(Model.)

J. McCORMICK.

HARVESTER KNIFE.

No. 266,632. Patented Oct. 31, 1882.

Fig. 1.

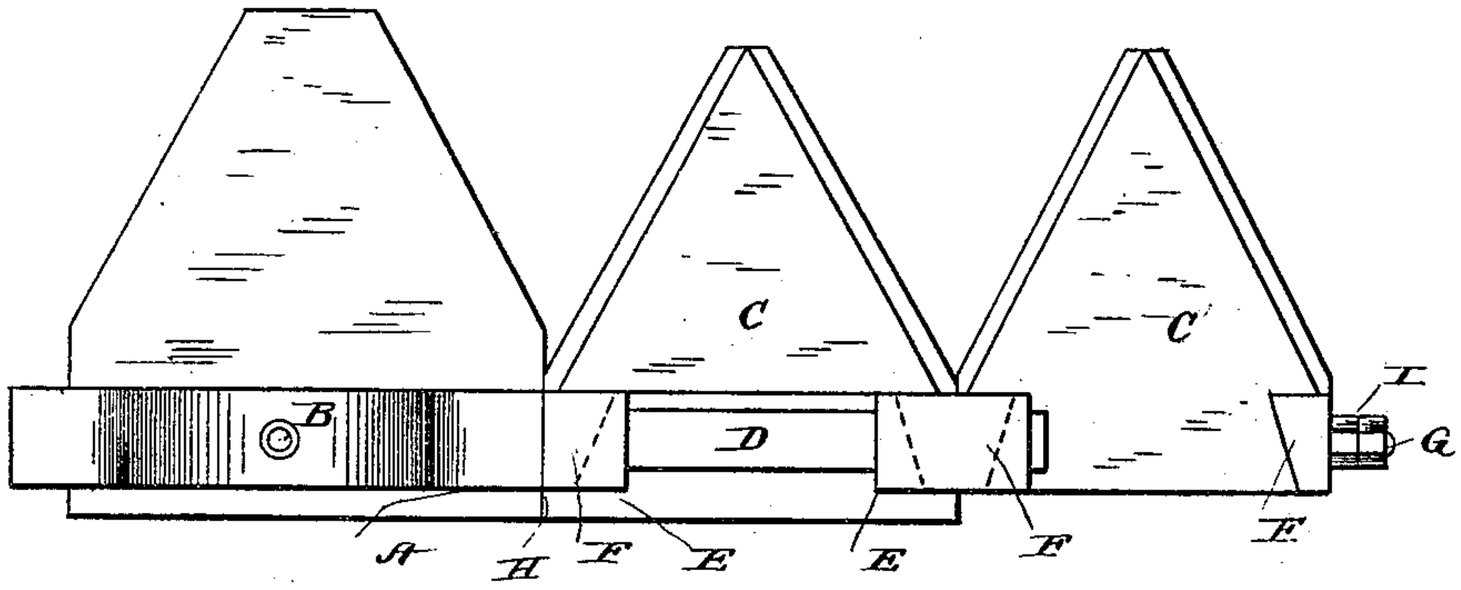


Fig. 2.

