(No Model.)

M. WILSON.

HARVESTER CUTTING APPARATUS.

No. 489,062. Patented Jan. 3, 1893.

Fig. 1.

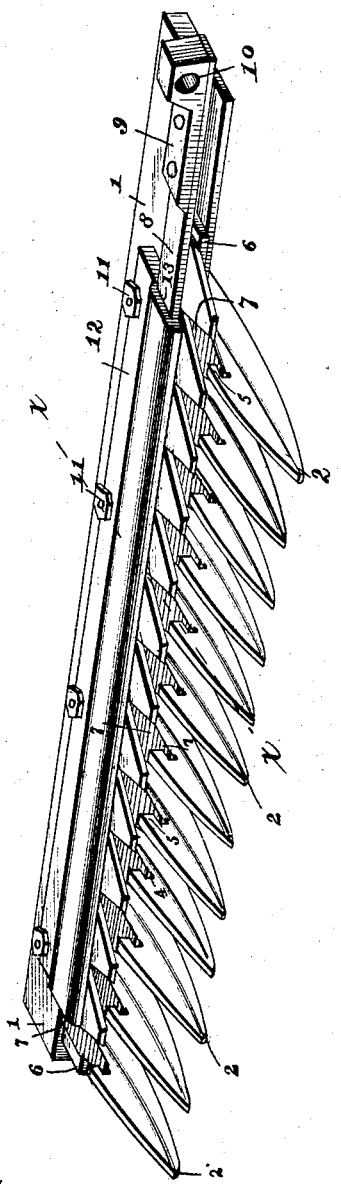
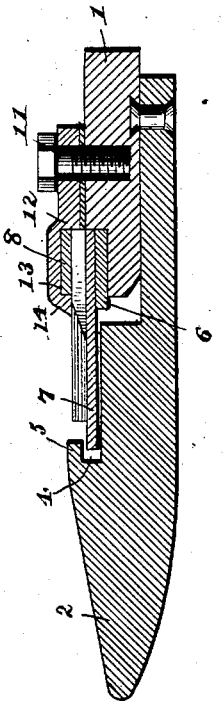


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

MATHEW WILSON, OF GARRISON, IOWA.

HARVESTER CUTTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 489,062, dated January 3, 1893.

Application filed June 2, 1892. Serial No. 435,290. (No model.)

To all whom it may concern:

Be it known that I, MATHEW WILSON, a citizen of the United States, residing at Garrison, in the county of Benton and State of Iowa, have invented a new and useful Harvester Cutting Apparatus, of which the following is a specification.

This invention relates to certain new and useful improvements in cutting apparatus, and consists of an improvement on Patent No. 448,567, granted to me March 17, 1891.

The object of this invention is to simplify and to strengthen the construction and arrangement of the parts of the device shown in said patent and make them more convenient of application and advantageous in use.

To this end the invention consists of the details of construction hereinafter more fully described and claimed.

In the drawings—Figure 1 is a perspective view of a section of this improved cutting apparatus. Fig. 2 is an enlarged transverse section of the same on the line *x*—*x*, Fig. 1.

Similar numerals of reference indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates the finger-bar, having a series of fingers 2 projecting therefrom having the upper portions thereof shouldered as at 3 and formed with recesses 4 which provide overhanging ends 5. The bar 1 is recessed at its front edge, and is of a continuous or integral construction, and the rear portions of the fingers 2 are recessed to receive the said bar 1.

To the finger-bar 1 is secured a bar 6, having a set of knives 7 which project into the recesses 4 and have their front portions covered by the overhanging ends 5, said bar 6 being mounted in the front recess 1^{x} of the bar 1. This construction dispenses with the use of fastening-screws for the said knives 7 as in the former patent, and the bar 6 is applied to the finger-bar 1, aside from the construction set forth, in the same manner as in the aforesaid patent. The cutter-bar 8 is located over the knives 7, and connected to a bar 9, being the ordinary form of construction, and the said bar 9 having an eye or bearing 10 at the end thereof by means of which it is reciprocated by a pitman from a crank-wheel on the machine as will be understood.

Secured to the finger-bar 1 by means of suitable bolts 11, is a plate 12, having a recess or channel 13 extending longitudinally throughout the length of the same and which is fitted over the bar 9 of the cutter-bar to hold the same in position. The front portion of the plate 12 is beveled as at 14, and extends downward toward the knives of the cutter-bar, and for a short distance over the same. By this means dirt and grit are prevented from entering the parts, and clogging of the same is thereby avoided. The longitudinal recess or channel 13 of the plate 12 is of such dimension as to permit free movement of the bar 9 of the cutter-bar therein, and the portion of the said plate in which said recess or channel is formed is slightly elevated or raised to accommodate the position of the several parts.

In disconnecting the cutter-bar, the bolts 11 are removed and the plate 12 detached, when the said cutter-bar can readily be withdrawn for sharpening or other manipulation. The said plate 12 also acts to hold the cutters of the cutter-bar down adjacent to the knives 7, and resist any tendency of the said cutters of the cutter-bar from rising from the said knives. In this form of construction every finger 2 is engaged by one of the knives 7 in the manner hereinbefore set forth, which materially strengthens the construction and holds the said knives in such position as to render them less liable to become broken or injured. Further, the front beveled portion of the plate 12 provides for easy travel of the device entire over the ground when in operation, and as will be consequent upon continuous friction of the parts, the said plate may be adjusted down through the medium of the bolts 11 to compensate for wear and to at all times keep the cutters of the cutter-bar in close position on the knives 7. The advantages and conveniences arising from this form of construction are readily apparent to those skilled in the art and need not be further enlarged upon herein. The bar 6 is removable, and when removed it carries the knives 7 therewith, so that convenient means are provided for sharpening or repairing said knives.

Having thus described the invention, what is claimed as new is:

In a cutting apparatus, the combination of the finger bar having a series of fingers with

upper shouldered portions formed with recesses to provide rearwardly extending overhanging ends, a removable bar having a series of knives held under said overhanging ends, a reciprocating cutter-bar bearing on said knives, and a plate removably and adjustably secured to said finger bar and having a front raised portion with a channel extending entirely and continuously through the same, the front portion of said plate being beveled and extending down to and over the knives of the cutter bar, and the fastening bolts for said plates located at the rear and forming the sole means of securement, substantially as described.

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

MATHEW WILSON.

Witnesses:
D. W. MENTZER,
I. N. RAYMOND.