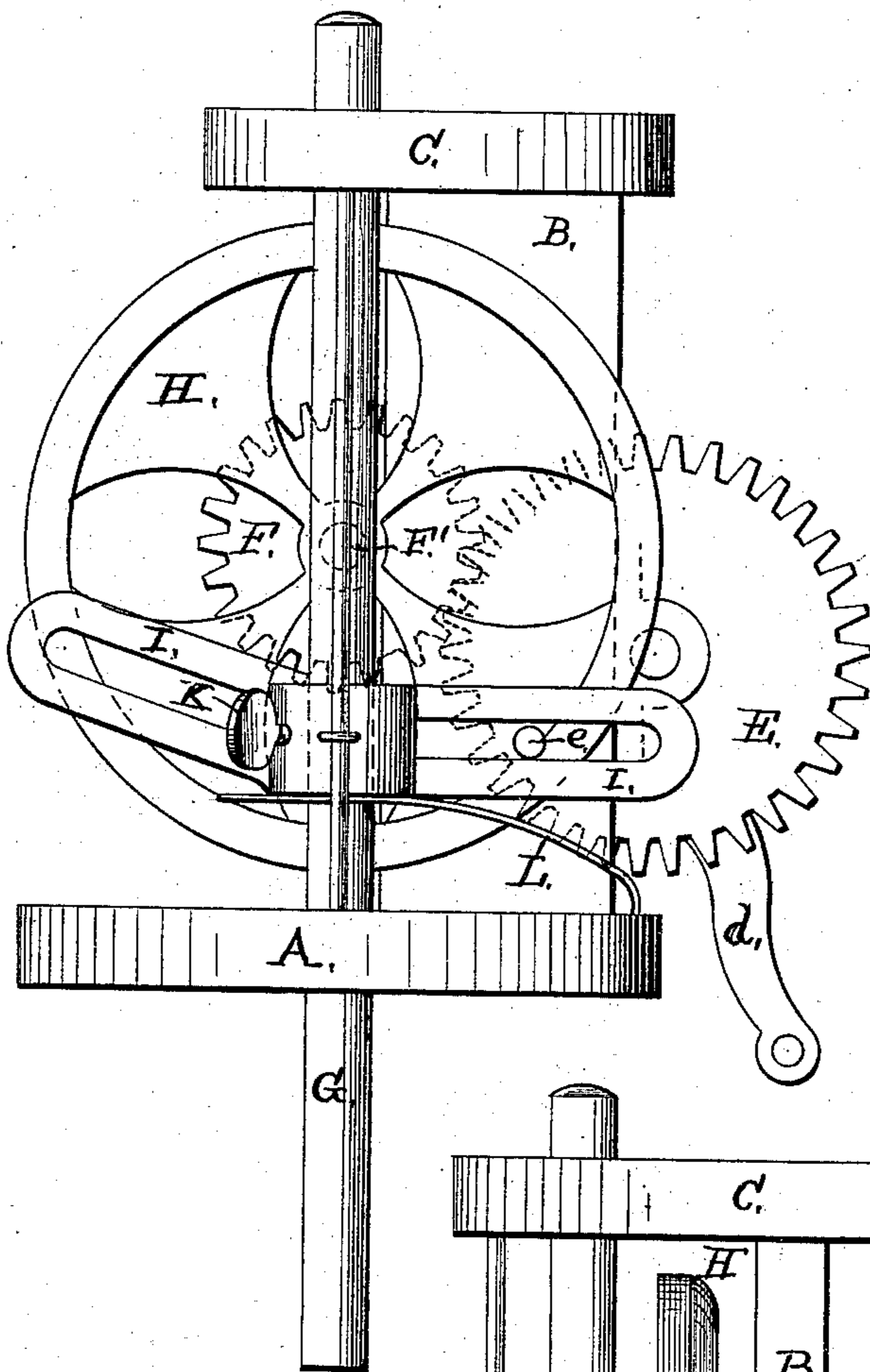


D. T. PARTLOW.  
Mechanical-Movement.

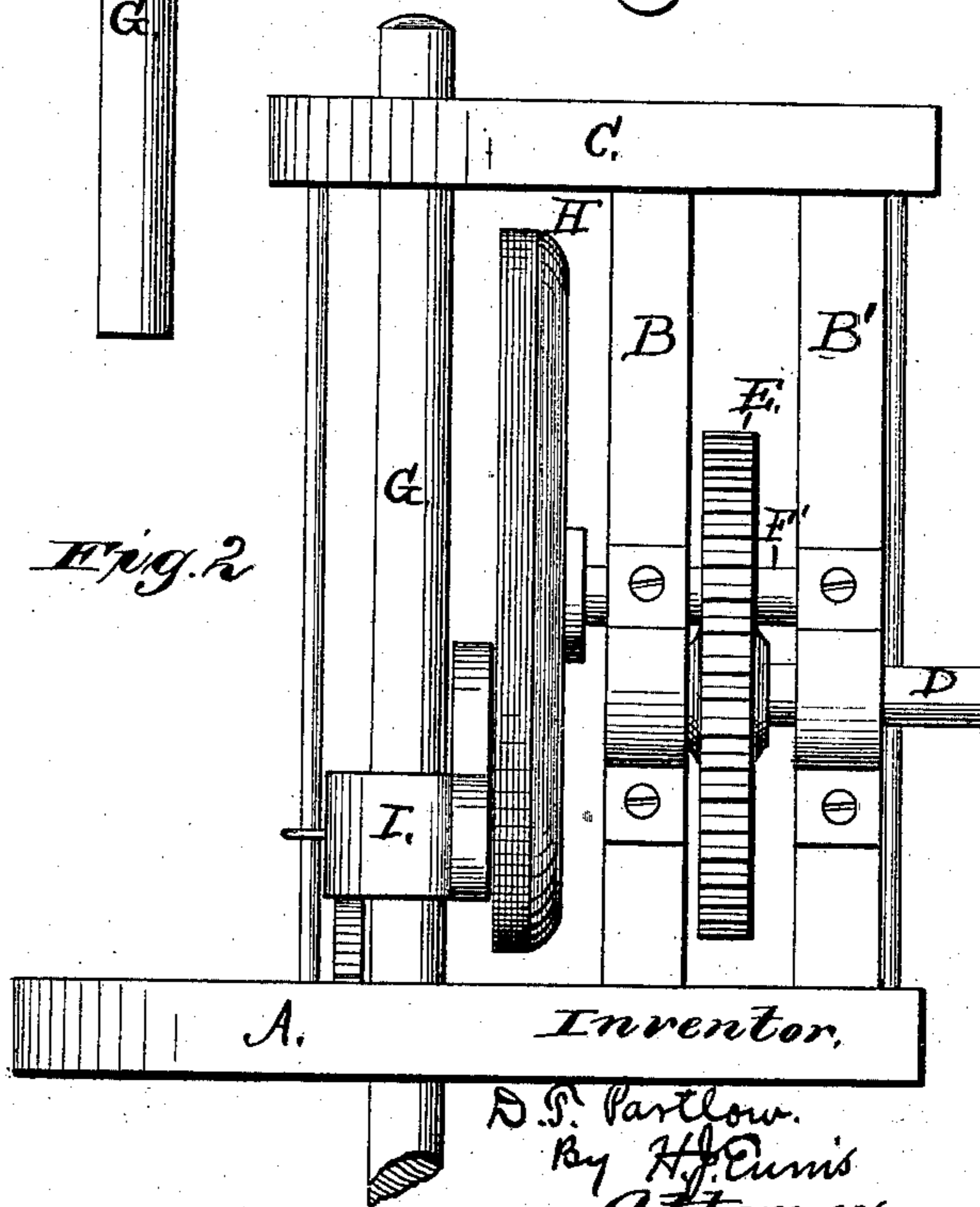
No. 219,409.

Patented Sept. 9, 1879.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*  
*Frank L. Curand,*  
*E. H. Bradford,*

*Inventor,*  
*D. T. Partlow.*  
*By H. J. Curtis*  
*Attorney*

# UNITED STATES PATENT OFFICE.

DAVID T. PARTLOW, OF CATAWBA RIVER, SOUTH CAROLINA, ASSIGNOR  
OF ONE-HALF HIS RIGHT TO ALEXANDER S. HAND, OF SAME PLACE.

## IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **219,409**, dated September 9, 1879; application filed  
May 9, 1879.

*To all whom it may concern:*

Be it known that I, DAVID T. PARTLOW, of Catawba River, in the county of York and State of South Carolina, have invented certain new and useful Improvements in Mechanical Movements; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a front elevation of a device illustrating my invention. Fig. 2 is a side view of same.

This invention has relation to mechanical movements, and more particularly to that class in which a rotary is converted into a reciprocating motion, all of which will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings similar letters of reference indicate like parts of the invention.

