(No Model.)

J. F. BROWN.

DEVICE FOR CONVERTING MOTION.

No. 264,511. Patented Sept. 19, 1882.

Fig. 1.

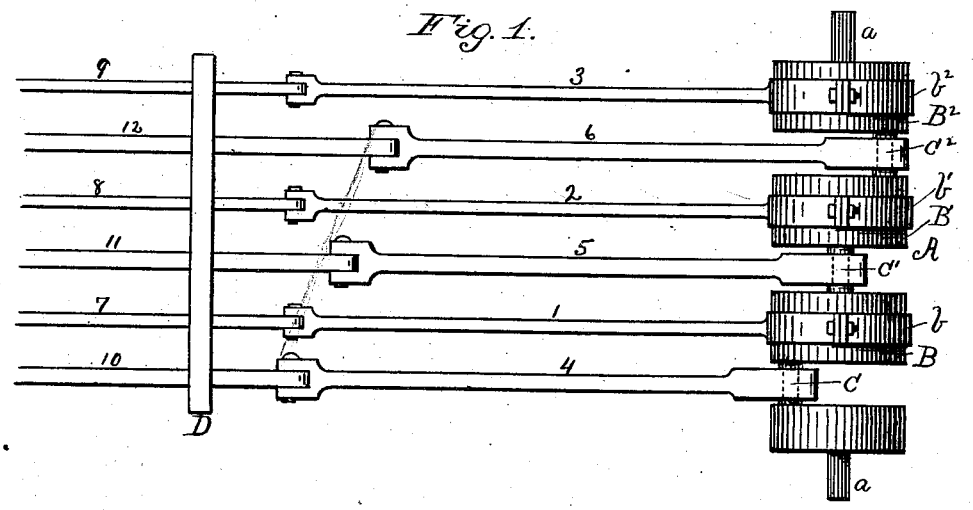
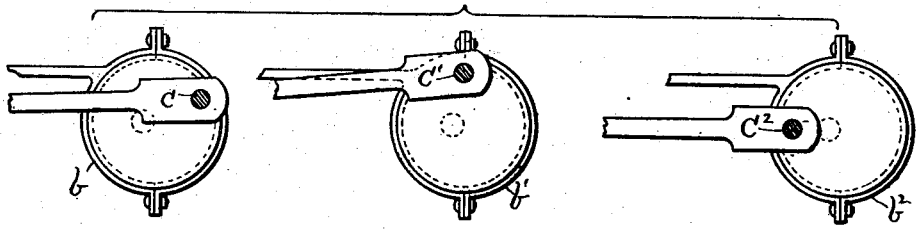


Fig. 2.



Witnesses:

J. W. Garner

H. S. D. Haines

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per H. J. Ennis

Atty.

UNITED STATES PATENT OFFICE.

JAMES F. BROWN, OF CUSTER CITY, TEXAS, ASSIGNOR OF TWO-THIRDS TO FRANKLIN P. WHITESIDE, OF SAME PLACE, AND ALEXANDER S. BELCHER, OF GAINESVILLE, TEXAS.

DEVICE FOR CONVERTING MOTION.

SPECIFICATION forming part of Letters Patent No. 264,511, dated September 19, 1882.

Application filed August 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. BROWN, a citizen of the United States, residing at Custer City, Texas, have invented certain new and useful Improvements in Mechanical Movements, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to mechanical movements for converting a reciprocating into a rotary motion so as to impart a steady and regular motion to such machinery as windmills and engines, churning and washing machines, as well as to all other motors to which it may be applied; and the novelty consists in the construction of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

Figure 1 is a top plan view of the movement, and Fig. 2 is a detached view of the three cranks shown in their relative position on the shaft.

A is a solid shaft, provided with journal-bearings *a a*, which may extend far enough through their supports to receive gear wheels or pulleys for imparting motion. This shaft A is provided with sections B B′ B^2, upon which are turned eccentrics, so as to receive the straps *b b′* b^2, attached to the rods 1, 2, and 3.

C, C′, and C^2 are the crank-pins, which also form a portion of the solid shaft A, and each is provided with a connecting-rod, 4, 5, and 6. These crank-pins are placed at equal distances on the revolution, so that when one crank is on the dead-center two are off and exerting their best effect.

7, 8, and 9 represent valve-stems working in the guide-bar D, and 10, 11, and 12 are the rods which impart the motion, through the connecting-rods, to the crank-shaft A.

It will thus be seen that as long as a reciprocating motion is given the rods 10 11 12 the shaft A will continue to revolve steadily in the direction in which it was first started, and can be as readily started and stopped, as there is no dead-center or point at which the cranks are not in position to respond at once to the prime motor, and the equal distribution of the imparted motion to the shaft A through the medium of the three cranks insures a uniform and regular motion to the driven machinery.

Having thus described my invention, what I claim is—

1. In a device for converting motion, the solid shaft A, having sections B B′ B^2, forming eccentrics, and the crank-pins C, C′, and C^2, all made of a single piece, substantially as set forth.

2. In a device for converting motion, the shaft A, sections B B′ B^2, and crank-pins C, C′, and C^2, in combination with the connecting-rods 10 11 12 and eccentric-straps *b b′* b^2, substantially as set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 24th day of August, 1882.

JAMES F. BROWN.

Witnesses:
E. H. BRADFORD,
H. J. ENNIS.