

No. 615,233.

Patented Dec. 6, 1898.

A. J. ANTHONY.
CUTTER BAR.

(Application filed Dec. 3, 1897.)

(No Model.)

Fig. 1.

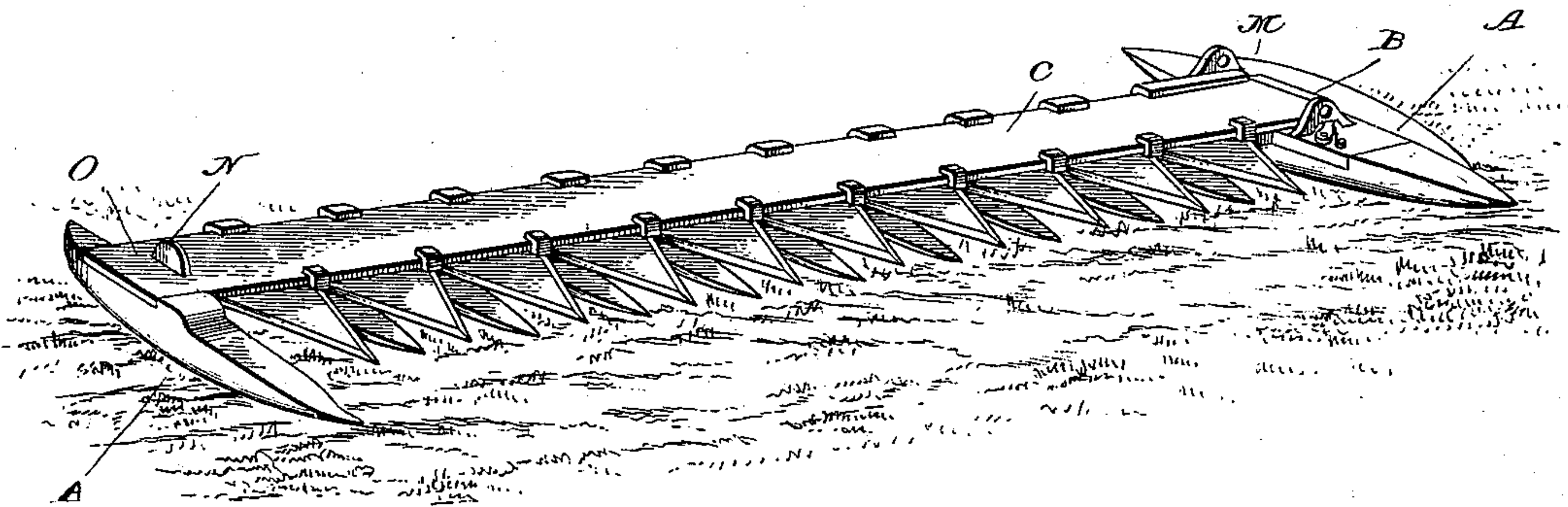


Fig. 2.

