

May 9, 1933.

L. ALIX

1,907,700

WRIST WATCH CASE

Filed March 7, 1931

FIG. 1.

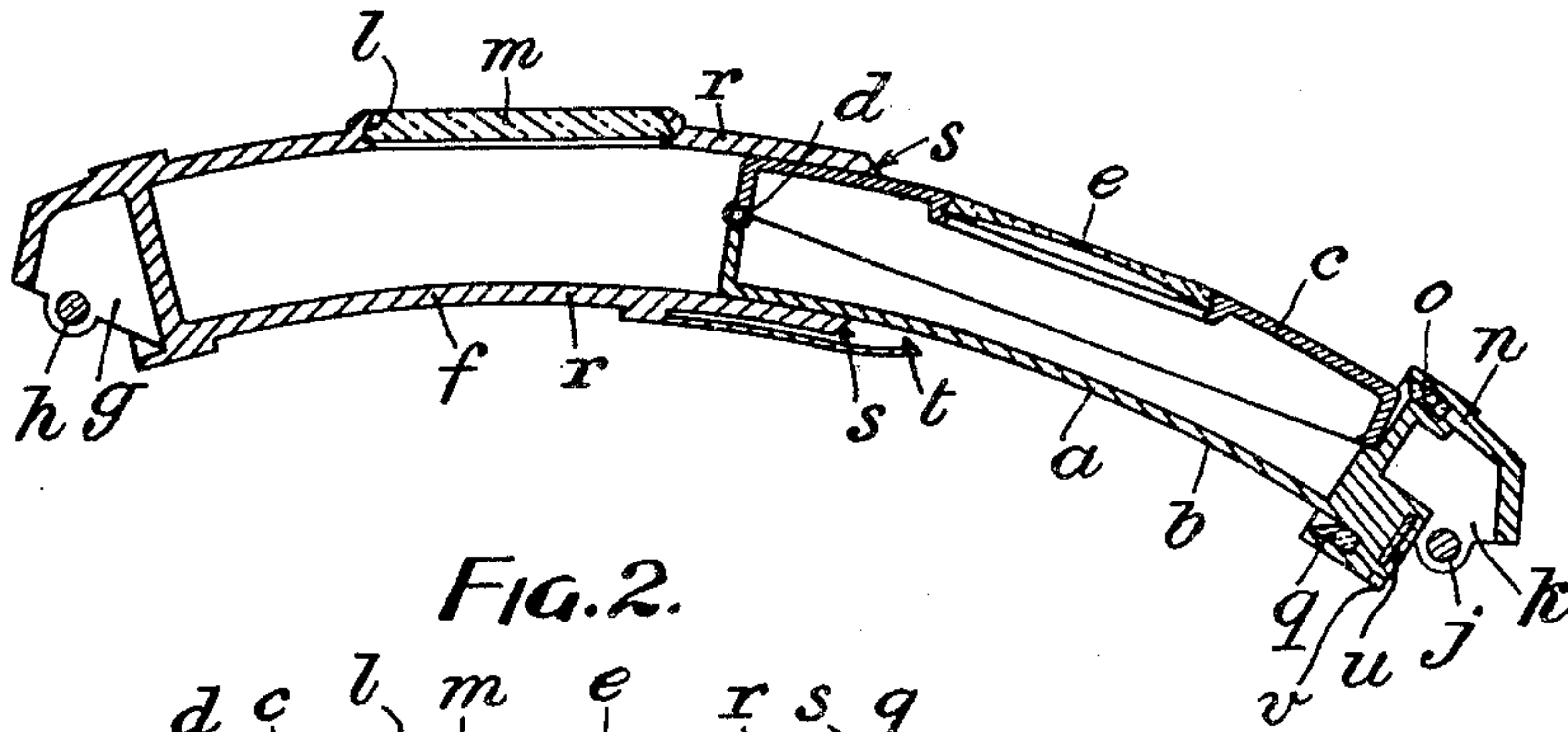


FIG. 2.

