KEELER & BARTHEL.

Seed-Dropper.

No. 35,317. Patented May 20, 1862.

Fig. 1

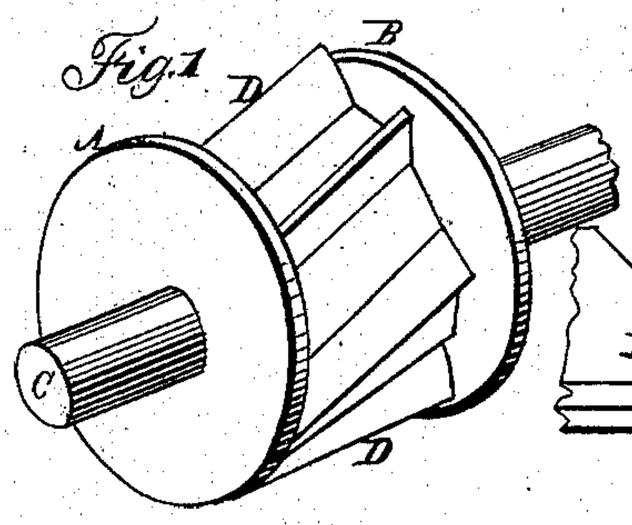


Fig. 2

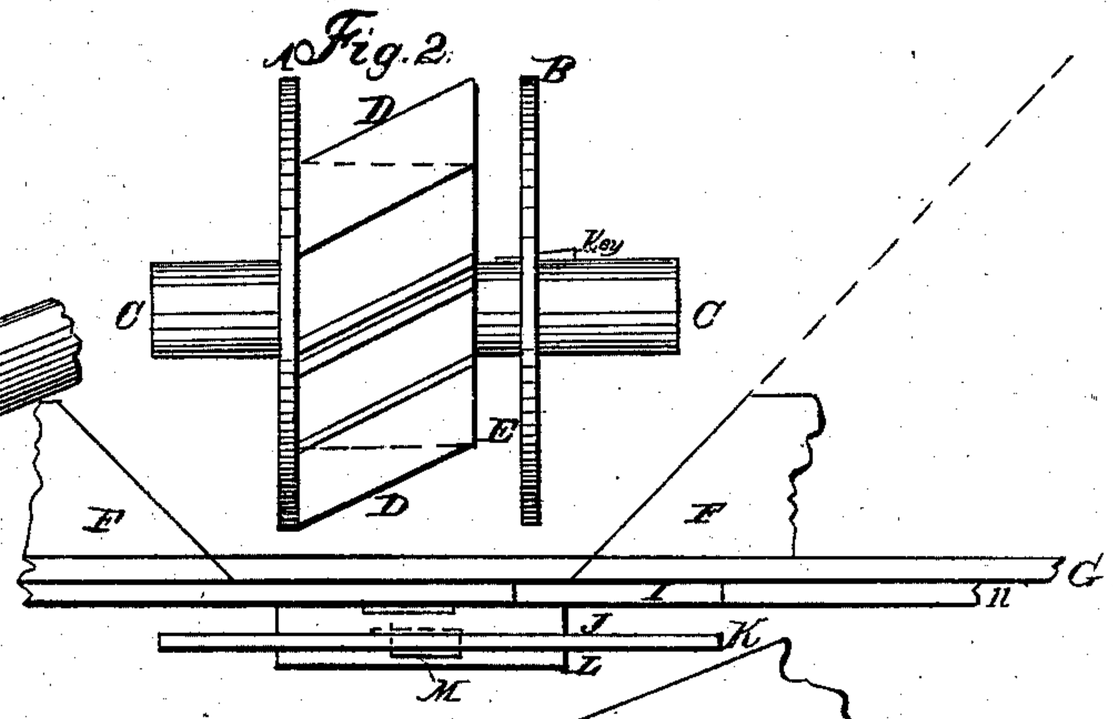