A is a base provided with two uprights, B and B', their upper ends being joined by the cross-piece C. The uprights B B' have a shaft, D, mounted upon them so as to rotate freely. The outer end of said shaft D is provided with a crank, *d*, and its inner end is provided with a gear-wheel, E, which engages with a smaller gear, F.

The shaft F', carrying the gear F, is provided with a balance-wheel, H, on the face of

which is a pin, *e*. A plunger-rod, G, works perpendicularly at a right angle to the shaft F', and is provided with a slotted cross-head, I, it being adjustable upon said rod G by means of the set-screw K. A spring, L, secured to the base A, acts upon the cross-head I when it is at the bottom of the downstroke, to relieve the concussion and assist the fly-wheel H over or past the lower center.

The operation of the device is as follows: The handle *d* being operated, the gear-wheel E causes the smaller gear, F, to rotate, which also imparts motion to the fly-wheel H. The pin *e*, working in the slot in the cross-head I, gives said cross-head I and plunger-rod G a perpendicular reciprocating motion, and by this means sawing, churning, &c., may be done.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

The shaft D, having gear E and handle *d*, and the gear F and fly-wheel H, in combination with the slotted cross-head I, adjustable by set-screw K, and the spring L, constructed and operating substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

DAVID T. PARTLOW.

Witnesses:

E. P. WILLIAMS,  
J. L. JACKSON.