

J. C. BARLOW.
Seed-Planter.

No. 212.088.

Patented Feb. 11, 1879.

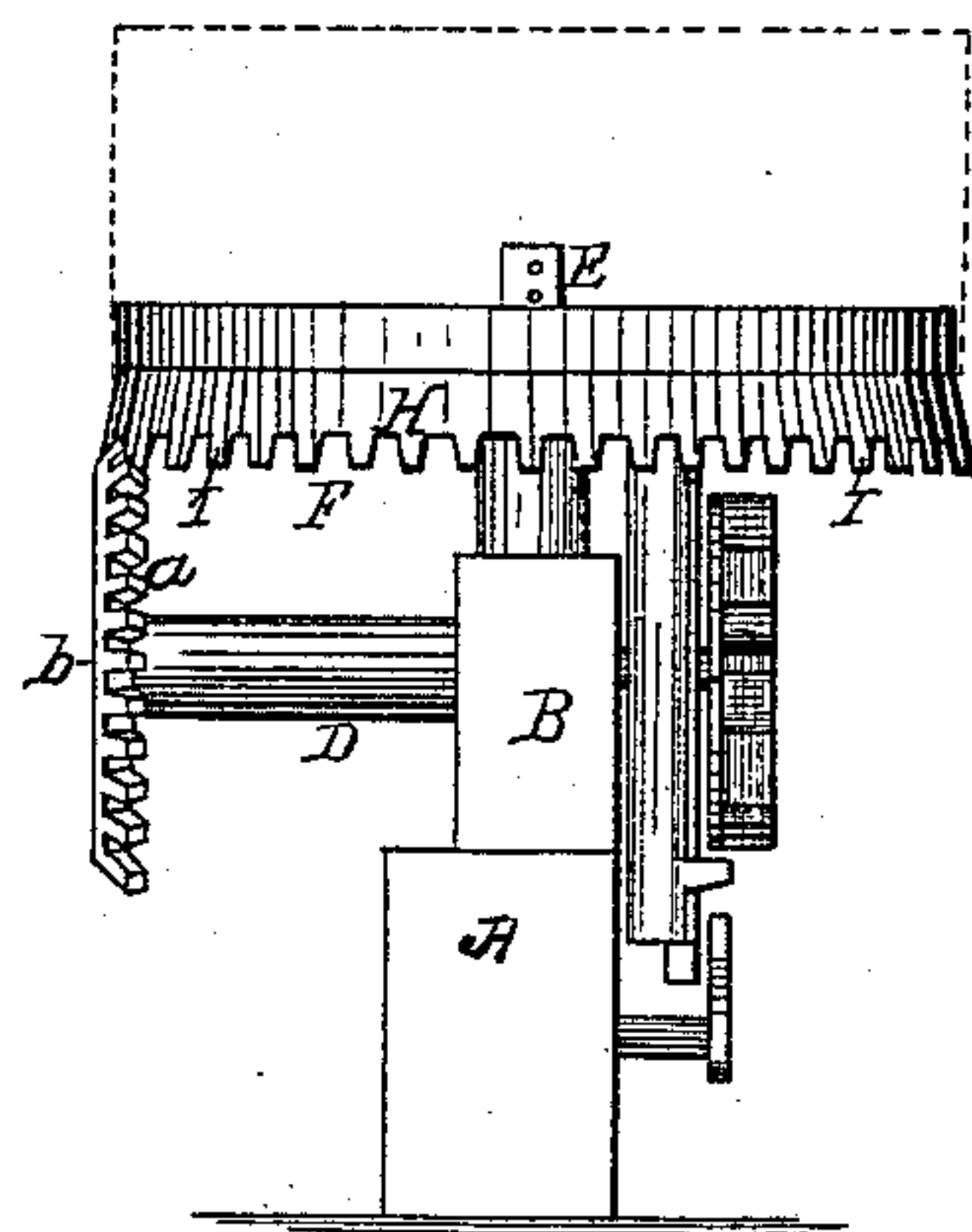


Fig. 1.

