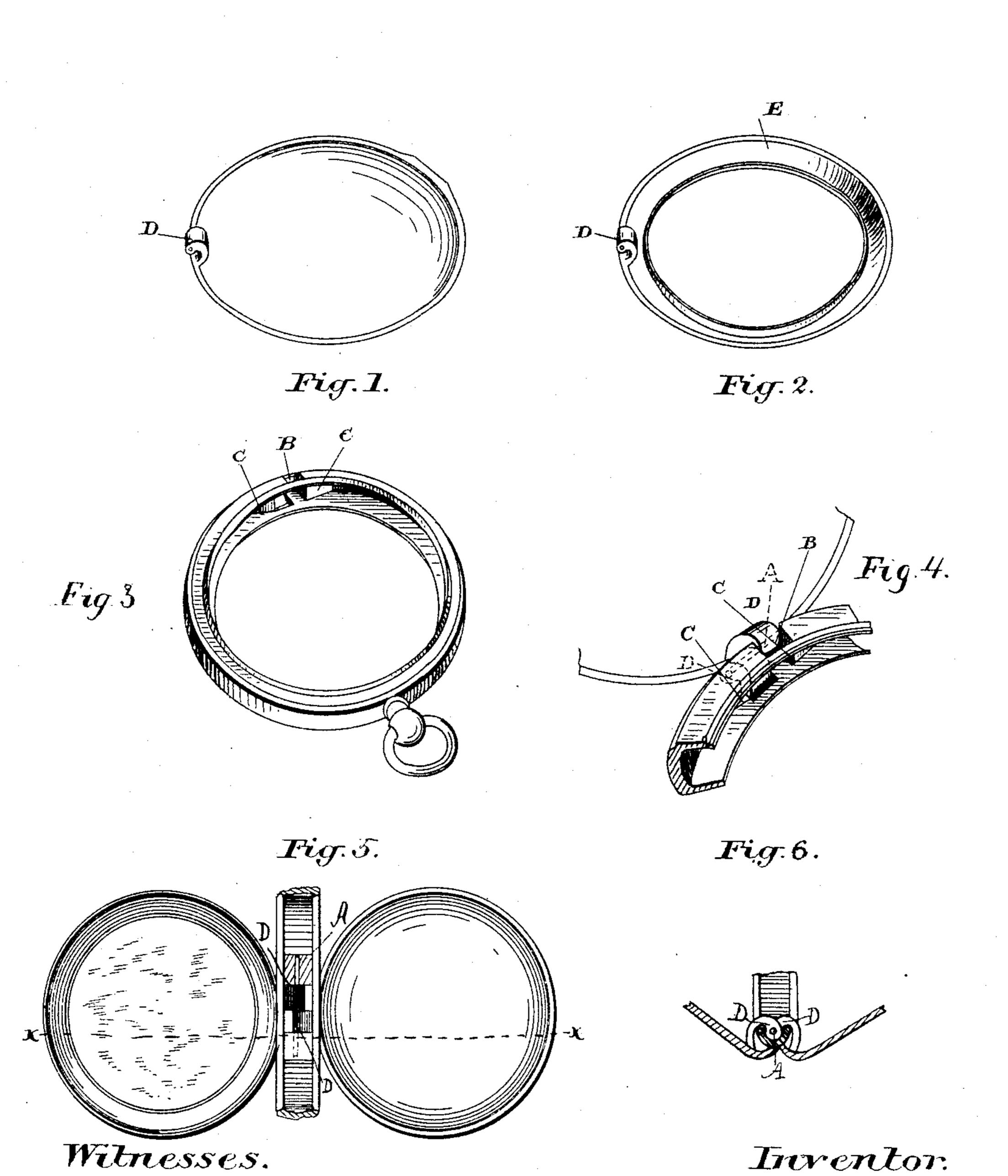
(Model.)

## R. J. QUIGLEY. JOINT FOR WATCH CASES.

No. 288,184.

Patented Nov. 6, 1883.



Lewis Toulouson Chas. C. Baldwin. Robert John Zuigley by Donald Ridact 4 Att 4.

## United States Patent Office.

ROBERT J. QUIGLEY, OF TORONTO, ONTARIO, CANADA.

## JOINT FOR WATCH-CASES.

SPECIFICATION forming part of Letters Patent No. 288,184, dated November 6, 1883.

