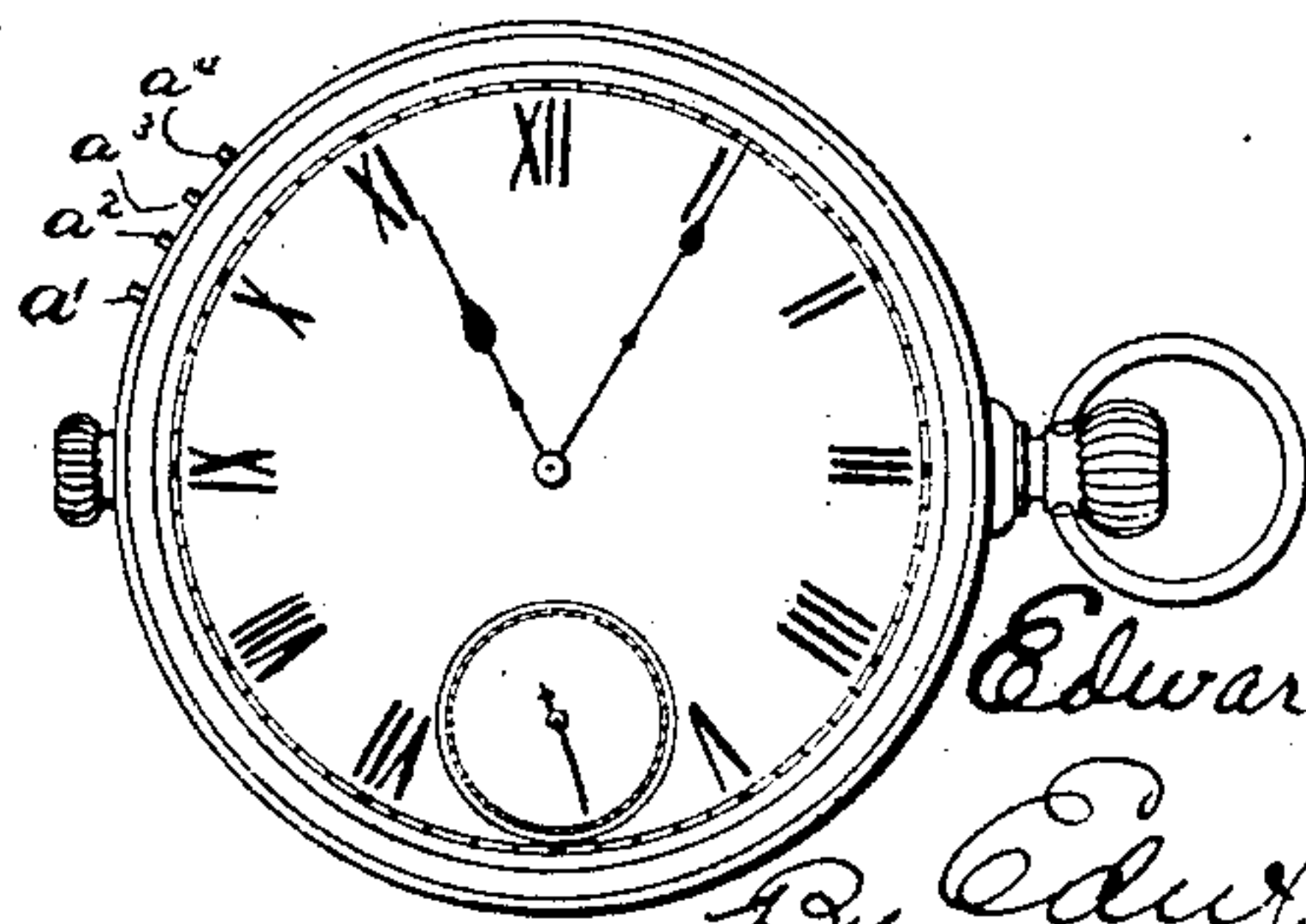