Fig. 3

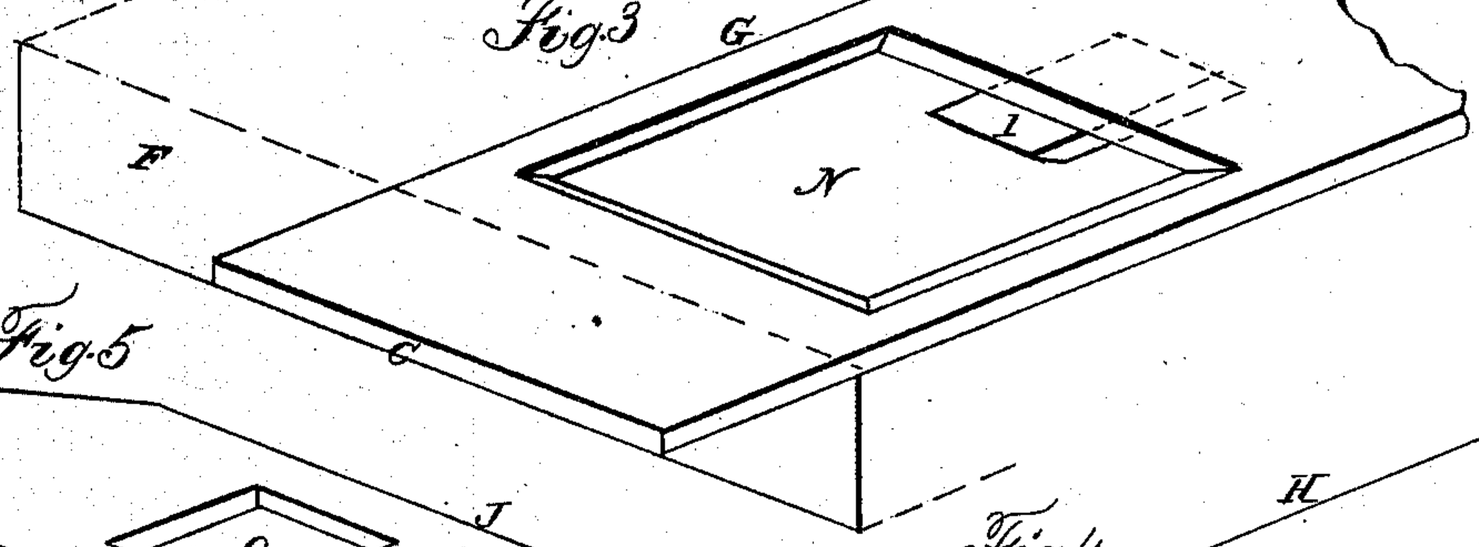


Fig. 4

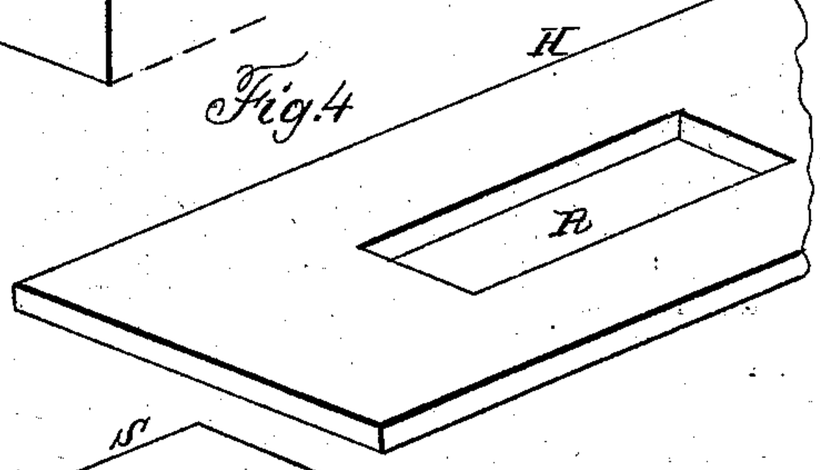


Fig. 5

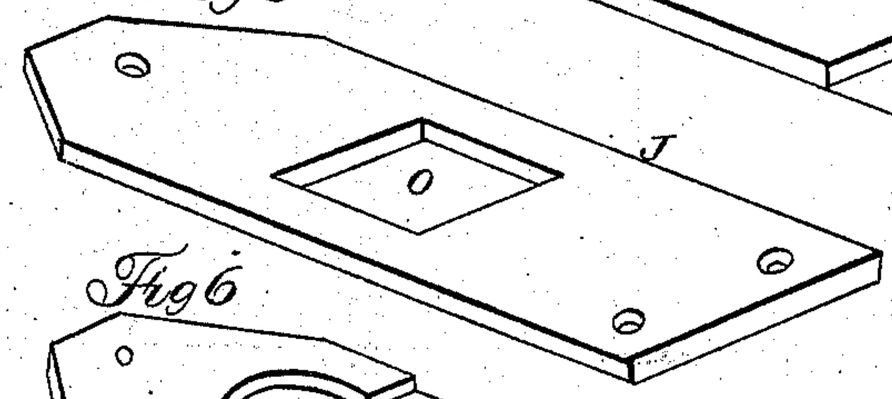


