No. 859,748. PATENTED JULY 9, 1907.

H. H. DAMMAN.

MOWING MACHINE.

APPLICATION FILED SEPT. 29, 1905.

2 SHEETS—SHEET 1.

Fig. 2.

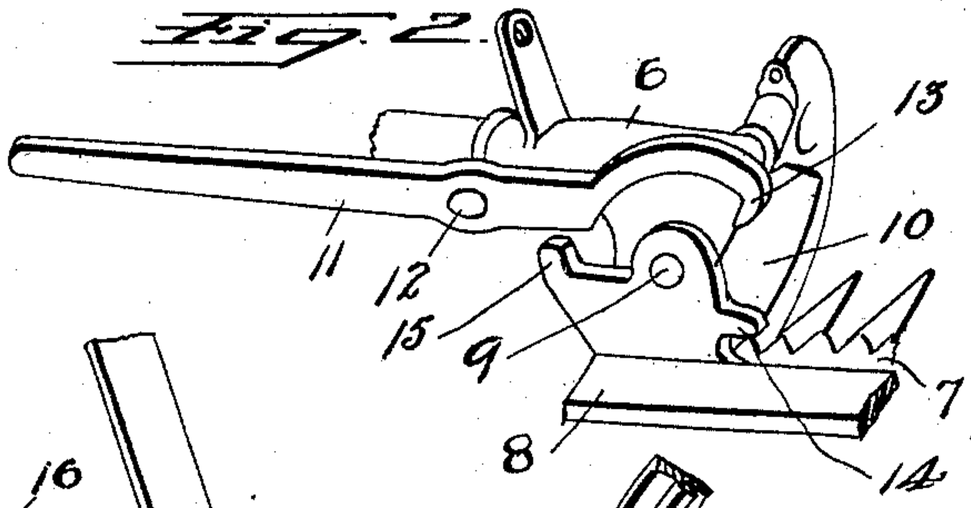

Fig. 1.

Fig. 3.

Witnesses
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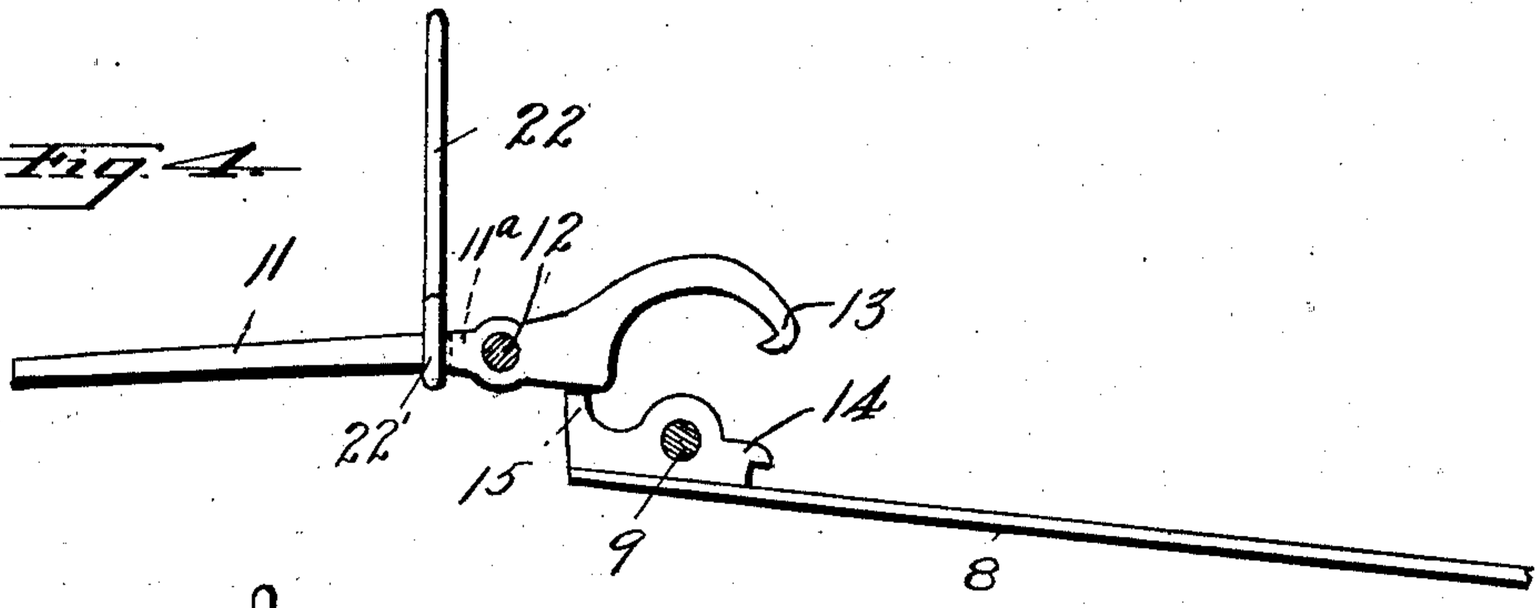
2 SHEETS—SHEET 2.

