

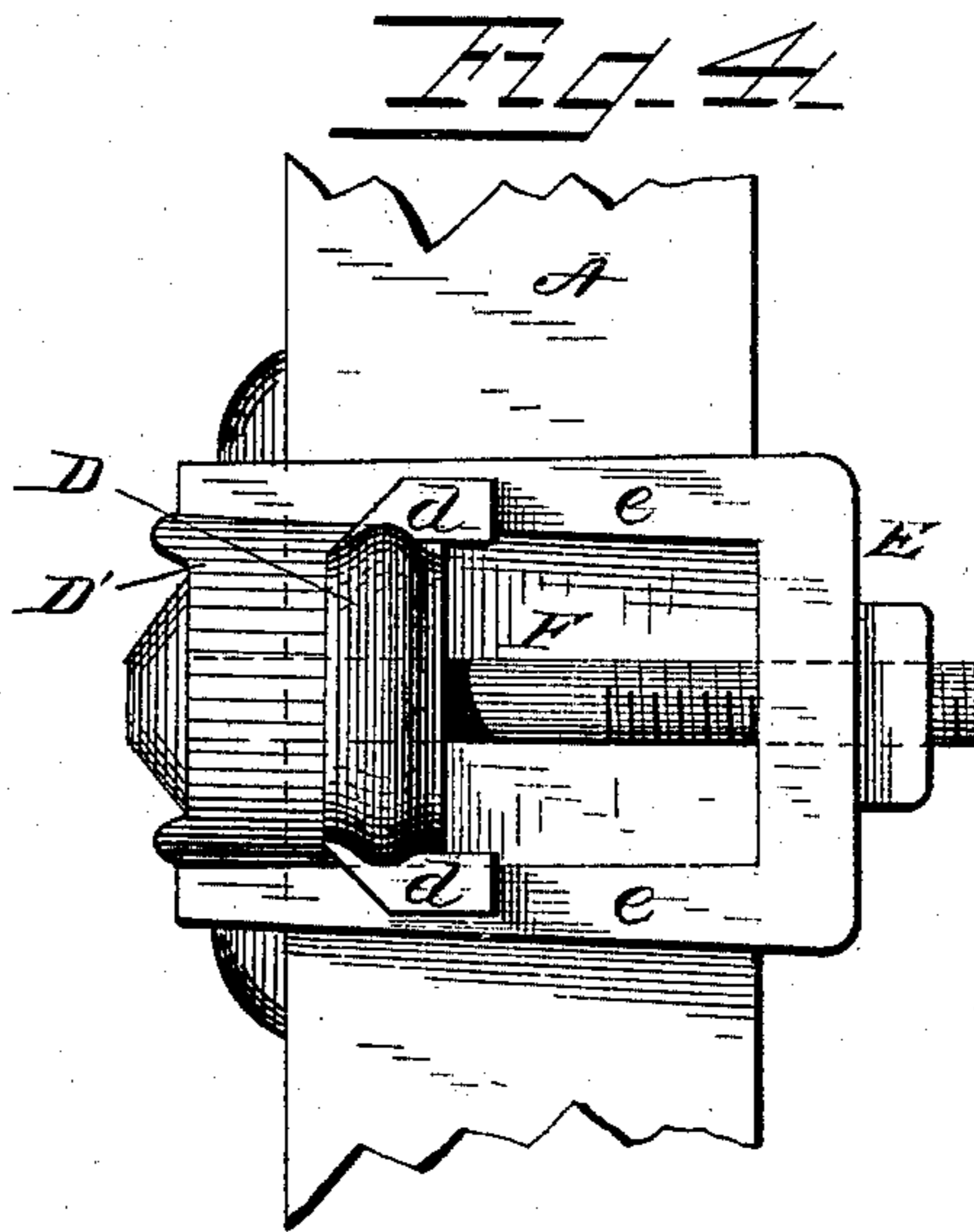