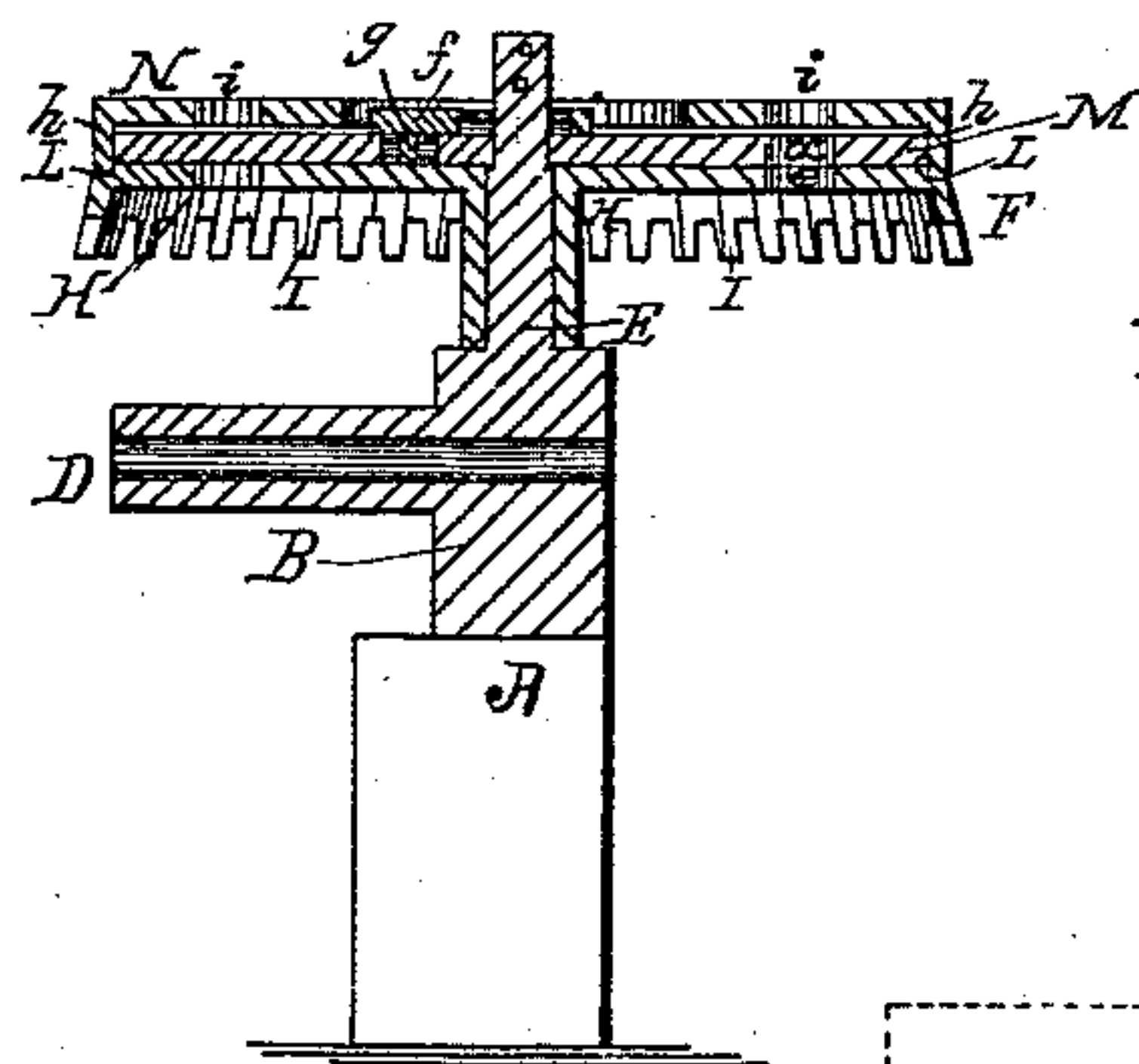


Fig. 2.

