounds .....	7.00
Drag Saw Blades, 6-foot; weight 16 pounds .....	8.40
Drag Saw Blades, 7-foot; weight 19 pounds .....	9.80

Descriptive Circular mailed free upon application.



SEND FOR OUR CIRCULAR ON DRAG SAW MACHINES.



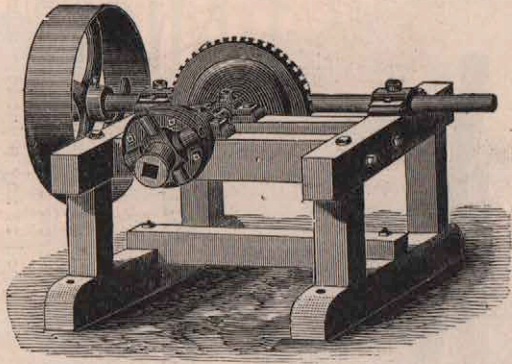
## The Famous Battle Creek Self-Feed Drag Saws.

### No. 2, for Sweep Power.

No. 2 Battle Creek Drag Saw is arranged to be driven by our Number 6 Battle Creek Horse Power. The balance wheel is also a band wheel, from which can be run a belt to circular saw or other machine. The self-feed is simply a screw and pinion with tumbling rod coupled to end of feed roller, which is all iron; worked by a lever and can be started and stopped at any point in a moment by the operator without leaving his position, and will feed up any size log with a steady motion, and in half the time a man can do it with a hand roller. With the use of our improved saw guide and self-feed, there is no occasion to check the motion of the horses to feed up the log, and we can saw six cords a day more than with the hand feed. This machine can be worked by four horses on our Battle Creek Horse Power, for which it is especially adapted, and is capable of sawing from thirty to fifty cords of stove wood per day. Is calculated for low geared powers and has increased gearing.

Weight, 1200 pounds. Capacity, 35 to 50 cords of stove wood per day. Price, \$125.00; with Sweep Power complete, \$225.00.

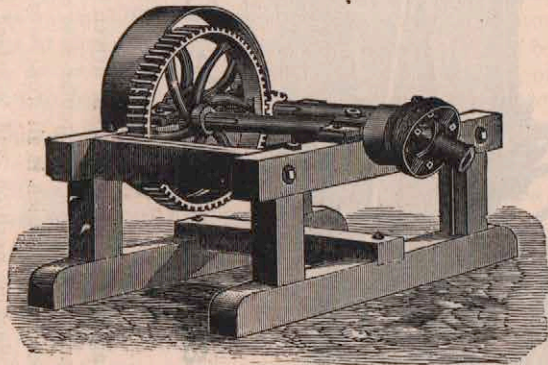




### Smalley No. 3 Bevel Jack.

All of our Jacks have heavy hardwood frames, well mortised and bolted, heavy shafting and well babbited boxes.

No. 3 Bevel Jack, weight 200 pounds .....\$20.00

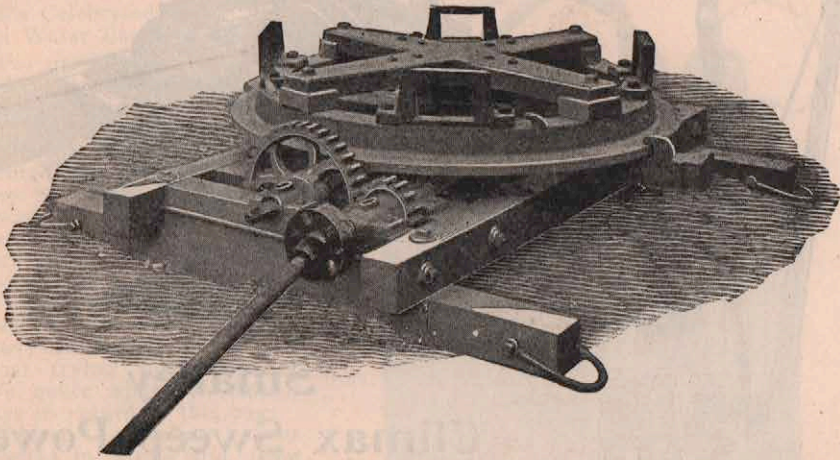


### Smalley No. 5 Spur Jack.

The Smalley Sweep Power outfits are second to none in the American market in giving complete satisfaction. The above Jacks are for use with Smalley Cutters and Powers.

