

1869.

1871.

# CLIMAX

CHANGEABLE SPEED



## MOWER AND REAPER,

MANUFACTURED BY THE

### Climax Mower and Reaper Company.

CORRY, PA.

Special Agents,

STEWART & NEEDHAM,  
 WESTERN AGENTS  
 FOR THE  
**"CLIMAX"**  
 MOWER AND REAPER,  
 AND GENERAL DEALERS IN  
**FARM MACHINERY,**

No. 16 SOUTH MAIN STREET,

SAINT LOUIS, - - - MISSOURI.

BRANCH HOUSE:

DAVENPORT, - - - IOWA.

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**SPECIALTIES:**

**CLIMAX MOWERS AND REAPERS;**

*Climax Sulky Hay Rakes;*

*Gundloch's Revolving Rakes;*

*J. I. Case's Threshers and Separators;*

*Newton Farm and Freight Wagons;*

*Eagle Feed Cutters;*

*Eagle Walking Cultivators;*

*Keystone Corn Planters;*

*Keystone Corn Shellers;*

*Buckeye Grubbers.*

OFFICERS  
CLIMAX MOWER AND REAPER.

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F. W. ANDREWS,  
*President.*

LYMAN STEWART,  
*Treasurer.*

JOHN D. McFARLAND,  
*Secretary.*

H. T. PHILLIPS,  
*Superintendent.*

**LYMAN STEWART, General Manager.**

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**We Warrant the Climax Mower and  
Reaper**

To be well built, of good material, and to do first class work, with light draft on the team and ease to the operator.

The purchaser will be allowed to work the Machine in cutting two acres of grass or grain, on trial ; and in case it does not fulfill the Warranty, he must give us or our Agent immediate notice, and allow time for us or our Agent to put it in order.

If any part has proven defective, it will be replaced ; and if it then does not work, and the fault is in the Machine, the payment will be refunded. Keep the *knives sharp*, and the *bearings well oiled*.

OFFICE OF THE  
**CLIMAX MOWER & REAPER CO.,**  
**CORRY, PA.**

In calling attention to the CLIMAX MOWER AND REAPER, we have reason to thank our own agents and friends for the many unsolicited testimonials, complimentary to the machine, which we have received, and take great pleasure in acknowledging our obligations to them for the generous favor in which it has been placed before the public. Keeping in view the liability of other manufacturers of reapers and mowers to claim that their particular machine is the only successful one in the world, we have prepared this circular with caution, and make no statement that we are not prepared to substantiate, by a fair competition, under the severest possible tests in the field.

With no disposition to detract from the merits of other machines, as all have some good points, we affirm with confidence that in the Climax are combined more of the essentials of *durability, adaptability, lightness of draft, strength and safety*, than any other mower or reaper in the market.

The two independent wheels, with pole central to the work, obviating side draft, the flexible frame and hinge in cutter bar giving the machine great flexibility on rough ground, also holding the cutter bar in line with the pitman rod; the guard, with an adjustable steel plate ground to a shear edge, which may be removed, ground and replaced without injury to the guard, thus always securing a *perfect shearing cut*; the encasing of the gearing, protecting it from mud and rust, insuring

its durability and easy action, and at the same time securing from danger the person operating the machine; the changeable speed which, after much experimenting and outlay of money, is now so perfect that the *motion of the sickle can be instantly changed* while the machine is in operation, to a slow motion for reaping or easy mowing, or a quick motion for the most difficult mowing, are some of the claims of superiority which combine in the Climax to make it the grandest achievement in the catalogue of harvesting machinery; and the effort of other manufacturers to appropriate to their own use our forms of enclosed gearing and changeable speed, is proof of the importance and value attached to them by our competitors.

No machine has been offered to the public that has gained so wide and favorable a reputation in so short a time, which is accounted for in the fact that no pains or expense have been spared in securing every known improvement for immediate use on the machine.

We ask a careful perusal of the description of the machine hereinafter given, and, if possible, an examination of the machine itself; and we are confident that the reader will find such a beautiful combination of mechanical principles as cannot fail to give perfect satisfaction, either as a reaper or a mower.

We use only *the very best of materials*, and the strictest attention is given to every detail in the construction by practical mechanics, under the supervision of Mr. Phillips, who has had long experience in manufacturing mowers and reapers. With every preparation for careful work and our thorough system of inspection, it is next to impossible for an imperfect machine to leave our works; and we open the season with great confidence that the Climax of 1871 will more than excel its much envied reputation in the past, and as our works have a capacity for the manufacture of from 1,000 to 1,500 machines per month, we hope to be able to supply the large and rapidly increasing demand of the trade.

## Description of the "Climax Mower."

**The General Construction** is very complete, accuracy being of first importance. Fully realizing this fact, we leave nothing to chance or hand work in the construction of the Climax, but every part, in every detail and particular, is manufactured by machinery especially designed for that purpose, securing beyond doubt perfect accuracy, not only in the moving but the stationary part of the machine. Competent mechanics are detailed to carefully examine every part of the machine before it is set up, and no casting is used unless stamped as perfect by them.

**The Simplicity of Construction** is such that it can be set up and run by any farmer's boy; it is strong and compact, made entirely of *iron, steel and brass*.

**The number of Bolts** is less, and it is composed of fewer pieces than any other mower; there is nothing about it to get out of order, and its durability is beyond question.

**The Gearing is enclosed in a neat Iron Case**, the cog-wheels occupying the smallest possible space, are thus protected from water or dampness, preventing rust, and excluding dirt, grass, or anything that would clog or injure the gearing of the machine.

**The construction of the Gearing** deserves special mention. In size and strength it is fully equal to an ordinary horse-power of a threshing machine. This is believed to be an important consideration. The pinions are all large, thereby lessening the strain upon the *centres*, which, both practically

and theoretically, is found to be the correct principle. All the gearing of the Climax is placed upon a mandrel and turned off, rendering it perfectly true, thus securing uniform depth of mesh. The bearings are all large, which secures steadiness of motion and adds to its strength and durability. It is compact in construction, smooth in motion, and communicates more power to the knife, with less friction, and therefore less draft, than any other mower in use.

**The Shafts are made of Steel**, are of a uniform size, and run on

**Solid Brass Bearings or Boxes**, which are so constructed that when worn they can be replaced without getting the shafts out of line.

**Lightness of Draft.** Much of the difference in the draft of Mowing and Reaping Machines is due to the accuracy of their construction, but more to the principles on which the gearing is constructed; and we claim that with the intelligent use of materials and correct application of mechanical principles in the *Climax*, that it is unequaled by any Mower in the country.

**The actual Draft of the Climax**, at a field trial last June, in ordinary grass, cutting 4 1-2 feet wide, was only 137 pounds—the *lightest draft on record*. It has no side draft.

**The facility of Management** in the Climax cannot be excelled. The lifting levers are convenient to the right hand of the operator, and without leaving his seat he *regulates the height of cut*, raises the outer end of the cutter-bar 3 feet from the ground, the inner end 15 inches, or both ends simultaneously, and as the knife works in any position, he can pass over or around obstructions without stopping the team or motion of the knife, and should he approach

**Lodged Grass or Grain**, he shifts the lever one notch, thereby giving the knife fast motion, and cuts through the most difficult places. Coming again to common grass or grain, he reverses the lever and has slow motion of knife, saving wear of the machine, as well as lessening the draft on the team.

**The Changeable Speed** of the Climax is so arranged that the pitman crank makes twenty-one revolutions in the slow and thirty in the fast speed, to one of the drive wheels.

**In Turning Corners** there is no necessity of backing, as the machine turns readily either way without stopping the team or losing motion of the knife.

**The Guards are Malleable Iron**, faced with Steel and ground to a shear-cutting edge, which secures a perfect shearing action when the knife is in motion.

**The Knife-Back is made on Scientific Principles.** Long experience has shown that iron, subject to constant jarring or vibratory motion, loses its fibrous character and becomes brittle, or like cast iron. This indisputable fact induces us to use *very soft, tenacious iron*; and the wonderful strength and durability of the Climax knife has demonstrated the wisdom of our choice.

**The Safety of the Climax in Transportation** leads all competition, as the enclosed gearing secures the driver from injury by the cogs, the reins from being entangled or cut off; and if by accident he should possibly be thrown from his seat, he will fall behind the cutter-bar, which is conveniently folded across the pole in a perfectly safe position, allowing the machine to pass through narrow gates or alleys; and on account of the enclosed gearing,

**It will pass over Plowed Ground**, astride a row of corn or potatoes, or along dusty or muddy roads, without incurring a loss of time in cleaning dirt or mud from the gearing.

**A Spring-Steel Floating-Bar or Frame**, to which the cutter-bar is attached, gives great flexibility to the movements of the machine, and prompt adjustment to the surface irregularities of the ground; and with our

**Spring-Steel Cutter-Bar** on this *spring-steel frame*, sudden contact with obstructions is avoided, rendering it scarcely possible to break even a guard.

**The Seat-Springs** are oil-tempered, long and flexible, making riding a matter of pleasure.

**The Swather, or Track-Clearer**, is made of one piece of annealed iron, so shaped that it is self-supporting, requiring neither bolts nor rivets to hold it in position. By bending it more or less, it will clear as wide or narrow a track as desired, and *never clogs* in tangled clover.

**The Whiffletrees are stayed** by a casting on the pole, dispensing with long stay-chains, and rendering it impossible for the team to be injured by the cutter-bar.

