

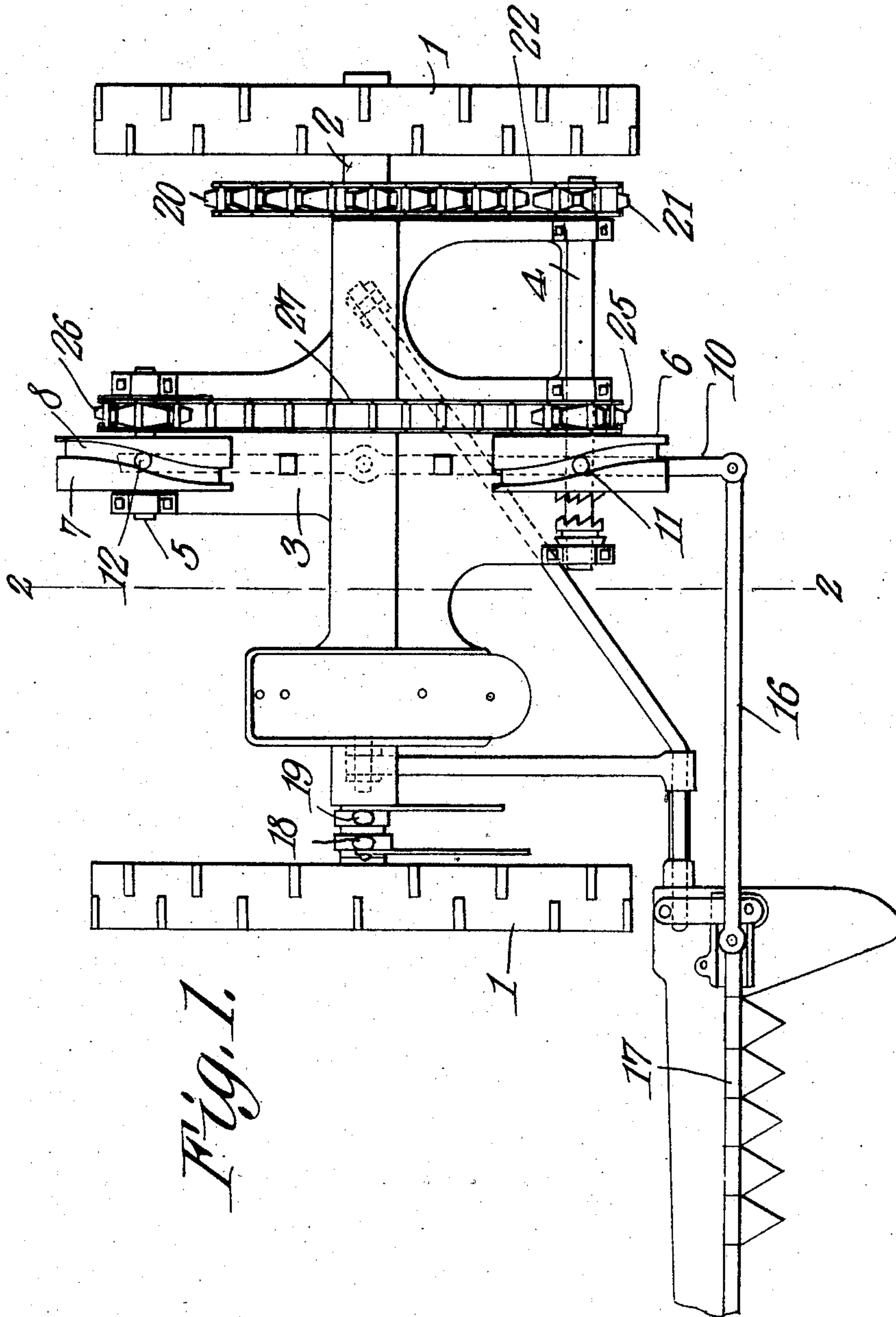
No. 865,241.

PATENTED SEPT. 3, 1907.

C. A. DARRAH.
SICKLE DRIVE FOR MOWERS AND THE LIKE.

APPLICATION FILED JAN. 24, 1907.

2 SHEETS—SHEET 1.



WITNESSES:

E. J. Stewart
Wm. J. Stewart

Charles A. Darrah, INVENTOR.

