

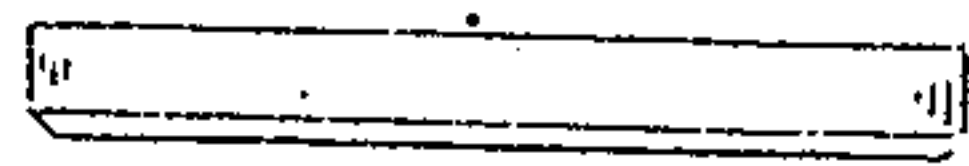
Gile J Willsons improvement in

Watch Cases

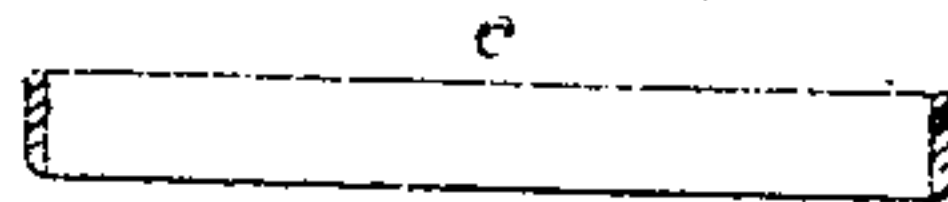
PATENTED

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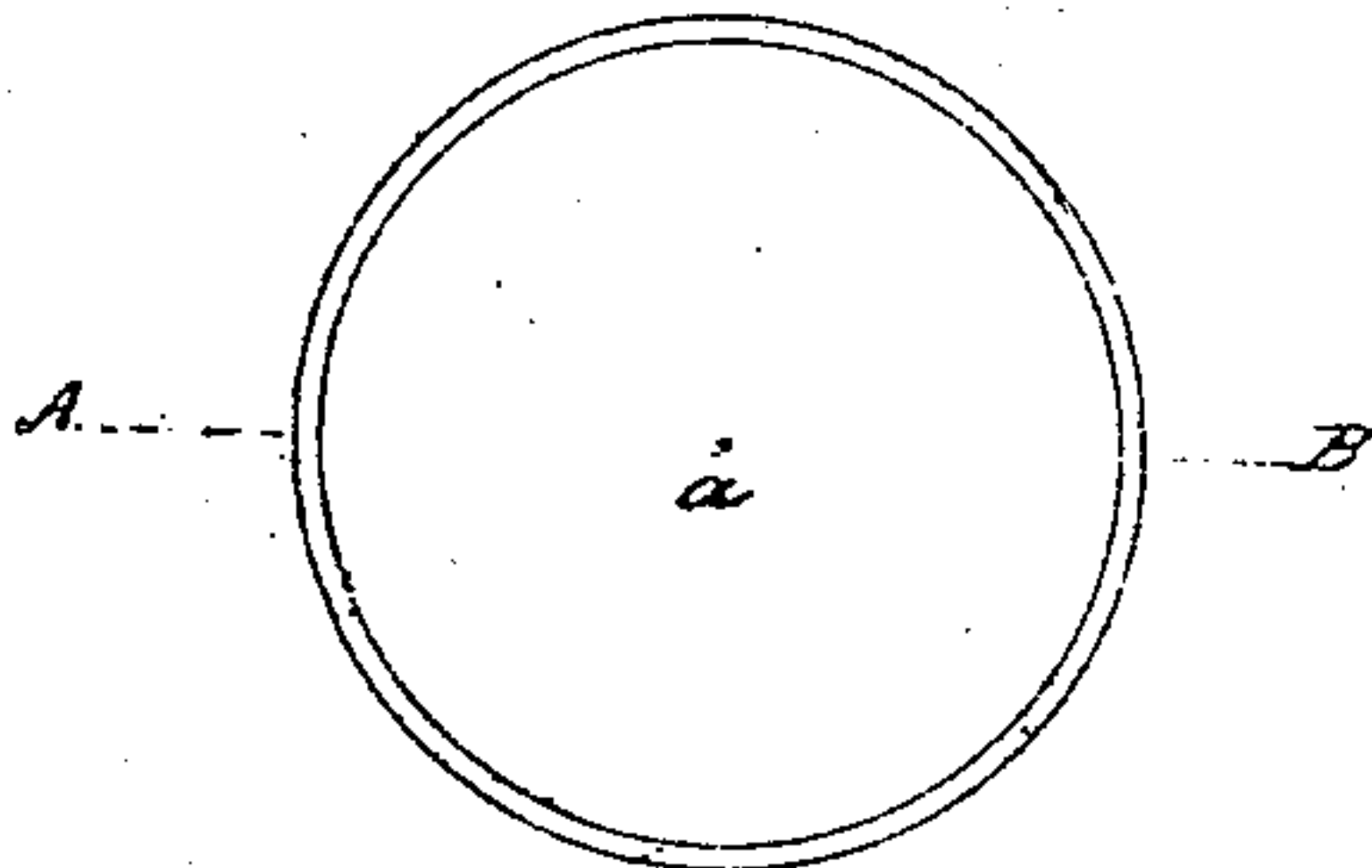
75505



