

J. KING.
Grain-Drills.

No. 158,716.

Patented Jan. 12, 1875.

Fig. 1

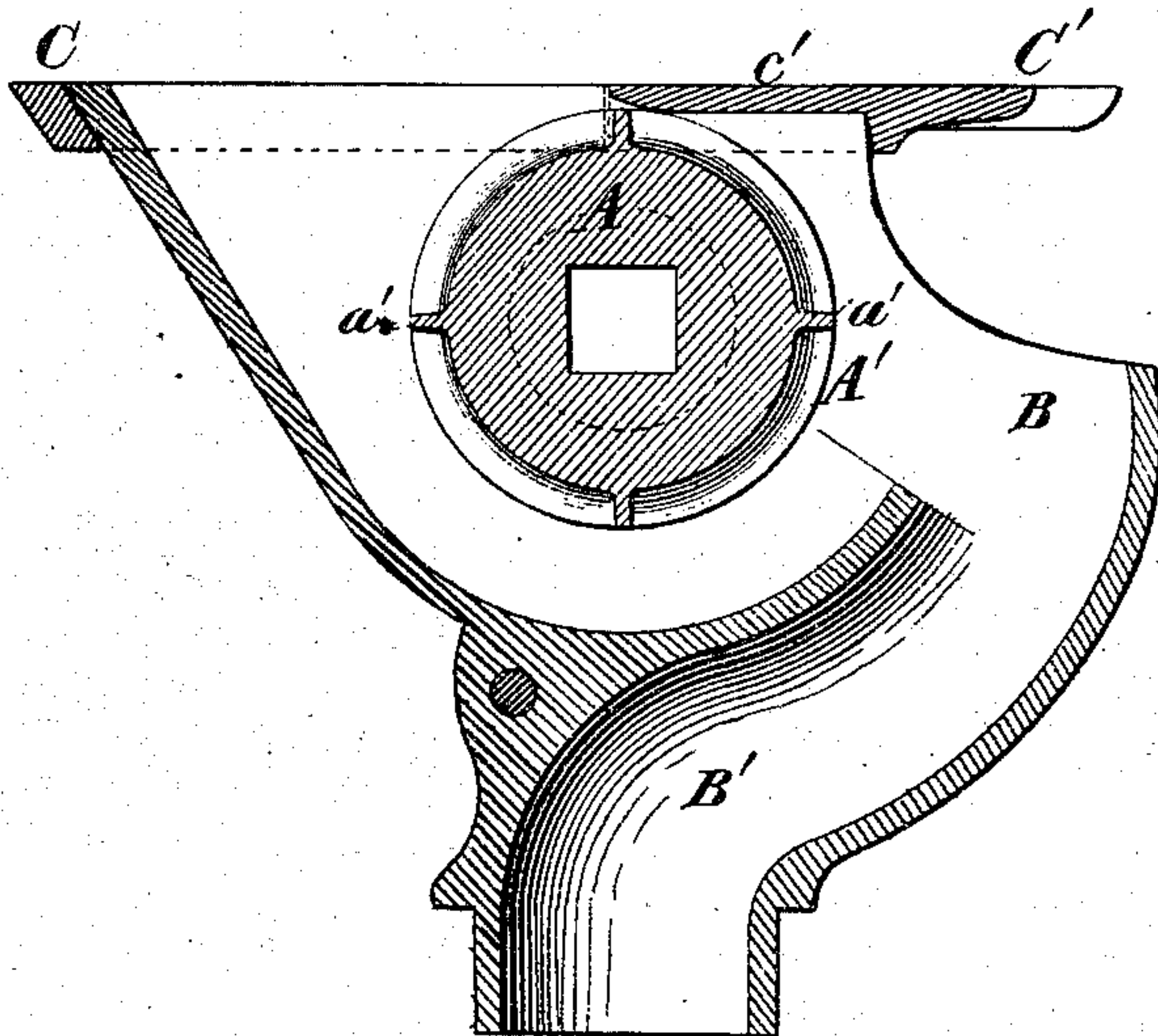


Fig. 2.

