R. F. FISHER.

SWIVELS FOR WATCH-CHAINS.

No. 181,656. Patented Aug. 29, 1876.

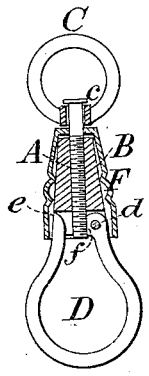

Fig: 1.

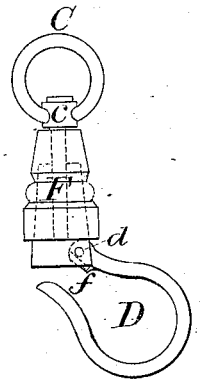

Fig: 2.

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per Frank L. Pope
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UNITED STATES PATENT OFFICE.

ROBERT F. FISHER, OF NORTH ATTLEBOROUGH, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH T. BACON & CO., OF WRENTHAM, MASSACHUSETTS.

IMPROVEMENT IN SWIVELS FOR WATCH-CHAINS.

Specification forming part of Letters Patent No. **181,656**, dated August 29, 1876; application filed April 22, 1876.

To all whom it may concern:

Be it known that I, ROBERT F. FISHER, of North Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Safety-Hooks or Swivels for Watch-Chains; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The device employed for attaching watches to watch-chains, usually termed a "safety-hook" or "swivel," has heretofore usually been constructed in the form of a divided ring or bow, so arranged that one half thereof is firmly attached to the shank of the swivel proper, while the other half is movable, in order to permit the ring of the watch to be inserted within the bow. The movable section of the bow is attached to the fixed portion at one side by a rivet, which forms a fulcrum, and at the other by a nut, which turns upon an external thread formed upon adjacent portions of both the fixed and movable portion of the bow, so as to clasp them together after the ring of the watch has been inserted. A serious objection to this arrangement arises from the facility with which the nut becomes unscrewed, owing to its small bearing-surface, thus permitting the two sections of the bow to separate, and endangering the loss of the watch. The unsightly appearance of this device forms another objection to it of some importance.

The object of my invention is to provide a safety-hook and swivel free from the herein-before-mentioned objections; and it consists in making use of a bow of an improved form, composed of a single piece of metal, and in arranging the screw within a conical or tapering socket, the latter being so constructed as to fit tightly within an outer case or shell of similar form. This arrangement causes all the parts to be held firmly in their respective positions, and it also presents a much neater appearance than the device heretofore used.

In the accompanying drawing, Figure 1 is a sectional view of my improved safety-hook and swivel when closed, and Fig. 2 shows the position of the parts when open.

The different parts may be composed of gold, composition, or other suitable metal. The screw A passes through the center of the cone or socket B from end to end, and the ring C is attached thereto by an ordinary swivel-joint, *c*, so as to turn freely upon it. The bow D is formed of a single piece of metal, and is hung at one end by means of a rivet, *d*, in a suitable socket formed in the larger end of the cone. The other end of the bow enters also into a socket in the cone, as shown at *e*. The internal screw-thread within the cone in which the screw A works is continued along one side of the bow, as seen at *f*. In the drawing this is shown as being on the same side of the bow as the rivet or fulcrum *d;* but it may be arranged on the opposite side at *e*, if preferred. The outer shell or case F is likewise of a conical form. It is formed of sheet metal, and is soldered or otherwise rigidly attached to the screw A. The terminal link of the chain is attached, in the usual manner, to the ring C.

In order to insert the ring of a watch within the bow D, it is only necessary to turn the bow D, together with the cone B, upon the screw A in such a manner as to draw the cone a short distance out of the shell or case F, so that the screw will be free from that portion of the internal thread which is cut in the side of the bow. The latter may then be swung open, turning upon the rivet *d* as a fulcrum, the ring of the watch inserted, and the whole restored to its former position.

Owing to the comparatively great length of the bearing of the screw A in the cone B, and the tapering form of the cone, which causes it to be firmly held by the friction of the internal surface of the shell or case F, it cannot work loose after having been properly screwed up, and it is therefore almost impossible for the bow D to become unfastened. Even should this happen, the peculiar form which, in consequence of my improvements, I am able to give to the bow D is such that there is comparatively little danger of the loss of the watch itself.

It is obvious that the form of the various details of my invention may be modified with-

out departing from its essential principles. For example, the bow D may be made nearly or quite circular in form, and the tapering piece B, instead of being a conical, may be angular or flat; but in general I prefer to construct the parts substantially in the form and manner hereinbefore described.

I claim as my invention—

1. The bow D, formed of a single piece of metal, attached to the cone or socket B by a fulcrum at one of its ends, and secured by a screw, A, which engages with a thread formed in one side of the bow, substantially as specified.

2. The conical shell or case F, in combination with the cone or socket B, provided with an internal screw-thread, arranged to operate substantially as specified.

3. The bow D and cone or socket B, in combination with the conical shell or case F and the screw A, arranged and operated substantially as specified.

In testimony that I claim the foregoing as my invention I hereunto affix my signature in presence of two witnesses.

R. F. FISHER.

Witnesses:

HARLAND G. BACON,

JOHN S. CROAK.