

No. 748,236.

PATENTED DEC. 29, 1903.

F. TUVELL.
PITMAN FOR MOWERS OR REAPERS.
APPLICATION FILED SEPT. 16, 1903.

NO MODEL.

Fig. 1.

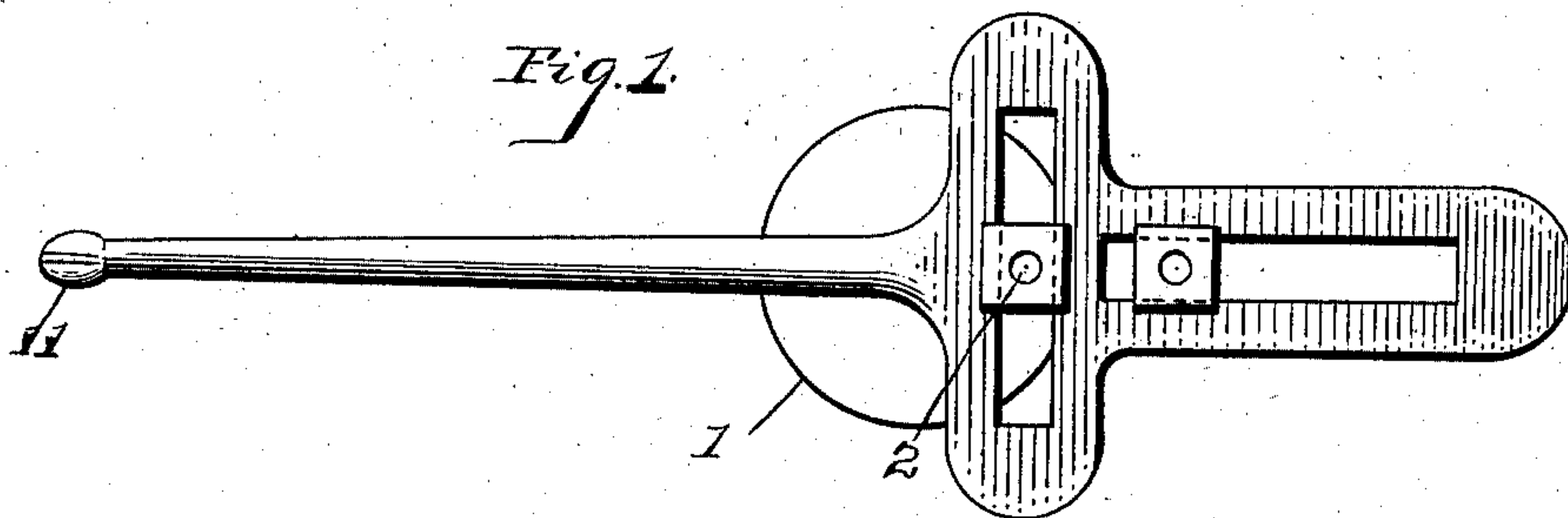


Fig. 2.

