

T. J. LOVE.
CORN HARVESTER.

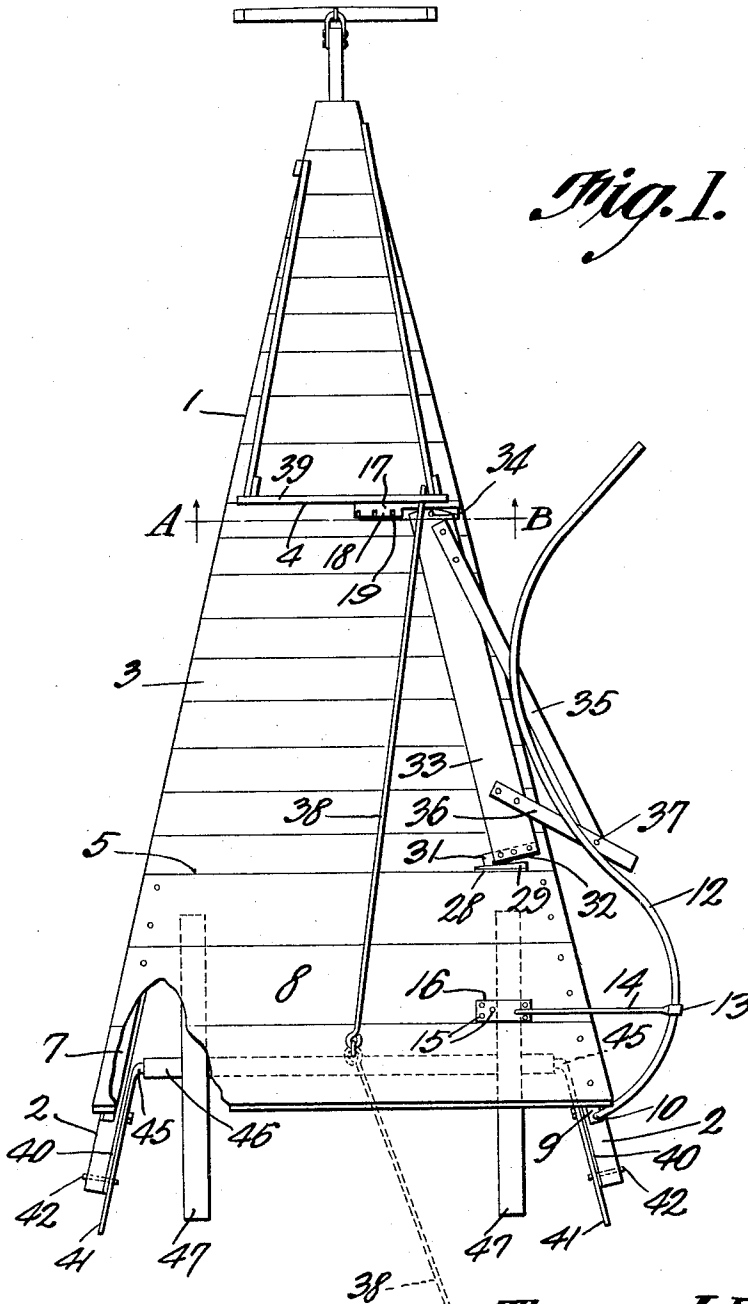
APPLICATION FILED NOV. 13, 1913.

Patented Oct. 13, 1914.

2 SHEETS—SHEET 1.

1,113,225.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 1.

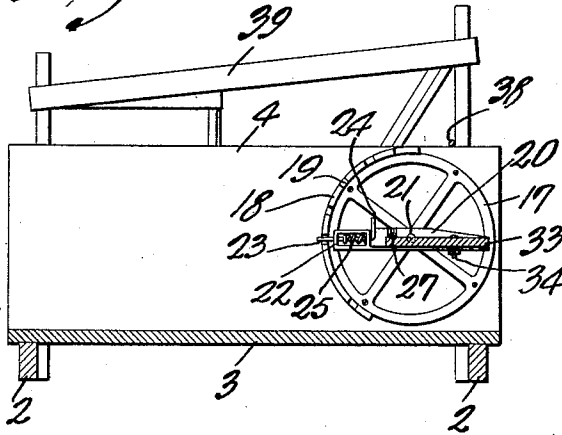


Fig. 5.