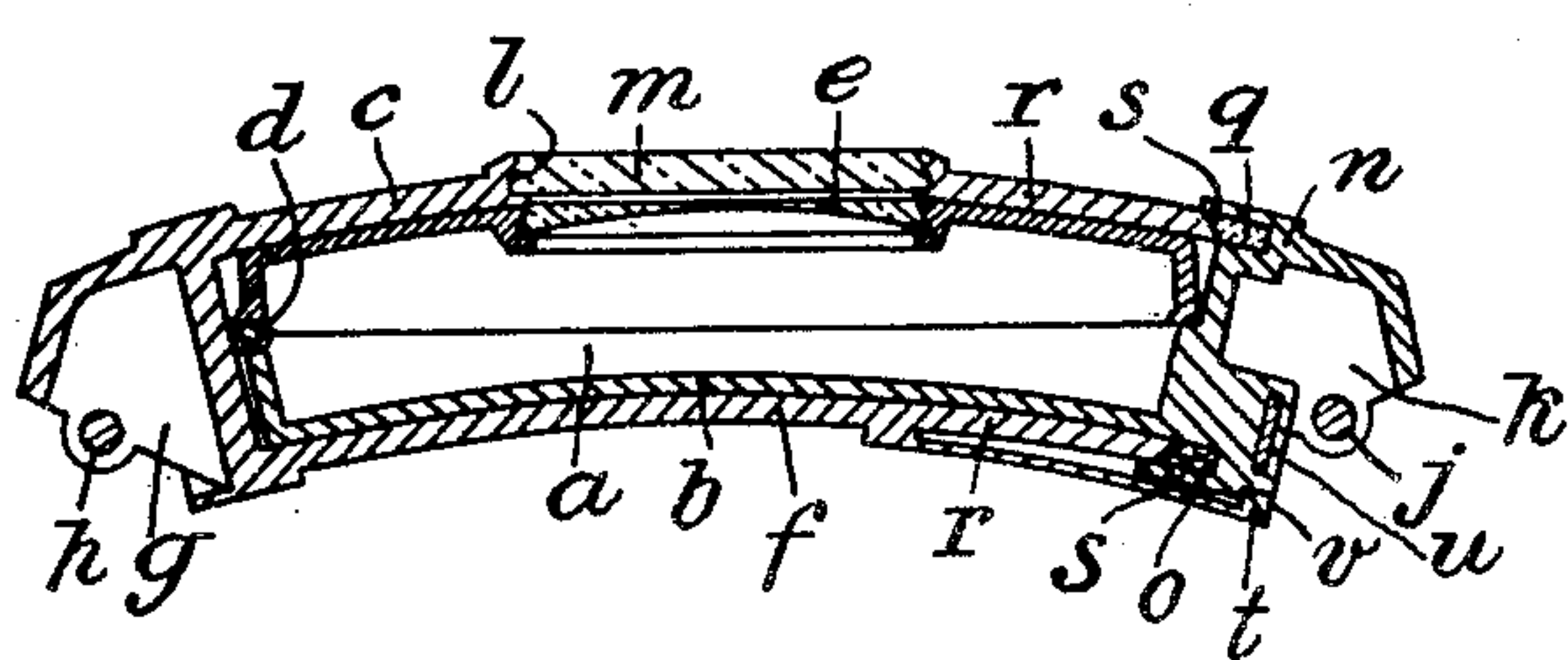


FIG. 5.

