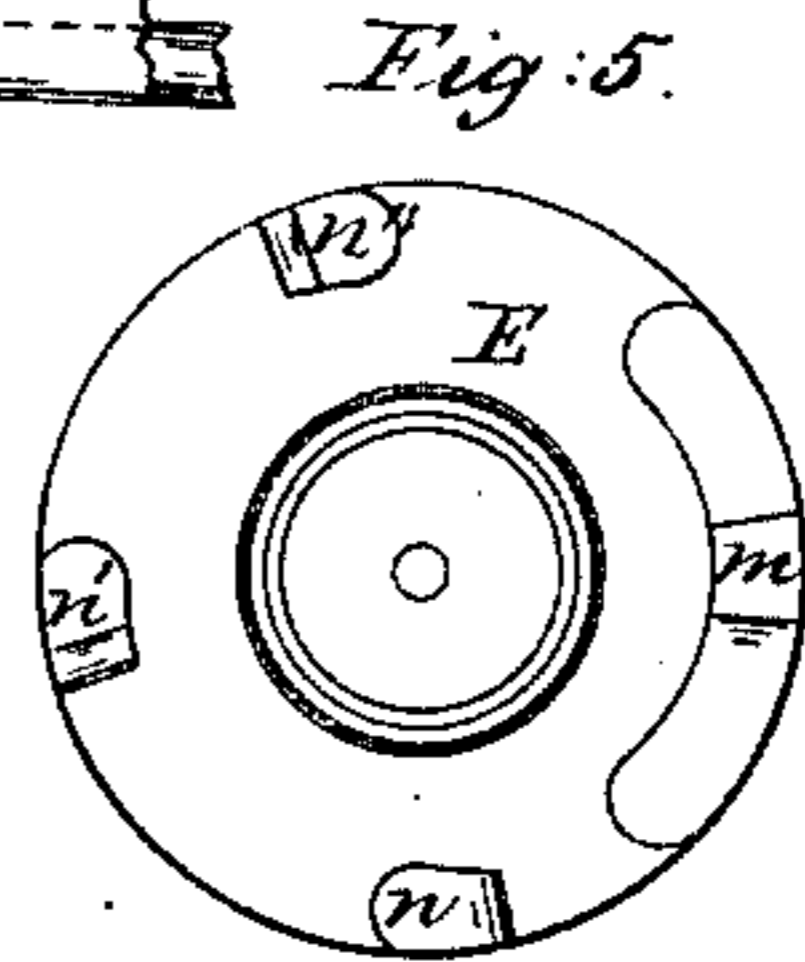
