

(No Model.)

L. SCOFIELD.

ATTACHING DEVICE FOR CHECK ROW MACHINES.

No. 387,819.

Patented Aug. 14, 1888.

Fig. 1.

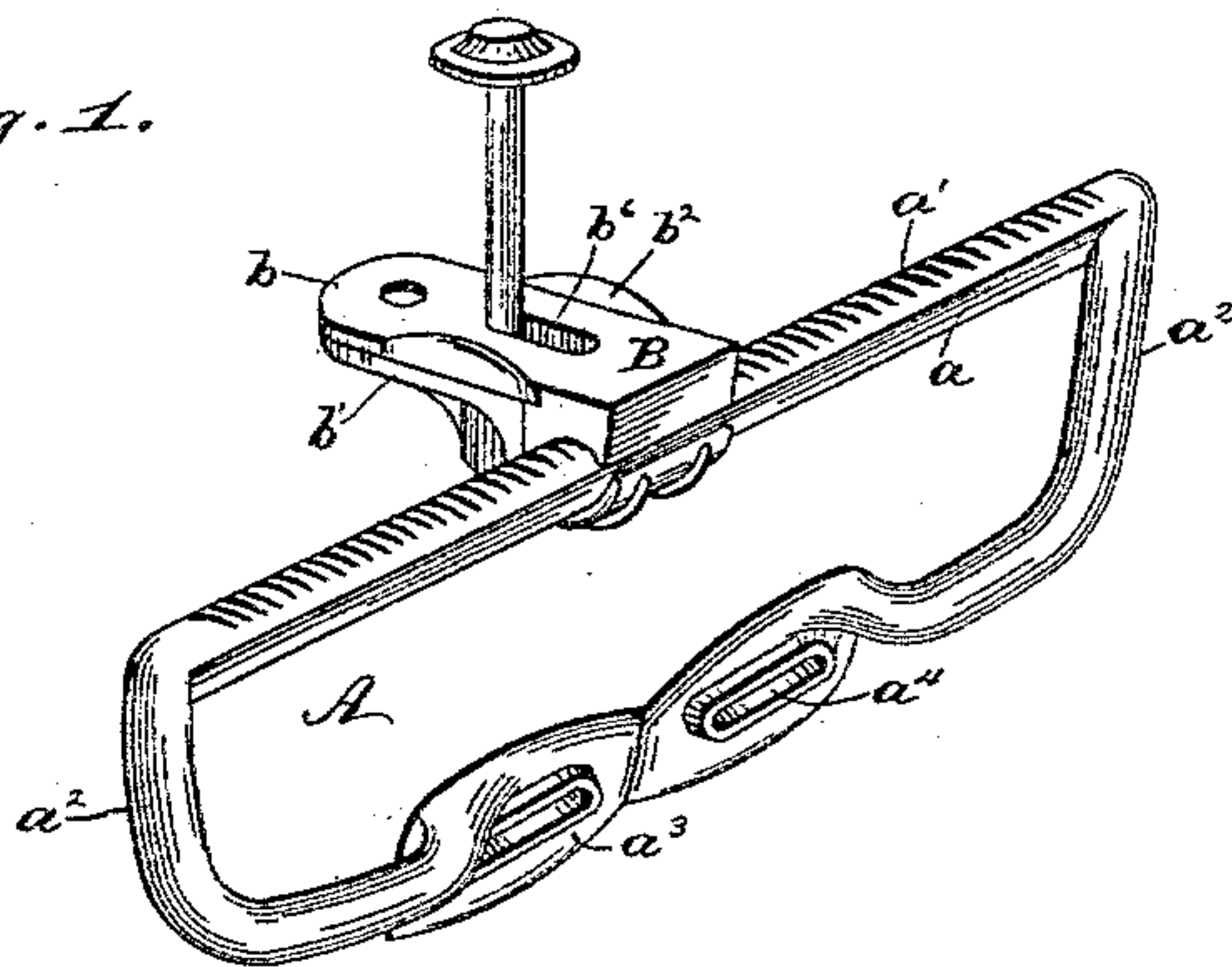


Fig. 2.