No. 5 Spur Jack, weight 200 pounds .....\$20.00



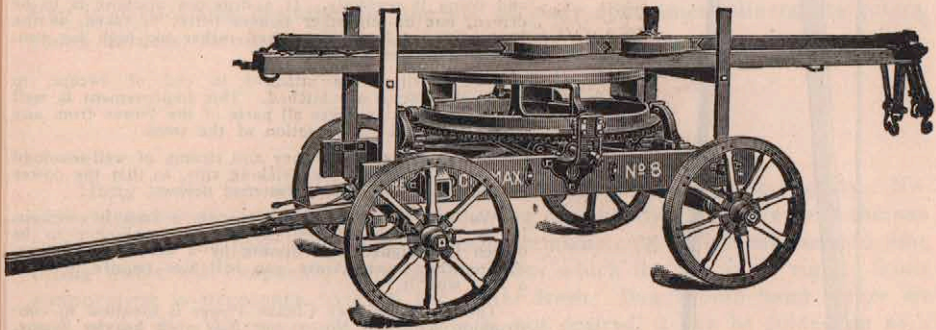


## Smalley Battle Creek Sweep Power.

The B. C. No. 6 Power, illustrated herewith, is a well made, heavy Power, designed for use with from two to four horses.

This Power is especially designed for operating the No. 2 B. C. Drag Saw Machine, but at the same time is a first-class general purpose Farm Power of unusual strength and wearing capacity.

No. 6 Power, weight 1250 pounds .....\$75.00



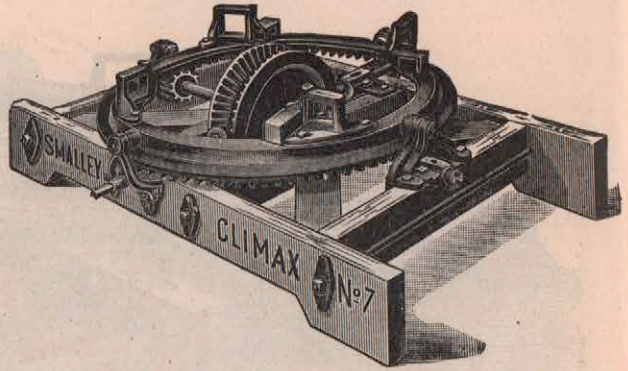
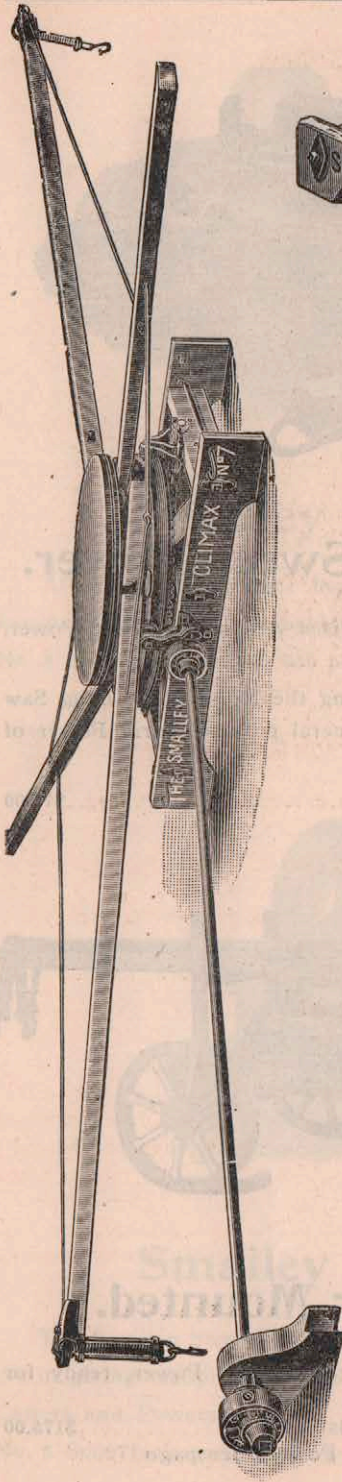
## No. 8 Climax Power Mounted.

