C. OSTROM.
Clock.

No. 213,999. Patented April 8, 1879

Fig. 1.

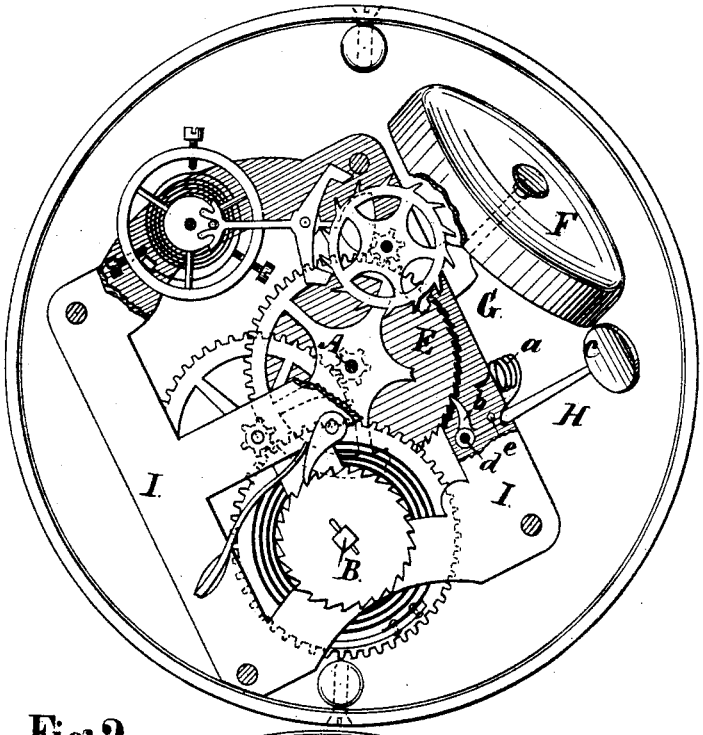
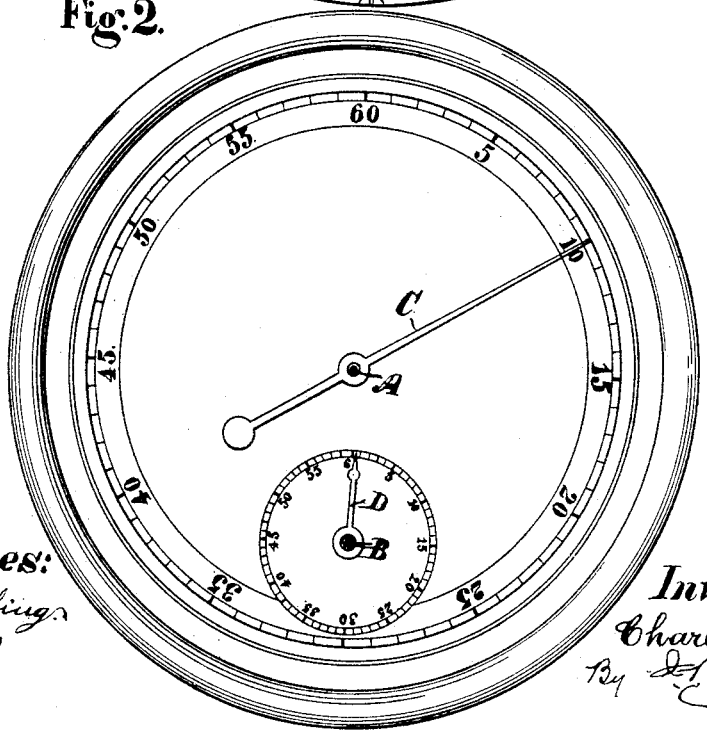


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES OSTROM, OF NEWARK, NEW JERSEY, ASSIGNOR TO E. & H. T. ANTHONY & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN CLOCKS.

Specification forming part of Letters Patent No. **213,999**, dated April 8, 1879; application filed February 28, 1879.

To all whom it may concern:

Be it known that I, CHARLES OSTROM, of Newark, in the State of New Jersey, have invented an Improved Clock-Movement, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same.

Figure 1 is a side elevation of a clock-movement containing my invention; and Fig. 2 is the face of the clock, showing the minute and second hand on the central shaft of the movement, and arranged to indicate seconds on the large index-circle of the face, and also a hand on the separate shaft of the movement to indicate minutes on a smaller index-circle.

My invention relates to a clock-movement in which seconds of time are struck audibly upon a bell; and consists in the combination of devices hereinafter described and claimed.

The general mechanism of the movement does not differ materially from the common clock-movements in use, as represented in Fig. 1, and which it is unnecessary to describe in detail.

The several parts are so constructed and adjusted relatively to one another that the central shaft, A, makes a complete revolution in just one minute of time. The main shaft B is timed to make one entire revolution each hour. The shaft A carries the long pointer, C, and the shaft B the short pointer, D. Upon the shaft A is fixed a notched wheel, E, there being just sixty notches in its periphery, the wheel therefore moving just one notch per second of time.

F is a bell supported on an arm, G. H is an arm or lever pivoted on a short shaft, *d*, fixed in the frame I, on the end of which is fixed the hammer or bell-striker *c*. *b* is a short curved arm extending from H, the outer end of which rests upon the wheel E, and engages the notches on the said wheel. *a* is a spring, which acts to force the striker *c* into contact with the bell F. *e* is a little stud or pin fixed in the frame I, which serves to limit the movement toward the bell of the arm H and striker *c*.

It is evident that, as the notched wheel is rotated from right to left, the arm *b*, sliding over the notches in said wheel, will cause a blow to be struck upon the bell every second of time. It is evident, also, that the pointer C will indicate the seconds by pointing to the figures on the large circle on the face of the clock, indicating one minute at each entire revolution; and that the short pointer, D, on a separate axis, and pointing in a separate and smaller circle, will indicate the minutes by pointing to the figures on such smaller circle, indicating one hour by each entire revolution.

This invention is specially adapted for use by photographers for timing the taking of photographic impressions by the camera, and I therefore denominate it "The Photographic Clock." It is intended to be placed in convenient proximity to the camera, where the sound of the bell may be heard by the operator, so that the moment he removes the cap from his instrument he may begin to count the seconds, as the seconds are heard by him struck upon the bell F.

The movement is to be inclosed in a suitable case.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a clock-movement, of the wheel E, having on its periphery sixty notches, arranged to make one entire revolution in each minute of time, the arms *b* and H, and striker *c*, the spring *a*, and bell F, all as and for the purpose described.

CHAS. OSTROM.

Witnesses:
J. P. FITCH,
M. F. CLIFTON.