

(No Model.)

G. E. HART.
WATCH DIAL FASTENING DEVICE.

No. 554,511.

Patented Feb. 11, 1896.

Fig. 1.

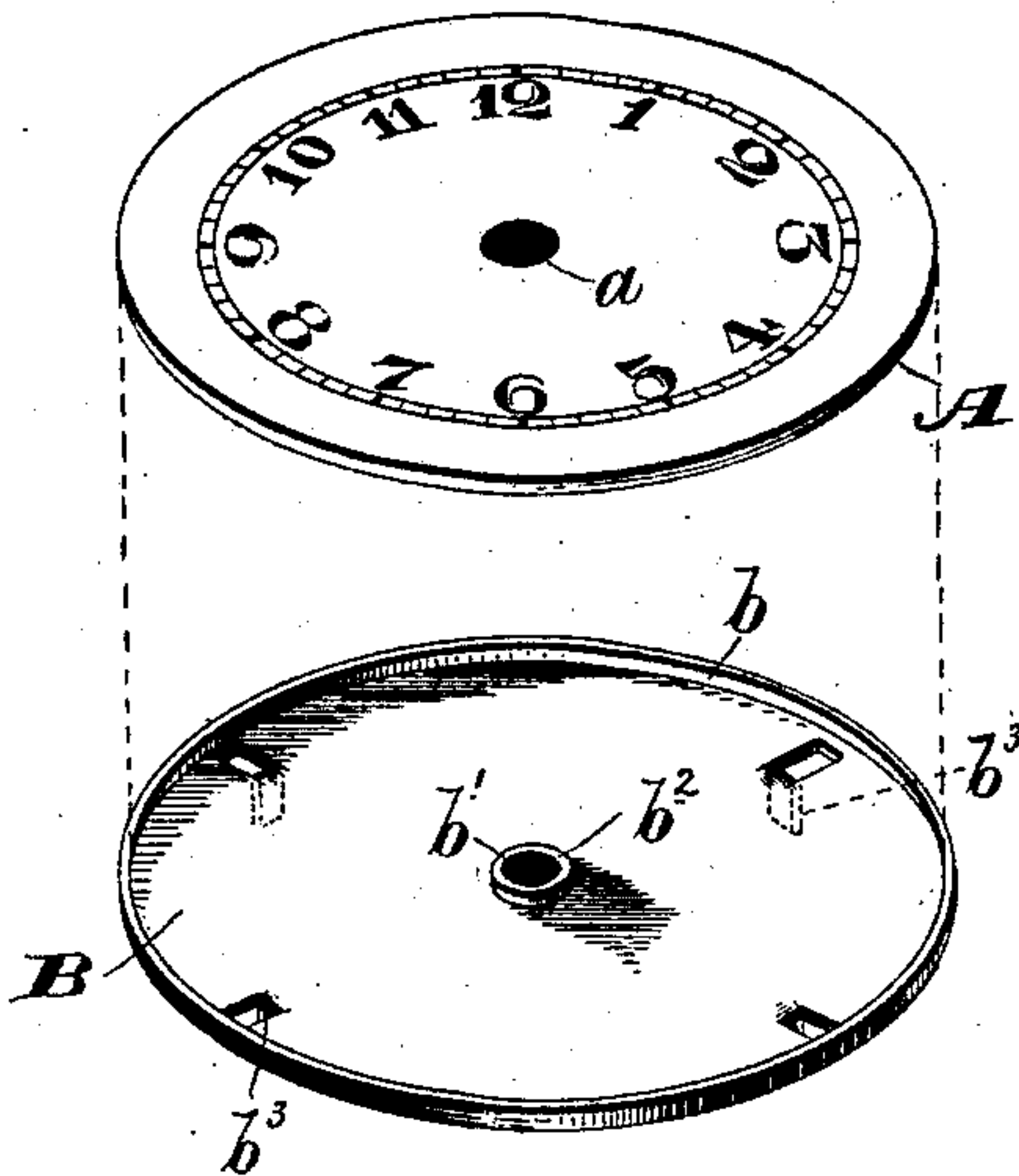


Fig. 2.

