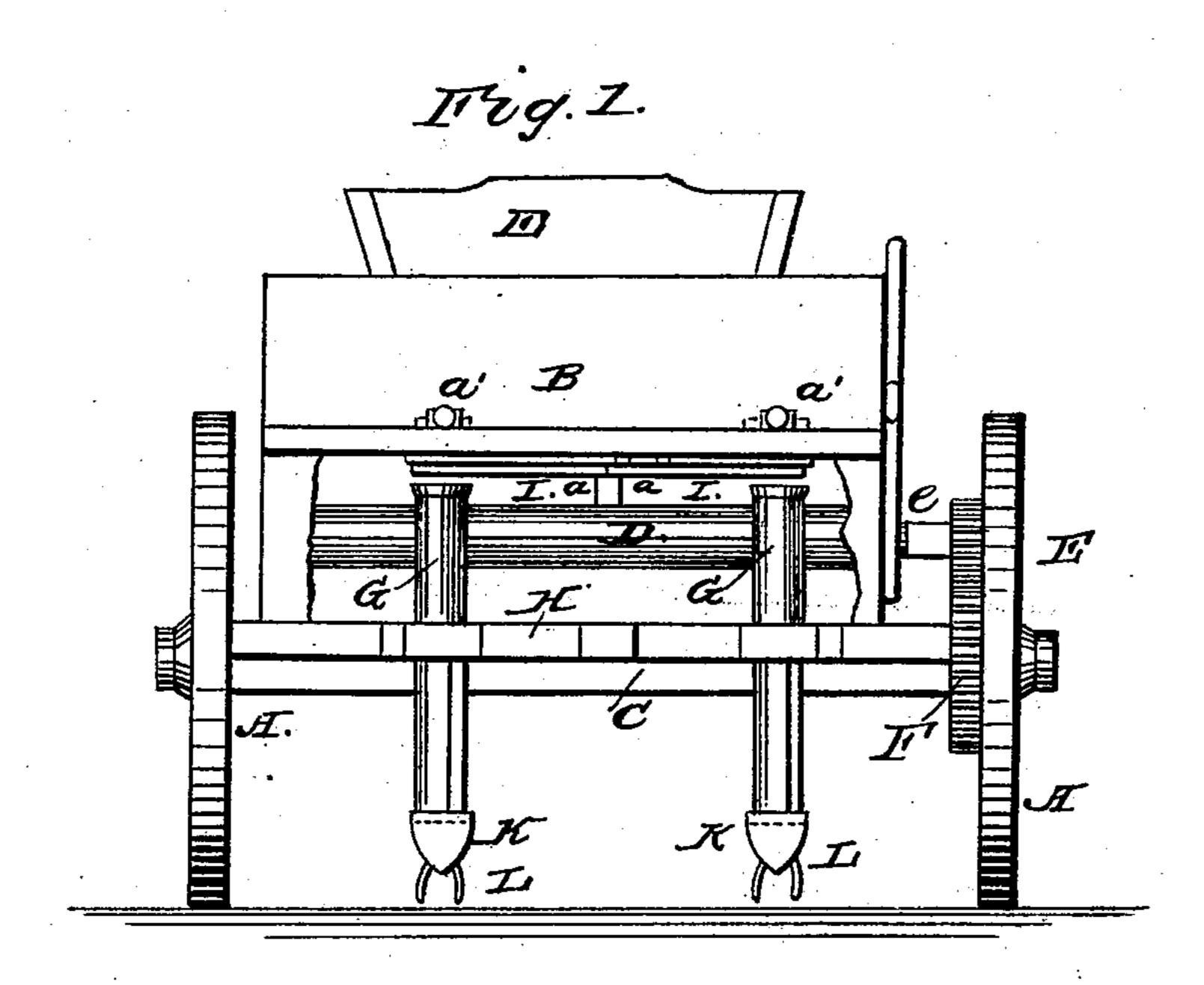