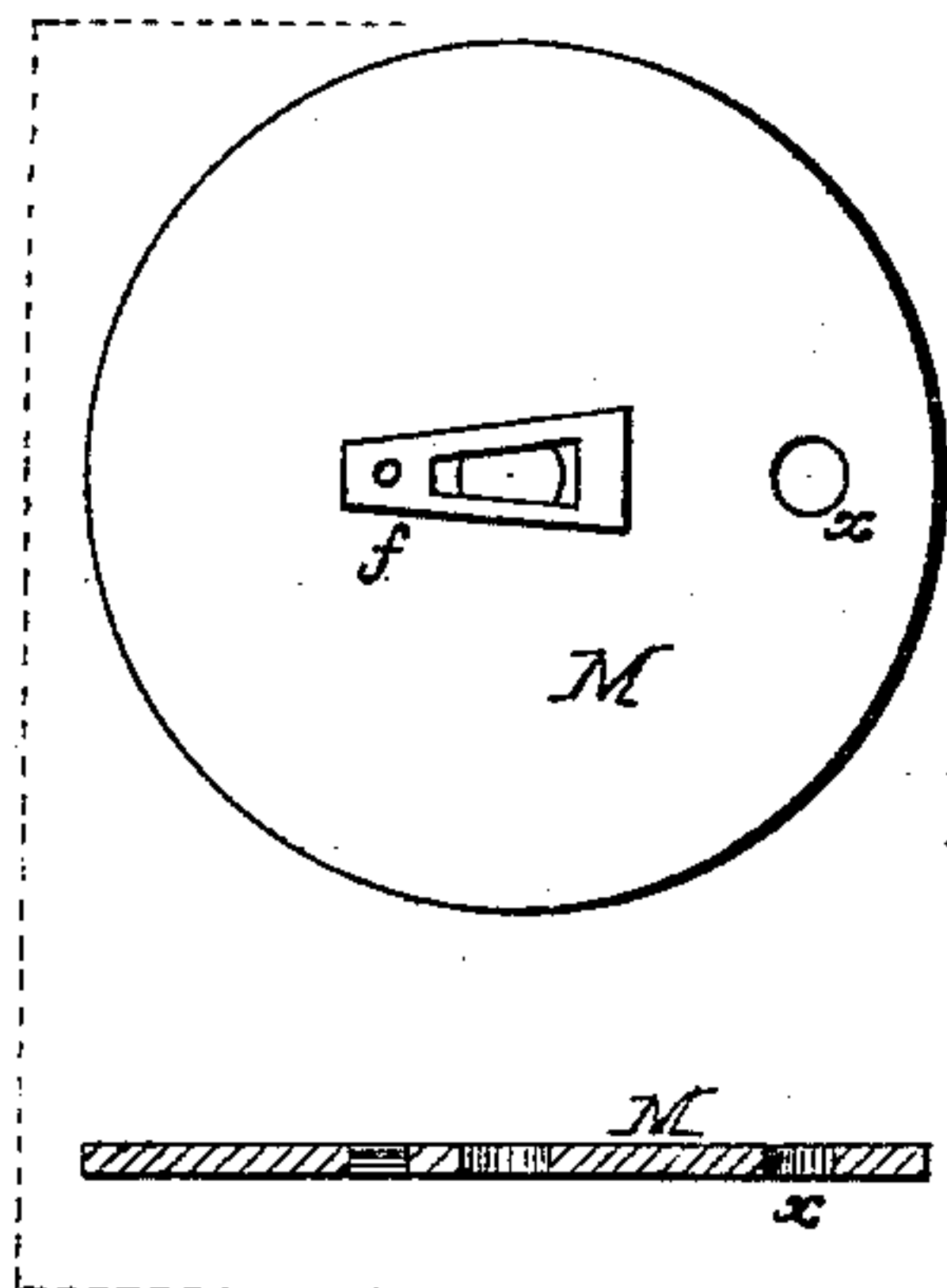


Fig. 3.

