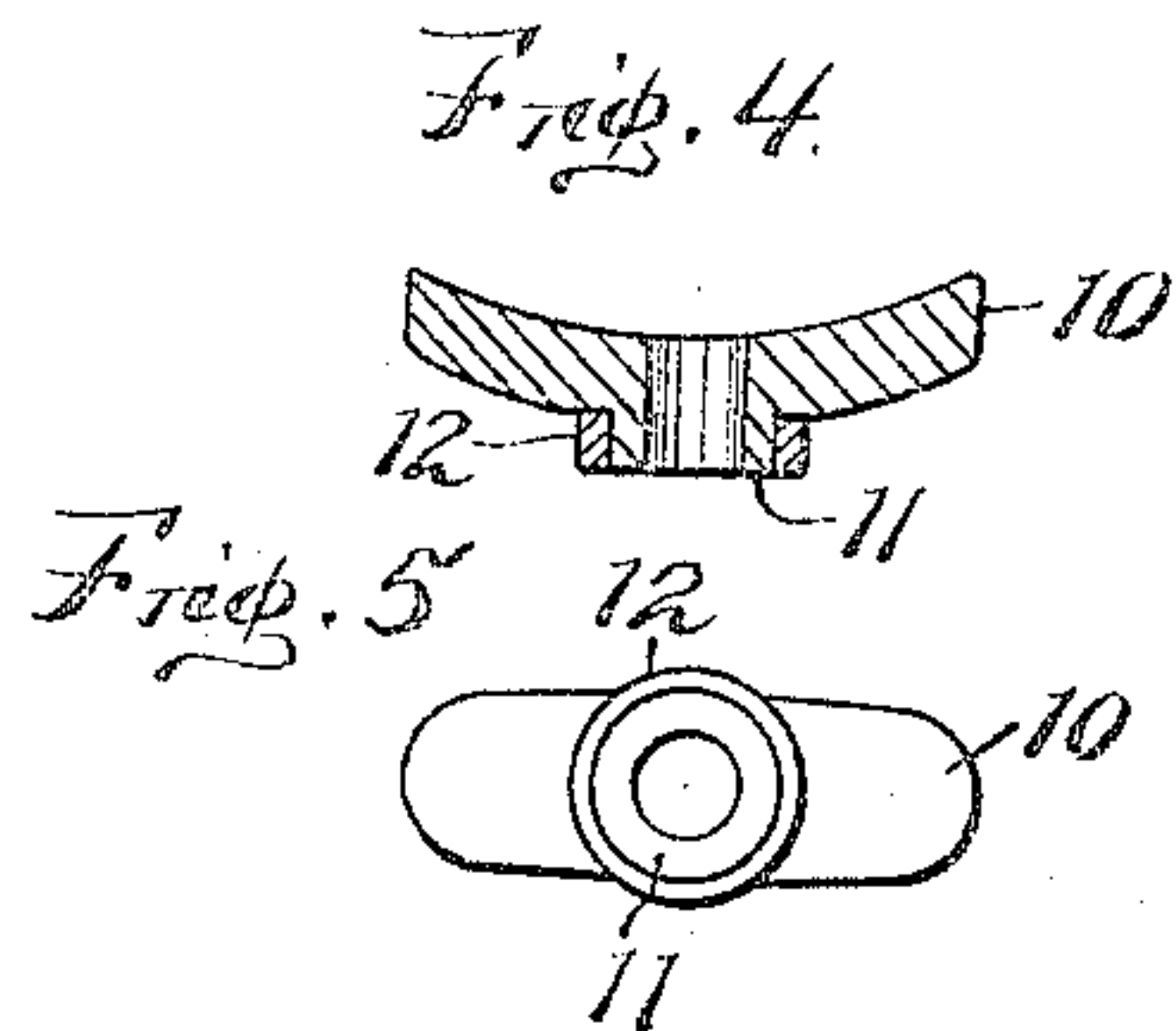