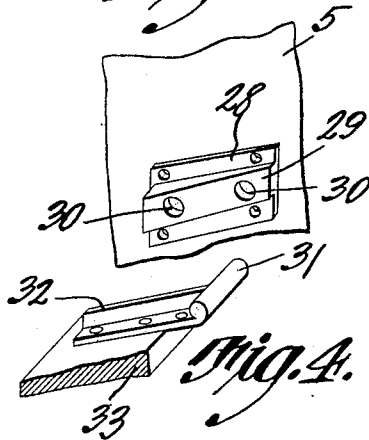


Fig. 4.

Fig. 7.

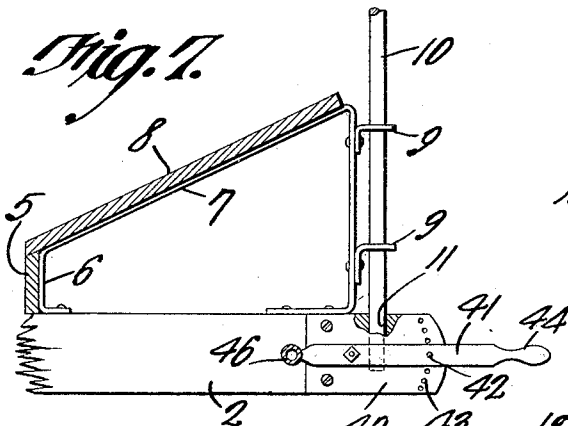


Fig. 6.

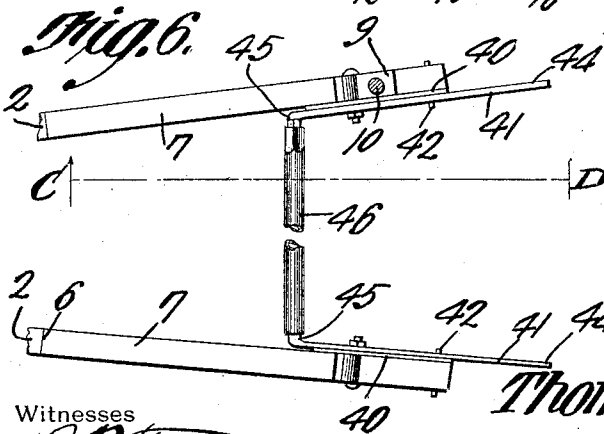
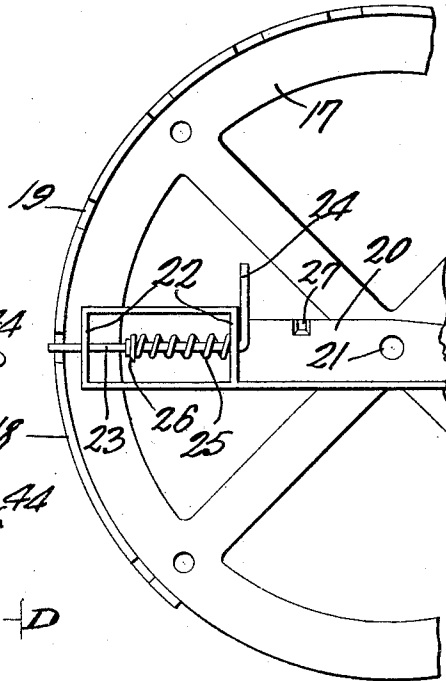


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS J. LOVE, OF LINCOLN, ILLINOIS.

CORN-HARVESTER.

1,113,225.

Specification of Letters Patent.

Patented Oct. 13, 1914.

Application filed November 13, 1913. Serial No. 800,844.

To all whom it may concern:

Be it known that I, THOMAS J. LOVE, a citizen of the United States, residing at Lincoln, in the county of Logan and State of Illinois, have invented a new and useful Corn-Harvester, of which the following is a specification.

This invention relates to corn harvesters and is more particularly designed as an improvement upon the structure disclosed in Patent No. 940,171, issued to me on November 16, 1909, and Patent No. 1,006,243, issued to me on October 17, 1911. In machines of this type an adjustable knife board is utilized, the knife supported by the board being extended laterally beyond the side of the machine, so that when the machine is drawn forward, this knife will cut off the stalks so that they can be gathered and formed in bundles.

