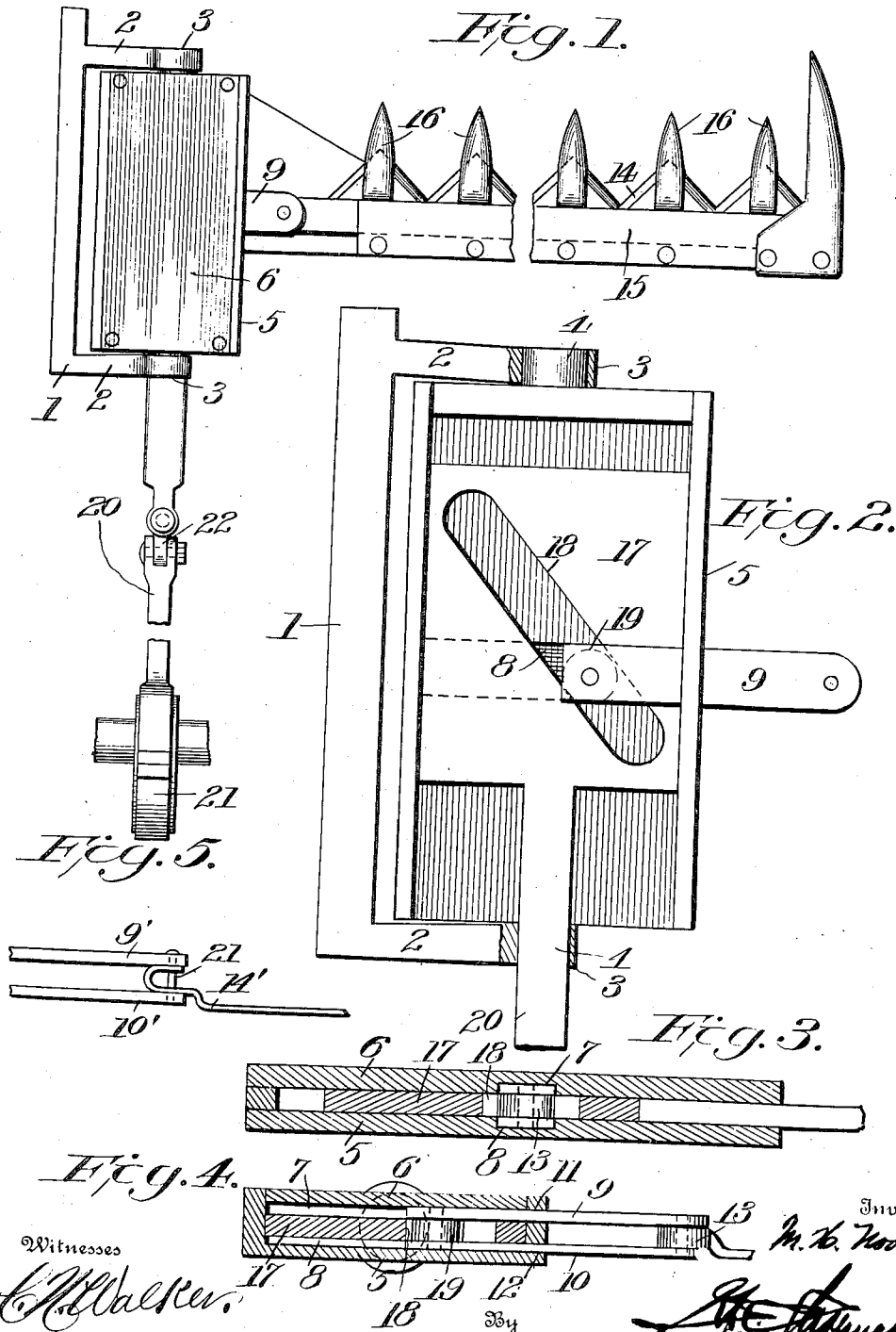


M. H. NOONAN.
MOWING MACHINE.
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966,046.

Patented Aug. 2, 1910.



