

(No Model.)

G. W. FREEMAN.

ADJUSTABLE HOLDER FOR THE SICKLE BARS OF MOWERS AND REAPERS.

No. 273,504.

Patented Mar. 6, 1883.

Fig: 1.

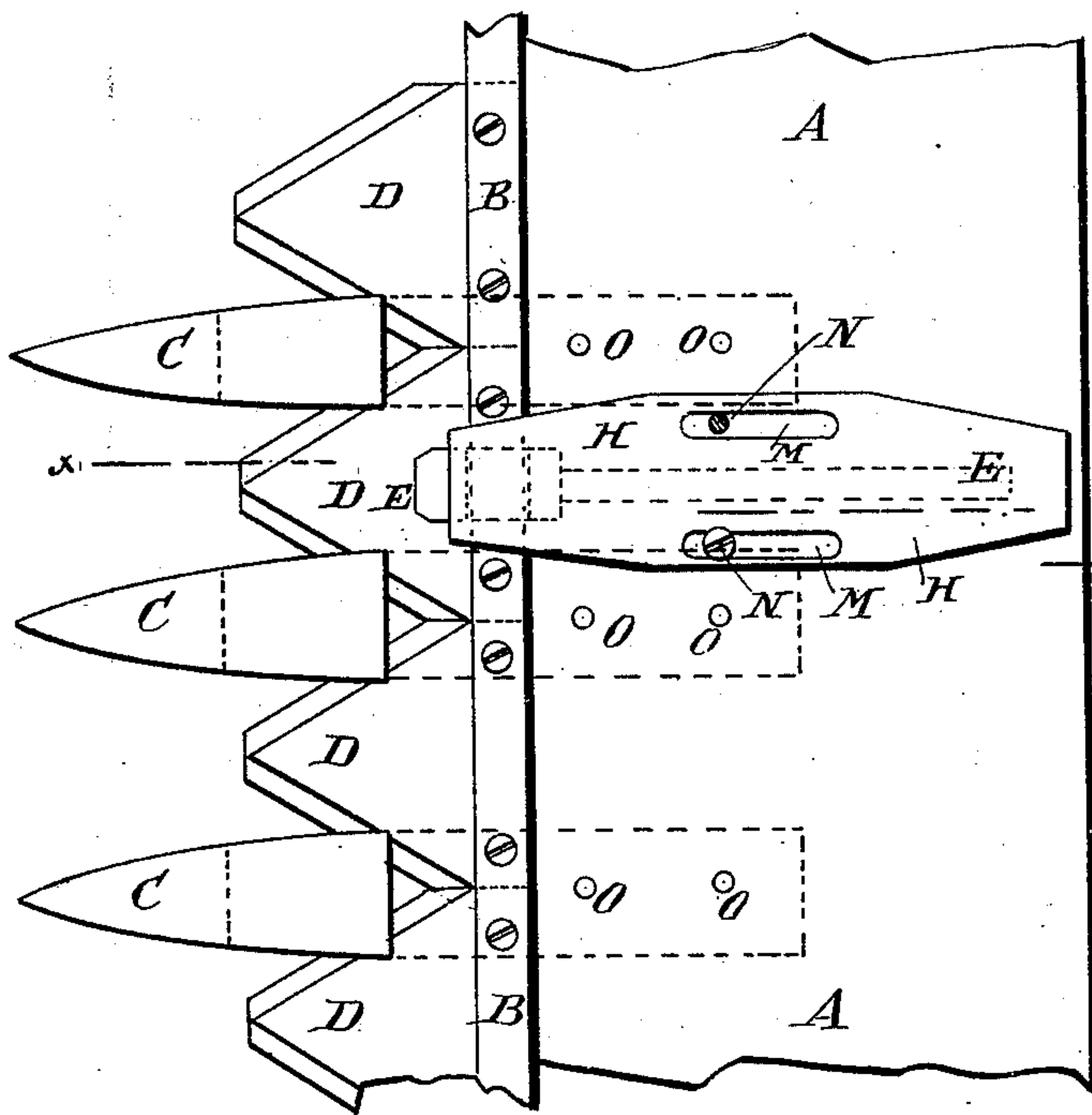


Fig: 4.