By *C. A. Snow & Co.*
ATTORNEYS

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2 SHEETS—SHEET 2.

Fig. 2.

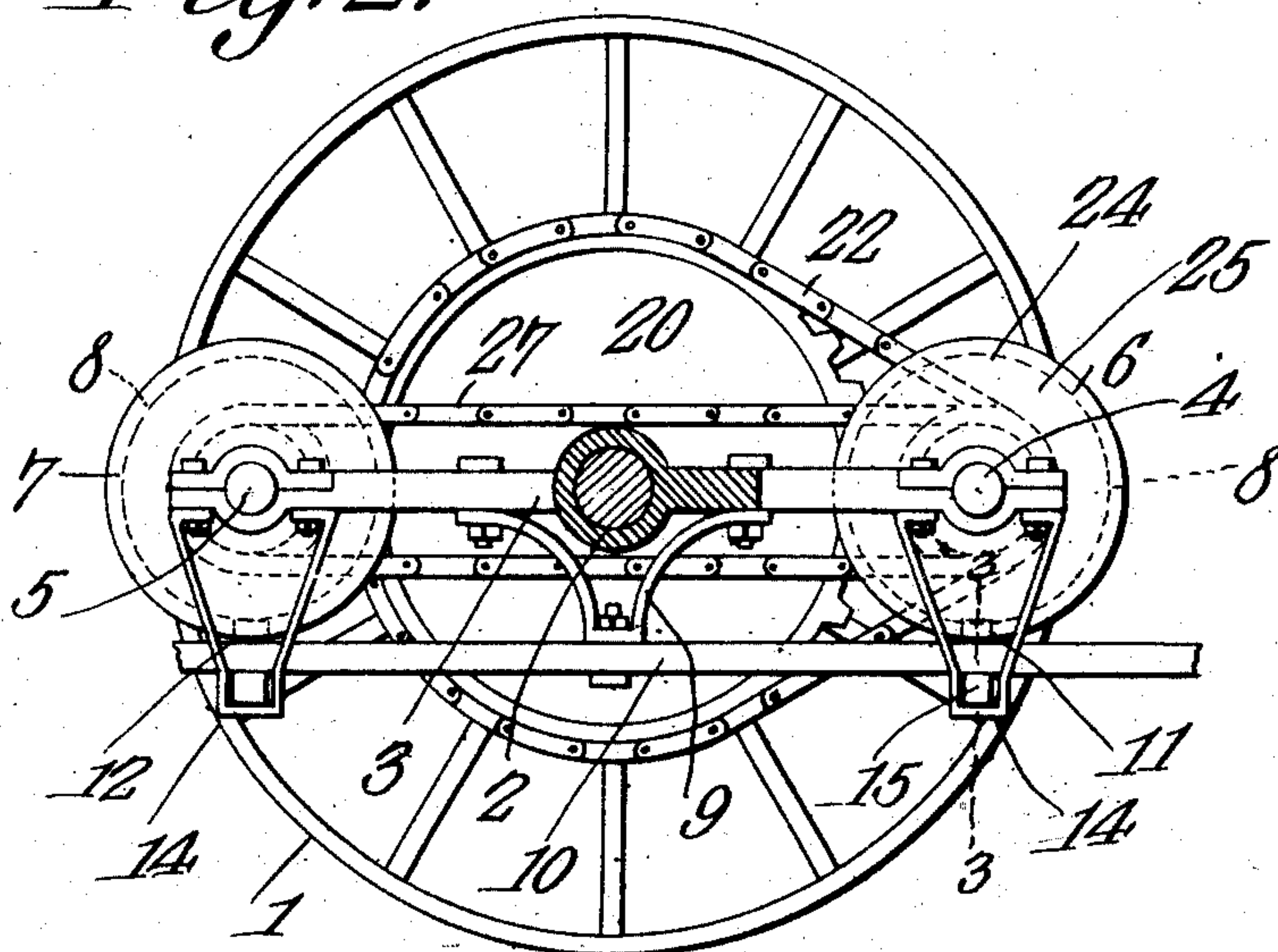
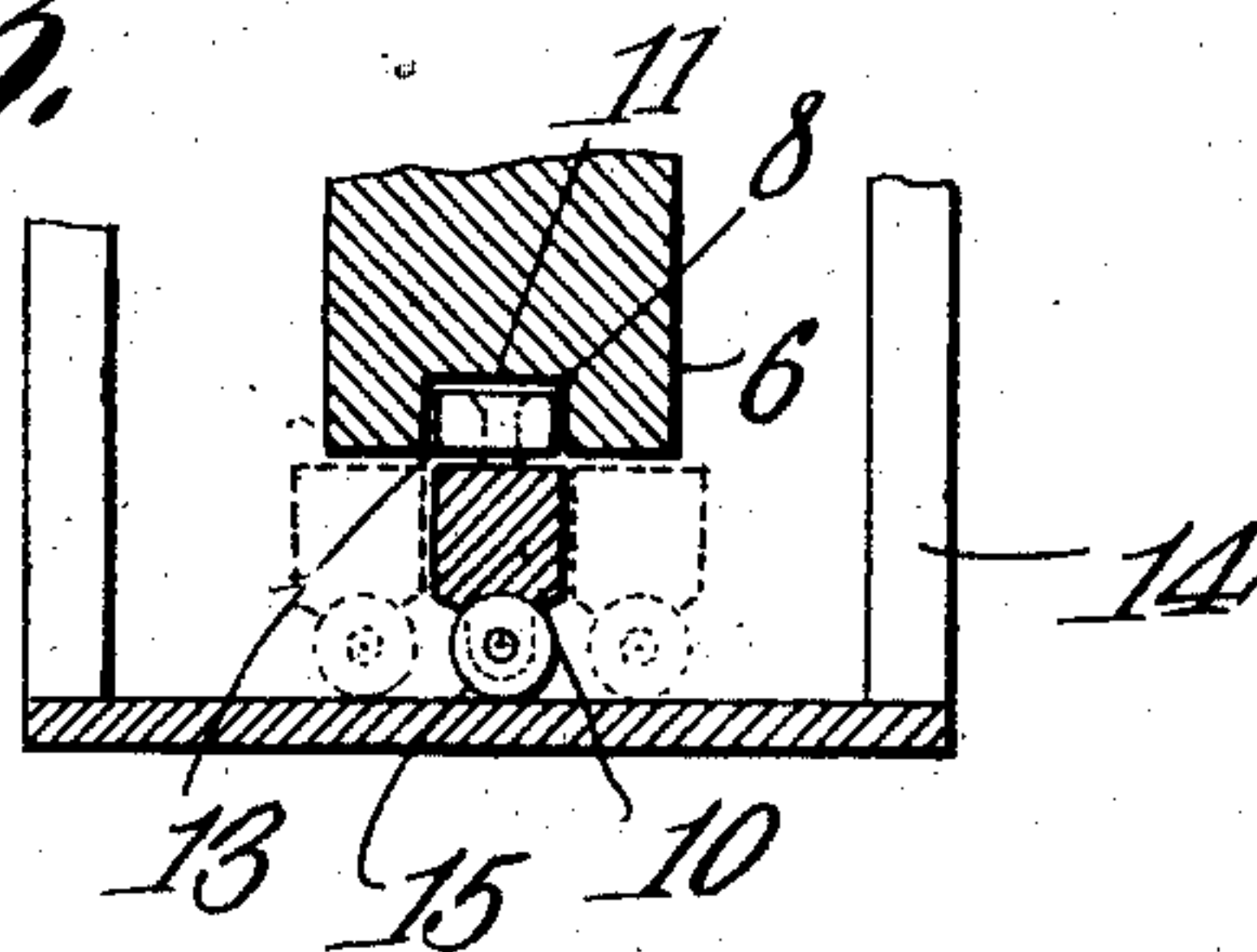