**We do not claim** that the Climax will cut more grass or grain in a day, but that it will cut as much as the best in the market, with *less strain on the team*, less trouble to the operator, do its work better, be in better condition at the end of the season, and require less repairs than any other mower in the country. Its work is thoroughly done with either quick or slow motion; it can be worked by oxen, stopped and started without backing, and never chokes.

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## DESCRIPTION

OF THE

## “CLIMAX” AS A REAPER.

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After experimenting with Self-Rakes, Hand-Rakes, Binders, and various other reaping attachments, we have found that

**The Sieberling Dropper** is the most perfect, giving uniform satisfaction. To speak of the merits of this Dropper, or attempt to set forth its claims upon the farmers of the country, seems to be superfluous. The fact that nearly every reaper establishment of any note has been compelled to endorse and use it, is sufficient evidence of its many advantages. That there are more droppers sold yearly than any and all other reapers, needs no comment—the fact speaks for itself.

Determined to excel in furnishing a Reaper in every way adapted to the wants of an intelligent community, we have se-

cured the right to use this Dropper, and have taken great pains in adjusting it to our Climax Mower, which, on account of its changeable speed, encased gearing, hinged cutter-bar, facilities for cutting high or low, without stopping, is better adapted to working with this dropper than any other machine on which it has ever been operated.

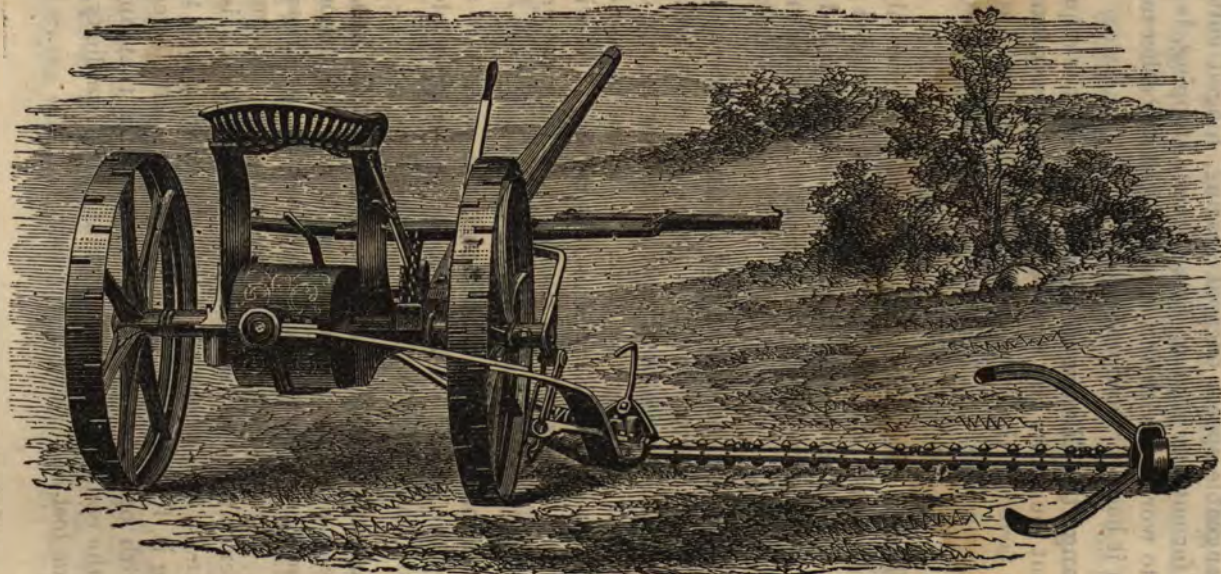
**To change the Climax to a Reaper**, all that is required is to take out four bolts and remove the entire Mower frame and bar, then fasten in the same place the Reaper frame and bar, with the same bolts, and the work is done. The change can be made in five minutes' time.

**The Climax, with Dropper**, will cut 19 inches high for tall grain, or only 2 inches high for short or tangled grain; and the height of both ends of the cutter-bar is changed simultaneously, with great ease, by a single lever, while the machine is in motion, thus

**In Cutting Lodged or Tangled Grain**, the operator is enabled to let the cutter-bar down for lodged spots, and when through, to again raise both ends of the bar to any desired height without stopping the team. This cannot be done by any other two-wheeled Reaper in the country. At will, the Climax has a *quick speed* or a *slow speed*, a high cut or a low cut, and can be operated by a boy.

**For Transportation on the Road**, the cutter-bar swings around by the side of the machine, and the dropper folds in a convenient manner for passing through gates.

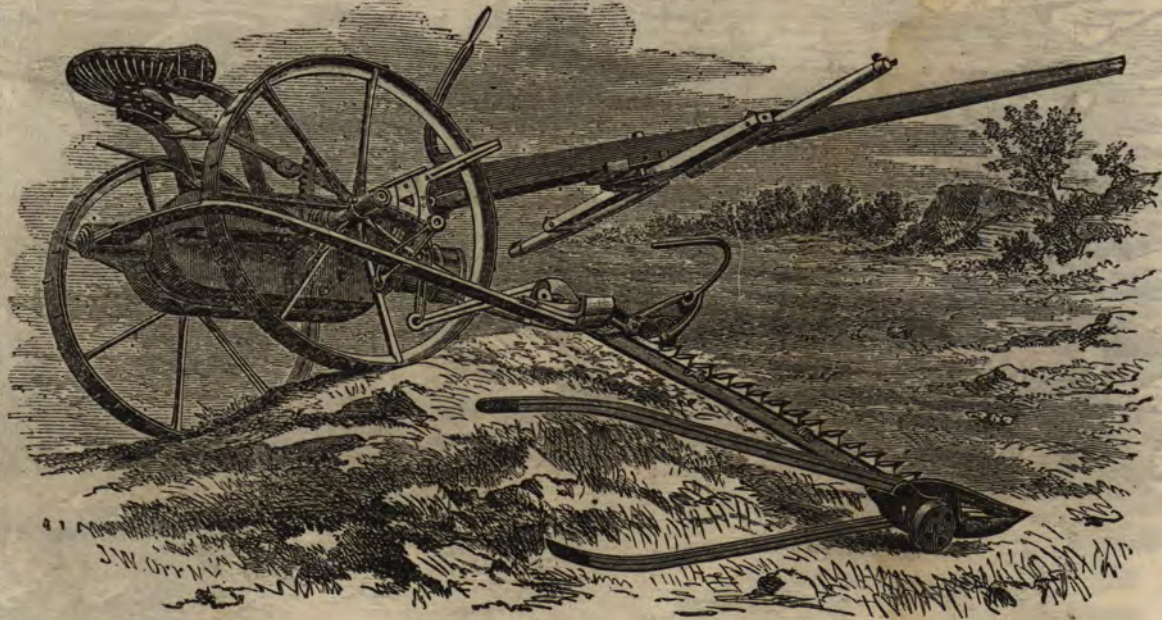
**The Advantages of a Dropper over Self-Rakes**. The Self-Rake has yet to be introduced which can deposit the grain in so close and uniform a gavel as does the *Climax with Dropper*. Five men can bind more grain after this machine than seven after a self-rake, as the six foot swath is compressed and left in a compact gavel, obviating loss of time in arranging it for binding. It is light, less complicated, and works with one-third less draft on the team than any Self-Rake in the country; and on account of its simplicity, there is less time lost in keeping it in repair.



