W. G. BARNES.

SEEDING-MACHINES.

No. 177,983. Patented May 30, 1876.

Fig. 1.

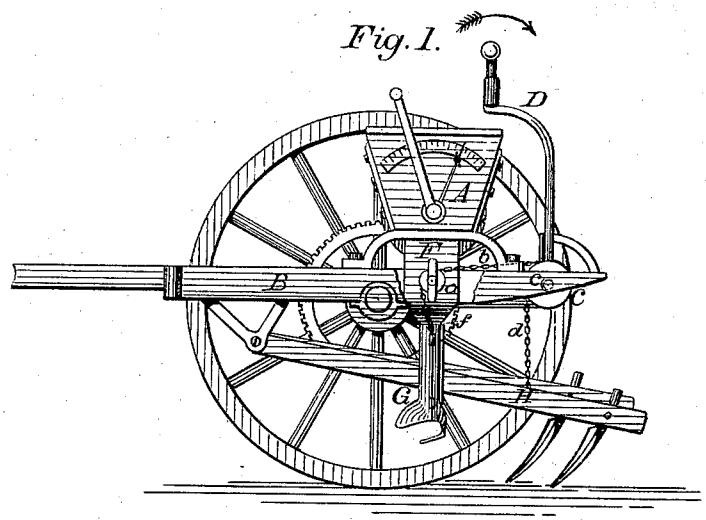


Fig. 2.

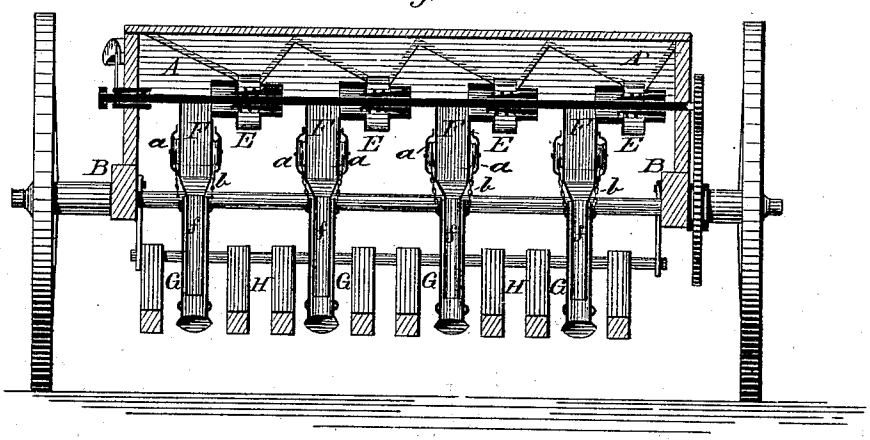
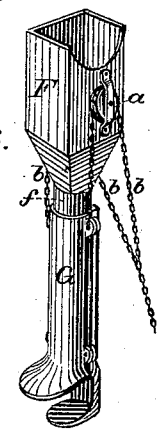


Fig. 3.



Attest:

Wm Bagger.

C. A. Snow

Inventor:

Walter G. Barnes,

by Louis Bagger

his Atty.

UNITED STATES PATENT OFFICE.

WALTER G. BARNES, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. **177,983**, dated May 30, 1876; application filed March 31, 1876.

To all whom it may concern:

Be it known that I, WALTER G. BARNES, of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Seeding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side elevation of a seeding-machine having my improvement. Fig. 2 is a longitudinal vertical section of the same, and Fig. 3 is a detached view of the seed-spout, showing pulleys and elevating-chains.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to the scattering device in seeding-machines or seed-drills; and consists in the combination of an adjustable scatterer with a fixed seed-spout, in such a manner that the former may be raised simultaneously with the raising of the drag-bars when obstructions are encountered, in the manner hereinafter more fully set forth, and pointed out in the claims.

In the drawing, A is the seed-box, and B is the frame, of the seeding-machine. To the rear part of the latter is affixed a roller, C, journaled in bearings *c* at each end, and operated by the lever-handle D. E are the hoppers, arranged underneath the seed-box in the usual manner, and so constructed as to discharge the seed either from the front, rear, bottom, or from the side. To the hoppers are affixed the spouts F, which terminate in tubes *f*, that fit into cast-iron tubes G in such a manner that these will readily slide up or down.

Spouts F and tubes *f* may be made of cast-iron, or it may sometimes be found preferable to make part of the tube *f* of rubber, or similar flexible material, so that if the scatterer G should strike an obstruction before the driver has had time to turn the handle D and raise them they will give way and bend back instead of breaking, as they would be likely to do if the tube was made altogether of rigid material.

In order to prevent the sliding scatterers from turning around the tubes *f* these tubes, and also the scatterers that slide upon them, may be flattened or made oblong, so that a horizontal section thereof would present an ellipse instead of a circle.

By this construction the scatterers would always be kept in their proper position relative to the machine and to each other; but I do not limit myself to this construction, as various other means may be employed that would answer the same purpose—viz., preventing the scatterers from turning upon the tubes on which they slide.

To the sides of the seed-spouts F are affixed pulleys *a*, over which pass chains *b*, that are secured at one end to each side of the adjustable cast-iron spouts G, and at the other end secured upon the roller C.

It is obvious that the pulleys *a* may be affixed to arms or brackets projecting downward from the bottom of the seed-box on each side of the stationary spouts, instead of to the sides of the latter, as the result will be the same.

I prefer to unite the two chains *b* in one, and then affix this one chain upon the roller.

d are chains which pass from the drag-bars H up to the roller C, to which they are secured.

It will be observed that when the roller C is turned in the direction of the arrow the chains *b d* will be wound around it in such a manner as to elevate the drag-bars, and hoist also the adjustable scatterers G. When meeting obstructions, such as stones or stumps, it is desirable to elevate not only the drag-bars, but also the scatterers, out of the way, and prevent breakage, and by this improvement I am enabled to elevate the drag-bars and the scatterers simultaneously, thereby simplifying the construction, and also saving labor and time in operating the machine.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the roller C, with the

elevating-chains *b d*, sliding and adjustable scatterers G, pivoted drag-bars H, and lever-handle D, by which the seed-drills or scatterers and the drag-bars may be raised simultaneously, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in presence of two witnesses.

WALTER G. BARNES.

Witnesses:
L. W. GINTEAU,
JNO. B. TAYLOR.