No. 621,482. Patented Mar. 21, 1899.

J. AUMUND.

CLOCK STRIKING MECHANISM.

(Application filed Sept. 17, 1898.)

(No Model.)

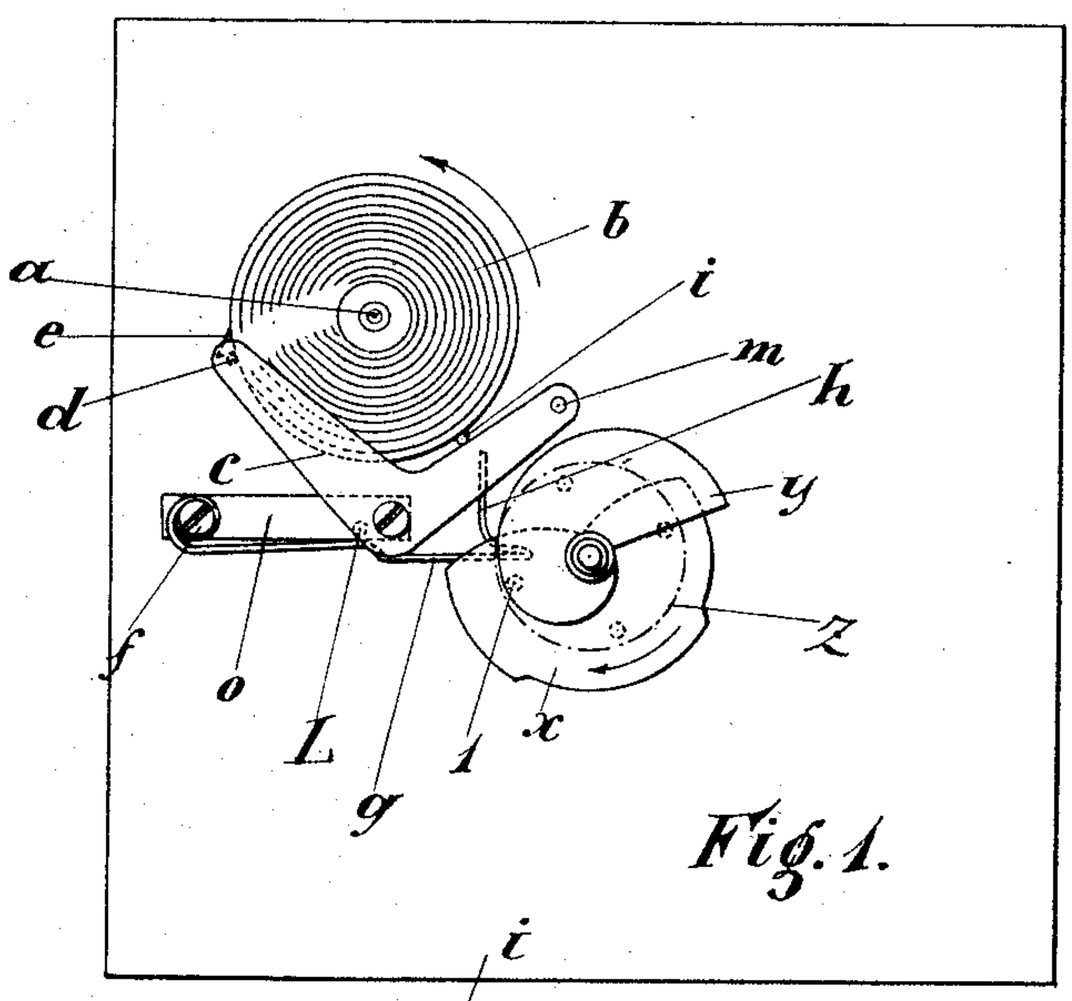

Fig. 1.