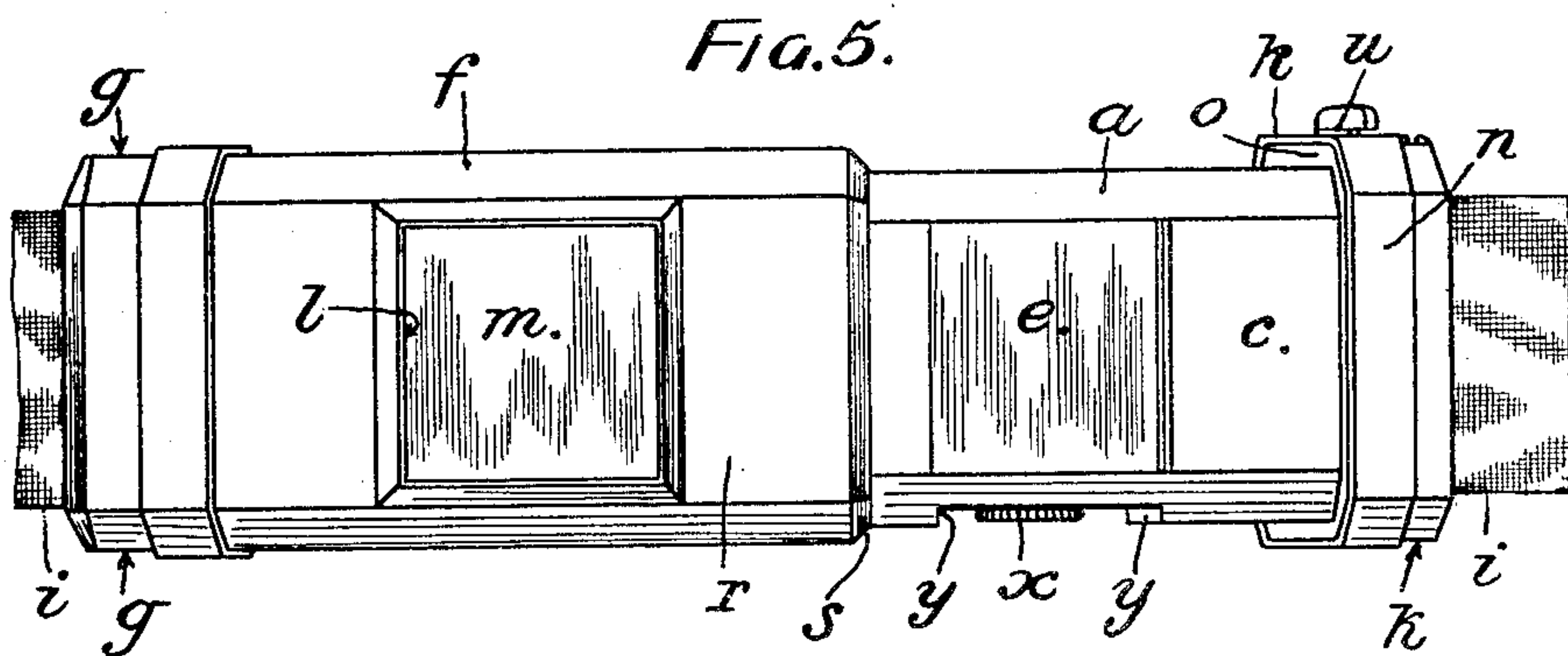


FIG. 3.

