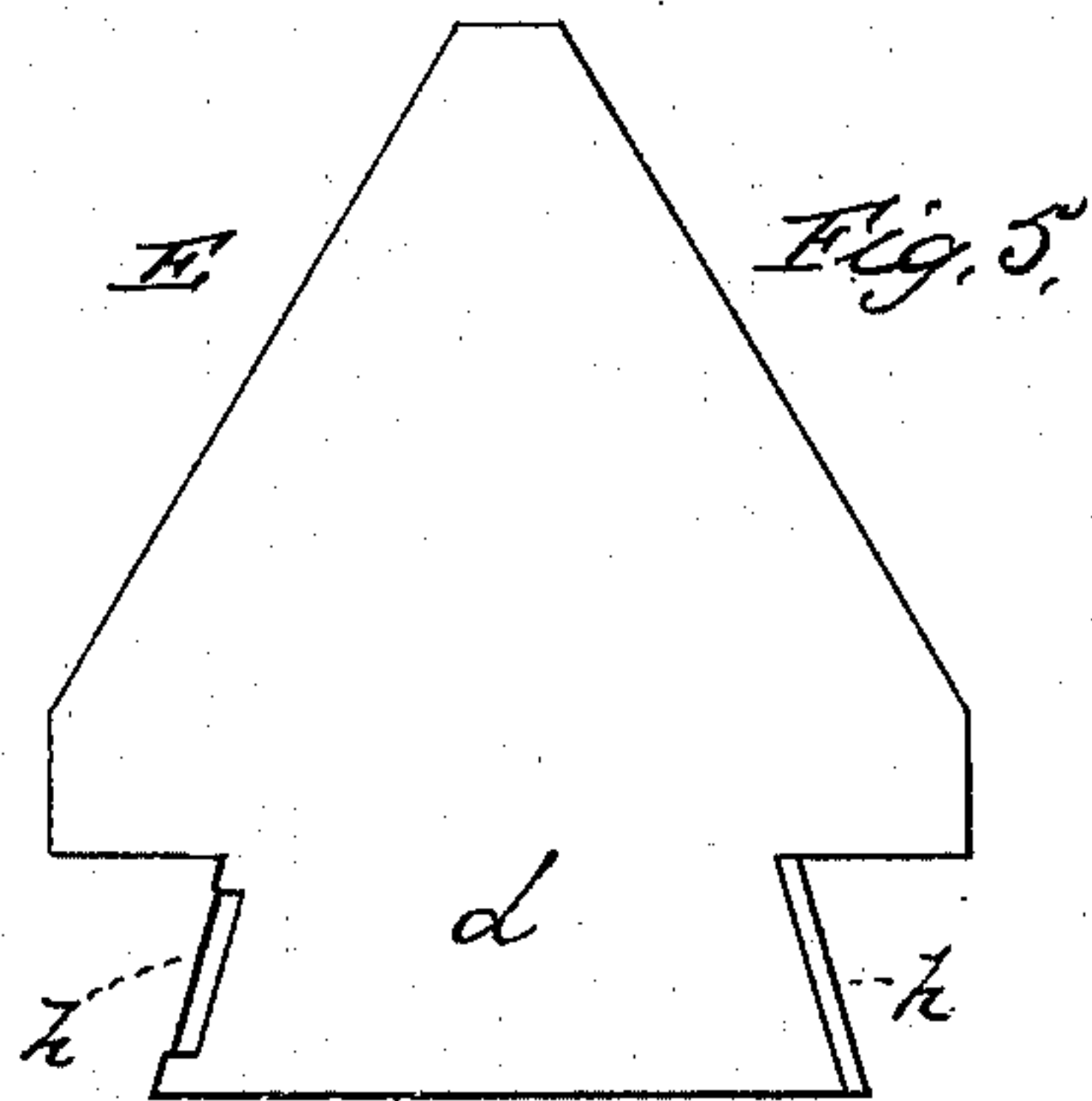
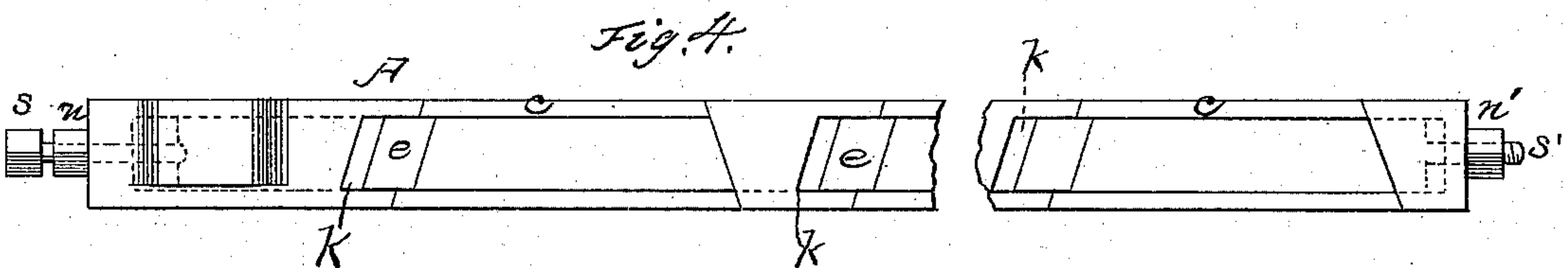