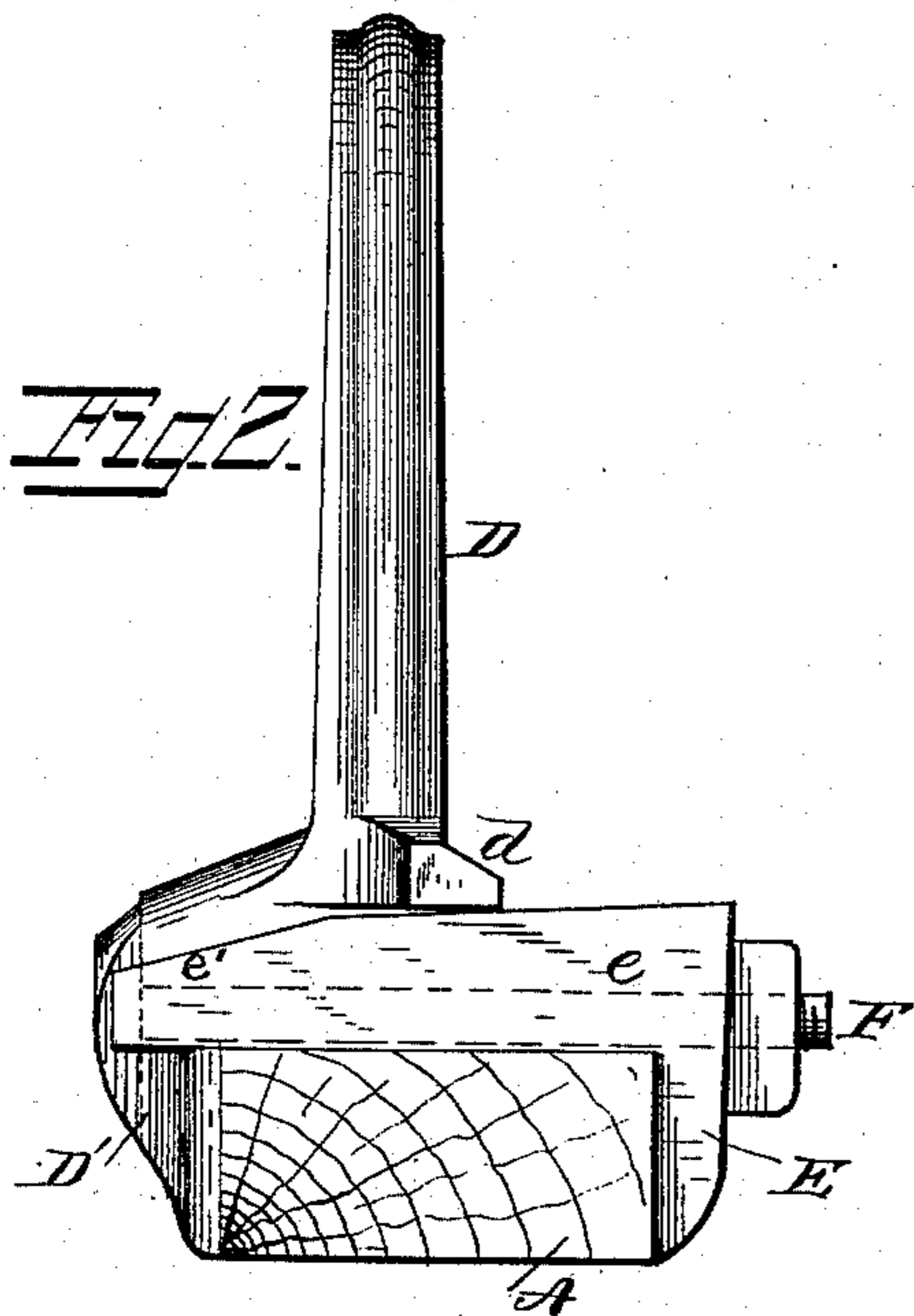