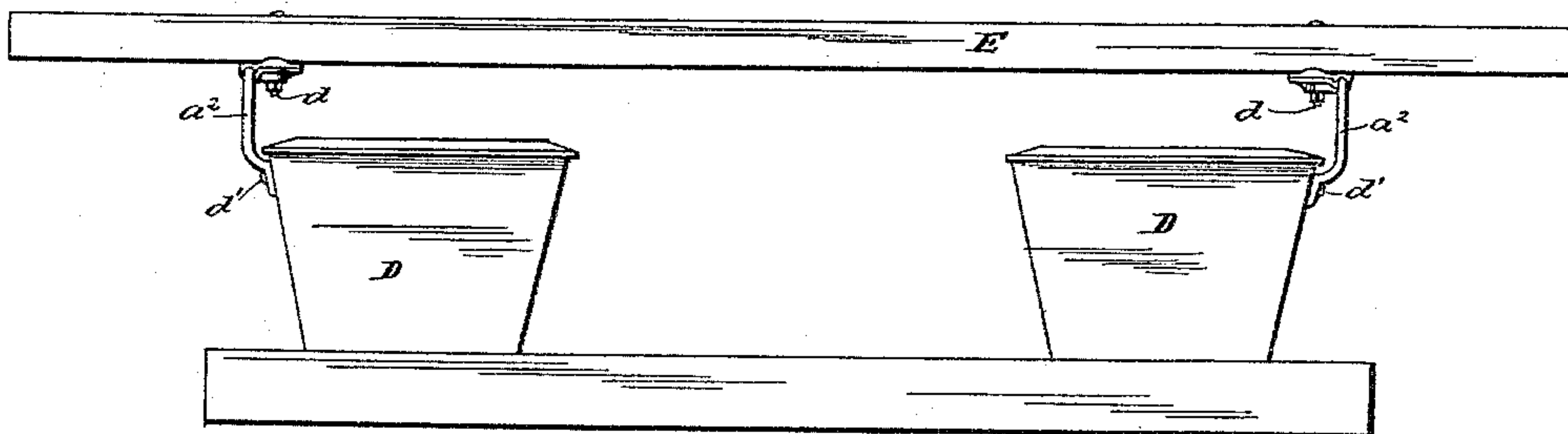
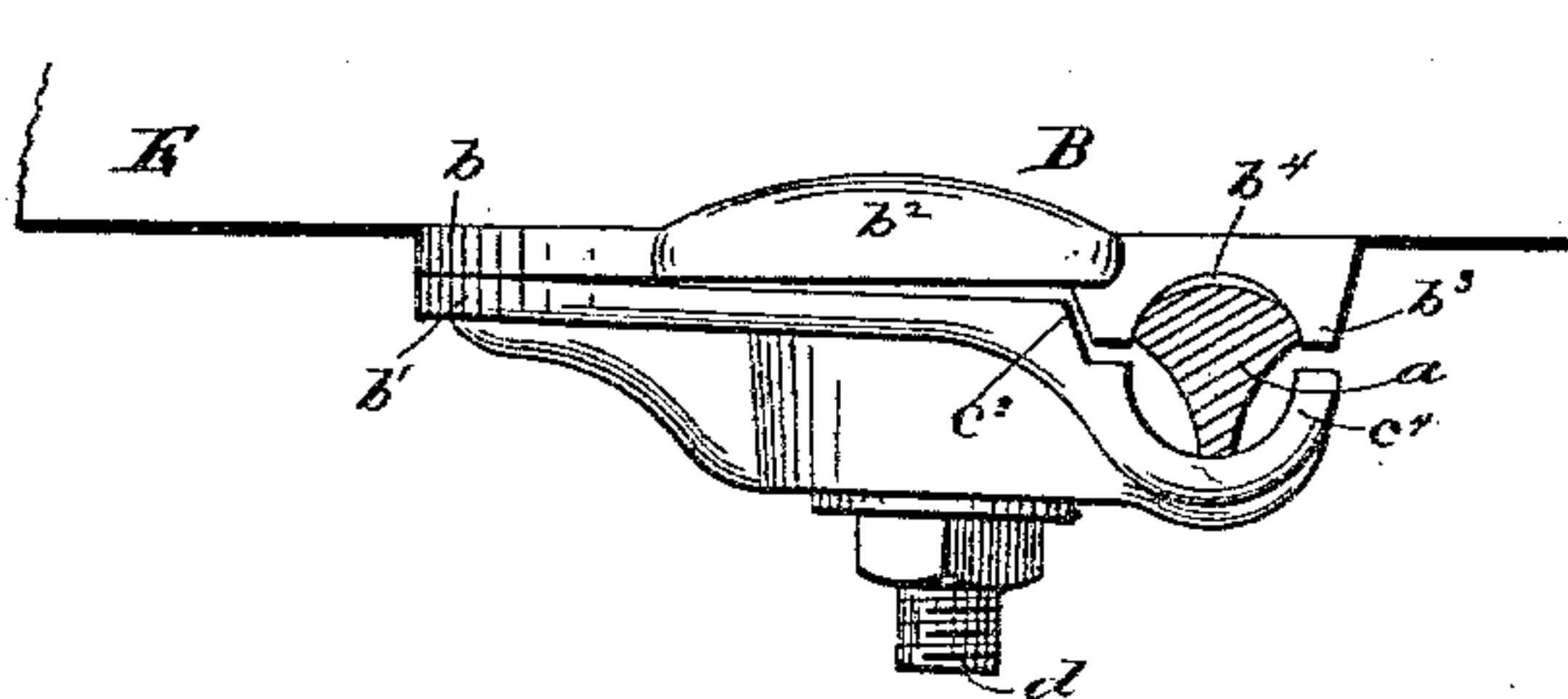
