

(Model.)

3 Sheets—Sheet 1

W. B. RUSH

DEVICE FOR CONNECTING CHECK ROWERS TO PLANTERS.

No. 259,652.

Patented June 13, 1882.

Fig. 1.

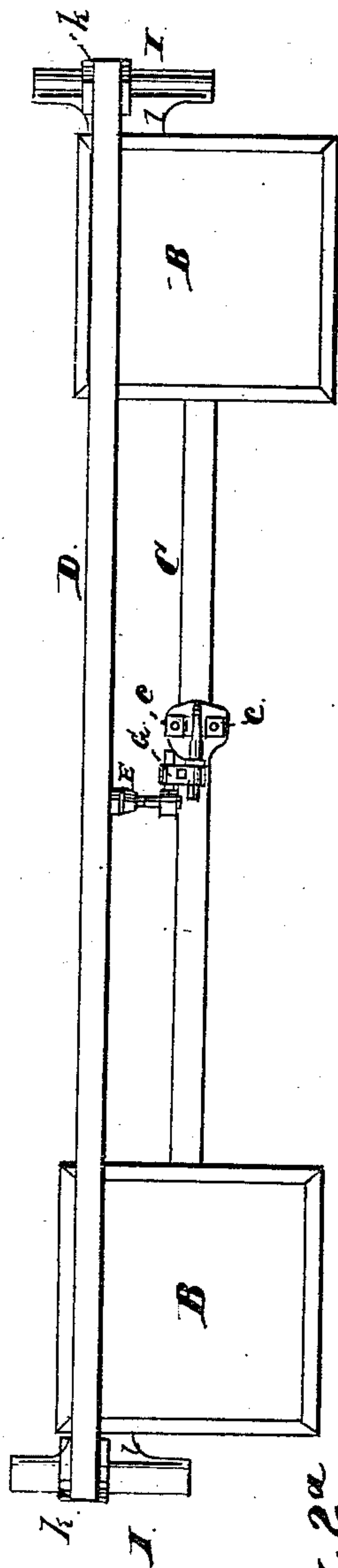
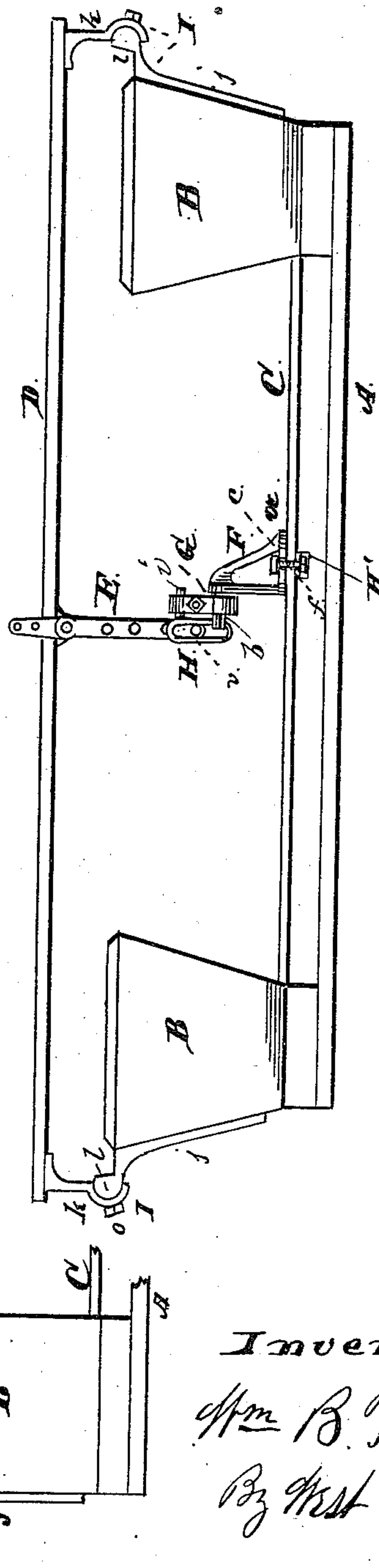


Fig. 2.