One of the objects of the present invention is to provide improved means for adjustably supporting the knife board.

Another object is to provide adjustable means for gathering the stalks into the path of the supported knife.

A further object is to provide improved means for connecting the rear supporting wheels to the body of the machine so as thus to allow the machine to travel with its platform substantially horizontal while working on a hillside.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a plan view of the machine, a part of the wheel guard or cover being broken away. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is an enlarged elevation of a portion of the circle shown in Fig. 2 and of a portion of the pivoted bracket for supporting the knife board. Fig. 4 is a perspective view of the connecting member used at the other end of the knife board. Fig. 5 is a per-

spective view of the bracket to be used in connection with said connecting device. Fig. 6 is a plan view of a portion of the rear axle and showing the adjacent structures. Fig. 7 is a section on line C—D Fig. 6.

Referring to the figures by characters of reference 1 designates the body of the harvester, the same being of the same general construction as that disclosed in my patents hereinbefore mentioned. The side beams 2 of the body support a low intermediate platform 3 interposed between an upstanding front board 4 and an upstanding rear board 5. Frames 6 are erected on the side beams 2 directly back of the board 5, the upper portions of these frames being inclined upwardly and rearwardly, as shown at 7, so as thus to support a wheel guard or cover 8. The upstanding front portions of the frames 6 constitute backings for the board 5. The upstanding rear portion of one of the frames 6 has rearwardly extending brackets 9 in which a vertical rod 10 is mounted for rotation, the lower end of this rod being seated in a socket 11 formed in one of the side beams 2. The upper end of this rod 10 merges into an S-shaped gathering finger 12 the free end portion of which extends forwardly and laterally away from the side of the body 1. The rear outwardly bowed portion of the finger 12 is slidably engaged by a sleeve 13 formed at the upper end of a brace rod 14, this rod being pivotally mounted in either one of two or more holes 15 formed in an attaching plate 16 secured to the guard or cover 8. By sliding the sleeve 13 along the bowed rear portion of the finger 12, said finger can be caused to swing inwardly or outwardly relative to the body and by adjusting rod 14 within the plate 16, further adjustment of the finger may be effected.

Fixedly connected to that end portion of the board 4 nearest the finger 12 is a circular holding member 17 having a peripheral flange 18 extending through about 120 degrees and provided with marginal notches 19. An elongated bracket or strip 20 which is L-shaped in cross section, is pivotally mounted, as at 21, upon the middle portion of the holding plate or member 17 and formed on or secured to one portion of this strip or bracket 20 are guide webs 22 in which a spring pressed bolt 23 is slidably mounted. A handle 24 is provided at the

inner end of the bolt and the spring which serves to hold the bolt normally projected has been indicated at 25, this spring bearing at one end against one of the webs 22 and at its other end against a collar 26 on the bolt. When the bolt is projected it is adapted to be seated within any one of the notches 19, thus to prevent the strip or bracket 20 from swinging about its pivot 21. Retraction of the bolt is limited by a lug 27 extending from the strip or bracket 20.

Secured to the board 5 at that end thereof nearest the finger 12, is a bracket such as shown in detail in Fig. 5. This bracket includes an attaching plate 28 having a longitudinally extending outstanding central portion 29 which gradually increases in width toward the finger 12 and is provided preferably with two apertures 30. Either of these apertures is designed to receive a connecting pintle 31 formed at one end of an L-shaped member 32. A knife board 33 is adapted to be secured at one end to this member 32 and the other end of this knife board is connected by a single bolt 34 to the bottom portion of the strip or bracket 20. Thus it will be seen that by removing bolt 34, the pintle 31 can be placed in either of the apertures 30 and said bolt then inserted through the knife board 33 and into the bottom portion of the bracket or strip 20. Thus it will be seen that the knife board can be adjusted angularly in a horizontal plane. Any preferred form of knife may be used in connection with the board. In the structure shown, two knife sections are utilized, one section, indicated at 35, being extended laterally and rearwardly from the front end portion of the knife board while the other section, designated at 36, is likewise extended laterally and rearwardly from the rear portion of the knife board, the two sections of the knife being fastened together as at 37. The outer or advancing edges of these knife sections are sharpened so that, when they are brought against a standing row of corn or the like, they will sever it.