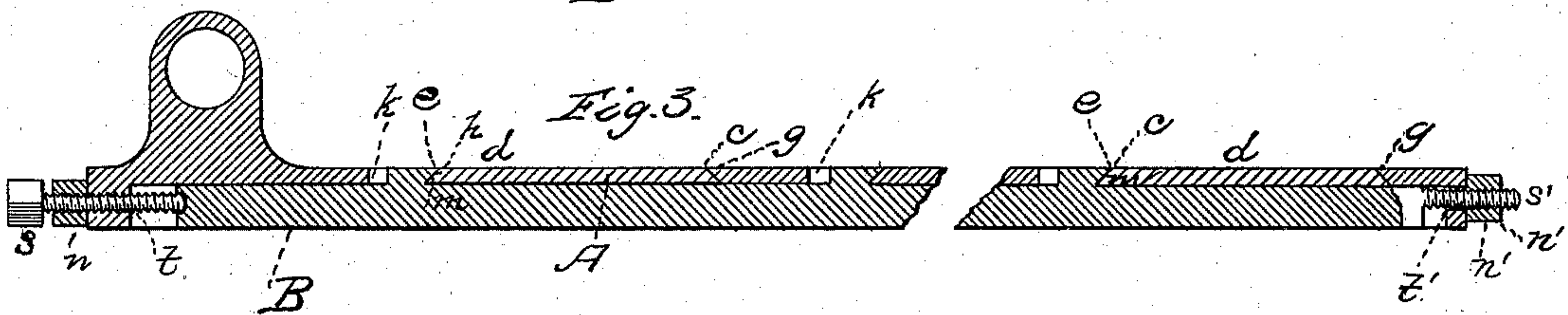
