B. BAILLOT.

Calendar Watch.

No. 212,882. Patented Mar. 4, 1879.

Fig. 1.

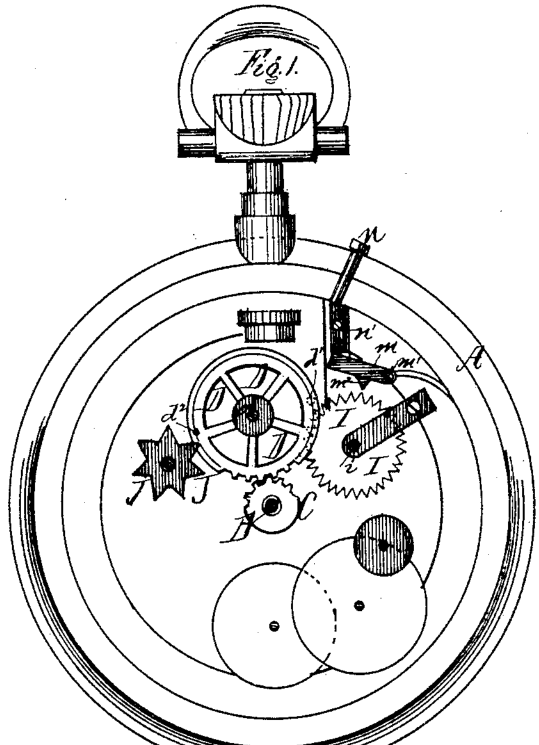
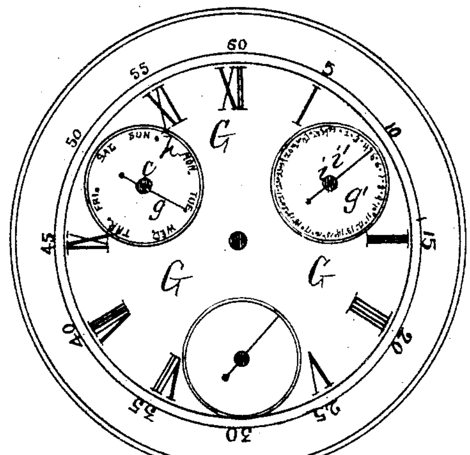


Fig. II



Witnesses:

J. Barritt

Ch. Riegelman

Inventor:

Barbezat Baillot,

Per Richard Gerner,

Atty.

UNITED STATES PATENT OFFICE.

BARBEZAT BAILLOT, OF LOCLE, SWITZERLAND.

IMPROVEMENT IN CALENDAR-WATCHES.

Specification forming part of Letters Patent No. **212,882**, dated March 4, 1879; application filed December 4, 1878.

To all whom it may concern:

Be it known that I, BARBEZAT BAILLOT, of Locle, in the Canton of Neufchatel and Republic of Switzerland, have invented a new and useful Improvement in Watches; and I hereby declare that the following is a clear and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is to provide for certain improvements in watches, by aid of which a watch will record the days of the month and the days of the week by aid of certain mechanical devices, which derive their motion from the watch-movement.

My invention consists in attaching on the center pinion of a watch under the dial a wheel provided with thirty (30) teeth or cogs. This wheel gears into another wheel having sixty (60) teeth. This last wheel is provided with two pins, one fastened to the under side of the rim and the other to the upper side of the same. One of these pins is intended to move a wheel for recording the days of the week. The other pin is intended to move a wheel for recording the days of the month. Above the wheel for recording the days of the month is a spring pusher or pawl, which is acted upon by a slide. This slide is moved by aid of a pin, which protrudes through the rim of the watch-case. The object of this spring pusher or pawl is to turn the wheel independently of the watch mechanism, in order to register correctly the number of days in different months.

In order to more fully describe my invention, I refer to the accompanying drawings, forming a part of this specification.

Figure 1 is a front view of the internal mechanism of a watch embodying my invention. Fig. 2 is a front view of a watch-dial embodying my invention.

A is a watch-case; B, the central pinion, to which is attached the cogged wheel C, with thirty teeth. This wheel gears into the wheel D, having sixty teeth, and attached to the axle *d*. d^1 is a pin, fastened to the under side of the wheel D. d^2 is another pin, fastened to the upper side of the wheel D. The object of the pin d^2 is to turn the star-wheel J, provided with seven teeth, indicating the seven days of the week. This wheel is attached to the axle *c*, which protrudes through the dial G, and provided at the end with a hand, *g*. The space *h*, over which the hand *g* revolves, is divided off into seven spaces—viz., Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

The object of the pin d^1 is to turn the wheel I, provided with thirty-one teeth, and attached to the axle *i*. These thirty-one teeth indicate the number of days in a full month. To the axle *i*, which protrudes through the dial G, is fastened the hand *i'*, revolving over the month-dial *g'*, with thirty-one numbers, as shown.

It is obvious that when the wheel C revolves twice, thus indicating twenty-four hours or one day, the wheel D will revolve once in the same time, or once a day. At each revolution of the wheel D the wheels J and I will have moved through the actions of the pins d^1 and d^2 one tooth, thus changing the days of the week and the days of the month. This will take place when the hour-hand reaches twelve o'clock midnight, and will continue to take place as long as the watch mechanism is in running order.

m is a spring pawl or starter, fastened to the watch-case at m^1 above the wheel I, as shown. This pawl is provided with a tooth, m^2, which is prevented from engaging into the wheel by virtue of the spring on the end of the pawl. The office of this pawl *m* is to cause the wheel I to revolve independently of the watch mechanism. This is done by pushing the pawl down and causing the tooth m^2 to strike against the teeth of the wheel I, thus moving the said wheel one tooth by each movement of the pawl. This pawl is operated from the outside of the case by the pin *n*, which also acts upon a slide, *n'*, acting upon the outer end of the pawl.

By the above arrangement the difficulty of registering correctly the different number of days in certain months is overcome.

When February is reached it is required that the teeth of wheel I shall skip three days, so as to correspond with the days-of-the-week dial; and in order to accomplish this it is only required to press down the pin *n* three times, which will cause the wheel I to move around the distance three teeth, which is done

through the action of the pawl. The same course is pursued with months having thirty days, excepting the pin is only pressed down once.

Having thus described my invention, I desire to claim—

1. The wheel D, with pins d^1 and d^2, and provided with sixty teeth, in combination with the wheel C, with thirty teeth, and attached to the central pinion, B, substantially as and for the purpose set forth.

2. The wheel D, with pins d^1 and d^2, and being provided with sixty teeth, in combination with the wheel J, with seven teeth, and attached to the axle i with hand i', substantially as and for the purpose set forth.

3. The wheel I, having thirty-one teeth, in combination with the pawl m, with tooth m^2, slide n', and pin n, substantially as and for the purpose set forth.

This specification signed this 15th day of September, 1878.

BARBEZAT BAILLOT.

Witnesses:

EUGENE LOZE COURVOISIER,

G. MATILE.