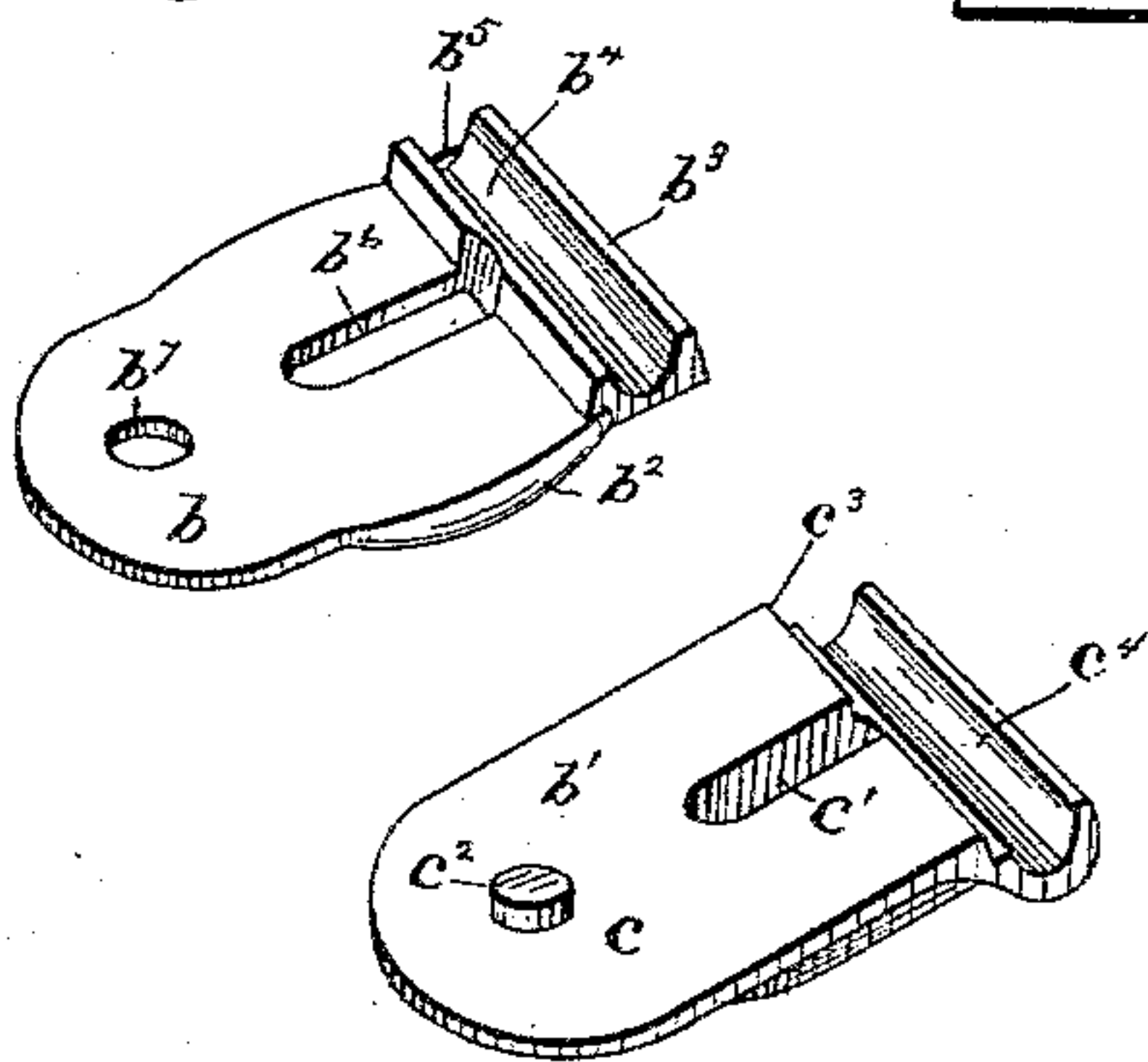