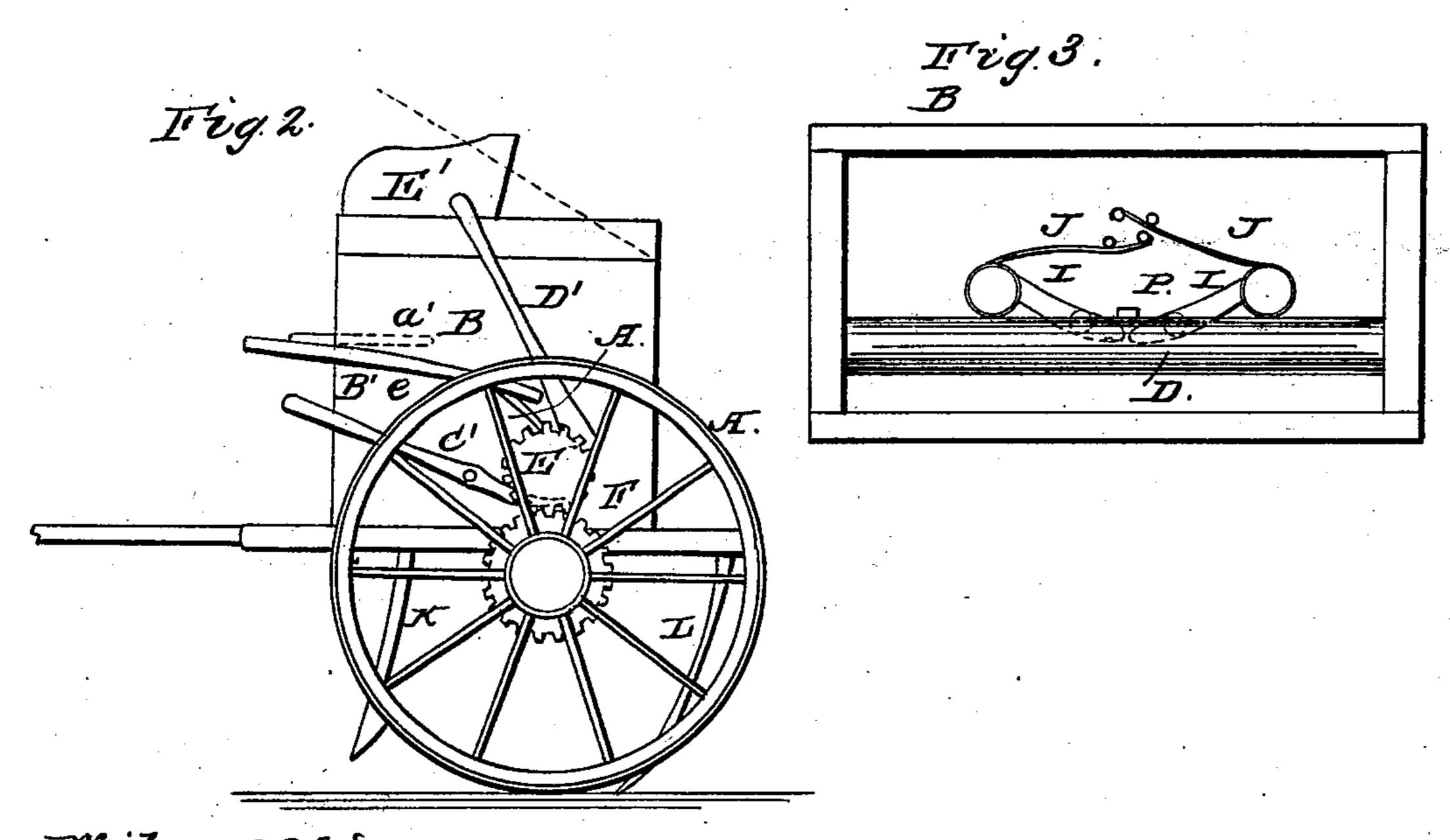
## A. STERNBERG.

