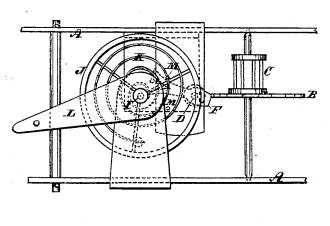
## R. BARCLAY.

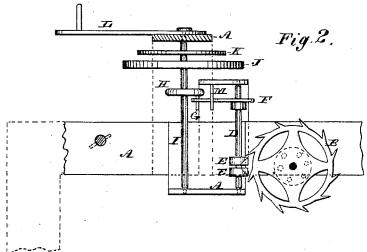
## ESCAPEMENT.

No. 183,623.

Patented Oct. 24, 1876.

Fig.1.





Witnesses. Iohn Crish, <sup>y</sup>. J. Rojs

Inventor Robert, Barclay By Henry Grist Attorney.

## UNITED STATES PATENT OFFICE.

ROBERT BARCLAY, OF PARIS, ONTARIO, CANADA.

## IMPROVEMENT IN ESCAPEMENTS.

Specification forming part of Letters Patent No. 183,623, dated October 24, 1876; application filed August 23, 1876.

To all whom it may concern:

Be it known that I, ROBERT BARCLAY, of Paris, in the county of Brant, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Escapements; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of this invention is to diminish the friction by rendering the action more sensitive to the operation of the escape-wheel; and it consists of an intermediate spindle, having disk-pallets with inclined faces, and a bifurcated lever, in combination with a balance-wheel spindle, parallel to the intermediate spindle, and provided with a disk having a pin adapted to engage with said lever.

Figure 1 is a top view, and Fig. 2 an elevation, of an escapement embodying my invention.

A is the frame; B, the escapement wheel; C, the trundle pinion, with which the tramwheel of the clock mechanism engages in the usual manner. D is a spindle, provided with parallel pallets E E, each having inclined faces, convergingly with which the teeth of the

escapement-wheel B engage to rock the spindle. F is a bifurcated lever on said spindle D, adapted to engage with a pin, G, projecting from a disk, H, on a spindle, I, which is parallel to the spindle D. The bifurcated lever F, by vibration, rocks the spindle I by engagement with the pin G of the disk H. The spindle I carries the balance wheel J and hair-spring K. The regulator L is pivoted to the top of the frame A, and operates the hair-spring in the usual manner. M are guidepins, dropping from the frame-bracket N on both sides of the lever F.

I claim as my invention-

The combination of the parallel spindles D and I, the spindle D, provided with bifurcated lever F and disk-pallets E E, having inclined faces, and the spindle I, provided with balance-wheel J and disk H, having pin G, adapted to engage with the bifurcated lever F, as and for the purpose set forth.

ROBT. BARCLAY.

Witnesses:
JOHN McMILLAN,
JNO. BARCLAY.