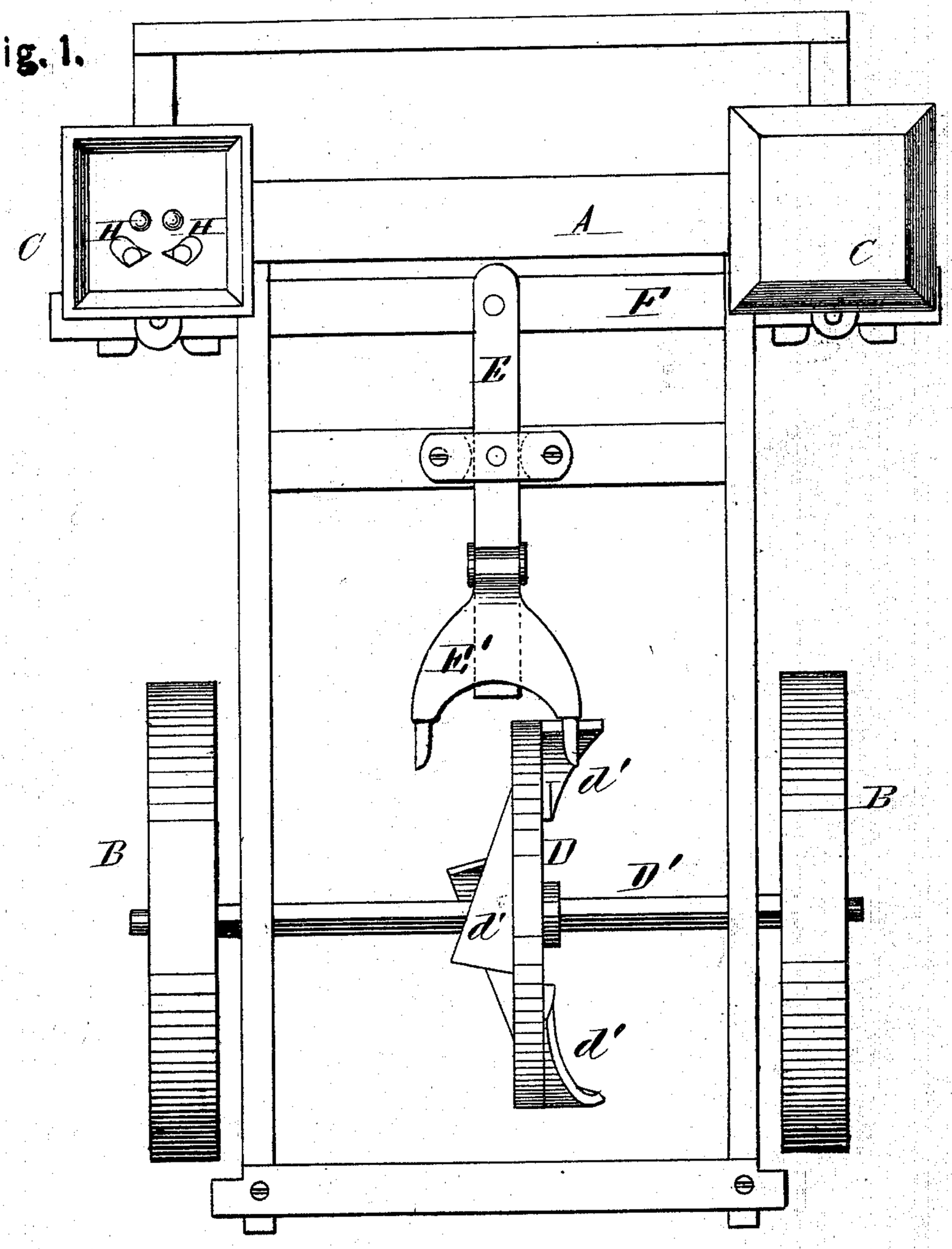
2 Sheets--Sheet 1.

A. H. STARK.

Corn-Planters.

No. 139,205. Patented May 20, 1873.

Fig. 1.



WITNESSES.

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2 Sheets--Sheet 2.

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Corn-Planters.