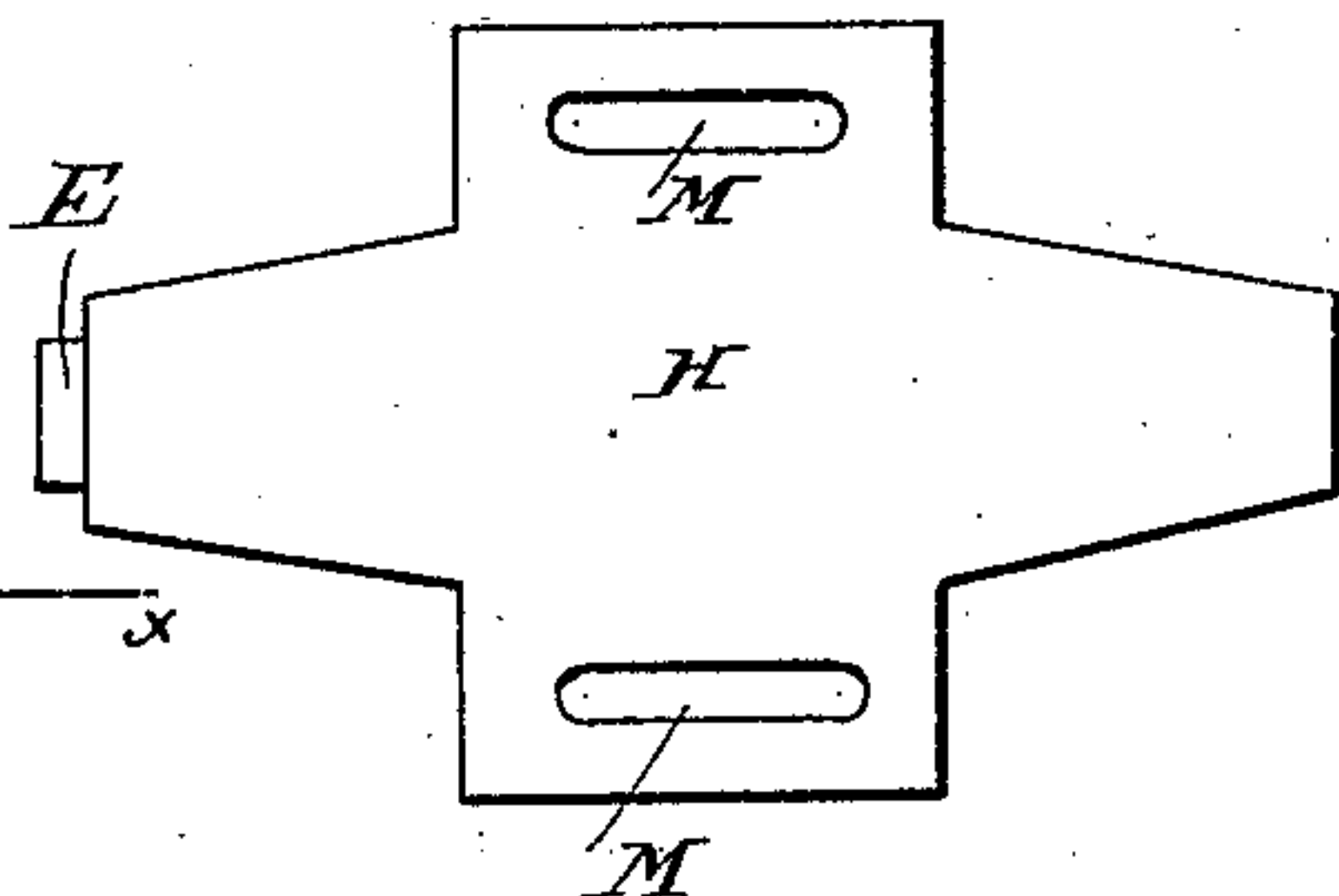


Fig: 2.