Fig. 4.



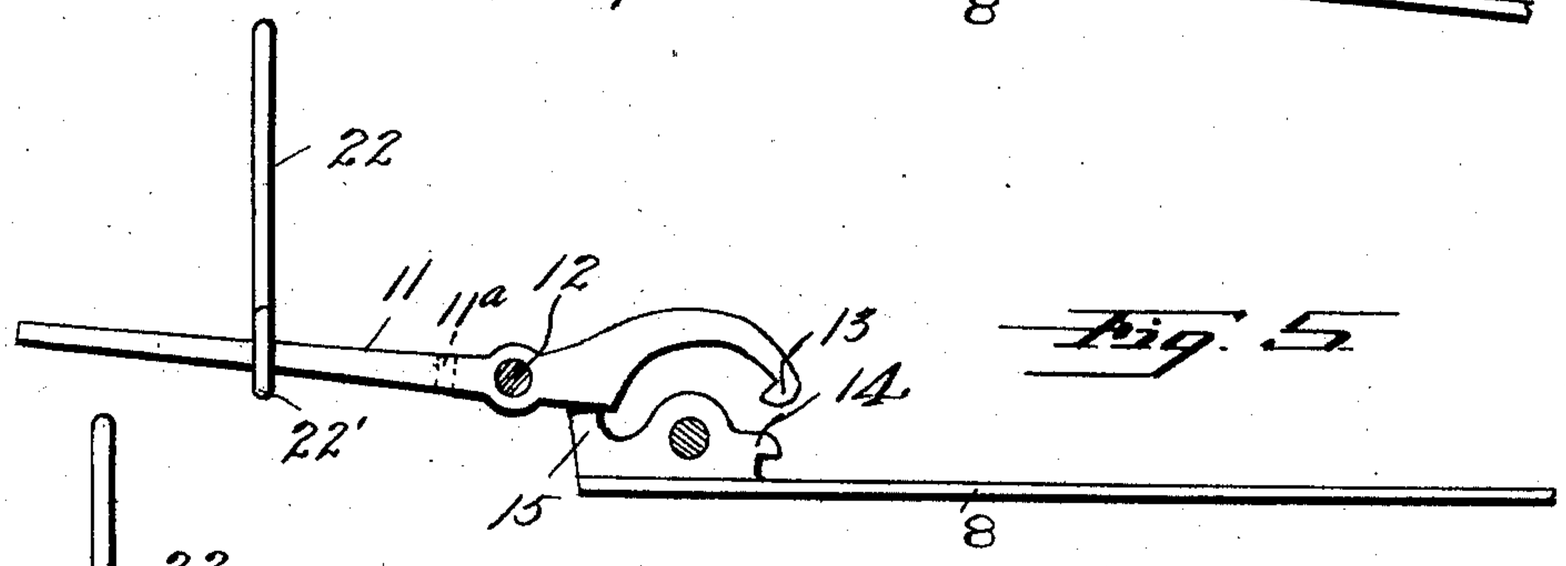


Fig. 5

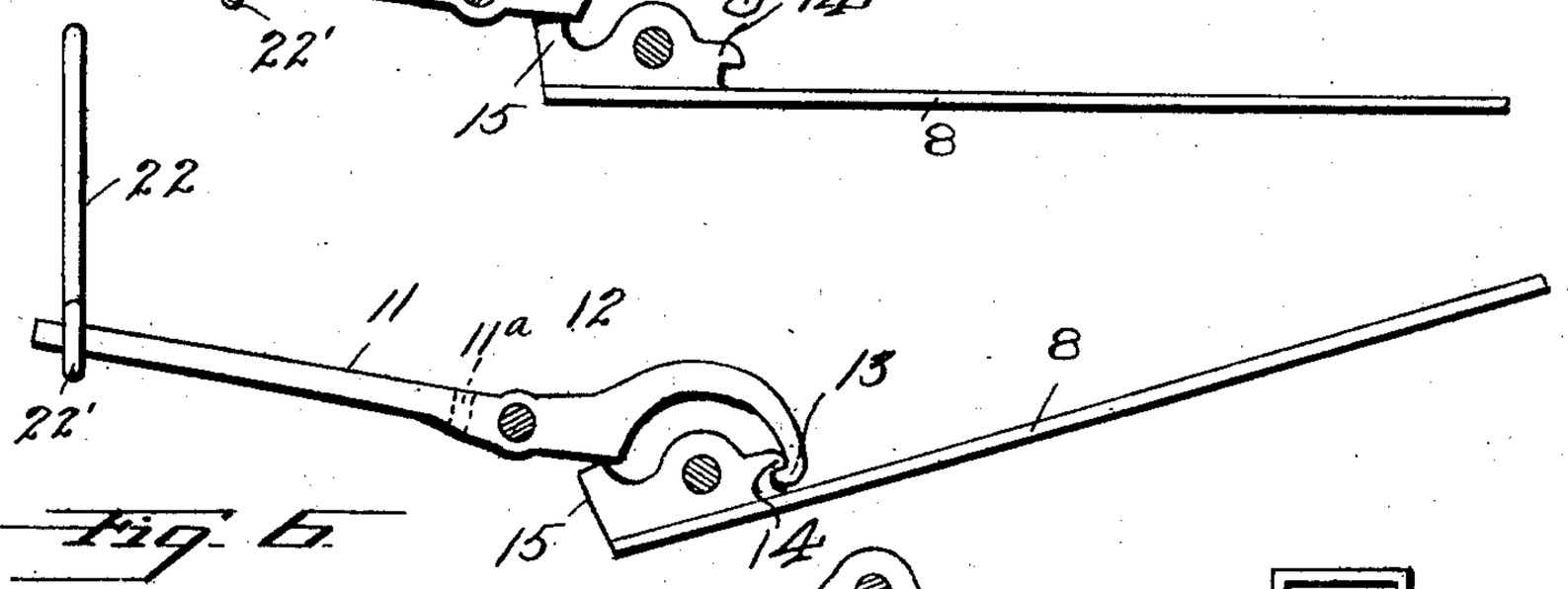


Fig. 6

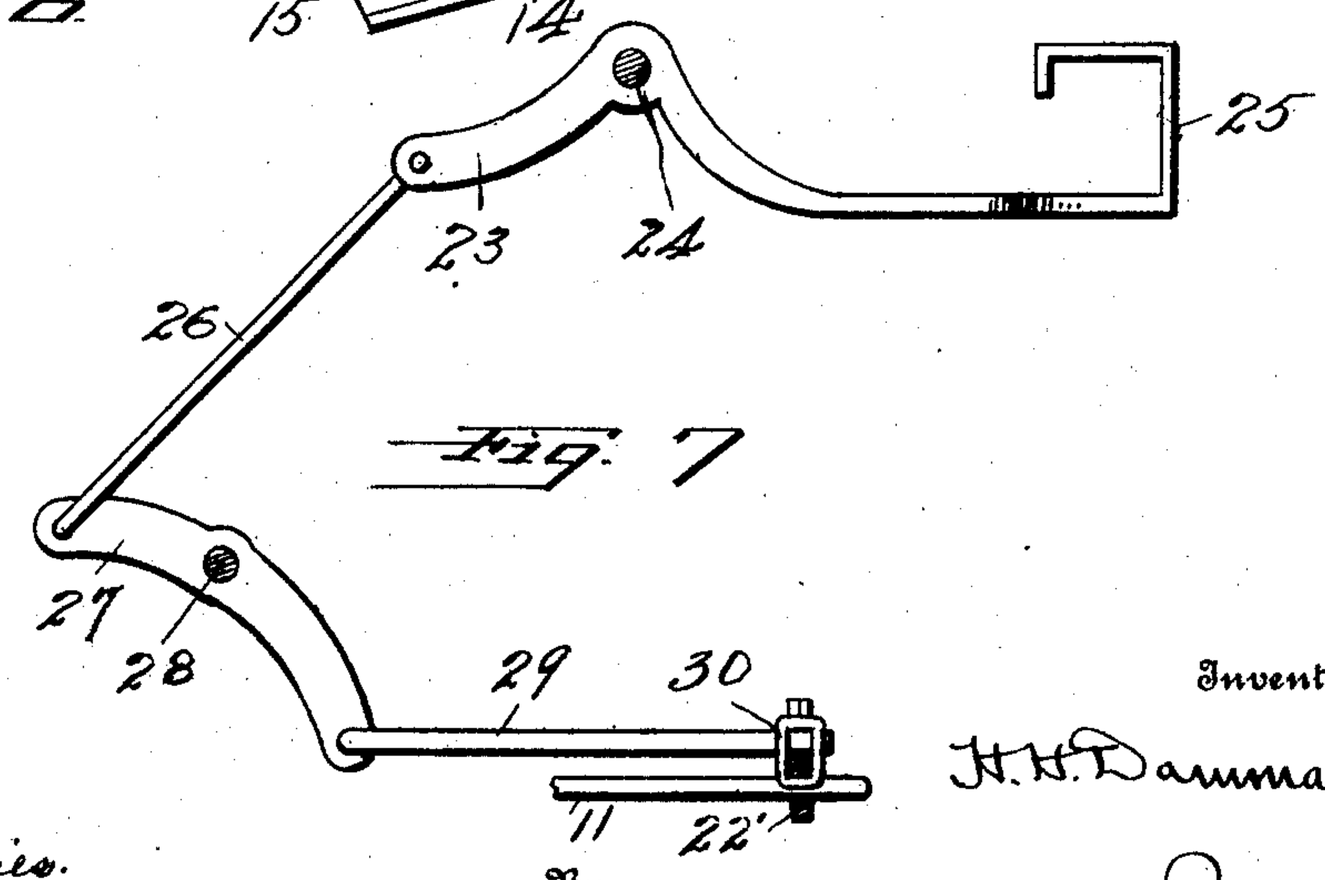


Fig. 7

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UNITED STATES PATENT OFFICE.

HAROLD H. DAMMAN, OF PULLMAN, WASHINGTON.

MOWING-MACHINE.

No. 859,748. Specification of Letters Patent. Patented July 9, 1907.

Application filed September 29, 1905. Serial No. 280,606.

To all whom it may concern:

Be it known that I, HAROLD H. DAMMAN, a citizen of the United States, residing at Pullman, in the county of Whitman and State of Washington, have invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification.

The invention relates to improvements in mowing machines, particularly of the class known as "side cut" machines.

The object of the invention is the production of a more simple and efficient machine of this class, especially in the mechanism for moving or lifting the cutting apparatus of the machine. To this end I employ the usual hand lever located sufficiently near the driver to