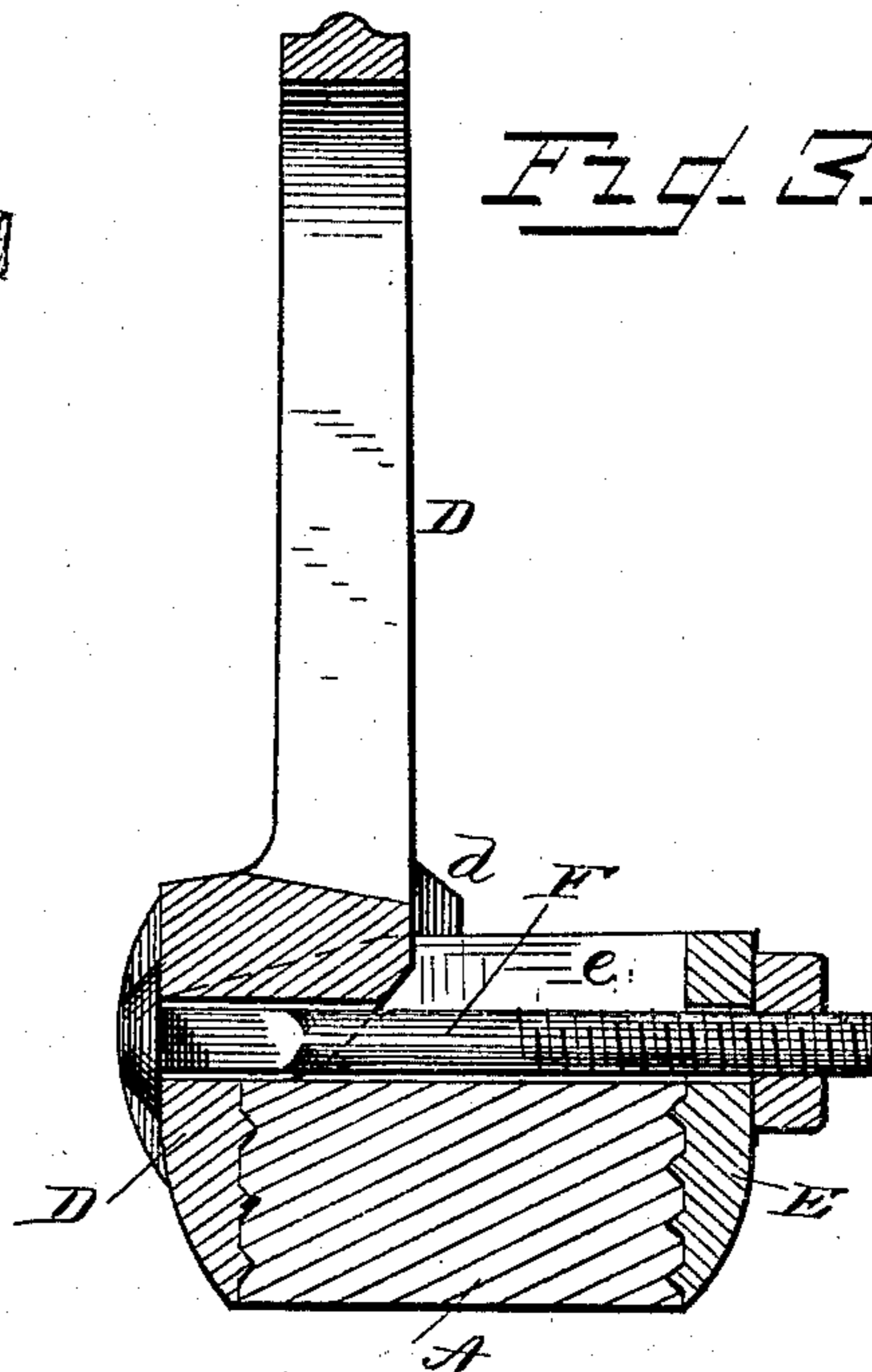
