

(No Model.)

S. C. MORTIMER.

MECHANISM FOR CONVERTING MOTION.

No. 360,970.

Patented Apr. 12, 1887.

Fig. 1.

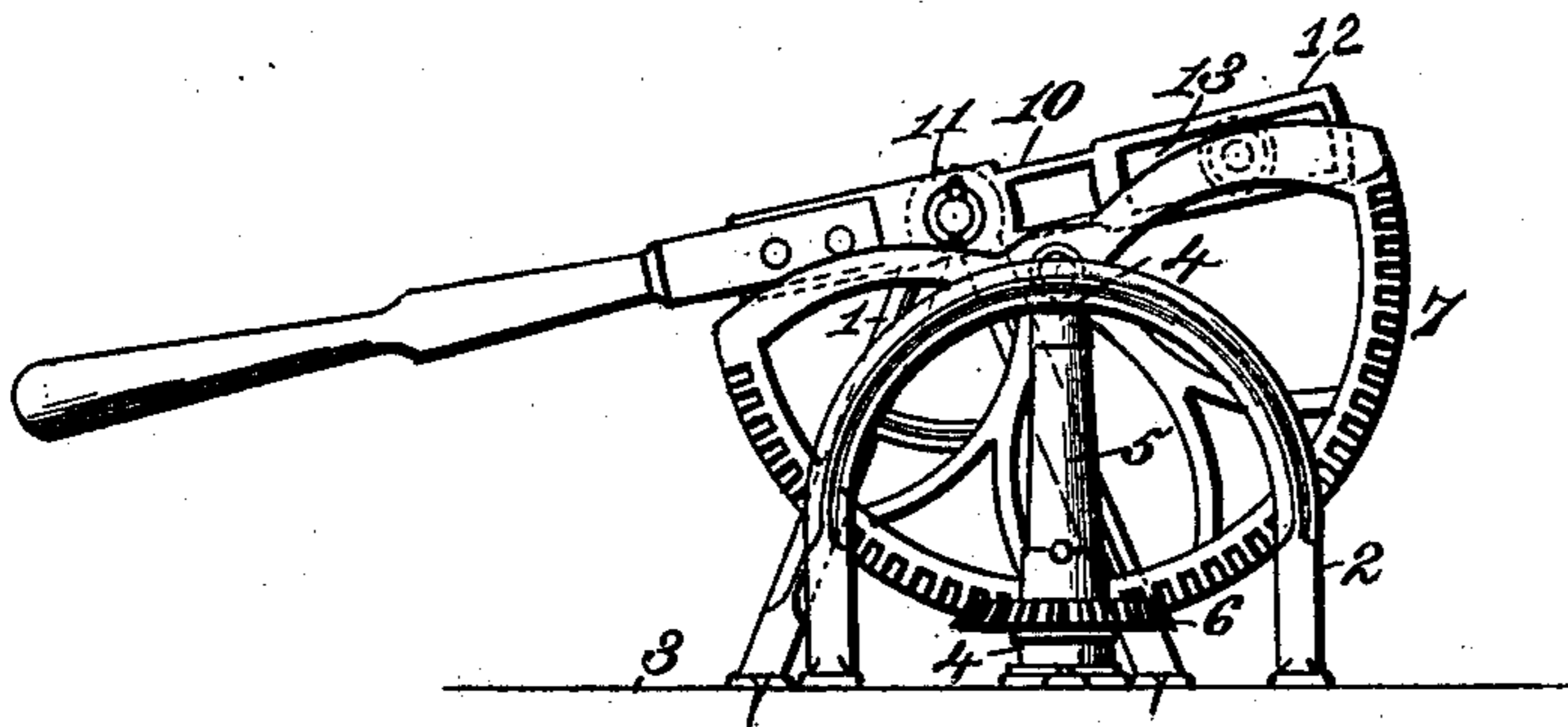


Fig. 2.