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(Model.)

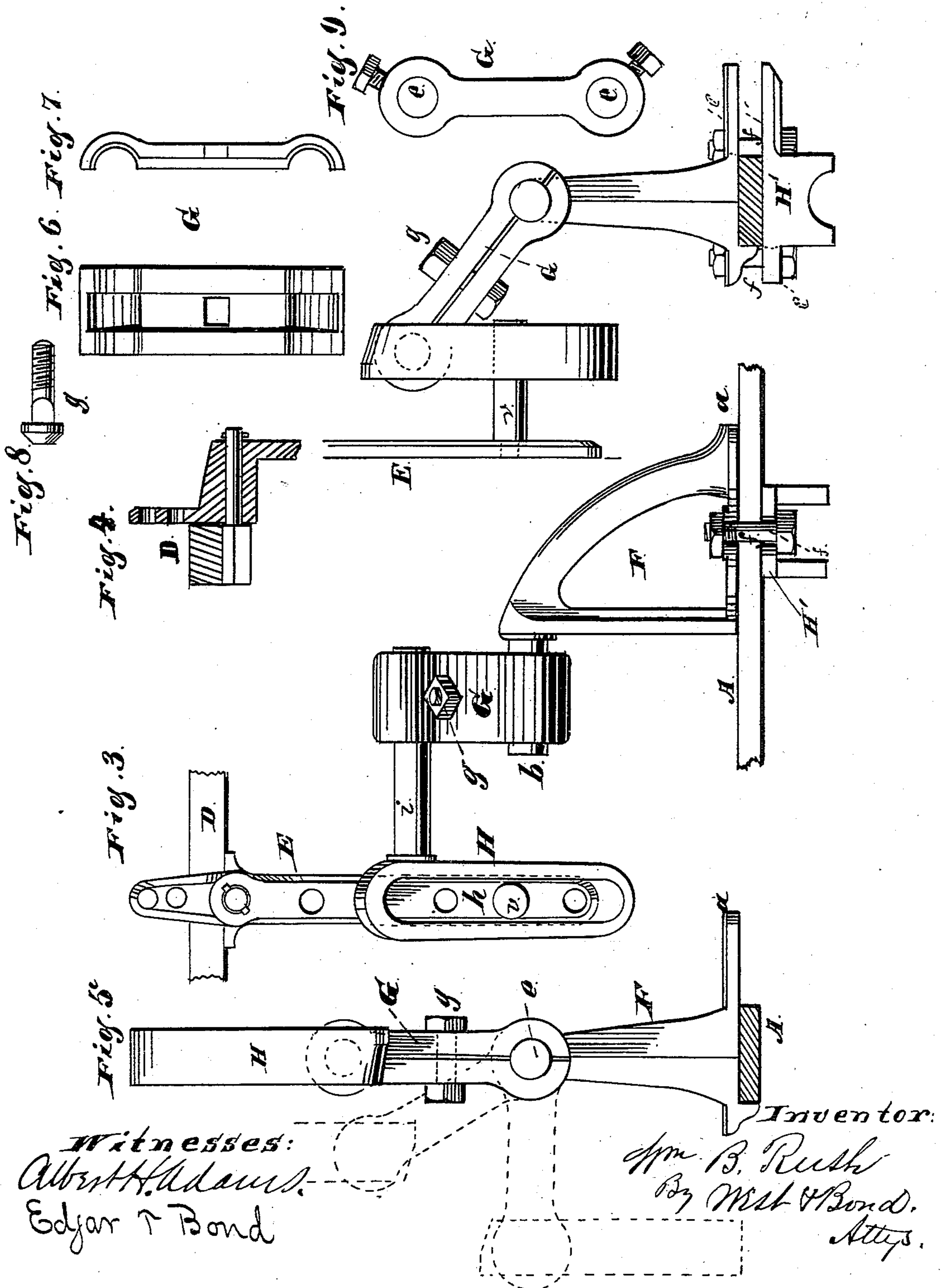
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