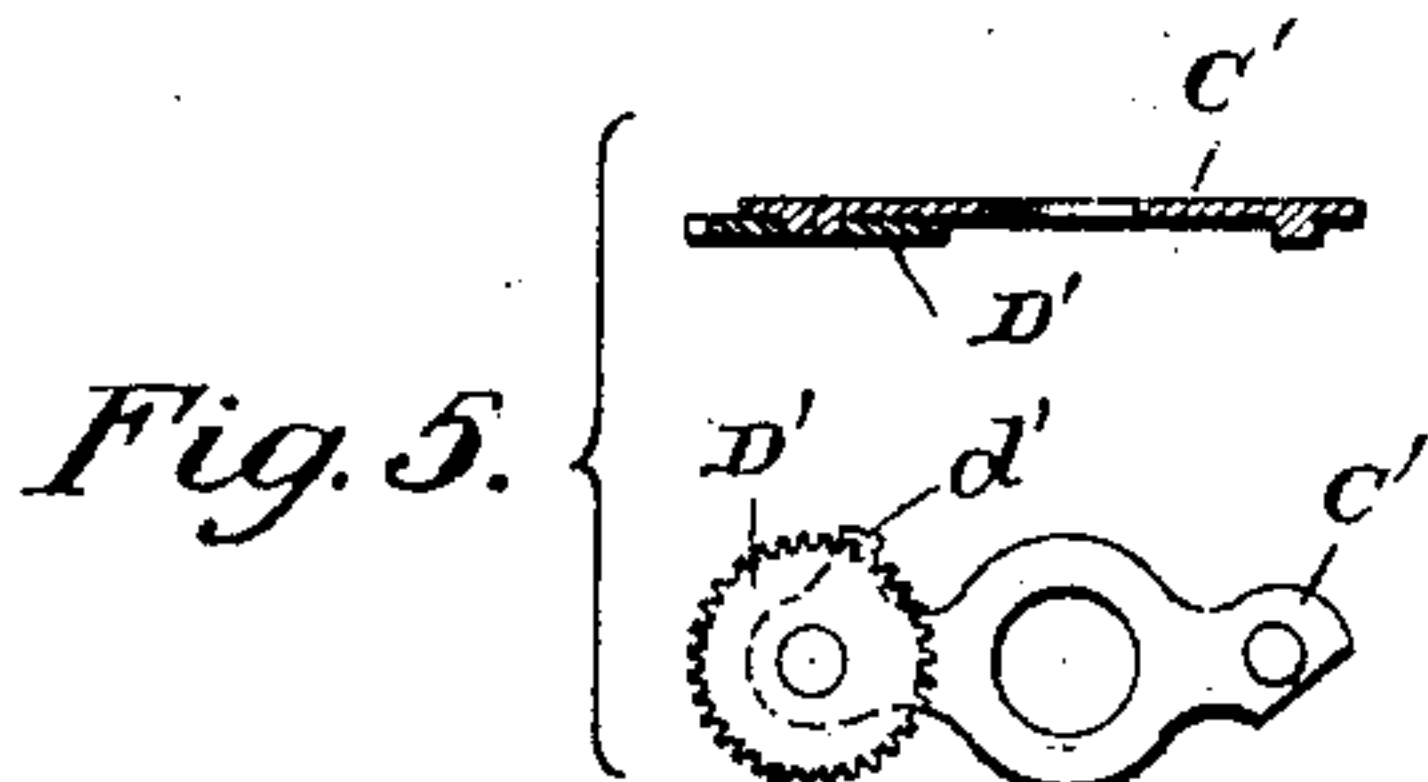
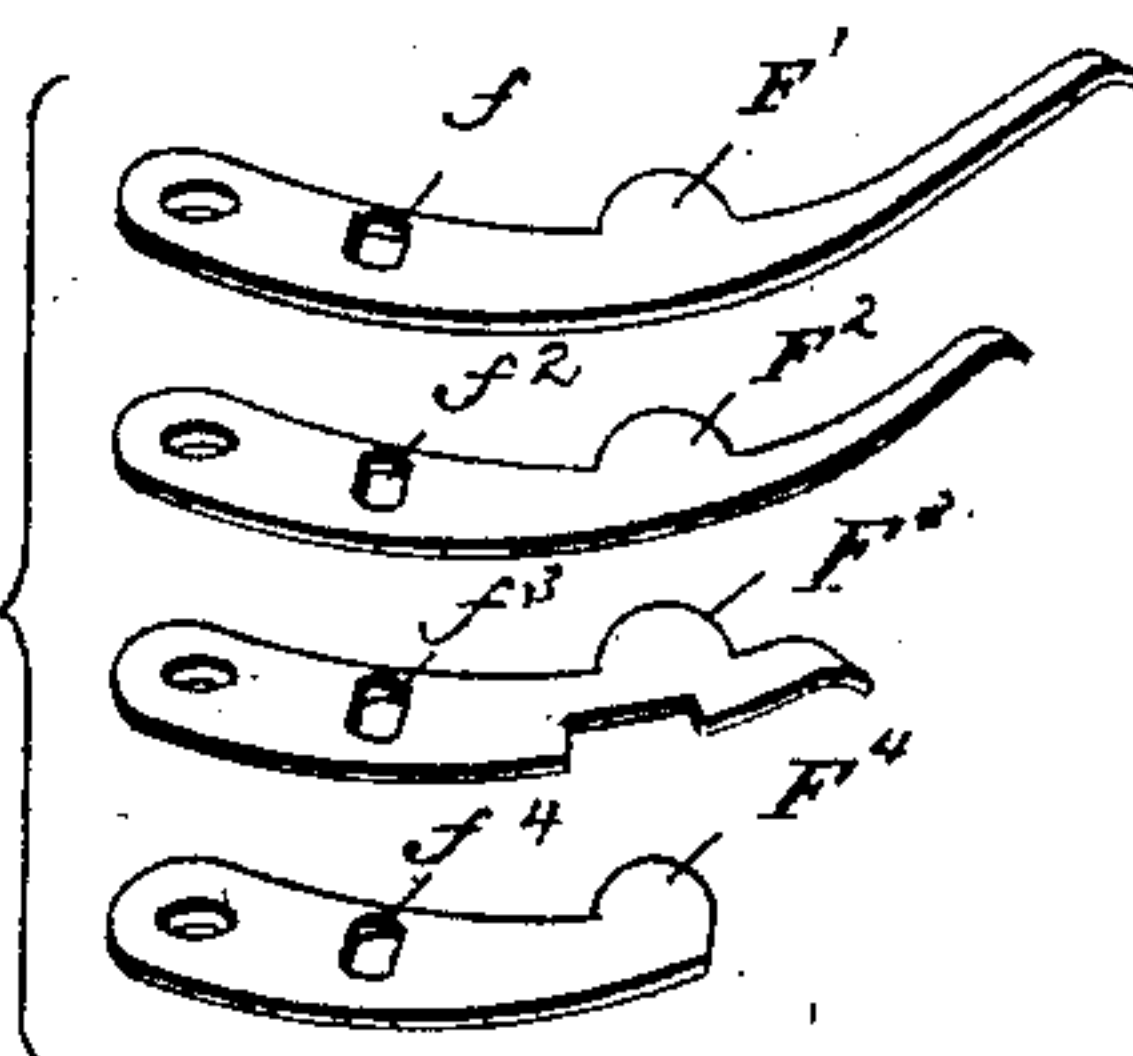
