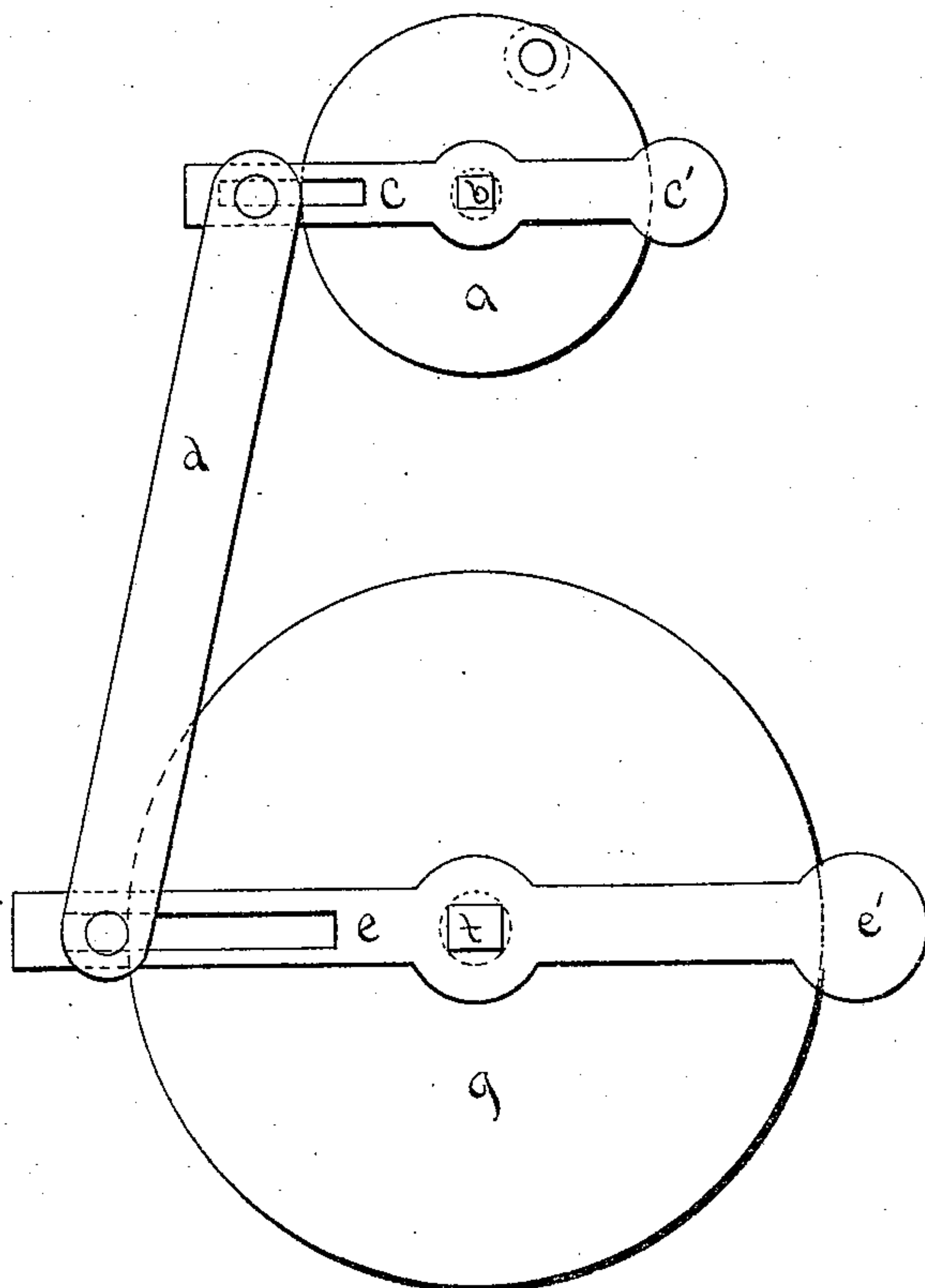


(No Model.)

W. H. BEHRENS.
MECHANICAL MOVEMENT.

No. 287,408.

Patented Oct. 30, 1883.



Attest.
J. H. Campbell.
Chas. Herr

Inventor.
William H. Behrens
By O. Drake, Atty

UNITED STATES PATENT OFFICE.

WILLIAM H. BEHRENS, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF
TO CHARLES M. THEBERATH, OF SAME PLACE.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 287,408, dated October 30, 1883.

Application filed March 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BEHRENS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Mechanical Movements; 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, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in mechanism for converting motion from rotary to reciprocating; and it consists of such combination and arrangement of parts as will be hereinafter set forth, and finally embodied in the claims.

In the drawing the figure is a side elevation of my improvement.

The relation and construction of the parts is substantially as shown in the drawing, in which *a* is a wheel, secured to the shaft *b*. Upon or to the same shaft is secured the slotted bar *c*. The bar *c* is connected with the slotted bar *e* by the link *d*, the said bar *e* being secured to the shaft *f*, to which is also secured the wheel *g*. If desirable, the shafts *b* and *f* may be dispensed with and the slotted bars *c* and *e* secured directly to the wheels *a* and *g*. The rotary motion produced in the wheel *a* is communicated through the shaft *b* to the bar *c*, and this rotary motion is converted into reciprocating motion by the link *d* to the bar *e*, shaft *f*, and thence to the wheel

g. The link *d* is adjustable in the slots in the bars *c* and *e*, and may be secured in place by a nut and bolt, as indicated. The extent of the reciprocating or rocking motion in the bar *e* and wheel *g* can thus be regulated.

The bars *c* and *e* may be extended, as shown at *c'* and *e'*, in order to balance the parts, and thus give greater steadiness of motion. The extended portion may be weighted, if desirable.

Instead of slots in the bars *c* and *e*, holes may be made to produce the same result—*i.e.*, to make the link *d* adjustable.

Motion may be communicated to the wheel *a* either by a belt or in any other manner desirable or convenient.

Having thus described my invention, what I claim as new is—

1. The combination of the slotted bars, link, shafts, and wheels, arranged, substantially as shown, to form a mechanical movement, as and for the purposes herein set forth.

2. The combination, in a mechanical movement, of the wheel *a*, shaft *b*, a slotted bar, (as *c*,) having an extended portion, (as *c'*,) a link, (as *d*,) slotted bar, (as *e*,) having an extended portion, (as *e'*,) the shaft *f*, and a wheel, (as *g*,) all operating substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of March, 1883.

WILLIAM H. BEHRENS.

Witnesses:

F. F. CAMPBELL,
OLIVER DRAKE.