

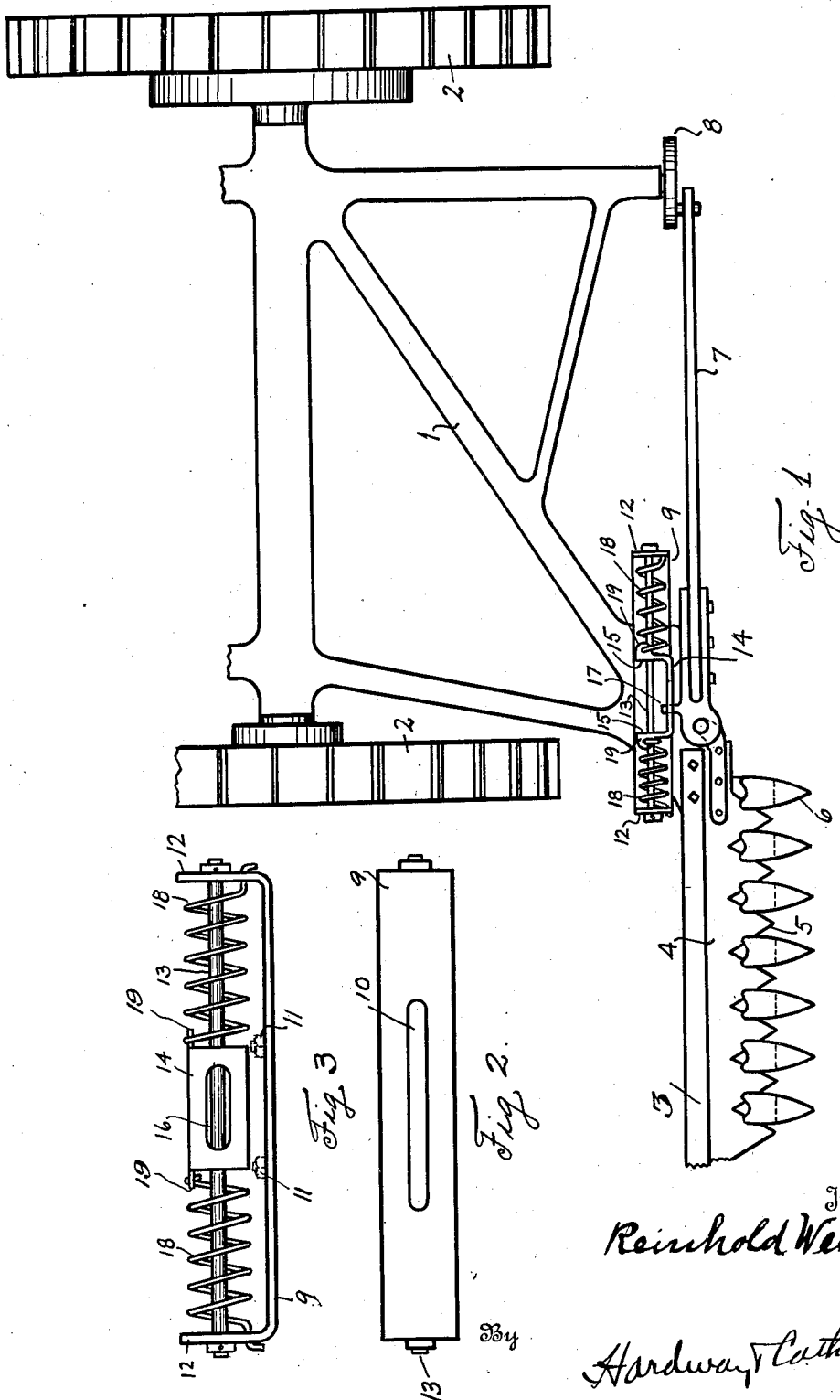
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R. WEIDEMANN

MOWING MACHINE

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REINHOLD WEIDEMANN, OF HOUSTON, TEXAS.

MOWING MACHINE.

Application filed November 9, 1922. Serial No. 599,762.

To all whom it may concern:

Be it known that I, REINHOLD WEIDEMANN, citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Mowing Machines, of which the following is a specification.

This invention relates to new and useful improvements in a mowing machine.