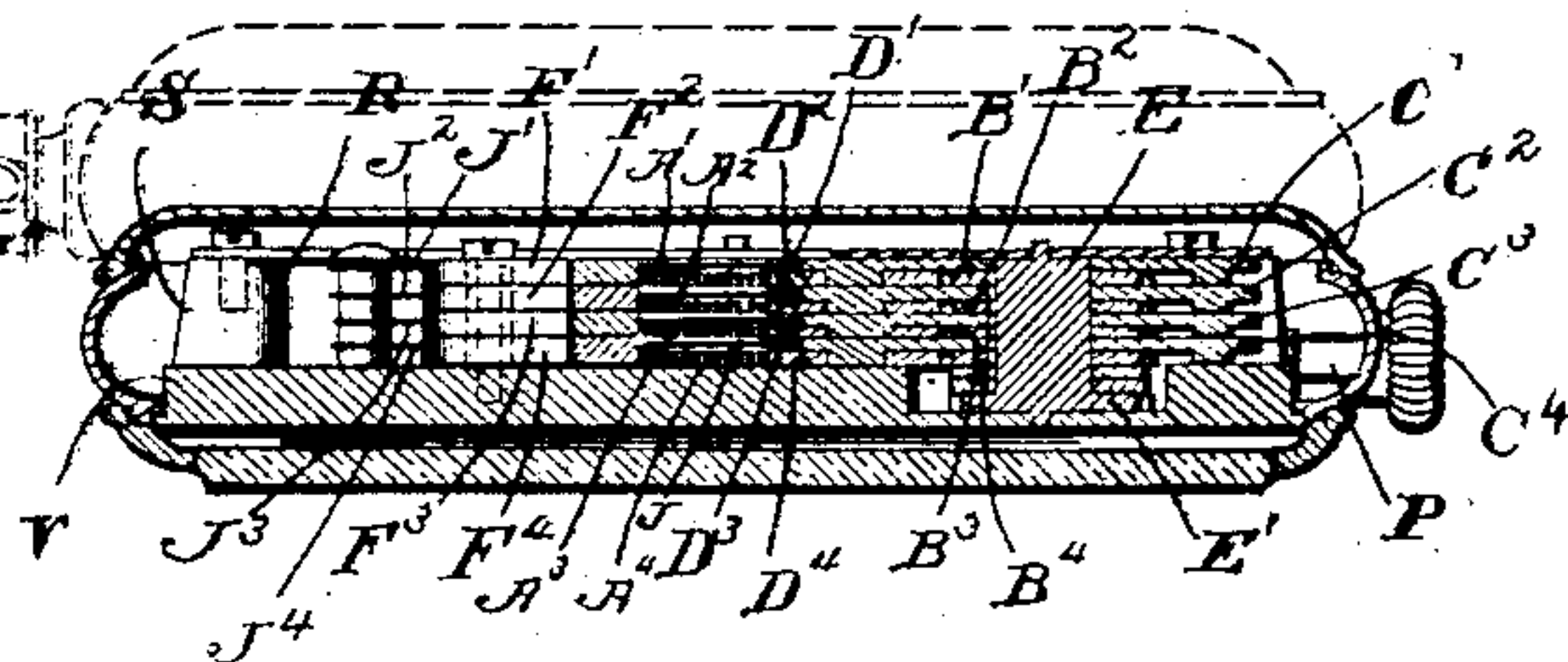