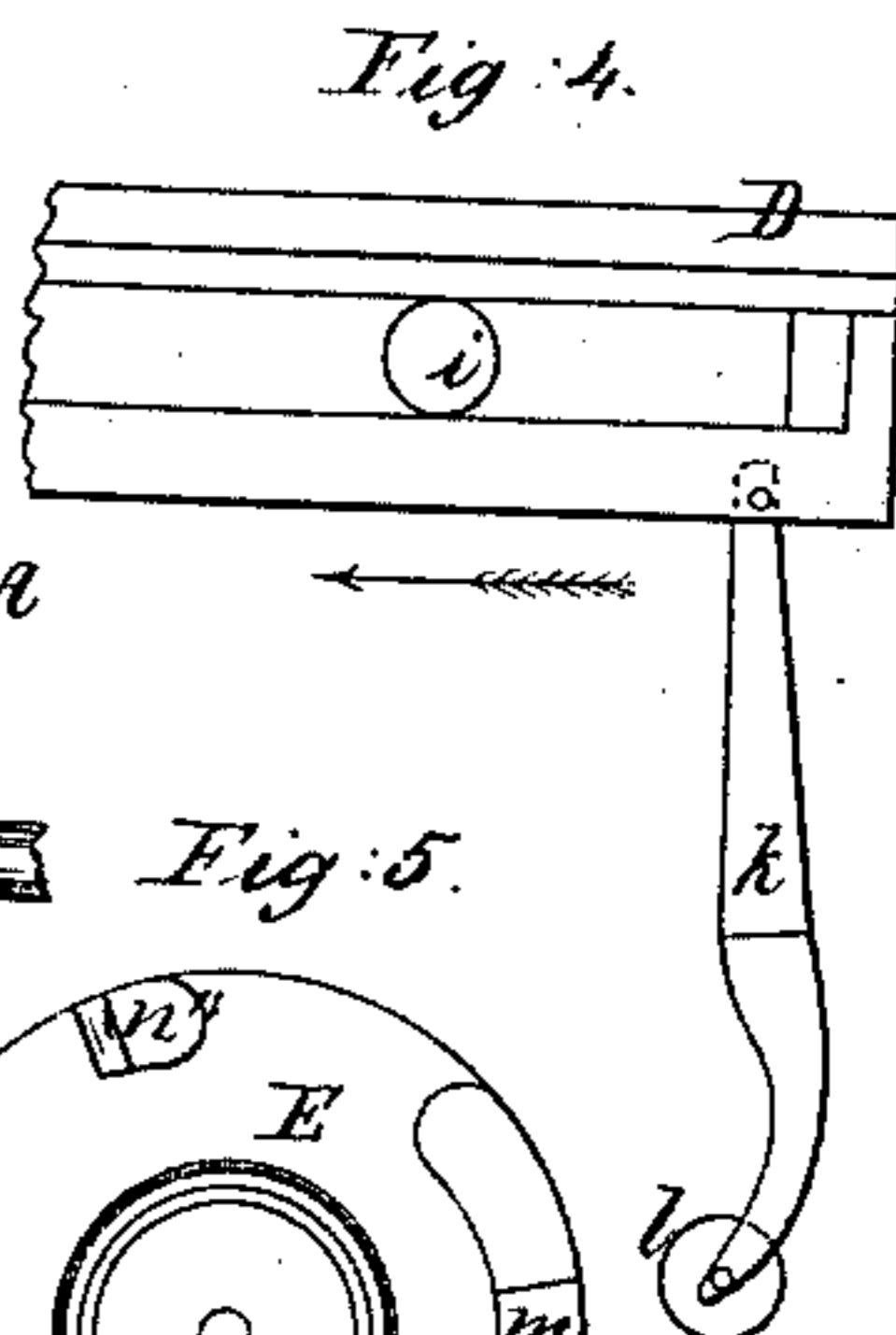
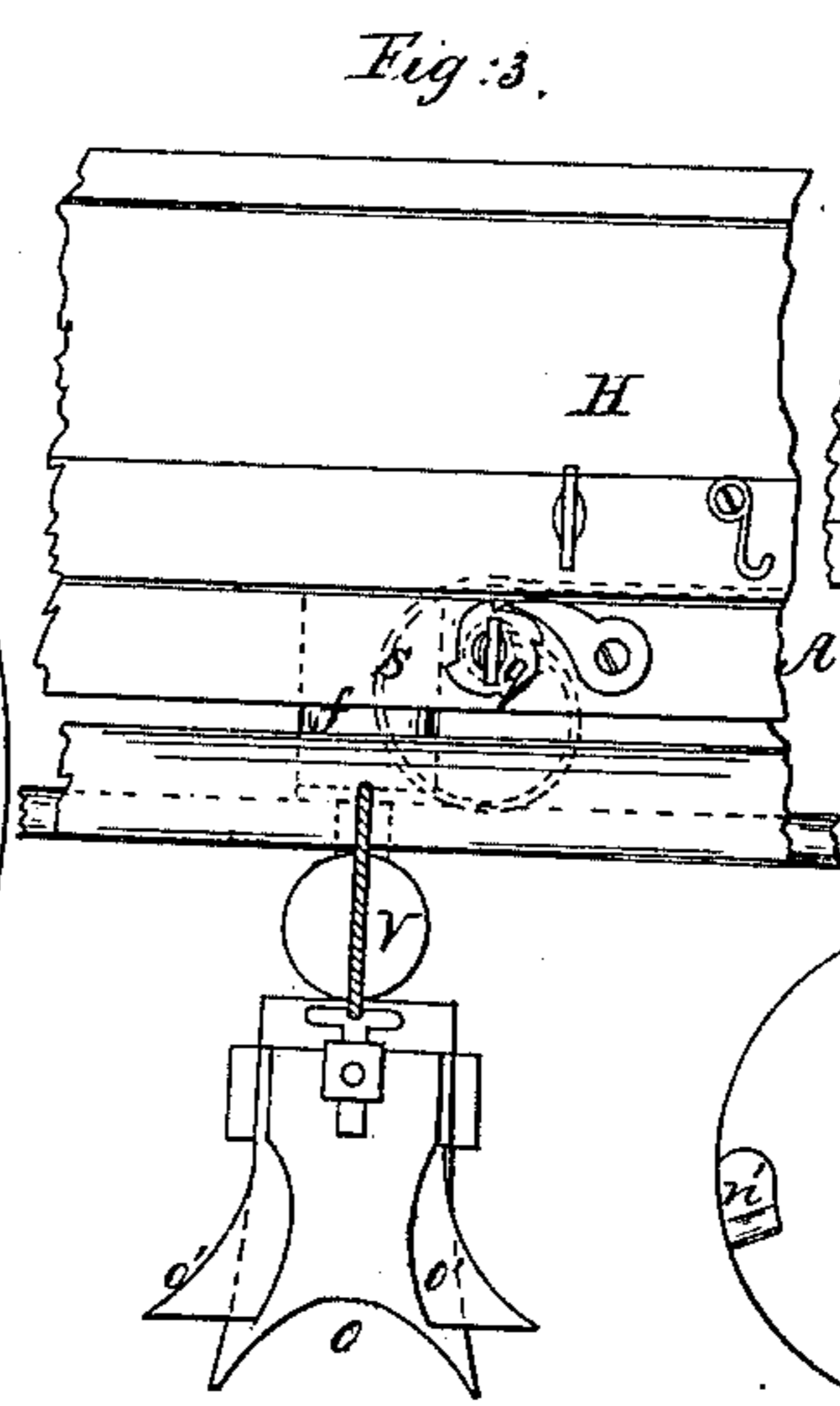