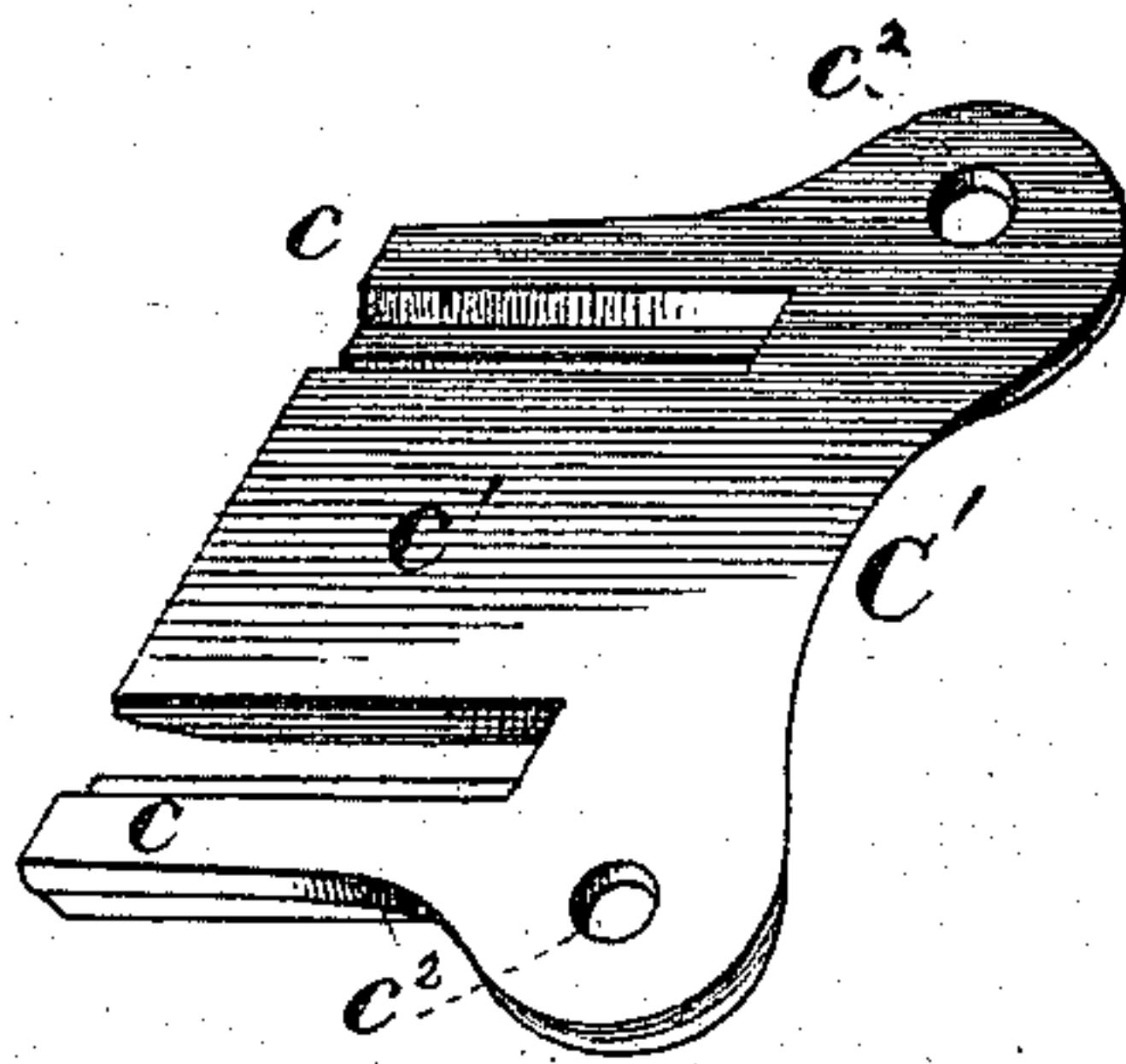
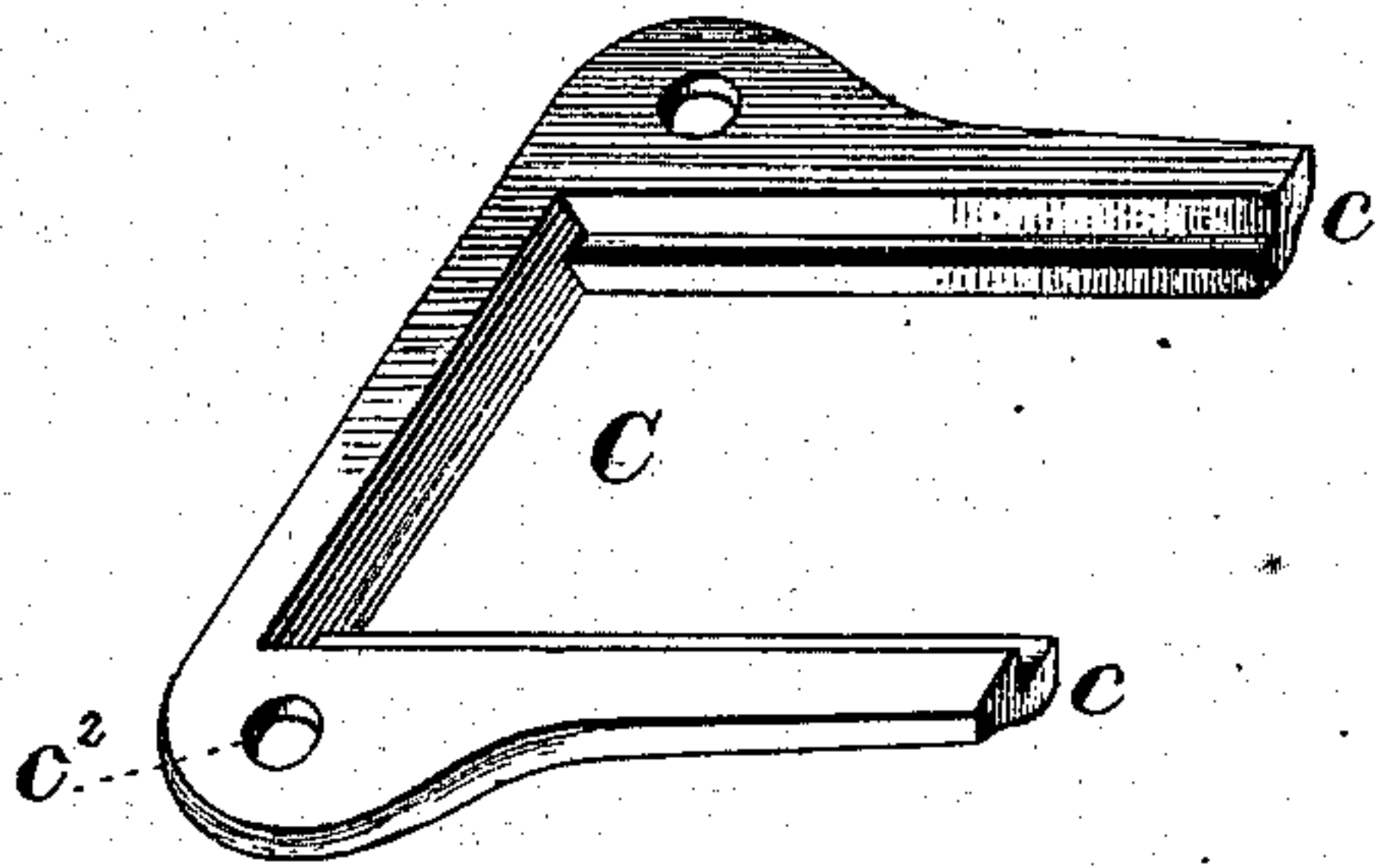