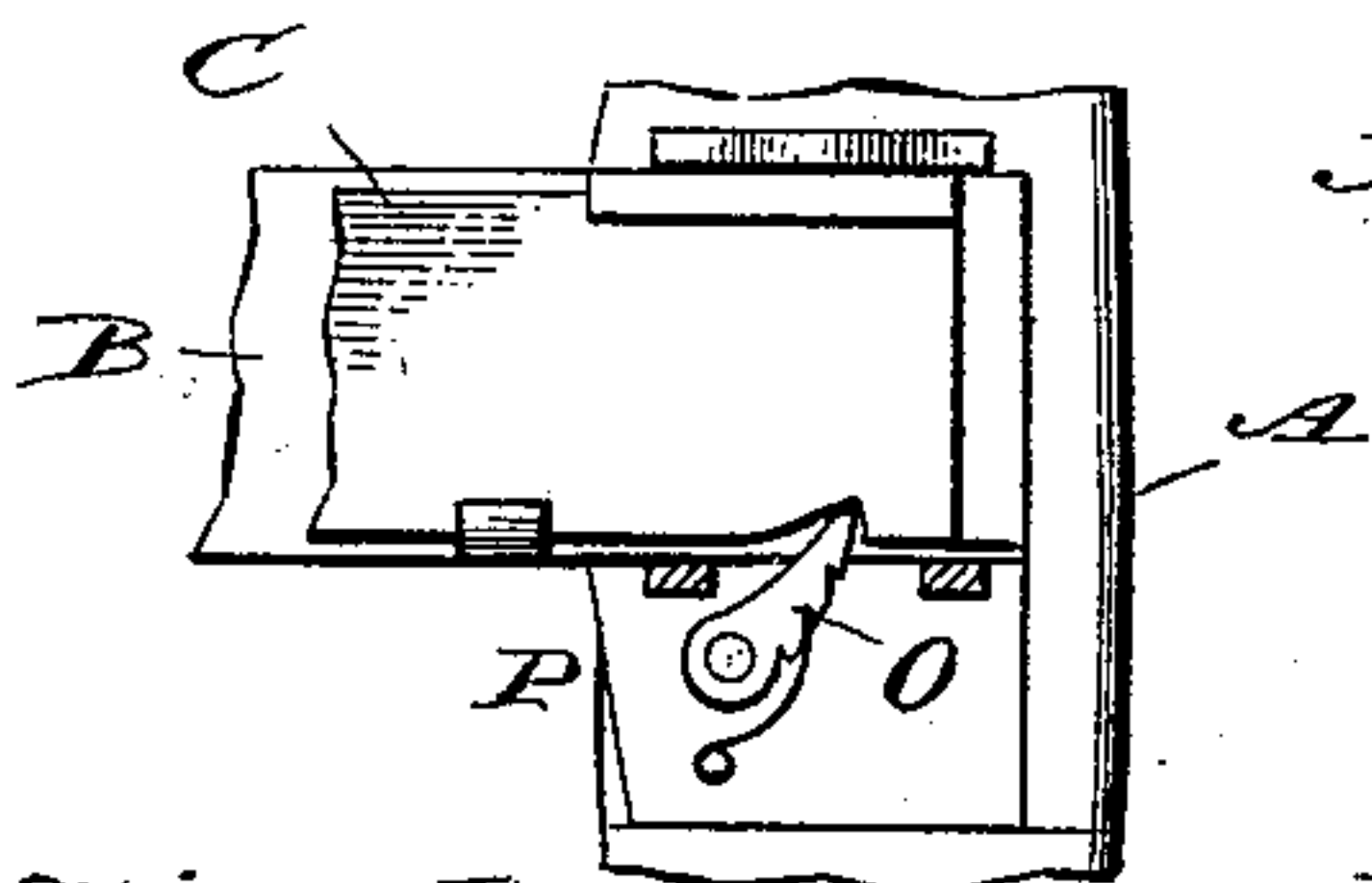
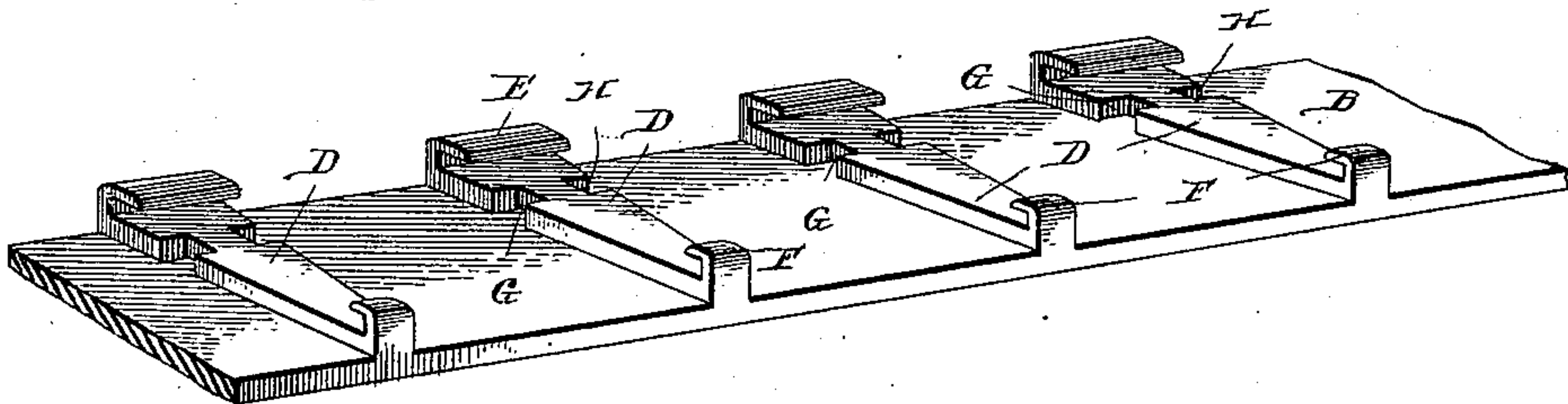


