

(No Model.)

D. BENETT.
HARVESTER CUTTER.

No. 348,261.

Patented Aug. 31, 1886.

Fig. 1.

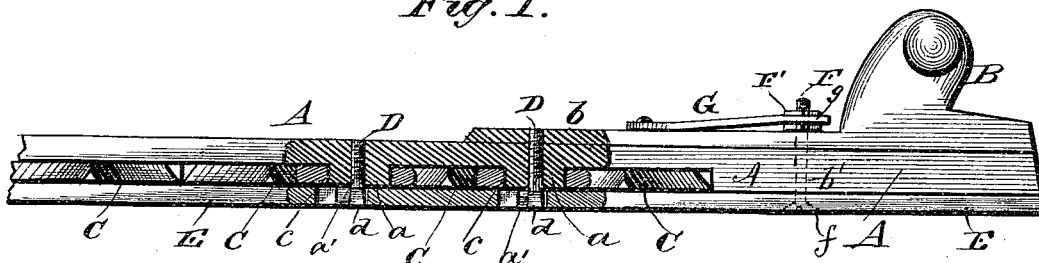


Fig. 2.

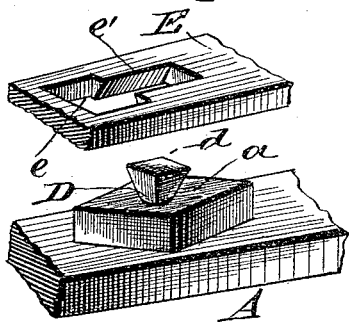
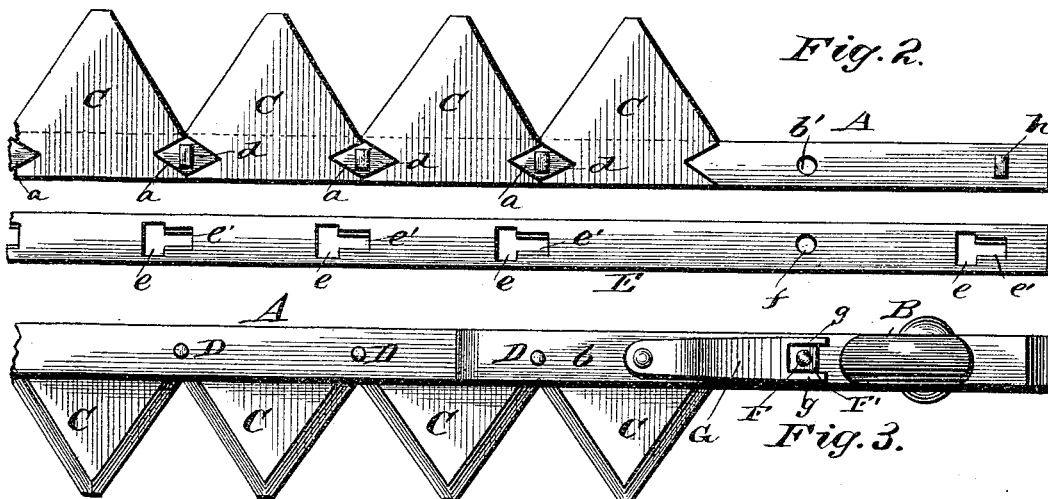
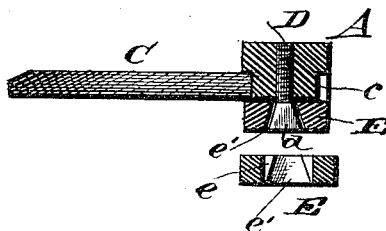


Fig. 4.

Fig. 5.



WITNESSES
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HARVESTER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 348,261, dated August 31, 1886.

Application filed November 30, 1885. Serial No. 184,320. (No model.)

To all whom it may concern:

Be it known that I, DAVID BENETT, a citizen of the United States, residing at Andalusia, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Harvester-Cutters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to harvesters and mowers; and it consists in the peculiar construction, arrangement, and adaptation of parts which go to make up the cutter-bar and its attachments, as will be more fully hereinafter set forth, and specifically pointed out in the claim.