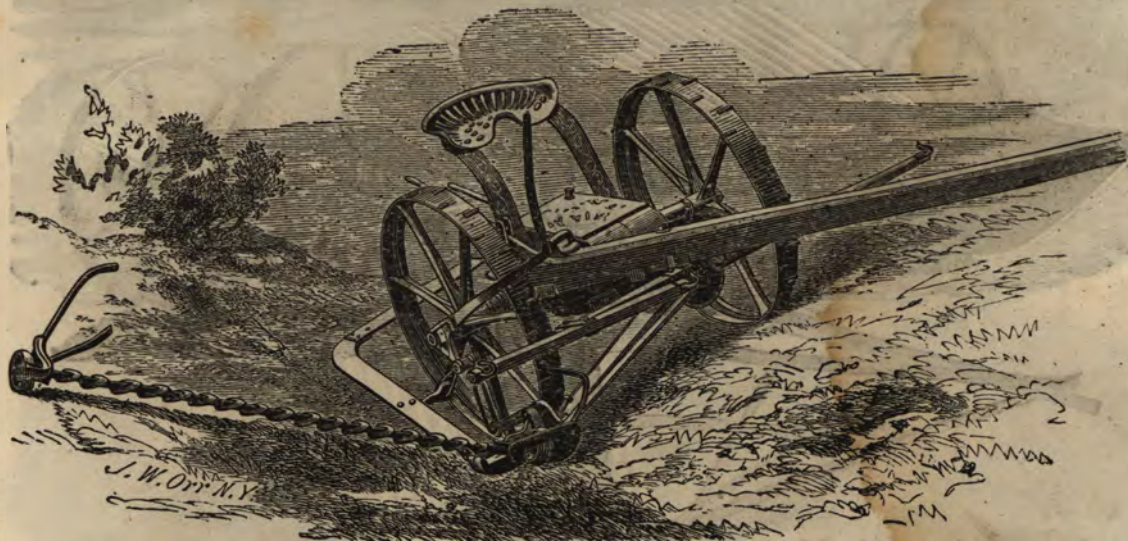
**THE CLIMAX MOWER READY FOR A TRIAL.**



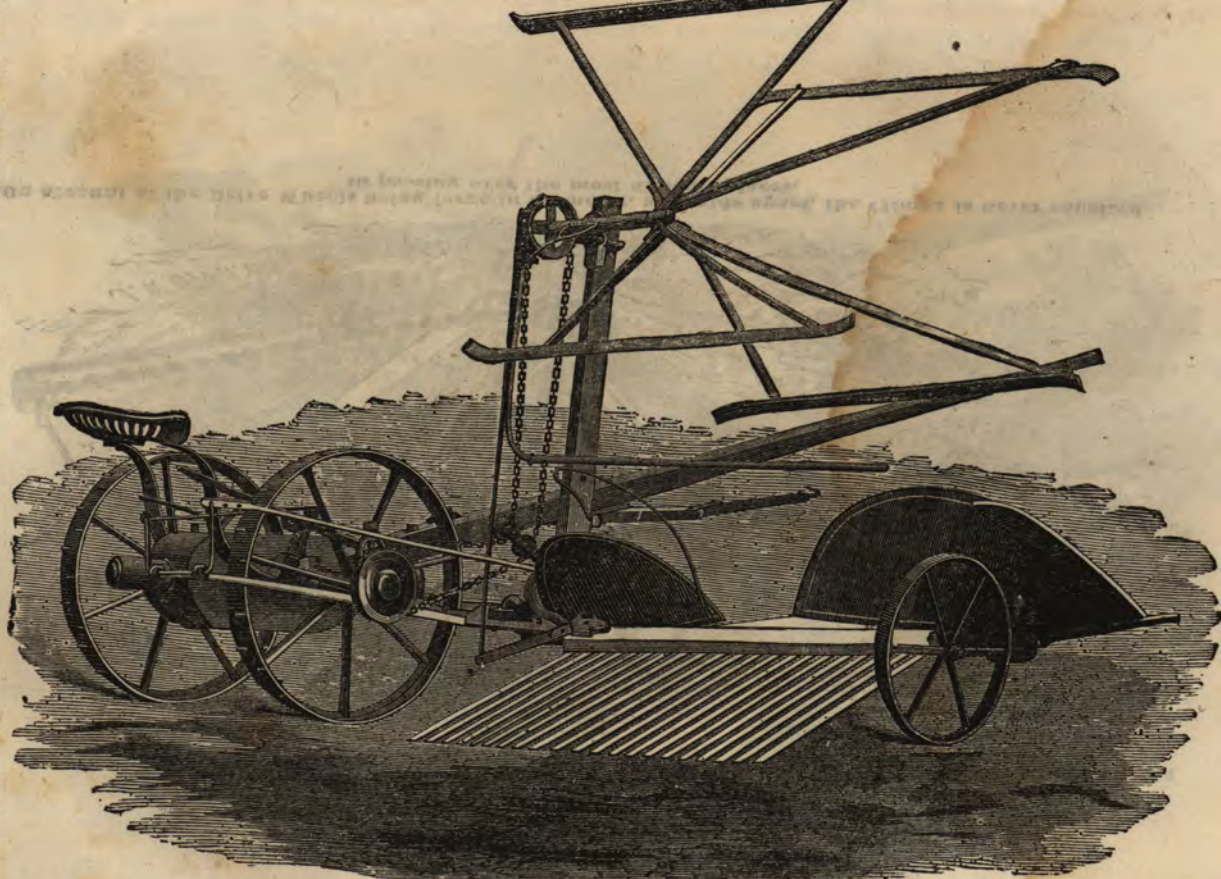
The Cutter Bar folds over the Tongue, making the Climax as Portable as a Sulky.



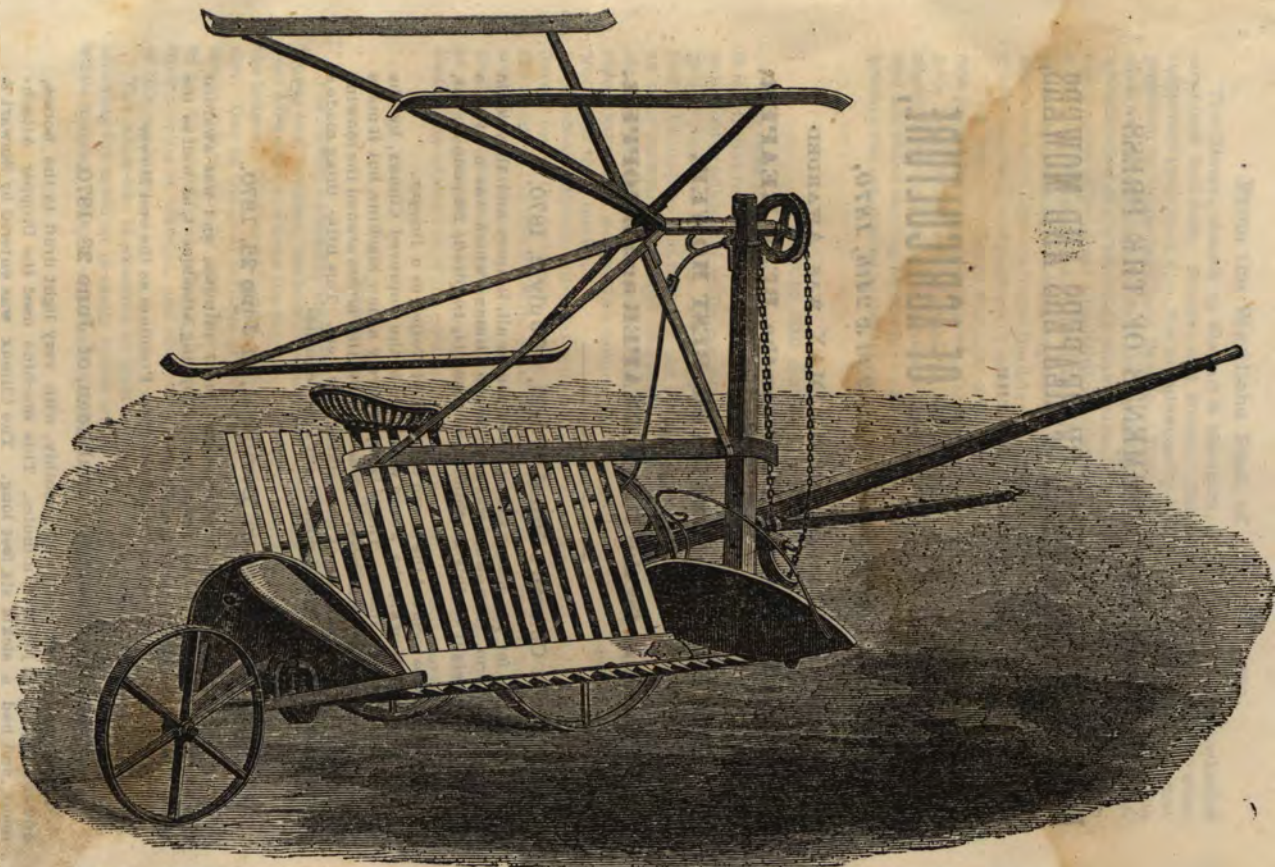
**The Climax Cutter Bar adjusts itself to the surface of rough ground without getting the Pitman rod out of line with the knife.**



On account of the Drive Wheels being large in diameter, and wide apart, the Climax is never capsized in passing over the most difficult places.



**The Climax with Dropper, as it was awarded the Grand Sweepstakes Prize at the Missouri trial in 1876.**



The Climax with Dropper folded for Transportation on the Road, and passing through narrow gates.

NOTICES AND COMMENTS OF THE PRESS  
UPON THE GREAT TRIAL OF REAPERS AND MOWERS,  
HELD BY THE  
**MISSOURI STATE BOARD OF AGRICULTURE,**

*At ST. LOUIS, June 22d, 23d & 24th, 1870,*

ON WHICH OCCASION THE CLIMAX WAS AWARDED  
**The Grand Sweepstakes Prize for the BEST REAPER,**  
(OF ANY KIND),  
**The First Premium for the BEST MOWER,**  
AND THE  
**First Premium for the BEST REAPER and DROPPER.**

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From Colman's Rural World, of July 2, 1870.

The premium for the BEST REAPER was open to all Reapers and they could come in in any form. The award was made to the Climax, which was used as a Dropper. The weight of this machine is 800 pounds, the draft, 203 pounds, cut, six feet.

The Climax also received the award for the *Best Reaper as a Dropper*.

FOR THE BEST MOWER, the award was made to the Improved Climax, by the same inventor as the Climax. This is comparatively a new machine, but it made some extraordinary performances, such as running the horses around the mowing lot, cutting down or running at fence stakes, etc., etc. This little thing made a host of friends. Its draft is 204 pounds, cut 4 feet, 8 inches.

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From the Missouri Democrat, of June 28, 1870.

The Climax completed its square, (one acre) in 37 minutes, and was awarded the First Premium as the best Reaper with Dropping attachment, as well as the Grand Sweepstakes Prize, as the best Reaper.

The Improved Climax was awarded the First Premium as the best Mower.

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From the Missouri Republican, of June 23, 1870.

The Climax moved easily and smoothly, with very light draft to the horses, and cut a splendid job in 37 minutes. This machine used the Dropper Attachment, and had a sickle six feet long. The Climax was entered by Stewart & Needham of this city.