Above cut shows our No. 8 Smalley Mounted Climax Power, ready for moving.

Price No. 8 Mounted as above, weight 1490 pounds .....\$175.00

For further description of No. 7 and 8 Climax Powers, see page 172.





## Smalley Climax Sweep Power Nos. 7 and 8.

These Powers have pinions on both sides of the master-wheel, thus distributing the strain so equally that the utmost durability is secured and the surest guarantee against breakage, if overstrained.

The shafts are cold-rolled steel, extra heavy, running in well babbited boxes throughout.

The cut at the top shows arrangement of gearing. The one at the side shows power complete, ready to hitch the horses on.

The tumbling rods make 56 revolutions to one turn of horses, this being a much higher speed than any other sweep-power we have. If a high speed is wanted, something like the run of a threshing machine, then this is the right power to be taken. It is in fact suited for all ordinary farm work, such as running a thresher, a feed mill, a cutting machine, a circular saw machine, etc., and doing it perfectly. If a drag-saw machine is to be driven, one of our other powers better be taken, as the No. 7 Climax Power is geared rather too high for running a drag-saw machine.

Sweep-springs are attached to end of sweeps, to which the horses are hitched. This improvement is well liked, because it relieves all parts of the Power from any strain from the jerky motion of the team.

The frame is made heavy and strong, of well-seasoned hard wood; has improved staking sills, so that the power can be easily and quickly fastened down.

We sell this Power either with a jack or without it, as the purchaser desires. If the machinery to be driven is designed for running by a belt, then in purchasing this Sweep-Power you will also require to have a jack with it.

The No. 8 Smalley Climax Power is identical in construction with the No. 7, but has much heavier frame, gears and shafts making it abundantly strong for six or eight horses.

### PRICE LIST.

Complete with platform, four sweeps, two equalizing springs, two 11-foot tumbling rods, two safety couplings:

	Speed.	Weight.	Price.
No. 7 Climax Power.....	56	640 lbs.	\$100.00
No. 8 Climax Power.....	56	950 lbs.	125.00
Four-Wheel Trucks, extra ..		500 lbs.	50.00



This cut illustrates Mr. Appell's Celebrated South African Water Bag.

For use in crossing deserts and arid regions, or for the field—in fact, anywhere, and under all circumstances where a cool drink of water is wanted, or where it is necessary to carry water a long distance through a dry atmosphere or hot climate, such as is found in many sections of the South and West.

This Water Bag is guaranteed to keep water cool for thirty-six hours under the most trying circumstances. We quote what Mr. Appell says in regard to this bag:

"After traveling four months in Africa and using one of these bags, and seeing that it was an excellent thing, I became so interested that I brought one home with me to America, and since have used it on a trip through the desert of Southern Oregon, and, as many became anxious to get one, I have at last succeeded in getting the material in a foreign country and am now putting them on the market."



**The South African Water Bag.**

Every one is guaranteed to do what is claimed or your money will be refunded with pleasure. Water put into the bag in the morning, and exposed to the sun and air all day, will be cooler at night than in the morning. This Water Bag is particularly desirable for the use of stage companies, miners, freighters, sheep herders, farmers and travelers.

#### DIRECTIONS.

Hang in the sun and air. This causes the water to evaporate slightly. Notice a drop of water on the outside of the bag continually. This prevents the sun from striking the bag, and the water inside remains cool. First and second time filling water will evaporate quite rapidly, after which the bag is all right. Some evaporation is necessary to keep the water fresh. Bag should hang where air will strike it. When empty, or its use is not desired, it can be folded up as a towel and carried in the pocket. Holds  $2\frac{1}{2}$  gallons. Will manufacture special sizes to order.