No. 139,205. Patented May 20, 1873.

Fig. 2.

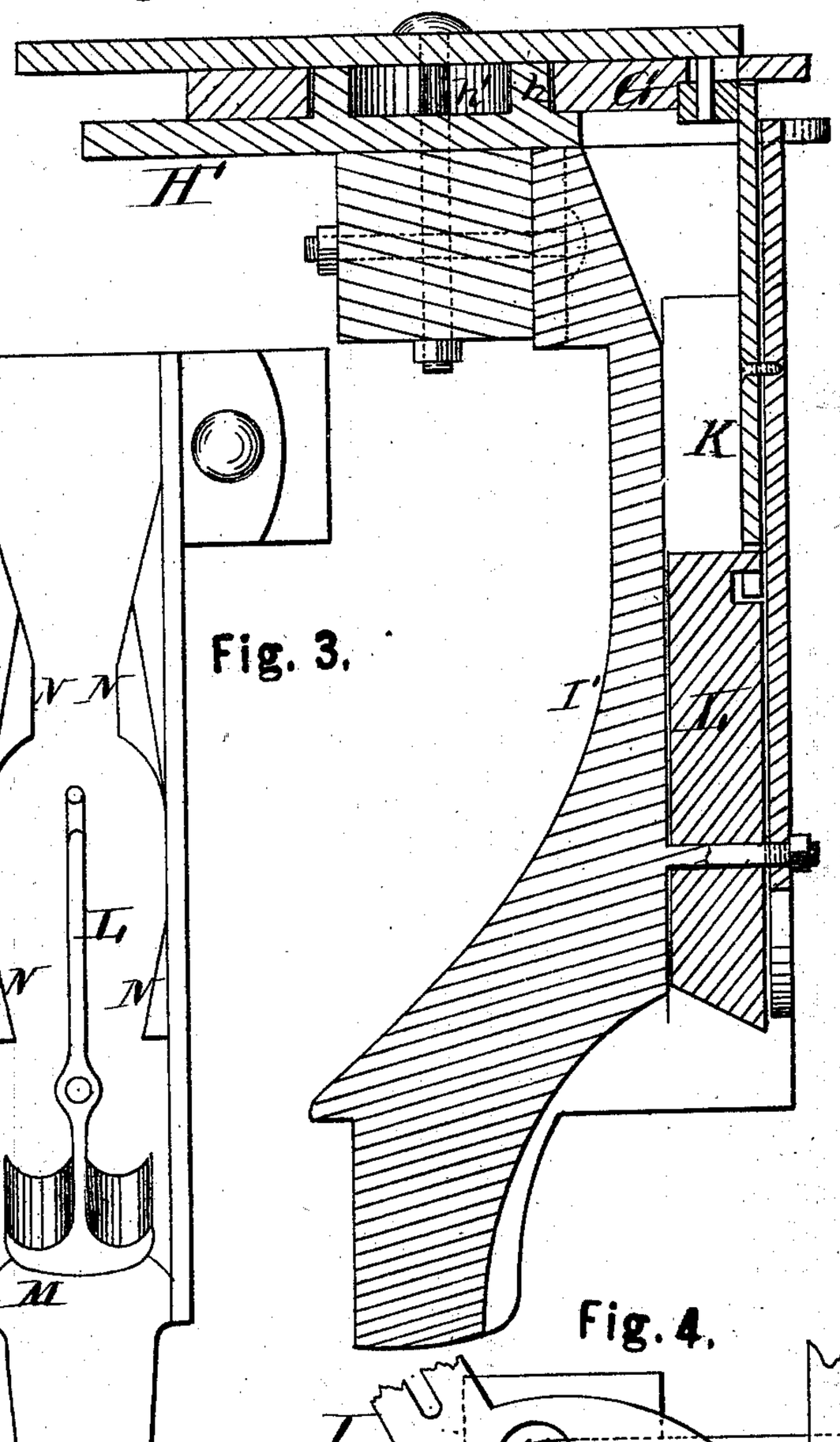


Fig. 3.