### From the Westliche Post, of June 29, 1870.

The Climax, entered by Stewart & Needham, of St. Louis, is a two-wheeled combined Self-Rake, Dropper and Mower. This Machine received the two most important premiums, *i. e.*, first premium as the best Reaper of any kind, and first premium in its specialty, as a Dropper. It is only one year since this Machine has been introduced on this side of the Mississippi river by the above named firm, notwithstanding she is favorably known already amongst most farmers of the West, on account of the great simplicity of construction and numerous advantages. As a Dropper, this machine works splendidly. She lays off the grain nicely and compactly, and scarcely leaves a single straw between the gavels. The horses work the machine with light draft and the driver handles it with the greatest ease, and its great simplicity and easiness of motion are superior points of merit.

The *Improved Climax* was also entered by the same firm and was awarded the first premium as the best Mower. Its construction is similar to that of the Climax. As a Dropper she cuts six feet, and as a Mower, four and a half feet wide. This machine seemed to be the favorite of every one present, as there was never a prettier and easier moving Mower in the field. It was handled like a toy, and everybody present was astonished at its easy movements and quality of work performed.

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### From the Journal of Agriculture.

A novelty to us was the Climax—though it has now been three years in the field. It is peculiar in its construction, almost exclusively of iron, and very compact; the sickle being adjustable while in motion, both as to quickness of stroke, and as to height from the ground. We never saw the machine before, and have been accustomed to suppose that half a dozen or more of the well-tried machines, were about as near perfection as could be expected; but the appearance and performance of this new machine, have produced in our mind the impression that the older machines must look well to their honor. They will find in this competitor something worthy of their mettle.

In what estimate this trial will be held, we cannot now say; but being conducted under the patronage of the State Board, its results ought to have weight in the minds of the farmers of the State; and, looking at the awards here given, those who have purchased new machines, will examine the Climax—for this, comparatively new, entered the contest with the best machines in the world, and took three of the six prizes. As a Mower, it contested with all the machines on the ground, and in the estimation of the committee, beat them all. This is glory enough!

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### From the Prairie Farmer.

The *Climax*, entered by Stewart & Needham, of St. Louis, as a Combined Reaper, Mower and Dropper, has now been some three seasons before the public; and last year 4,000 were put upon the market. It is an entire iron and steel machine, except the tongue. It is very compact, the whole gearing being encased from dust and dirt. One of the good features of this machine is that of the changeable gear from fast to slow motion for grass or grain cutting. This change can be made instantly by the driver without stopping the team, when desirable. The facility of changing from reaping to mowing, and convenience of handling, are strong points in favor of this machine.

The knife-bar is attached to what is called a floating-bar made of spring steel allowing the machine to easily follow all irregularities of the surface of the ground while moving. Few, if any machines, have ever made the same headway.

## MOWER TRIAL.

### *THE CLIMAX AND CLIPPER IN THE FIELD.*

From the Missouri Republican, of July 9, 1870.

A trial between the rival mowing machines, known respectively as the Climax and Clipper, took place yesterday at the farm of John Ferguson, on the St. Charles rock road. On a former occasion these machines were tried together, but the result was not considered satisfactory to all parties, and so another "meeting" was arranged. The tests were severe and well calculated to exhibit the qualities of the respective machines. The experiments were made on a piece of grass very difficult to cut, which had been reserved for some such occasion. Mr. Ferguson acted as general superintendent of the trial, and the following farmers constituted the committee to report on the result: Mr. Huntington, Dr. Stephens, Thos. Breckinridge, Mr. Thorne, Marion Wise, John L. Ferguson, C. H. Webber, O. Baldwin, E. Thomas, Mr. Vanwinkle, T. G. Settle, J. MacMannamy. The tests comprised 'cutting a circle on the "haw,"' and other feats of skill. The result appears to have been in favor of the Climax. The draft of the Climax was 185, and of the Clipper 245 pounds. The vote on the result was taken by the twelve farmers by ballot, the Climax receiving eight and the Clipper four votes.

FERGUSON STATION, St. Louis County, Mo., February 9, 1871.

Messrs. Stewart & Needham,—St. Louis, Mo.—

GENTLEMEN—I have examined the above report, and find it correct according to the evidence shown on that occasion.

Yours, truly,

J. L. FERGUSON.

The foregoing notices and COMMENTS OF THE PRESS, are fully substantiated by the following TABULAR STATEMENTS OF THE RELATIVE MERITS of the machines which competed for the awards offered by the

### Missouri State Board of Agriculture, in 1870.

The want of space forbids our naming the SEVERAL HUNDRED AWARDS which THE CLIMAX has received since its first appearance in the market, two years ago.

*The following are the awards, taken from the OFFICIAL REPORT OF THE MISSOURI STATE BOARD OF AGRICULTURE, 1870. (Page 182.)*

Best Harvester,....."Marsh."  
 Best Combined Reaper and Mower,....."Clipper."  
 Best Self-Raking Reaper,....."Burdick."  
 Best Reaper,....."Climax."  
 Best Reaper as a Dropper,....."Climax."  
 Best Mower,.....Acme."Climax Improved."

**TABULAR STATEMENT.**

| NAME OF MACHINE.             | WIDTH OF CUT.   | ACTUAL CUT ON TRIAL. | DRAFT.   | TIME OF CUTTING 9-10 ACRE. | WEIGHT OF MACHINE. | PRICE OF MACHINE. | TIME REQUIRED TO CHANGE FROM REAPER TO MOWER. |
|------------------------------|-----------------|----------------------|----------|----------------------------|--------------------|-------------------|-----------------------------------------------|
|                              | Reaper.         | Reaper.              | Reaper.  |                            |                    |                   |                                               |
| Marsh,.....                  |                 | 5 feet,.....         | 270 lbs. | 36 Minutes.                | 870 lbs.           | \$195 00          |                                               |
| Clipper,.....                | 6 feet,         | 5 " 6 ins.           | 235 "    | 41 "                       | 875 "              | 190 00            | 10 Minutes.                                   |
| Burdick,.....                | 5 " 6 ins.      | 4 " 8 "              | 226 "    | 43 "                       | 875 "              | 160 00            |                                               |
| Climax,.....                 | 6 "             | 5 " 2 "              | 203 "    | 37 "                       | 800 "              | 150 00            | 6½ Minutes.                                   |
| Climax,.....                 | 6 "             |                      | 203 "    |                            | 890 "              | 185 00            |                                               |
| Acme (Climax improved),..... |                 | 4 feet, 8 ins.       | 204 "    |                            |                    | 125 00            |                                               |
| Kirby,.....                  |                 | 5 "                  | 243 "    | 45 Minutes.                | 900 lbs.           | 165 00            | 4 Minutes.                                    |
| Champion,.....               |                 | 5 "                  | 297 "    | 54 "                       | 1,000 "            | 175 00            | 5 "                                           |
| John P. Mowry,.....          |                 | 5 "                  | 260 "    | 38 "                       | 950 "              | 175 00            | 3 "                                           |
| Ætna,.....                   |                 | 5 "                  | 327 "    | 35 "                       | 900 "              | 142 00            | 6½ "                                          |
| Bucyrus,.....                |                 | 5 " 3 ins.           | 256 "    | 35 "                       | 750 "              | 145 00            | 4 "                                           |
| Meadow King,.....            |                 |                      |          |                            |                    | 150 00            |                                               |
| McCormick Reaper,.....       |                 |                      |          |                            |                    | 190 00            | 19 Minutes.                                   |
| McCormick Combined,.....     | 4 feet, 10 ins. |                      | 317 lbs. | 36½ Minutes.               | 830 lbs.           | 160 00            |                                               |
| Excelsior,.....              | 5 "             |                      | 253 "    | 39 "                       | 850 "              |                   |                                               |

# FARMERS' CERTIFICATES.

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## FROM IOWA.

### Full Endorsement Climax Mower and Reaper.

NEWTON, Iowa, January 21, 1871.

*Messrs. Stewart & Needham—St. Louis, Mo.*

GENTLEMEN: I herewith hand you the names of Jasper county farmers, who say you may put any recommend you please in favor of the Climax Combined Reaper and Mower to their names, as you can not speak in too high terms of it. Their names are as follows:

S. H. DEVANYHAM,  
JOSHUA CRAWFORD,

J. E. WYATT,  
A. T. DRAKE,

J. W. WILTBANK  
THOS. SHERMAN.

Yours truly,

WM. R. SKIFF.

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### Mower and Reaper Combined—Best and Lightest Draft.

CENTREVILLE, Iowa, January 10, 1871.

*Messrs. Stewart & Needham:*

I hereby certify that I purchased of Ware & Rummel, one of your Climax Mowers and Reapers Combined; and after cutting 80 acres of meadow and 50 acres of grain, I can recommend the machine as the best I ever saw. I regard it as the lightest draft and the smoothest running machine in the country.

SAMUEL BROWN.

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### Enclosed Gearing, Light Draft.

CENTREVILLE, Iowa, January 1, 1871.

*Messrs. Stewart & Needham,*

GENTLEMEN: We hereby certify that we purchased of Ware & Rummel, a Climax Mower and Reaper Combined, and during last harvest cut 65 acres of grain and 70 acres of grass; and for ease of draft and thoroughness of work, it excels any Reaper and Mower that we know. The gearing being protected is decidedly a great advantage over other machines.

S. H. SHOWALTER,  
ISRAEL GARTON.

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### Cuts Wire Grass on Wapsie Bottoms.

DAVENPORT, Iowa, December 10, 1870.