Fig. 3.



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ATTACHING DEVICE FOR CHECK-ROW MACHINES.

SPECIFICATION forming part of Letters Patent No. 387,819, dated August 14, 1888.

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To all whom it may concern:

Be it known that I, LEVI SCOFIELD, of Grand Haven, in the county of Ottawa and State of Michigan, have invented certain new and useful Improvements in Attaching Devices for Check-Row Mechanisms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

My present invention relates to devices for supporting and attaching the check-row or other actuating mechanisms upon a planter; and it consists in the novel and improved construction and arrangement of the adjustable, removable, and interchangeable brackets upon which the actuating devices are mounted, as hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of my improved bracket-support and clip. Fig. 2 is a side elevation of a portion of the planter and check-row attachment, showing the manner of applying my improved bracket. Fig. 3 is a view in perspective illustrating the two sections of the clip detached. Fig. 4 is a transverse sectional view illustrating the application of clip and bracket.

Similar letters of reference in the several figures indicate the same parts.

The letter A designates my improved bracket, and B the clip. The bracket is made in the form of an open link provided with a straight bar, *a*, of approximately arc shape in cross-section, the upper or outer surface furnished with a series of teeth or notches, *a'*. This bar *a* is connected at each end by downwardly-projecting arms *a''*, whose ends curve or extend inward beneath the bar *a*, and are joined to a plate, *a'''*, provided with transverse slots or openings *a''''*, and a flat face standing at a slight angle to the plane of the arms *a''*. The clip B, especially designed to co-operate with the bar *a* of this bracket or link A, is formed in two sections, *b* *b'*. The section *b* consists, essentially, of a flat plate provided on one face with retaining-lugs *b''*, while the opposite face is provided with two parallel ribs, *b'''*, lying transversely across one end and forming a groove or recess, *b''''*, for the reception of the upper

face of the bar *a* of the bracket. In this groove is formed a tooth or shoulder, *b'''''*, for engaging the teeth or notches in the bar *a*. The plate is further provided with an elongated slot, *b''''''*, for the accommodation of the fastening-bolt, and a perforation or recess, *b'''''''*, for the reception of a lug on the opposite section. The section *b'* of the clip comprises a plate, *c*, having an elongated slot, *c'*, for the fastening-bolt, and a lug, *c''*, for entering the perforation or recess *b'''''''* in the section *b*, while at the opposite end of the plate *c* is formed a shoulder, *c'''*, and a transversely-grooved cap, *c''''*, for receiving and embracing the under or inner face of bar *a*.

The manner of attaching and applying the bracket and clip is as follows:

Referring to Fig. 2, D represents the two seed-boxes secured to the planter and located on opposite sides thereof, as is usual. E represents the cross-bar carrying the actuating devices or check-row attachment. At or near each end of the cross-bar E, and to its under side, is secured one of the clips B by a bolt, *d*, passing through the elongated slots in the two sections, the flat face of section *b* resting against the under side of the cross-bar, while the clip is prevented from turning on the bolt by the lugs *b''* engaging said bar on opposite sides of the bolt. To each seed-box D, or equivalent supports, is adjustably attached one of the brackets A by bolts, *d'*, passing through the slots *a''''*, the face of the plate *a'''* resting against and taking its bearing upon the side of the support D. The bolts *d* being loosened, the actuating devices or check-row attachment is placed in position above the end boxes, with the grooved portion *b'''''* of section *b* resting upon the cross-bar *a* of the bracket. The cross-bar E is now adjusted forward or backward upon the brackets until it stands in the proper position, when by simply tightening the nuts on the two bolts *d* the whole is clamped and secured firmly in place. The tooth *b'''''* engaging the notches in bar *a* effectually prevents longitudinal motion of the clip upon the bracket when the bolt *d* is tightened, and when said bolt is loosened assists in locating and holding the clip and the end of the cross-bar, to which it is attached, in adjusted position while the opposite end of the bar is being adjusted.

The two sections of the clip are held in their

proper position with relation to each other and the bar *a*, and are prevented from being accidentally misplaced so as to not entirely embrace and thus insecurely hold the cross-bar in position upon the bracket by the shoulders, and the lug on the lower section entering the recess in the upper section; but one of the principal advantages of my improved device is its interchangeability, the bracket and clips for both ends being the same, instead of requiring, as heretofore, two different sets of devices, involving an additional set of patterns—the one for the right-hand and the other for the left-hand side of the machine; moreover, a large latitude of adjustment is provided, first, by the location and adjustment of the brackets upon their supports; second, by the location and adjustment of the clips on the cross bar and on the bar *a* of the bracket, and, third, by the radial adjustment of the clip relatively to the bracket, or vice versa, whereby the necessity for accurately positioning the clip and bracket is avoided, and the whole adapted for use upon machines of different forms, constructions, and dimensions.

Having thus described my invention, what I claim as new is—

1. In a planter, and in combination with the cross-bar or support of the actuating devices and the seed boxes or supports therefor, the brackets, each provided with a plate bolted to the seed-box and carrying a bar, *a*, connected thereto, and the two-part detachable and adjustable clips secured to the cross-bar and holding the bar *a* of the bracket between their members, substantially as described.

2. The improved connection or support for the actuating mechanism of a planter such as described, consisting, essentially, of the bracket provided with attaching-plate and notched bar *a* and the clips formed in two sections and provided with a partible bearing embracing the bar *a* of the bracket, a projection engaging the teeth on said bar, and a bolt for clamping said clip on the cross-bar and closing the partible bearing upon the bar *a*, the whole constructed and combined for operation, substantially as described.

3. The improved clip for connecting the actuating devices or check-row attachment to a planter, consisting, essentially, of the section

b, having ribs *b*³ and recess *b*¹, and the section *b*², provided with lug *c*², shoulder *c*³, and cap *c*⁴, the two sections being held together and clamped upon the supporting-bracket and cross-bar by a bolt, *d*, passing through or engaging the outer section, substantially as described.

4. In a planter such as described, the combination, with the cross-bar supporting the actuating devices and the clips secured thereto, of the reversible and interchangeable brackets, each provided with an attaching-plate, and a bar, *a*, to which the clip is adjustably applied, substantially as described.

5. The improved bracket for supporting the actuating devices or check-row attachment for a planter, consisting of the toothed bar *a*, two arms, *a*², extending from the ends of the bar, and plate *a*³, with inclined face and united to said arms, substantially as described.

6. In combination with the bracket A, having the toothed bar *a* and secured to the seed-box or equivalent support, the sectional clip B, fastened to the cross-bar and provided with a clamping-bolt and retaining-tooth, substantially as described.

7. In combination with the bracket A, having notched bar *a* and centrally supported by its plate *a*³ upon the seed-box, a clip provided with a sectional socket or bearing for the reception of said bar *a* and a tooth engaging the latter, and a bolt engaging said clip to simultaneously fasten it to the cross-bar and close the section upon bar *a* of the bracket, substantially as described.

8. The hereinbefore described improved attaching device for planters, consisting, essentially, of the bracket A, with bar *a*, arms, and central plate, the clip B, constructed in two sections and provided with retaining-lugs engaging cross-bar E, a partible socket to receive the bar *a* and a tooth to enter notches in the latter, a lug on one section and recess in the other, and a bolt passing through both of said sections and the cross-bar E to clamp these parts together and in position upon the bar *a* of the bracket, substantially as described.

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Witnesses:

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