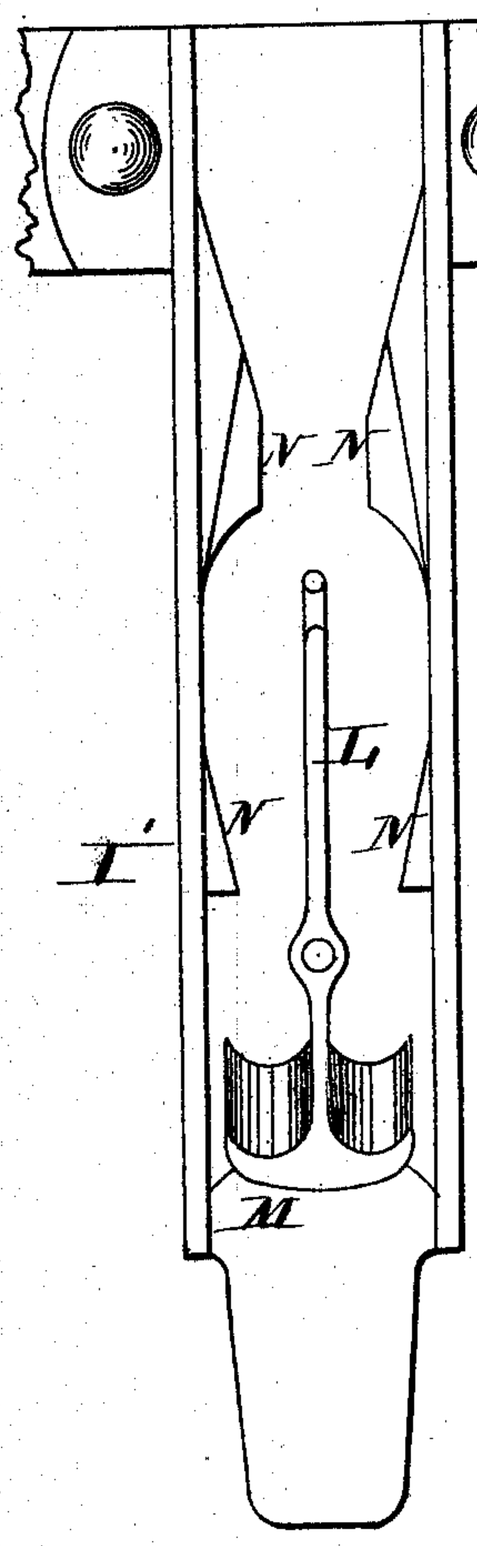
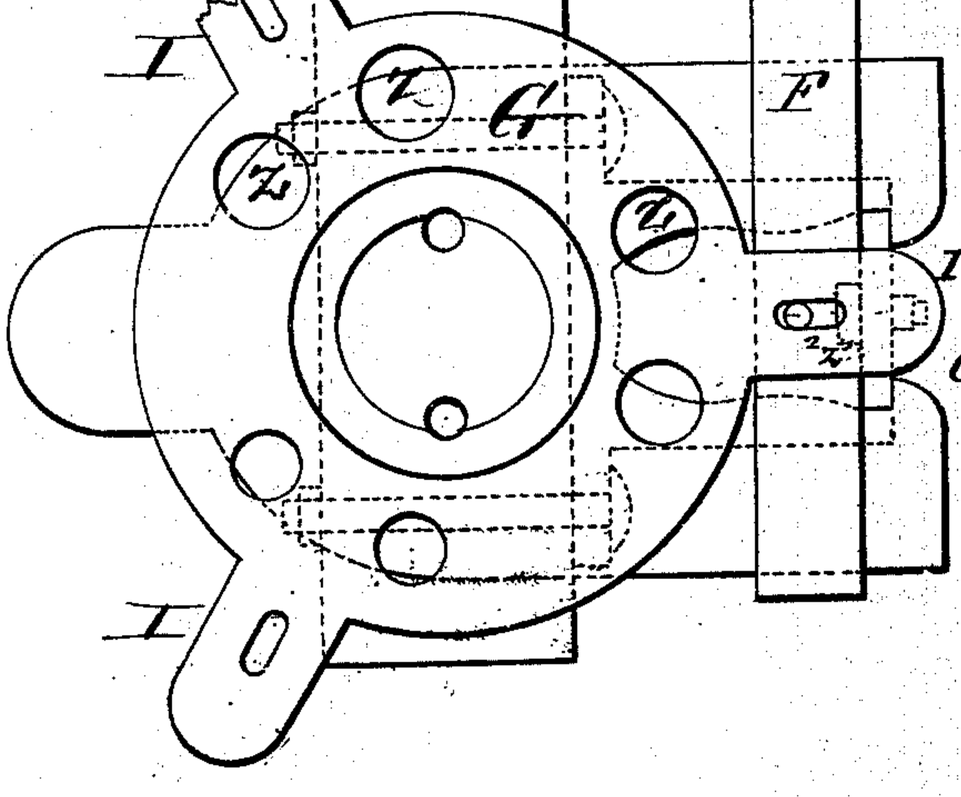