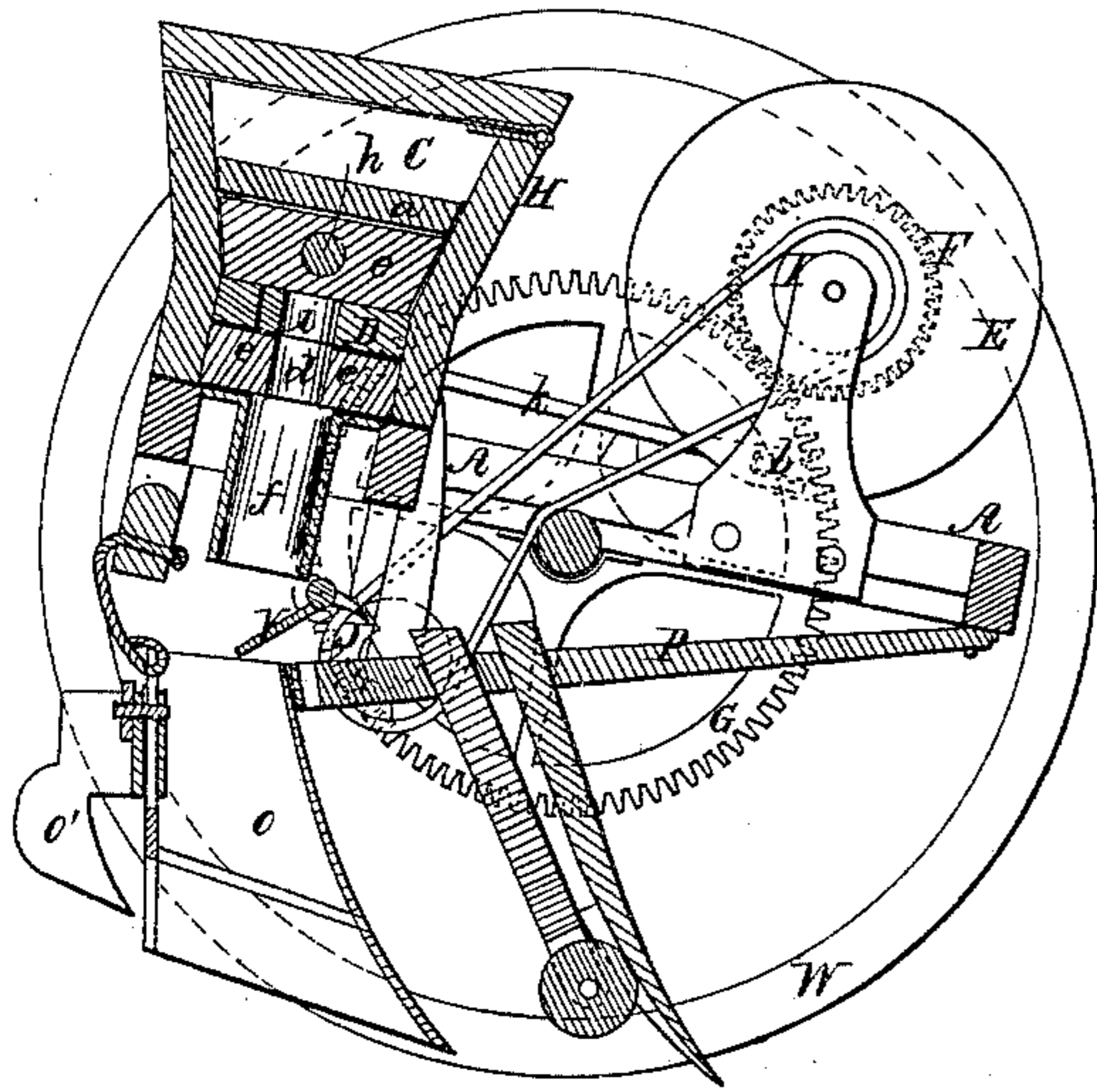
