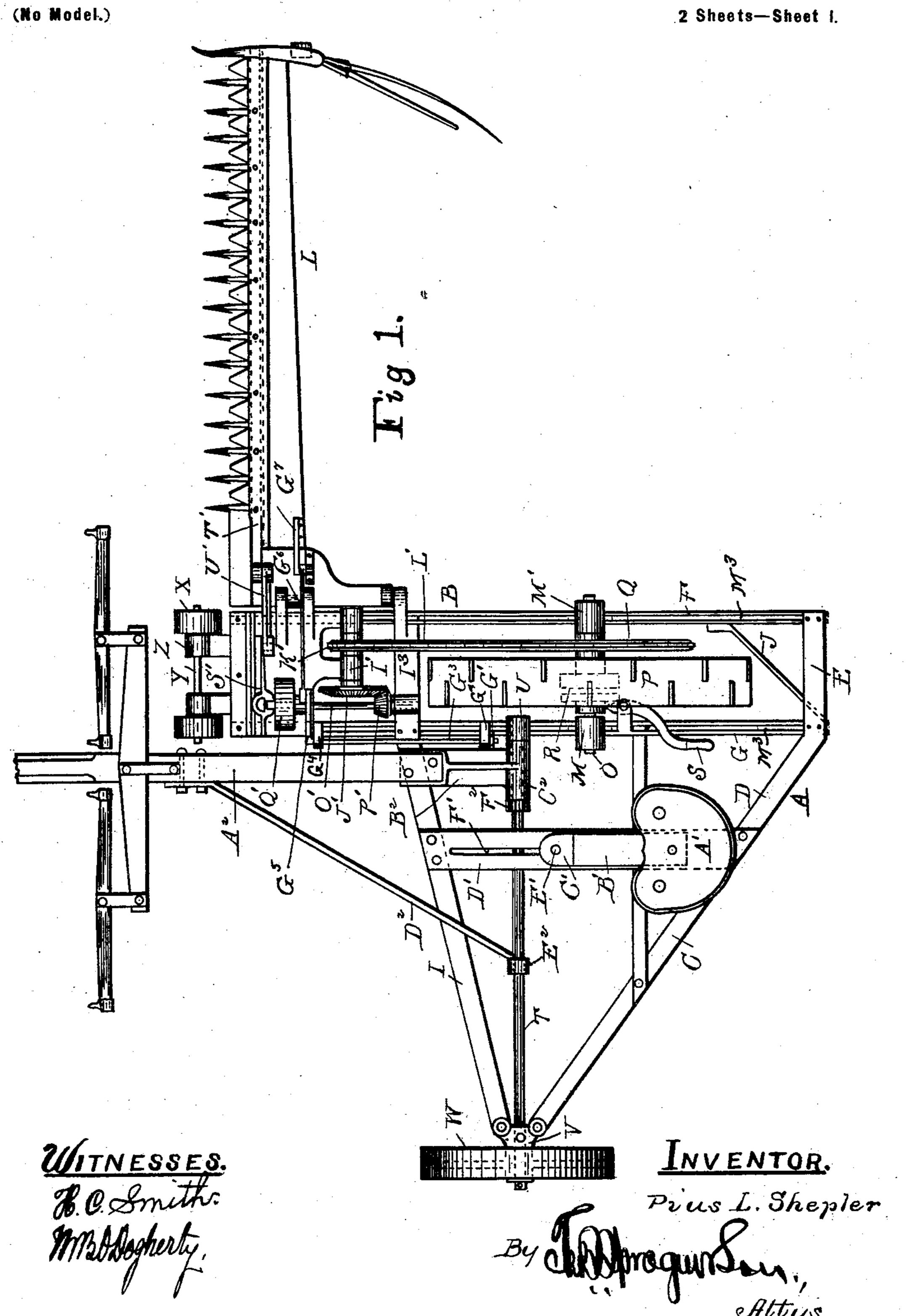
P. L. SHEPLER.

MOWING MACHINE.

