

No. 647,050.

Patented Apr. 10, 1900.

R. TÜRCK.
CLOCK STRIKING MECHANISM.

(Application filed Nov. 19, 1898.)

(No Model.)

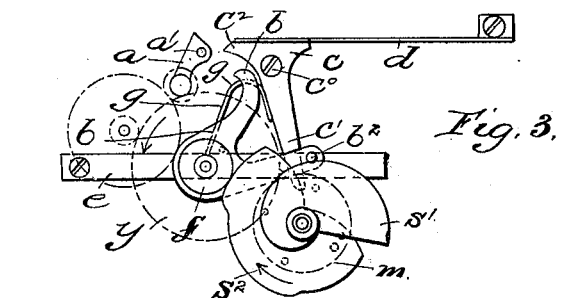
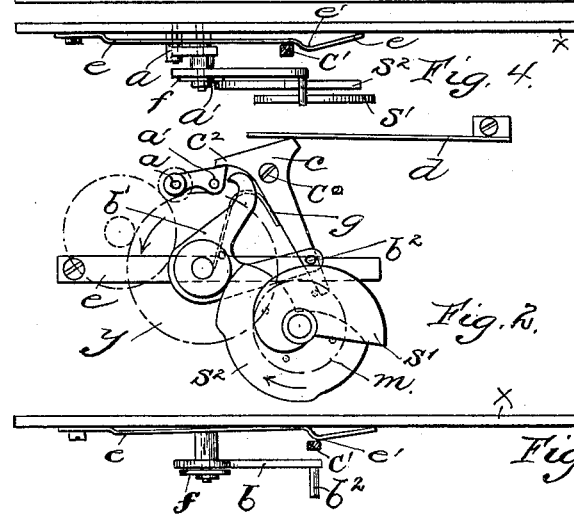
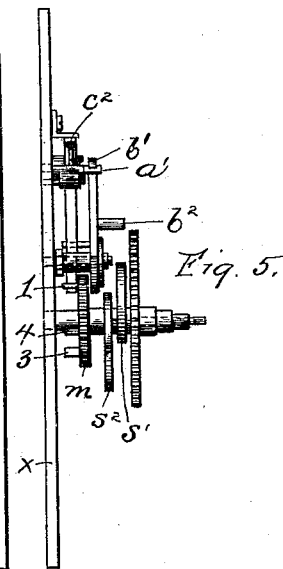
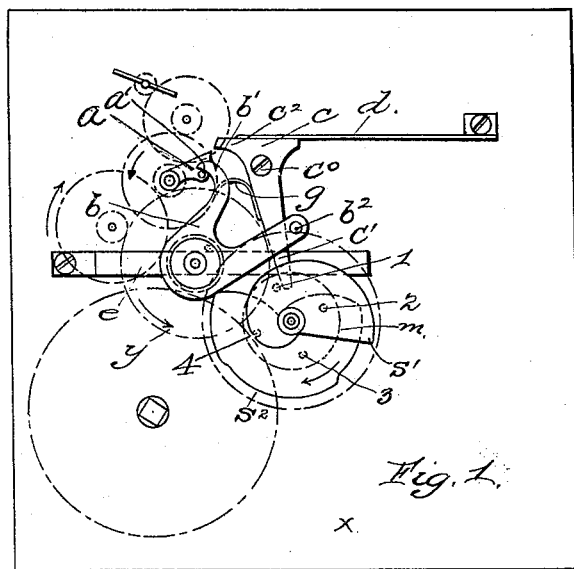


Fig. 6.

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UNITED STATES PATENT OFFICE.

ROBERT TÜRCK, OF ZURICH, SWITZERLAND.

CLOCK STRIKING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 647,050, dated April 10, 1900.

Application filed November 19, 1898. Serial No. 696,866. (No model.)

To all whom it may concern:

Be it known that I, ROBERT TÜRCK, a citizen of the Swiss Republic, residing at Zurich, Switzerland, have invented certain new and useful Improvements in Striking Mechanism for Clocks and Watches, of which the following is a specification.

My invention is a repeating striking mechanism, and it includes the features of structure and arrangement hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of the invention. Fig. 2 is a side view of some of the parts of Fig. 1 in a different position from Fig. 1. Fig. 3 is a view similar to Fig. 2 with the parts in the position assumed by them during the striking. Fig. 4 is a plan view of some of the parts of Fig. 1. Fig. 5 is an edge view of the parts of Fig. 1. Fig. 6 is a plan view of some of the parts in Fig. 2.

In Fig. 1 some of the wheels of the movement are represented by dotted lines. These wheels turn in the direction of the arrow. The wheel marked *y* has loosely journaled upon its arbor a two-armed lever *b*, which has one arm hooked at *b'* to engage a pin *a'* on an arm *a*. This arm is on the arbor of one of the wheels of the striking-train, and so long as the hook *b'* engages the pin *a'* the striking-movement will be held inactive. The hub of the double-armed lever *b* is pressed upon by the spring *e*, which is secured to the movement-plate *x*, and this pressure forces the lever into frictional contact with the disk *f* on the arbor of the wheel *y*. The minute-wheel is shown at *m*, and this has pins 1, 2, 3, and 4, as in quarter-stroke clocks. The engagement between the hook *b'* and the pin on the arm *a* is controlled by a lever *c*, pivoted to the movement-plate at *c'*, having one end extending down into the path of the pins 1, 2, 3, and 4 and having its upper end broadened, upon which rests the spring *d*, secured to the movement-plate. This spring returns the lever to normal position when it is moved therefrom. When the lever is turned by one of the pins 1, 2, 3, and 4, its end *c''* engages the end of the arm *a* and forces it down, so that the pin *a'* will be freed from the hook *b'*. At the same moment the lower end of the lever *c* engages the bent end *e'* of the spring *e* and moves said spring inwardly, so that the double-armed lever *b* will be released from frictional contact with the disk *f*, and the said lever will be free

to fall. The falling movement of the double-armed lever is limited by the pin *b''* of the arm striking against one of the steps of the disk *s'*. As soon as the lever *c* is freed from the pin of the minute-wheel the spring *d* returns it to normal position, and the arm *a* is thus entirely free both from the lever *c* and the hook *b'*. This allows the striking action to take place, and the double-armed lever *b* having fallen until its pin *b''* strikes the step of the disk the striking will continue until the double-armed lever is raised again to the position of Fig. 1 and the pin *a'* engages the hook. The raising movement of the double-armed lever begins as soon as the lever *c* is returned to normal position by the spring *d*, so that the lower end of said lever will be free from the spring *e*, and said spring will then force the double-armed lever or its hub into contact with the disk *f*. A spring *g* is attached to the lever *c* and presses against a pin on the hub of the lever *b*. This limits the movement of the count-lever *b* on returning.

I claim—

1. In combination with a wheel of the striking-movement, a count-lever having frictional connection therewith to be moved thereby, a spring for pressing the lever into said frictional connection, a lever *c* controlling the pressure of the spring, a disk having steps to engage a part of the count-lever, means to operate the lever *c* and an arm controlled by the count-lever, substantially as described.

2. In combination, the striking-movement, an arm *a* connected thereto and having a pin, a count-lever engaging the pin and having frictional connection with a wheel of the striking-train, a disk having steps to be engaged by a part of said lever, a spring for pressing the count-lever into frictional connection with the wheel of the striking-train, the wheel *m* having the pins thereon, the lever moved by said pins, said lever having an end to engage the spring *e* and also a portion to engage the arm *a* and a spring for returning the said lever *c* to normal position, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ROB. TÜRCK.

Witnesses:

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