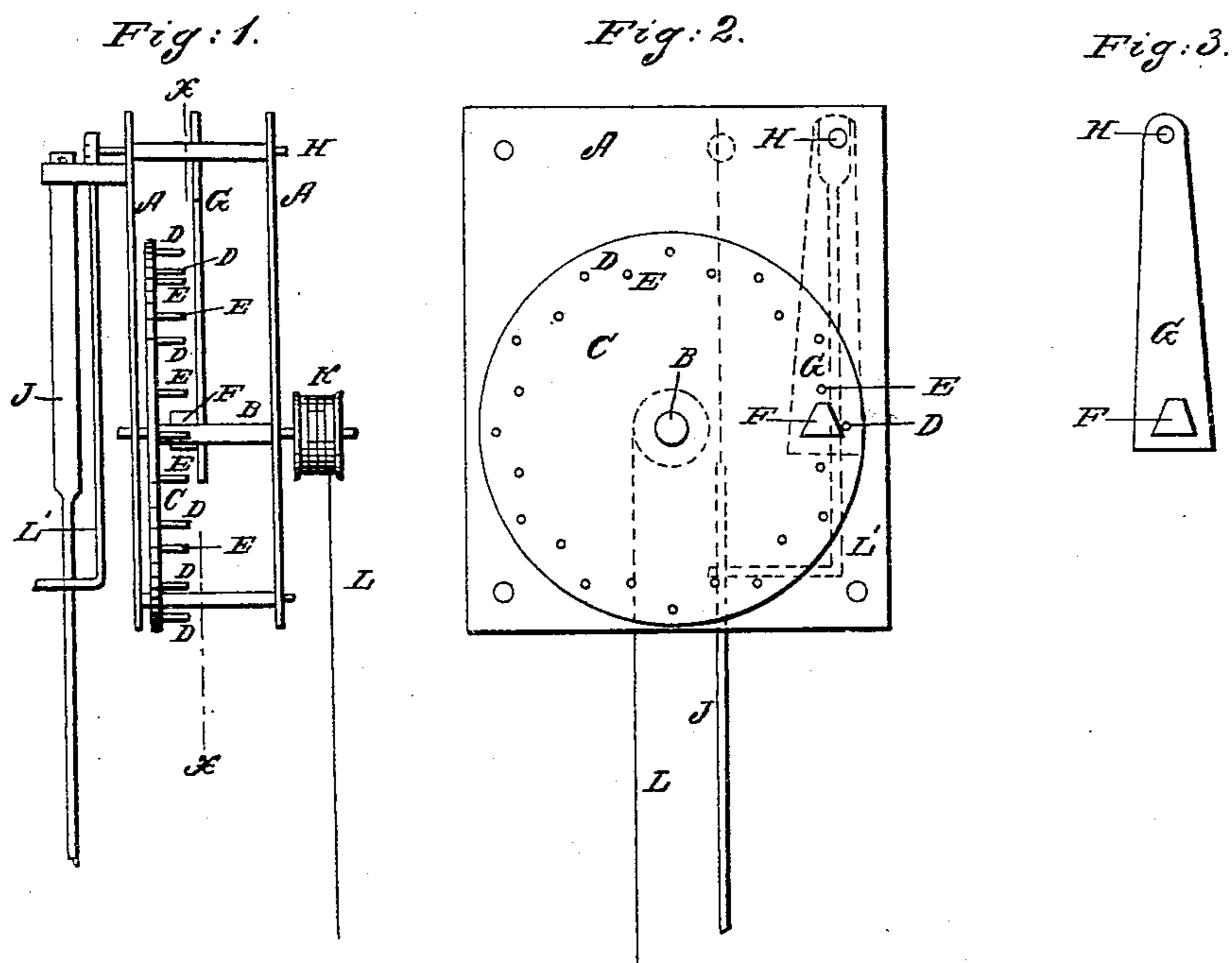


J. W. EINHAUS.
Clock Escapement.

No. 22,495.

Patented Jan'y 4, 1859.



Witnesses:

Ed. Barritt
R Rowley

Inventor:

John W. Einhaus.

UNITED STATES PATENT OFFICE.

JOHN W. EINHAUS, OF NEW YORK, N. Y.

ESCAPEMENT FOR TIMEKEEPERS.

Specification of Letters Patent No. 22,495, dated January 4, 1859.

To all whom it may concern:

Be it known that I, JOHN W. EINHAUS, of the city, county, and State of New York, have invented certain new and useful Improvements in Escapements for Clocks, Watches, and other Purposes; and I do hereby declare the following to be a full description of the same.

The nature of my invention consists in the mode of constructing an escapement wheel, by arranging on the surface of the wheel, in two lines of curvature, alternating series of escapement pins or teeth, and combining therewith a triangular block lever pallet, so that as the escapement wheel rotates, the outer and inner series of pins are alternately brought into contact with the opposite inclined planes of the pallet, and thus by its connection with the pendulum or balance wheel a perfect and uniform beat is obtained. But to describe my invention more particularly I will refer to the accompanying drawings forming a part of this specification, the same letters of reference wherever they occur referring to like parts.

Figure 1, is a side view of the escapement movement, and pendulum attached thereto. Fig. 2, is a vertical cut section of the same through the line x, x , Fig. 1, showing in dotted outline also the pendulum &c. Fig. 3, is a detached view of the block pallet lever.

Letter A, represents the frame of an ordinary clock movement, in which is arranged on a suitable axis B, an escapement wheel C. In the face or surface of this wheel, are secured two rows of pins D, and E, on independent lines of curvature. The number of pins in each row are twelve, (though this number may be varied for seconds beats, if desired) and are in alternating order, so that as the wheel rotates the pins alternately act upon the opposite inclined planes of a

triangular block pallet F, secured to the lower end of a lever G, centered or adjusted on an axis H, to the outer end of which is attached the pendulum vibrating lever I.

Letter J, is the pendulum, and K, is a pulley on the axis of the escapement wheel on which a cord L, and weight is suspended for the purpose of giving motion to the escapement.

The operation of my escapement is, that, when the pin D, of the outer row, is against the outer inclined plane of the pallet, it vibrates the lever, till it slips off the base of the pallet, but instantly it does so the alternating pin E, in the inner row catches upon the apex of the inner side of the inclined plane and vibrates the lever in an opposite direction, till the pin slips off the base of the pallet, when the succeeding pin D, in the outer row engages the pallet as before, and thus a uniform, simple and cheap lever escapement is produced.

Having now described my invention and its operation I will proceed to set forth what I claim and desire to secure by Letters Patent of the United States.

What I claim is—

The use of a triangular shaped pallet lever for an escapement pallet for clocks, watches &c., with an escapement wheel constructed in the manner hereinbefore set forth—but irrespective of such use of my block pallet I make no claim to the construction of the escapement wheel of itself, as my invention relates exclusively to the use and application of the block pallet, substantially as hereinbefore set forth.

JOHN W. EINHAUS.

Witnesses:

C. L. BARRITT,
R. ROWLEY.