B. F. LESLIE.

Pitman.

No. 220,395. Patented Oct. 7, 1879.

Fig. 1

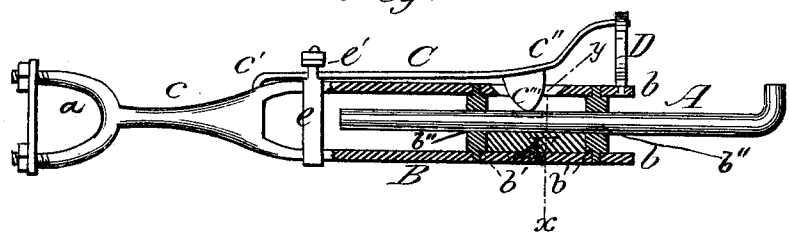


Fig. 2.

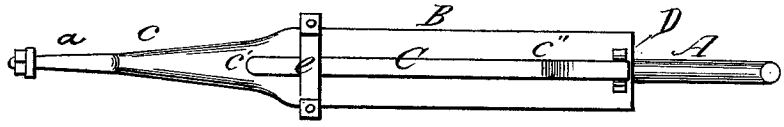


Fig. 3.

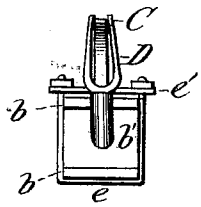
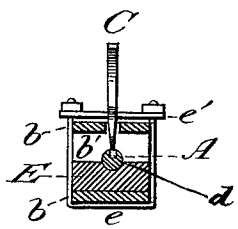


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

BUNYAN F. LESLIE, OF TROUTSVILLE, VIRGINIA.

IMPROVEMENT IN PITMEN.

Specification forming part of Letters Patent No. **220,395**, dated October 7, 1879; application filed July 21, 1879.

To all whom it may concern:

Be it known that I, BUNYAN F. LESLIE, of Troutsville, in the county of Botetourt and State of Virginia, have invented certain Improvements in Pitmen for Mowers and Reapers, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention is designed to automatically release the cutter in the event of its meeting with an obstruction while in operation, and to be the means of preventing the breakage or damage of the cutter at such a time.

The invention further aims to adapt the cutter to the unevennesses of land surface which are constantly met with in the act of mowing and reaping.

In the accompanying drawings, Figure 1 is a side view, partly in section, of my improved pitman. Fig. 2 is a top or plan view of the same. Fig. 3 is an end view of the same, looking from the cutter. Fig. 4 is a cross-section on the line *x y*.

Similar letters of reference indicate similar parts in all the views.

A is the rod which attaches to the cutter-bar in the ordinary manner.

B is that portion of the pitman which carries the rod A and connects with the driving-wheel, the strap *a* being provided with boxes which receive the crank-pin thereof. The part B consists principally of the plates *b*, which are flat and are welded to the round shank *c*, upon which the strap *a* is formed. The plates *b* are separated and held apart by the pieces *b'*, each of which is provided with a round hole, *b''*, and serves as a guide and rest for the rod A.

C is a spring running longitudinally of the plates *b*, to the upper one of which it is secured at *c'*. The end of the spring C nearest the cutter-bar is bent upward, as shown at *c''*. A projection, *c'''*, on the under side of the spring C enters, when the spring is down, a notch, *d*, in the rod A, which notch is made wider than the thickness of the projection *c'''*, in order to allow the rod to have a slight rocking movement independently of the spring, thereby giving the cutter freedom of action.

A U-shaped band, *e*, having threaded ends and nuts, serves, with its plate or yoke *e'*, to increase the strength of the spring C when moved toward its free end and secured at the desired point. By means of this band and plate the projections *c'''* may be forced into the notch *d* of the rod A by a power greater than that of the unaided spring, and the rod held immovably if desired. D is a forked spring placed at the cutter end of the upper plate, *b*, the office of which forked spring is to hold or clamp the bent end *c''* of the spring C when raised. E is a block, of wood or other material, placed between the guides *b'* and channeled out to receive and support the rod A; but this block is not absolutely necessary, as practice has demonstrated the fact that ample support to the rod is afforded by the guides alone.

The operation of the invention is as follows: The tension of the spring having been properly adjusted by means of the U-band and its accompanying devices, the projection *c'''* engages with the notch *d* in such a manner as to allow of a disengagement should undue strain be placed upon the cutter. Upon the cutter meeting with an obstruction, such as a stone, the rod A, by the undue strain to which it is in consequence subjected, is immediately thrown out of gear by the forcing upward of the spring C, the bent end of which is caught by the forked spring D. The driving-wheel continuing to work, the part B of the pitman has a reciprocating movement upon the rod A without effecting any motion of the cutter, which movement continues until the machine is brought to a stop. The proportions of the several parts of the pitman are such that the rod is at all times within its guides or rests *b'*, whether in gear or out.

When the obstruction has been removed, in order to start the cutter, it is only necessary to press the spring C into contact with the rod A again. As before stated, the notch *d* and projection *c'''* are of different widths, which provision gives a free rocking movement to the rod of sufficient extent for all needful purposes.

It is apparent that the spring C may be raised by hand at any time. I do not limit

myself to the construction shown, as changes in form may be made without departing from the essentials of the invention.

Having described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. The combination of the plates *b*, guides *b'*, rod A, and a spring for clamping said rod in the guides, substantially as specified.

2. The combination of the plates *b*, guides *b'*, rod A, spring C, and forked spring D, substantially as described.

3. The combination of the plates *b*, guides *b'*, and spring C, having the projection *c'''*, with the rod A, provided with the notch *d*, substantially as set forth.

4. The plates *b*, guides *b'*, spring C, and forked spring D, combined with the rod A and U-shaped band *e* and yoke *e'*, substantially as described.

5. The combination of the plates *b*, guides *b'*, rod A, and channeled block E, substantially as specified.

In testimony whereof I have hereto subscribed my name in the presence of two witnesses this 25th day of March, A. D. 1878.

BUNYAN F. LESLIE.

Witnesses:
DEWIT E. BEAMER,
JOHN WM. TROUT.