be manipulated by him for lifting the cutting apparatus, and in addition, provide a foot operated lever or mechanism also adjacent the driver's seat, whereby the desired movement of the cutting apparatus is determined, before the hand lever is used. This foot lever operates indirectly to determine the movement of the gag lever of the machine, whereby the cutting apparatus may be brought to different positions with relation to the frame of the machine.

In the drawings: Figure 1 is a perspective view of so much of a mowing machine as is necessary to show the embodiment of my invention. Fig. 2 is a detail perspective view, as seen from the rear, showing the relation of the pivoted gag lever, the cutting apparatus and its connection with the coupling frame. Fig. 3 is a detail perspective view of the foot lever employed in carrying out my invention. Figs. 4, 5 and 6 are elevations showing the different positions of the finger bar and its correlated elements to be hereinafter specifically referred to, and—Fig. 7 is a plan view of a portion of the gag lever and its associated parts to be hereinafter specifically referred to.

Referring to the drawings, the numeral 1 designates the pair of wheels; 2, the main frame; 3, the tongue; 4, the gearing; 5 and 6 the coupling frame which is pivoted to the main frame in the usual manner; and the numeral 7 indicates the cutting apparatus, the finger bar 8 of which is pivoted in the coupling frame as usual at 9 and provided with the customary shoe 10.

My improvements contemplate a new construction of gag lever, as 11, which is pivoted at 12 to the coupling frame, and also the means for operating the said lever. The lever 11 has at its outer end a hook 13 adapted to engage a lug 14 formed on the finger bar, to hold the cutting apparatus in raised position, when the machine is not in use, and out of the way of obstructions. As seen clearly in Fig. 2, the finger bar is provided with a projecting lug 15 on which lug, when the machine is in use, the lever 11 rests, and this lug affords a bearing surface for the lever 11 during the lever movements of the gag lever.