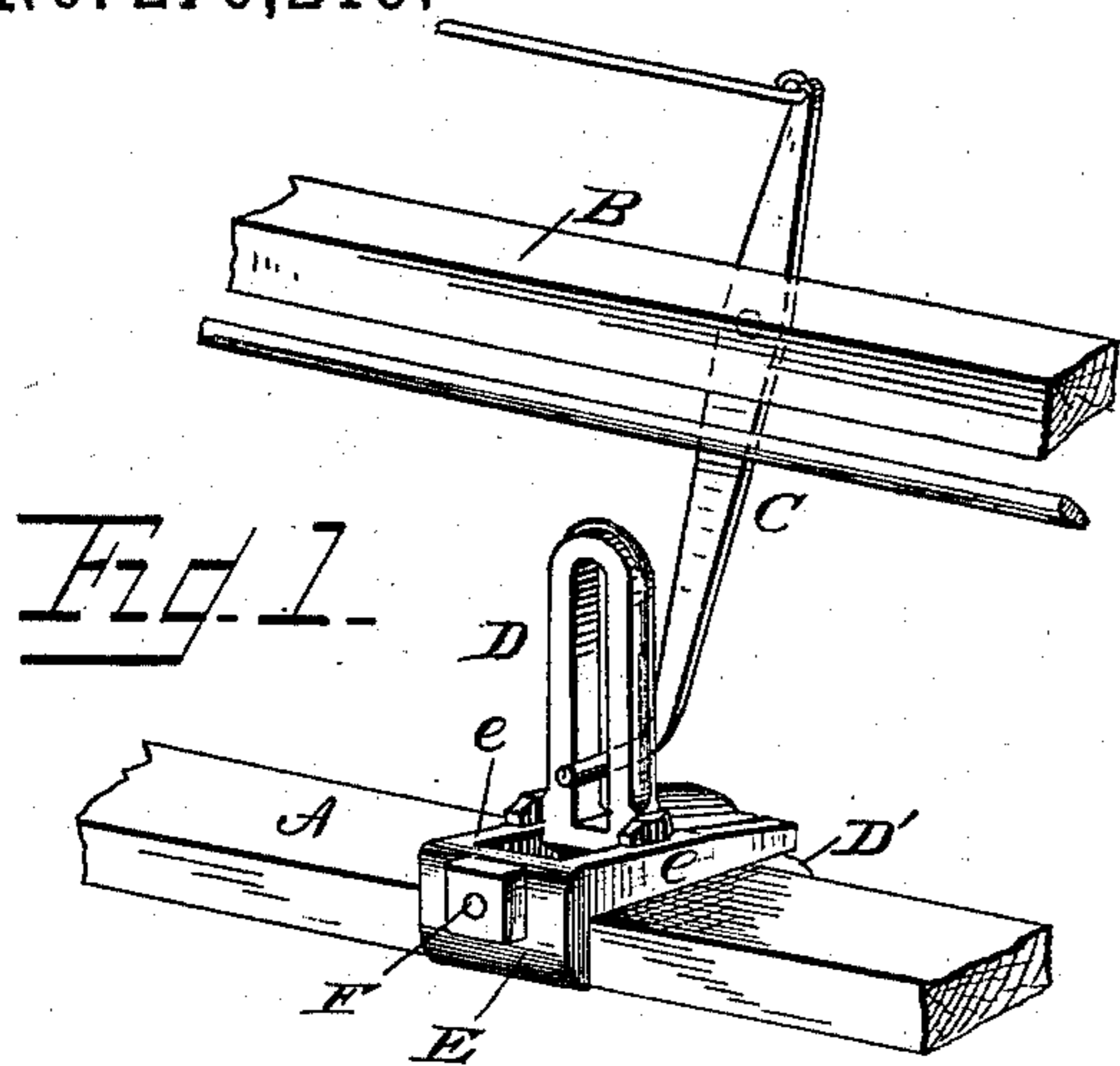
(Model.)