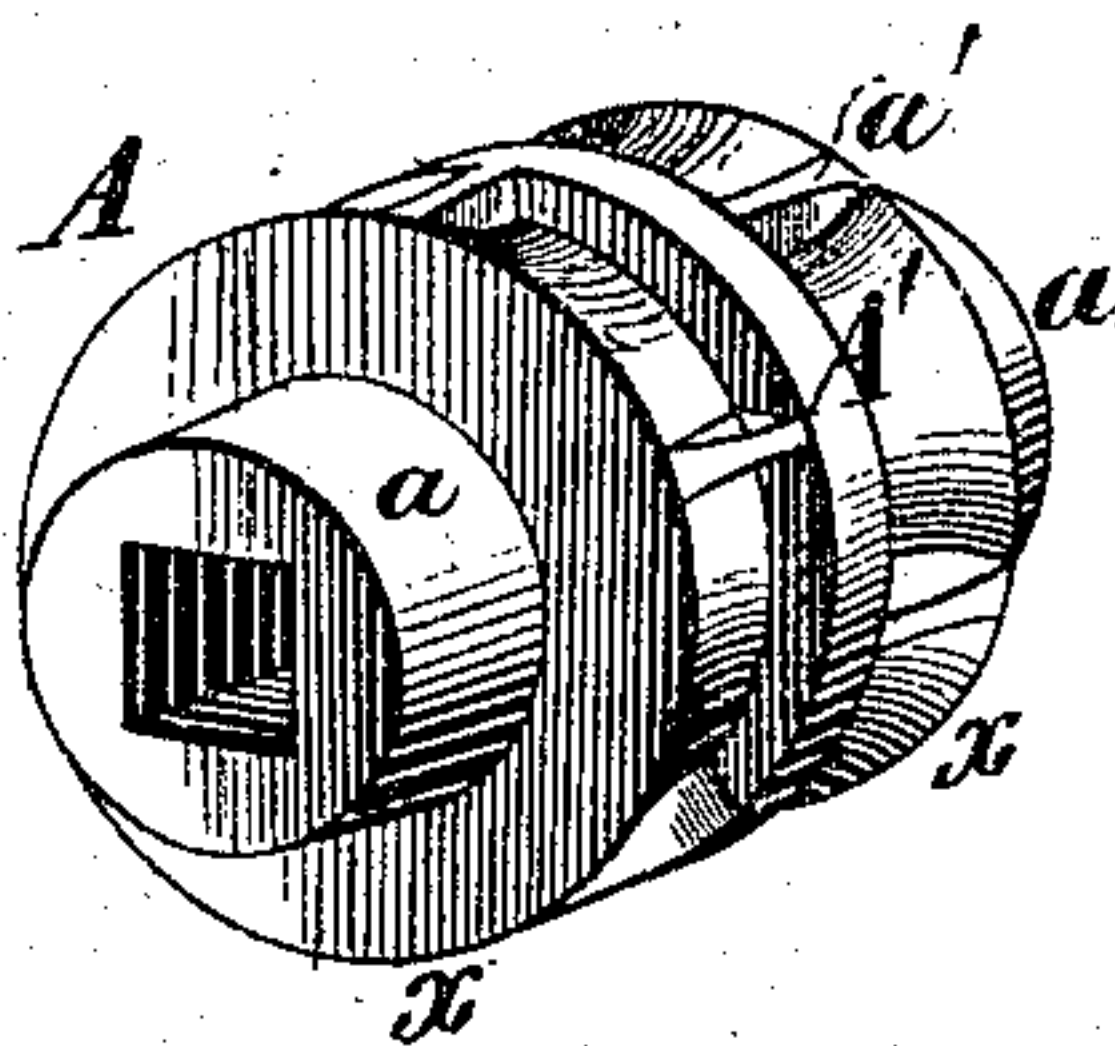