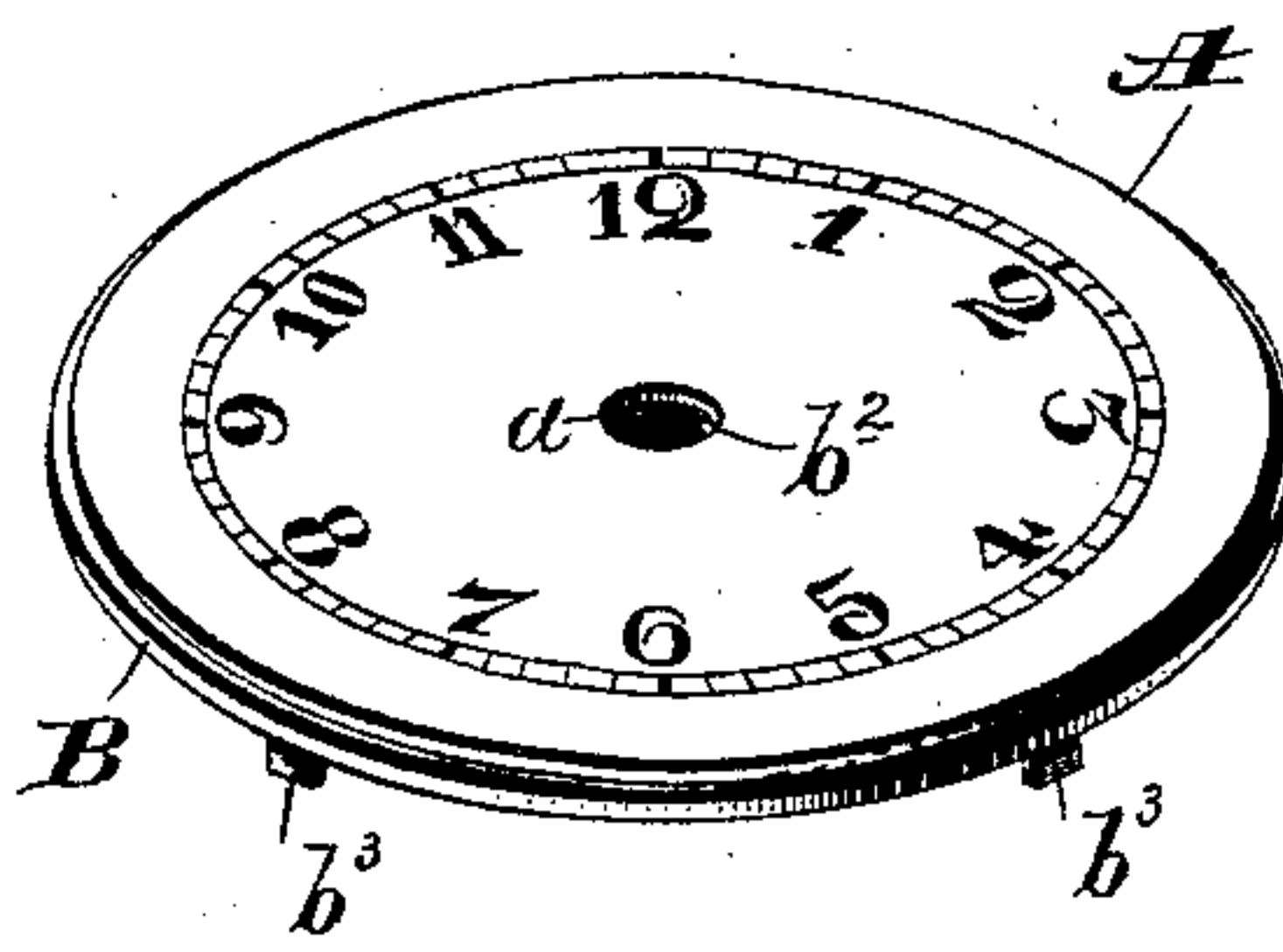


Fig. 3.