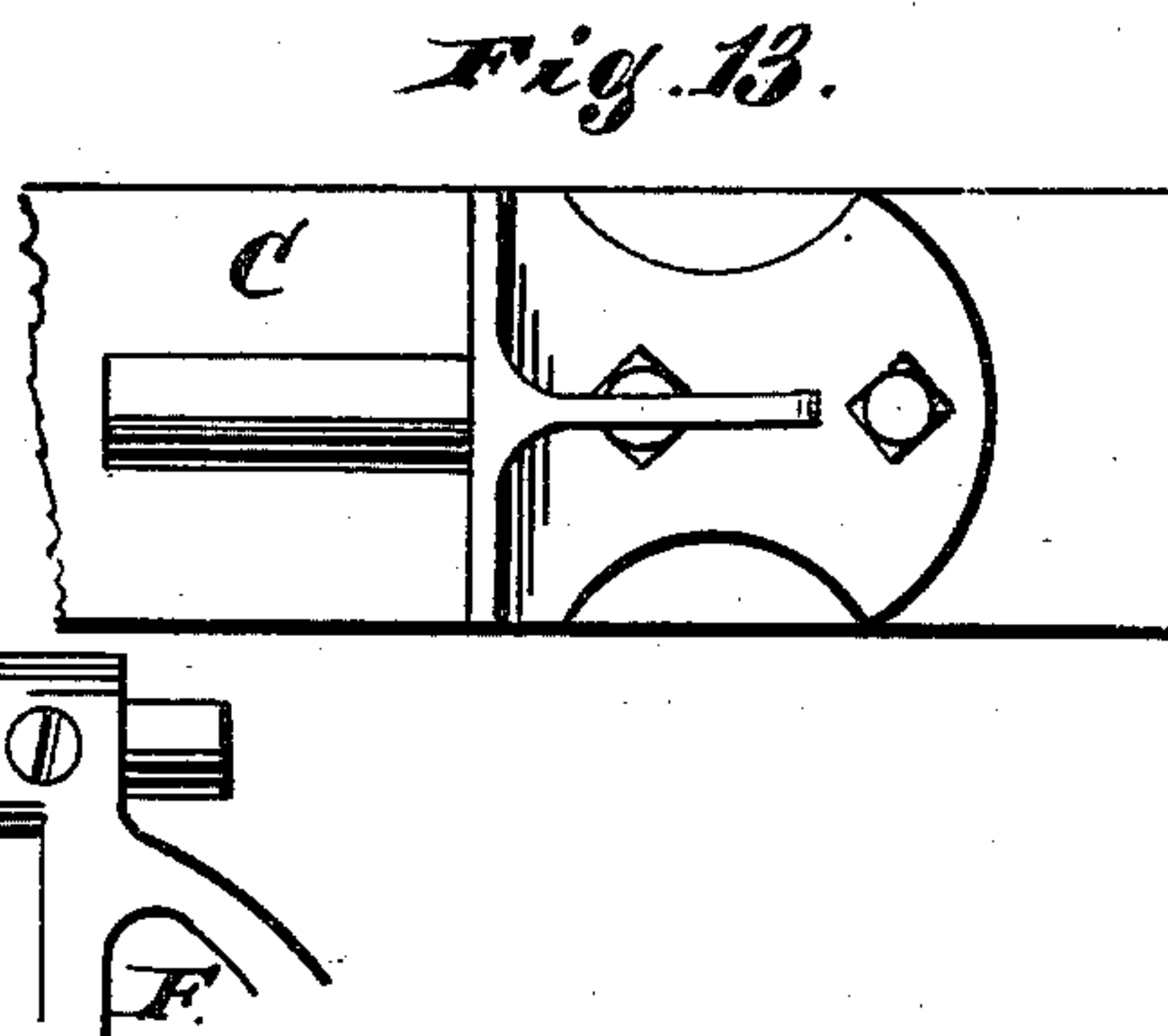
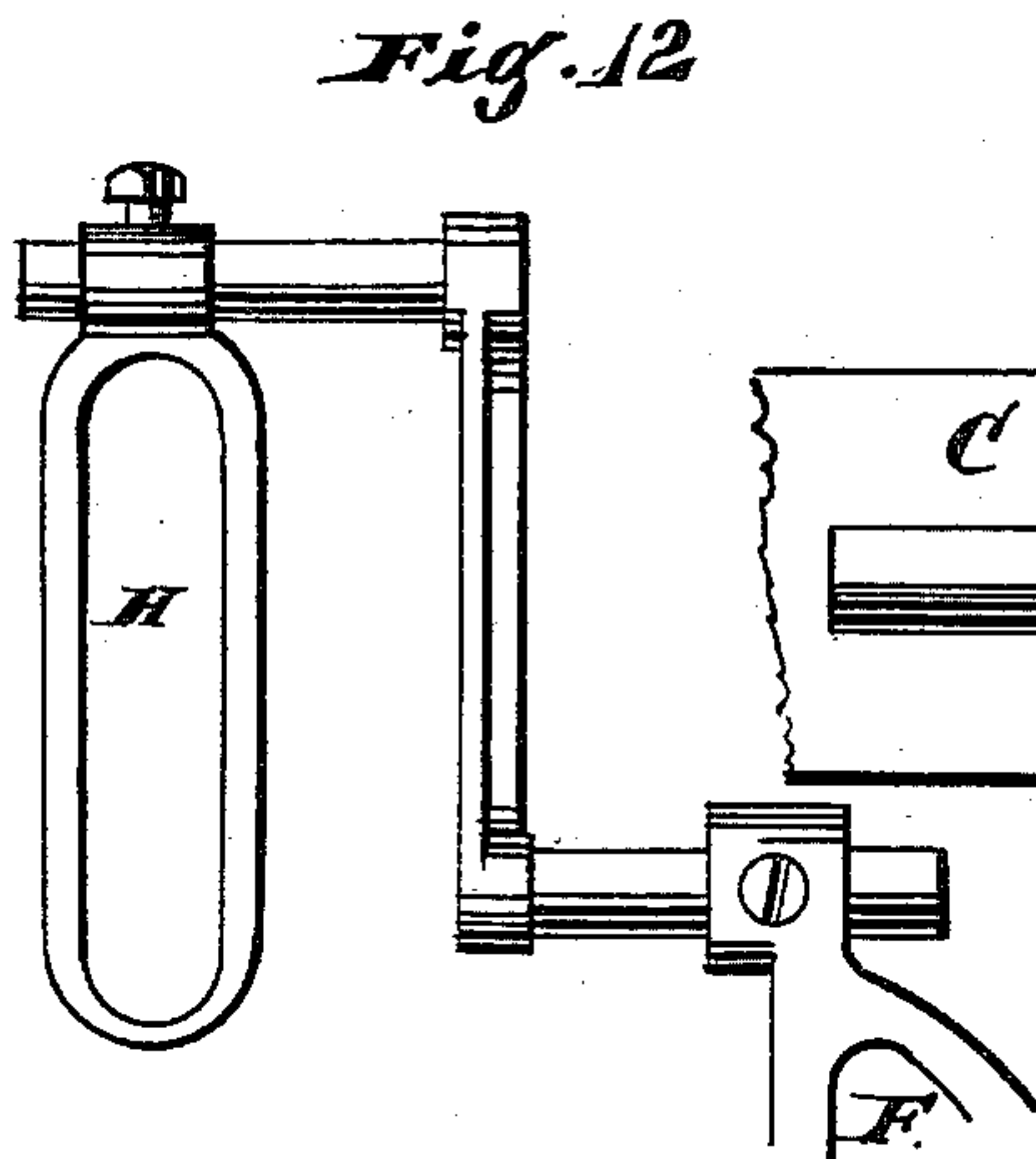