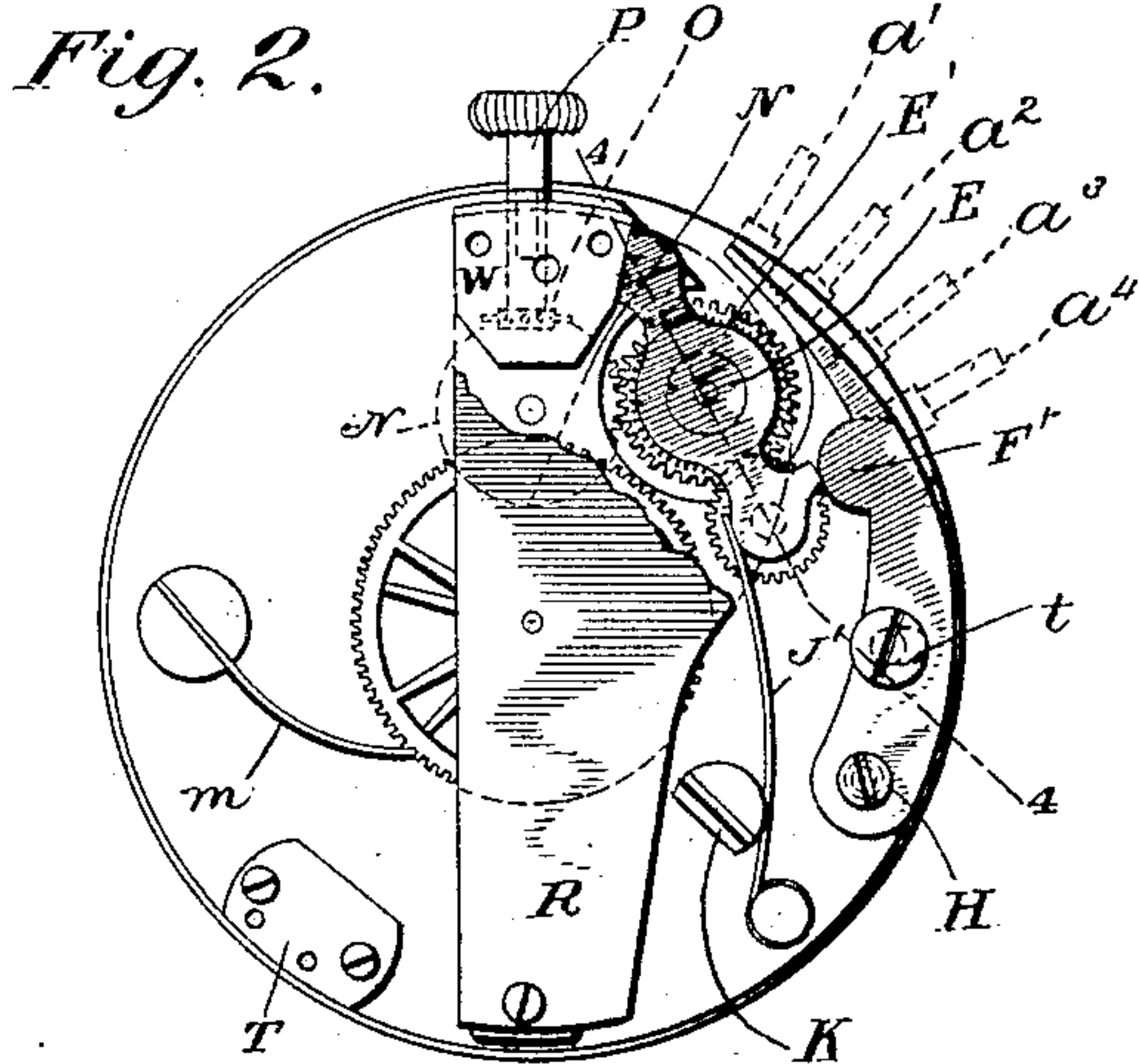


