



No. 707,981.

Patented Aug. 26, 1902.

P. L. SHEPLER.  
MOWING MACHINE.

(Application filed June 19, 1900. Renewed Feb. 3, 1902.)

(No Model.)

2 Sheets—Sheet 2.

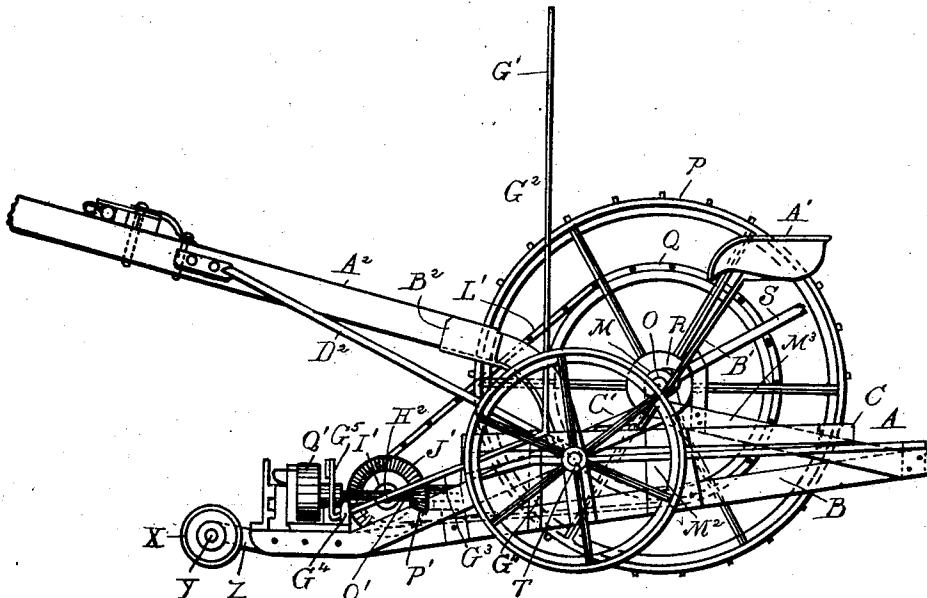


Fig 2.

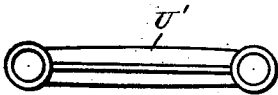


Fig 6.

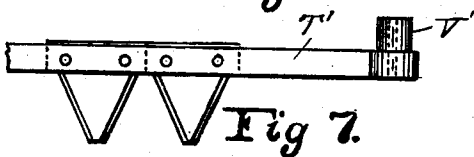


Fig 7.

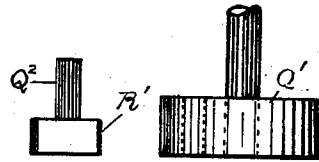


Fig 3. Fig 4.

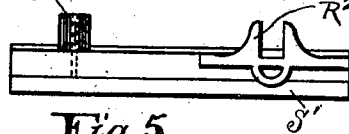


Fig 5.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

PIUS L. SHEPLER, OF TOLEDO, OHIO.

## MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 707,981, dated August 26, 1902.

Application filed June 19, 1900. Renewed February 3, 1902. Serial No. 92,344. (No model.)

*To all whom it may concern:*

Be it known that I, PIUS L. SHEPLER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the novel construction of a mowing-machine, and in the peculiar combination and arrangement of its various parts, as will more fully be pointed out and shown in the drawings, in which—

Figure 1 is a plan view of the machine. Fig. 2 is a side elevation thereof. Figs. 3, 4, 5, and 6 are detached plan views of parts of the drive mechanism for the cutter; and Fig. 7 is a similar view of a portion of the sickle-bar.

In the drawings thus briefly described the reference-letter A designates the supporting-frame of the machine, which comprises in its construction a rectangular framework B and an outrigger in the form of a triangular frame C, which projects some distance beyond one side of the rectangular or main frame, as shown. One of the members D of the triangular frame referred to is provided with an angular bent portion E, which extends across the side members F and G of the rectangular frame, at one end of the latter, and acts as a brace to hold the same in place. The complementary member I of the frame C is provided with a similar bent portion I', which connects the side members of the framework B at its ends, as plainly indicated in Fig. 1. To further strengthen the rectangular frame, I provide a brace J therefor, which extends diagonally from side to side, as shown.

M M' designate tubular bearings supported upon uprights M<sup>2</sup>, which in turn are braced to the rectangular framework by truss-bars M<sup>3</sup>.

O is an axle journaled within the bearings just referred to, which carries loosely sleeved thereon the usual traction-wheel P, as indicated in Fig. 2.

Q is a sprocket-wheel fixed to the axle O, and R is the usual clutch mechanism, controlled by a suitable lever S, for connecting the traction-wheel to the shaft to permit of the cutter being operated.