Fig. 6.

Fig. 3.

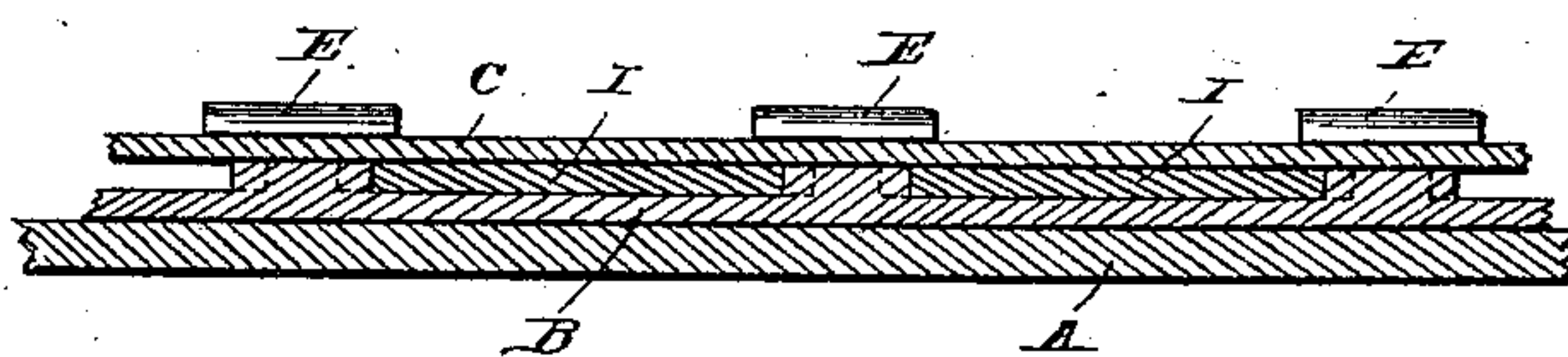


Fig. 5.