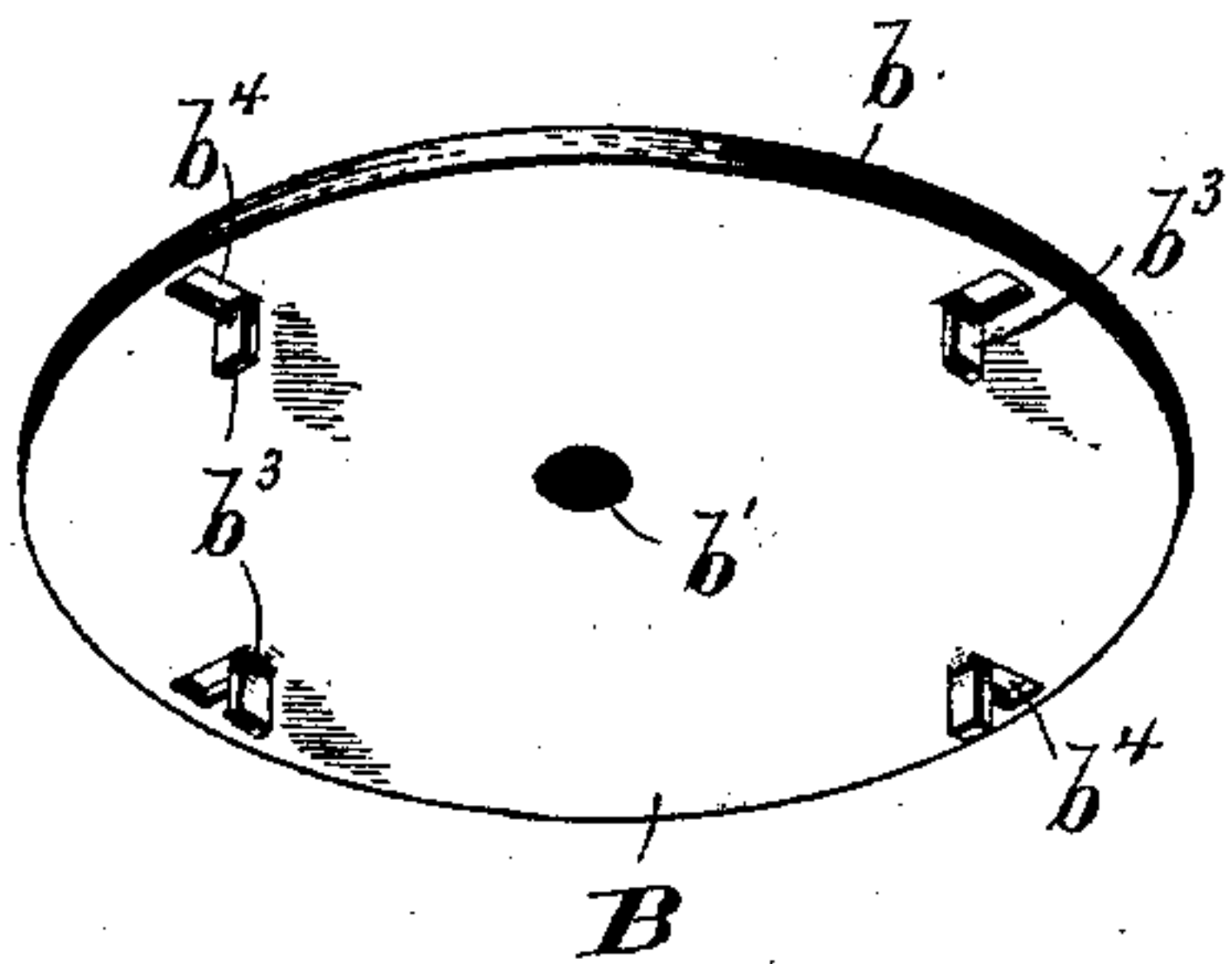


Fig. 4.