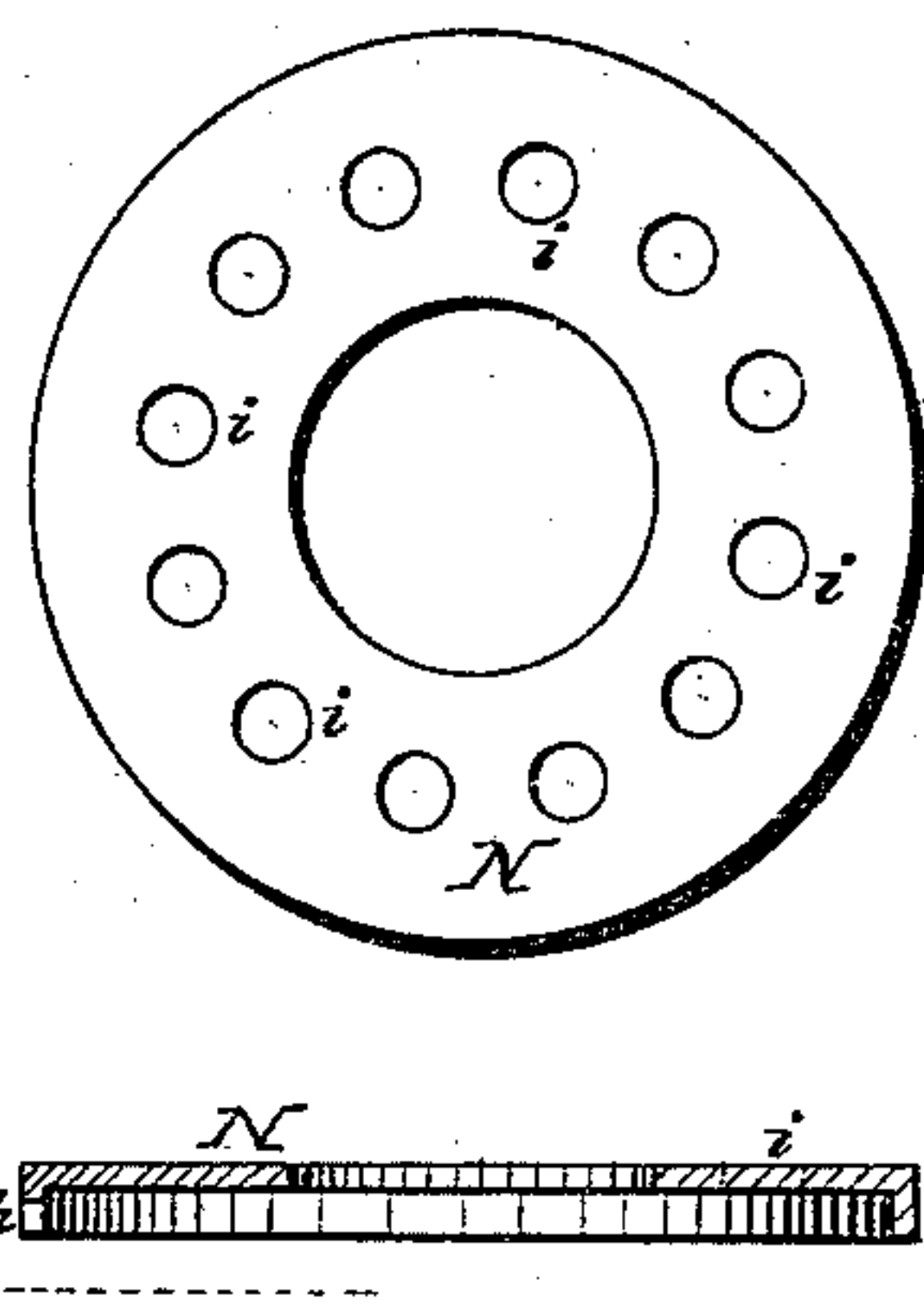


Fig. 4.