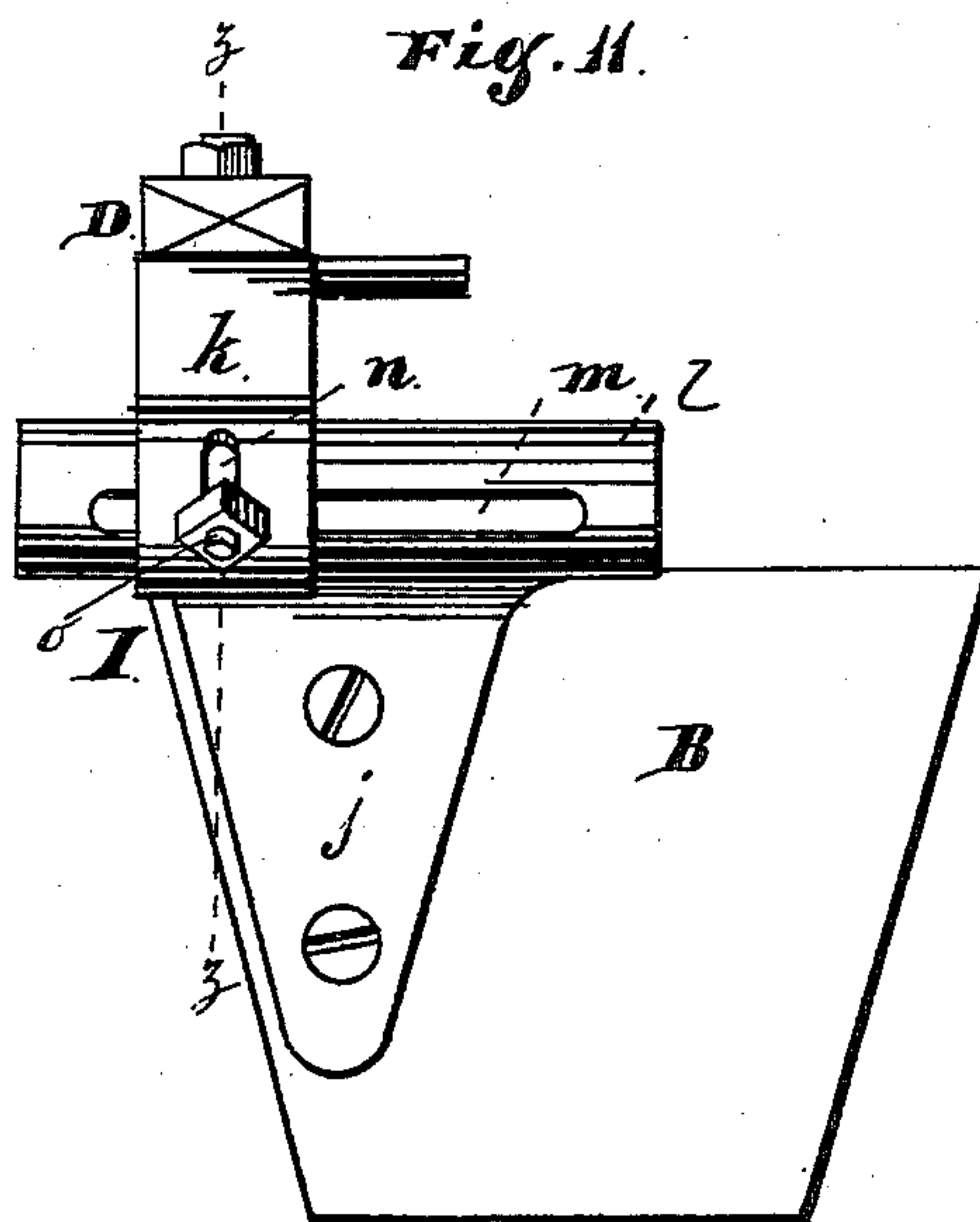
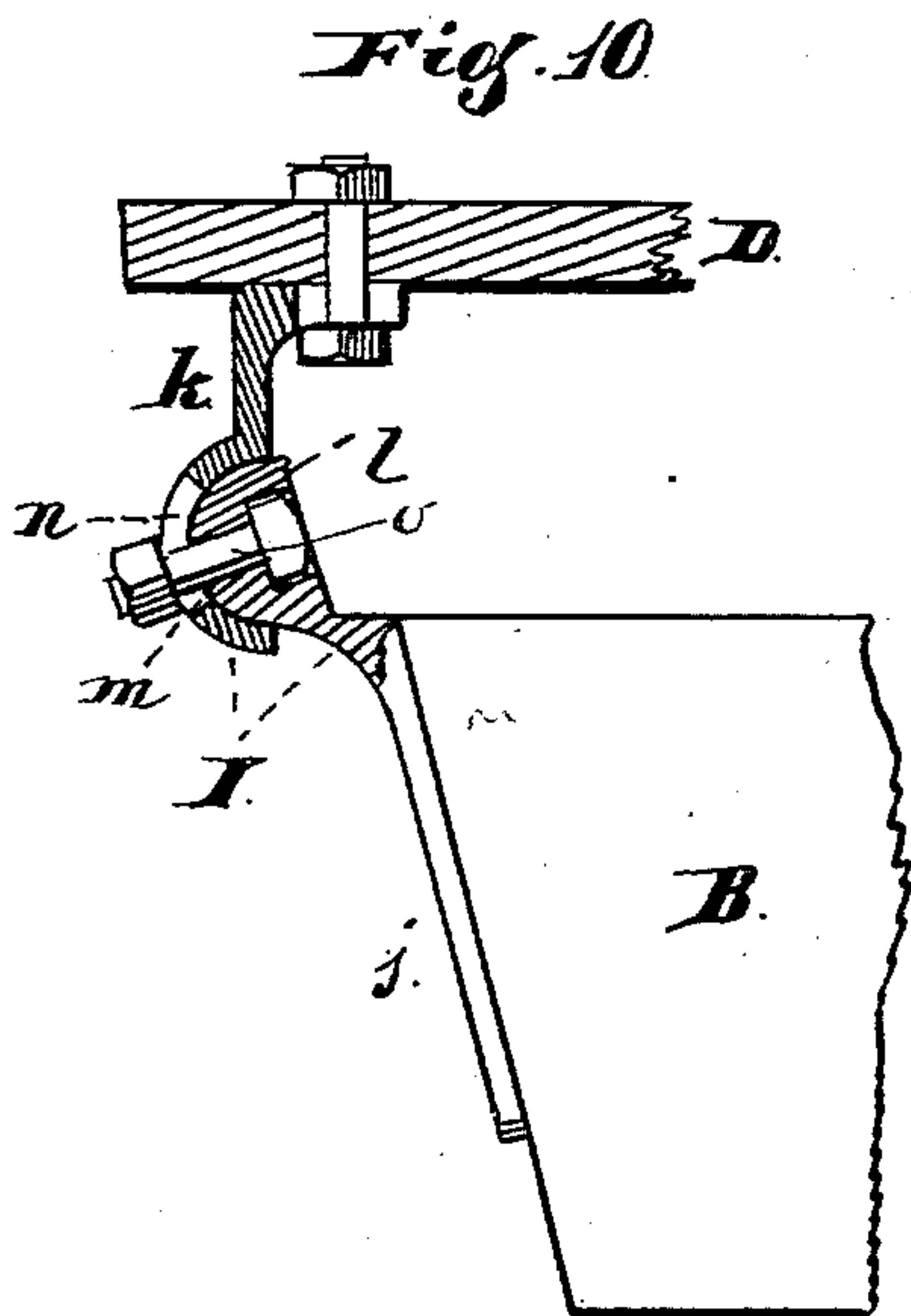
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Patented June 13, 1882.



