

(No Model.)

J. L. V. BRACK.
CUTTER BAR.

No. 465,317.

Patented Dec. 15, 1891.

Fig. 1.

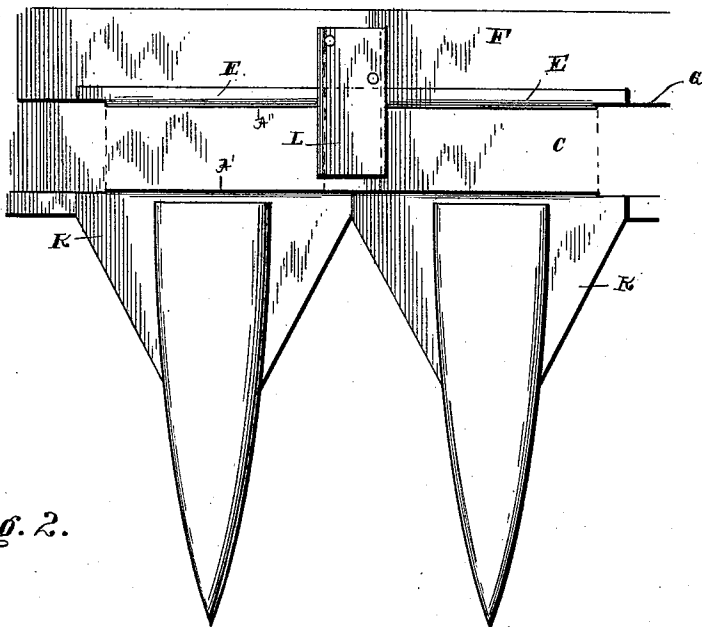


Fig. 2.

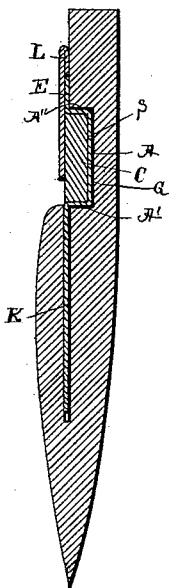
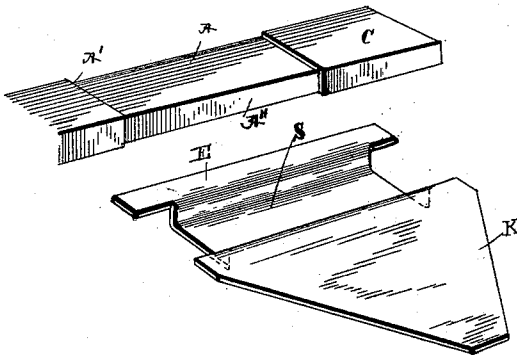


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JULIUS L. V. BRACK, OF UNIONVILLE, MICHIGAN.

CUTTER-BAR.

SPECIFICATION forming part of Letters Patent No. 465,317, dated December 15, 1891.

Application filed July 22, 1891. Serial No. 400,353. (No model.)

To all whom it may concern:

Be it known that I, JULIUS L. V. BRACK, a citizen of the United States, residing at Unionville, in the county of Tuscola and State of Michigan, have invented a new and useful Cutter-Bar, of which the following is a specification.

This invention relates to harvesters, and more especially to that class therein known as "cutting apparatus," and the object of the same is to produce certain improvements in the manner of attaching the knives to the cutter-bar.

To this end the invention consists in the details of construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a plan view of a portion of the cutting apparatus of a harvester when constructed in accordance with my invention. Fig. 2 is an enlarged cross-section through the cutter-bar and one knife. Fig. 3 is a perspective detail of a portion of the cutter-bar inverted, showing the knife as slightly removed therefrom.

Referring to the said drawings, the letter F designates the finger-bar, having a groove G in its upper face, in which moves the cutter-bar C, and L is a lip mounted on the finger-bar and projecting over the cutter-bar for keeping the latter in place in the groove, this construction and the mechanism for reciprocating the cutter-bar being well known in devices of this character.

At various points throughout the cutter-bar it is cut away on its lower face, as at A, on its front face, as at A', and on its rear face, as at A'', to form a recess, in which the knife K is to be locked. The said knife is of sheet metal, as is usual. Its blade stands in the plane of the upper face of the bar C, and is provided with a rearwardly-extending shank, which is bent downwardly, rearwardly, upwardly, and then again rearwardly to form a transverse socket S of a size to engage the reduced portion of the cutter-bar. The three walls of this socket closely embrace the cutter-bar where cut away, and said socket is of a length equal to said cut-away portions, though the knife-blade and its extreme rear end E are broader than the shank where reduced to form the socket, as seen in Fig. 3.

In applying this knife to the cutter-bar the latter is removed from the finger-bar, the knife brought into position with its shank below one of the recesses, and then borne upwardly, the springing of the sheet metal being usually sufficient to keep the knife in place on the bar. The latter, with the knives, is then inserted in the groove G of the finger-bar and connected with the reciprocating mechanism, and when in this position the weight of the cutter-bar, together with the lip L, will hold the knives in place. The side edges of the rear end of the blade and of the extremity E of the shank of each knife touch those of the adjacent knives and slide on the upper face of the finger-bar at the sides of the groove G, and the bodies of the shanks are preferably thick enough to hold the cutter-bar out of contact with the sides of the groove. This brings all the wear onto the shanks of the knives, and by the time that they are worn out and must be replaced the blades will be of little or no further use. New ones can be substituted in the manner above described.

Considerable change may be made without departing from the spirit of my invention.

What is claimed as new is—

1. The combination, with the cutter-bar having a recess on its lower face and its two edges, of a knife whose upper face stands in the same horizontal plane as the upper face of the bar and whose shank is shaped so as to removably fit said recess, substantially as described.

2. In a cutting apparatus, the combination, with the cutter-bar having a recess on its lower face and its two edges and a knife comprising a blade whose upper face stands in the same horizontal plane as the upper face of the bar, and a reduced shank shaped so as to removably fit said recess with its rear end in line with the blade, of a finger-bar having a groove on its upper face, and a lip on the finger-bar bearing on the cutter-bar, substantially as described.

3. In a cutting apparatus, the combination, with the cutter-bar having a recess on its lower face and its two edges and a knife comprising a blade whose upper face stands in the same horizontal plane as the upper face of the bar, and a reduced shank shaped so as

to removably fit said recess, the thickness of
said shank being slightly greater than the
depth of the recess, of a finger-bar having a
groove in which said cutter-bar reciprocates,
5 the shanks of the several knives normally
bearing against the faces of said groove, sub-
stantially as hereinbefore described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature
in presence of two witnesses.

JULIUS L. V. BRACK.

Witnesses:

J. H. DIMOND,
GEO. SHARRARD.