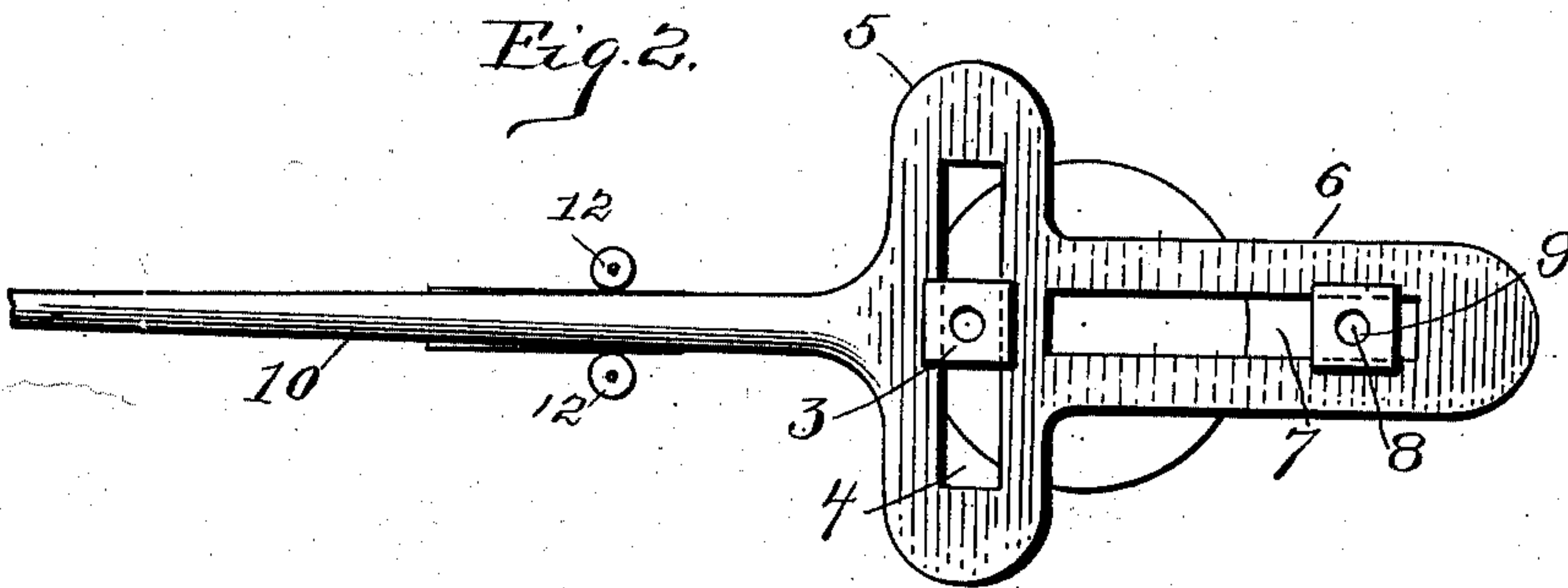
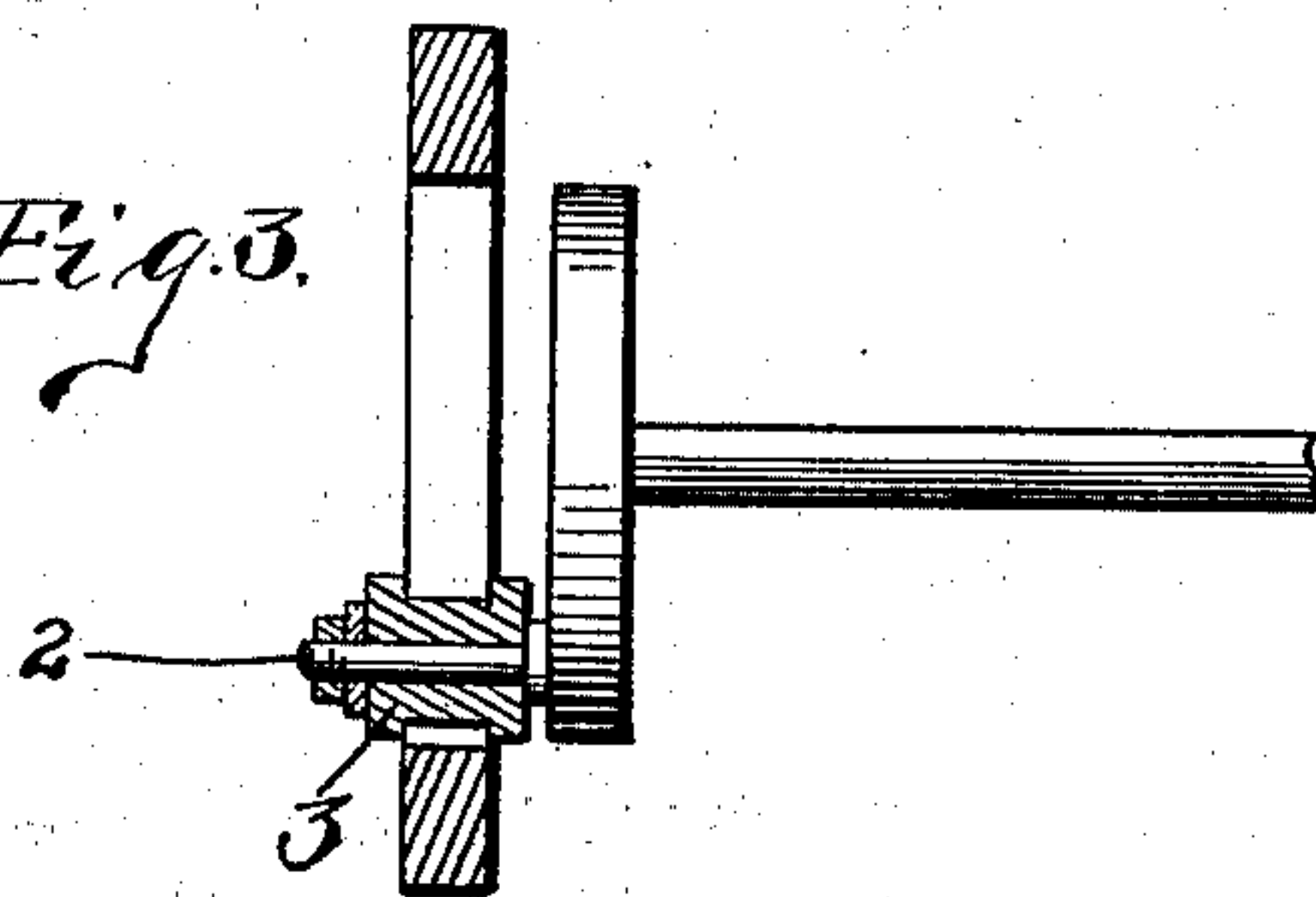


Fig. 3.