Fig. 6

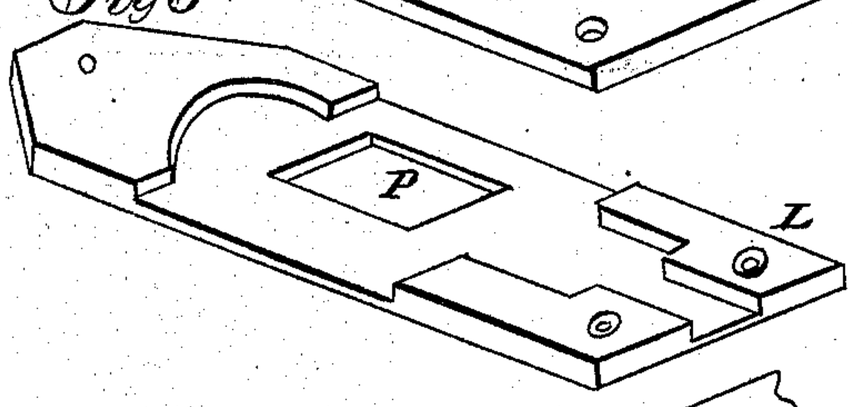


Fig. 7.

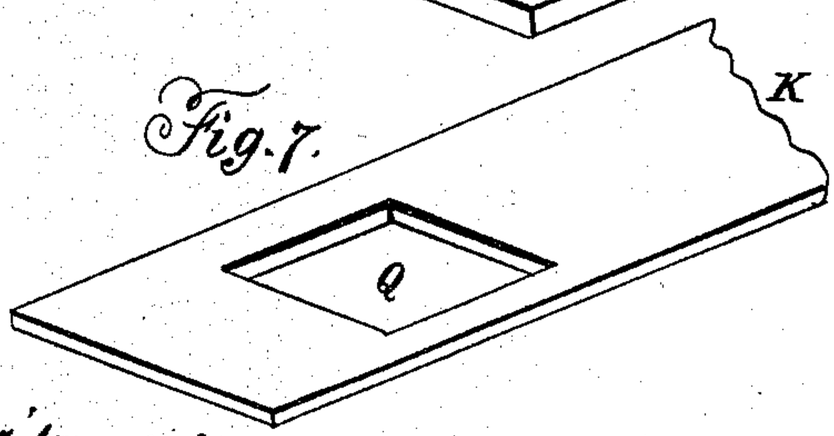
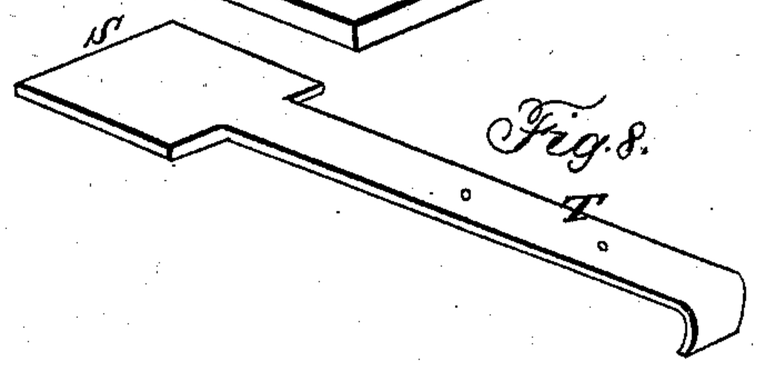


Fig. 8.