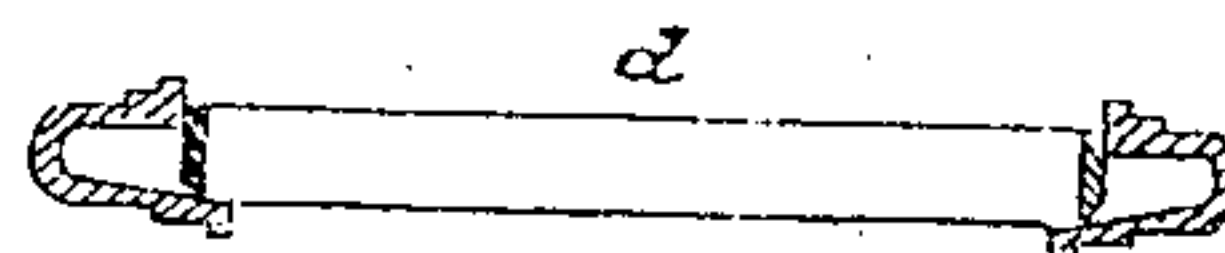
Elevation



Section AB

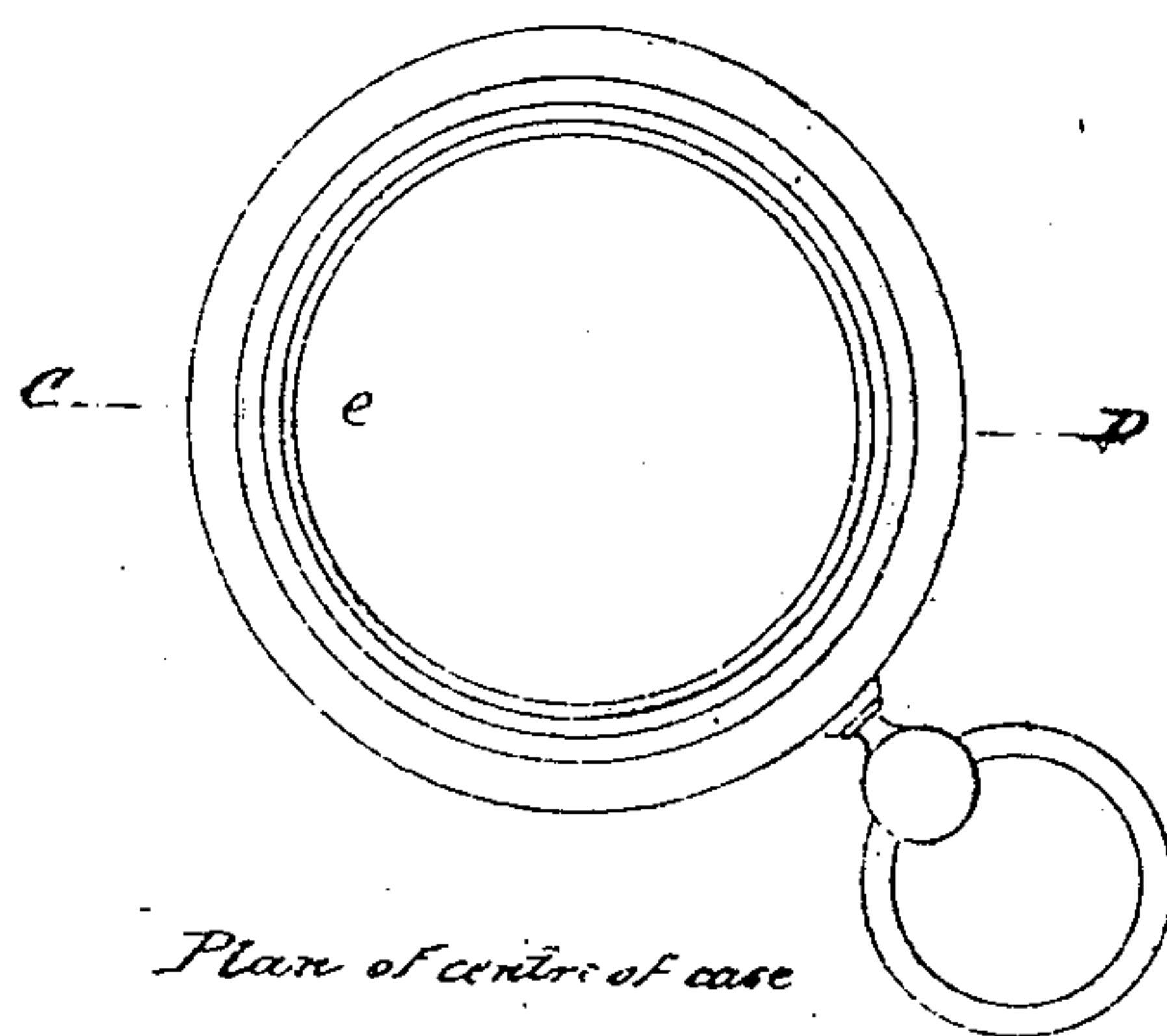


Plan of ring

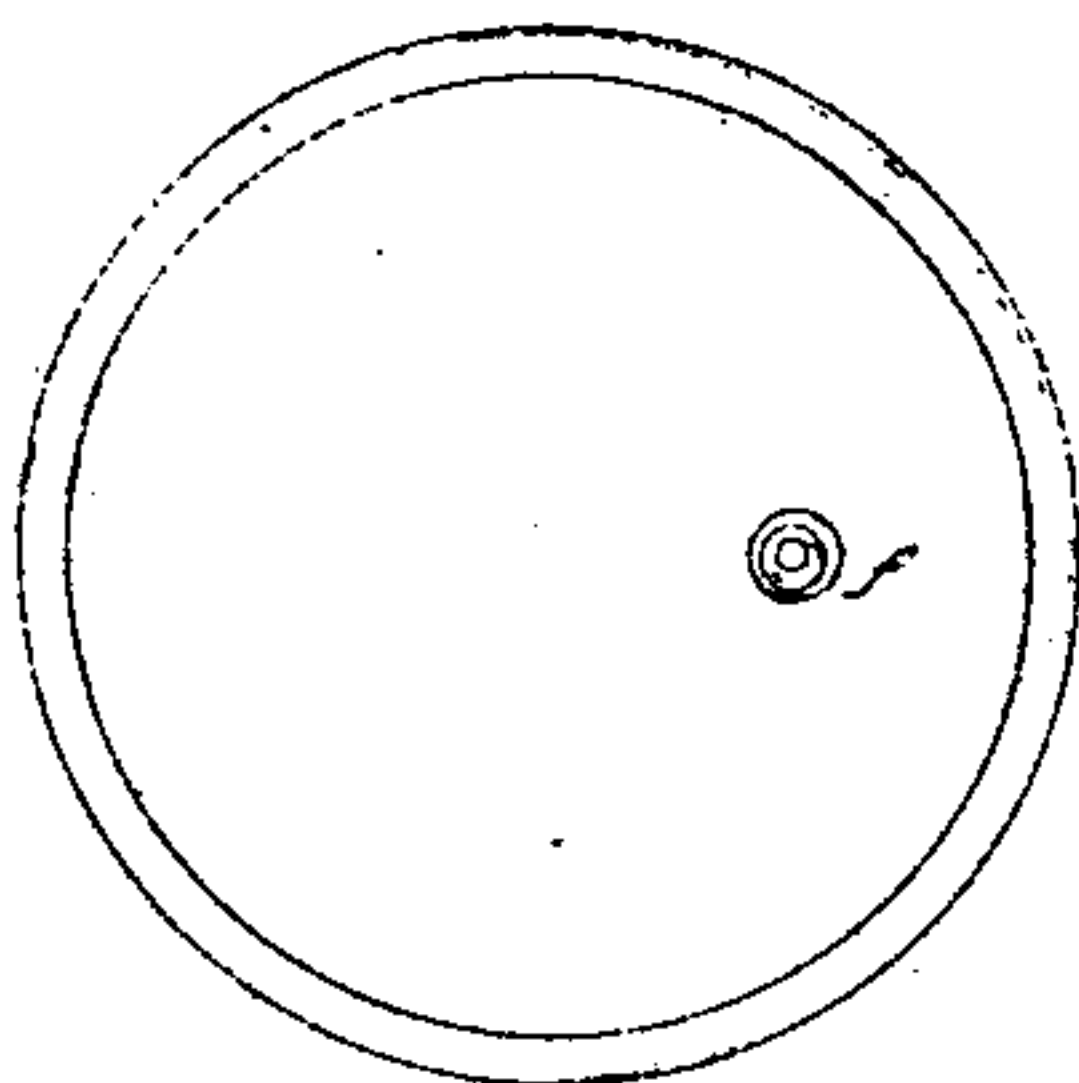


Section CD