E. L. GIBSON.
POCKET CASH REGISTER.

Patented Feb. 15, 1898.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD L. GIBSON, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF
TO ARTHUR A. WATERMAN, OF ARLINGTON, MASSACHUSETTS.

POCKET CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 599,174, dated February 15, 1898.

Application filed July 23, 1897. Serial No. 645,706. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. GIBSON, 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 Pocket Cash-Registers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement upon Letters Patent No. 563,854, granted to me July 14, 1896.

My invention relates to pocket cash-registers adapted to be placed in the back of a watch or combined with a watch in the same case, or it may be placed in a separate case by itself.

The object of my invention is to register several accounts upon a single face having a plurality of concentric dials, each dial being adapted for a separate account and each account to be separately registered upon its dial by mechanism hereinafter described.

My invention consists in the novel construction and combination of parts set forth in the following description, and particularly pointed out in the appended claims.

Reference is herein made to the accompanying drawings, on which similar letters of reference denote corresponding parts.

Figure 1 is a face view of my invention, having enlarged dimensions. Fig. 2 is a rear view of the register mechanism removed from the case. Fig. 3 is also a rear view of the same having certain parts removed. Fig. 4 is a section taken on the line 4-4 of Fig. 2. Fig. 5 is a detail view of one of the swinging plates. Fig. 6 is a detail view of the push-button levers; and Fig. 7 is a front view of the combined watch and register, showing the watch-face exact size.

The exterior appearance of my invention may be that of a double-faced watch, having the rear face for the register and the front face for the watch. Under these circumstances the part of the case containing the watch mechanism is shown in dotted lines in Fig. 4, and the watch-face is shown in Fig. 7. Inasmuch as the peculiar construction of the

watch is immaterial to my invention and is entirely distinct therefrom or may not be included at all, I shall herein omit description of the details thereof.

In the register mechanism A' , A^2 , A^3 , and A^4 are the dial-wheels, journaled at the lower ends of four concentric hand-bearing sleeves, and are the same as in my former patent above referred to. These hand-bearing sleeves bear upon a central arbor S' , which is journaled at its respective ends in the base-plate V and the retaining-plate R . Another arbor E is likewise journaled at its ends between these two plates adjacent to the stem P . Journaled fast on the lower end of this arbor in a recess in the plate V is a pinion E' in mesh with a pinion N , which is in turn in mesh with a pinion O , journaled at the inner end of the stem P . Thus the arbor E may be revolved by turning the stem P .

Journaled fast above the pinion E' on the arbor E are four pinions B' , B^2 , B^3 , B^4 . These last-mentioned pinions are respectively in the same planes with their corresponding dial-wheels A' , A^2 , A^3 , A^4 .