A rod 38 is pivotally connected to the guard 8 and extends forwardly so as to rest beneath a cross strip 39 supported above the board 4, as shown in Fig. 2. This guard strip serves to prevent the operator from coming against the knives while he is standing on the platform 3. It also acts as a rail against which the severed stalks can be piled as they are gathered during the harvesting operation.

Secured to the inner side of each strip 2 at its rear end is a plate 40 on which a lever 41 is pivotally mounted, this lever carrying a pin 42 adapted to be placed in any one of an arcuate series of apertures 43 whereby the lever is held against movement about its pivot. The rear end of each lever is provided with a handle 44 while the front end

of each lever is inturned, as shown at 45 so as to project loosely into one end of a tubular axle 46. The rear supporting wheels 46 are mounted on this axle. It will be seen that by separately adjusting the levers 41, either of the wheels 47 can be raised or lowered relative to the other wheel and, consequently, as the front end of the machine is mounted on a single support, either in the form of a wheel or a colter, not shown, it will be seen that this independent adjustment of the rear wheels will enable the machine to be supported horizontally while traveling along an inclined surface.

In using the machine the operator stands on the platform 3 and the machine is drawn along one row of stalks so that the finger 12 will gather the stalks inwardly toward one side of the platform where they will be engaged and severed by the knife mounted on the board 33. The severed stalks can be gathered by the operator and arranged in bundles and tied. If desired, the rod 38 can be swung rearwardly so as to extend beyond the rear end of the machine and while thus positioned can be used as a rack against which the stalks can be stacked while the machine is stationary. This position of the rod 38 has been indicated by dotted lines in Fig. 1.

By disengaging bolt 23 from the notched flange 18, the knife board 33 can be adjusted angularly so as to raise or lower the outer end of the knife, said knife being held fixedly in any position to which it may be adjusted, by allowing bolt 23 to enter the adjacent notch 19.

What is claimed is:—

1. A harvester including a movably supported body having a platform provided with upstanding front and back boards, a knife board interposed between said front and back boards and adjustable angularly in a horizontal plane, and means for tilting the board transversely.

2. In a harvester, the combination with a movably supported body, of a knife board, a bracket having spaced apertures, a pintle extending from one end of the knife board and movable to position in any one of the apertures, a pivoted bracket mounted for movement in a substantially vertical plane, a connection between said bracket and one end of the knife board, said knife board being adjustable angularly relative to the pivoted bracket, and means for holding the bracket against swinging movement.

3. The combination with a body, of a pivoted bracket adapted to swing in a substantially vertical plane, cooperating means upon the bracket and body for securing said bracket against swinging movement, a knife board mounted on the bracket and adjustable angularly relative thereto, a second bracket having spaced apertures, and a

pintle extending from one end of the knife board and adapted to be seated within one of the apertures.

4. The combination with a body, of a
5 pivoted bracket adapted to swing in a substantially vertical plane, cooperating means upon the bracket and body for securing said bracket against swinging movement, a knife
10 board mounted on the bracket and adjustable angularly relative thereto, a second bracket having spaced apertures, a pintle extending from one end of the knife board
15 and adapted to be seated within one of the apertures, a knife extending laterally from the board and adjustable therewith, and a gathering finger extending over the knife
and beyond one side of the body.

5. A corn harvester including a movably supported body, a plate having an arcuate
20 flange formed with notches, said plate being fixedly mounted, a bracket pivotally mounted upon one side of the plate and adapted to swing in a substantially vertical plane, a
locking bolt carried by the bracket and
25 adapted to engage any one of the notches to hold the bracket against movement, a

knife board mounted on the bracket and adjustable angularly relative thereto, a pintle connected to the other end of the knife board, supporting means adjustably engaged
30 by the pintle, a shearing knife extending laterally from and movable with the knife board, and a gathering finger carried by the body and extending laterally therebeyond
above and in front of the knife. 35

6. A corn harvester including a body, a knife board adjacent one side of the body and adjustable angularly in a substantially horizontal plane, means for tilting the board transversely, a knife extending laterally
40 from the board, an upstanding rod mounted for rotation upon the body, a curved gathering finger extending from the rod and over the knife, and an adjustable connection
between the finger and the body. 45

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

THOMAS J. LOVE.

Witnesses:

ROBERT L. DAVIS,
EDITH VAUGHAN.