The reference-letter T designates the guide-wheel axle, which is arranged upon the supporting-frame in advance of and below the traction-wheel axle, as plainly shown in Fig. 2. This axle is at its inner end journaled in a suitable bearing U upon the rectangular framework and at its outer end in a bearing V, located at the junction of the members I and D of the triangular frame. The guide-wheel W, which is of considerably less diameter than the traction-wheel, is journaled upon the end of the axle T, which projects beyond the bearing.

The forward end of the rectangular frame is supported by rollers X X upon a suitable axle Y, journaled within bearings Z, which project beyond the rectangular frame, as shown.

From the foregoing description of the arrangement of the wheeled axles it will be readily seen that by placing the same in different horizontal planes, as described, the center of gravity of the machine will be at a point intermediate the axles, and thus the tipping of the framework forwardly or rearwardly is prevented.

The seat A' of the machine is located upon an upwardly-extending seat-bar B', the lower end of which is provided with a foot C', which is adjustably secured to a brace-bar D', connecting the side members of the triangular frame. The adjustable connection between the foot referred to and the brace-bar is of very simple construction, consisting merely of a bolt E', which is adapted to extend through the foot and through a slot F', formed in the bar. As shown in Fig. 1, the slot is of considerable length, which permits the seat to be moved either forwardly or rearwardly for a considerable distance to or beyond either of the wheeled axles. By constructing the seat in this manner I am enabled to locate the same upon the frame at a point in convenient relation to the levers that are to be operated. In addition to this, however, the seat can be placed in such a position that the operator by throwing his weight suddenly rearwardly and grasping the lever G', hereinafter referred to, is enabled to lift the rollers at the forward end of the supporting-frame from off the ground to avoid obstructions in the path of the machine.

H<sup>2</sup> is a stub-shaft journaled in suitable bearings I' upon the forward end of the rectangular frame, and J' is a bevel gear-wheel upon one end of said shaft.

5 K' is a sprocket-wheel secured centrally to the shaft referred to, and L' is a sprocket-chain connecting the wheel K' with the sprocket-wheel Q.

10 O' is a shaft journaled at right angles to the shaft H<sup>2</sup>, which carries a bevel-pinion P', that meshes with the bevel-gear referred to. Upon the end of the latter shaft is a disk-crank Q', Fig. 4, in which is swiveled a pin Q<sup>2</sup>.

15 R' is a block fixed upon the outer end of the pin, which reciprocates vertically in a plate R<sup>2</sup> upon a head S', arranged for sliding movement in suitable guides upon the platform.

20 T' represents the sickle-bar of the cutter L, and U' is a link connecting said sickle-bar with the sliding head, the link engaging lugs or pins V', which extend from the devices that are to be connected.

25 In operation when it is desired to actuate the cutter the lever S of the clutch mechanism is operated to permit of motion being imparted by the traction-wheel through the mechanism just described to the sickle-bar, and the latter is reciprocated in the usual 30 manner.

The cutter L is pivotally connected to the rectangular frame in any suitable manner to permit of its being raised and supported against the draft-bar when the machine is 35 not in use.

40 The lever G' comprises in its construction an upright portion G<sup>2</sup>, an inclined portion G<sup>3</sup>, journaled in bearings G<sup>4</sup> upon the rectangular frame, and an upright portion G<sup>5</sup>, the lower end of which is secured to a connecting-rod G<sup>6</sup>, Fig. 1. The rod last referred to is secured to a bracket-arm G<sup>7</sup> upon the cutter. The parts are so arranged that by a rocking movement of the lever G' toward the

45 guide-wheel the cutter will be raised from the ground and folded upon the supporting-frame of the machine.

One of the essential objects of the present invention is to so construct and arrange the draft appliances for the mowing-machine 50 that the line of draft will be as nearly as possible in the plane of operation of the cutter, so that the tendency of the latter being forced into the ground will be overcome. To accomplish this object, the draft-bar A<sup>2</sup> is secured to the lower wheeled axle and a pivotal connection is formed between the bar 55 and said axle, so that the weight of the machine will not be borne by the horses, as is usually the case where the draft-bar is fixed to the supporting-frame. The bar A<sup>2</sup> is provided at its inner end with a casting B<sup>2</sup>, which terminates in a sleeve C<sup>2</sup>. This sleeve is engaged over the guide-wheel axle, as 65 shown, forming the pivotal connection referred to. The draft-bar is also provided with a brace D<sup>2</sup>, at the inner end of which is the sleeve E<sup>2</sup>, which engages the axle T. A collar F<sup>2</sup>, fixed upon the axle, prevents lateral movement of the draft-bar. 70

What I claim as my invention is—

In a mowing-machine, the combination with the supporting-frame, two wheeled axles thereon, one below and in advance of the 75 other, rollers at the forward end of the supporting-frame, a draft-bar having its inner end pivotally connected to the lower wheeled axle, and a brace for the draft-bar extending from the latter to and having a pivotal connection with the lower axle, substantially as 80 and for the purpose described.

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

PIUS L. SHEPLER.

Witnesses:

M. B. O'DOHERTY,  
H. C. SMITH.