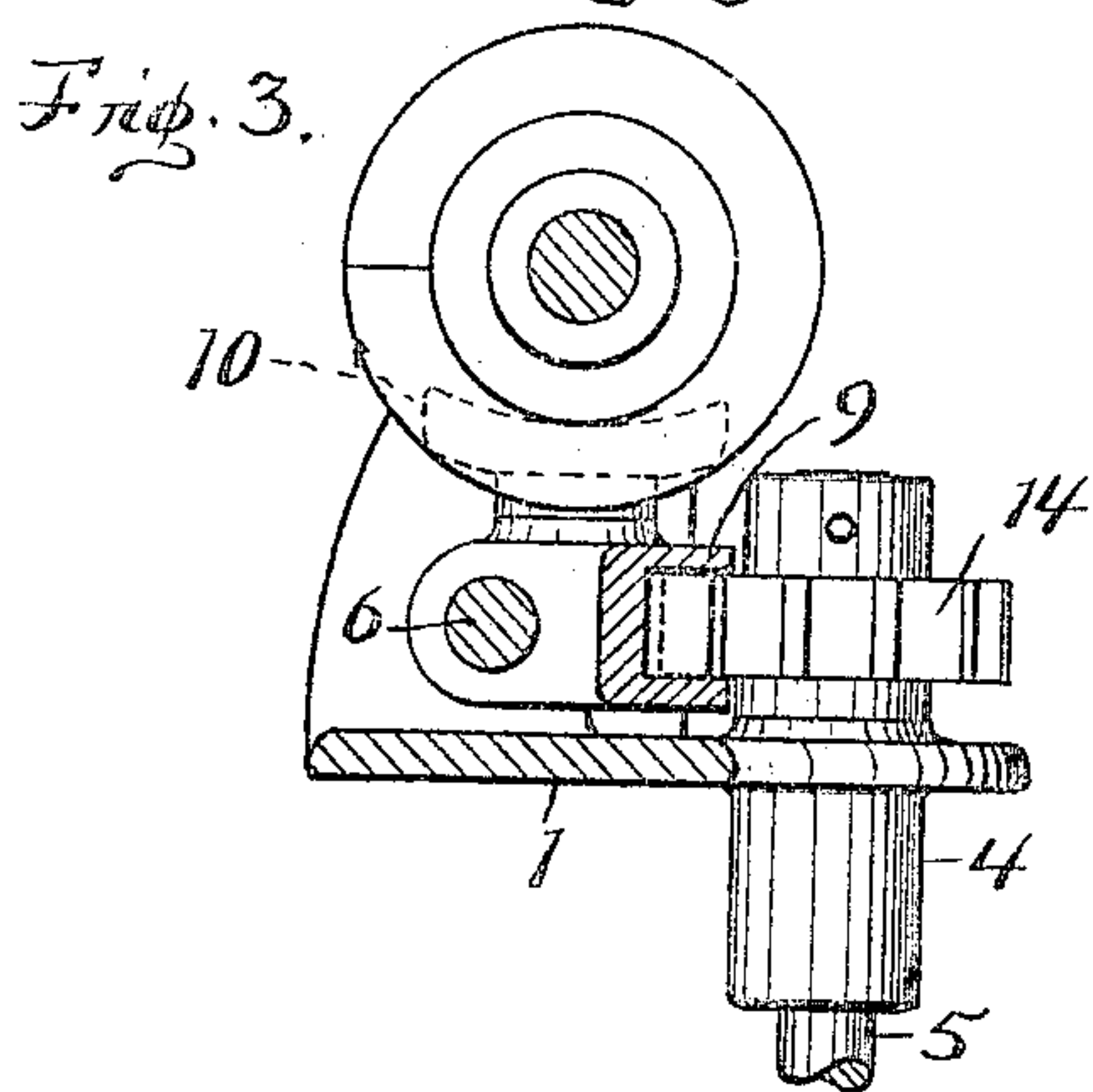
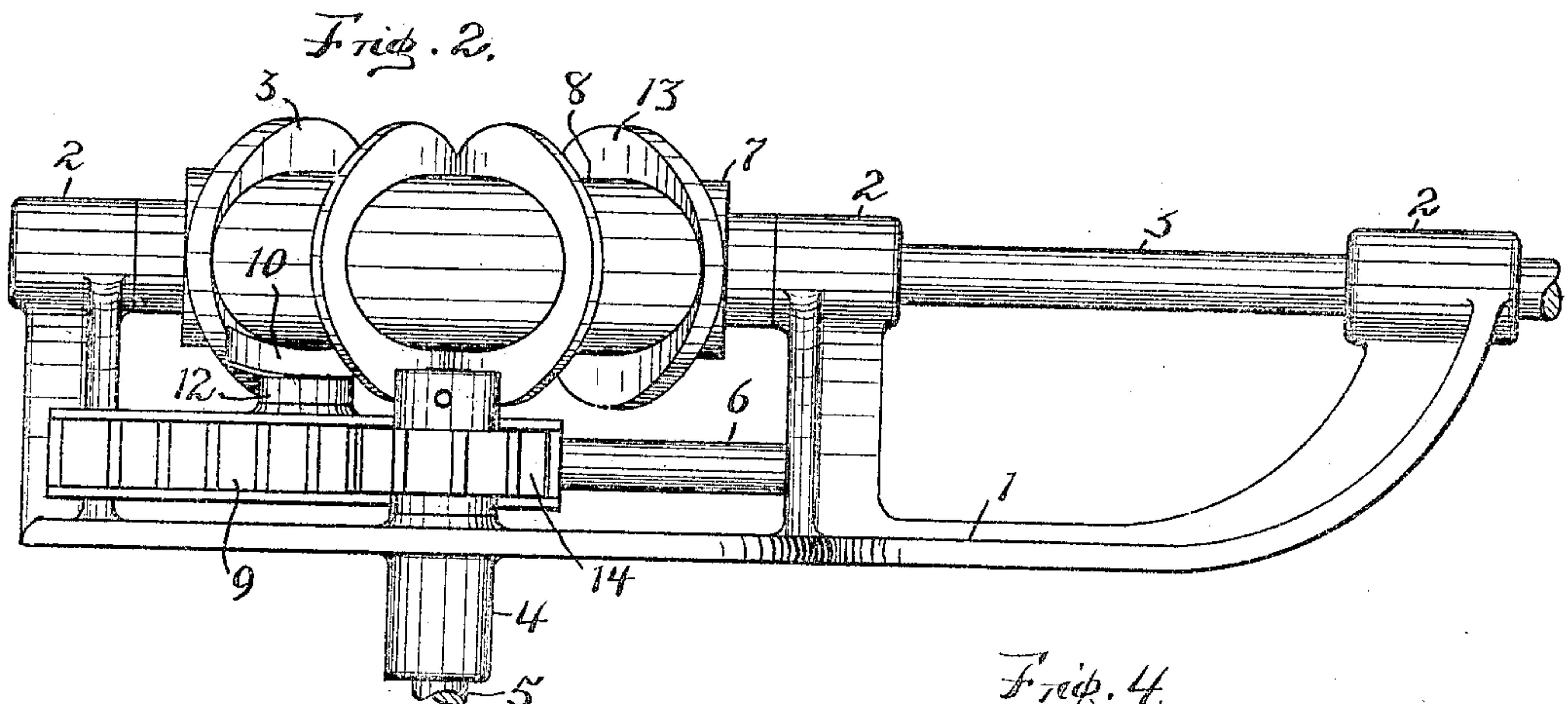