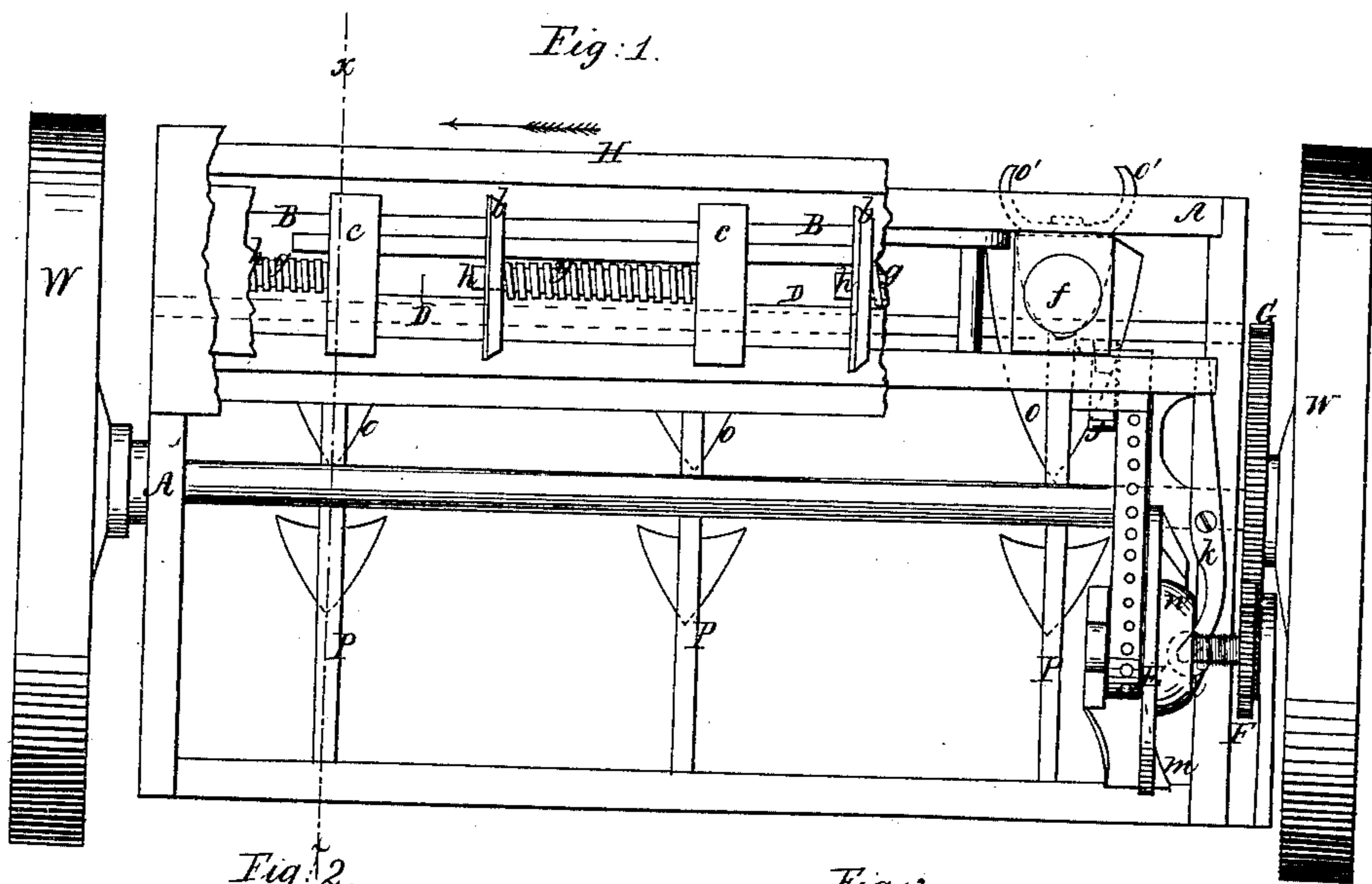