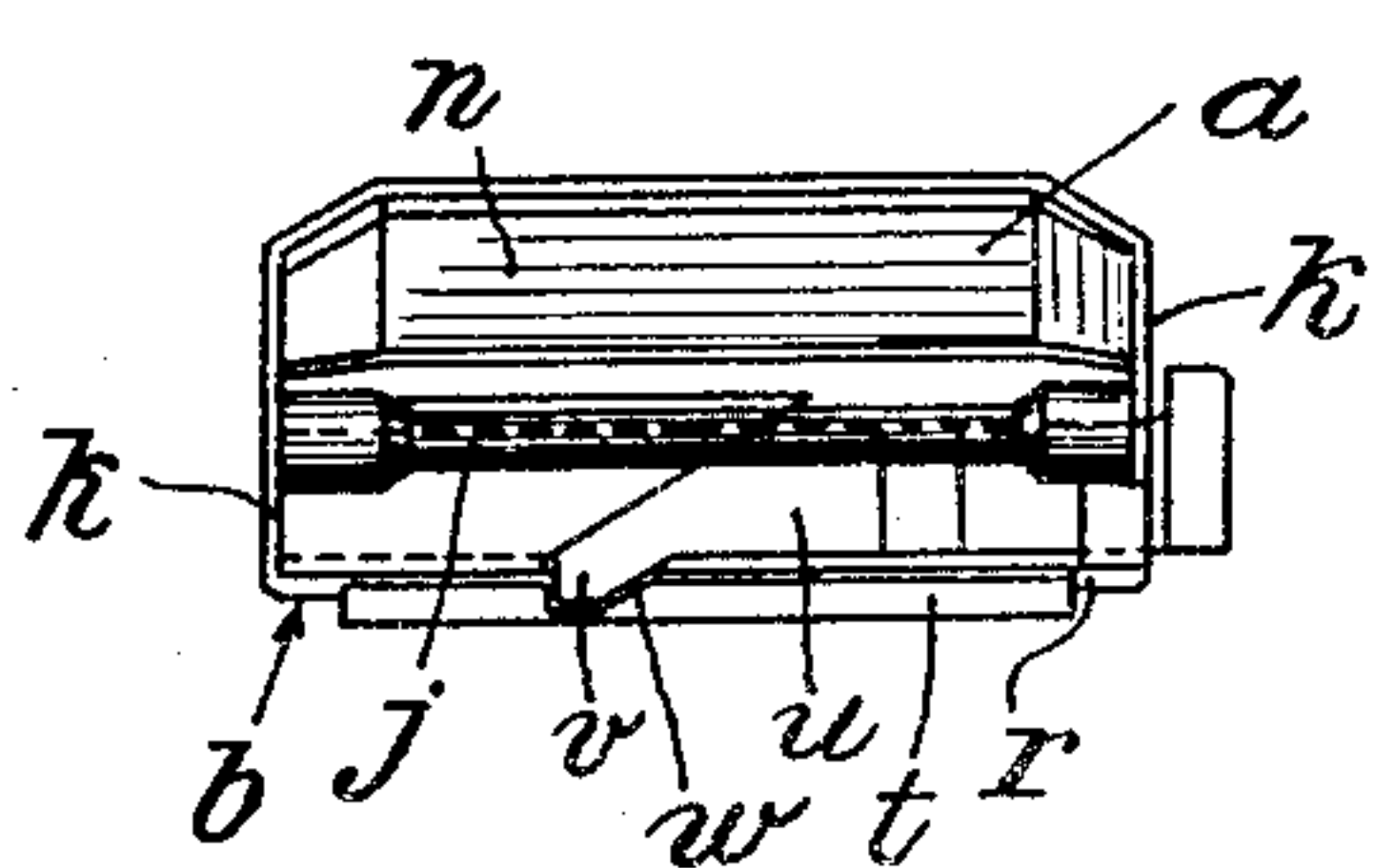
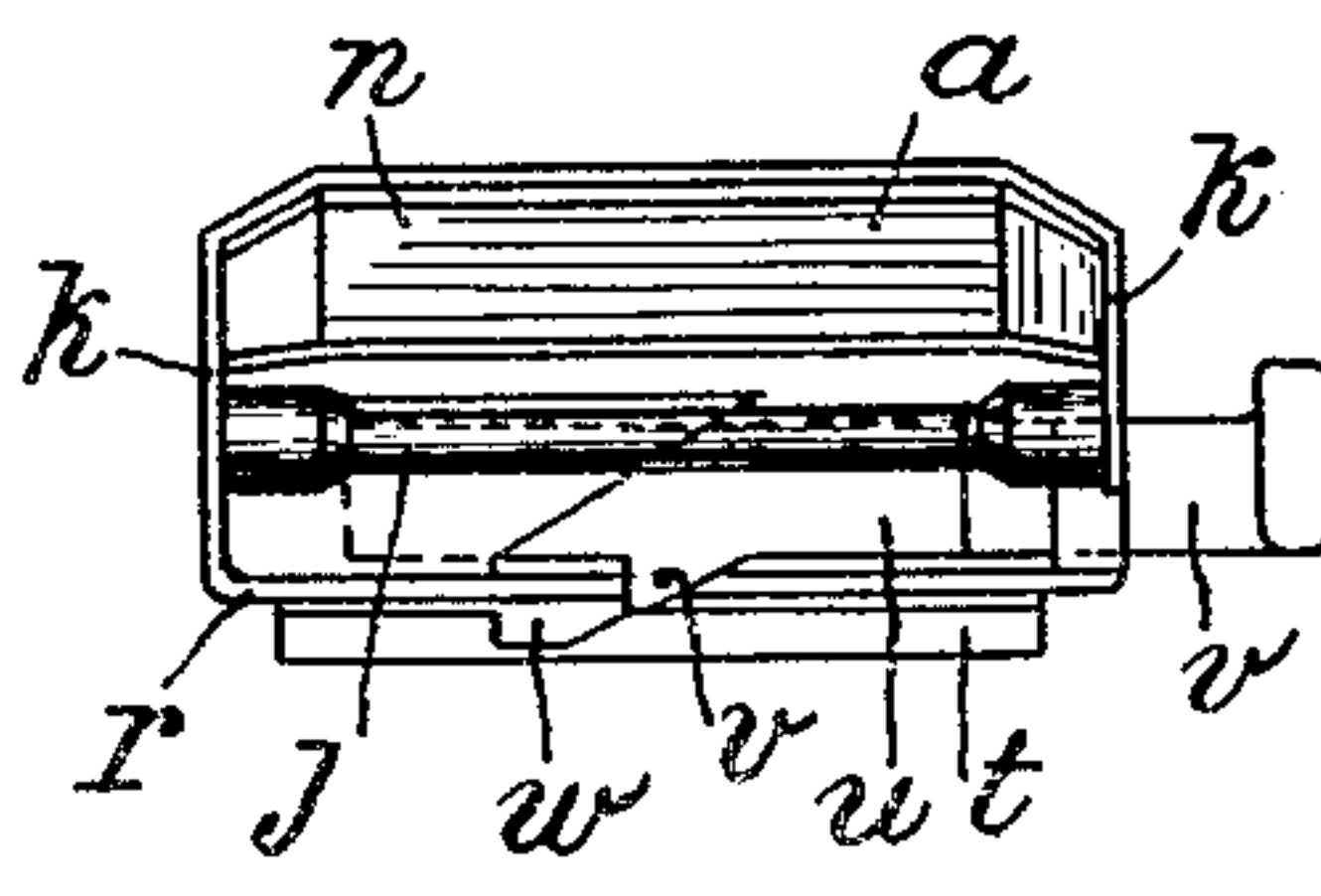


