J. H. LANDIS.

Grain-Drills.

No. 150,331. Patented April 28, 1874.

Fig. 1.

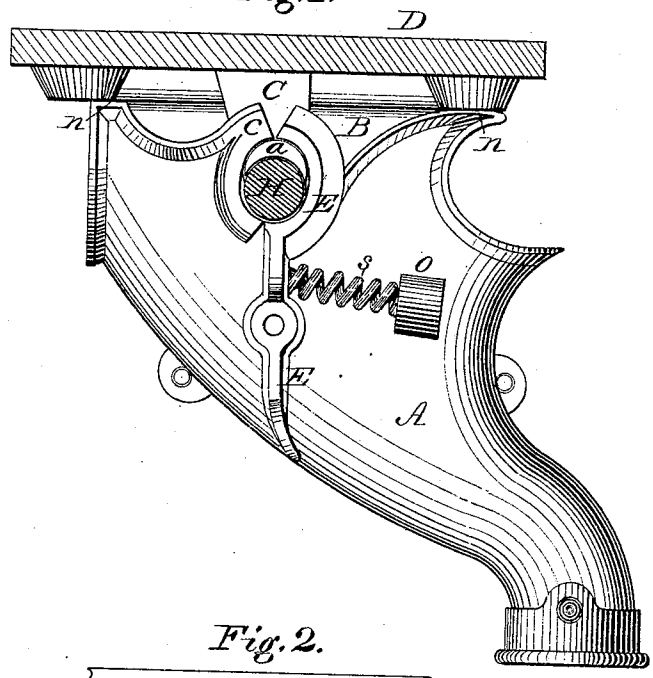


Fig. 2.

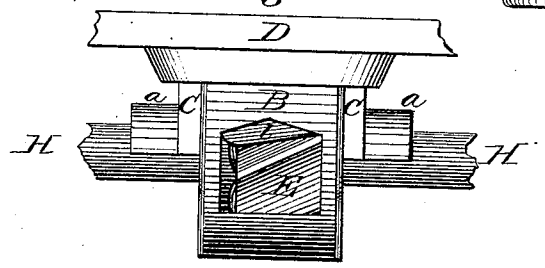
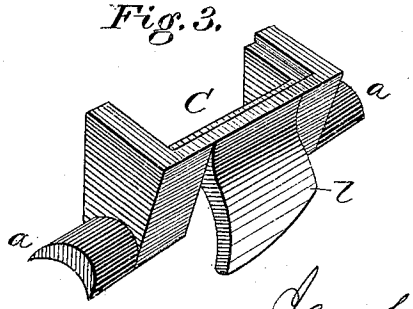


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JACOB H. LANDIS, OF DAYTON, OHIO, ASSIGNOR TO D. E. McSHERRY & CO., OF SAME PLACE.

IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. **150,331**, dated April 28, 1874; application filed March 23, 1874.

To all whom it may concern:

Be it known that I, JACOB H. LANDIS, of Dayton, in the county of Montgomery and State of Ohio, have invented certain Improvements in Grain-Drills, of which the following is a specification:

My invention consists in an improved manner of attaching the receivers or grain conductors to the feed-cups of grain-drills; and is an improvement on the device patented by Daniel E. McSherry, January 24, 1871, numbered 111,132.

Figure 1 is a side view of my improved apparatus, showing the receiver or grain-conductor attached to the feed-cup. Fig. 2 is an end view of the feed-cup, showing the relative position of the parts; and Fig. 3 is a perspective view of the cap or saddle which fits over the driving-shaft and distributing-wheel, detached and enlarged.

The receivers or grain-conductors A are made detachable, in order that they may be so placed as to cause the machine to deliver either forward or in rear of the feed-cups B.

In the patent above referred to, the receivers or conductors were attached to the feed-cups by means of hooks locking over the driving-shaft, said hooks being held over the shaft by means of springs. It has, however, been found, in practice, that this arrangement caused friction, and consequent wearing away of the driving-shaft.

The object of my invention is to obviate this difficulty.

In the drawings, B represents the seed-cup, which is attached to the bottom D of the hopper, as shown in Figs. 1 and 2, said cup having placed in it a distributing-wheel, E, mounted on the driving-shaft H. The distributing-wheel E being placed in position, a cap or saddle, C, having one of its sides made beveling or inclined, is placed in a correspondingly-shaped recess, made in the sides of the feed-cup, over the driving-shaft H, as shown in Fig. 1. The cap or saddle C having one of its sides made beveling or inclined, and fitting in a recess of corresponding form, wedges itself in place, and is supported by the seed-cup, so that it does not come in contact with the driving-shaft H. This cap or saddle is provided on one side with a curved lip, *l*, which forms a cover to the distributing-wheel E, thus preventing the grain from falling from the hopper onto that side of the distributing-wheel over which it projects, and prevents the grain from being carried around too far by the wheel, and also prevents the saddle from moving endwise in the feed-cup B. The cap or saddle C is also provided at its ends with semicircular lugs or projections *a*, which extend out over the driving-shaft H a sufficient distance to allow hooks E on the receiver A to engage over them, which, together with the arm *c* on the receiver, securely lock the receiver to the feed-cup B, the upper part *n* of the receiver resting against the upper part of the cup B, thus keeping the receiver steady and in its proper position. The hooks E are held over the lugs *a* by means of springs S, one end of which fits over a projection on the hooks, and the other in a recess made in the lug O, as in the device above mentioned. The distributing-wheel E being mounted on the driving-shaft H, is placed in the feed-cup B, and the saddle or cap C is then placed in position over them, the ears or lugs *a* coming nearly in contact with the shaft H. The cup B is then secured to the hopper D, which prevents the cap or saddle C from being removed from its seat, and this in turn holds the distributing-wheel and shaft H. The receiver or conductor A is then attached to the cup B by means of the hooks E, which in this case are somewhat elongated in order to reach above the driving-shaft H, and over the cars *a*. In all other respects these hooks are the same as those heretofore used.

It will be observed that this arrangement prevents the unnecessary friction and wear on the driving-shaft, which was an objectionable feature of the device before mentioned.

Having thus described my invention, what I claim is—

The adjustable receiver A, secured to the feed cup B by means of the spring-hooks E, in combination with projections *a* on the cap-piece C, all constructed and arranged to operate substantially as described.

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