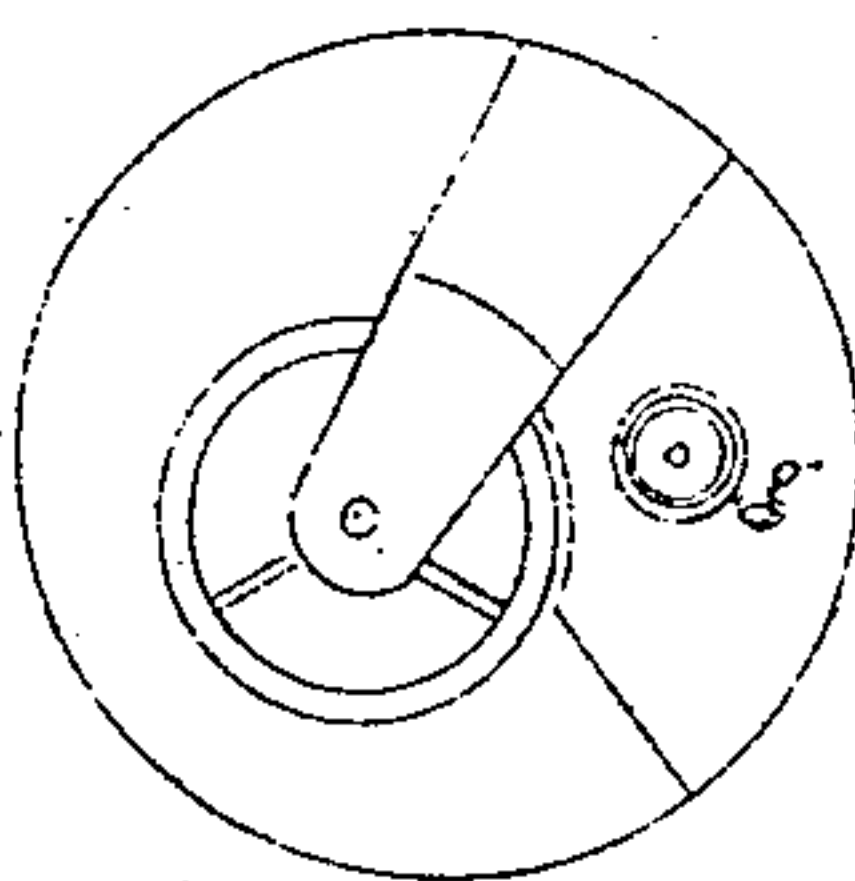
Scale: Full Size



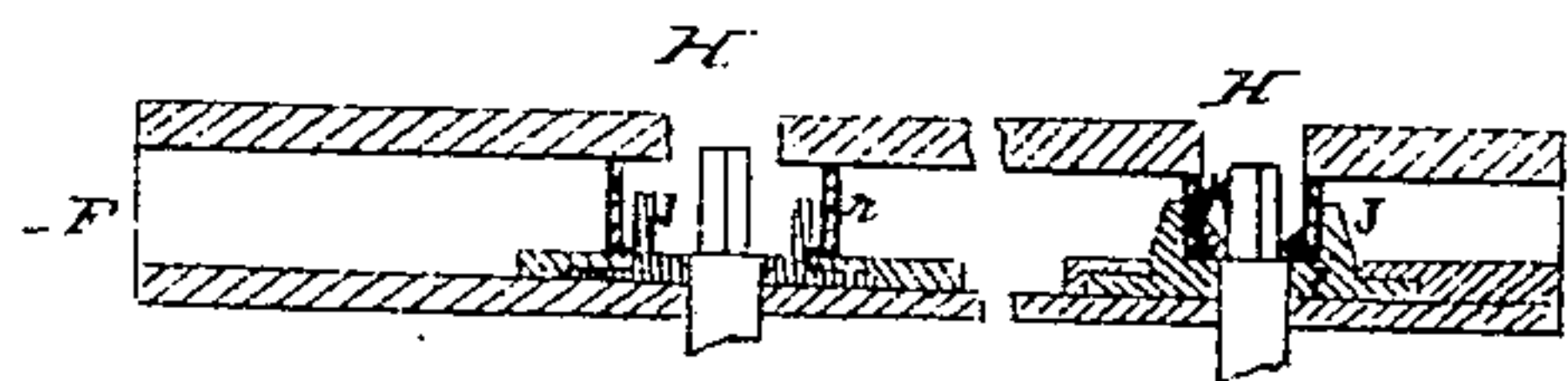
Plan of centre of case



Plan of cap



Plan of top of movement



Section FF (double size)

Witnesses

Edward Willson  
John H. Chapin

Inventor

Gile J Willson

# United States Patent Office.

GILE J. WILLSON, OF READING, PENNSYLVANIA.