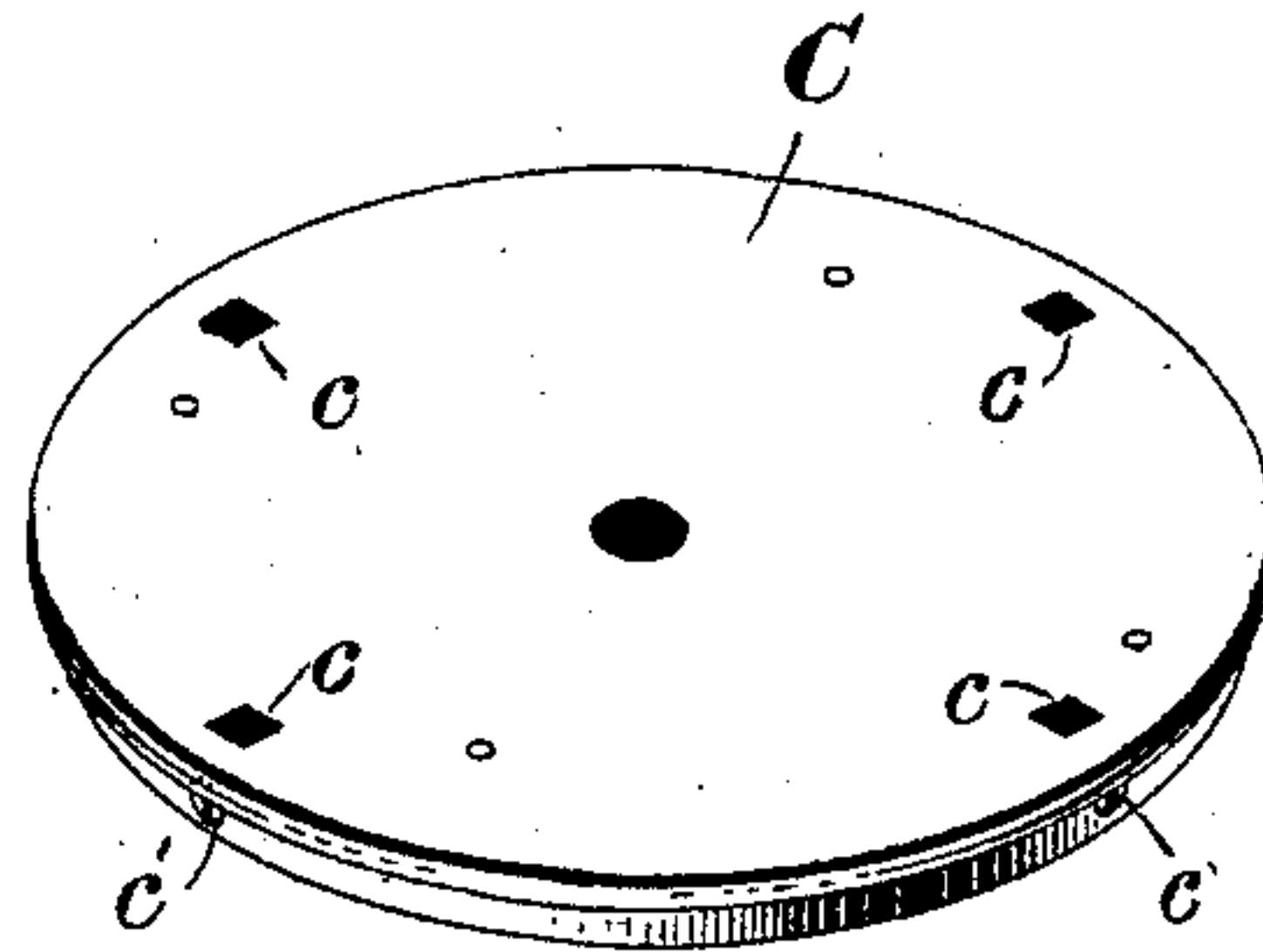
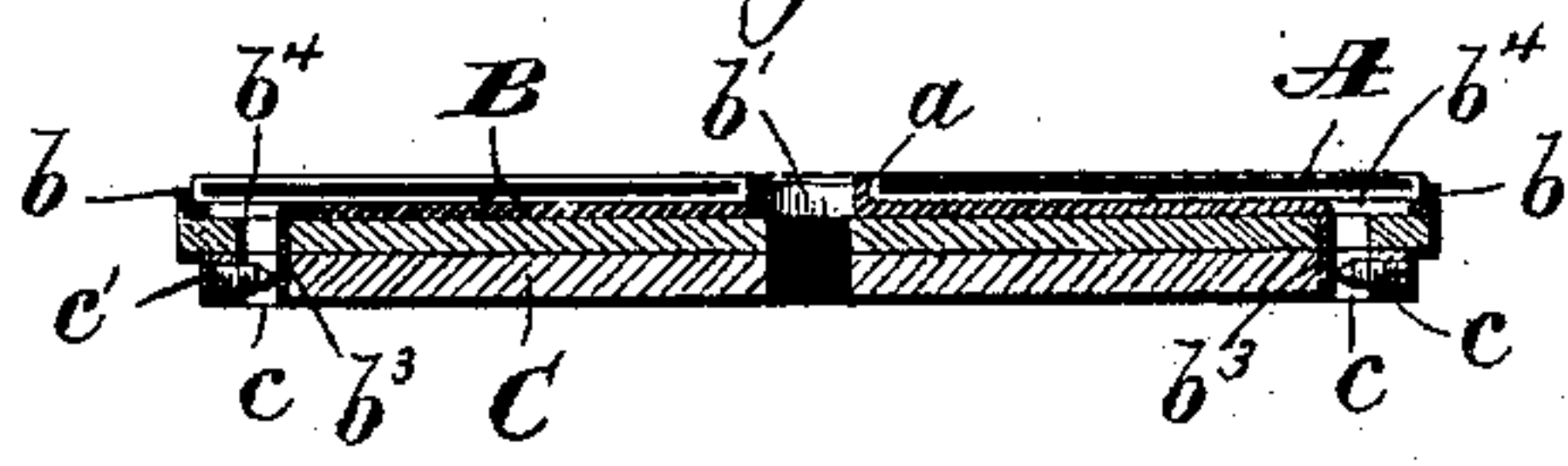


Fig. 5.