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UNITED STATES PATENT OFFICE.

WILLIAM B. RUSH, OF DECATUR, ILLINOIS, ASSIGNOR TO CHAMBERS,
BERING & QUINLAN, OF SAME PLACE.

DEVICE FOR CONNECTING CHECK-ROWERS TO PLANTERS.

SPECIFICATION forming part of Letters Patent No. 259,652, dated June 13, 1882.

Application filed November 7, 1881. (Model.)

To all whom it may concern:

Be it known that I, WM. B. RUSH, residing at Decatur, in the county of Macon and State of Illinois, and a citizen of the United States, have invented new and useful Improvements in Devices for Connecting Check-Rowers to Planters, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top view. Fig. 2 is a front elevation. Fig. 2^a shows irons on a straight seed-box; Fig. 3, a front view of devices for connecting the check-rower with a shake-bar. Fig. 4 is a side view of such devices. Fig. 5 shows the same parts as Fig. 4, but in another position. Figs. 6, 7, and 8 are details. Fig. 9 is a modification. Figs. 10 and 11 show the irons I use for connecting the check-rower with the seed-boxes, Fig. 10 being a section at line *z* of Fig. 11. Fig. 12 is a modification. Figs. 3 to 12 are enlarged. Fig. 13 shows the part F attached to the shake-bar without using the plate H'.

Corn-planters of various styles, and differing somewhat in the construction and arrangement of the seeding devices, are manufactured and sold. It is common to manufacture so-called "check-rower" attachments for use with corn-planters, and it is desirable to provide such attachments with devices by means of which the shake-bar of the planter is operated so constructed that the attachment and such operating devices can be readily applied to different kinds of planters having the same general construction, but varying considerably as to the location and arrangement of the shake-bar.

One object of my invention is to provide devices such as indicated above, which I accomplish as hereinafter described.

Some corn-planters are provided with seed-boxes having angular sides. Others have straight sides. It is customary to secure check-rower attachments to the seed-boxes of planters by means of castings, upon which the attachment is supported, and such castings must have special construction in order to adapt them to be used with seed-boxes which have straight sides, as well as those which have angular sides.

A second object of my invention is to provide improved castings to be used in attaching check-rowers to corn-planters having different

kinds of seed-boxes, which I accomplish as hereinafter fully described.

In the drawings, A represents a transverse bar of a corn-planter carrying seed-boxes B.

C is the shake-bar, by means of which the seed slides or disks at the bottom of the seed-boxes are operated.

D represents the main bar of a check-rower attachment, which, as shown in the drawings, is supported upon the seed-boxes by means of my peculiarly-constructed castings, which will be hereinafter fully described.

E is the check-rower lever, which is pivoted to the main bar D in any suitable manner, which lever may be operated by a rod connected to the upper end of such lever in the usual manner. I have not shown this rod, nor the other parts of the check-rower attachment which are connected to the bar D, because they are not necessary to illustrate my present invention.

v is a pin on the lower arm of the lever E.

The devices which I have invented for connecting the shake-bar of the planter with the check-rower lever E consist of three principal parts, F, G, and H. The part F consists of a base-plate, *a*, adapted to be bolted or clamped to the shake-bar C and the round arm *b*. As shown, the base-plate *a* is provided with two open slots, *c c*, one on each side, and it is secured to the shake-bar C by means of bolts and a clamping plate, H', of peculiar construction, having slots to receive the fastening-bolts *f*. As this peculiar plate H' was not invented by me, I will not fully describe it. This special mode of connecting the plate *a* to the shake-bar is not a necessity. It could be secured to the shake-bar by means of bolts passing through the plate and shake-bar, as shown in Fig. 13; but the slots *c* and plate H' are convenient.

G is a connecting-iron provided with a circular hole, *e*, at each end. This connecting-iron G, as shown in Fig. 5, consists of two parts connected together by a screw-bolt, *g*, by means of which this part G can be clamped upon the parts F H.

H is an iron having a long slot, *h*, and a round arm, *i*. The slot *h* passes over a pin, *v*, upon the lever E.

When the three parts F, G, and H are in use the connecting-iron G is to be clamped upon the two parts *b i*. In use the part F,

when once attached to the shake-bar, always remains in the same fixed position; but the parts G and H can be adjusted so as to occupy a great variety of positions, some of which are illustrated in Fig. 5. For example, the part G may be adjusted upon the round part *b* of F so as to stand up vertically therefrom, or it may project at right angles therefrom, either forward thereof or back thereof, and may be made to occupy a great variety of other positions both above and below the right-angled position mentioned, and both in front and in rear of the arm *b*. So, too, the part H may be made to stand upright, as shown at Fig. 5, or it may be turned down, as shown in Fig. 3, or it can be placed upon either side of the part G. The part G can also be adjusted laterally upon the parts *b* and *i*.