G. D. HAWORTH.

SEED PLANTER.

No. 270,219.

Patented Jan. 9, 1883.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE D. HAWORTH, OF DECATUR, ILLINOIS.

SEED-PLANTER.

SPECIFICATION forming part of Letters Patent No. 270,219, dated January 9, 1883.

Application filed August 9, 1882. (Model.)

To all whom it may concern:

Be it known that I, GEORGE D. HAWORTH, of Decatur, in the county of Macon and State of Illinois, have invented new and useful Improvements in Seed-Planters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a clamp-standard forming the connection between the check-row devices and the seed-slide; and it consists in the combination of the slotted standard, through which the rock-shaft or lever operated by the check-row devices is connected with the slide-bar actuating the seeding devices, with a clamp facilitating the attachment of said standard to, its removal from, and its adjustment on, said slide, as hereinafter explained.

In the accompanying drawings, Figure 1 is a perspective view of my improved clamp-standard, showing its attachment to the slide rod or bar actuating the seeding devices. Fig. 2 is a side elevation of the clamp-standard, shown attached to the slide; and Fig. 3 represents a vertical section, and Fig. 4 a plan view, of the same.

The type of machine to which my improvement is more especially applicable is that known as a "check-row corn-planter," in which the reciprocating transverse slide-bar which actuates the seeding devices is operated by means of a rock-shaft or lever forming a part of the check-row attachment and actuated by the check-line, and as both the machine and the check-row attachment thereto may be similar to such as are now in common use it will be unnecessary to describe them in detail.

In the drawings, A represents a portion of the sliding bar through which the seeding devices are operated.

B is the main transverse frame-bar of the check-row attachment, and C a rocking lever or shaft connected therewith for operating the slide A, said lever or shaft being actuated by the check-row mechanism through any usual or preferred arrangement.

D is a slotted standard in the slot, in which the crank-pin on the lower arm of the rock-shaft or lever C works, as said lever is vibrated, for imparting a reciprocating move-

ment to the slide A. This standard is provided on its lower end with an angular foot, forming a horizontal shoulder which rests on the bar A, and a pendent lip or flange, D', passing down on the forward or vertical face of said bar, and constituting one jaw of the clamp for uniting the standard thereto. E is a similar jaw, made separate from the standard, and resting against the opposite vertical face of the slide, and provided at its upper end with horizontal arms *e e*, which rest upon the bar A and stride the standard D, passing above the extended ends of the jaw D', and between said ends and lugs or ears *d d*, formed on the sides of said standard, above said jaw, as shown. The jaws D' and E are ribbed or corrugated on their inner adjacent faces, adapting them to more firmly grasp and hold the slide A, and, extending above said slide, are perforated to receive a through-bolt, F, passing above the slide, and by means of which they are firmly secured thereto. The arms *e e* are by preference made slightly tapering near their ends, as shown at *e'*, to facilitate their insertion between the lugs *d d* and the projecting ends of the flange or jaw D, and the lugs *d d* are by preference made to project somewhat in advance of the forward face of the standard D for giving the standard increased steadiness and length of bearing on the arms *e e*. When drawn into place the arms *e e* snugly fill the space between the lugs *d d* and the ends of the jaw D', and in connection with the jaws serve effectually to prevent the rocking or accidental displacement of the standard D.

By loosening the bolt F the standard can be readily removed from or adjusted upon the slide, as desired, while by tightening the bolt the jaws are made to act like the jaws of a clamp or vise, firmly grasping the slide and causing any movement imparted to the standard by the rock-shaft or lever to be communicated to the slide.

Having described my invention, I claim as new—

1. In a seed-planter, the combination, with the standard or its equivalent, through which movement is communicated to the seed-slide, of the jaws D' and E for uniting said standard to the slide, substantially as described.

2. The slotted standard D, provided with the angular foot or jaw D', in combination with the jaw E, provided with the horizontal arms *e e*, striding said standard, for uniting the latter to the seed-slide, substantially as described.

5 3. The combination, with the seed-slide and the rock-shaft or lever for actuating the same, of the slotted clamp-standard D, provided with the jaws D' and E, and their connecting-bolt

for uniting said standard to the seed-slide, substantially as described. 10

In testimony whereof witness my hand this 5th day of August, A. D. 1882.

GEORGE D. HAWORTH.

Witnesses:

C. O. JUDSON,

THEO. COLEMAN.