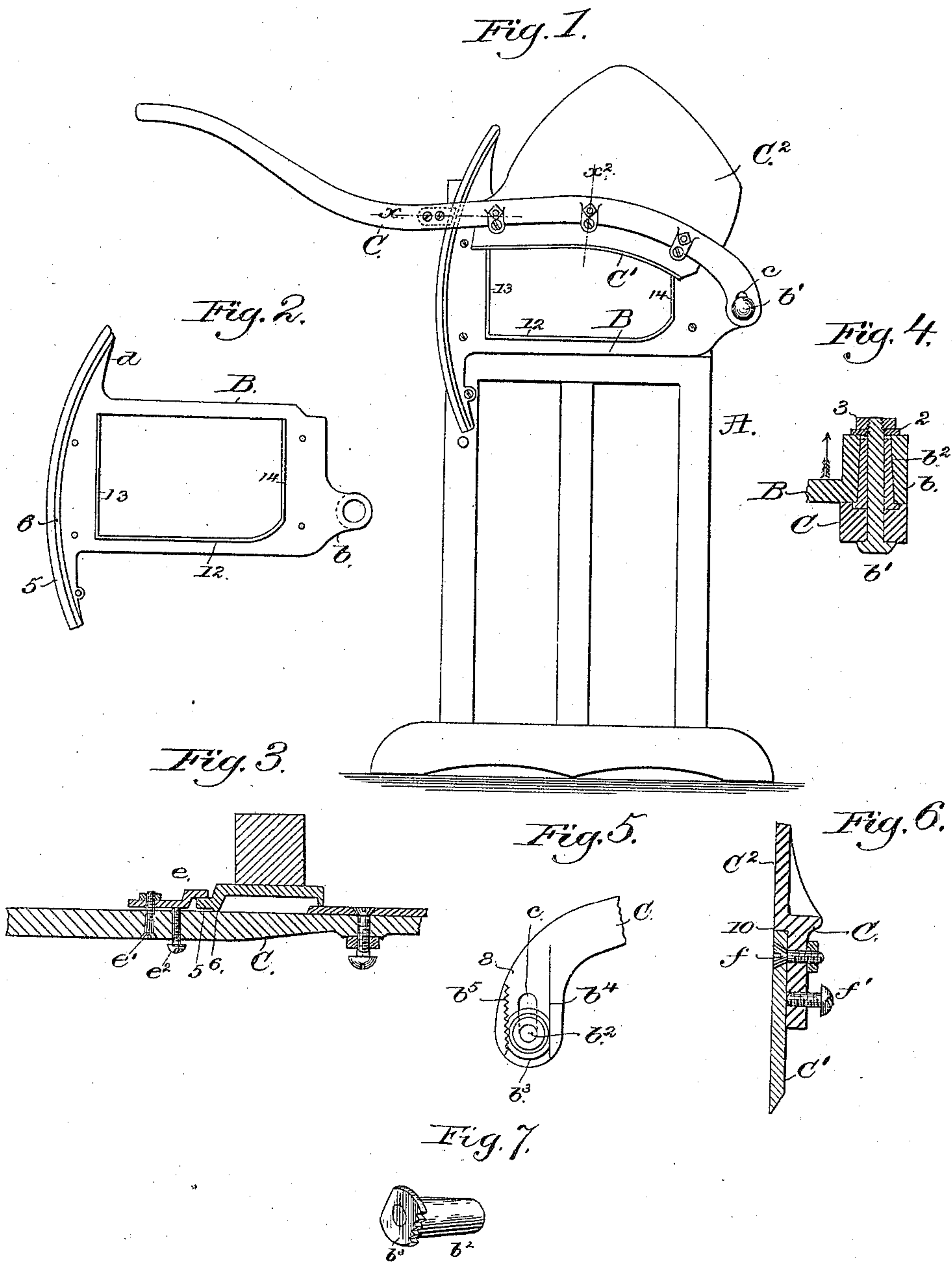


(No Model.)

P. S. RICH.
FODDER CUTTER.

No. 341,770.

Patented May 11, 1886.



Witnesses.

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UNITED STATES PATENT OFFICE.

PEMBROKE S. RICH, OF WORCESTER, ASSIGNOR TO THE AMES PLOW COMPANY, OF BOSTON, MASSACHUSETTS.

FODDER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 341,770, dated May 11, 1886.

Application filed December 3, 1885. Serial No. 184,567. (No model.)

To all whom it may concern:

Be it known that I, PEMBROKE S. RICH, of Worcester, county of Worcester, and State of Massachusetts, have invented an Improvement in Fodder-Cutters, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve and simplify the construction of feed-cutters.

In accordance with my invention the delivery end of the box of the machine is provided with a metallic throat-piece having a segmental guide for the blade-carrying lever, the latter having a lip to overlap the flange of the guide. The throat-piece has an ear or projection to receive the fulcrum-stud for the lever carrying the blade, the said stud having applied to it a toothed sleeve to engage a toothed part of the said lever, thus permitting the adjustment of the fulcrum of the said lever, as occasion requires.