South African Water Bag, by mail—

$2\frac{1}{2}$ Gallons .....	\$1.25
5 Gallons .....	1.75



## INDEX.

## A

Attachments—Horse Hoe Cultivator	49
Attachment—Grass Seed for Van Brunt Seeder	37
Attachment—Grass Seed for Van Brunt Disc Drill	39
Attachment—Grass Seed for Gund- lach Drill	36
Attachment—Seeding for Disc Harrow	34-35

## B

Bags—Water	173
Bale Ties	130
Baling Wire	130
Barbed Wire	130
Barrows	95-97
Belting Chain	167
Binding Twine	142-143
Binders	118-119
Block—Pulley Snatch	126
Block—Pulley Derrick	128
Bolster Springs	62-63
Bone Cutters	98-99
Bone Mills	100
Brackets—Rafters	128
Breaking Carts	71
Buggies—Top	85-93
Buggy Tops	94
Burrs—Grinding	102-103

## C

Canopy Tops	94
Carriers—Hay	124-125
Carriers or Elevators for Feed Cutters	166-167
Carts—Hand	97
Carts—Breaking	71
Carts—Road	71-72
Chain Belting	167
Churns	145
Cider Mills	104
Corn Planters	42-44
Corn Shellers	155
Cotters—Spring	123
Cultivators—Garden	45-46
Cultivators—Horse Hoe	47-50
Cultivators—Disc	50
Cultivators—Wheel Walking	51-52

Cultivators—Wheel Riding	53-54
Cutters—Bone	98-99
Cutters—Feed	156-167
Cutters—Potato	56
Cutters—Root	157-158
Cylinders—Pump	154

## D

Deering Binders	118-119
Deering Hay Rakes	115
Deering Mowers	116-117
Deering Sickle Grinders	120
Diggers—Potato	56-58
Disc Drills	39-40
Disc Harrows	32-33
Disc Harrow Hitches	32-33
Disc Harrow Seeding Attachment	34-35
Doubletrees	61
Drag Saw Machines	168-169
Drag Scrapers	106
Drills—Van Brunt Disc	39-40
Drills—Van Brunt Hoe	38
Drills—Bacon Garden	45-46
Drills—Gundlach Grain	36
Drive Points	154

## E

Elevators or Carriers for Feed Cutters	166-167
Extras—Walking Plow	16-17
Extras—Riding Plow	25
Extras—Pump	153-154
Extras—Wagon	68

## F

Fanning Mills	105
Farm Truck—Michigan	66
Farm Wagons	64-70
Feed Cutters	156-167
Feed Cutter Carriers	166-167
Fence Machines	123
Fence—Wire Field	133
Fence—Wire Hog	132-133
Field Fencing	133
Floor Hooks	128
Forks—Hay	127

## G

Gang Plow Attachments	25
Gang Plow—Riding	22-24
Garden Drills	45-46



## G—Continued.

Gauge Wheels	18
Grain Drills	36-38-39
Grape Vine Hoes	30
Grass Seed Attachments	36-37-39
Grinders—Sickle	120-123
Grinders—Tool	122-123
Grinding Burrs	102
Grinding Mills	100-103
Grist Mills—Hand	100

## H

Hand Carts	97
Hand Grist Mills	100
Hand Planters—Corn	42-44
Hand Planters—Potato	43
Hanging Hooks	128
Hand Seeders	41-42
Harrows—Disc	32-33
Harrows—Hop	33
Harrows—Spike Tooth	28-29
Harrows—Spring Tooth	30-31
Harrow Teeth—Spring	31
Hay Carriers	124-125
Hay Forks	127
Hay Knife	156
Hay Loaders	112
Hay Presses	129
Hay Pulleys	126-128
Hay Rakes	108-109-115
Hay Tedders	110-111
Hay Tools	124-128
Hitches—Dandy Harrow	32-33
Hoe Drills	38
Hoes—Nursery	30
Hog Fencing	132
Hooks—Floor	128
Hooks—Hanging	128
Hop Harrows	33
Hop Wire	130
Horse Hoe Attachments	49
Horse Powers	100-171-172
Horse Shoes	136-139

## I

Introductory	1-2-3
--------------	-------

## J

Jacks	170
Jacks—Wagon	69

## K

Knife—Hay	156
Knife Grinders	120-122

## L

Link Chain Belting	167
Loaders—Hay	112

## M

Machines—Fence	123
Machine Potato Planter	55
Machines—Saw	168-169
Machines—Washing	144
Mills—Bone	98
Mills—Burrs	102-103
Mills—Cider	104
Mills—Fanning	105
Mills—Feed	100-103
Mills—Grinding	100-103
Mills—Grist—Hand	100
Mills—Poulterers'	100
Mills—Wind	147
Mowers	116-117