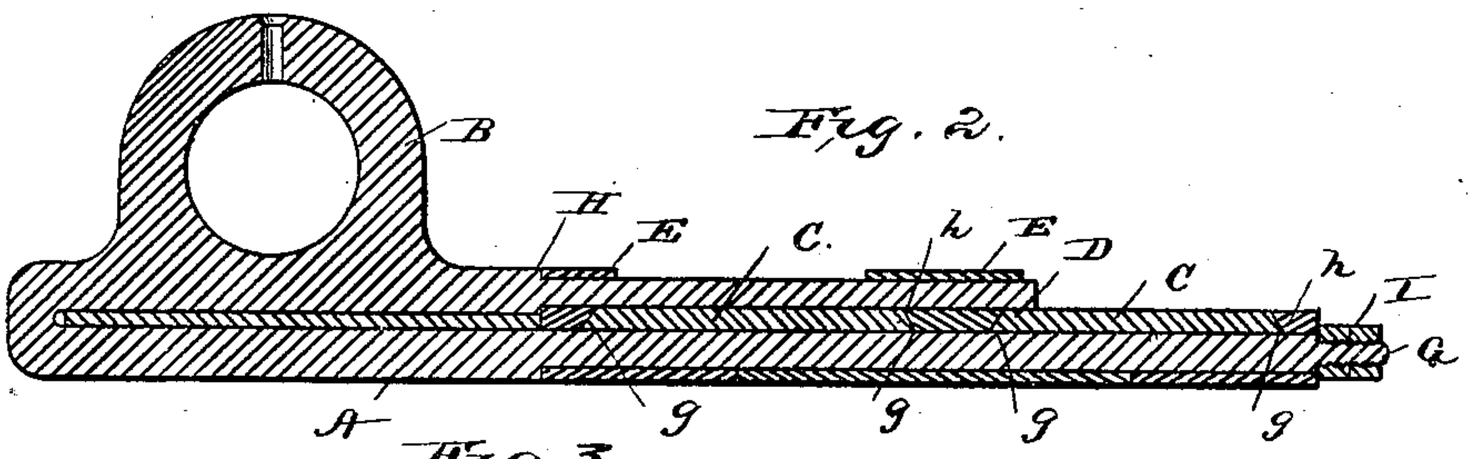


Fig. 3.

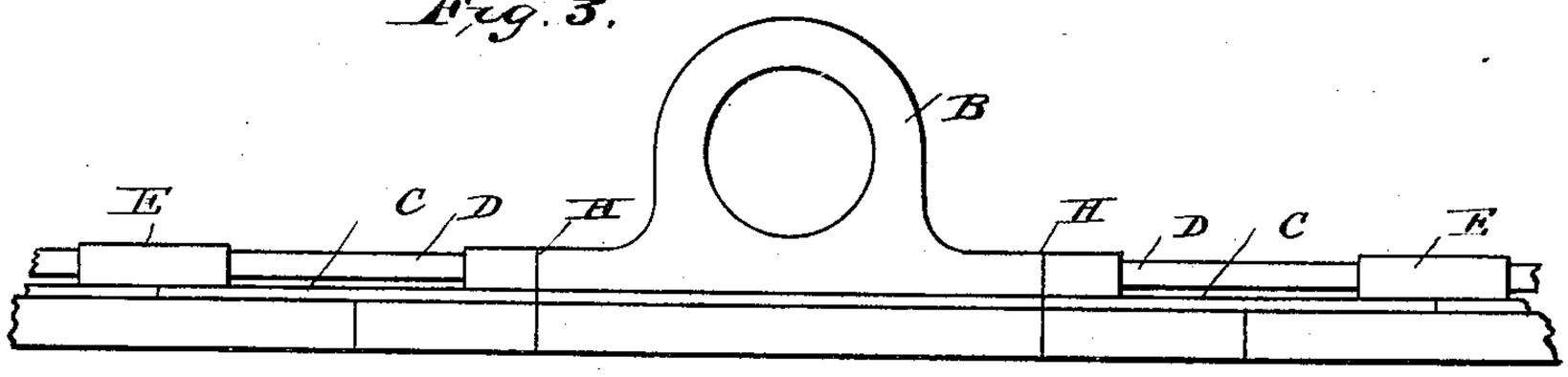


Fig. 4.

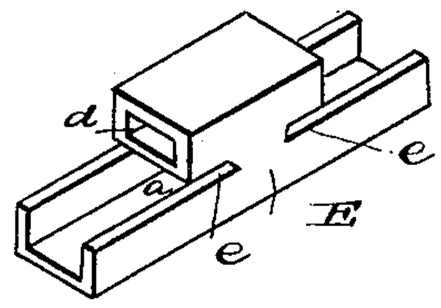
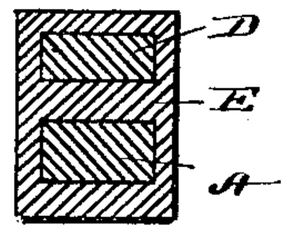


Fig. 5.



Witnesses.

Edwin L. Yewell.