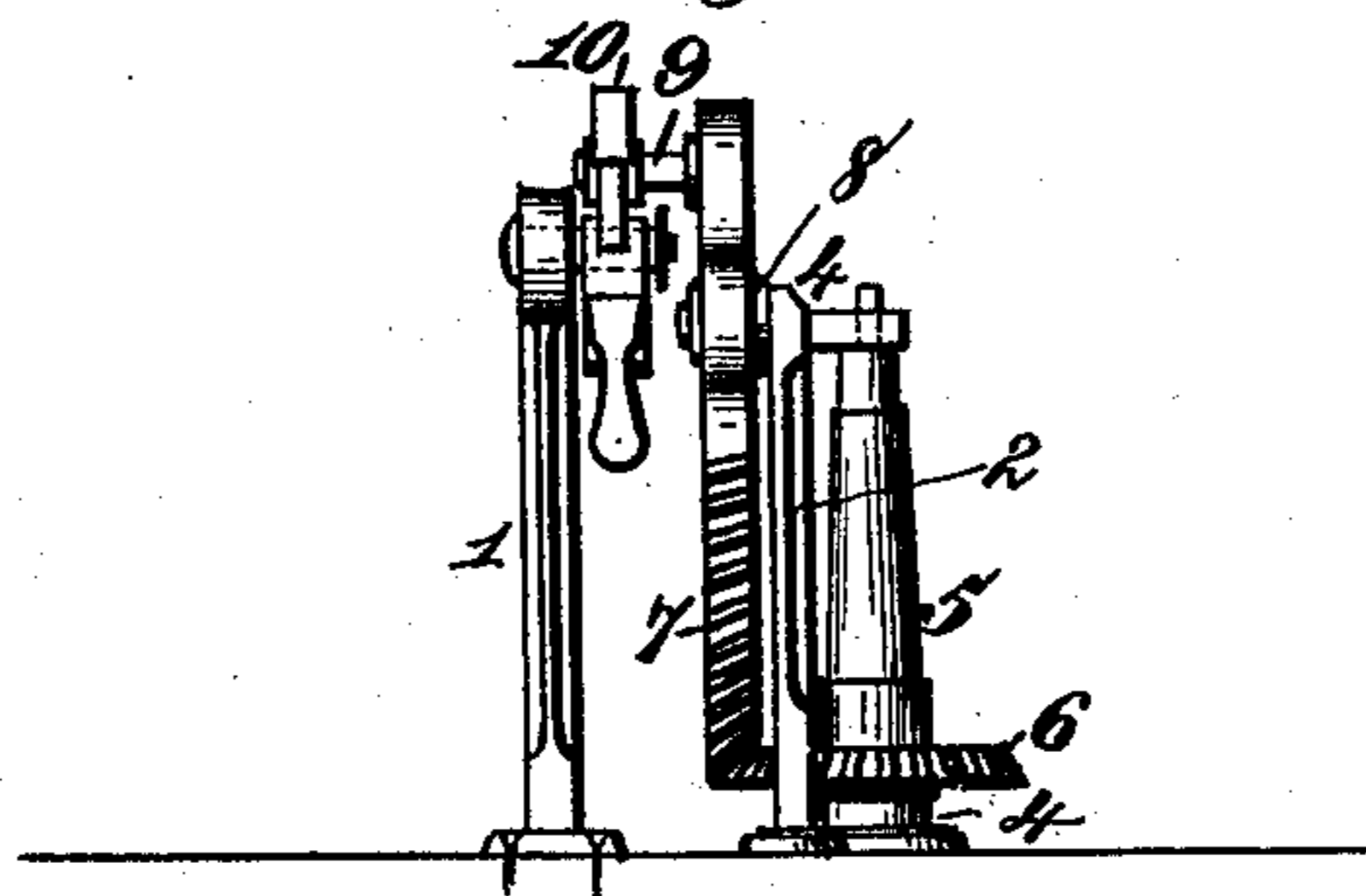
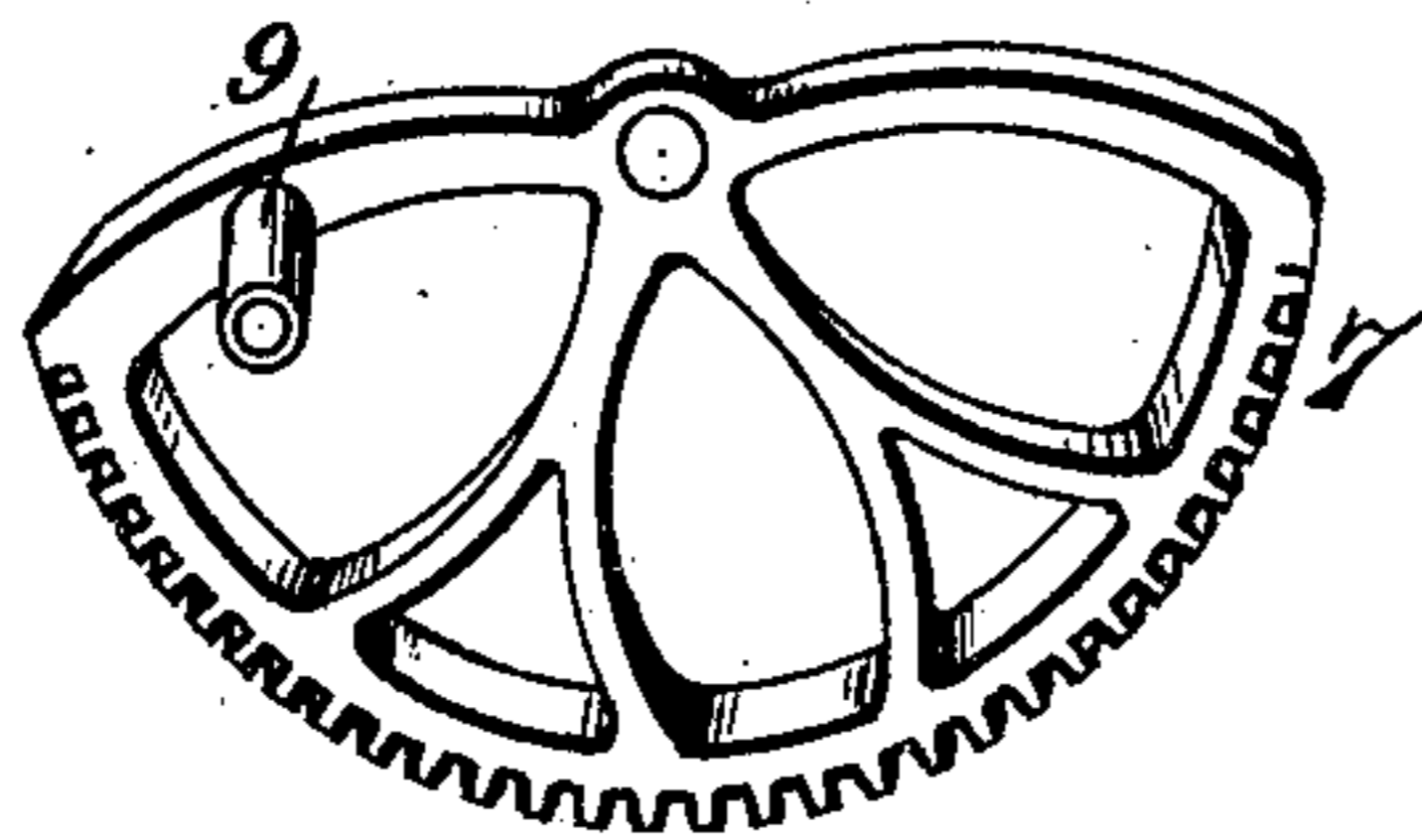