FIG. 4.



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UNITED STATES PATENT OFFICE

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WRIST-WATCH CASE

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The object of the invention is an impervious wrist-watch case.

It is characterized by the fact that it includes an interior case enclosing the movement as well as an exterior case which is hermetically closed except at one of its extremities through which the first case is inserted which can slide into the second, the one case being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which engage one with the other at the normal relative position of the two cases in order to close the second case in an impervious fashion in conjunction with an impervious wall of the first case.

The attached drawing shows as an example one form of the application of the invention.

Figs. 1 and 2 are longitudinal and axial sections showing certain parts in different positions.

Figs. 3 and 4 are two end views showing also certain parts in different positions.

Fig. 5 is a top view.

The case shown includes an interior case *a*, which holds the movement and having, as seen from the top, a rectangular shape, and as seen from the side, the general conformation of the arc of a circle. It consists of a body *b* and a lid *c* connected by a hinge *d* not closing in a specially impervious manner: a glass *e* is mounted in the lid *c*.

The case *a* can slide into the outer case *f* which has also, in plane view, a rectangular shape and, as seen from the side, the general conformation of the arc of a circle. This case *f* is fitted on its left extremity with lugs *g* between which is a bar *h* which receives one of the ends of the supple band *i* of the wrist-watch the other end of which encloses a bar *j* placed between two similar lugs *k* of the case *a*: it has an opening *l* which is closed by a transparent disc *m*, made for example, of sapphire in such a way as to prove very resistant to shocks, and set in the rim of the opening so that the closing may be impervious.

The cap of the winder *x* of the movement within the case *a* is placed between two shoulders *y* of the latter and is slightly less thick

than these, so that it offers no resistance to the sliding of the case *f* into the case *a*.

The impervious connection between the two cases *a* and *f* when the second is inserted fully into the first, in the relatively normal position of *a* and of *f* is obtained as follows: the right extremity *n* of the case *a*, made of a continuous impervious wall, has a larger transversal section than the remainder of it and displays on the level of the walls *r* of the case *f* a ring shaped housing *o* of a transversal rectangular section, enclosing a fitting *q*: this fitting is made of springy material, rubber for example, and has a transversal trapezoidal section the large base of which is placed on the outside. As far as the walls *r* of the case *f* are concerned, they end in a ring shaped bevel the point of which is on the inside. If, in these conditions, the case *f* is inserted fully into the case *a* the bevel *s* of the walls *r* enters the housing *o* and compresses in it, from the interior towards the exterior, the springy fitting *q* thus providing the desired impervious joint.