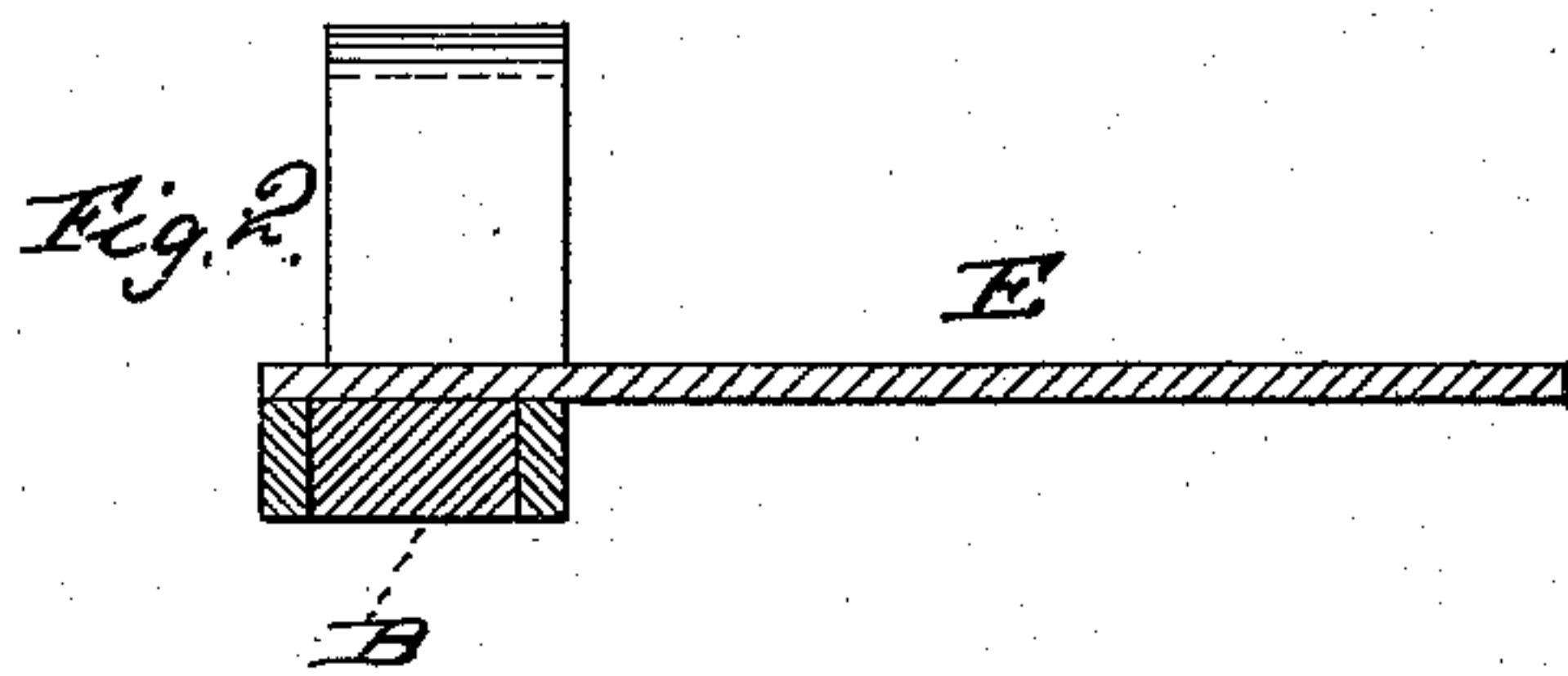
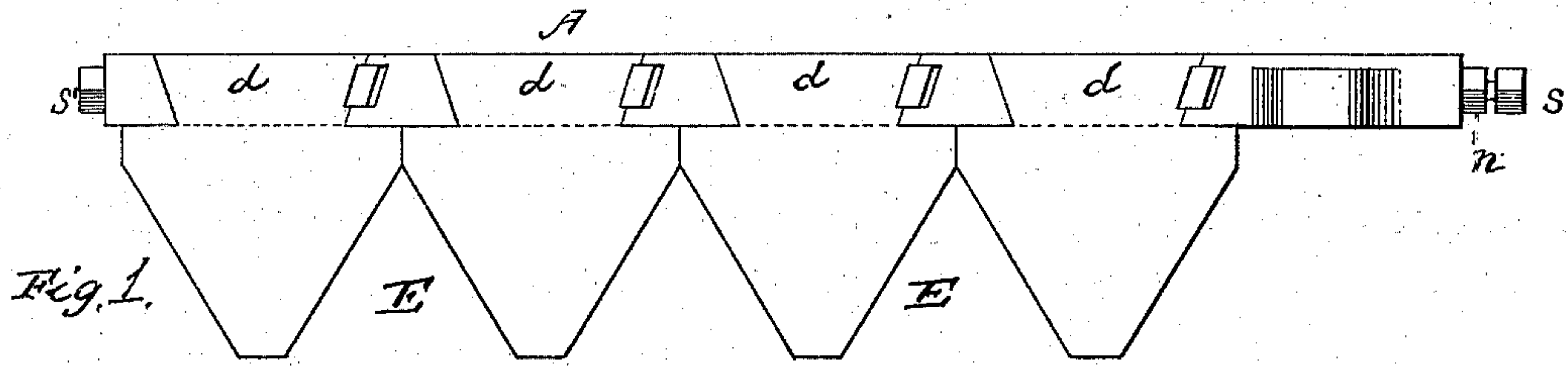