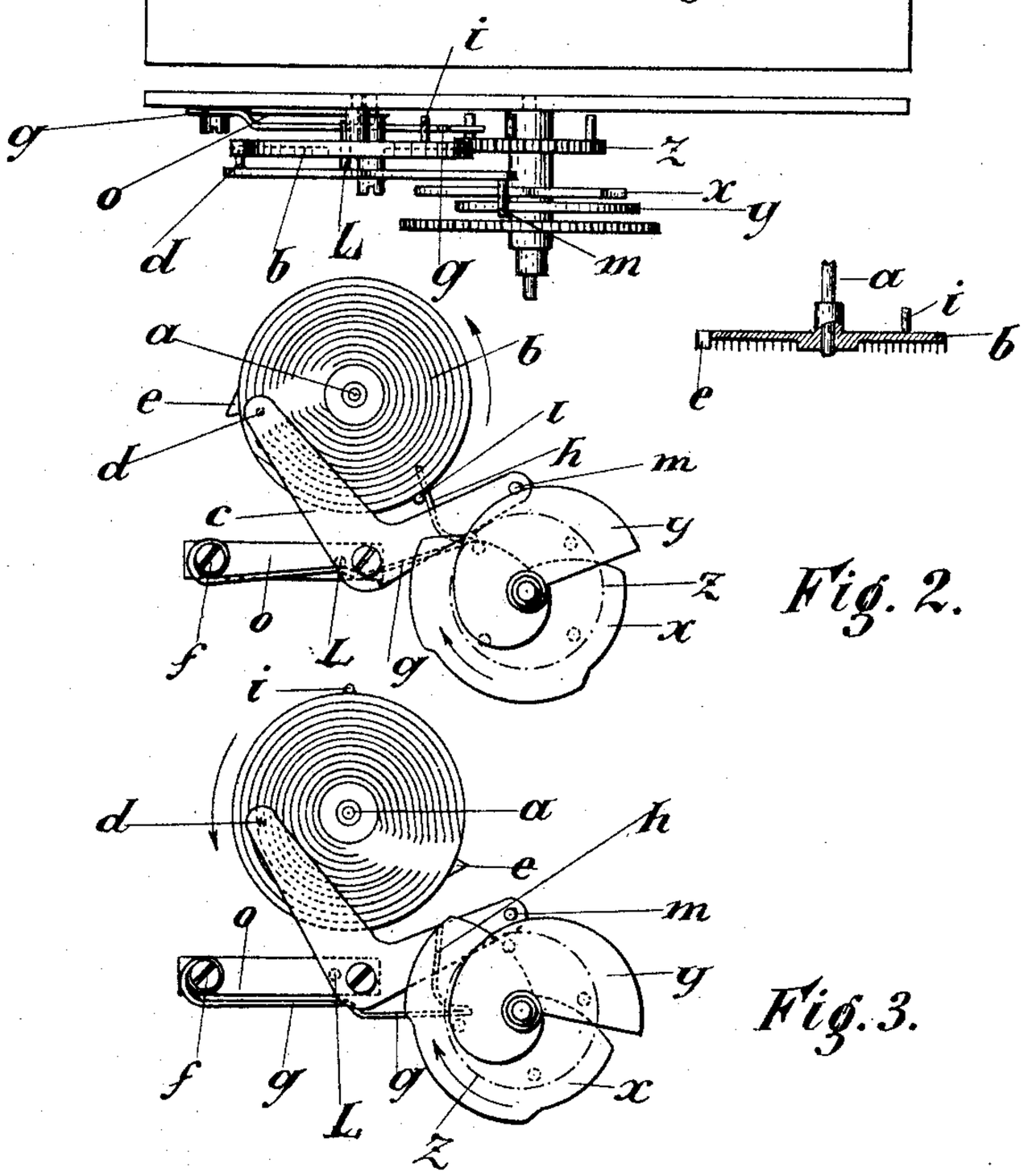

Fig. 2.

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHANNES AUMUND, OF ZURICH, SWITZERLAND.

CLOCK STRIKING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 621,482, dated March 21, 1899.

Application filed September 17, 1898. Serial No. 691,237. (No model.)

To all whom it may concern:

Be it known that I, JOHANNES AUMUND, a citizen of the Republic of Switzerland, and a resident of Zurich, Switzerland, have invented certain new and useful Improvements in Strike-Works for Clocks and Watches, of which the following is a full, clear, and exact specification.

The drawings hereto annexed represent one example of putting into practice my invention of a new repeating striking mechanism for clocks and watches.

Figure 1 gives a front and top view. Fig. 2 shows the parts ready for striking. Fig. 3 shows the striking mechanism in action.

The axle *a* of a wheel which revolves one time at each bell-stroke passes through the front plate of the clockwork, and on that end of the axle a disk *b* is placed. The surface of the disk is divided into twelve annular grooves, almost throughout concentric, which are discontinued at a place which is in the moments of rest in a concentric position with the pivot of lever *c*. A pin *d*, which fits into the said grooves of disk *b*, is attached to the left branch of lever *c*, which covers part of the disk. The nose *e*, protruding from the periphery of the disk, meets the pin *d*, thus keeping the mechanism at rest.

The center wheel *z* carries the unlocking-pin *l*, which presses upward against the spring *f* until the latter's extremity reaches the pin *i* of the disk *b*. That disengages the nose *e*. Thereby the bend of spring *g* is pressed against the pin L of the lever in the vicinity of the latter's pivot and causes the lever to turn upward to the right until the pin *m* of the right branch of lever *c* rests against one of the striking-snails *x* or *y*. During that movement of lever *c* the pin *d* moves on to the right along the space where the annular grooves are discontinued, as in Fig. 2.

The unlocking-pin *l* having disengaged the spring *g* in consequence of the motion of the center wheel and the said spring having sprung back into its resting position, whereby the pin *i* of the disk *b* became disengaged, the striking can begin. (See Fig. 3.) The disk turns to the left, as indicated by the arrow in the drawings, and the pin *d* enters that groove of the disk which responds to the pin's initiative position, Fig. 2. At every revolution of the disk—that is, at each bell-stroke—the pin *d*, owing to a slight turn of the ripples or grooves, passes over into the next groove, which is of a larger diameter. When finally pin *d* leaves the last or longest groove, the nose *e* strikes against the pin *d* again and stops the striking mechanism, Fig. 1.

o is a thin spring placed under the hub of lever *c* and, pressing lightly against it, brakes the motion of the lever in order to prevent the pin *d* from moving radially as it passes from one groove to the next across the space between the ends of the grooves.

While the branches of lever *c* are of equal lengths, the division on disk *b* corresponds with the shape of the striking-snails.

If a repetition of the strokes is desired, it suffices to move the spring *g* upward and back again. That can be done by means of a string over a roll or in some other practical manual way.

I claim—

In combination in a repeating strike-work for clocks and watches, a disk *b* having grooves in its face, a lever *c* having a pin *d* to engage the grooves during the striking and a stop on the disk *b* to engage the pin on the lever, substantially as described.

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

JOHANNES AUMUND.

Witnesses:

FRIEDRICH ALBERT GEIGER,

JOSEPH ANTON STEINEGGER.