*Messrs. McNair & Jordan,*

GENTLEMEN: The Climax Mower we bought of you has given complete satisfaction. The draft is very light, and it is impossible to choke it. We have cut all kinds of grass that grows on the Wapsie Bottoms, and with our experience of the qualities of the Climax, we can safely say, that were it brought to a test, it would cut anything from a growth of the heaviest, down to the worst wire grass. We have used a good many other kinds of Mowers, but were never so well suited before, and we feel justified in advising all farmers in want of a first-class Mower, to try the Climax before buying anything else.

W. H. SOOVEY,  
ASA HOOPER.

## Boy Twelve Years Old can run the Climax.

DAVENPORT, Iowa, December 1, 1870.

*Messrs. McNair & Jordan,*

DEAR SIR: The Climax Mower bought of you last summer, beats anything in the Mower line I ever used. My neighbors all agree that it has no superior. The draft is very easy, and a boy twelve years old can run it anywhere. Any person wanting a good Mower, should be sure and buy a Climax.

JAMES VAN BUSKIRK.

## FROM MISSOURI.

### Front Cut, Light Draft, and Works Easily.

FAIRVIEW, St. Louis Co., Mo., February 14, 1871.

*Messrs. Stewart & Needham,*

DEAR SIR: The Climax Mower I purchased from you last June, I found superior to any Mowing machine I ever used, having used three other patents. It is of a light draft, does the work neatly, and a very great advantage over most machines, is the blades being forward of the driver. Yours &c.,

WM. H. BROWN, M. D.

### No Machine Equal to the Climax.

DENT STATION, Mo., (Iron Mountain R. R.,) January 8, 1871.

*Messrs. Stewart & Needham,*

DEAR SIR: The Climax Mower and Reaper purchased of you last year, gives entire satisfaction. In fact, of the many different kinds of machines in use in this section, I have seen none to equal the Climax. Yours truly,

WM. DENT.

### Changeable Speed, Hight of Cut, Durability. Cuts 240 Acres with Small Pair of Mules.

BROWNVILLE, Saline Co., Mo., Nov. 29, 1870.

*Messrs. Baker & Blocher—Sedalia, Mo.,*

GENTLEMEN: The Combined Climax Mower and Reaper I purchased from you is the Climax, not alone in name, but in reality, and has exceeded my most sanguine expectations. I have, with a small span of mules, cut 160 acres of grass and grain for myself, and 80 acres for my neighbors, and all without the least perceptible wear on the machine. I have worked with many different kinds of Reapers and Mowers, but for draft, the Climax is the lightest, and the ease with which the driver can regulate the Changeable Speed and Hight of cut without leaving his seat, are points of excellence in this machine over others. To work so nice a running machine as this gave me great pleasure, and I much regretted when harvest closed and I could find no more grain or grass to cut. Yours truly,

WM. SMITH.

## Durability, Lightness, Changeable Speed. Cuts Timothy and Clover grown up thick through dead Blue Grass.

BOONVILLE, Mo., Dec. 23, 1870.

*Messrs. Joachimi & Gross Bros.,*

GENTLEMEN: I have tried the Climax Mower purchased from you last summer, giving the same a most severe test in a piece of clover and timothy. When the bottom was covered with dead blue grass, I doubted if any machine could do the work required; but upon your recommendation I gave the Climax Mower a trial, and to my great satisfaction and astonishment, the Climax performed the work to perfection. Its simplicity, durability and lightness of draft, combined with *changeable speed*, and all its other excellent qualities, make it undoubtedly the best machine of the kind I have ever seen used. Therefore, I most cheerfully recommend the Climax to all farmers wanting a No. 1 machine.

Yours respectfully,  
DANIEL DAVIS.

CENTRAL P. O., Mo., June 4, 1870.

*Messrs. Stewart & Needham—No. 16 S. Main Street, St. Louis, Mo.,*

GENTLEMEN: I have thoroughly tested the Climax Mower I bought of you, and find that it works better than you recommended. Your agent said I could not break it, so I ran it with great force against stumps and trees with heavy horses, till I am satisfied that it is the strongest, most durable and lightest draft machine I have ever seen. Its work cannot be excelled. Many of my neighbors have seen it work and will testify to these facts. I would refer you to Wm. Heaps, Sr.; Wm. Heaps, Jr.; David Graham, David Sappington, Thomas Snyder.

Very respectfully, J. B. UNDERWOOD.

## Changes Speed Without Stopping Team.

PISGAH, Missouri, December 28, 1870.

*Messrs. Joachimi & Gross Bros., Boonville, Mo.—*

GENTLEMEN: With the Climax Mower and Reaper, purchased of you last summer, I have cut 150 acres of grass and grain, and am prepared to say that the Climax Mower and Reaper is the best machine of the kind in use; and its simplicity, lightness of draft, and *CHANGEABLE SPEED*, together with the raising of height of cut—which can so easily be done without getting off the machine or stopping the team—are features of such excellence that in my opinion the CLIMAX, as a COMBINED machine, far excels any similar machine I ever saw. It has *no* side draft, and a pair of common horses will handle the machine with perfect ease all day, in any field of grass or grain. You may refer to me any persons wishing to hear more in regard to this "tip-top" machine. I remain, respectfully yours,

McHENRY RUTHERFORD.

## FROM NEBRASKA.

### Cuts 250 acres with small ponies--stops & starts without choking.

YANKEE CREEK, Saline County, Nebraska, July 22, 1870.

*Messrs. L. C. Rimboid & Co.,—Nebraska City, Neb.—*

GENTLEMEN: The Climax Mower we purchased from you is a splendid little machine. We cut about 250 acres of grass with it, and you can hardly see that it has been used. We could stop it anywhere, and start again, and it would not choke at all. Two little ponies worked the machine easily. We did run the CLIMAX Mower against the machines of our neighbors, but they could not compete, and gave it up. We offered to bet \$50 that we could cut with the Climax, prairie grass fields which have not been burned off once within ten years. They would not take the bet. Our neighbors who own the Kirby, Excelsior, and John P. Manney, will testify, if required from you, to the above—though they did not like to be beat.

Respectfully yours,

T. F. MARTIN,  
S. M. WESTON.

### FROM ILLINOIS.

Did all his Cutting with Slow Speed.

*Messrs. Stewart & Needham.*—

JERSEYVILLE, Illinois, Christmas, 1870.

GENTLEMEN: I bought a Climax Mower of Mr. Newton last summer, and on trial it proved to be the best Mower I have ever used. I have worked with the Buckeye, Excelsior, Russell and many others, but the *Climax* climaxed them all in draft, handling and cutting. I did all my cutting with the slow speed. Below, please find certificate of myself and neighbor as to the test we gave it.

Yours respectfully

CHARLES H. RUE.

### Cuts Readily in Turning Corners---Cuts through a Winrow and 200 lbs. Bundle of Hay without Clogging.

We certify that the Climax Mower cut across the mown grass in all directions. Cut turning to the right and left; cut through a winrow lengthways—cutter bar twelve inches from the ground; and cut through a 200 lbs. bunch of hay sixteen inches from the ground, and done it all without clogging or stopping. This is the severest test for any Mower.

CHARLES H. RUE,  
DAVID R. ROSS.

### Cuts in Prairie Slough where other machines clogged.

MORRISON, Illinois, January 19, 1871.

*Messrs. Stewart & Needham.*—

GENTLEMEN: I bought a Climax Mower of your agent, E. S. Little, which for lightness of draft and ease of management, has proved to be the best I ever used. I cut a Slough that had not been mown for several years, and where a number of machines could not mow one rod without clogging. I am highly pleased with it.

Very truly yours,

JAMES S. BROWN.

### FROM PENNSYLVANIA.

From Joel S. Goe, General Agent, Pittsburg---Three were Sold at the Trial with Competitors.

FAYETTE COUNTY, Pennsylvania.

GENTS: At a trial of mowers, held on the farm of Joseph Bidler, near Conellsville, the Wood, Union, Champion, Excelsior and Climax were represented. They said the Climax would have to leave the field: but the little unassuming Climax went in and did its work well, and remained on the farm. Three were sold to those who saw it work.

JOEL S. GOE.

## IN ORDERING MACHINES OR EXTRAS, Be Particular to Mention

1st. Whether to ship by freight or express.

2d. Station, Town, County and State to which they are to be shipped, as well as your address.

3d. In ordering castings or extra parts, give the number *on the casting*, or the number of same with name of the piece, as shown in the following list of Duplicates.

4th. Give the number of the machine for which the extra is ordered, and state whether it is a Junior or Senior size.

We furnish *no repairs free* to replace imperfect parts, unless the defective ones are delivered to us or our agents, immediately after the imperfection or breakage is known.

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### PRICE LIST

#### CLIMAX MOWERS AND REAPERS.

|                                                |          |
|------------------------------------------------|----------|
| Climax Junior, single speed Mower, 4 ft. cut,  | \$120.00 |
| “ Senior, chan’ble “ “ “                       | 135.00   |
| “ “ “ “ “ 4½ “                                 | 140.00   |
| “ “ “ “ 4 foot Mower                           |          |
| and 6 foot Dropper,                            | 180.00   |
| Climax Senior, changeable speed, 4½ foot Mower |          |
| and 6 foot Dropper,                            | 185.00   |
| Seiberling Dropper attachment, for Sr. Mower,  | 45.00    |

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All machines shipped will be delivered on board cars at  
ry, Pa., the purchaser paying freight from the factory.

# PRICE LIST OF DUPLICATE PARTS OR EXTRAS.

See Cuts of Mower Parts on Pages 27 and 28, and of Dropper Parts on Page 29.