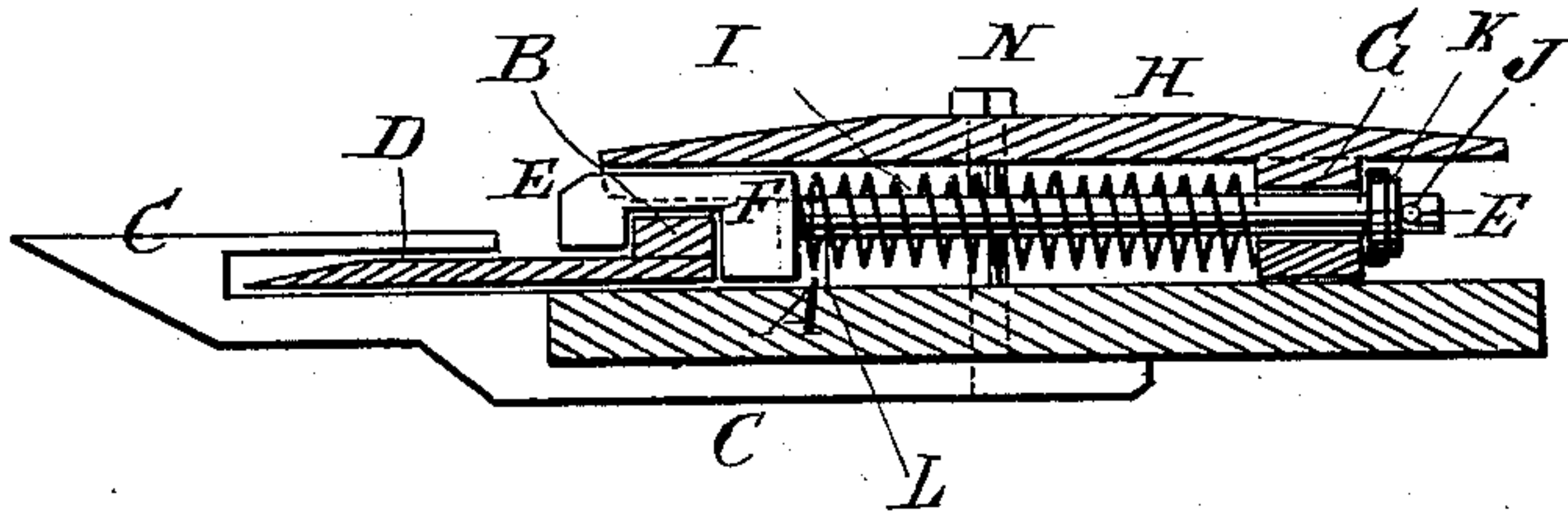