Fig. 3.



Witnesses.
A. Ruppert.
A. Edw. Eils

Jacob King
Inventor.
D. P. Holloway & Co
Atty

UNITED STATES PATENT OFFICE.

JACOB KING, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JOSEPH K. ENGLISH AND EWALD OVER, OF SAME PLACE.

IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. **158,716**, dated January 12, 1875; application filed
April 20, 1874.

To all whom it may concern:

Be it known that I, JACOB KING, of Indianapolis, in the county of Marion and State of Indiana, have invented a certain Improvement in Grain-Drills, of which the following is a specification:

This invention relates to the feed-wheels used in grain-drills to extract the grain from the hopper and deliver it to the conducting-tubes. My improvement consists in forming the flange by which the wheel-case is secured to the hopper-bottom separate from such case, and in two sections, which are interlocked with the case in securing the parts together, the object being to facilitate the casting of the case, and to permit of the screw-holes in the flanges being formed in casting.

In the annexed drawings, Figure 1 is a sectional elevation of my invention. Fig. 2 illustrates in perspective the two parts of the flange of the wheel-case. Fig. 3 is a perspective view of my improved feed-wheel.

The same letters of reference are used in the several figures in the designation of like parts.

The feed-wheel A is, as usual, provided with projecting hubs *a*, passing through the apertures in the walls of the case B, and a square axial aperture for the reception of the shaft upon which it is to be mounted. Midway upon the wheel an annular collar, A', is formed upon it, on either side of which are the concaved feed-surfaces crossed at regular intervals by transverse ribs *a'*. The width of the dividing collar A' is made greater or less according as the wheel is to be used for feeding coarser or finer seed. In all cases the entire surface of the wheel from *x* to *x* will be exposed to wallow in the seed in the hopper; and the length of this surface can be readily increased where the nature of the seed requires a comparatively large discharge-opening in the hopper-

bottom by widening the collar without increasing the area of the actual feeding-surfaces of the wheel. The feed-ribs *a'* alternate on the opposite sides of the collar A'. In this way a uniform and continuous feed is obtained, for, during the temporary cut-off of the feed by the passage of one of the ribs *a'* up under the flange of the case, the pocket inclosed by the adjacent ribs on the opposite side of the collar A' will be feeding full. The flange of the case, by which it is secured to the hopper-bottom, is formed in two separate sections, C and C', the configuration of which is clearly illustrated in Fig. 2. The top of the case is constructed so that the tongued legs *c* of these sections can interlock with it. The section C', covering the back of the feed-wheel, is for this purpose provided with the plate *c'*, while the space between the legs of the section C' is left entirely open. Making the flange in this way enables me to cast the screw-holes *c*² in it, saving the labor and expense of boring them, as has been heretofore customary, and by practical experience have also found that I can make the flange more level than where it is cast on the case. The latter is cast in two sections, as usual, and provided with the conductor-spout B'.

What I claim as my invention, and desire to secure by Letters Patent, is—

The case B, provided with a detachable top flange, consisting of the sections C *c* and C' *c'*, adapted to interlock with the top of the case, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JACOB KING.

Witnesses:

R. E. HARRISON,
ABIJAH JOHNSON.