## Numbers, Names and Prices of the Duplicate Parts of the CLIMAX MOWER.

|           |                                                       |         |
|-----------|-------------------------------------------------------|---------|
| No. 1.    | Right Hand Traveling Wheel,<br>narrow tread, Sr.....  | \$10.50 |
| " 1.      | R't Hand Traveling Wheel,<br>broad tread, Sr.....     | 11.00   |
| " 1.      | R't Hand Traveling Wheel,<br>broad tread, Jr.....     | 10.50   |
| * R't     | Hand Traveling Wheel,<br>nar'w tread, ratchet hub, Sr | 10.50   |
| * R't     | Hand Traveling Wheel,<br>br'd tread, ratchet hub, Sr  | 10.50   |
| * R't     | Hand Traveling Wheel,<br>br'd tread, ratchet hub, Sr  | 11.50   |
| No. 2.    | Left Hand Wheel, Sr.....                              | 9.50    |
| " 2.      | Left Hand Wheel, Jr.....                              | 8.00    |
| * Left    | Hand Wheel, ratchet<br>hub, Sr.....                   | 9.50    |
| No. 3.    | Left Hand Side.....                                   | 11.00   |
| " 4.      | Right Hand Side.....                                  | 12.00   |
| " 5.      | Lid.....                                              | 1.50    |
| " 6.      | Floating Bar Frame.....                               | 5.00    |
| " 7.      | Rear Spring.....                                      | 2.50    |
| " 8.      | Front Spring.....                                     | 3.00    |
| " 9.      | Frame Hinge Casting.....                              | 4.00    |
| " 10.     | Front Frame Spring Holder,                            | 1.50    |
| " 11.     | Rear Frame Spring Holder,                             | 1.50    |
| " 12.     | Lifting Eye and Link.....                             | 75      |
| " 13.     | Seat Spring (each).....                               | 1.50    |
| " 14.     | Foot Piece (each).....                                | 50      |
| " 15.     | Seat.....                                             | 1.50    |
| " 16.     | Inner Shoe.....                                       | 3.00    |
| " 17.     | Pitman H'd, with Bushings,                            | 1.50    |
| " 18.     | Inner Shoe Wheel.....                                 | 1.00    |
| " 19.     | Outer Shoe.....                                       | 3.00    |
| " 20.     | Outer Shoe Wheel.....                                 | 1.00    |
| " 21.     | Lock Lever Handle.....                                | 50      |
| " 22.     | Lock Lever Hatch.....                                 | 50      |
| " 23.     | Lock Lever Post.....                                  | 75      |
| " 24.     | Lock Lever complete.....                              | 3.50    |
| " 25.     | Lifting Lever and Hub.....                            | 2.75    |
| " 26.     | Pitman Bonnet.....                                    | 1.50    |
| " 27.     | Wrist Pin.....                                        | 1.25    |
| " 28.     | Pitman Wheel.....                                     | 1.50    |
| " 29.     | Pitman Rod.....                                       | 1.50    |
| " 30.     | Wrist Pin Bushing.....                                | 50      |
| " 31.     | Knife Section, each.....                              | 25      |
| " 32.     | Knife Guards, each.....                               | 50      |
| " 33.     | Cutter Bar Clip.....                                  | 15      |
| No. 34.   | Cutter Bar Hinge.....                                 | \$3.50  |
| " 35.     | Cutter Bar complete with<br>one Sickle.....           | 30.00   |
| " 36.     | Sickle complete.....                                  | 5.00    |
| " 37.     | Cutter Bar Lever and Links,                           | 1.25    |
| " 38.     | Pitman Shaft.....                                     | 3.00    |
| " 39.     | Bevel Pinion.....                                     | 1.00    |
| " 40.     | Main Axle, long.....                                  | 2.50    |
| " 41.     | Main Axle, short.....                                 | 2.00    |
| * Main    | Axle, whole.....                                      | 3.00    |
| No. 42.   | Rear Shaft.....                                       | 1.75    |
| " 43.     | Tongue Bolt.....                                      | 50      |
| " 44.     | Tongue Casting.....                                   | 3.00    |
| " 45.     | Thirty Tooth Spur Gear....                            | 3.00    |
| " 46.     | Shifting Lever.....                                   | 1.00    |
| " 47.     | Clutch Yoke.....                                      | 25      |
| " 48.     | Bevel Wheel with Spur pin's,                          | 4.50    |
| " 49.     | Thirty-five Tooth Spur Gear,                          | 3.00    |
| " 50.     | Main Drive Gear with ratchet                          | 3.00    |
| * A 50.   | Main Drive Gear without<br>ratchet.....               | 2.50    |
| * A 62.   | Hub Dog Plate, right.....                             | 3.00    |
| * A 61.   | Hub Dog Plate, left.....                              | 3.00    |
| No. 51.   | Pitman Shaft Bushings.....                            | 1.50    |
| " 52.     | Double Clutch.....                                    | 3.00    |
| " 53.     | Clutch Flange, left.....                              | 3.00    |
| " 54.     | Clutch Flange, right.....                             | 3.00    |
| " 55.     | Clutch Dogs, right in gear..                          | 10      |
| " 56.     | Clutch Dogs, left in gear...                          | 10      |
| * Clutch  | Dogs, right, in travel-<br>ing wheel.....             | 10      |
| * Clutch  | Dogs, left, in travel-<br>ing wheel.....              | 10      |
| No. 57.   | Swather (iron).....                                   | 3.00    |
| * Swather | (wood).....                                           | 3.00    |
| No. 58.   | Pole Iron.....                                        | 1.00    |
| " 59.     | Spur Pinion.....                                      | 1.50    |
| " 60.     | Shifting Lever Holder.....                            | 75      |
| " 61.     | Cast Plug for rear end of box,                        | 30      |
| " 62.     | Shoe Guard.....                                       | 75      |
| " 63.     | Gas Pipe Sleeve with brass<br>bushings.....           | 3.00    |
|           | Pole.....                                             | 3.00    |
|           | Whiffletrees & Doubletrees,                           | 2.50    |
|           | Neck Yoke.....                                        | 1.00    |

Parts marked with a \* are not shown in cuts.