(No Model.)

J. K. CASE.  
HARVESTER CUTTER BAR.

No. 271,787.

Patented Feb. 6, 1883.



WITNESSES

*Vilhelm Anderson,*  
*Philip C. Massi.*

INVENTOR

*John K. Case,*  
*by Anderson & Smith*  
*his* ATTORNEYS



# UNITED STATES PATENT OFFICE.

JOHN K. CASE, OF VINCENNES, INDIANA.

## HARVESTER CUTTER-BAR.

SPECIFICATION forming part of Letters Patent No. 271,787, dated February 6, 1883.

Application filed February 21, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN K. CASE, a citizen of the United States, and a resident of Vincennes, in the county of Knox and State of Indiana, have invented a new and valuable Improvement in Harvester Cutter-Bars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my improved cutter-bar. Fig. 2 is a cross-sectional view of the same. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a plan view of the sickle-bar with the teeth removed, and Fig. 5 is a plan view of one of the knives.

This invention has relation to harvester cutter-bars; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings, the letter A designates a sickle-bar, which is recessed lengthwise on the bottom to receive the slide-bar B; or the sickle-bar may be provided with edge-bearings for the slide. On top the sickle-bar is formed with the dovetail recesses *c*, to receive the broad dovetail shanks or roots *d* of the teeth E, the edges *h* of which are beveled to engage the overhanging or undercut fixed bearing *g* at one end of each recess, and the undercut movable bearing *e* at the other end thereof. This movable bearing *e* is a key projection, which extends from the slide-bar B through an opening, *k*, in the sickle-bar at the end of each tooth seat or recess *c*, and forming an offset therefrom of sufficient size to allow the projection a little play back and forth, according to the movement of the reciprocating key-bar B, to which it is connected. The undercut engaging edge *m* of the key projection *e* is oblique, and it is designed to correspond in angular direction with the edge of the root *d*, which it engages, so that when forcibly pressed against said edge it will draw the tooth backward firmly into its seat, fixing it in position so that it cannot shake. In order to give the key-bar endwise motion to bring its key projections into forcible engagement with the bev-

eled edges of the tooth-shanks, a set-screw, *s*, at one end of the slide-bar, is employed, said set-screw passing through a threaded bearing, *t*, in the end of the sickle-bar. On this set-screw a jam-nut, *n*, is located, serving to secure the screw in position when turned up. The other end of the sickle-bar is provided with a threaded stud, *s'*, passing through an opening, *t'*, in the end of the sickle-bar, and provided with a nut, *n'*, whereby the bar may be secured at this end. When the screw-fastenings are disengaged sufficiently the key-bar can be moved backward, releasing the teeth from the key projections, so that any or all of the teeth can be detached; so, also, the slide-bar can be removed from the sickle-bar, it being held in connection therewith by the screw-fastenings at its ends and by the engagement of its key projections with the teeth on top of the sickle-bar.

A cutter-bar supplied with a central longitudinal groove in its face immediately beneath the cutter-blades has been provided with transverse undercut dovetailed receptacles above the groove for receiving the notched straight beveled edges of the shanks of the cutter-blades, and combined with a lock-bolt supplied with alternate rises and depressions, and provided with a flexible end having a lock-pin, which is adapted to be sprung into a hole in the face of the cutter-bar near its outer end when the lock-bolt has been pressed or driven to place in its groove and the rises have entered the notches in the shanks of the cutter-blades. A sickle-bar, from which rises a number of inclined lugs, all of which incline in the same direction—i. e., toward the outer end of said bar—and are of a sufficient length to pass through notches made in the straight beveled edges of the sickle-blades, and also through slots in a locking-bar which covers the rear portions of the blades, has been combined with a screw passed through the upturned end of the sickle-bar into the end of the locking-bar, said screw being tapped and designed to forcibly draw down the locking-bar upon the sickle-blades, other screws being passed down vertically through the locking-bar, through two or more of the shanks of the sickle-blades, which are perforated for this purpose, and into the sickle-bar. In this case, however, the straight edges of the blades overlap each other, so that the edge of one blade



presses upon and locks down the edge of the adjacent blade, and all of the vertical screws must be loosened in order to remove a single blade. A cutter having a tapering tang, the  
5 taper being toward the rear, has been fitted into a transverse receptacle of the cutter-bar—either in the top or bottom face—and held in place by a screw passed through its shank into the cutter-bar prior to my invention; and I  
10 claim none of these constructions, broadly, herein.

What I claim as my invention, and desire to secure by Letters Patent, is—

15 The combination, to form a sickle for mowers and harvesters, of a frame-bar having a longitudinal bearing in its bottom, and dovetailed recesses having undercut bevels at one

end thereof, in its top face, and openings between said lower longitudinal bearing and top recesses, with a slide-bar having oblique-edged under- 20 cut key projections, extending through the openings of the frame-bar, cutting-knives having broad dovetailed outwardly-flaring undercut shanks, and the end screws for adjusting the slide-bar within the frame bar, substan- 25 tially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN K. CASE.

Witnesses:

GEO. G. RAMSDALL,  
DEXTER GARDNER.