C. ATKINSON.

Seed-Planter.

No. 27,766. Patented Apr. 10, 1860.

Fig. 1.

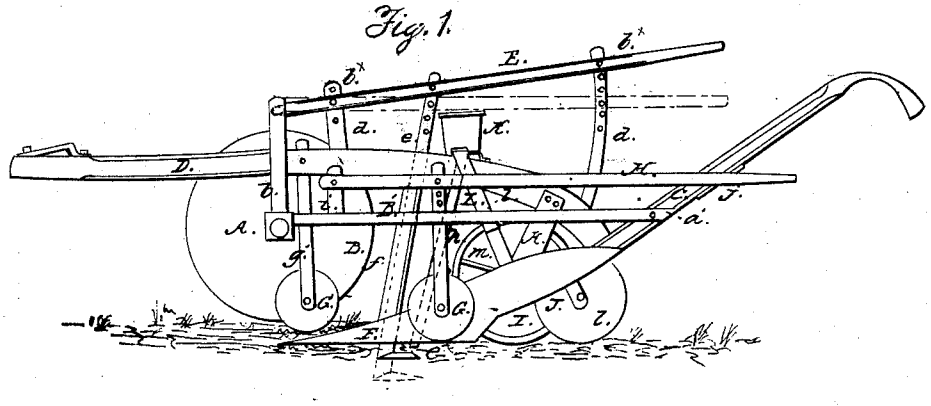
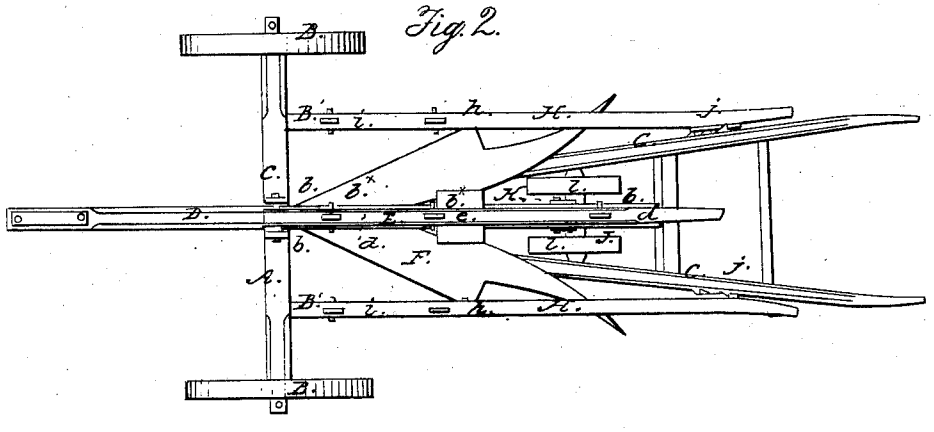


Fig. 2.



Witnesses:
J. W. Combs
L. W. Hughes

Inventor:
C. Atkinson
Munn & Co
Attorneys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

C. ATKINSON, OF VERMONT, ILLINOIS.

IMPROVEMENT IN SEEDING-PLOWS.

Specification forming part of Letters Patent No. **27,766**, dated April 10, 1860.

To all whom it may concern:

Be it known that I, C. ATKINSON, of Vermont, in the county of Fulton and State of Illinois, have invented a new and Improved Combination of a Plow and Seeding-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation of my invention; Fig. 2, a plan or top view of the same.

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

The object of this invention is to obtain an implement for planting seed, and at the same time for preparing the ground in a more proper state than usual to receive the seed and favor its rapid germination and growth.

The invention consists in an arrangement of rotary colters, double-mold-board share, subsoil-share, and seed-distributing device, as hereinafter shown and described, whereby the desired result is obtained.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents an axle, having a wheel, B, at each end of it, and B′ B′ are two parallel bars, the front ends of which are secured to the axle A and the back ends to the handles C C of a plow by pivots *a*.

D is the plow-beam, which is fitted between uprights or guides *b b* on the axle A.

Between the upper parts of the uprights or guides *b b* a bar, E, is secured by a pin or bolt, *c*. This bar E extends back over the beam D, and said bar has two perforated bars, *d d*, passing through it, which bars *d d* are attached to the beam D.

To the bar E a perforated bar, *e*, is attached, said bar *e* passing down through the beam D and the double-mold-board share F, which is attached to the lower parts of the handles C C, and is braced near its front end by a standard, *f*, which also serves as a sheth for the bar *e*. At the lower end of the bar *e* there is a small share, $e^{\times}$. The double-mold-board share F is of the usual form, or of a form approximating thereto, and it has a rotary colter, G, at its front part and one at each side. The front colter G is directly over the front of the double-mold-board share F, as shown in Fig. 1, and it is simply a circular metal cutter hung in a pendant, *g*, attached to beam D. The side colters G G, which are of the same form as the front one, are at the back part of the share, and they are fitted or hung in pendants *h h*, which pass loosely through the bars B′ B′, and are attached to bars H H, which are secured at their front ends to small uprights *i i* at the front ends of the bars B B, the back ends of the bars H H being fitted in either of a series of notches, *j*, made in plates attached to the handles C C.

At the back part of the beam D there is a wheel, I, the axis of which is fitted in pendants *k*, attached to the beam, and to the lower parts of the handles C C an axle, J, is attached, said axle having a wheel, *l*, at each end.

To one side of the wheel I there is attached a projection, *m*, and to one of the pendants, *k*, there is secured an elastic bar, *l′*, the upper part of which is bent at right angles to its lower portion, is perforated, and passes through the bottom of a seed-box, K, on the beam D, and serves the purpose of an ordinary seed-distributing slide. The elasticity of the bar *l* has a tendency to keep its upper horizontal part fully within the seed box. L is a seed-tube, which leads from the seed-box K down behind the share $e^{\times}$.

The operation is as follows: As the implement is drawn along the colters G cut the sod or earth, and the double mold-board F raises the earth slightly and loosens it. As the latter passes over the mold-board the share $e^{\times}$ forms a furrow, which receives the seed from the box K, and the seed is distributed from the box in consequence of the projection *m* throwing the bar $l^{\times}$ outward at every revolution of wheel I, while the elasticity of the bar gives it the return movement. The depth of the furrow made by share $e^{\times}$ may be regulated, as desired, by adjusting bar E, and the depth of the cut of the double-mold-board share F may be regulated by the same means, the bar E being adjusted by pins $b^{\times}$ passing through it and the bars *d d*. The depth of the cut of the side colters, G, is regulated by adjusting the bars H.

From the above description it will be seen that the earth will be well pulverized and the seed covered by a loose layer of soil permeable to air and moisture, while the colters G render the work of the double mold-board F compar-

atively light, and the sustaining of the implement by the wheels B B I *l l* prevents much friction which would otherwise be produced.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the double-mold-board share F, colters G, subsoil-share $e^{\times}$, and a suitable seed-distributing device for joint operation, as set forth.

2. The supporting of the implement by the wheels B B I *l l*, when arranged with the beam D, axle A, and bar E, substantially as shown, to graduate the depth of the cut of the shares, as specified.

C. ATKINSON.

Witnesses:
HENRY W. TAYLOR,
W. B. ATKINSON.