Dec. 13, 1927. 1,652,238

F. CRAWFORD

MOWER KNIFE FASTENING

Filed June 8, 1926

Fig. 1.

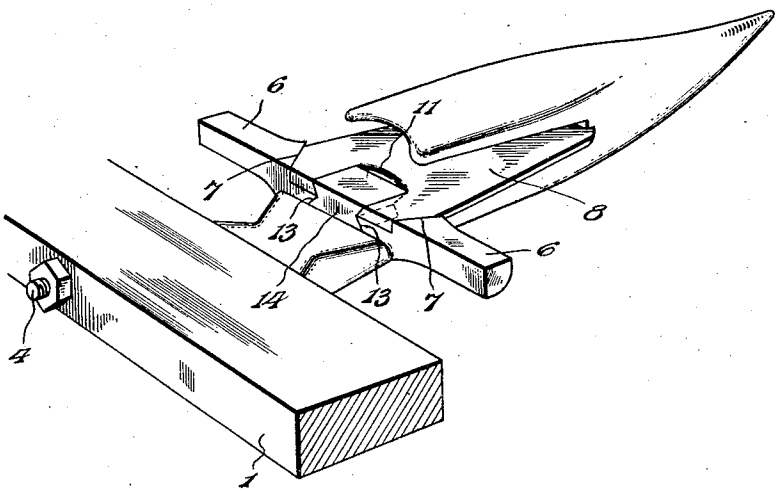


Fig. 2.

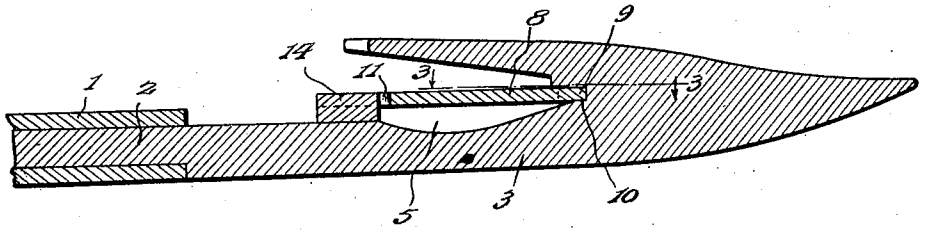
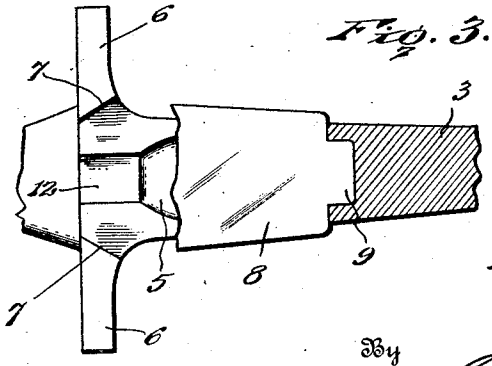


Fig. 3.



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MOWER-KNIFE FASTENING.

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This invention relates to harvesters and has special reference to the cutting or mowing apparatus, the object of the invention being to provide a very simple, inexpensive and efficient means for securing the stationary knife or ledger plate upon the guard finger. The invention secures the stationary knife in place without the use of any bolts, rivets or other like fastening devices which pass through and thereby weaken the guard finger or other parts and provide projections upon which grass or other matter may tend to accumulate. The invention is illustrated in the accompanying drawing and consists in certain novel features which will be particularly pointed out in the appended claim.

In the drawing:

Figure 1 is a perspective view of a guard finger and ledger plate illustrating the present invention;

Fig. 2 is a longitudinal vertical section of the same;

Fig. 3 is a detail horizontal section on the line 3—3 of Fig. 2.

The finger bar 1 may be of any approved construction and is provided at intervals with openings therethrough to receive the shank 2 of the guard finger 3 and a bolt 4 or other fastening device whereby the guard finger is secured in the finger bar. The guard finger is of the usual form and is provided in its upper side with a cavity or depression 5 whereby to reduce weight, as will be understood. The guard finger is formed with the usual lateral lugs 6, and at the junction of these lugs with the body of the finger rearwardly converging vertical shoulders 7 are formed across the same to furnish abutments for the correspondingly shaped rear end of the stationary knife or ledger plate 8. This ledger plate is provided at its front end with a tongue 9 seating in a recess 10 provided therefor in the body of the finger and in the rear end of the plate at the center thereof is a notch 11 opening through the rear end of the plate and having its side walls parallel and beveled to converge downwardly. A groove 12 is formed centrally in the guard finger midway between the shoulders 7, and this groove extends longitudinally and has its side walls beveled to converge upwardly, as shown at 13 in Fig. 1. The ledger plate or stationary knife is fitted in place by having the tongue 9 at the front end thereof engaged in the socket or recess 10 and then slipping the rear end of the plate between the rearwardly converging vertical shoulders 7 to rest upon the guard finger between the shoulders. The notch 11 in the ledger plate will thus be brought into vertical alinement with the groove 12 in the guard finger and a key 14 is then engaged in the notch 11 and the groove 12 to lock the plate in place. This key, as shown clearly in Figs. 1 and 2, is a flat-faced block having its side edges parallel and formed with longitudinal V-shaped grooves adapted to engage the beveled walls of the notch 11 and the groove 12, as clearly shown. The key is rectangular in form and of such dimensions that, when its front end has been slid to the forward extremity of the notch 11, the rear end of the key will be flush with the rear sides of the lugs 6 of the guard finger so that a continuous uninterrupted guiding surface for the cutter bar is provided, it being noted that the rear extremity of the ledger plate is also flush with the rear end of the key and the rear sides of the lugs 6. It will also be noted that the upper face of the key is flush with the ledger plate and the height of the vertical shoulders 7 is such that the upper surfaces of the lugs 6 will be flush with the key and the ledger plate. A smooth surface is thus provided over which the reciprocating knives or cutters may operate.

The present invention provides an exceedingly simple and inexpensive means for securing a ledger plate in place upon a guard finger and very effectually holds the plate in position. The key is engaged with the plate and the guard finger without requiring the use of any tools and the front end wall of the notch 11 is preferably slightly arcuate so that the front edge of the key may be engaged by the finger when it is necessary to remove a ledger plate in order to sharpen or renew the same.

Having thus described the invention, I claim:

The combination with a guard finger having a longitudinal groove in its upper surface, the walls of said groove being upwardly converging, a ledger plate resting upon the guard finger and provided at its rear end

with an open-ended notch having its side walls downwardly converging, and a key adapted to slidably engage the said groove and the said notch and having its side walls provided with V-shaped grooves to engage the walls of the groove and the notch whereby to lock the plate on the guard finger, the inner end of the notch projecting beyond the inner end of said key whereby the inner end of the key may be engaged to slide it longitudinally out of the notch and groove.

In testimony whereof I affix my signature.

FRED CRAWFORD. [L. S.]