

N. S. THOMPSON.

Improvement in Seeding-Cultivators.

No. 114,881.

Patented May 16, 1871.

Fig. 3.

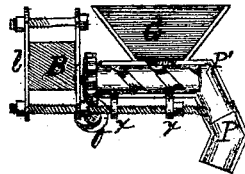


Fig. 2.

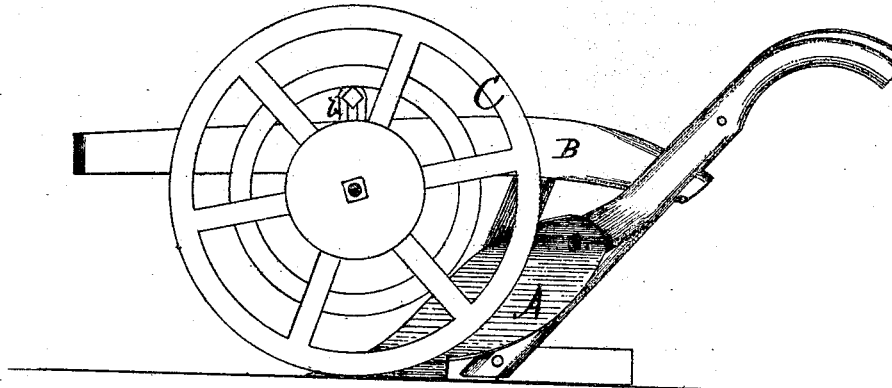
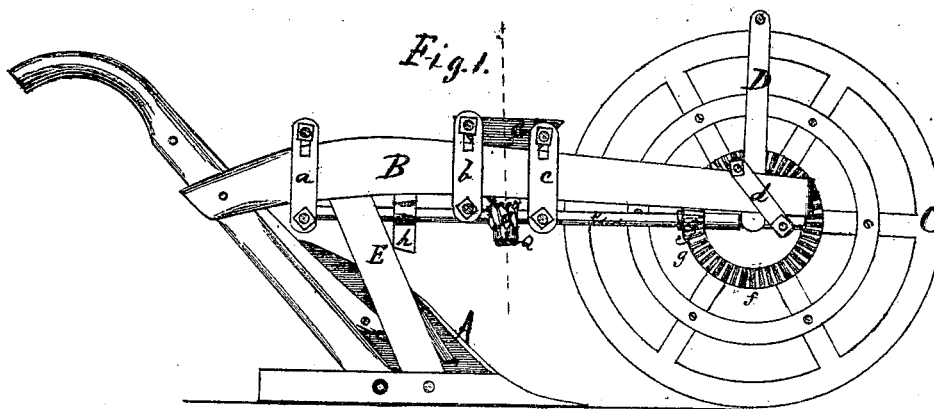


Fig. 1.



Witnesses  
A. L. Peck,  
J. E. Peck

Nelson S. Thompson  
By his Attys.  
H. B. Peck

# UNITED STATES PATENT OFFICE.

NELSON S. THOMPSON, OF RICHMOND, INDIANA.

## IMPROVEMENT IN SEEDING-CULTIVATORS.

Specification forming part of Letters Patent No. **114,881**, dated May 16, 1871.

*To all whom it may concern:*

Be it known that I, NELSON S. THOMPSON, of Richmond, Wayne county, Indiana, have invented a new and useful Improvement in Seeding-Cultivators; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a side elevation of my new seeding-cultivator. Fig. 2 represents a side elevation of the plow with the driving-wheel adjusted in proper position for a fender, the other parts represented in Fig. 1 being removed, Fig. 3 represents the seeding apparatus detached.

The plow A does not differ in construction from those in common use. The beam B is furnished with four clamps, *a b c d*. The two end clamps, *a* and *d*, serve to support and retain in position the gearing-shaft *e*. The lower bolt of the clamp *a* is provided with a suitable box to receive the end of the shaft *e*, and its front end is journaled in a suitable box in a short axle, upon which the driving-wheel C revolves. The guide-frame D, consisting of two upright flat pieces of metal connected by a pin at their upper ends, is also connected at each side of the wheel C at each end of the short axle upon which the wheel C is journaled, and the clamp *d* supports this part of the structure at the front end of the plow-beam. The bevel-gear *f* on wheel C meshes into the bevel-pinion *g* on shaft *e*.

Just in front of the plow-standard E, and secured upon the shaft *e*, a trash-cleaner, *h*, is arranged. The trash-cleaner may be of any suitable form, either the beveled arms, as represented in the drawings, or of any other form which will not be liable to gather the trash around the shaft *e*. The two clamps *b c* are employed to support a seed-dropping apparatus, represented in Fig. 3.

G denotes the hopper, seated upon a hori-

zontal tube, P', in which a spirally-grooved shaft is inclosed, and the inner end of this shaft is provided with a fine spur-gear, which is actuated by the screw-gear *o* upon the shaft *e*. The pipe P is so attached to the seed-conducting pipe as to be readily adjusted for the purpose of directing the seed nearer to or farther from the plow A, which is used to cover the seed with earth. The two lower bolts of the clamps *b c* are provided with screw-threads, and they extend beneath the seeding apparatus and support it upon two cross-ties, *x x*. (Seen in Fig. 3.)

It will be seen that all the parts supported by the clamps *a b c d* may be removed from the plow as the clamps are made adjustable by means of slots, nuts, and bolts; and in Fig. 2 the single clamp *b* serves to retain the wheel C in proper position to serve as a fender of a corn-plow. The trash-cleaner may also be used independently of the seeding apparatus, and it may be adjusted to occupy a position on either side of the plow-beam, and its rotary motion may be reversed by transposing the pinion *g* upon the shaft *e*, so as to occupy a position in front of the axle of wheel C.

It is apparent that more than one pipe may be used for discharging the grain from the seeding apparatus.

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

The arrangement of the trash-cleaner *h*, adjustable clamps *a b c d*, and guide-frame D, in combination with the convertible wheel C, so that the latter may be used to propel the trash-cleaner *h* or serve for a fender, in the manner and for the purposes specified.

In testimony whereof I have hereunto set my hand this 6th day of June, A. D. 1870.

NELSON S. THOMPSON.

Witnesses:

H. P. K. PECK,  
L. D. DAY.