

No. 646,862.

Patented Apr. 3, 1900.

J. C. McCOLLUM.
PEA VINE OR CLOVER CUTTER.

(Application filed Dec. 19, 1898.)

(No Model.)

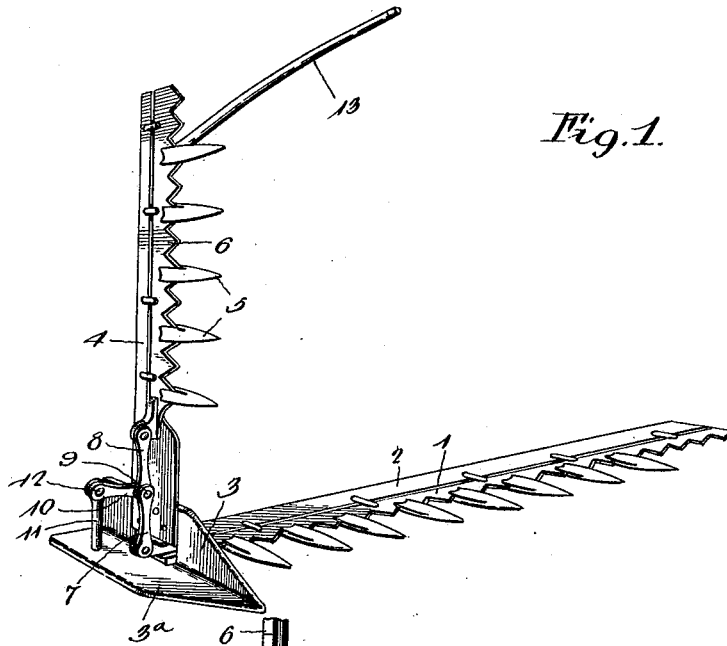


Fig. 1.

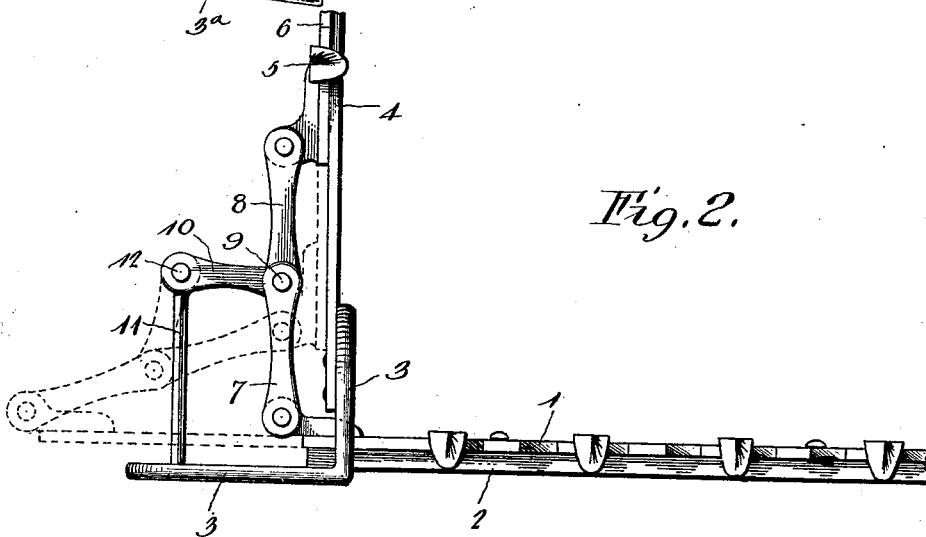


Fig. 2.

Witnesses
Wm. Bulverwell, By his Attorneys,
Joseph C. McCollum, Inventor.
C. Snow & Co.

UNITED STATES PATENT OFFICE.

JOSEPH C. McCOLLUM, OF BLOOMFIELD, MISSOURI, ASSIGNOR OF ONE-HALF
TO ERNEST M. VINE, OF EAST ST. LOUIS, ILLINOIS.

PEA-VINE OR CLOVER CUTTER.

SPECIFICATION forming part of Letters Patent No. 646,862, dated April 3, 1900.

Application filed December 19, 1898. Serial No. 699,735. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. McCOLLUM, a citizen of the United States, residing at Bloomfield, in the county of Stoddard and State of Missouri, have invented a new and useful Pea-Vine or Clover Cutter, of which the following is a specification.