J. J. McCarthy.

Inventor.

James McCormick,

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his Attorney.

UNITED STATES PATENT OFFICE.

JAMES McCORMICK, OF PRINCETON, INDIANA.

HARVESTER-KNIFE.

SPECIFICATION forming part of Letters Patent No. 266,632, dated October 31, 1882.

Application filed February 3, 1882. (Model.)

To all whom it may concern:

Be it known that I, JAMES MCCORMICK, of Princeton, in the county of Gibson, and in the State of Indiana, have invented certain new and useful Improvements in Harvester-Knives; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in sectional knives for reapers and mowers; and it has for its objects to provide an improved means for securing the blades to the supporting-bar in such manner as to bring the strain upon the sides of the bar and avoid all longitudinal strain, as more fully hereinafter specified. These objects I attain by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a top view of a portion of my improved cutter-bar. Fig. 2 represents a longitudinal section view of the same. Fig. 3 represents a side elevation of a modification of my invention; Fig. 4, a perspective view of one of the connecting devices, and Fig. 5 a cross-section of the same.

The letter A indicates the supporting-bar, provided with an eye, B, for attachment to the pitman.

The letter C indicates the knife-sections.

Above the bar A, and parallel with it, is a similar bar, D, as shown in Fig. 2 of the drawings, extending longitudinally partly over the lower bar. These bars are rectangular or other shaped in cross-section to receive the rectangular or other shaped sleeves E, or connecting devices. The sleeves are of such form and size as to fit over the bars A D, as shown, the said sleeves being formed with two openings, *a d*—one for the lower and the other for the upper bar. The lower portion of the sleeve is extended at each end beyond the upper portion, and between the upper and lower portions are formed slots or recesses *e*, for the purpose hereinafter described. The extended portions of the lower part of the sleeve are open on top, as indicated in Fig. 4 of the drawings.

The cutters or knives at their rear corners are provided with angular recesses F, and are adapted to set into the recesses *e*, which extend obliquely to the rear to conform to the angular corners of the rear of the cutters, so as to securely hold the same in place.

The bar A at its end is provided with a screw-bolt, G, by means of which the knives and their connecting devices may be held in place.

The angular corners of the knives are beveled at their edges, as indicated by the letter *g*, and the recesses into which they fit are likewise beveled, as indicated by the letter *h* in the drawings.

In applying the cutters and connecting devices to the supporting-bars, one of the sleeves is placed upon the bars and pushed up to the shoulder H on the section which carries the eye B. A cutter is then placed upon the lower bar, and its rear angular corner at one side, is pushed into the recess in the connecting device previously placed upon the bars. Another connecting device or sleeve is then placed upon the bars until the recess at one side engages the cutter previously placed upon the bar A. Another cutter is then applied, and so on until all are in place, when they are secured by means of the nut or nuts I, applied to the screw-bolt at the end of the bar A.

It will be apparent that as thus constructed, should one or more of the knives receive a shock, the strain will be thrown upon the shoulders of the knife-sections, thus bearing the sleeves against the sides of the bars, and not separating them longitudinally. Hence no strain comes on the nuts, and they simply perform their proper office of holding the parts together in such manner that they may be readily tightened or loosened.

In the modification the eye-section is located at the center instead of the end of the cutter-bar, and in this case the knives and their connections are secured at opposite sides of the sections.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A cutter-bar consisting of two parallel bars, a series of removable sleeves having suitable openings and adapted to fit on said bars, the said sleeves being provided with angular recesses to hold the cutters, a series of removable knife-sections provided with angular beveled rear corners adapted to fit said recesses,

and the screw-bolt and nut for securing the parts together, substantially as specified.

2. In combination with the bar A, the parallel bar D, extending from the eye-section, whereby said bar A is re-enforced at its weakest point, the sleeves E, provided with oblique recesses *e*, the knives C, provided with angular beveled rear corners adapted to fit in said recesses, and the bolt G and confining-nut, all constructed and arranged substantially in the manner specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 7th day of January, 1882.

JAMES McCORMICK.

Witnesses:

HENRY M. LAMB,

ROBERT R. ORR.