Witnesses:
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Jacob Stauffer

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Jacob Barthel

UNITED STATES PATENT OFFICE.

SAMUEL KEELER AND JACOB BARTHEL, OF LANCASTER, PENNSYLVANIA.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. **35,317**, dated May 20, 1862.

To all whom it may concern:

Be it known that we SAMUEL KEELER and JACOB BARTHEL, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and Improved Arrangement in Seed-Rollers or Cylinders and Slides Used on Seed-Drills; and we hereby declare that the following is a full, clear and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 a vertical front view, of the same, being one of a series of such rollers or cylinders on a revolving shaft, *c*, within the hopper, operated in the usual manner. Fig. 3 is a cast plate, G, inserted in the bottom of the hopper flush with the wood (below) along its entire length, having a series of square apertures with the sides beveled in a line with the sides of the hopper or cell openings in the bottom, under each of said rollers. To the under side of this attached plate G, partly projecting into each of said apertures, is a clip or lug, I, as shown. Fig. 4 is the simple sliding plate H, having a series of narrow oblong slots guided by and the openings adjusted with the attached clips or lugs I on the bottom of plate G. Fig. 5, 6, 7, and 8 illustrate slide K, operated when the shovels are raised and lowered in turning or the like—the slide Fig. 8 to shut off one or more shovels in the end or point rows. These latter sliding devices are common and form no part of our invention.

Our improvement consists in making one or both of the flanges A B, Figs. 1 and 2, adjustable by keying them on the shaft *c* more or less removed from the central core or ridged cylinder D. These ridges, seven (more or less) in number, rising from the core or central axis of the cylinder as high as the flanges A B, are inserted diagonally, as shown. By this arrangement we have all the advantage of open cells and obviate the tendency to clog their delivery when the drill becomes inclined on hillsides, as is found to be the case with such rollers. Our first device was to cast the flanges and ribbed core in one piece and remove a space between the core and flanges by means of a lathe. We, however, find the method more simple, as above set forth, by keying onto the shaft.

We are aware that rollers or cylinders having a flange affixed on one side and diagonal ridges or partitions on their face, open on the other side, unprotected by an adjustable outer flange, have been used, as well as others having spiral flanges placed in a reverse position, open and unprotected on both sides, while others, again, have a fixed kind of flange on one side and serrated teeth on the other, as also those, again, being closed firmly on both sides, having a series of pockets on their periphery, neither of which devices we claim.

We are also aware that slide-plates having oblong slots, and clips or lug attached to them instead of being (said lugs) a part of the fixed or top plate, G, have been used. We do not claim the upper or lower plate, G H, independently considered, as such have been used before. Our improvement consists in simplifying the manufacture by at once casting the clips or lugs I with the attached plate G (with its large beveled openings N) from a properly-adjusted mold, making a more durable job with greater ease and accuracy by being all uniform and in a true line, so difficult to adjust when separately riveted or soldered on in each separate drill, for a series of seven or more lugs to slide in.

We are aware that plates have been cast in one piece for a like object, provided with lugs above for the regulating-slide and clips and grooves beneath for the shut-off slide, and the transverse slides to each cell, being, however, more complicated and difficult to mold. We therefore do not claim casting plate G in a single piece, nor when the same comes between the two sliding plates, as such are in use.

What we claim as our invention, and desire to secure by Letters Patent, is—

The improvement in the cylinder by making it with flanges adjustable, as described.

SAMUEL KEELER.
JACOB BARTHEL.

Witnesses:
CHAS. R. FRAILEY,
JACOB STAUFFER.