

(No Model.)

E. EINFELDT.
HAND LEVER, &c.

No. 497,641.

Patented May 16, 1893.

Fig. 1.

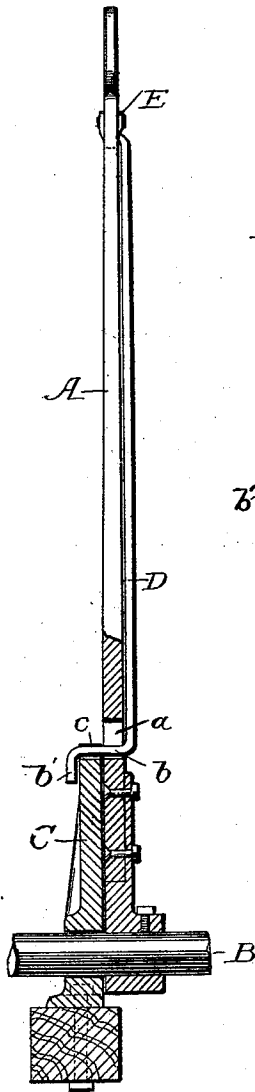


Fig. 2.

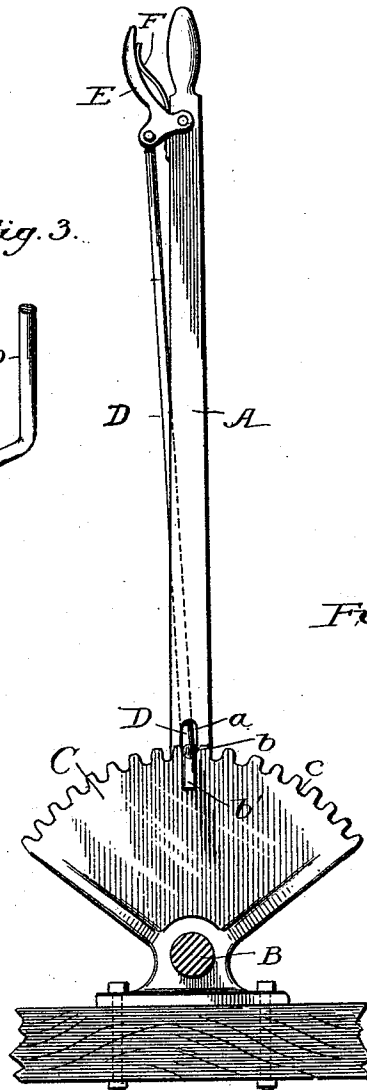


Fig. 3.

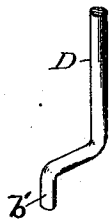
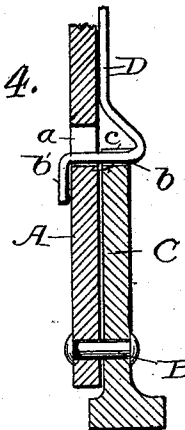


Fig. 4.



Witnesses:

J. J. Emory.
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Inventor:

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UNITED STATES PATENT OFFICE.

EMIL EINFELDT, OF DAVENPORT, IOWA, ASSIGNOR TO THE EAGLE
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HAND-LEVER, &c.

SPECIFICATION forming part of Letters Patent No. 497,641, dated May 16, 1893.

Application filed December 2, 1891. Renewed March 7, 1893. Serial No. 464,934. (No model.)

To all whom it may concern:

Be it known that I, EMIL EINFELDT, of Davenport, county of Scott, and State of Iowa, have invented a new and useful Improvement in Hand-Levers for Cultivators, &c., of which the following is a specification.

My invention relates to an improved means for locking hand and foot levers such as are used on cultivators, plows, harvesters and other agricultural machinery for effecting the adjustment of their various parts.

Heretofore it has been the custom to provide levers with sliding dogs or catches of various kinds adapted to engage toothed stationary plates lying adjacent to the levers. It has been usual to construct the sliding dog or latch proper in one or more expensive pieces, mounted to slide upon the lever, usually in connection with separate guiding devices, and to operate this sliding dog by means of a rod extending to a thumb-latch or lever pivoted on the end of the main-lever. Now, I aim to dispense entirely with the separate latch or dog, and to reduce the cost of and simplify the construction by so forming the inner end of the controlling-rod that it will directly engage the toothed plate and thus serve in itself as the locking device. To this end I bend the inner end of the rod laterally and project it through a slot in the lever so that its laterally bent portion serves both as a guide to retain it in position and as the catch to engage the retaining plate.

In the accompanying drawings,—Figure 1 represents a section through a lever and the adjacent toothed plate in connection with my locking device. Fig. 2 is a side elevation of the same. Fig. 3 is a perspective view of the inner end of the locking rod detached. Fig. 4 represents a vertical cross-section showing a modified form of locking device.

Referring to Fig. 1, A represents a hand-lever mounted to turn at one end on a shaft or other fulcrum B, and C is a stationary sector-plate fixed in position at the side of the lever and provided in its edge with a series of notches c, as usual.

D represents my improved locking device, consisting of a rod connected at its upper end

in the usual manner, to a thumb-latch or other operating device E, whence it is extended along the lever to a point near the lower end where it is bent at a right angle and projected through a slot a, in the lever across the outer edge of the plate C, and finally bent downward at the end over the outer side of said plate. A spring F, applied beneath the thumb-latch E, or otherwise applied, urges the rod endwise toward the inner end of the lever, causing its transverse portion b, to enter one of the notches in the plate C, and thus lock the lever firmly to the plate. The downturned extremity of the rod b, overlapping the face of the sector-plate serves to prevent the rod from swinging laterally away from the lever; or, in other words, prevents the bent end from drawing out of the slot in the lever. It will be observed that in my structure the end of the rod constitutes in and of itself and alone the entire connection or locking member between the lever and sector-plate, thus doing away with the necessity of the separate locking-dog, its guide, and the other parts commonly used in said structures and with the expense of fitting them.

The essential feature of the invention resides in so bending and arranging the inner end of the rod that it directly engages the sector-plate, and it will be manifest that it may be varied in form and arrangement at will, provided it is adapted to serve this purpose.

In Fig. 4, I have represented the rod D, as suitably bent at the inner end to engage the sector-plate before it passes through the lever, its end being finally projected through the latter and bent down to keep it in place or provided with a pin for the same purpose.

It is to be understood that the form of the thumb-latch or other operating device and the special arrangement of the spring are not of the essence of my invention, and that they may be modified at will.

Having thus described my invention, what I claim is—

1. In combination with a slotted lever and an adjacent segmental rack or toothed plate, a longitudinally-movable rod carried by the

lever, its inner end bent laterally through the slot and the lever, and again bent at the extremity to retain it in place.

2. The combination of a segmental rack, a
5 hand-lever adjacent thereto having a slot or elongated opening opposite the rack, a longitudinally movable rod lying against the lever on the side opposite the rack, and having a right angular portion which projects through
10 the lever and forms a locking-dog to engage the rack, the projecting end of said right angular portion being again bent at right angles

along the side of the rack and serving to hold the lever and rack together, and also to hold the dog and rod in place on the lever, and :5 means for operating said rod and dog.

In testimony whereof I hereunto set my hand, this 20th day of November, 1891, in the presence of two attesting witnesses.

EMIL EINFELDT.

Witnesses:

NATH. FRENCH,
ETHEL E. MORAN.