In some corn-planters the shake-bar passes into the ends of the seed-boxes. In some it is located behind the seed-boxes, and the distance from the tops of the seed-boxes to the shake-bar varies considerably in different planters. By means of the three parts F, G, and H, constructed substantially as described, I am able to connect a check-rower attachment with the shake-bars of a great variety of corn-planters, which practically is a very desirable feature. By loosening a nut upon the bolt *g* the parts G and H can be adjusted as may be desired in order to bring the parts into the proper positions relatively to the shake-bar C and the check-rower lever, E. Then the part G can be clamped into place both upon *b* and *i*. It is not necessary to make this part G in two pieces. It might be made solid, with a hole at each end, and it could then be secured to the parts *b* and *i* by means of set-screws, or in some other known suitable manner. In Fig. 9 I have shown this modification.

I represents the castings by means of which I connect a check-rower attachment to the seed-boxes of the corn-planter.

Each connecting-iron consists of two parts, *j* and *k*. The part *j* is adapted to be bolted to the end of the seed-box, and the upper end of this part *j* is provided with a half-round part, *l*, provided with a long slot, *m*, to receive a bolt, *o*. The upper part, *k*, of this connecting-iron has at its lower end a concave surface adapted to fit the half-round part *l* and a vertical slot, *n*, and the upper end of this part *k* is provided with a flat surface to receive the main bar D of the attachment, which is secured to the upper ends of *k* by bolts. It is desirable that the bar D be secured to a flat surface, in order that it may be securely held in place. I am able to maintain the upper ends of the parts *k* in proper position, whether the lower parts, *j*, be attached to seed-boxes having vertical ends or having straight ends, because by loosening the bolts *o* the parts *k* can be turned upon the half-round part *l*, as may be necessary to keep the part *k* in a vertical position. By means of the long slot *m* the part *k* can be adjusted longitudinally upon the half-round part *l*, as may

be desirable when securing the check-rower attachment to different kinds of planters. To illustrate the use of these connecting-irons, I have shown them in Fig. 2 attached to a seed-box having inclined sides and in Fig. 2^a to a seed-box having vertical sides.

It is evident that the construction of the three parts F, G, and H could be considerably changed without departing from the spirit of my invention. Instead of providing the plate *a* with the arm *b*, such arm might be omitted, and the plate *a* might be provided with a suitable socket. So, too, the round arm *i* might be omitted from the part H and a suitable socket be substituted. Then by providing the connecting-piece G with two round arms, one at each end, adapted to enter the two sockets last mentioned, and in use being secured in such sockets by set-screws or in other suitable manner, the device would be substantially the same as that first described, and its operation would be substantially the same. This modification is shown in Fig. 12.

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. A device for connecting the operating-lever of a check-rower with the shake-bar of a corn-planter, composed essentially of the three adjustable parts F, G, and H, the part F being secured to the shake-bar and the part H being capable of vertical adjustment on the operating-lever for changing the position of the part G and adapting the device to various machines, substantially as described.

2. A device for connecting the operating-lever of a check-rower with the shake-bar of a corn-planter, composed essentially of the part F, adapted to be secured to the shake-bar and having a projecting round arm, *b*, the part H, adapted to be attached to the lever and having a projecting round arm, *i*, and the intermediate part, G, having a hole in its upper and lower ends, in which are respectively arranged the arms *i* and *b*, substantially as described.

3. In a device for connecting the operating-lever of a check-rower attachment with the shake-bar of a corn-planter, a clamping-piece, G, composed of two parts held by a bolt and adapted to be used in connection with the parts F and H, substantially as and for the purposes specified.

4. The device herein described for connecting the check-rower attachments with the seed-box of a corn-planter, composed of the part *j*, having a half-round portion at its upper end, provided with the longitudinal slot *m*, the part *k*, having a concaved lower end provided with the vertical slot *n*, and the bolt *o*, passing through the slots in the half-round portion and the concaved end of the parts *j* and *k*, substantially as described.

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Witnesses:

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