Journaled loosely above each of the pinions B' , B^2 , B^3 , B^4 are the swinging plates C' , C^2 , C^3 , C^4 , respectively. The ends of the respective swinging plates toward the stem P have a straight edge to abut against the block W , and their opposite ends respectively carry the loosely-journaled pinions D' , D^2 , D^3 , D^4 . These last-mentioned pinions are in the same planes with their corresponding pinions B' , B^2 , B^3 , B^4 and the corresponding dial-wheels A' , A^2 , A^3 , A^4 . The pinions D' , D^2 , D^3 , D^4 are continually in mesh with their corresponding pinions B' , B^2 , B^3 , B^4 , since the centers of these two sets of pinions are always equidistant from each other. The swinging plates C' , C^2 , C^3 , C^4 are each held normally abutting against the block W by means of the springs J' , J^2 , J^3 , J^4 , bent over the pin K .

Journaled loosely on a pin H , screwed into the base-plate V , are the push-button levers F' , F^2 , F^3 , F^4 , each journaled in the same plane with its corresponding swinging plate, and abut, respectively, against the projections d' , d^2 , d^3 , d^4 , formed on the plates C' , C^2 , C^3 , C^4 . The levers each contain a slot f' , f^2 , f^3 , f^4 for their unobstructed oscillation on the pin t ,

which passes through them and is screwed into the base-plate V. This screw aids in holding the levers in place. Push-buttons a' a^2 a^3 a^4 project through the side of the case of the register, each opposite to and bearing against its corresponding lever F' F^2 F^3 F^4 . These push-buttons have shoulders inside the case, as shown, to keep them from falling out of the register. Screw-holes are formed in the block T for the purpose of fastening the mechanism inside the register-case. A detent-spring m bears against each of the dial-wheels in such a manner as to cause a clicking noise every time one tooth passes, as in my former patent.

Since the operation of actuating all the hands is the same, it will be herein sufficient to explain the operation of one.

By pressing in the push-button a' the lever F' swings inwardly on the pin H as a pivot. The lever F' thus bears against the projection d' of the swinging plate c' , which swings inwardly on the arbor E as a pivot and carries with it the pinion D' , which is continually in mesh with the pinion B' , into mesh with the dial-wheel A' . Then the train of pinions O N E' B' D' A' is actuated by turning the stem P, and the pointer on the dial-face corresponding to the dial A' is moved substantially over each successive space at the pleasure of the operator.

The register may be operated in the dark or in the operator's pocket, the number of spaces being measured by the clicks caused by the detent m . Instead of the preferred mechanism shown of the face and movable pointers I may have one pointer and movable faces or any other well-known face mechanism that I may chose to select. The number of dial-wheels and corresponding actuating mechanism are herein described for four dials; but I reserve the right to use one or any number of dials and corresponding mechanism and also to deviate from the minor mechanical details not within the scope of my invention.

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

50 1. In a pocket cash-register, a plurality of

dial-wheels, a plurality of pinions equal in number to the dial-wheels and journaled on a spindle, a plurality of swinging plates loosely journaled on the spindle, each adjacent to its corresponding pinion and having a pinion loosely journaled at its free end continually in mesh with its corresponding pinion on the spindle, in combination with means for throwing each of said second-mentioned pinions into engagement with their corresponding dial-wheels, and means for actuating said spindle, substantially as described.

2. In a pocket cash-register, a plurality of dial-wheels, a plurality of pinions equal in number to the dial-wheels and journaled on a spindle, a plurality of swinging plates loosely journaled on the spindle, each adjacent to its corresponding pinion, and having a pinion loosely journaled at its free end continually in mesh with its corresponding pinion on the spindle, in combination with means consisting of a series of push-buttons and pivoted levers each adjacent to its corresponding swinging plate and each by its engagement with said plate adapted to throw said second-mentioned pinion into mesh with its corresponding dial-wheel and means for actuating the pinion, substantially as described.

3. In a pocket cash-register, a plurality of dial-wheels, a plurality of pinions equal in number to the dial-wheels and journaled on a spindle, a plurality of swinging plates loosely journaled on the spindle, each adjacent to its corresponding pinion and having a pinion loosely journaled at its free end continually in mesh with its corresponding pinion on the spindle, in combination with means for throwing each of said second-mentioned pinions into engagement with their corresponding dial-wheels, and means consisting of a stem and a series of gears in mesh with a pinion on the spindle for actuating the same, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD L. GIBSON.

Witnesses:

ARTHUR A. WATERMAN,
ALEX. C. PROUDFIT.