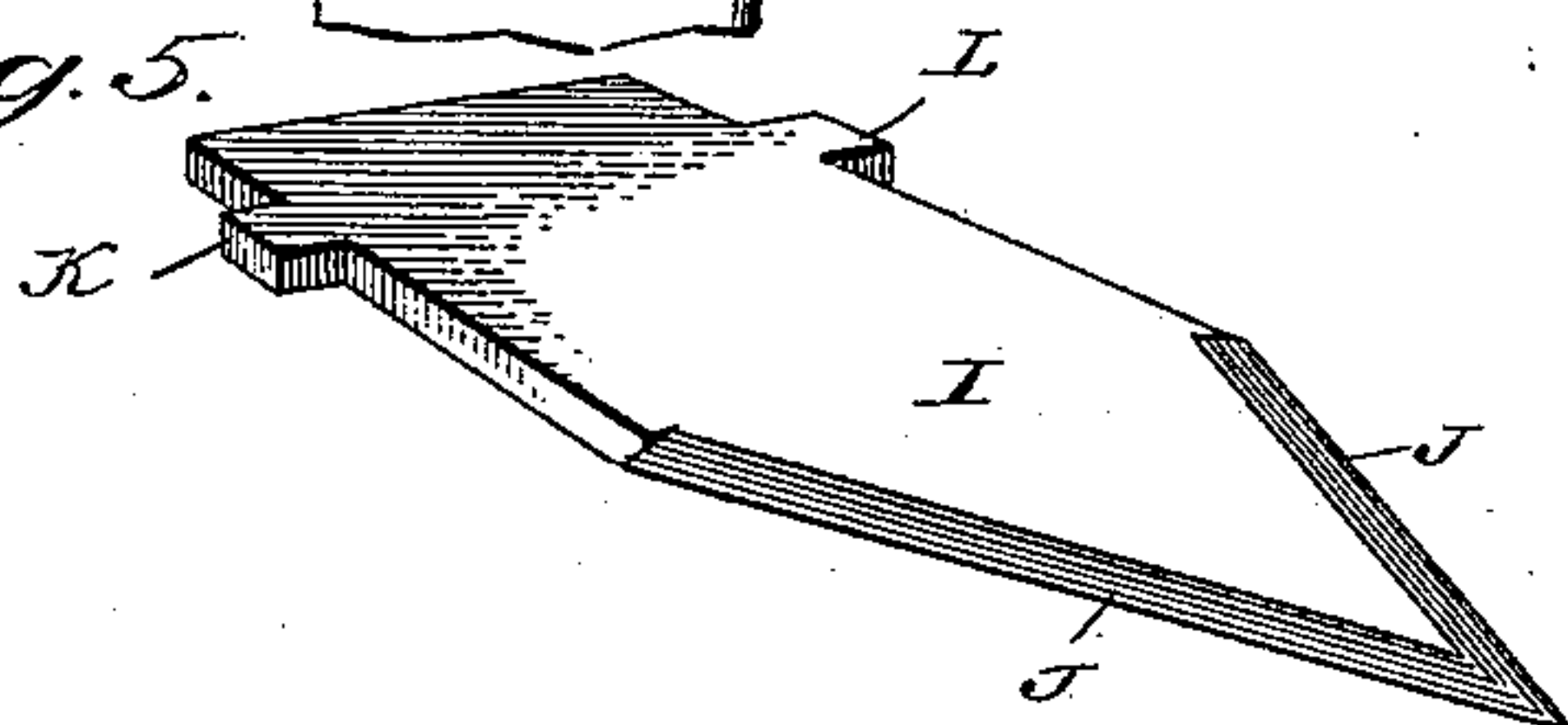


Fig. 4.