Inventor
Frank Tuvell.

Witnesses
H. C. Lederer.
S. W. Fitzgerald.

By *W. J. Fitzgerald*
Attorneys

UNITED STATES PATENT OFFICE.

FRANK TUVELL, OF BINFORD, NORTH DAKOTA.

PITMAN FOR MOWERS OR REAPERS.

SPECIFICATION forming part of Letters Patent No. 748,236, dated December 29, 1903.

Application filed September 16, 1903. Serial No. 173,452. (No model.)

To all whom it may concern:

Be it known that I, FRANK TUVELL, a citizen of the United States, residing at Binford, in the county of Griggs and State of North Dakota, have invented certain new and useful Improvements in Pitmen for Mowers or Reapers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to pitmen, and more particularly to a pitman which is especially adapted for use in driving a sickle either upon a mover or reaper; and my invention consists of certain novel features of combination and construction of parts, the preferred form whereof will be hereinafter clearly set forth, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a side elevation of my improved pitman ready for use upon an ordinary mower or reaper. Fig. 2 shows a similar view thereof in a different position relative to the driving-wheel. Fig. 3 shows a sectional view taken on the median line of the vertical slot carried by the pitman-head.

For convenience in referring to the details of my invention and accessories and in order to show a practical application thereof to use numerals will be employed, the same numeral applying to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates a driving-wheel common to all reaping-machines and having a wrist-pin 2, provided with an antifriction-block 3, designed to fit snugly within the vertical guide-way 4 of the pitman-head 5. The pitman-head is substantially T-shaped and therefore provided with the stem or extension 6, also having a slotted opening 7, which is disposed, substantially, at right angles to the slotted opening 4, hereinbefore mentioned. The slotted opening 7 is utilized to sustain the pitman in a horizontal plane, though permitting it to reciprocate incident to its use. I therefore provide upon a contiguous part of the frame of the machine (not shown) a stub-shaft or lug 8, upon which I locate the guiding-block 9 of proper size to fit within

the slotted opening 7, the blocks 3 and 9 being similarly constructed, inasmuch as they are provided with suitable projecting flanges to prevent the pitman from casually slipping off of the same. The pitman-rod proper, 10, is also integrally formed with the head 4 and may be connected in any preferred way with the sickle-bar, as by providing upon the free end of the pitman a spherical head 11, adapted to fit a suitable socket in the end of the sickle, whereby a minimum friction will be produced.

By the construction and method of mounting or securing my pitman-rod in position it is obvious that it will be reciprocated by the driving-wheel 1 in a true horizontal plane or in the same plane occupied by the sickle, thereby at all times bringing the requisite degree of force to bear upon the sickle and obviating dead-centers and inequalities of thrust.

If desired, suitable guiding-wheels or antifriction-rollers 12 may be attached to a suitable part of the frame, whereby the end of the pitman 10 will be sustained or guided incident to the operation thereof, though I reserve the right to wholly omit said antifriction-rollers or employ them as I may find most desirable in practice. It will thus be seen that while the driving disk or wheel 1 and the wrist-pin will be rotated and the wrist-pin 2 driven in a circle the pitman will be driven so as to always occupy substantially the same horizontal plane, and thereby communicate its force directly to the sickle, thereby insuring the maximum delivery of force, and while I have described the preferred combination and construction of parts deemed necessary in materializing my invention I desire to comprehend in this application all substantial equivalents and substitutes that may be considered as fairly falling within the scope of my invention.

Believing that the advantages and manner of constructing my improved pitman and driving mechanism therefor have been made fully apparent, further description is deemed unnecessary.

What I claim as new, and desire to secure by Letters Patent, is—

The herein-described attachment for mowers, reapers or the like, comprising the driv-

ing-wheel 1, a wrist-pin and a block 3 rotatably secured to said wrist-pin, in combination with a pitman having two slots arranged at right angles to each other, the slot 4 being
5 adapted to receive said block 3 upon the wrist-pin; a suitable journal or lug 8 and a guiding-block 9 carried thereby, said parts adapted to be secured to a fixed part of the frame, said guiding-block 9 operating in the
10 other of said slots; a pitman extending from said head and suitable means to guide the

same whereby when the wrist-pin is driven in a circle the pitman will be reciprocated in a plane common to the circle substantially as specified and for the purpose set forth. 15

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

FRANK TUVELL.

Witnesses:

A. G. BONHUS,
F. B. WHITCOMB.