*Letters Patent No. 75,505, dated March 10, 1868.*

## IMPROVEMENT IN WATCH-CASES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, GILE J. WILLSON, of Reading, Berks county, and State of Pennsylvania, have invented a new and useful "Improvement in Watch-Cases;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

The present invention mainly relates to any kind of a watch-case, the movement of which has not a movable cap to protect it from dust and broken case-springs entering the working parts of the watch.

The object of this invention is to protect such watch-movements from being stopped by the above causes, it consisting in providing a separate entire ring, to be applied to the inner part of the centre of a watch-case of any convenient metal or material, the one edge forming a shoulder or bearing to receive the watch movement, and the other or lower edge to find its bearing on the lower flange of the centre of the watch-case, thereby forming an inside lining to the centre of the watch-case, thereby excluding the possibility of dust working into the movement through or around the pusher to the cap-spring of a hunting-case watch, into the movement of the watch; also said ring or lining prevents the possibility of broken cap or case-springs from entering the movement of the watch, the movement of the watch being fastened into the case in the usual manner.

It also consists in a key-hole protector in the form of a tube, which may pass from the cap of the watch down to the upper plate of the movement, either inside or outside of the flange, usually around the winding-stem of the watch, and finding its bearing on said plate, on some elastic material to form an air-tight joint. When said tube is passed inside of the flange to the winding-stem, and the lower end closed, so as only to admit of the stem turning freely in winding, it will act, in opening the cap to which it is attached, as a cleaner of the recess or flange around the winding-stem, throwing out any deposits from the winding-key of the watch and admitting the winding-key to pass on to the stem without any obstruction, and preventing either dust or dirt of any kind from passing through the key-hole into the movement of the watch.

In accompanying plate of drawings, my improvements in watch-cases are illustrated.

Letter A is a plan of the ring described, it being a top edge view of the same. Letter B shows an elevation of ring A. C is section of A B. d is a section of C D, showing the connection of the ring A with the centre of watch-case C D. E is a plan of the centre of watch-case, the yellow shading showing top edge of ring A in the centre or inside of the case, of such a size as to admit the movement intended for the case. F is the inside cap of watch, covering the movement of the watch, showing the key-hole with the tube in shading. g is a plan of the top of an ordinary watch-movement with the winding-stem, and the flange around said stem, shown in shading. H H show the winding-stem and the key-hole protector in the two forms described, one with the protector or tube, passing down inside, and the other outside of the flange around the stem. I, the red shading, shows the packing at the bottom of tube or key-hole protector, which said tube or protector finds its bearing upon, thus forming an air-tight joint, to prevent dirt or any other deposits from passing into the works of the watch. J is the usual cup or flange surrounding the winding-stems of watches. K is the tube or protector, extending from cap of watch down around winding-stem to the movement of the watch, to prevent dust or dirt entering, as above described. Section E F represents cap and the upper plate of movement, (double size,) showing the dust-protector to key-hole, and its connection with cap, and its bearing on the top of movement inside and outside of cup around the winding-stem, and the packing upon which said tube forms a joint or bearing air-tight.

I am aware that rings encircling the movements in various kinds of watches have been used for the purpose of protecting the movements from dust, but such rings have rested upon the movement-plate, and have formed a part thereof. I am also aware that encircling rings have been used in the cases of watches, but such rings have been elastic, and have not been made entire, being sprung into the case, but such is not the character of my invention.

Having thus fully described my invention, what I desire to claim and secure as my invention by Letters Patent, are as follows:

1. The application of a separate entire ring to the centre of an ordinary watch-case, (new or old,) which



the movement of the watch will connect with, in the manner set forth, made of any convenient material, and of any size, shape, or form, to answer the purposes set forth.

2. The application of a conical-pointed tube, with its bearing or packing on the movement of a watch or some elastic substance, and connected with the cap of the watch in any convenient manner, to answer the purposes set forth.

The above specification of my invention signed by me, this 10th day of June, A. D. 1867.

GILE J. WILLSON.

Witnesses:

G. A. WILL,

JOHN M. SHARP.