## N

Nails	134-135
Neckyokes	56
Netting—Poultry	131-133

## P

Pipe	154
Planters—Hand Corn and Potato	42-44
Planters—Machine Potato	55
Plow Attachments—Walking	16-18
Plow Bottoms for Gang	19-25
Plow Doubletrees	61
Plow Gauge Wheels	18
Plow Repairs—Riding	25
Plow Repairs—Walking	16-17
Plows—Riding, Chilled and Steel	19-25
Plow Sets	61
Plows—Shovel	26-27
Plow Singletrees	61
Plows—Walking, Chilled and Steel	1-15
Plows—Winged	26
Poetry	3-113
Points—Drive	154
Potato Cutters	56
Potato Diggers	56-58
Potato Planters—Hand	43
Potato Planters—Machine	55
Potato Sorters	59
Poultry Netting	131-133
Powers—Horse	171-172



## P—Continued.

Presses—Hay .....	129
Puller—Stump .....	60
Pulleys—Derrick .....	128
Pulleys—Hay .....	128
Pulleys—Sling .....	126
Pumps .....	150-153
Pump Cylinders .....	154
Pump Extras .....	153-154

## R

Rakes—Hay .....	108-109-115
Rafter Brackets .....	128
Repairs—Wagon .....	68
Riding Cultivators .....	53-54
Riding Plows .....	19-24
Road Carts .....	71-72
Road Scrapers—Drag .....	106
Road Scrapers—Wheel .....	107
Road Wagons .....	82-84
Root Cutters .....	157-158
Rope .....	140-141

## S

Saws—Power Drag .....	168-169
Scales .....	146
Scrapers—Drag .....	106
Scrapers—Wheel .....	107
Seeders—Broadcast .....	41-42
Seeders—Hand .....	41-42
Seeders—Van Brunt .....	37
Seeders—Wagon .....	41
Seeding Attachment for Disc Harrow .....	34-35
Shellers—Corn .....	155
Shoes—Horse .....	136-139
Shovel Plows .....	26-27
Sickle Grinders .....	120-123
Singletrees—Plow and Wagon ..	61
Skeins—Wagon, Cast and Steel ..	68
Slings—Wagon .....	128
Smooth Wire .....	130
Sorters—Potato .....	59
Spike Tooth Harrows .....	28-29
Springs—Bolster .....	62-63
Spring Cotters .....	123
Spring Tooth Harrows .....	30-31
Spring Wagons .....	73-81
Staples—Wire .....	130
Support—Tongue—Wagon .....	69
Stretchers—Wire .....	132
Stump Pullers .....	60
Sulky Plows—Riding .....	19-21

