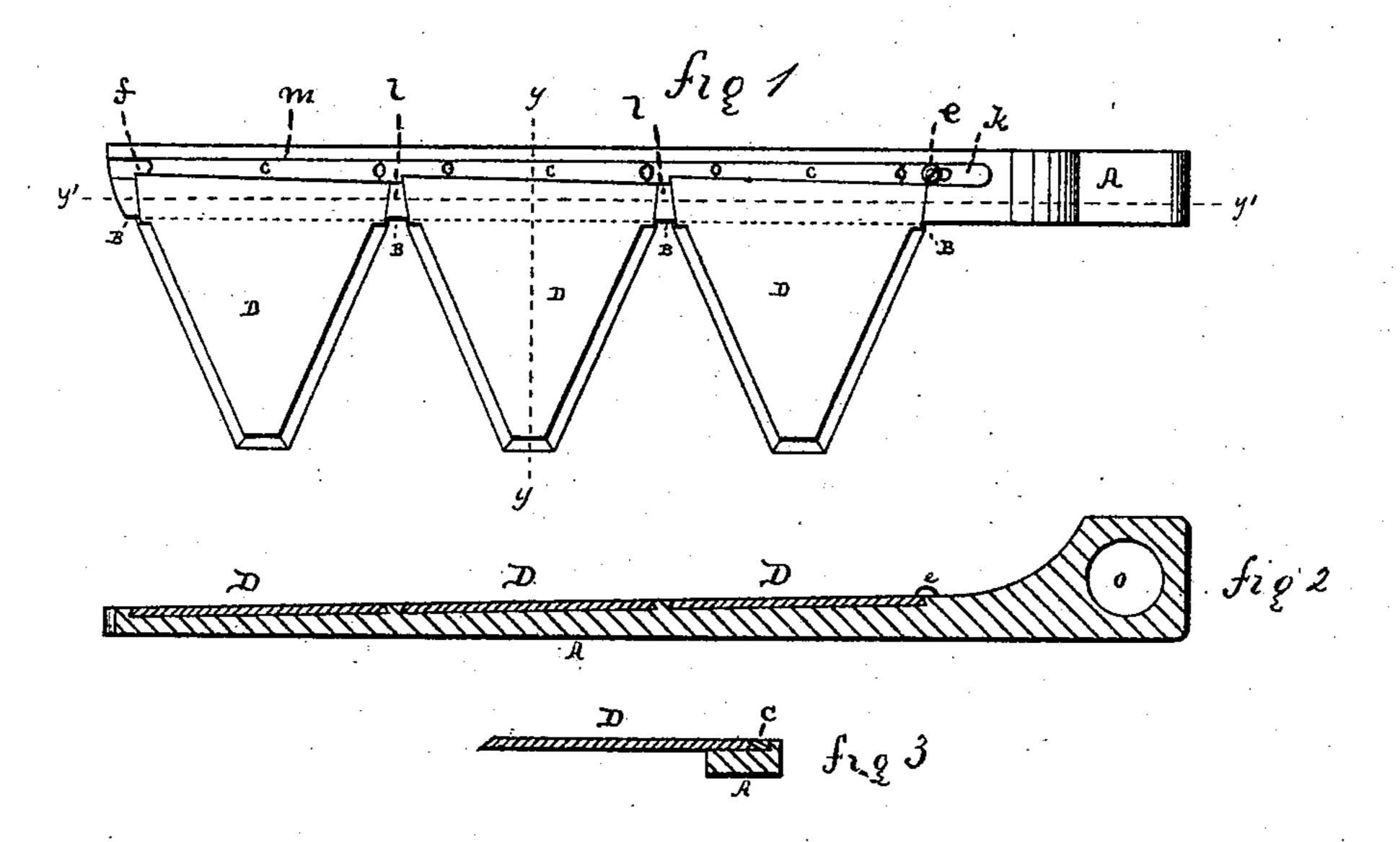
## E. C. KEYS. Harvester Cutter-Bar.

No. 209,172.

Patented Oct. 22, 1878.



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## UNITED STATES PATENT OFFICE.

EZRA C. KEYS, OF ALLEGHENY, PENNSYLVANIA.

## IMPROVEMENT IN HARVESTER CUTTER-BARS.

Specification forming part of Letters Patent No. 209,172, dated October 22, 1878; application filed April 1, 1878.

To all whom it may concern:

Be it known that I, Ezra C. Keys, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Securing the Cutters to the Cutter-Bars of Harvesters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in securing the cutters to the cutter-bars of harvesters; and consists in beveling the rear ends and sides of the cutters, and placing them in dovetail recesses made in the cutter-bar, and securing them in a fixed position by means of wedges placed in dovetail grooves in the rear of the cutter.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a top view or plan of my improvement. Fig. 2 is a longitudinal section of the cutter-bar and transverse section of the cutters at line yy. Fig. 3 is a longitudinal section of the cutters and transverse section of the bar and wedge at line y'y'.

In the drawings, A is the cutter-bar, furnished with dovetail recesses B. D are the cutters, which are beveled along their sides, which are set into dovetailed recesses B in the cutter-bar, as illustrated in Fig. 2, and which are also beveled along their rear edges, so as to engage with correspondingly-dovetailed wedges C, as shown in the sectional view, Fig. 3, taken through a cutter and wedge. C are the wedges placed in a dovetailed groove in

the bar A at the rear end of the cutters, which wedges are secured in position by means of a set-screw, e. These wedges are beveled, as shown in Fig. 3, and fit into the dovetailed groove in the cutter-bar, so that one side of each wedge will be secured by the continuous beveled side m of the longitudinal dovetailed groove in the bar A, while the other sides will be secured at the points l by the dovetailed portions of the bar which are between the recesses B, the remaining portions of said sides of the wedges engaging with the rear beveled edges of the cutters D. The cutter-bar, with its recesses, may be constructed of steel by the casting process. The wedges should be formed of cast-steel and the cutters also of steel, the latter having the usual cutting-edges.

The form of the rear end of the cutters and their adaptation to the recesses, and the manner of securing them in the recesses, are clearly shown in the accompanying drawings. o is the opening for pivoting the cutter-bar to the machine. The wedges are made in sections, as represented in Fig. 1, and are removed by removing the section of the wedge marked k, which is held in position by the set-screw e. It will be observed that the back end of the teeth correspond to the front edge of the wedge.

Having thus described my improvement, what I claim is—

A cutter-bar for harvesters, provided with dovetailed recesses B and groove f, in combination with the wedges C and cutters D, as and for the purpose set forth.

EZRA C. KEYS.

Witnesses:

A. C. Johnston, B. L. Johnston.