# NUMBERS, NAMES and PRICES of the DUPLICATE PARTS

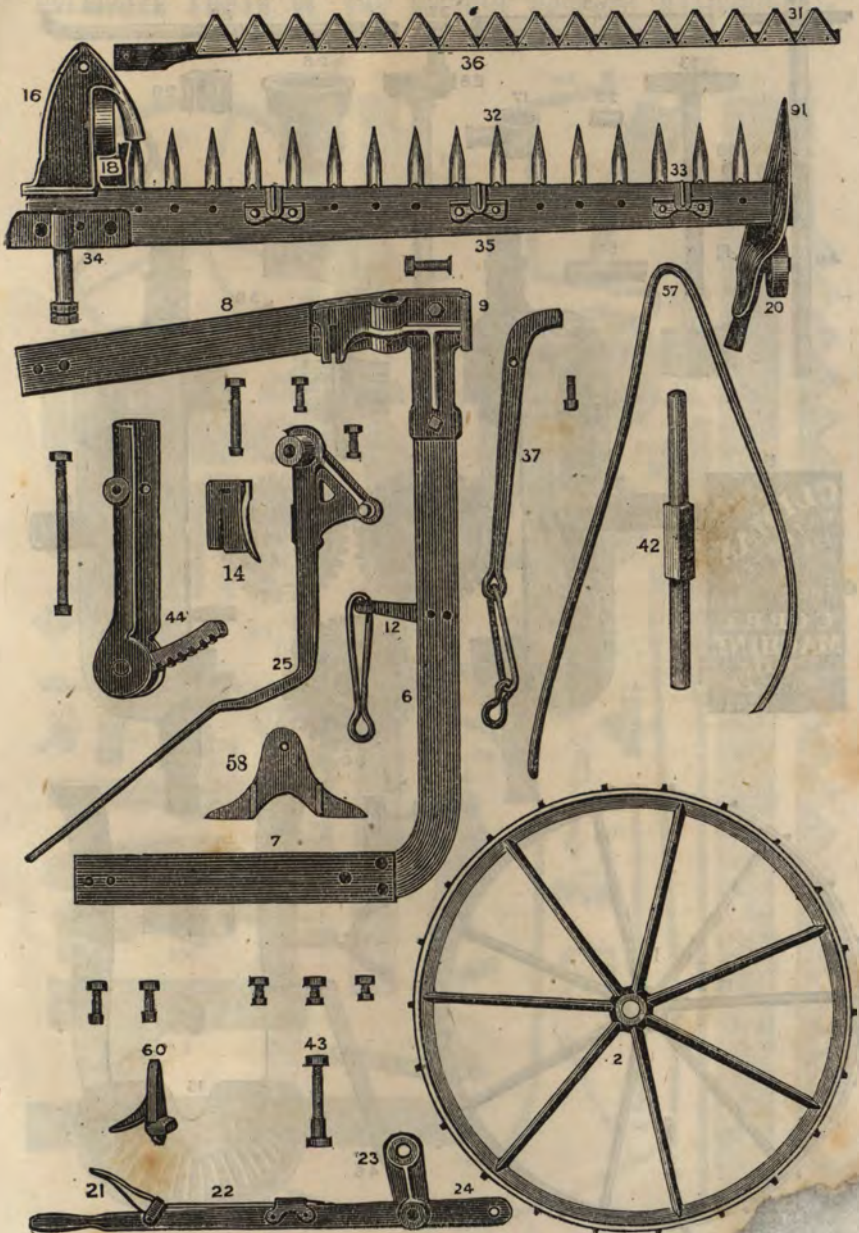
OF THE

## CLIMAX DROPPER ATTACHMENT.

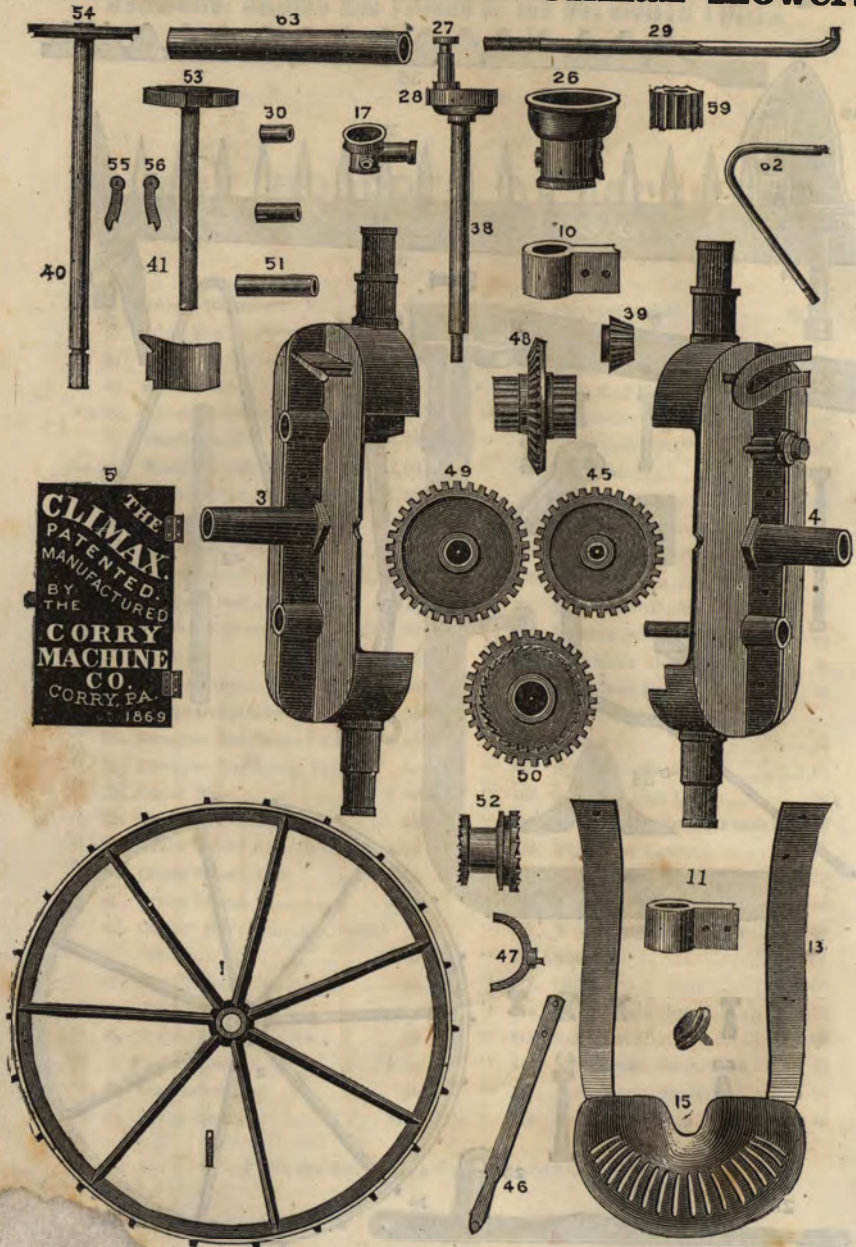
|                                                        |        |                                              |        |
|--------------------------------------------------------|--------|----------------------------------------------|--------|
| No. 61. Dropper Frame.....                             | \$6.00 | No. 89. Dropper Crank.....                   | \$1.00 |
| " 62. Front Frame Piece.....                           | 2.50   | " 90. Dropper Hinge.....                     | 75     |
| " 63. Frame Hinge Casting.....                         | 4.50   | " 91. Stop Rod Lifter.....                   | 1.50   |
| " 64. Wheel Clutch and Shieve....                      | 3.00   | " 92. Stop Rod Hinge.....                    | 1.50   |
| *A 64. Wheel Clutch and Shieve for<br>ratchet hub..... | 3.00   | " 93. Tightener Shieve Yoke.....             | 50     |
| No. 65. Wheel Clutch Box.....                          | 1.50   | " 94. Tightener Shieve.....                  | 30     |
| " 66. Frame Yoke.....                                  | 1.50   | " 95. Reel Shieve.....                       | 1.50   |
| " 67. Frame Yoke Screw.....                            | 75     | " 96. Reel Chain.....                        | 3.00   |
| " 68. L. Dropper Bar.....                              | 8.00   | " 97. Reel Shaft.....                        | 1.50   |
| " 69. Sickel complete.....                             | 9.00   | " 98. Reel Shaft Bearing.....                | 3.00   |
| " 70. Dropper Bar Clip.....                            | 15     | " 99. Reel Spider.....                       | 3.00   |
| " 71. Sickel Sections.....                             | 30     | " 100. Reel Post Staple.....                 | 30     |
| " 72. Guards.....                                      | 50     | " 101. Rubber Spring.....                    | 60     |
| " 73. Sickel Guide.....                                | 1.00   | " 102. Tightener Hook.....                   | 30     |
| " 74. Sickel Guide Cap.....                            | 50     | " 103. Tightener Hook Casting....            | 25     |
| " 75. Dropper Bar Hinge Casting, 5.00                  |        | " 104. Grain Holder Socket and<br>Screw..... | 1.00   |
| " 76. Dropper Bar Hinge Bolt....                       | 75     | " 105. Stop Rod Knuckle.....                 | 1.00   |
| " 77. Outer Shoe.....                                  | 3.50   | " 106. Dropper Fall Hinge.....               | 25     |
| " 78. Grain Board Segment.....                         | 75     | " 107. Inner Grain Board Fender.             | 50     |
| " 79. Grain Wheel Arm Hinge....                        | 1.00   | " 108. Tightener Lever.....                  | 50     |
| " 80. Grain Wheel Arm.....                             | 3.00   | " 109. Caster Arm Button.....                | 75     |
| " 81. Grain Wheel.....                                 | 3.50   | " 110. Grain Board Angle Irons..             | 30     |
| " 82. Cutter Bar complete, with<br>Sickel.....         | 36.00  | " 111. Wood Dropper Bar com....              | 2.50   |
| " 83. Foot Treadle Standard.....                       | 50     | " 112. Slats.....                            | 15     |
| " 84. Foot Treadle.....                                | 75     | " 113. Outer Grain Board.....                | 4.00   |
| " 85. Frame Crank Hinges.....                          | 30     | " 114. Inner Grain Board.....                | 2.25   |
| " 86. Frame Cranks.....                                | 2.00   | " 115. Reel Post.....                        | 2.00   |
| " 87. Foot Lever Rod.....                              | 30     | " 116. Reel Arms, long, each....             | 65     |
| " 88. Crank Rod.....                                   | 1.50   | " 117. Reel Arms, short, each....            | 50     |
|                                                        |        | " 118. Reel Fans.....                        | 65     |

Parts marked with a \* are not shown in cuts.

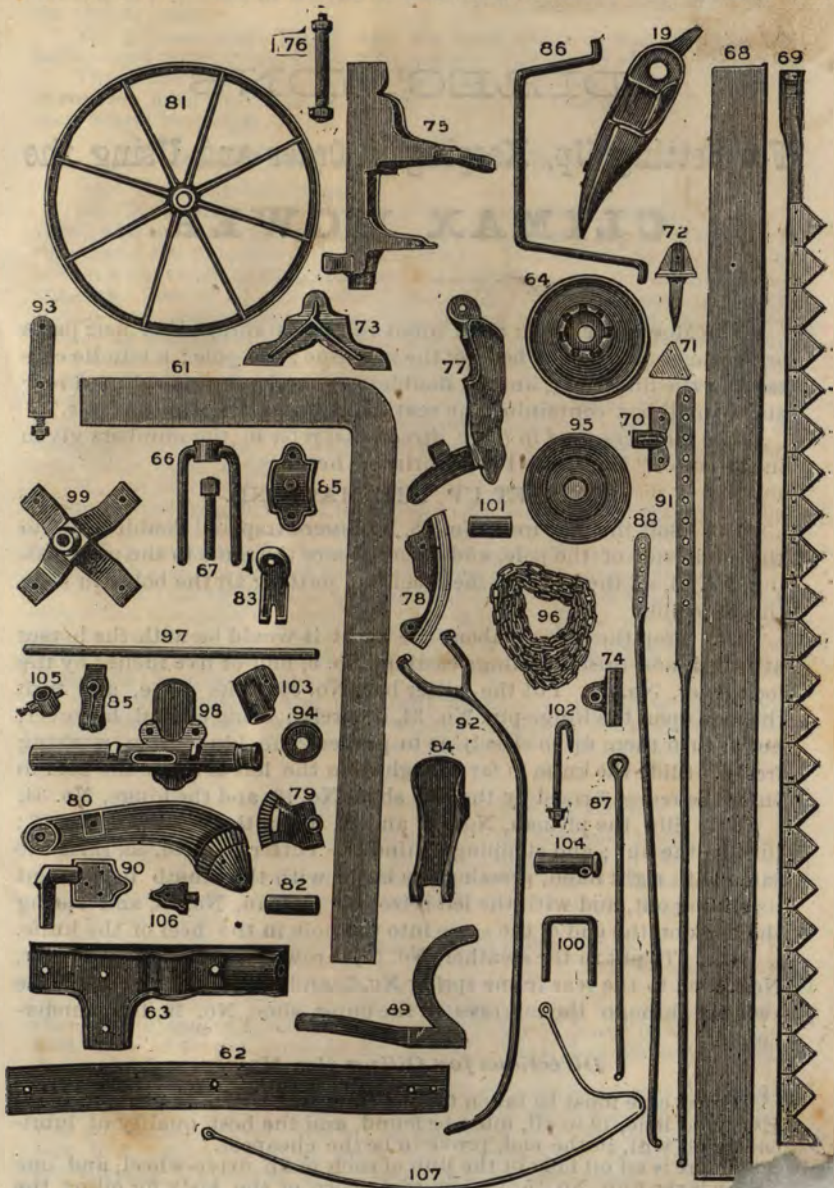
# Duplicate Parts of the Climax Mower.