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MOWING-MACHINE.

966,046.

Specification of Letters Patent.

Patented Aug. 2, 1910.

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To all whom it may concern:

Be it known that I, MICHAEL H. NOONAN, a citizen of the United States, residing at Modesto, in the county of Stanislaus and State of California, have invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification.

This invention relates to mowing machines.

The object of the invention is to provide an improved means for operating the sickle in such a manner as to obviate the use of the ordinary wheel and pitman rod connection, which so frequently breaks and causes the machine to be thrown out of operation for repair.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details, without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a top plan view of a portion of the framework of a mowing machine illustrating my invention applied thereto. Fig. 2 is an enlarged view of the mechanism for operating the sickle bar, the top of the casing which incloses the parts, being removed. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view. Fig. 5 is a modified form of means for connecting the knife bar to the operating pitman.

Referring now more particularly to the accompanying drawings, the reference character 1 indicates a portion of the framework of the mowing machine including the arms 2 provided at their free ends with bearings 3 adapted to receive the journals 4 formed at the ends of the casing 5, the casing 5 having a removable cover 6, whose underface is provided with a groove 7 adapted to aline with a groove 8 in the bottom of the casing to slidably receive the upper and lower members 9 and 10, which project through the slots 11 and 12, respectively, in one side of the casing 5 and between which members 9 and 10, at the outer end thereof, is pivotally or otherwise connected the inner end 13 of the sickle bar 14 mounted be-

tween the guard bars 15, whose fingers 16 project beyond the outer edge of the knife or sickle bar for purposes well known in the art.

Slidably mounted within the casing is a slide 17 provided with an oblique slot 18, in which latter operates a roller 19 carried by and between the inner ends of the aforesaid pitman members 9 and 10, so that as the slide is operated in a manner to be explained, the pitman members 9 and 10 are compelled to move inwardly and outwardly of the casing to reciprocate the sickle bar by virtue of the fact that the aforesaid roller 19 is caused to travel in said oblique slot 18.

One means for operating the slide 17 is to provide it with a projecting arm 20 of an eccentric 21, which is adapted to be geared up to the driving axle of the mowing machine in any well known manner. For purposes of illustration, the arm 20 is shown as operating through the corresponding bearing 3 of the casing 5. The arm 20 has swiveled connection at 22 with the slide 17. This swiveled connection permits the sickle bar to operate efficiently regardless of the angle of the sickle bar or unevenness of the ground.

As a modified form of means for connecting the sickle bar to the pitman members 9 and 10, I bend the inner end of the sickle bar 14' in Fig. 5 in substantially U-shape for engagement with the inner faces of the upper and lower pitman members 9' and 10', and pass therethrough and said members a suitable pivot pin 21.

What is claimed is:—

1. In a mowing machine, a framework, a casing mounted in said framework and said casing having upper and lower grooves and slots in one side communicating with said grooves, upper and lower pitman members mounted for sliding movement through said slots and in said grooves, a roller mounted between said pitman members, a slide mounted for movement in the casing and provided with an oblique slot to embrace said roller to move the pitman members inwardly and outwardly upon movement of the slide, and a sickle bar having connection with said pitman members.

2. In a mowing machine, a framework, a casing mounted on the framework, pitman members movable into and out of the casing, a roller disposed at the inner end of said pitman members, a slide movably mounted

in said casing and provided with an oblique slot to embrace said roller to move the pitman members inwardly and outwardly of the casing when the slide is moved, and a sickle bar having connection with said pitman members.

3. In a mowing machine, a framework, a casing mounted on the framework, a pitman movable into and out of the casing, a roller carried at the inner end of said pitman and confined within the casing, a slide in the casing provided with an oblique slot

to embrace said roller when the slide is reciprocated, and a sickle bar connected to said pitman for reciprocation upon operation of the slide and consequent inward and outward movement of the pitman.

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

MICHAEL H. NOONAN.

Witnesses:

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