Fig. 3.



WITNESSES:

E. J. Stewart
J. H. Smith

Charles A. Darrah,
INVENTOR.

By *CA Snow & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES AARON DARRAH, OF OTTUMWA, IOWA.

SICKLE-DRIVE FOR MOWERS AND THE LIKE.

No. 865,241.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed January 24, 1907. Serial No. 353,855.

To all whom it may concern:

Be it known that I, CHARLES AARON DARRAH, a citizen of the United States, residing at Ottumwa, in the county of Wapello and State of Iowa, have invented a new and useful Sickle-Drive for Mowers and the Like, of which the following is a specification.

This invention has relation to sickle drive mechanisms for mowers and the like and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide means for reciprocating the sickle bar of an implement indicated in a positive and efficient manner and at the same time requiring the expenditure of a minimum amount of initial energy and also minimizing the friction between the several moving parts.

In the accompanying drawing:—Figure 1 is a top plan view of the sickle drive. Fig. 2 is a vertical sectional view of the same, and Fig. 3 is a section of a portion of the same cut on the line 3—3 of Fig. 2.

In the accompanying drawing the device is applied to a mower of usual type and in which the traction wheels 1 are mounted upon the axle 2. The frame 3 is also mounted upon the said axle in the usual manner. The countershaft 4 is journaled upon the frame 3 in parallel relation with the axle 2 and the stub shaft 5 is journaled upon the frame 3 in parallel relation to the axle 2. The said shafts 4 and 5 are located upon opposite sides of the axle 2 and at equal distances from the same. The disk 6 is fixed to the shaft 4 and the disk 7 is fixed to the shaft 5. Each of said disks is provided in its periphery with a cam groove 8 and the said grooves are so related to each other in position or disposition that the outwardly extending portion of one groove is lowermost at the same time that the inwardly extending portion of the other groove is lowermost and vice versa. The bracket 9 depends from the frame 3 and the lever 10 is fulcrumed to the said bracket at a point midway between the shafts 4 and 5. The said lever 10 is provided with the studs 11 and 12 which enter the grooves 8 of the disks 6 and 7 respectively. The said studs are surrounded by friction rollers 13. The hangers 14 also depend from the frame 3 and within said hangers are located the rollers 15 which are journaled on the lever 10 and which reduce the friction which otherwise would result from the oscillation of the said lever. The sickle bar pitman 16 is pivotally connected at one end to the extended end of the lever 10 and at its other end pivotally connected to the sickle

bar 17 in the usual manner. The implement is provided with the levers 18 and 19 for raising the sickle bar and for swinging the same. The sprocket wheel 20 is fixed to the axle 2 and the sprocket wheel 21 is fixed to the shaft 4. The sprocket chain 22 passes around the wheels 20 and 21. When the vegetation is thin movement is transmitted from the axle 2 through the sprocket wheel 20, chain 22, sprocket wheel 21 to the countershaft 4 which rotates the disk 6 and oscillates the lever 10. The sprocket wheel 25 is fixed to the countershaft 4 in alinement with the sprocket wheel 26 which is fixed to the stub shaft 5. The sprocket chain 27 passes around the wheels 25 and 26.

Having described my invention what I claim as new and desire to secure by Letters-Patent is:—

1. A sickle drive for mowers and the like, comprising a frame, a sickle bar, two disks journaled for rotation upon the frame, said disks having cam grooves the inner portion of one of which is lowermost when the outer portion of the other is lowermost and vice versa, a lever fulcrumed at a point equidistant of said disks and having studs which enter said grooves, a pitman connected at one end to said lever and at its other end to the sickle bar and means for rotating the said disks.

2. A sickle drive for mowers and the like, comprising a frame, a sickle bar, a plurality of disks journaled for rotation upon the frame, said disks having cam grooves, a lever fulcrumed to the frame at a point between said disks and having studs which enter said grooves, a sickle bar pitman connecting said lever with the sickle bar and means for rotating the said disks.

3. A sickle drive for mowers and the like, comprising a frame, a sickle bar disks journaled for rotation upon the frame, said disks having cam grooves, a lever fulcrumed to the frame of the implement at a point between said disks, rollers journaled upon and supporting said lever, a sickle bar pitman connecting the lever with the sickle bar and means for rotating said disks.

4. A sickle bar drive for mowers and the like comprising a frame, a sickle bar, an axle, traction wheels mounted thereon, shafts located upon opposite sides of the axle, a sprocket wheel fixed to the axle, a sprocket wheel fixed to one of said shafts, a sprocket chain passing around the said sprocket wheels, sprocket wheels located upon said shafts in alinement with each other, a sprocket chain passing around the last said sprocket wheels, disks mounted upon said shafts, said disks having cam grooves, a lever fulcrumed to the frame and having studs which enter said grooves and a sickle bar pitman connecting said lever with the sickle bar of the implement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES AARON DARRAH.

Witnesses:

MABLE JAQUES,
W. H. C. JAQUES.