J. SHEARER.

Cotton Seed Sower.

No. 104,893. Patented June 28, 1870.

Fig. 1.

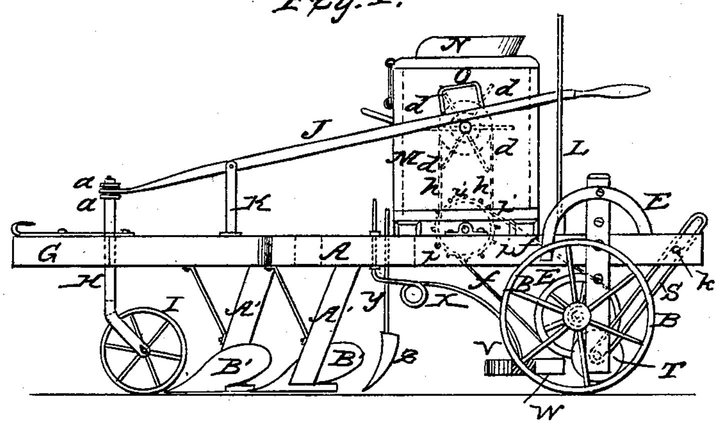
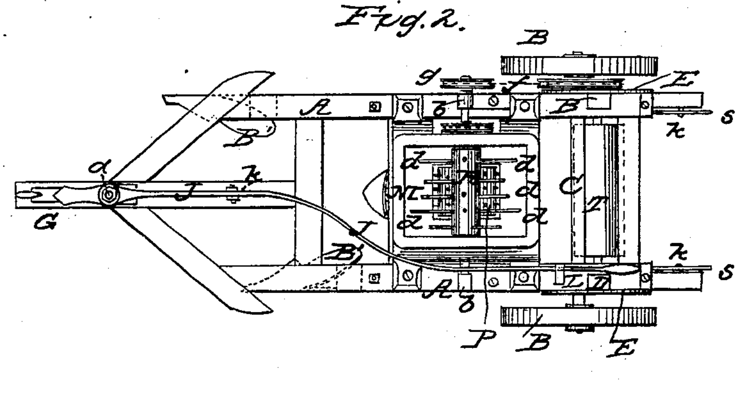


Fig. 2.



Witnesses
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United States Patent Office.

JOSEPH SHEARER, OF TIMBERVILLE, ILLINOIS.

Letters Patent No. 104,893, *dated June* 28, 1870.

IMPROVEMENT IN COTTON-SEED SOWERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH SHEARER, of Timberville, in the county Wabash and in the State of Illinois, have invented certain new and useful Improvements in Cotton-seed Sowers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for sowing cotton-seed, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and

Figure 2 is a plan view of my machine.

A represents the frame of the machine, which is mounted upon two driving-wheels B B, in the following manner:

The wheels B B are mounted, one upon each end of an axle, C, which has its bearings and revolves in suitable journal-boxes on the front sides of two upright bars, D D. These bars are placed in grooves, one on each side of the frame A, and a suitable distance from its rear end.

The bars D D are secured, each by a bolt, to the frame A, and also to a semicircular brace, E, on the same, as seen in fig. 1. By this arrangement the wheels are made adjustable, that is, they can be raised and lowered at pleasure.

The tongue G is secured, in any suitable manner, in the front end of the frame A, and through the same, at a suitable point, is an upright rod, H, the lower end of which is forked and curved, as shown in fig. 1, to form bearings for the gauge or temper-wheel I.

In addition to the rotary motion of which the rod H is capable, it can also, with the wheel, be adjusted up or down by means of a lever, J, which is pivoted in a forked standard, K, near the rear end of the tongue G.

The front end of said lever has a hole, through which the upper end of the rod H passes, a collar or nut, *a*, being placed on said rod above and below the front end of the lever J.

The rear end of the lever J is pressed into notches on the inner side of the standard L, by a spring attached to the same, so that, by moving said lever from one notch to another in the standard, the gauge-wheel I is raised or lowered, as may be desired.

In its passage toward the rear, the lever J is curved, as shown in fig. 2, so as to pass along the side of the seed-box M, which is secured at a suitable point on the frame A, and has on top the driver's seat N.

The lever J is, at the side of said seed-box, provided with a handle, O, so that the driver may readily, from his seat, reach and operate the same, for the purposes above mentioned.

Under the seed-box M, in suitable journal-boxes on the frame A, is placed a shaft, *b*, which is provided with a roller, P.

This roller projects upward through an opening in the bottom of the seed-box M, and is, on its circumference, provided with a number of pins, *i i*.

Above the roller P is another roller, R, extending across the seed-box, and its journals having their bearings in the side of the box.

This roller R is provided with a number of arms, *d d*. The two rollers P and R, with their pins and arms, are revolved, keeping the seed in motion, to prevent the seed from forming a bed in the box or hopper, and to feed the seed to the ground.

These rollers are revolved by the following means:

A pulley, *e*, is connected, by a belt, *f*, with a pulley, *g*, on the shaft *b*.

Another belt, *h*, connects another pulley on the shaft *b* with a pulley on the end of one of the journals to the roller R.

At or near the lower end of each of the adjustable uprights D is secured a slotted bar or brace, S, which is inclined upward and backward, as shown in fig. 1, and is attached to or at the rear end of the frame A, by a headed bolt, *k*.

In the two slotted braces S S are placed the journals of a roller, T, which can rise and fall in said braces, thus being self-adjusting to the ground.

Immediately in front of the roller T, between it and the point where the seed falls out of the box, is a rake or scraper, V, provided with wings, W.

This rake or scraper is attached to the frame A by means of spring wires, X, so that the rake will yield when it meets any serious obstruction. The springs X are bent, as shown in fig. 1, so that their front ends will pass vertically up through the frame A, in front of the seed-box M, said wires or springs being secured, by nuts, above and below the frame. By changing these nuts, the rake or scraper is raised or lowered at will.

On a cross-beam in front of the seed-box M is secured a bar, Y, at the lower end of which is attached the furrow-plow Z. The bar Y is slotted vertically, so that the plow can be adjusted higher up or lower down, as may be desired.

At suitable points on the under side of the frame A are placed two inclined beams, A′ A′, at the lower ends of which the plows B′ B′ are secured. These plows are each made of one solid piece of metal, no welding to be done. The land-side, mold-board, shear, and point, are all cut out at the same time, and bent so as to form the plow.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the wheels B B, axle C, uprights D D, and circular braces E E, for the purpose of adjusting the wheels, substantially as herein set forth.

2. In combination with the foregoing, the roller T, provided with journals and operating within the diagonally-placed slotted braces S S upon the rear of the frame, all substantially as set forth.

3. The scraper V, provided with wings W, and suspended under the rear part of the seed-box M of a cotton-seed sower by means of the springs X, substantially as set forth.

4. The combination of the frame A, adjustable wheels B B, adjustable gauge-wheel I, seed-box M with its internal arrangement, self-adjusting roller T, yielding rake or scraper V, adjustable furrow-plow Z, and plows B′ B′, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 21st day of February, 1870.

JOSEPH SHEARER.

Witnesses:

J. W. PRICE,

GEORGE HARRINGTON