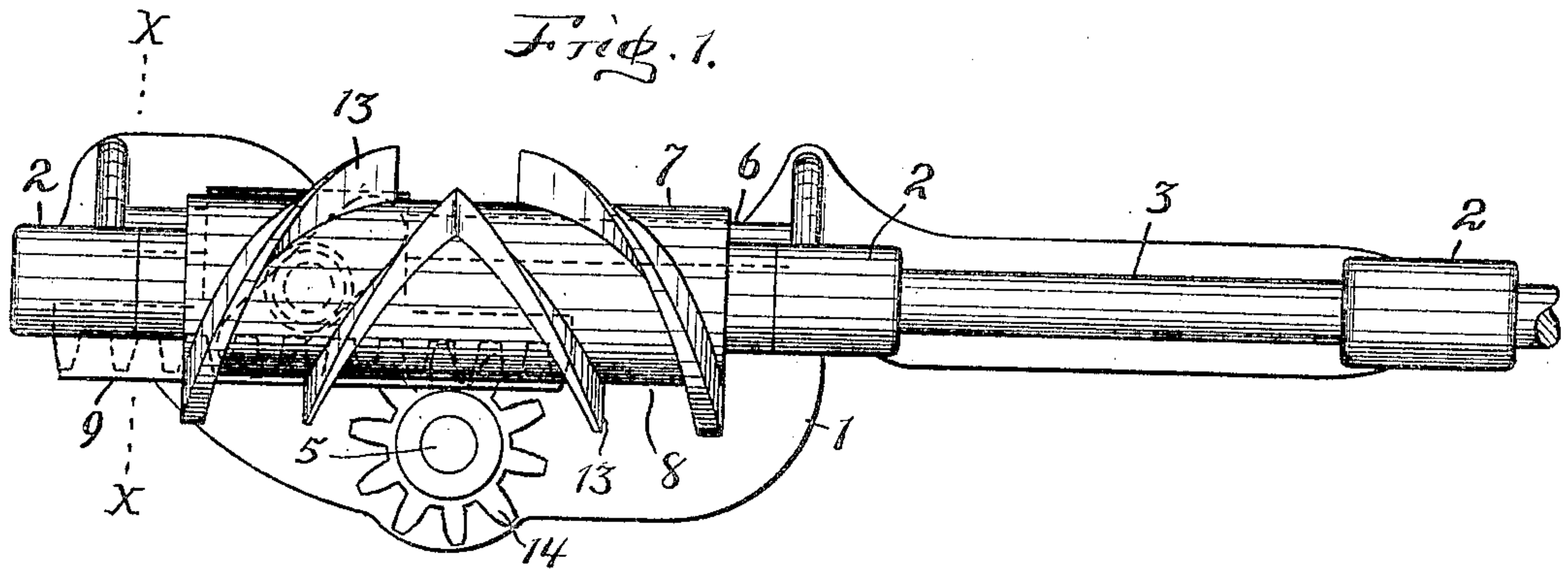