B. L. PRIME,
CORN PLANTER.

No. 18,768.

Patented Dec. 1, 1857



UNITED STATES PATENT OFFICE.

BRADLEY L. PRIME, OF HAMILTON, OHIO.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 18,768, dated December 1, 1857.

To all whom it may concern:

Be it known that I, BRADLEY LOCK PRIME, of Hamilton, in the county of Butler and State of Ohio, have invented a new and useful Improvement in Corn-Planters; and I do 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 annexed drawings, forming part of this specification, in which—

Figure 1 is a top view of the machine with portion of hopper broken away to show depositing-tube. Fig. 2 is a vertical section on *x x*. Fig. 3 is a rear view of a portion of hoppers, showing furrow openers and coverer. Fig. 4 is a view of lever operating seed-slide. Fig. 5 is a face view of cam-wheel operating seed-slide.

Similar characters of reference in the several figures denote the same part.

The nature of my invention consists in an elastic construction of the partitions of the seed-chambers under which the cavities of the seed-slide pass, and in a peculiar formation of the cam-wheel actuating the feed-slide for insuring the proper filling of the aforesaid cavities and preventing obstruction to the reciprocation of the slide and cutting of the grain, as will be hereinafter set forth.

In the drawings, A is the frame of the machine, supported upon the wheels W W.

The hopper H is constructed with a chamber, C, at top, extending the entire length, the floor *a* of this chamber having openings over the lower compartments, B, contained between partitions *b c*, for the admission of the grain to the cells of the feed-slide D. The partitions *c* are over the openings *d* in the hopper-bottom *e*, leading to the discharge-tubes *f*. These partitions are held in their proper position by spiral springs *g*, around rods *h*, attached to said partitions and passing through openings in partitions *b*, so that the partitions *c* will yield to pressure, and will on the removal of the pressure resume their proper position over openings *d*. It should here be stated that partitions *b* are fixed, and that floor *a* will not permit the entrance of grain into the chambers containing the spiral springs *g*.

The slide D has cavities *i* to contain the quantity of seed for a single discharge. These cavities are adjustable by any of the known devices for that purpose. The slide is moved in direction of arrow by lever *k*, said lever being actuated by the projections *m n n' n''* on wheel E, the end of the lever in contact with the wheel having a small roller, *l*. A spring, *s*, attached to slide D, moves the slide in the opposite direction from that indicated by arrow and keeps the roller *l* in contact with the face of wheel E. The spring *s* is attached by one extremity to a shaft, whose head is shown at *q*, so that the strength of the spring may be graduated, as indicated in Fig. 3. The wheel E is rotated from the wheel W by gearing-connection F G. On the shaft of this cam-wheel E is a pulley, I, having a band-connection with a pulley attached to cam, J, which regulates the opening and closing of a valve, *v*, at the lower extremity of discharge-tube *f*, as shown in Fig. 1.

P is the drag-bar, having opener *o* and coverer *o'*.

The operation of my improvement is as follows: The projections *n n' n''*, by slightly moving the slide D before its cavity is carried under partition *c*, serve to settle the grain in the cavity and insure proper filling thereof. As the cavity passes under partition *c* under the action of projection *m* upon lever *k* it will carry its contents to discharge-opening *d*; but in event of a packing of the grain in the cavity to such an extent that the motion of the slide would be stopped or the grain cut the partition *c* will be carried in direction of the motion of the slide and the contents of the cavity dropped through opening *d*, the partition resuming its place by force of spring *g*. Moreover, it frequently happens that the corn becomes jammed between the partition and the grain-cavity before the cavity reaches the partition. In this case the partition yields, and the shake given by the small projection on wheel E settles the grain in the cavity and the partition resumes its place.

It will thus be seen that the action of my construction is to insure the filling of the grain-cavities and obviate all jamming and breaking of the grain.

Having thus described my invention and the operation thereof, I claim—

The yielding partitions *c* of the hopper, constructed, arranged, and operating substantially as and for the purpose set forth, in combination with the secondary projections *n n'* of the cam-wheel *E*, the whole operating as hereinbefore described.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

BRADLEY LOCK PRIME.

Witnesses:

P. ELKIN,
S. CRANE.