

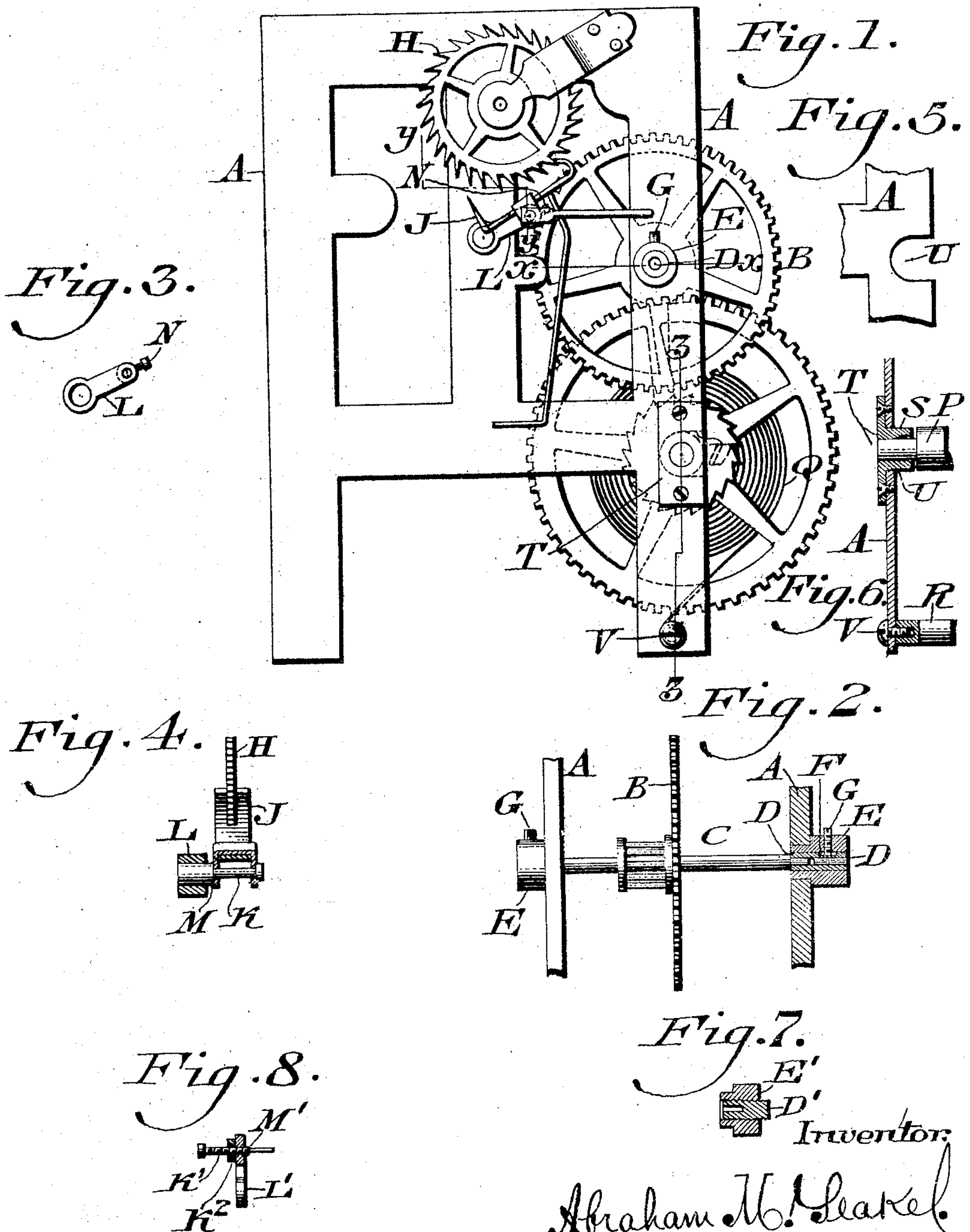
A. M. YEAKEL.

CLOCK.

APPLICATION FILED APR. 13, 1909.

948,363.

Patented Feb. 8, 1910.



Witnesses  
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L. Rouville.

Fig. 7.  
E'  
D'  
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# UNITED STATES PATENT OFFICE.

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CLOCK.

948,363.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed April 13, 1909. Serial No. 489,632.

*To all whom it may concern:*

Be it known that I, ABRAHAM M. YEAKEL, a citizen of the United States, residing at Perkasia, county of Bucks, and State of Pennsylvania, have invented a new and useful Clock, of which the following is a specification.