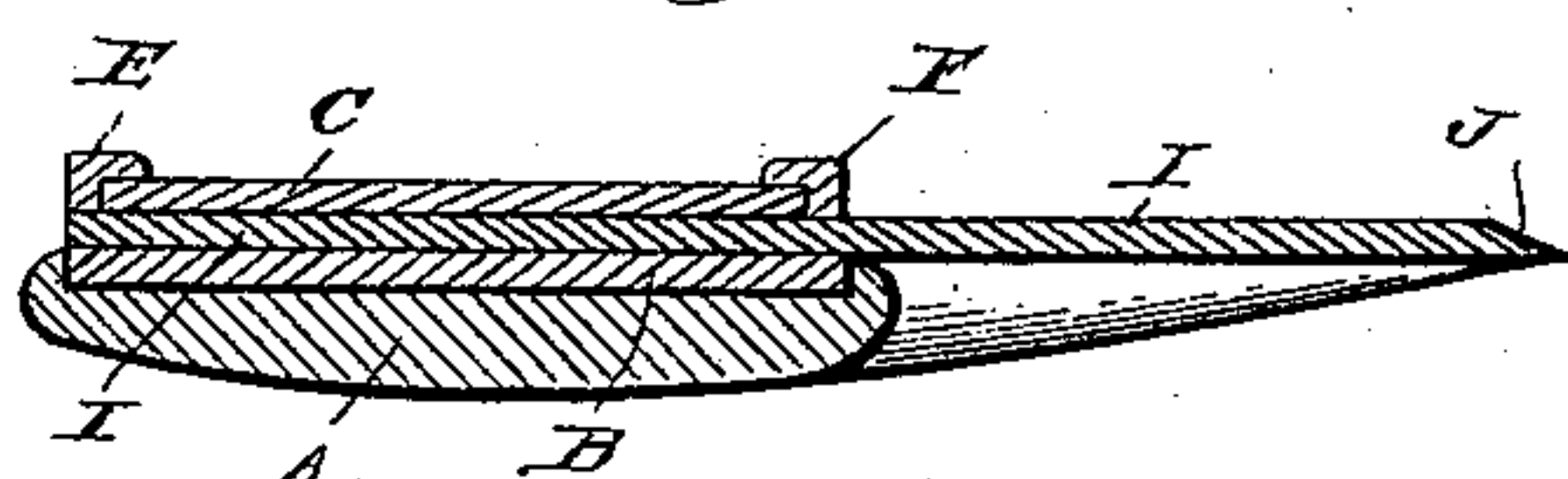
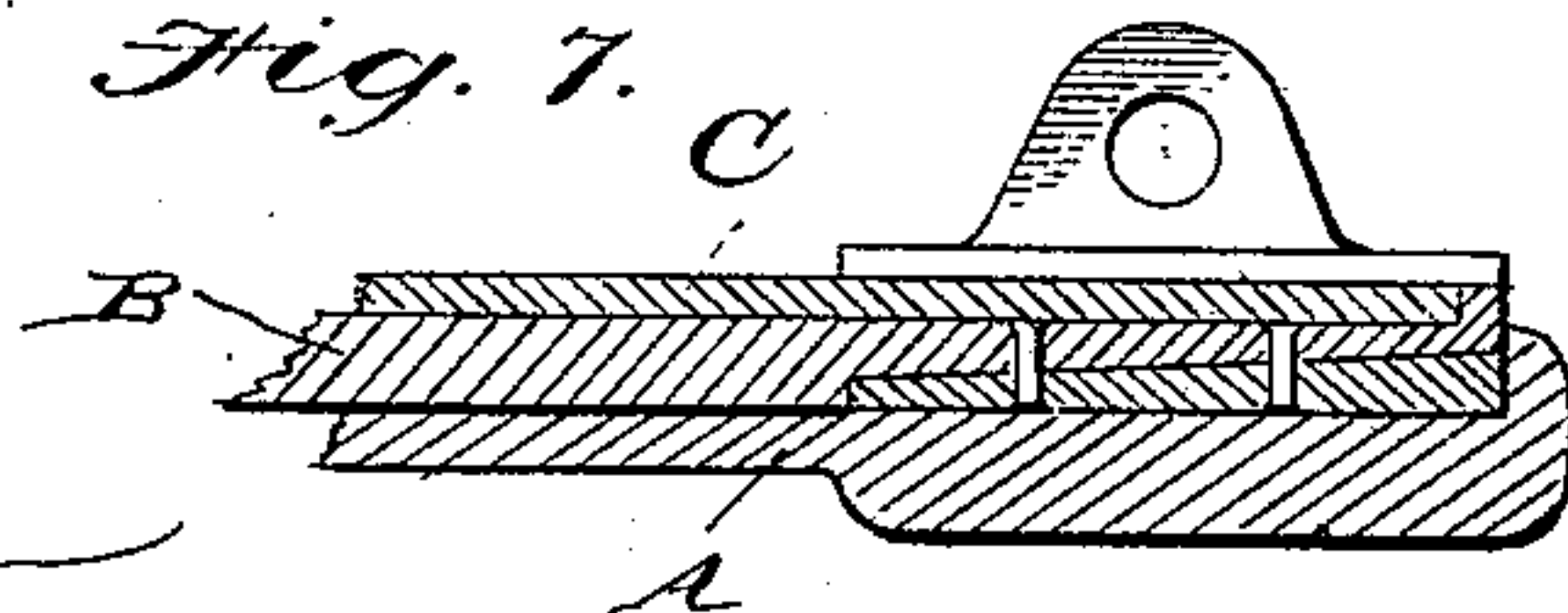


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT J. ANTHONY, OF BIG RUN, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO C. U. ANTHONY, OF DUBOIS, PENNSYLVANIA.

CUTTER-BAR.

SPECIFICATION forming part of Letters Patent No. 615,233, dated December 6, 1898.

Application filed December 3, 1897. Serial No. 680,648. (No model.)

To all whom it may concern:

Be it known that I, ALBERT J. ANTHONY, residing at Big Run, in the county of Jefferson and State of Pennsylvania, have invented a new and useful Cutter-Bar, of which the following is a specification.