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



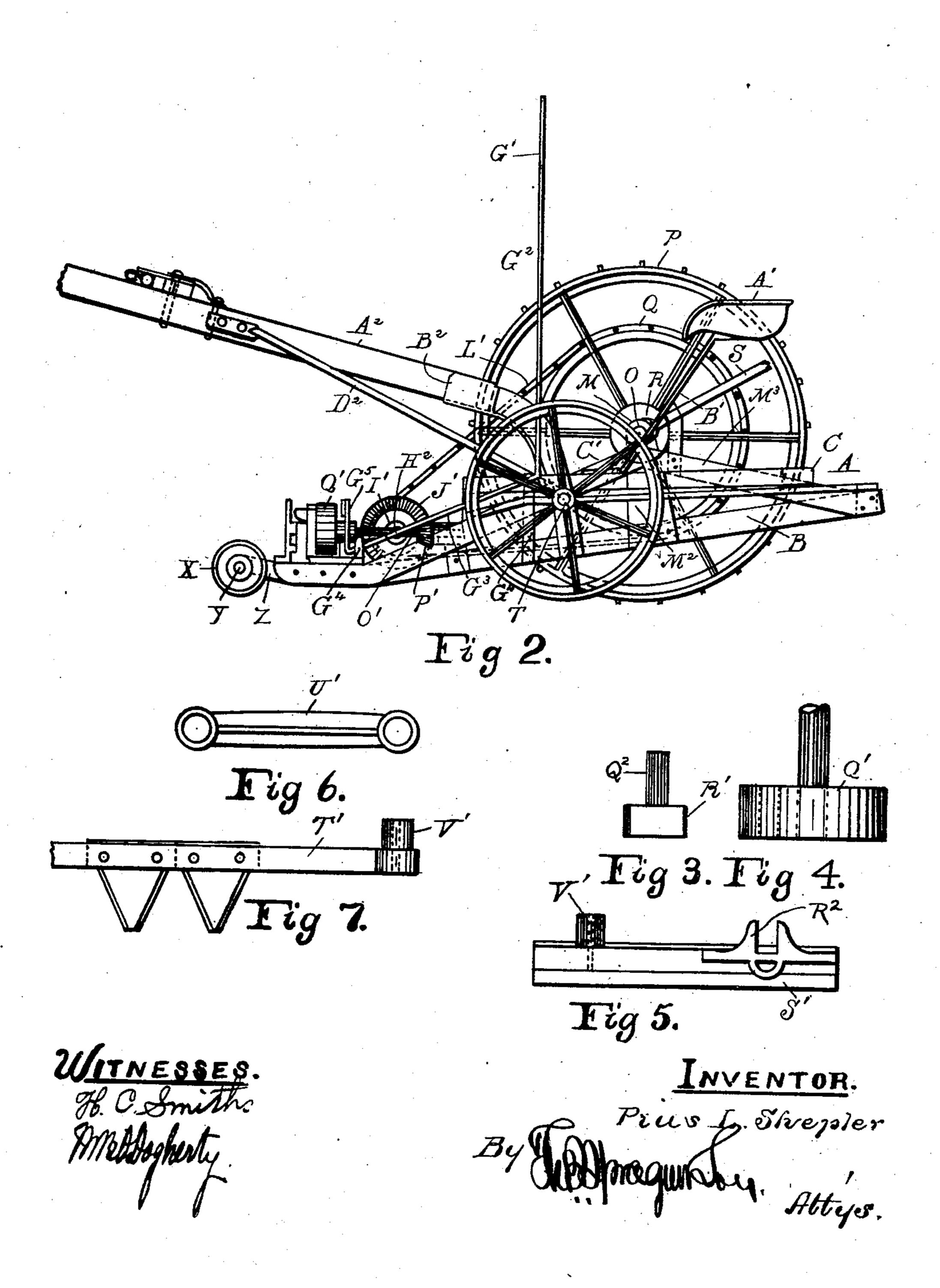
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(No Model.)

2 Sheets-Sheet 2.



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-20 bar.

In the drawings thus briefly described the reference-letter A designates the supportingframe of the machine, which comprises in its construction a rectangular framework B and 25 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 30 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 pro-35 vided with a similar bent portion I3, 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 40 diagonally from side to side, as shown.

M M' designate tubular bearings supported upon uprights M², which in turn are braced to the rectangular framework by truss-bars M³.

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 55 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 60 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 75 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 80 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 85 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 90 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 con- 95 venient 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', herein- 100 after 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.

H² 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.

K' is a sprocket-wheel secured centrally to the shaft referred to, and L' is a sprocketchain connecting the wheel K' with the

sprocket-wheel Q.

O' is a shaft journaled at right angles to 10 the shaft H2, which carries a bevel-pinion P', that meshes with the bevel-gear referred to. Upon the end of the latter shaft is a diskcrank Q', Fig. 4, in which is swiveled a pin Q2.

R' is a block fixed upon the outer end of 15 the pin, which reciprocates vertically in a plate R² upon a head S', arranged for sliding movement in suitable guides upon the platform.

T' represents the sickle-bar of the cutter L, 20 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.

In operation when it is desired to actuate 25 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

The lever G' comprises in its construction

35 not in use.

an upright portion G2, an inclined portion G3, journaled in bearings G4 upon the rectangular frame, and an upright portion G5, the in presence of two witnesses. 40 lower end of which is secured to a connecting-rod G⁶, Fig. 1. The rod last referred to is secured to a bracket-arm G7 upon the cutter. The parts are so arranged that by a

rocking movement of the lever G' toward the

guide-wheel the cutter will be raised from the 45 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 A2 is se- 55 cured to the lower wheeled axle and a pivotal connection is formed between the bar 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 60 to the supporting-frame. The bar A² is provided at its inner end with a casting B2, which terminates in a sleeve C². This sleeve is engaged over the guide-wheel axle, as shown, forming the pivotal connection re- 65 ferred to. The draft-bar is also provided with a brace D², at the inner end of which is the sleeve E², which engages the axle T. A collar F², fixed upon the axle, prevents lateral movement of the draft-bar.

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 other, rollers at the forward end of the sup- 75 porting-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

PIUS L. SHEPLER.

Witnesses:

M. B. O'DOGHERTY,

H. C. SMITH.