The two cases *a* and *f* are kept in their normal relative position (Fig. 2) by a spring hook *t* integral with *f* and gripping one of the extremities of *a*. The hook *t* can, however, be unhooked from this extremity, for the purpose of the disengagement of the two cases *a* and *f* (Fig. 1) by means of a transversal slide *u* fitted in the case *a* and presenting a nose *v* which works from above to below on the hook *t*: in the normal position of the cases *a* and *f* the nose *v* rests in a notch *w* of the hook *t* and allows the latter to grip *a* (Fig. 3): if the slide *u* is shifted from left to right (Fig. 4) the nose *v* forces the hook *t* to disengage itself from *a*.

An inspection of the drawing shows that the casing also forms the lock fastening of the bracelet since the two cases are each united to one of the ends of the fastening and permit of their being joined.

What I claim as my invention and desire to secure by Letters Patent in the United States is:—

1. In an impervious casing of a wrist-watch an interior case having an opening for the face of the watch, an exterior case her-

metically shut, except at one of its extremities through which is inserted the interior case which can slide into the exterior one, said exterior case having a window therein, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case in an impervious fashion in conjunction with an impervious wall of the interior case, the opening for the face of the watch being located in juxtaposition to the window in the exterior case.

2. In an impervious casing of a wrist-watch an arcuate exterior case hermetically shut, except at one of its extremities through which is inserted an interior case which can slide into the arcuate exterior one, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case in an impervious fashion in conjunction with an impervious wall of the inner case, the ring shaped fitting being placed in an open housing on the side of the other case.

3. In an impervious wrist-watch casing an arcuate interior case having an opening for the face of the watch, an arcuate exterior case hermetically shut except at one of its extremities, through which is inserted the interior case which can slide into the exterior one, said exterior case having a window therein, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case in an impervious fashion in conjunction with an impervious wall of the interior case, the opening for the face of the watch being located in juxtaposition to the window in the exterior case, the ring shaped fitting being placed in an open housing arranged in the interior case which, with this object shows a larger transversal section at one of its extremities than on the remainder of its length.

4. In an impervious wrist-watch casing an arcuate interior case having an opening for the face of the watch, an arcuate exterior case hermetically shut except at one of its extremities through which is inserted the interior case which can slide into the exterior one, said exterior case having a window therein, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case with the opening for the face of the watch being located adjacent the window therein, in conjunction with an impervious wall of

the interior case the fitting presenting an inclined surface on the side on which the bevel of the other case comes into contact.

5. In an impervious wrist-watch casing an arcuate interior case having an opening for the face of the watch, an arcuate exterior case having a window therein hermetically shut except at one of its extremities through which is inserted the interior case which can slide into the exterior one, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case with the opening for the face of the watch being located adjacent the window therein, in conjunction with an impervious wall of the interior case, a spring hook which is fitted to one of the cases and grips the other maintaining the two cases in their relative normal position.

6. In an impervious wrist-watch casing an arcuate interior case having an opening for the face of the watch, an arcuate exterior case having a window therein hermetically shut except at one of its extremities through which is inserted the interior case which can slide into the exterior one, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the exterior case with the opening for the face of the watch being located adjacent the window therein, in conjunction with an impervious wall of the interior case, a spring hook which is fitted to one of the cases and grips the other maintaining the two cases in their relative normal position, a slide which moves in a transverse direction in one of the cases presenting a nose shaped so that it can actuate the hook in order to separate it from the case with which it grips at the said normal relative position of the cases.

7. In an impervious wrist-watch casing an arcuate interior case having an opening for the face of the watch, an arcuate exterior case having a window therein hermetically shut except at one of its extremities through which is inserted the interior case which can slide into the exterior one, one of the cases being fitted with a ring shaped bevel and the other with a springy ring shaped fitting which grip one with the other at the relative normal position of the two cases in order to close the second case in an impervious fashion, in conjunction with an impervious wall of the first case, the opening in the interior case for the face of the watch being located adjacent the window opening in the exterior case, a spring hook which is fitted to one of the cases and grips the other maintaining the two cases in their relative normal position, a slide which moves in a transversal direction in one of the cases presenting

a nose shaped so that it can actuate the hook in order to separate it from the case with which it grips at the said normal relative position of the cases, the nose of the slide
5 being in their relative normal position in a notch of the hook and not actuating it except when the slide is moved from its rest position corresponding to the relative normal position.

10 In testimony whereof I have affixed my signature.

LOUIS ALIX.

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