

(No Model.)

A. BRANDLEY.

HAND SETTING MECHANISM FOR TIMEPIECES.

No. 476,515.

Patented June 7, 1892.

Fig. 1.

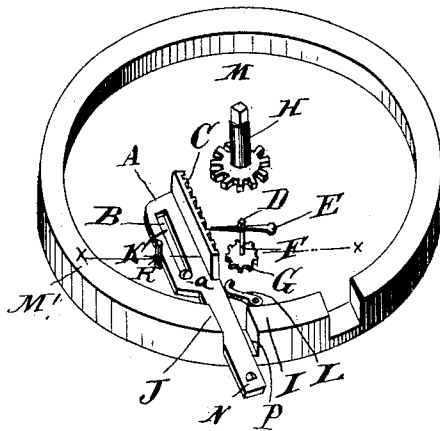


Fig. 2.

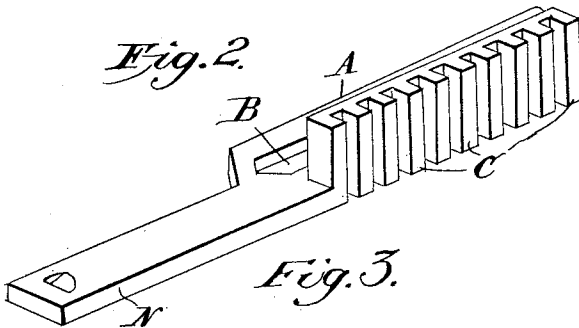
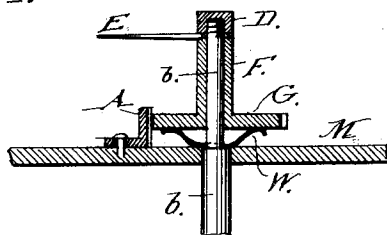


Fig. 3.



Witnesses:

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HAND-SETTING MECHANISM FOR TIMEPIECES.

SPECIFICATION forming part of Letters Patent No. 476,515, dated June 7, 1892.

Application filed February 24, 1890. Serial No. 341,622. (No model.)

To all whom it may concern:

Be it known that I, ARNOLD BRANDLEY, a citizen of the United States, residing at Cherryvale, in the county of Montgomery and State of Kansas, have invented certain new and useful Improvements in Means for Setting the Seconds-Hands of Clocks, Watches, &c., as set forth in the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the top plate of a watch with the dial omitted to show the operative parts. Fig. 2 is an enlarged detail of the sliding rack-bar. Fig. 3 is an enlarged sectional view on the line *x x* of Fig. 1.

My invention relates to means for setting the seconds-hands of clocks, watches, and other time-pieces by means of a toothed slide or rack bar and interposed gearing; and my invention consists of the construction and combination of devices which I shall hereinafter fully describe and claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now describe its construction and indicate the manner in which the same is carried out.

In the accompanying drawings I have shown my invention applied to a watch; but it is manifest that the same is equally adapted to clocks or other timepieces.

M indicates the top plate of a watch from which the dial has been removed, the said plate having a central post or shaft H, carrying a pinion forming part of the usual train of gearing and having the hour and minute hands fitted to it in any well-known manner. The rim M' of the plate is formed with a notch or recess P, dividing the rim into right-hand and left-hand portions I and J, respectively.

From the top plate M rises a pin or stud R, which forms a guide for the rear or inner end of a slide or rack bar A, whose handle portion N projects through the notched portion of the rim M' and serves as a means by which the slide may be moved in and out. This slide is formed with a slot K, through which passes a screw *a*, which secures the slide to the plate M, but enables the slide to move in

and out, and one side of the slide is formed with a rack-surface C, the purpose of which will be hereinafter stated.

Passing through the plate M at one side of the central post H is a shaft or post *b*, which serves as the seconds-hand pivot, the said post being longer than usual and having its end threaded. Upon this post *b* is secured a pinion or gear-wheel G, to which is secured a sleeve or cylinder F, to the upper end of which the seconds-hand E is secured by means of a nut or screw-tap D, as shown in Figs. 1 and 3.

A spring L, secured to the plate M, has its free end bearing against the slide A to keep it normally out of contact with the gear G on the pivot of the seconds-hand. On the shaft or pivot *b* of the seconds-hand below the gear G is a spring-plate W, having a hole in its center for said shaft or pivot and having its ends supporting the gear, as shown in Fig. 3. In placing these parts together the spring is passed down upon a shoulder on the shaft or pivot *b*. Then the gear G and its sleeve are slipped down upon the spring and the seconds-hand fitted to the top of the sleeve and held in place by the nut or screw-tap D and the parts adjusted by the latter until the gear G bears gently upon the spring.

In operating the constructions described to set the seconds-hand the handle portion N of the slide is first pressed toward the right-hand portion I of the notch or recess. This movement causes the inner or rack end of the slide to be moved inward toward the gear G, so that its teeth will engage those of the gear, when the continued pull upon the lever will set the hand E backward. To set the hand forward, the operator pulls the slide outward with its handle portion N against the left-hand portion J of the notch or recess and then presses the slide toward the opposite wall of the groove or recess to cause the engagement of the slide with the gear G, and finally presses the slide inward so as to move the hand forward. When the setting has been accomplished, the operator releases his hold on the slide, when the spring L operates to force the slide to one side out of engagement with the gear.

Having thus described my invention, what I

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

1. A watch, clock, or other timepiece having a rim with opening therein provided with
5 a notch or recess, in combination with a bar or slide mounted upon the top plate of the timepiece and slotted upon a pin thereon, said rack-bar having a handle portion extending through said recess and having its
10 inner side portion provided with a rack or toothed surface, a gear on the shaft or pivot of the seconds-hand into engagement with which the toothed portion of the slide is moved to set the hand forward or backward, substantially as herein described.

2. In a watch, clock, or other timepiece, a top plate having a notched or recessed rim, a toothed slide or rack bar slidable upon said plate and having a handle portion projecting
20 through the rim, a gear on the seconds-hand shaft or pivot, a spring on said shaft or pivot

below the gear, a sleeve or cylinder rising from the gear and inclosing the upper end of the pivot, and a nut or screw-tap on the upper end of said pivot, substantially as herein described.

3. In a watch, clock, or other timepiece, a gear on the seconds-hand pivot, in combination with a longitudinally and laterally moving toothed slide or bar slotted upon a pin
30 upon the top plate of the timepiece, the pin R or guide against which the outer face of the slide contacts to force the toothed portion of the slide transversely into contact with the pinion as the slide is drawn out longitudinally, and a spring acting against the
35 slide to move it laterally away from the pinion, substantially as herein described.

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Witnesses:

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