Witnesses:
Jas. C. Hutchinson.
Henry C. Hazard.

Inventor.
George E. Hart, by
Trimble and Russell, his Attys.

UNITED STATES PATENT OFFICE.

GEORGE E. HART, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
WATERBURY WATCH COMPANY, OF SAME PLACE.

WATCH-DIAL-FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 554,511, dated February 11, 1896.

Application filed March 8, 1894. Serial No. 502,897. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. HART, of Waterbury, in the county of New Haven, and in the State of Connecticut, have invented certain new and useful Improvements in Means for Fastening Watch-Dials; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my dial and dial-back separated from each other. Fig. 2 is a like view of the same when combined. Fig. 3 is a perspective view of the rear face of said dial-back and shows the construction of the dial-feet. Fig. 4 is a like view of the outer face of the dial-plate of a watch-movement which is adapted to receive the said dial; and Fig. 5 is a central cross-section of said parts, when combined, upon a line with two of the dial-feet.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to avoid the difficulties heretofore experienced in securing a dial upon a movement-plate and to render more easy and certain the adjustment of the hour and minute wheels; and to such end my said invention consists in the means employed for combining the dial with the movement-plate, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I employ an ordinary watch-dial A, which is unprovided with the usual feet, and upon the rear face thereof place a sheet-metal back B that is provided with a peripheral flange b , which extends forward upon the edge of such dial, and at its center has an opening b' that corresponds to the central opening a of said dial and is, preferably, provided with an annular flange b^2 that extends forward into and forms a lining for such opening a . Said back plate and dial are, preferably, cemented together; but any other desired means may be employed for attaching them together. At suitable points near the edge of the back plate B are provided feet b^3 and b^3 for securing the same and the dial A upon a movement-plate C, which feet are constructed by forming within the plate

rectangular openings b^4 b^4 , &c., and bending the metal partially cut therefrom rearward and radially inward until longitudinally each has practically a right angle to the face of said plate, and transversely its sides have the same relation to the radius of the plate.

The movement-plate C is provided with square openings c and c , which have such dimensions and relative location as to enable them to receive the feet b^3 , each foot, when in place, being in contact with the inner side of its opening, and by means of a screw c' , that passes radially inward from the periphery of said movement-plate and at its inner end bears against the outer face of said foot, is caused to bear firmly against the side of said opening so as to lock the dial in place. If desired, the screws described may be omitted and said feet given a sufficient inward spring to cause them by pressure against the inner sides of the openings c and c to confine the dial in place.

It will be seen that while longitudinally the dial-feet are capable of resisting any strain to which they could ever be subjected, when in use, transversely they are adapted to yield any amount that may be necessary in order to permit of their being firmly fastened in place within the movement-plate openings and that neither longitudinal nor transverse strain can in any manner crack or otherwise injure the dial, by which means a cause heretofore existing for much annoyance and an occasion for a material loss is removed.

The metal dial-back possesses material advantages independent of the especial construction of the feet described, in that it furnishes for the dial a perfectly-flat rear face, which bears equally at all points upon the movement-plate and thus prevents strain and breakage of the dial, and it also enables the hour-wheel to be easily and quickly fitted to place and given the necessary end shake.

Having thus described my invention, what I claim is—

1. As a means for combining a watch-dial with a movement-plate, a sheet-metal back which is secured to or upon the rear face of the dial, yielding dial-feet that are cut out of said back, and enter openings in the movement-plate, and means for fastening said feet

therein, substantially as and for the purpose specified.

2. As a means for combining a watch-dial with a movement-plate, a sheet-metal back which is secured to or upon the rear face of the dial, and yielding spring-feet that are cut out of said back and engage openings in the movement-plate, substantially as and for the purpose shown.

10 3. As a means for combining a watch-dial and a movement-plate, a sheet-metal back which is secured to or upon the rear face of the

dial, yielding dial-feet that are cut out of said back, and enter openings in the movement-plate, and screws which pass into such openings and impinge upon said feet, substantially as and for the purpose set forth. 15

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of February, 1894.

GEORGE E. HART.

Witnesses:

S. L. ARTHUR,

P. R. CUMMING.