The particular features in which my invention consists will be hereinafter especially described, and pointed out in the claims at the end of this specification.

Figure 1 in front elevation represents a feed-cutter embodying my invention; Fig. 2, a detail of the metal throat-plate detached from the machine; Fig. 3, a sectional detail in the line xx , Fig. 1; Figs. 4 and 5, details of the devices for effecting the adjustment of the end of the blade-carrying lever. Fig. 6 is a partial section in the line x^2 , Fig. 1; and Fig. 7, a detail to be referred to.

The wooden frame-work A of the feed-cutter will support at its upper end the usual box, in which is laid the feed or fodder material to be cut into small pieces. At one end of the box of the feed-cutter is arranged the throat-plate B, made preferably of cast metal, as shown separately in Fig. 2. This throat-plate at one end has an ear, b , for the reception of the sleeve b^2 , which is placed upon the bolt b' . The bolt b' is extended through the slot c at one end of the cutter-carrying lever C, and the end of the bolt beyond the sleeve and ear b is provided with a washer, 2, and a nut, 3. As shown in Fig. 5, the sleeve b^2 has at its larger end a flange, b^3 , which is cut away at two sides to

enter a groove, S, at the inner side of the end of the lever C. One wall, b^4 , of this groove is made straight or as a guide, the opposite side being provided with teeth b^5 . One portion of the flange b^3 is made smooth, to rest against the wall b^4 , the opposite edge of the flange being toothed, as shown in Figs. 5 and 7, to engage the teeth b^5 .

To adjust the end of the lever C up or down, to compensate for wear of the blade or knife, or for other purposes, the nut 3 will be loosened sufficiently or will be removed from the bolt far enough to permit the lever C to be moved outwardly away from the ear b , the wall b^4 and teeth b^5 being removed from the flanged end of the sleeve, and thereafter, while the parts are loose, the end of the lever may be raised or lowered, and when in the proper position the lever will be pushed back upon the sleeve in the direction of the arrow near it in Fig. 4 until the teeth b^5 again engage the toothed flange of the sleeve, when the nut will be again screwed upon the bolt b' sufficiently to draw the bolt tightly into the sleeve to keep the lever upon the flange of the sleeve. In position the sleeve turns in a bearing in the ear b . The opposite end of the throat-plate B has a segmental guiding-flange, d , shaped substantially as shown, to present a lip, 5, and, preferably, a rib, 6, as best shown in Figs. 2 and 3, and the lever C has attached to it a catch or hook, e , to engage the said lip, the said hook being secured to the lever by a bolt, e' . I have shown this catch or hook as made adjustable by means of an adjusting device, shown as an adjusting-screw, e^2 , the said adjusting-screw and bolt by their movement, as will be readily understood from inspection of Fig. 3, enabling the hook or catch to be adjusted to keep the lever C snugly to the rib 6, and to compensate for any wear between the hook or catch and the lip 5.

The lever C has connected with it and forming an integral part of it an extension or flange, C^2 , which acts to close the open end of the box and prevent the forward movement therein of the material while the knife or blade C' is descending through the material.

The knife or blade is adjustably attached to the lever C by means of bolts f and set-screws

f', and the said lever at its rear side is provided with a shoulder, 10, next which rests the upper edge of the blade or knife.

The material when being cut is supported
5 by the lip 12 of the throat-piece, the said lip acting as the stationary member of the cutting mechanism, the cutting-blade *C'* being kept closely against the raised lip 12, and also the
10 lips 13 14, forming part of the throat-piece, by means of the bolt *f* and adjusting-screws *f'*.

I claim—

1. In a feed-cutter, the throat-piece B, having the quadrangular opening, and provided with a segmental guide having the lip 5, and
15 bored at the opposite end to form a bearing for the cutter-lever, combined with the cutting-blade *C'*, the blade-carrying lever to which it is attached, the bolt and nut for attaching the lever to the throat-piece, and the adjustable hook *e*, carried by the lever to engage the
20 said lip, all substantially as described.

2. The throat-piece B, having the ear *b*, and

the sleeve *b*², placed in the said ear and provided with a toothed flange, and the bolt *b'* and nut, combined with the blade *C'* and the
25 lever C, carrying it, the said lever being slotted and provided with teeth, as at *b*³, to engage the toothed flange of the sleeve, substantially as and for the purpose described.

3. The metallic throat-piece B, having the
30 lips 12 13 14, and the segmental guide having the flange 6 and lip 5, combined with the bolt *b'*, sleeve *b*², the adjusting-lever C, its attached cutting-blade *C'*, and adjusting devices *f f'*,
35 and with a hook attached to the lever and engaging the lip 5 of the throat-piece, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PEMBROKE S. RICH.

Witnesses:

HORACE HOBBS,

ELLIOTT H. PEABODY.