My invention consists of improvements in clocks, embodying means for adjusting the verge of the escapement so that the pallets of the same may be set properly relatively to the teeth of the escapement wheel, and new surfaces on said pallets may be presented to said teeth as the prior contacting surfaces are worn, thus overcoming lost motion and causing in either case easy-running of the clock.

For the purpose of explaining the invention, the accompanying drawing illustrates a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a front view of a portion of a clock embodying my invention. Fig. 2 represents a partial side elevation and partial section of a portion on line  $x-x$ , Fig. 1. Fig. 3 represents a side elevation of the verge support detached. Fig. 4 represents a section of a portion on line  $y-y$ , Fig. 1. Fig. 5 represents a side elevation of a portion of the frame. Fig. 6 represents a section of a portion on line  $z-z$ , Fig. 1. Figs. 7 and 8 represent sections of modifications of the adjustable shaft and verge-bearings.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawing:—A designates the frame of a clock.

B designates one of the wheels of the train, the shaft C thereof having its ends mounted in the bushings D, the latter being movably contained in the collars E, which are firmly secured to the frame in openings therein.

On the peripheries of the bushings are the longitudinally extending slots F, in which are received the points of the set screws G, which are fitted in the collars E and serve to hold said bushings in set position, according

to the requirements of the shaft, and when the latter is adjusted, the screws G are tightened, the effect of which is evident. As the ends of the shaft are worn, the screws are loosened and the bushings moved to the required extent, when the screws are again tightened, thus taking-up the lost motion and causing regularity in the rotation of the shaft. Furthermore, by withdrawing the bushings, the shaft C and consequently the wheel B may be readily removed and easily reapplied.

H designates the escapement wheel, and J the anchor or verge therefor, both of usual form. The verge is mounted on the pin K, which is freely fitted in an opening in the arm L, which is secured to an adjacent portion of the frame A.

The pin K has a shoulder M, against which the verge is rested, while the portion of the former in the opening in the arm L is engaged by the set screw N, which is fitted in the wall of said opening and adapted to tighten against said pin, it being evident that as the pallets of the verge wear, especially where they contact with the teeth of the escapement, the verge may be moved in and out, the screw N being previously loosened, the verge remaining in contact with the shoulder M. When the verge is adjusted as desired, the screw N is tightened, and so the former retains its newly set position.

P designates the arbor of the spring Q, and R designates the post with which said spring is connected. The arbor P is mounted in the collar S, which is connected with the plate T, said collar occupying the open slot U in the adjacent member of the frame A. By this provision, when the plate is unscrewed or loosened from the frame, the collar S may be readily removed from the frame A, thus adapting of the convenient disconnection of the said spring and its arbor from the frame without disturbing the other members of the clock or disintegrating the frame, and as is evident admitting of the restoration of said spring, its arbor and the collar to the frame.

The post R is retained by the screws V, which are passed through the adjacent portions of the frame into the ends of said post, thus securing the latter in position, while ad-



mitting of the convenient removal of the same when a spring is to be displaced.

5 In Fig. 7, I show a bushing D' in lieu of one of the bushings D, the same being exteriorly threaded and engaging with threads interiorly of the collar E', so as to be screwed in and out and thus be adapted for the adjustment and take-up of the shaft that is mounted in the bushing.

10 In Fig. 8, I show a threaded pin or screw K' in lieu of the pin K, the same having a nut K<sup>2</sup> thereon, the latter being adapted to be tightened against the arm L' in which said screw is fitted, thus retaining said pin 15 in the adjusted position of the verge, which latter is fitted on the nut-threaded portion of said screw K' and rested against the shoulder M' thereof similar to the shoulder M, the verge being thus capable of adjustment similar to that shown in Fig. 4.

20 Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is:—

1. In a clock, a verge, a pin on which the same is mounted, an arm connectible with 25 the frame of the clock, said pin being adjustably held on said arm for movement in the direction of its length, and a set screw on said arm adapted to engage said pin.

2. In a clock, a verge, a pin on which the 30 same is mounted, an arm connectible with the frame of the clock, said pin being adjustably held on said arm for movement in the direction of its length, and a set screw on said arm adapted to engage said pin, said 35 pin having thereon a shoulder against which one side of the verge is rested in all of its adjustments.

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Witnesses:

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