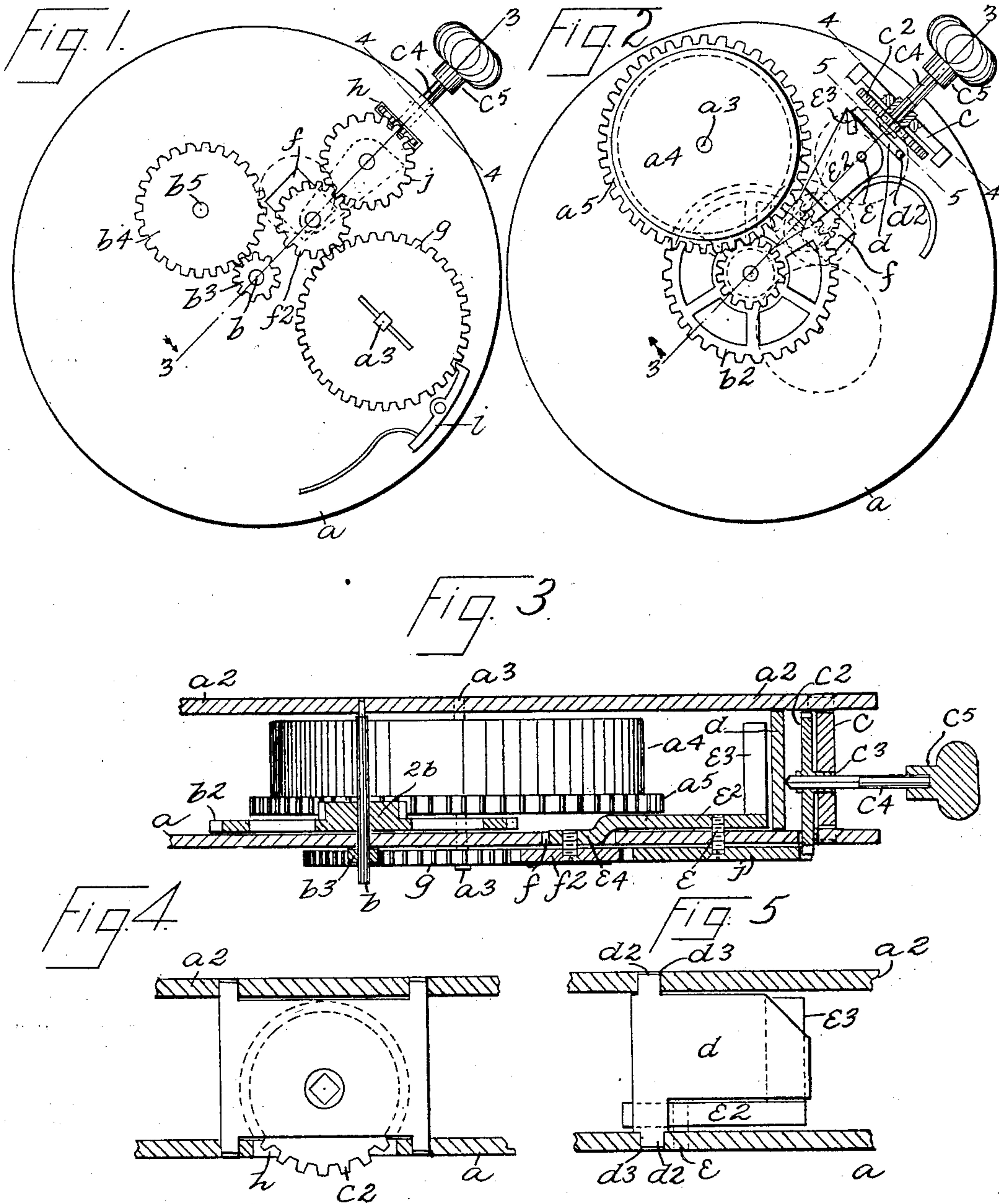


No. 708,985.

Patented Sept. 16, 1902

M. BASSOFF.
STEM WINDING WATCH.
(Application filed May 12, 1902.)

(No Model.)



WITNESSES

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MORRIS BASSOFF, OF BROOKLYN, NEW YORK.

STEM-WINDING WATCH.

SPECIFICATION forming part of Letters Patent No. 708,985, dated September 16, 1902.

Application filed May 12, 1902. Serial No. 106,871. (No model.)

To all whom it may concern:

Be it known that I, MORRIS BASSOFF, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Watch Winding Mechanism, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide improved devices for winding and setting a watch, a further object being to provide devices of this class which will be simple in construction and operation and which will not easily get out of order or frequently need repairs; and with these and other objects in view the invention consists in devices for winding and setting a watch constructed and operating as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, in which—

Figure 1 is an outside view of one of the side plates of the frame of the watchwork mechanism and showing the parts of my improvement connected therewith. Fig. 2 is an inside view of said plate and showing the parts of my improvement connected therewith. Fig. 3 is a section on the line 3 3 of Figs. 1 and 2; Fig. 4, a section on the line 4 4 of Figs. 1 and 2; and Fig. 5, a section on the line 5 5 of Fig. 2, Figs. 3, 4, and 5 being on an enlarged scale.

