(No Model.)

E. N. GAILLARD.

MUSICAL WATCH.

No. 346,812. Patented Aug. 3, 1886.

Fig. 1.

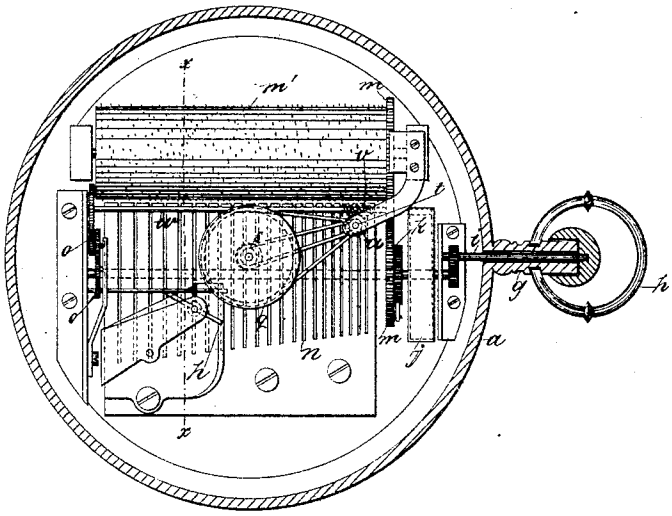


Fig. 2.

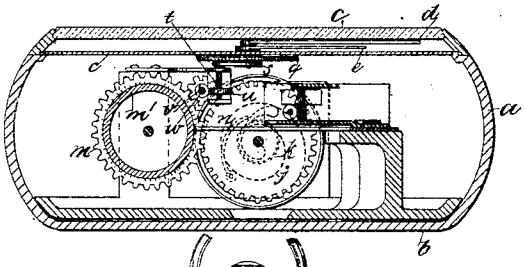
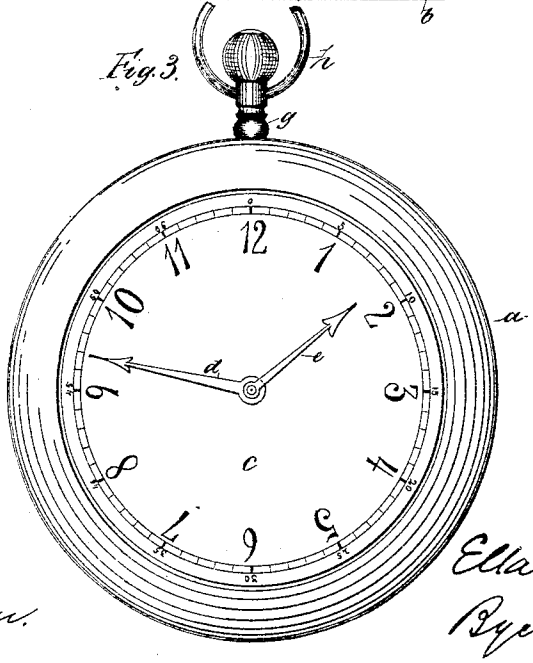


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

ELLA N. GAILLARD, OF NEW YORK, N. Y.

MUSICAL WATCH.

SPECIFICATION forming part of Letters Patent No. 346,812, dated August 3, 1886.

Application filed August 5, 1885. Serial No. 173,668. (No model.)

To all whom it may concern:

Be it known that I, ELLA N. GAILLARD, a citizen of the United States, residing at New York city, in the county and State of New York, have invented new and useful Improvements in Musical Watches, of which the following is a specification.

My invention consists of an improved contrivance for the combination of a watch dial and hands with the mechanism of a music-box, whereby the turning of the hands will be effected by the action of a music-train for a simple and cheap imitation musical watch, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of the device with the dial and hands removed and the case and stem sectioned. Fig. 2 is a transverse section of the device on line *x x*, Fig. 1. Fig. 3 is a face view.

I arrange the mechanism of a common music-box in a case, *a b*, resembling a watch-case, and having a watch-dial face, *c*, and hands *d e*, also having a hollow stem, *g*, and ring *h*, and I fit the shaft *i* of the winding mechanism of the music apparatus through the hollow stem *g* in the manner of the winding-gear of a stem-winding watch.

To the music mechanism, which consists of the driving-spring *j*, ratchet *k*, driving-train *m*, pin-barrel *m'*, comb *n*, fan-driving train *o*, and regulating-fan *p*, of approved contrivance, I gear the hands *d e* by means of a large pulley, *q*, and belt connected with the hour-hand and the small pulley *s* and belt connected with the minute-hand, which belts run on the short shaft *t*, gearing by the worm-wheel *u* with the worm *v* on the shaft *w*, which gears with the train *o* of the fan-regulator with the power-train *m* of the music apparatus, thus making a simple device representing a musical watch for the amusement of children.

For the belts I propose to employ flexible rubber bands, that will hug the pulleys and shaft, so as to avoid slipping, and at the same time will be sufficiently light and flexible for the purpose.

The pulleys *q* and *s* will be suitably proportioned for the required differential motions of the minute and hour hands.

I claim as my invention—

1. The improved combined music-box and watch, consisting of the music apparatus inclosed in a watch-case having dial *c* and hands *d e*, the hands being differentially geared with the music-driving train by the shaft *t*, belts and pulleys *q s*, and the worm-gear *u v*, substantially as described.

2. The improved combined music-box and watch, consisting of the music apparatus inclosed in a watch-case having dial *c*, hands *d e*, and hollow stem *g*, the winding-shaft of the music mechanism being arranged in said hollow stem, and the hands being geared with the music-driving train by the shaft *t*, belts and pulleys *q s*, and the worm-gear *u v*, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ELLA N. GAILLARD.

Witnesses:
W. J. MORGAN,
S. H. MORGAN.