My invention relates to harvesters and mowers, and particularly to an attachment for mowing-machines, whereby long material, such as pea-vines and clover, may be cut vertically to divide the swaths made by the mower, and thus facilitate the harvesting thereof.

The particular object of my invention is to provide a simple and efficient construction and arrangement of parts whereby a vertical knife may be reciprocated, the same receiving its motion from the usual knife or cutter bar of a mowing-machine.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is perspective view of a cutter embodying my invention, the same being shown applied to the contiguous portions of a mowing-machine. Fig. 2 is a detail view, partly in section, of the attachment to show the means for communicating motion from the main cutter-bar to the auxiliary or vertical cutter bar, the members of said connection being shown in full lines in one position and in dotted lines at the opposite limit of the movement thereof.

Similar reference characters indicate corresponding parts in both figures of the drawings.

The device embodying my invention is adapted for use in connection with the usual reciprocatory cutter-bar 1 and finger-bar 2 of an ordinary mowing-machine, said finger-bar terminating, as in the usual practice, in a shoe 3. Rising from the outer extremity of the main finger-bar or from the terminal shoe 3 is a guide-bar 4, arranged in an approximately-vertical position and provided with guard-fingers 5, which, with said guide, constitute an auxiliary finger-bar disposed approximately perpendicular to the main fin-

ger-bar. Mounted upon this auxiliary finger-bar is an auxiliary cutter-bar 6, adapted for reciprocatory movement parallel with the auxiliary finger-bar and having operative connection with the main cutter-bar, whereby the auxiliary cutter-bar is adapted for reciprocation simultaneously with the main cutter-bar.

The means which I employ for connecting the cutter-bars include links 7 and 8, pivotally mounted at their remote ends, respectively, upon the main and auxiliary cutter-bars and pivotally united at their contiguous ends, as shown at 9, and a link 10, mounted at one end upon said pivot 9 and at the other end upon a bracket 11, preferably rising from and carried by a horizontal shoe extension 3^a, said bracket having a suitable spindle 12, which forms the fulcrum of said link 10. Obviously the use of the link 10 insures the movement of the pivot 9 in a segmental path concentric with the fulcrum of said arm, and hence during the reciprocation of the main cutter-bar the motion communicated by the link 7 to the extremity of the link 10 is also imparted through the link 8 to the auxiliary cutter-bar. This connection enables me to obtain a long throw of the cutter-bars without binding of the parts and reduces to the minimum the friction due to the operation of the parts, whereby the strain due to the use of the attachment is reduced to the minimum and the auxiliary cutter-bar may be operated with but slight increase in the resistance offered to the driving mechanism.

As above indicated, the attachment is designed especially for use in harvesting pea-vines and clover, which are known to constitute valuable feed for stock; but difficulty has been experienced heretofore in harvesting pea-vines by reason of the length thereof and the fact that in growth they become interlocked and interwoven, and hence are difficult to handle in loading upon vehicles. The use of an attachment such as that constituting the subject-matter of my invention provides for severing the pea-vines or other material which is being harvested in the vertical plane of the outer end of the main finger-bar, whereby the swaths made by the mowing-machine are separated, and in this way the loading of the material is facilitated.

In connection with the auxiliary finger-bar I also employ an upwardly and forwardly inclined guide or gathering arm 13 to catch and depress the vines into the field of operation 5 of the auxiliary cutter-bar. In practice I prefer, as shown in the drawings, to arrange the connections between the main and auxiliary cutter-bars beyond or outside of the auxiliary cutter-bar to avoid interference thereof 10 with the material cut by the main bar; but it will be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any 15 of the advantages.

Having described my invention, what I claim is—

In an apparatus of the class described, the combination with the main horizontal 20 finger-bar, a vertical auxiliary finger-bar

rising from one end of the main bar, and the reciprocatory cutter-bars associated therewith, of a pair of toggle-links 7 and 8 having a pivot connecting their contiguous ends, and pivoted at their ends respectively to the adjacent ends of the right-angularly-disposed 25 cutter-bars, a stationary support arranged beyond one end of and carried by the main finger-bar, and a single swinging link 10 pivotally hung on said support at one end, and 30 having its other end connected with the pivot of the two toggle-links, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 35 the presence of two witnesses.

JOSEPH C. MCCOLLUM.

Witnesses:

J. W. FARRIS,
LETTIE JONES.