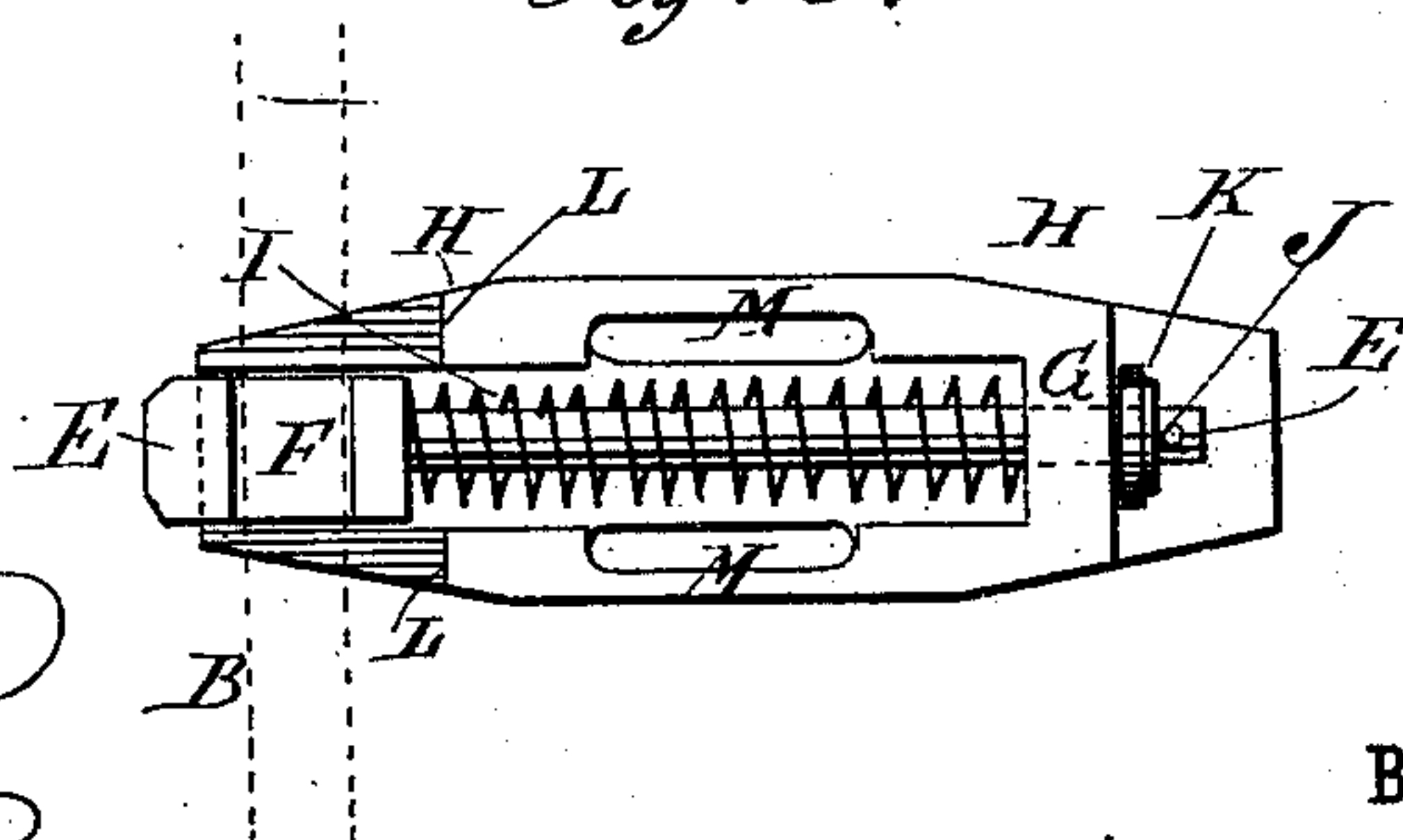