Broadcast Seeder.

No. 85,343.

Patented Dec. 29, 1868.





Witwesses J.G.Burridge E. E. Waite

Inventor a. Hernburg



## ADAM STERNBERG, OF NETTLE LAKE, OHIO.

Letters Patent No. 85,343, dated December 29, 1868.

## IMPROVEMENT IN SEEDING-MACHINES.

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, ADAM STERNBERG, of Nettle Lake, in the county of Williams, and State of Ohio, have invented a certain new and improved Seeding-Machine; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of the machine.

Figure 2 is a side view of the same.

Figure 3 is a view of the bottom of the seed-box. Like letters of reference refer to like parts in the several views.

In fig. 1, A is a pair of wheels, on which is mounted the seed-box B, through which, immediately over the axle-tree C, is a shaft, D, having its bearings in the ends of the box. One end of said shaft projects through the box, and has secured to it a pinion, E, fig. 1, by which it is revolved by engaging in the cog-wheel F, attached to the inside of the wheel A, the purpose of which will hereinafter be shown.

G is a pair of spouts, secured in a frame, H, said frame being mounted upon and secured to the axle-tree. These spouts, as will be seen, depend near to the ground, and reach up near to the bottom of the seed-box, and with which it is put in communication, by means of holes in the bottom of the box immediately above and over them. Between the upper end of the spout and bottom, is a pair of valves, I, figs. 1 and 2. Said valves are pivoted to the bottom of the box at the point a, the inner ends of which approach each other and touch at the point x, whereas the opposite ends reach to and cover the holes in the box above referred to.

J, fig. 3, are springs for operating the valve, as and

for a purpose hereinafter dessribed.

Immediately in front of the spouts, and depending a little below them, are a pair of cultivators, K, and upon the rear side depend a pair of forks, L, which, as will be seen, depend slightly below the cultivators.

The cultivators and forks are firmly secured in the frame H, whereby they are held rigidly and strongly

in place while being in use.

On the outer end of the shaft D, but close to the seed-box, is a ratchet-wheel, e, fig. 1, in which the pawl A, fig. 2, is made to engage by means of the lever B', to which it is attached. Said lever is pivoted to the box at the point c.

c' is also a lever, and so arranged as to engage in the

ratchet-wheel at the under side.

D' is also a lever, pivoted in like manner to the box, and made to engage the shaft, the purpose of which will hereinafter be shown.

Having thus described the construction and arrangement of the machine, the practical operation of the same is as follows:

The seed is put into the box, the cover of which is then closed; the operator takes his place upon the seat E', and thus starts off in the line of work. As the machine advances, the cultivators K plow a furrow, into which the corn is dropped at certain regular distances, through the holes in the bottom of the seed-box, which are opened by the valves being pushed from over them by the lug P, fig. 3, which, as the shaft rotates, is caused to impinge against the ends of the arms of the valves, thereby opening them sufficiently to admit their passing out into the spouts, through which, to the ground, the proper amount of seed for the hill, and which is then covered by the forks L.

As the lug leaves the arms of the valves, they are again returned over the holes by the reaction of the springs J, thereby preventing a further passage of grain until the valves are again opened by the return of the lug, the rotation of the shaft being so gauged as to bring the lug, at each revolution, to the arms of the valve, that they will be opened at the proper distance for the hills.

The amount of grain allowed to pass out is regulated by the stops indicated by the dotted lines a', fig. 2, which cover the seed-holes on the inside. By moving these stops from the holes more or less, it will be obvious that more or less grain will pass through.

The pinion B may be thrown out of gear with the wheel F, by means of the lever C', thereby lifting the pinion so that the machine can now be run from place to place; and when said pinion is engaged with the wheel, it is thus kept, by the lever D', the end of which is brought in such relation to the shaft, that it will rest lightly upon it, thereby preventing it from lifting up.

By means of the lever and pawl, a reverse movement may be given to the shaft, so as to cause the lug to operate the valves at the proper time, should the machine be out of place for the hill into which the grain is to fall.

This machine can be used as a drill for sowing small grains and grass-seed, by slight modification or change of the openings in the bottom of the box.

What I claim as my improvement, and desire to se-

cure by Letters Patent, is—

1. The valves I, springs J, as constructed, arranged, and operated by the lug P, for the purpose substantially as set forth.

2. The arrangement of the cultivators K, spouts G,

and forks L, for the purpose specified

3. The levers C' D', pawl and lever B' and A', as arranged in combination with the roller D, for the purpose and in the manner as set forth.

ADAM STERNBERG.

Witnesses:

JOHN BIGG, WILLIAM HELLMANN.