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

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MECHANISM FOR CONVERTING MOTION.

SPECIFICATION forming part of Letters Patent No. 360,970, dated April 12, 1887.

Application filed January 4, 1887. Serial No. 223,373. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN C. MORTIMER, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented new and useful Improvements in Mechanism for Converting Motion, of which the following is a specification.

This invention has for its object to provide novel means for imparting a rotary reciprocating motion to a shaft; and to such end it consists in the combination of two brackets or standards, a segmental gear pivoted to one of the standards and provided with a wrist-pin at one side of the pivot, a gear-wheel secured to the shaft to be rotated and engaging the segmental gear, and a lever pivoted to the other standard and having a slotted extension beyond its pivot engaging the wrist-pin, all in such manner that when the lever is swung back and forth a rocking motion is imparted to the segmental gear and a rotary reciprocating movement thereby given to the gear-wheel and its shaft.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a side elevation of the mechanism; Fig. 2, an end elevation of the same; Fig. 3, a detail view of the segmental gear.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, where—

The numerals 1 and 2 indicate two vertical brackets or standards secured to a suitable supporting-base, 3, the one 2 having top and bottom lugs 4, serving as the journal-bearings for a vertical shaft, 5, to which is rigidly attached a gear-wheel, 6. The upper end of the bracket 2 serves as a support for a centrally-pivoted

segmental gear, 7, having at one side of its pivotal point 8 a laterally-projecting wrist-pin, stud, or roller, 9. A lever, 10, is pivoted intermediate its ends, as at 11, to the upper end of the bracket 1, and the extension 12 of the lever beyond the pivot 11 is provided with a slot, 13, into which extends the wrist-pin, stud, or roller 9 of the segmental gear.

For the purpose of strength, I construct the slotted extension of the lever of metal and connect therewith a wooden handle; but obviously the entire lever may be of wood or metal.

When the lever is swung in a vertical plane, the slotted extension, acting on the wrist-pin, stud, or roller, rocks or oscillates the segmental gear, and thus imparts a rotary reciprocating motion to the gear-wheel and its shaft. The mechanism is useful for various purposes where it is desired to rotate a shaft alternately in opposite directions, as in churns, washing-machines, and other apparatus.

Having thus described my invention, what I claim is—

The combination of two brackets or standards, a segmental gear pivoted to one of the brackets and having a wrist-pin at one side of its pivotal point, a gear-wheel secured to a shaft and engaging the segmental gear, and a lever pivoted to the other standard and having a slotted extension engaging the wrist-pin, substantially as described.

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

STEPHEN C. MORTIMER.

Witnesses:

FRED. C. BOLTZ,
A. C. F. WICHMAN.