Fig: 3.



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ADJUSTABLE HOLDER FOR THE SICKLE-BARS OF MOWERS AND REAPERS.

SPECIFICATION forming part of Letters Patent No. 273,504, dated March 6, 1883.

Application filed November 18, 1882. (No model.) Patented in Canada April 19, 1882, No. 14,615.

To all whom it may concern:

Be it known that I, GEORGE WILLIAM FREEMAN, of Amherst, in the county of Cumberland, Province of Nova Scotia, and Dominion
5 of Canada, have invented a new and useful Improvement in Adjustable Holders for the Sickle-Bars of Mowers and Reapers, of which the following is a full, clear, and exact description.

10 Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement
15 shown as applied to a cutter-bar. Fig. 2 is a sectional side elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a view of the under side of the improvement. Fig. 4 represents a modified form of the case or cover.

20 The object of this invention is to promote the efficiency and durability of the sickles of mowers and reapers or other harvesters.

The invention consists in the combination,
25 with the finger-bar and the sickle-bar of a mower, reaper, or other harvester, of sliding bolts having recesses in their heads to receive and loosely hold the said sickle-bar, and provided with springs to hold the bolts forward and guides to keep them in position, whereby
30 the sickles will be made to operate with a drawing cut. The sliding bolts and their springs are covered and protected by cases which have longitudinal slots in their sides to receive the fastening-bolts, so that the said bolts and
35 springs can be moved forward to take up wear of the cutters, as will be hereinafter fully described.

A represents the finger-bar, B is the sickle-bar, C the fingers, and D the sickles or cutters, of an ordinary mower, reaper, or other
40 harvester.

In the drawings only one bolt, spring, and case are shown; but it will be understood that
45 two or more sets of the said bolts, springs, and cases should be used upon each cutter-bar.

E is a bolt, rod, or bar, the lower side of the forward end or head of which has a recess, F, formed in it to receive the sickle-bar B, when the said sickle-bar is attached to the upper
50 sides of the sickles D. When the sickles D are attached to the upper side of the sickle-

bar B short bars are attached to the upper sides of the said sickles D to enter the recesses F of the bolts E. The rear ends of the bolts E pass through guide-holes in supports G, at-
55 tached to or formed upon the finger-bar A or the case H that covers and protects the bolts E. The bolt E is held forward by a coiled or other shaped spring, I, of metal or other suitable material, the forward end of which rests
60 against the head of the said bolt E, and its rear end rests against or is attached to the guide G or other support secured to the case or cover H. The forward movement of the bolt E is limited by a pin or nut, J, passed
65 through or screwed upon the rear end of the said bolt E.

K is a washer, of rubber or other elastic material, interposed between the guide G and the pin or nut J to prevent a jar when the bolt E
70 comes to the end of its forward movement. By varying the thickness or number of washers K the bolt E can be held back more or less, as desired. The rearward movement of the bolt E is limited by shoulders L, formed upon the
75 case H, as shown in Fig. 3; or the shoulders L may be formed on the upper face of the finger-bar A, as shown in Fig. 2, for the head of the said bolt E to strike against. The side parts of the case or cover H have longitudinal slots M
80 formed in them to receive the bolts N, by which the said case is secured to the finger-bar A, so that the said case and the bolt E, connected with it, can be moved forward as the sickles are shortened by wear and sharpening, and thus
85 allow the sickles to be used much longer than would be practicable without such adjustment. If desired, the cases H can be made wide enough to bring the slots M over the bolts O, that secure the fingers C to the finger-bar A, as indicated in Fig. 4, so that the cases H and the
90 fingers C can be secured to the finger-bar A by the same bolts. With this construction, when the sickles D strike against the stalks of grass or grain being cut, the said sickles
95 will yield or move back a little, so as to operate with a drawing cut, and thus do their work easier than when made to move in a straight line, the said sickles, as soon as a cut has been made, being forced forward by the
100 springs I, ready for another cut.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a finger-bar, of a sickle-bar and a spring or springs pressing transversely against the back face of said sickle-bar, whereby the latter is caused to yield in a direction transversely to its length by the pressure of the grain or grass being cut, thus insuring a draw cut, as set forth.

2. In a mower, reaper, or other harvester, the combination, with the finger-bar A and the sickle-bar B, of the sliding bolts E, having recesses F in their heads, the springs I, and the guides G, substantially as herein shown and described, whereby the sickles will be made to operate with a drawing cut, as set forth.

3. In a mower, reaper, or other harvester, the combination, with the finger-bar A, the

sickle-bar B, and the spring-pressed bolts E, of cases H, having their sides slotted to receive the fastening-bolts, substantially as herein shown and described, whereby the said bolts and springs can be moved forward to take up wear, and will be covered and protected when in use, as set forth.

4. In a mower, reaper, or other harvester, the case H, made, substantially as herein shown and described, with a guide, G, shoulders L, and slots M, to adapt it to receive and protect the sliding bolt and its spring that loosely hold the sickle-bar in place, as set forth.

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