# Duplicate Parts of the Climax Mower.



# DUPLICATE PARTS OF THE CLIMAX DROPPER ATTACHMENT.



## DIRECTIONS

### For Setting Up, Keeping in Order and Using the **CLIMAX MOWER.**

The Mower for use in the United States, is shipped in four parts or packages, viz.: The body of the machine; the pole; a bundle containing the finger bar, knives, doubletrees, neckyoke and pitman rod; and a small box containing the seat and springs, bolts and extras.

*The numbers used in these directions, refer to the numbers given in the cut of "Duplicate Parts" printed herein.*

#### TO SET UP THE MACHINE.

1st. Bolt the pole iron, No. 58, hammer-strap and doubletrees, to the underside of the pole, and then secure the same to the pole casting, No. 44, on the body of the machine, putting all the bolts in from the underside.

2d. Prop the pole up about the height it would be with the horses attached, and raise the hinge casting, No. 9, four or five inches by the lock lever, No. 24. Put the cutter bar, No. 35, in its place, and turn the nuts upon the hinge-pin, No. 34, securely; being careful, however, not to turn them up so closely as to prevent the hinge from working freely. Slide the knife in far enough from the left to allow the heel to enter the recess formed by the iron shoe, No. 16, and the hinge, No. 34.

3d. Slip the pitman, Nos. 17 and 29, upon the wrist-pin, No. 27; turn on the nut; and stepping behind the cutter bar, No. 35, raise the same with right hand, pressing the knife with the thumb to prevent its sliding out, and with the left seize the pitman, No. 29, and spring the hook on the end of the same into the hole in the heel of the knife.

4th. To put in the swather, No. 57, throw back the lifting lever, No. 25, on to the rear frame spring No. 7, and pass the long end of the swather through the mortices in the outer shoe, No. 19, from underneath.

#### *Directions for Oiling the Mower.*

Great care must be taken to oil every part where there is friction. Every oil hole, 19 in all, must be found, and the best quality of lubricating oil will, in the end, prove to be the cheapest.

There is an oil hole in the hub of each main drive-wheel, and one in the lever hub, No. 25, two in each horn of the body for oiling the

main shaft or axle bearings; one in each back horn for oiling back shaft; and one in front on the outside for oiling pitman shaft; also one on the inside, next to small pinion; one in each spur pinion of the bevel gear; and one in the rim of each back or clutch gear, and one in the clutch itself.

The pitman head, No. 17, and the hook where it connects with the knife, need more frequent oiling than any other part of the machine.

The knife back should also be oiled occasionally where it comes in contact with the cutter bar; also the hinge bearing, No. 9, and the shoe-wheel bearings.

### *Instructions for Operating the Mower.*

1st. Keep the *knives sharp*.

2d. Keep the *bearings well oiled*; and with the machine in good order, and the nuts turned up close, you have only to drive the team right, and the machine will do the work. It will turn to the right or left on a curve, in cutting corners, readily, if either drive-wheel is advancing. (*See C. H. Rue's Certificate.*) But the experience of drivers on the best machines is, that it is always better to keep the corners square by driving entirely out before you commence turning; then, with a short swing to the right, make the turn with sufficient backward motion of outer end of cutter bar, to bring its full length square up to the grass, in starting in again on the next side; but in all common work, let the bar lie on the ground in making your turns, and do not touch the levers. It will generally clear its own way in this manner, better than if raised.

3d. When your work is finished and you wish to leave the field, or drive from one part of it to another—or pass an obstruction, the bar should be raised. In driving to or from your field, raise the frame as high as possible by the two levers, and fold the cutter bar across the pole, dropping the ends of the swather on the left side of the seat.

4th. In using the *Double Speed Machines* when your knives are sharp and the team is fresh, the slow motion will do the work, especially in reaping; but when needed, move the shifting lever, No. 46, two notches, and you will increase the motion about one-third, without changing the speed of the team.

5th. By moving the quadrant lever, No. 24, up or down, you change the height of cut at will, without stopping the team, and more readily than in any other machine. The shoe-wheels can also be varied if desired.

### *Directions for Setting Up the Dropper.*

1st. Prop up the end of the pole about the common height for work, and take the pitman out of the knife, as instructed in No. 3, Mower directions. Remove the cutter bar and knife. Turn off the nut on the right end of main axle, and remove the four bolts in front and rear ends of the frame.

Slip the frame off, including the lifting lever, No. 25.

2d. Adjust the chain shieve, No. 64, to the dropper frame, No. 61, by setting over it, frame-yoke, No. 66, and fastening same to dropper frame with nuts. Then shove chain shieve, No. 64, on right end of axle, at the same time moving front and rear of frame to their places. Bolt ends of frame same as for Mower. Then bolt on to the rear of frame the frame-crank, No. 86.

3d. Block up outer end of sickle bar, No. 68, level with the frame, and fasten it to the frame by turning on nut closely, but not too tight, and bolt grain wheel, No. 81, on the outer shoe, No. 77, and key the bolt to its place. Bolt on grain-bolt segment, No. 78, by putting bolt through the hole in dropper-fall socket of outer shoe.

Bolt large grain board to segment and outer shoe, screwing up the nuts closely. Set grain wheel, No. 81, up against grain board, and fasten it by catching short end of bottom lever, No. 109, in segment groove. Regulate hight of outer end of sickle bar, by bolt and nut in slot of No. 79, on arm of grain wheel, the hight of cut being regulated by the quadrant lever, No. 24.

4th. Attach tightening lever with its two shieves to upper bolt on reel post, and connect tightening hook to same, and through casting, No. 103 below, with rubber, turning nut on after the rubber; then set up reel post, and fasten it to hinge casting, No. 75, by its two bolts, leaning the post so far forward for ordinary work that its top end will be about fifteen inches in front of the sickle points. Prepare the reel by bolting the arms to the spider or reel iron, No. 99, and fasten the shaft bearing, No. 98, to the reel post, with its staple, No. 100, having under it a plate or washer. The entire reel can be raised or lowered on the post for different hights of grain. Bolt the dropper hinge, No. 90, to the inner end of the dropper fall, and attach dropper fall to sickle bar by inserting the hinges in their sockets. Fasten inner grain board to its place on first guard with bolts, through hinge casting, No. 75.

Fasten hinge rod, No. 92, to its place in reel shaft bearing, No. 98, with spring key. Set knuckle, 105, about eight inches from reel shaft bearing; then fasten grain holder, No. 104, to lower end of hinge rod—adjusting at pleasure for tall or short grain.

Attach stop rod lifter, No. 91, to knuckle and lower arm of dropper crank, No. 89, by spring keys.

Fasten the crank rod, No. 88, to upper arm of dropper crank, and outer end of frame crank, No. 86.

Remove right footpiece, No. 14, and seat springs to back holes, and fasten foot treadle, No. 84, with seat spring bolts, and attach foot lever rod, No. 87, to footpiece and frame crank, with spring keys.

Put on the chain by passing it around the two main shieves, with the upper chain passing between the two tightening shieves, and the lower chain passing below them; add the short piece of chain, for lengthening, if needed. Tighten the chain with nut on rubber. To insert sickle, unscrew cup, No. 74, and adjust pitman to its place in eye of sickle; then return and fasten cap.

### *The Same Oiling is as Necessary for the Dropper*

*As for the Mower*, with the addition of the grain wheel, reel shaft and wheel clutch box, No. 65. This box needs *special care*.

### *For Operating the Dropper.*

The same precautions are necessary in driving, as for mowing. The hight of the cut is varied by the quadrant lever, as in mowing, very readily; and also fixed by adjusting screw, No. 67, on the right hand end of axle, and moving the arm of the grain wheel.

The droppings of gavels will be learned by a half hour's experience better than by any directions we can give. Let the motion of the foot on the treadle, No. 84, be prompt and sudden, both in dropping and raising the fall. Raise or lower the reel until it lays the grain on the fall in good shape; and also adjust the grain holder, No. 104, until it holds the falling grain nicely, while you are dropping your gavel.

**STEWART & NEEDHAM,**  
WESTERN AGENTS

FOR THE

**CLIMAX MOWER & REAPER,**

AND

WHOLESALE DEALERS IN

**FARM MACHINERY,**

No. 16 SOUTH MAIN STREET,

**ST. LOUIS, MO.**

BRANCH HOUSE:

**DAVENPORT, IOWA.**

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AGENT AT

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