The depressible hand lever 16 with its hook 17 and extension 18 is pivoted at 19 to the bracket 20 secured on the tongue 3. This lever 16 as usual is for the operation of the gag lever 11, and is connected thereto by means of the pivoted eye 21 and the slotted link bar 22, the slot 22′ of said bar slipping over and engaging the end of the gag lever 11.

For the purpose of restricting the inward movement of the link bar 22, the lever 11 is provided with a lug or stop 11^a as clearly shown in Fig. 1.

The foot lever 23 is pivoted at 24 to the underside of the tongue of the machine, and is provided with an upward extension 25 which projects within easy reach of the foot of the driver of the machine, and said lever 23 swings back and forth in a direction with the length of the tongue.

The lever 23 is connected by rod 26 to one end of the lever arm 27, said arm being pivoted on the coupling frame at 28, and the other arm of said lever 27 is connected by rod 29 to the slotted slide bar 22, the connection being made in any usual manner, as by a link or cord 30, which is passed around the end of the rod 29 and through the slot 22′ in the bar 22. The lever 16 is a depressible lever, and when said lever is depressed the hook 17 pulls up on bar 22. The point where bar 22 pulls up on the gag lever 11, is controlled and determined by means of the foot lever 23, which, through the connections 26, 27, 29, and 30, when operated from the foot portion 25, slides the slotted bar 22 along the lever 11 to the desired position.

The weight of the frame and surrounding parts of the machine including the heel or inner end of the finger bar tend to hold that end of the bar on the ground. Hence, when power is applied to the extreme, or tongue end, of lever 11, with lug 15 as a fulcrum, both the long end of the gag lever and the outer end of the finger bar will be raised, as in Fig. 6, while the heel of the sickle bar remains on the ground. When power is applied to the portion near the pivot of the lever 11, both the long end of the lever and the outer end of the finger bar droop and the heel of the finger bar rises in the air, see Fig. 4. If power is applied at about midway of the lever 11 between its pivot and inner end, the finger bar is caused to rise horizontally as in Fig. 5.

Having thus fully described my invention, what I claim and desire to secure by Letters Patent is:

1. In a mowing machine, the combination with the main frame, the coupling frame and cutting apparatus pivoted therein, of a gag lever pivoted in the coupling frame and adapted to bear on the cutting apparatus, an operating

lever pivoted on the machine, a slidable link bar connecting said operating lever and gag lever, and means for moving said bar to determine the movement of the cutting apparatus.

2. The combination in a mowing machine with the main frame, the coupling frame and cutting apparatus pivoted therein, and a projecting lug formed on the sickle bar of the cutting apparatus, of a gag lever bearing on said lug, an operating lever, a slidable member connecting said operating lever and gag lever, and means for moving said slidable member to determine the movement of the cutting apparatus.

3. In a mowing machine the combination with the frame, the coupling frame and cutting apparatus pivoted therein, of a pivoted gag lever adapted to bear on the cutting apparatus, an operating lever on the machine, a slotted link bar connecting said operating lever and gag lever, and means for moving said slotted link bar to determine the movement of the cutting apparatus.

4. The combination with the main frame, the coupling frame and cutting apparatus pivoted therein and a projecting lug formed on the sickle bar of the cutting apparatus, of a gag lever pivoted on the coupling frame and resting on said lug, an operating lever, a slotted link bar connecting said operating lever and gag lever, and means for moving said slotted link bar to determine the movement of the cutting apparatus.

5. The combination with the main frame, the coupling frame and cutting apparatus pivoted thereto, a pivoted gag lever, an operating lever having a slidable member connected with the gag lever, and a third lever connected with said slidable member and adapted to move the same on the gag lever to determine the movement of the cutting apparatus.

6. The combination with the main frame, the coupling frame and cutting apparatus pivoted therein, a gag lever pivoted in the coupling frame, an operating lever and a slotted bar connected to said operating lever and gag lever, and a third lever connected with the slotted bar adapted to move the same along the gag lever to determine the movement of the cutting apparatus.

7. The combination with the main frame, the coupling frame and the cutting apparatus pivoted therein, and a projecting lug formed on the sickle bar of the cutting apparatus, of a gag lever pivoted in the coupling frame and resting on said lug, an operating lever, a slotted bar connecting said operating lever and gag lever, and a third lever connected with the slotted link bar to move the same on the gag lever to determine the movement of the cutting apparatus.

In testimony whereof I affix my signature in presence of two witnesses.

HAROLD H. DAMMAN.

Witnesses:
W. H. HARVEY,
P. W. KIMBALL.