No. 813,392.

PATENTED FEB. 20, 1906.

W. SWEET.
MECHANICAL MOVEMENT FOR WASHING MACHINES.
APPLICATION FILED MAY 5, 1905.



WITNESSES:

J. M. Dickerson.
H. J. Lampke.

Harvey Sweet INVENTOR

BY *H. G. Burns*
ATTORNEY

UNITED STATES PATENT OFFICE

WARREN SWEET, OF FORT WAYNE, INDIANA, ASSIGNOR OF ONE-HALF
TO JOSEPH SOMERS, OF FORT WAYNE, INDIANA.

MECHANICAL MOVEMENT FOR WASHING-MACHINES.

No. 813,392.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed May 5, 1905. Serial No. 258,998.

To all whom it may concern:

Be it known that I, WARREN SWEET, a citizen of the United States of America, and a resident of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Mechanical Movements for Washing-Machines, of which the following is a specification.

This invention relates to improvements in mechanical movements for washing-machines of that class in which rotary motion is transformed into oscillating movement; and the object thereof is to afford mechanism of the class described which will be operative when the driving-shaft is rotated continuously in either direction and which will not necessitate the disengagement of the parts of the mechanism.

The above object is accomplished by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the mechanism. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a transverse section of the same on the line xx of Fig. 1. Fig. 4 is a detail showing a longitudinal section through the follower, and Fig. 5 is a bottom plan view of the follower.

Similar numerals of reference indicate corresponding parts throughout the several views.

Referring now to the drawings, 1 is a supporting-casting which has bearings 2 for the rotative driving-shaft 3, mounted therein, and also a bearing 4 for the driven oscillating member 5, which is mounted in the latter. The said casting has also a horizontal guide-rod 6, which is rigidly mounted therein in a horizontal position relative to the driving-shaft.

Fixed upon the driving-shaft between two of the bearings 2 and over the guide-rod is an actuating member 7, which has a continuous cam-groove 8, the latter encircling twice around the body of the member and crossing itself at one point of its course. Upon the guide-rod is mounted a rack 9, which is longitudinally movable thereon and has upon its upper side a pivoted follower 10, which ranges in the groove 8. An integral sleeve 11 projects from the lower side of the fol-

lower, and an antifriction-collar 12 is mounted thereon, which is adapted to ride against the walls 13 adjacent the groove.

Upon the upper end of the driven member 5 is fixed a pinion 14, which meshes with the rack 9 and is driven thereby accordingly as the latter is actuated.

In the operation of this invention the driving-shaft 3 is continuously rotated in either direction by means of any suitable source of power, and accordingly the actuating member is likewise rotated and in so rotating the rack is caused to reciprocate longitudinally upon the guide-rod, because of its engagement with the groove in the actuating member. The follower serves to direct the movement of the rack from one part of the groove to the other at their intersection, and the roller 12 serves to reduce the friction occasioned by the driving action of the actuating member by riding against the walls adjacent the groove. The rack in reciprocating transmits an oscillating motion to the pinion engaged therewith, and accordingly the driven member 5 is operated. By means of the construction shown it will be apparent that the motion of the driven member 5 will be the same when the driving-shaft 3 is rotated in either direction.

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

In mechanism of the class described, a supporting-casting; a reciprocating rack and rotating actuating member mounted in connection with the casting, the actuating member having a continuous cam-groove which encircles the body of the member; a follower pivoted to the rack and ranging in the groove of the actuating member; and an antifriction-roller in connection with the follower and acting against the walls of the actuating member adjacent its groove.

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

WARREN SWEET.

Witnesses:

J. W. DICKENS,
W. G. BURNS.