Fig. 5.

Fig. 4.



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UNITED STATES PATENT OFFICE.

ABRAHAM H. STARK, OF NEVADA, IOWA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **139,205**, dated May 20, 1873; application filed August 17, 1872.

To all whom it may concern:

Be it known that I, ABRAHAM HENRY STARK, of Nevada, in the county of Story and State of Iowa, have invented a new and valuable 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a top view of my invention. Fig. 2 is a detail section of my invention. Figs. 3 and 4 are detail views of my invention.

This invention has relation to corn-planters; and consists in the construction and novel arrangement of devices for depositing the corn, and of the drill-teeth, substantially as hereinafter specified.

Referring to the accompanying drawing, A designates the main frame of a corn-planter; B, the driving-wheels; and C, the seed-boxes. D is a disk upon the axle D′, and *d′* curved beveled teeth or cams projecting from each side of said disk. E is a lever, having a forked piece, E′, pivoted to or near its end. Between the arms of this piece the rim or periphery of the disk D moves. The beveled edges of the cams *d′* strike the arms of the fork alternately and vibrate the lever. The fork, being pivoted, may be raised out of contact with the cams. The lever E is pivoted to a transverse bar of the frame A and to a transverse slide, F. The slide is pivoted to horizontal rotary perforated disks G arranged below the seed-boxes. The perforations of said disks are marked Z, and are in sets of two, and are designed as cups to receive the corn from the hopper. H designates openings in the bottom of the hopper, through which the corn passes to the perforated disk. H′ is a board underneath each disk to prevent the corn from escaping before the proper time. The holes of the sets in the disk are of different sizes, and are used according to the quantity of seed to be dropped into each hill. There are three sets of holes to each disk, and for each set the disk is provided with a slotted arm, I, to be pivoted to the slide F. The movement of the slide oscillates the disk, so that the cups or holes of the set in use deposit their contents alternately into the seed-tubes I′. The slide F has slots Z^2 formed in its rear edge to receive the upper ends of the levers K, which are pivoted inside and to the back parts of the tubes I′. The lower end of said lever is bifurcated, and is connected to a vibrating bar, L, having at its lower end two concave inclined spouts or gutters, M. Every motion of the slide F swings the forked lever against or toward one side or another of the seed-spout, thus producing an angular space at the upper part of the spout, into which the seed falls from one of the cups in the rotating disk. As soon as the seed falls into said space the slide and disk reverse their movement, in consequence of which the forked lever is swung over to the opposite side, and the position of the angular space changed. By this motion of the forked lever the seed is dropped from the space onto nearest gutter or channel at the lower end of the vibrating bar L, and is conducted to the ground through an opening in the back part of the tube, and may be therefore seen by the driver. N designates inclined blocks for guiding the seed to the center of the tube. The disks G are secured between the bottoms of the respective seed-boxes and the boards H′, and have openings in their centers, through which pass cylindrical flanges *h*, encircling the bolts *h′*, which secure the seed-boxes in place. Around said flanges the disks turn.

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

The combination and arrangement of the cam-wheel D, lever E having the forked piece E′ hinged thereto, and transverse slide F, operating substantially in the manner shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

A. H. STARK.

Witnesses:

JOHN SCOTT,

LYCURGUS IRWIN.