Application filed August 9, 1883. (Model.) Patented in Canada August 23, 1883, No. 17,543.

To all whom it may concern:

Be it known that I, Robert John Quig-Ley, of the city of Toronto, in the county of York, in the province of Ontario, Canada, 5 manufacturer of watch-cases, have invented a certain new and useful Joint for Watch-Cases; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention is to devise a simple, strong, and invisible joint for the bezels and backs of watch-cases; and it consists, essentially, of inserting the pin within the center of the case at right angles to its face, and forming the pivot for both the bezel and back on the said pin, the bezel and back being connected to the pin by a lug attached, respectively, one to the back and one to the bezel, the pivot-point in the lug being set at a point outside of the point where it connects to the bezel or back over the joint will be lifted clear of the center and carried away from the back of the center as the case is opened.

Figure 1 is a perspective inside view of the back, showing the shape of the lug. Fig. 2 is a perspective inside view of a bezel, showing the shape of the lug. Fig. 3 is a perspective view of the center. Fig. 4 is an enlarged perspective view of the joint complete. Fig. 5 is a plan view, partly broken away, and Fig. 6 is an enlarged section through x x, Fig. 5, also partly broken away.

It is a well-known fact to manufacturers of watch-cases that the joints connecting the bezel or back to the center are about the most difficult part of the case to make satisfactorily, and to all parties using watches it is well known that the joints form openings for the collection of dust and dirt, which finds its way through the joints into the works of the watch. In devising my improved joint I have sought to make a dust-proof case having hinged back and bezels, and also to make the joints invisible when the case is closed.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is a pin inserted into the center at right angles to its face. This pin, when so inserted, projects into the recess formed in the center B, and as the metal of the center itself would not be sufficient to form substantial bearings or

supports for the end of the pin I solder or otherwise fasten within the recess of the center, before piercing the hole for the pin, the blocks C, the space between the two blocks being a 55 size representing the width of the lugs D, which are fastened, as shown, to either the back or bezel E. Openings in the center leading to the recesses are made, to permit the insertion of the lugs D, which, when so inserted, 60 are both pivoted on the pin A, which passes, as before said, through the center at right angles to its face and through the blocks C and lugs D, as shown.

It will be noticed that the lug D is curved 65 between the hole for the pin A and the point where the lug is connected to the bezel or back. It will also be seen that the pivot-hole through the lug is set slightly outside of the point where it is connected to the bezel or back.

The curved form of the lug permits its easy insertion into the recess of the center, and allows the bezel or back to open without the necessity of filing away the center to permit the lug to swing back, while the pivot-point, 75 being slightly on the outside of the point where it is connected to the bezel or back, causes the bezel or back to be raised and carried clear of the center as the back opens upon its joint. The curved lug also forms a stop for prevent-80 ing the back or bezel opening farther than desired.

I should mention here that where a front back is used instead of a bezel it will be fastened exactly in the same way on the pivot-85 pin A.

What I claim as my invention is—

1. As an improved joint for the bezel and back of a watch-case, a lug or projection fixed to the bezel or back and pivoted upon a pin 90 inserted in the center, the pivot-point in the lug being outside of the point where the lug is connected to the bezel, so that the face of the bezel or back over the joint will be lifted clear of the center, substantially as and for the 95 purpose specified.

2. A lug or projection fixed to the bezel or back, and pivoted upon a pin within the recess of the center, the lug being curved, so as to clear the edge of the center and bring the roo pivot-point outside of the point where the lug is connected to the bezel or back and the body

of the lug inside of the said point, substantially as and for the purpose specified.

3. As an improved joint for the bezel and back of a watch-case, a pin inserted in the center at right angles to its face and forming the pivot for both the bezel and back, in combination with two lugs, one attached to the bezel and the other to the back, the said lugs being shaped so as to form a crank between their pivot and rigid connections, substantially as and for the purpose specified.

4. In a recessed or hollow center of a watch-case, in which the back and bezel are both

pivoted on the same pin, passing through lugs fixed, respectively, to the back and bezel, the 15 combination of blocks soldered or otherwise fastened within the recess on the outside of said lugs, for the purpose of forming invisible bearings or supports for the ends of the pivotpin, substantially as and for the purpose speci- 20 fied.

Toronto, August 3, 1883.

ROBERT J. QUIGLEY.

In presence of—

CHAS. C. BALDWIN,

LEWIS TOMLINSON.