In the drawings forming part of this specification I have shown the side plates of the frame of the mechanism of a watch together with certain parts of said mechanism hereinafter described, and the side plates of the frame are designated by the reference characters a and a^2 and may be connected in any desired manner. Mounted between the side plates a and a^2 is a shaft a^3 , which carries the usual spring-barrel a^4 , which is provided with the usual gear-wheel a^5 , and I also provide with a center arbor b , which is mounted between said plate and provided with a gear-wheel b^2 , rigidly secured thereto and which in practice operates the watchwork mechanism,

which is not shown and which is provided with a pinion 2^b , in connection with which the gear-wheel a^5 operates. The center arbor b is provided outside of the plate a with a pinion b^3 , and said shaft also carries in practice the minute-hand of the watch, which is not shown, and the pinion b^3 operates in connection with a gear-wheel b^4 , mounted on a shaft b^5 . In one side of the frame and between the plates a and a^2 is placed a transverse plate c . Within said plate c or at the inside thereof is placed a gear-wheel c^2 , provided with a hub c^3 , which passes through the plate c and is revoluble in said plate c , and the hub c^3 is adapted to receive the shank c^4 of the pendant-stem c^5 , and the end of the shank c^4 which passes into the end of the hub c^3 is angular in cross-section, and said shank passes through said hub and through the wheel and is movable there-through. Inside of the wheel c^2 is placed a plate d , provided at one side with pivotal projections d^2 , which pass through corresponding openings d^3 in the plates a and a^2 , and the plate d ranges parallel with the plate c and wheel c^2 and is adapted to be turned on its pivotal support through the shank c^4 of the pendant-stem c^5 when said shank is inserted into position, as shown.

Pivoted to the plate a at e is a yoke e^2 , which ranges radially of said plate a , and the inner end of which is narrower than the outer end, said yoke being substantially triangular in form, and the pivotal point e is near the corner thereof formed by the base side and wider end thereof, and the opposite corner of said yoke is provided with a finger e^3 , against which the plate d is adapted to bear, and said plate d forms an arm for operating the yoke e^2 , in which operation it bears on the finger e^3 of said arm. The inner end of the yoke e^2 is provided with an annular portion e^4 , which fits in a slot or opening f in the plate a , and connected with said annular portion e^4 of the yoke e^2 is a pinion f^2 , which is outside of the plate a and which is adapted to operate in connection with the large gear-wheel g on the shaft a^3 of the barrel a^4 and also in connection with the gear-wheel b^4 . The plate a is also provided with a slot h , through which the perimeter of the wheel c^2 passes, as clearly shown in the drawings, and this slot, or rather

the passing of said wheel therethrough, prevents the movement of said wheel toward or from the plate c and holds said wheel c^2 in proper position for use, and in Fig. 1 of the drawings I have shown at i a spring-operated ratchet adapted to engage the wheel g and prevent the unwinding of the barrel a^4 in the operation of winding the watch.

The support of the yoke e^2 at e consists of a screw or pin passing through the plate a , and mounted in this screw or pin, outside of said plate, is a large gear-wheel j , in connection with which the gear-wheel c^2 operates, and the gear-wheel j also operates in connection with the pinion f^2 , which is carried by the arm e^2 .

In the normal position of the parts the pinion f^2 is in engagement with the wheel g , and the watch may be wound by simply turning the pendant-stem c^5 ; but when it is desired to set the watch the key c^5 is forced inwardly. This operation presses the plate d or the yoke thereof against the finger e^3 of the arm e^2 and throws the pinion f^2 into engagement with the wheel b^4 , and then by turning the key the watch may be set, as will be readily understood, the pinion b^3 being connected with the shaft b , which carries the minute-hand of the watch, as hereinbefore described, and with which in practice the hour-hand is also connected in the usual manner.

This winding and setting mechanism for watches is comparatively simple in construction and also comparatively inexpensive and is positive in operation and is not liable to get out of order or frequently need repairs, and changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a watch winding and setting mechanism a barrel-shaft provided with a gear-wheel, a center arbor provided with a pinion, a gear-wheel operating in connection with said pinion, a yoke provided with a pinion normally in engagement with the gear-wheel on the barrel-shaft and adapted to be thrown into engagement with the gear-wheel which operates in connection with the pinion on the center arbor, a stationary plate, a wheel mounted on the inner side of said plate and provided with a hub which passes therethrough and is adapted to receive a pendant-

stem longitudinally movable therein, and a plate pivoted between said wheel and said yoke and adapted to be operated by the pendant-stem, said last-named plate being adapted to operate said yoke, substantially as shown and described.

2. In a watch winding and setting mechanism a barrel-shaft provided with a gear-wheel, a center arbor provided with a pinion, a gear-wheel operating in connection with said pinion, a yoke provided with a pinion normally in engagement with the gear-wheel on the barrel-shaft and adapted to be thrown into engagement with the gear-wheel which operates in connection with the pinion on the center arbor, a stationary plate, a wheel mounted on the inner side of said plate and provided with a hub which passes therethrough and is adapted to receive a pendant-stem longitudinally movable therein and a plate pivoted between said wheel and said yoke and adapted to be operated by the pendant-stem, said last-named plate being adapted to operate said yoke, and a gear-wheel mounted between said last-named gear-wheel and the pinion carried by said yoke, substantially as shown and described.

3. In a watch winding and setting mechanism a barrel-shaft provided with a gear-wheel, a center arbor provided with a pinion, a gear-wheel operating in connection with said pinion, a yoke provided with a pinion, which normally engages the gear-wheel on the barrel-shaft, a plate secured transversely of the frame of the watch mechanism near one side thereof, a gear-wheel mounted at the inner side of said plate and provided with a hub which passes therethrough and is adapted to receive a pendant-stem, another gear-wheel mounted between said last-named gear-wheel and operating in connection therewith and in connection with the pinion carried by the yoke, and a plate pivoted at the inner side of the wheel through the hub of which the pendant-stem passes, said last-named plate being adapted to be operated by pendant-stem so as to operate said yoke, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 10th day of May, 1902.

MORRIS BASSOFF.

Witnesses:

F. A. STEWART,
C. E. MULREANY.