One object of the invention is to provide a mower of the character described equipped with a shock absorbing device, designed and provided for the purpose of reducing the vibration incident to the reciprocation of the cutter bar of the machine.

Another object of the invention is to provide, in a mowing machine, compression springs, which are placed under compression alternately, at the end of each stroke of said bar, and which expand at the beginning of each return stroke of the cutter bar and thereby conduce to the easier and smoother operation of the machine.

With the above and other objects in view the invention has particular relation to certain novel features of construction, operation and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawings, wherein:—

Figure 1 is a fragmentary plan view of a mowing machine with the improved attachment applied thereto.

Figure 2 is a front view of the attachment; and

Figure 3 is a plan view thereof.

In the drawings the numeral 1 designates the framework as a whole which is of conventional construction and which is carried by the wheels 2, 2.

The front part of the frame travels along on the ground surface and fixed to it is the laterally extending guard 3 in which the cutter bar 4 reciprocates. The cutter bar carries the blades 5 which work between the guard fingers 6. The cutter bar and blades are reciprocated by means of a pitman 7, one end of which is pivoted to the inner end of the cutter bar and the other end of which is connected to the eccentric 8. The above described parts are conventional, being in common use in mowers.

The improved attachment will now be described:—Fixed on the front end of the frame 1 there is a bracket 9 which has a

long slot 10 to receive the securing bolts 11, 11 providing for the adjustment of said bracket. The ends of the bracket are upturned forming bearings 12, 12 for the ends of the bearing rod 13. Mounted on the rod 13 there is a slidable bracket 14, substantially U-shaped in form and provided with the end bearings 15, 15 which work on said rod. The slidable bracket has an oblong bearing slot 16 in which the finger 17, carried by said pitman, works.

Spiralled springs 18, 18 are interposed between the bearings 12 and the respective opposing ends of the sliding bracket 14.

The outer ends of these springs fit through holes in the bearings 12 and are clinched and the springs surround the rod 13 and their inner ends are fitted through holes in the lateral ears 19, 19 of the sliding bracket.

During the reciprocation of the pitman the finger 17 moves idly in the slot 16 to nearly the end of its stroke. Thereafter it operates to compress the corresponding spring, and when the pitman passes center the expansion of said compressed spring assists in the back stroke of the pitman and cutter bar. The springs thus serve as cushions at the end of each stroke to reduce vibration and also form auxiliary means to assist in driving the cutter bar.

It is to be noted that the springs 18 are so connected that when one is placed under compression the other will be placed under tension so that the springs will work in unison both to reduce the vibrations incident to the reciprocation of the cutter bar as well as to assist in the back stroke of said bar in each direction immediately after the pitman has passed center. The bearings of the mower, particularly the eccentric and pitman rod bearing being thus relieved of excessive vibration will not wear out so quickly, and the life of the entire mower will thus be materially increased.

What I claim is:—

1. In a mowing machine the combination with a cutter bar and pitman, of a cushion member for said cutter bar including a bracket provided with an elongated slot, securing bolts fitted through said slot; the ends of said bracket being upturned, forming bearings, a bearing rod having its ends mounted in said bearings; a slidable bracket having end bearings which work on said rod, and being provided with an oblong slot;



spiralled springs interposed between the bearings of the first named bracket, and the corresponding ends of the slidable bracket, and a finger carried by the pitman of said machine and working in the slot of said slidable bracket.

2. In a mowing machine having a frame, the combination with a cutter bar and a pitman, of a cushion member for the cutter bar, said cushion member including an adjustable bracket having an oblong slot to receive securing bolts through which said bracket is attached to the machine frame, the ends of said bracket being upturned forming bearings, a bearing rod having its ends mounted in said bearings, a slidable bracket having end bearings which work on

said rod, said slidable bracket having an oblong bearing slot, a finger carried by the pitman of the machine and working in said oblong slot, spiralled springs interposed between the respective bearings of the adjustable bracket and the slidable bracket, the respective ends of said springs being attached to said slidable bracket and to the bearings of the adjustable bracket.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

REINHOLD WEIDEMANN.

Witnesses:

W. H. DUNLAY,
E. V. HARDWAY.