The essential object of the invention is to provide means for quickly, readily, and securely locking the cutters in place upon the bar, and for readily allowing the disengagement of one or more cutters at will, the said means being reliable in service, simple in operation, and inexpensive of manufacture. I provide that the entire series of cutters shall be locked simultaneously by a simple movement of a locking-bar which is common to all the cutters. I provide that one or more of the teeth may be removed for repairs or sharpening while the machine is in the field. I provide for locking the locking-bar, and provide that the means for locking said bar shall strengthen a portion of the cutter-bar.

In this class of devices it is important to be able to liberate the cutters when broken or otherwise rendered inoperative while the machine is in the field, and without loss of time and at little trouble.

The invention is fully illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front edge view broken away to show internal construction. Fig. 2 is a bottom plan view of a portion with the locking-plate removed. Fig. 3 is a top plan view of a section. Fig. 4 is an enlarged detail of one of the locking-lugs, and showing a portion of

the locking-bar detached and reversed; and Fig. 5, a detail section taken transversely through the locking-bar.

Referring to the drawings, in which similar letters of reference indicate like parts in all the figures, A indicates the cutter-bar. A reinforcing block, *b*, secured to said bar, carries a lug or stud, B, which connects with any approved power attachments. The bar A is of proper metal, and has at regular intervals along its lower surface integral therewith a series of diamond-shaped lugs, *a*, the acute points of which correspond with recesses *c*, formed in the sides of the cutters C.

D designates a series of pins having dove-tailed heads *d*. The shanks of these pins are secured in holes *a'*, formed centrally in the lugs *a*.

E designates the locking-bar, having a series of apertures corresponding in number and location to the lugs *a* and heads *d*. The apertures consist, essentially, of two parts—one part, *e*, being of sufficient size to freely admit the heads *d*, and the other part, *e'*, being dove-tailed to correspond with the bearing-surfaces of the heads *d*. In one position of the locking-bar E the apertures *e* will receive all the heads *d* of the series, while in another position of said locking-bar the entire series of heads is locked in the sockets *e'*. When in this latter position, a hole, *f*, in the locking-bar registers with a similar hole, *b'*, in the cutter-bar A and its re-enforcing block *b*, which holes receive a bolt, F, which serves to lock the locking-bar against movement. A nut, F', serves upon the upper threaded end of the bolt F not only to hold the locking-bar in its locked position, but also to secure the parts *b* and A firmly together. I deem this double function of the bolt and nut F and F' important, from the fact that the strain upon the cutter-bar occurs at the junction of the parts *b* and A when the cutter is in operation, and breakage frequently occurs at this point. My bolt F is always in position when the cutter is in operation and greatly strengthens this part of the device.

Secured upon the upper side of the cutter-head is a spring-key, G, having jaws *g*, which embrace the nut F to keep it from becoming disengaged.

h designates a head, which serves, in connection with the locking-bar, as a guide and lock.

The several cutters *C* being engaged by the lugs *a*, fitting in their recesses *c*, it is only necessary to apply the locking-bar *E*, allowing each head *d* to pass through the corresponding aperture, *e*, when, by forcing the locking-bar in one direction, each head of the series is locked firmly in the locking-bar, and this bar bears firmly on every cutter to hold it in place.

By the simple application of the bolt *F*, nut *F'*, and key *G*, the entire device is ready for operation.

I deem it important that there is a head at the junction of each adjacent pair of cutters, and that all the cutters are locked simultaneously by a single movement of the locking-bar. The heads *d* may be integral with the cutter-head.

The improved cutter-head is adapted to

serve with finger-bars and guards now in use, it being only necessary to allow reciprocating space for the locking-bar.

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

In a cutting apparatus, substantially as described, the combination, with the cutter-bar *A*, having lugs *a* and pins *D*, the re-enforcing block *b*, carrying the lug or stud *B*, the notched cutters, and locking-bar *E*, having apertures *e e'*, as set forth, of the bolt *F*, passing through the locking-bar, cutter-bar, and block *b*, the nut *F'*, and the spring-key *G*, for engaging and locking the nut *F'*, all arranged for joint operation, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID BENETT.

Witnesses:

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