My invention has relation to cutter-bars for harvesting-machines, and has for its object to generally improve the construction and operation of such devices.

A special object of my invention is to provide means whereby the knives may be rigidly but removably secured to the knife-bar without the use of screws or other removable fastening devices.

Another object of my invention is to provide means whereby the cutter-bar is rigidly held in place, but permitted to reciprocate freely and with the least possible friction.

With these and other objects in view my invention consists in a cutter-bar provided with peculiarly-formed seats for the reception of knives correspondingly shaped, whereby the knives may be placed or removed and are securely held in position on the bar without the use of screws, rivets, or such like fastening means.

My invention further consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view illustrating my invention detached from the machine, represented as in position for practical operation. Fig. 2 is a detail perspective view of a portion of the knife-bar. Fig. 3 is a detail longitudinal sectional view of the cutter. Fig. 4 is a detail view, in transverse section, of the cutter. Fig. 5 is a detail perspective view of one of the knives removed from the knife-bar. Figs. 6 and 7 are detail views in plan and section of the inner end of the cutter-bar and attachments.

Referring to the drawings by letters, A is the finger-bar, B the knife-bar, and C the top bar, which together form what is known as the "cutter-bar."

The finger-bar may be of any ordinary approved construction such as are usually used in harvesting-machines, the knife-bar B being mounted upon the top of the finger-bar and the top bar C upon the top of the knife-bar B. The knife-bar B is provided with a series of blocks or flanges D, lying transversely upon the upper surface of the bar, each block being provided at its outer ends with overhanging flanges E and F and in its sides with notches G and H.

I indicate one of my improved removable knives. These knives are formed at their forward edges and points in the usual manner of knives for harvesting-machines, being V-shaped and provided with beveled sharpened edges J. They are also provided with side lugs or projections K and L, as clearly shown.

In assembling the parts of the cutter-bar the knife-bar is laid upon the finger-bar, the knives I laid upon the knife-bar with their side lugs K and L in the side notches H and G of the blocks D, and then the top bar is slid into position under the flanges E and F until its outer end abuts against the block M, secured to the top of the finger-bar at its inner end. This top bar securely holds the knives in position without the use of screws, rivets, or other like fastening devices, but leaves them free to be removed from the knife-bar upon the withdrawal of the top bar C.

The top bar C is provided with an upward-extending flange N at its one end to facilitate the manipulation of it and is prevented from accidental displacement by a spring-impelled pawl O, pivotally secured to the inner end of the knife-bar at P, as illustrated at the right hand of Fig. 1 and in Fig. 6.

From the foregoing description it will be obvious that I have provided means whereby the knives of cutter-bars can be readily removed for sharpening or renewing without the necessity of providing any fastening except the blocks D, which form part of the knife-bar itself. The same blocks, with their overhanging flanges E and F, furnish bearings

upon the top bar upon which the knife-bar will reciprocate with a minimum of friction, such bearings extending over only a small portion of the surface of the top bar and being in a position where they can be most easily lubricated.

The advantages attending the use of such a construction are numerous and need not be further specified here.

While I have illustrated and described the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact details of construction shown and described, but hold that any slight changes or variations such as might suggest themselves to the ordinary mechanic will properly fall within the limit and scope of my invention.

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

1. A knife-bar for harvesting-machines provided with transverse blocks mounted upon its upper edge formed and positioned to receive the main body of the knives between them, each block having rectangular recesses

in its sides, substantially as and for the purpose set forth.

2. In a cutter-bar for harvesting-machines a knife-bar provided with a series of transverse blocks having side recesses or notches, in combination with knives shaped in outline to accurately fit between adjacent blocks on the knife-bar, and provided with lugs to enter the recesses in the blocks, substantially as described.

3. The combination in a harvesting-machine of a slidable knife-bar provided with transverse blocks on its uppersurface having side recesses and overhanging flanges, knives located in the spaces between the transverse blocks and provided with lugs fitting the side recesses of said blocks, and a top bar fitting upon the top of the transverse blocks and the knives, the overhanging flanges embracing the edges of the top bar and preventing its displacement, substantially as described.

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Witnesses:

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