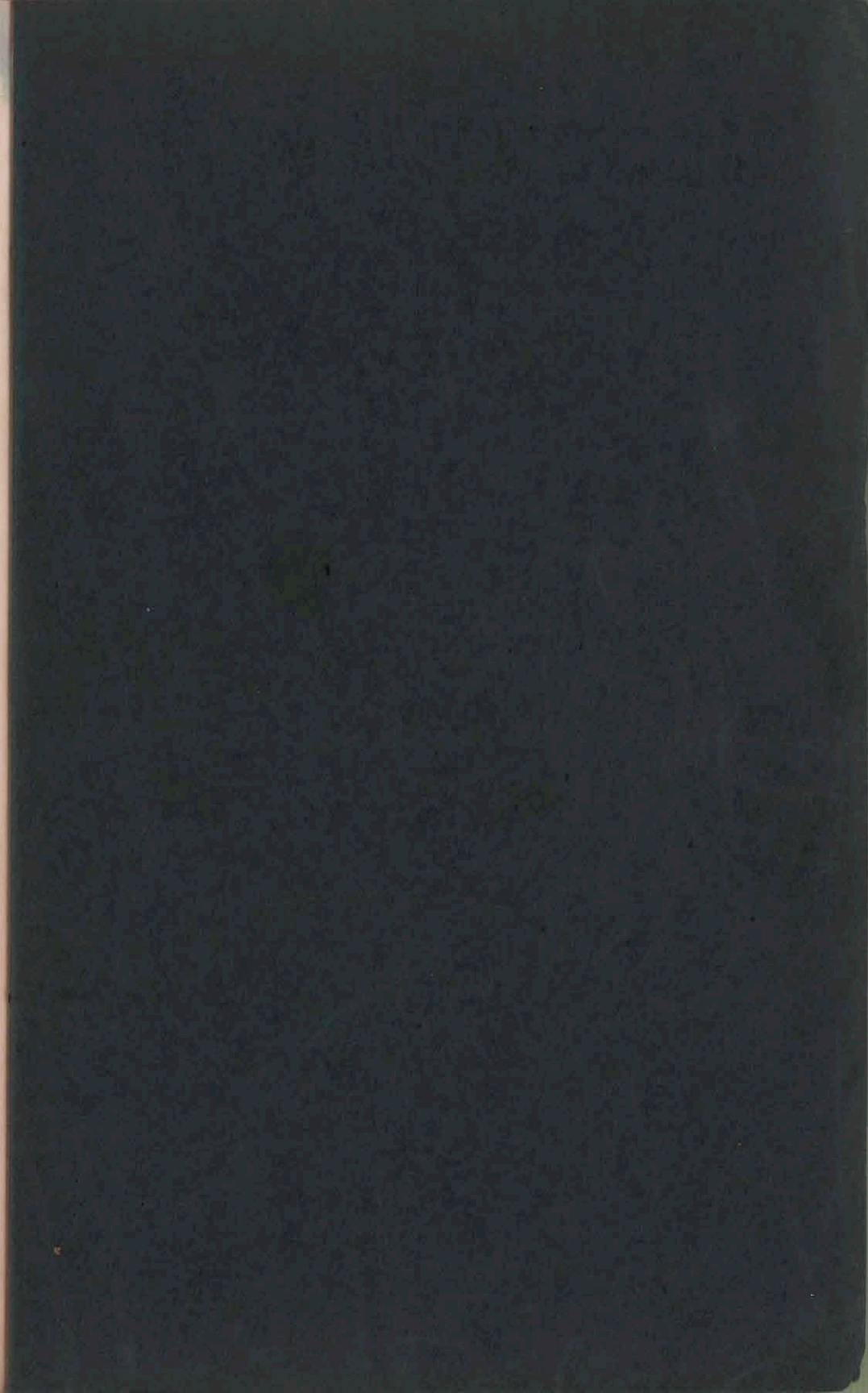
## T

Tanks .....	149
Tedders—Hay .....	110-111
Teeth—Spring Harrow .....	31
Ties—Bale .....	130
Tongue Supports .....	69
Tool Grinders .....	122-123
Tools—Hay .....	124-128
Tops—Buggy .....	94
Tops—Canopy .....	94
Towers—Wind Mill .....	148
Trucks—Michigan Farm .....	66
Twine—Binding .....	142-143

## W

Wagon Bolster Springs .....	62-63
Wagon Hay Slings .....	128
Wagons—Harrison .....	67
Wagon Jacks .....	69
Wagon Neckyokes .....	61
Wagons—One Horse .....	69-70
Wagon Repair List—Rushford ...	68
Wagons—Road .....	82-84
Wagons—Rushford Farm .....	65
Wagons—Rushford Mountain ...	64
Wagon—Seeders .....	41
Wagon Singletrees .....	61
Wagons—Spring .....	73-81
Wagon Tongue Supports .....	69
Walking Plow Attachments .....	16-18
Walking Plows—Chilled and Steel .....	1-15
Walking Plow Repairs .....	16-18
Washing Machines .....	144
Water Bags .....	173
Weeders—Horse .....	60
Wheelbarrows—Canal and Garden .....	95-96
Wheels—Gauge .....	18
Wheel Scrapers .....	107
Wheel Walking Cultivators .....	51-52
Wheelbarrows—Stone .....	97
Wind Mills .....	147
Wind Mill Towers .....	148
Wire Baling .....	130
Wire—Barbed .....	130
Wire—Hop .....	130
Wire—Smooth .....	130
Wire Staples .....	130
Wire—Field Fence .....	133
Wire—Hog Fence .....	132
Wire Netting .....	131
Wire Stretchers .....	132
Wire Nails .....	134-135









## Remember J. L. Clark Buggies

Style. Comfort  
Quality and Finish.

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## Oliver's No. 40 Full Chilled Plow.