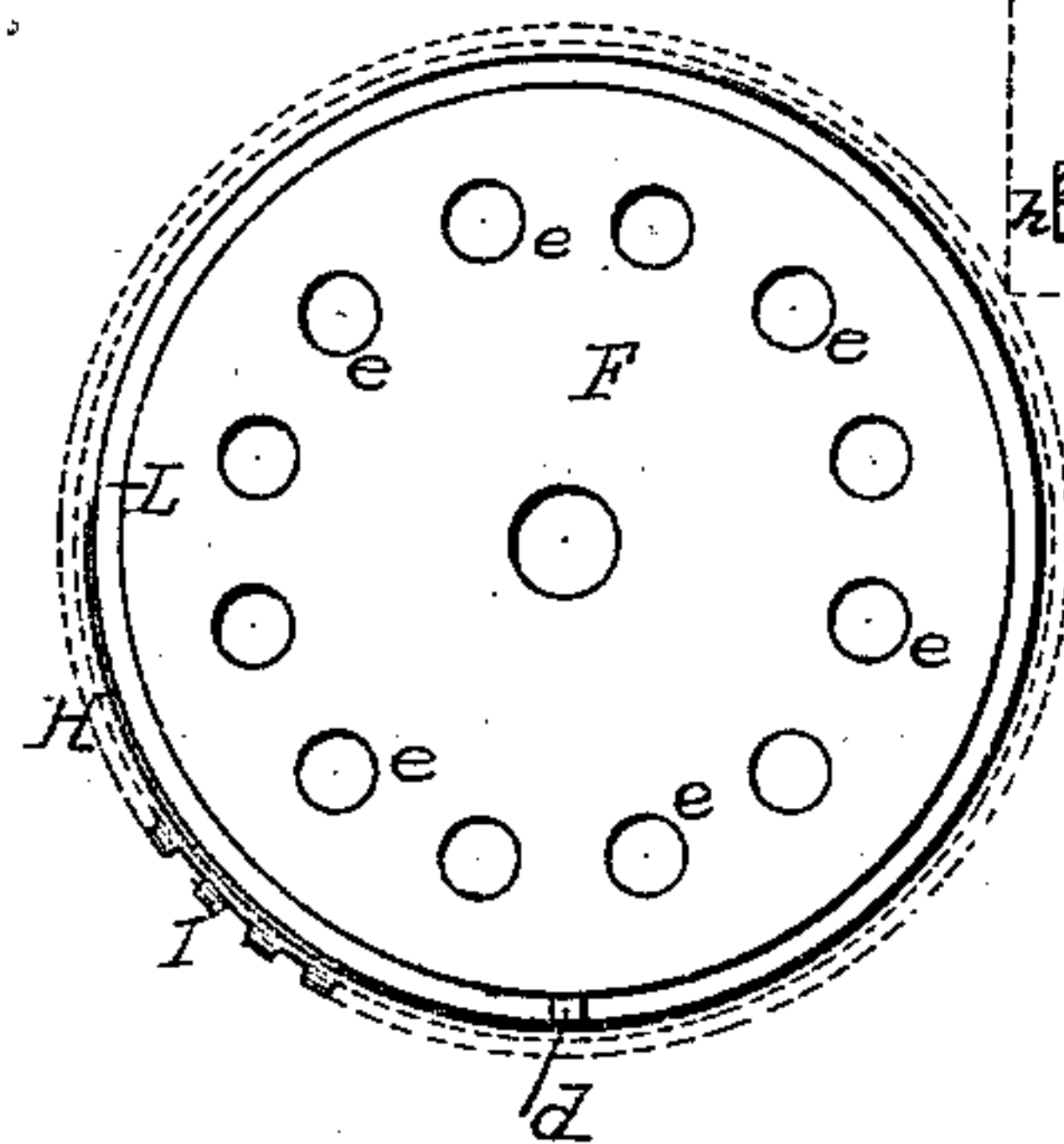


Fig. 5.

WITNESSES =

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By his Atty.

Cox and Leo

UNITED STATES PATENT OFFICE.

JOSEPH C. BARLOW, OF QUINCY, ILLINOIS.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. **212,088**, dated February 11, 1879; application filed June 27, 1878.

To all whom it may concern:

Be it known that I, JOSEPH C. BARLOW, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Seed-Planters, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in seed-planters, as hereinafter fully set forth, the object being to provide a suitable mechanism for feeding the seed from the hopper to the tube, whence it falls to the ground.

Referring to the accompanying drawings, Figure 1 is a plan view of the invention. Fig. 2 is a central vertical section of same. Fig. 3 represents a plan and a central sectional view of the plate M. Fig. 4 shows similar views of the plate N, and Fig. 5 a top view of the wheel F.

In the accompanying drawings, A is a support representing a portion of the frame of a seed-planter, upon which is mounted the journal B, having the elongated bearing D, extending frontward and supplied on its upper surface with the vertical shaft E, which passes upward within the seed-boxes, (not shown,) and receives the horizontal crown gear-wheel F, having the downwardly-deflecting peripheral flange H, carrying the teeth I, which engage the teeth of the pinion *a*, mounted upon the front end of the axle *b*, placed in the bearing D. Above the flange H and encircling the extreme edge of the wheel F is cut the angular recess L at a suitable point, in which is provided a stud, *d*, for the purpose hereinafter mentioned.

The wheel F, at a proper point between its center and periphery, is supplied with the apertures *e*, of uniform size, and arranged in a circle around the shaft E.

Upon the shaft E and flat upon the upper surface of the wheel F is placed the washer-plate or disk M, which is of such size as to completely cover the said wheel out to the inner edge of the recess L, and is provided with an aperture, *x*, corresponding exactly in size and position with the apertures *e*, above which it is arranged.

The shaft E, below the wheel F, has a circular circumference; but above this wheel it is slightly reduced, and has its opposite sides

flattened, the rear portion of the flattened sides being of slightly greater dimensions than the front portion thereof. The disk M is arranged upon this flattened end of the shaft, and has secured above its bearing the plate *f*, one end of which is provided with a pin, *g*, which is inserted in a slot in the plate M, while the other end extends over the said bearing, and is furnished with a slot, the contour of which is similar to that of the flattened end of the shaft E, and which is designed to be placed on the same, the thicker portion of the shaft being in the wider end of the slot.

The purpose of this construction is to prevent the disk M turning, and, when the edges of the slot shall have become worn by the jarring of the devices in operation, to tighten it upon the shaft. This is accomplished by simply tapping upon the plate *f* in rear of its slot, driving the narrower end of the said slot upon the flattened sides of the shaft, the pin *g* serving to guide the plate in this movement.

The disk M is retained upon the shaft by a pin or other convenient means. It is obvious that the disk M could be controlled as to its rotation by other means than above specified, if desired.

Over the disk M is placed the plate N, which may be made of any suitable thickness to accommodate the elevation of a plate below it, and is furnished on its periphery with the downwardly-projecting flange *h*, and within which are formed the apertures *i*, which are similar in size and position to the apertures *e* and aperture *x*. The flange *h* passes downward beyond the disk M and into the angular recess L, which serves as its base.

At a suitable point in the flange *h* is cut a recess, which engages the stud *d*, and thus enables the wheel F and plate N to be revolved together, while the plate M remains stationary upon the shaft. The central portion of the plate N is removed to escape the upper end of the shaft E and to lighten the mechanism.

Above the plate N may be arranged a plate (not shown) to closely cover all of its upper surface, except that immediately about the apertures *e*, which plate should be supplied with a spring cut-off (not shown) or other device, to

prevent the discharge of more than a limited quantity of seed from the apertures *e* at one time.

It is manifest that when the shaft *b* is revolved a corresponding movement is imparted to the pinion *a*, secured upon its front end, which pinion in turn rotates the crown gear-wheel *F* and plate *N*.

The motion of the wheel *F* and disk *M* brings at regular intervals the apertures *e* and *i* directly above and below the aperture *x* in the disk *M*, thereby affording a clear passage for the grain from the seed-boxes to a suitable tube or other device situated beneath the same, whence it is conveyed to the ground.

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

1. In a seed-planter, the combination of a movable toothed wheel provided with one or

more seed-apertures, a fixed disk provided with one or more seed-apertures, and a drop-plate provided with one or more seed-apertures and moving with the toothed wheel aforesaid, substantially as set forth.

2. A fixed disk interposed between upper and lower movable seed-plates, substantially as set forth.

3. The seed-wheel *F* and drop-plate *N*, in combination with the disk *M*, substantially as specified.

In testimony that I claim the foregoing improvement in seed-planters, as above described, I have hereunto set my hand this 21st day of June, 1878.

JOSEPH C. BARLOW.

Witnesses:

SAML. HOLMES,

LEWIS B. BOSWELL.