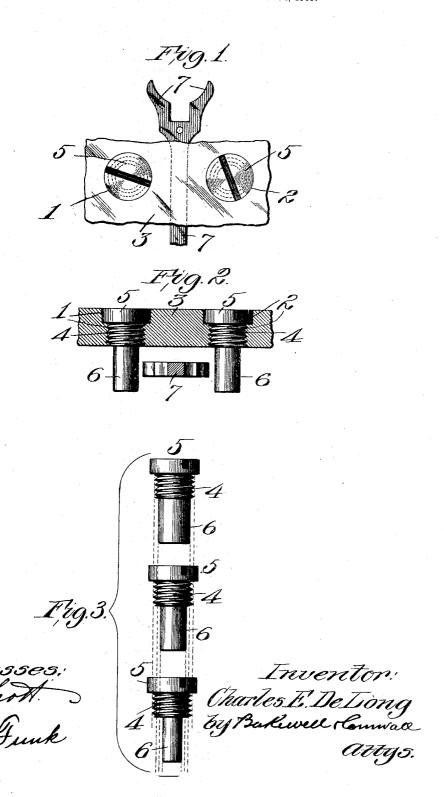
C. E. DE LONG.

BANKING SCREW FOR WATCHES.
APPLICATION FILED JUNE 15, 1904. RENEWED NOV. 4, 1905.



## UNITED STATES PATENT OFFICE.

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## BANKING-SCREW FOR WATCHES.

No. 815,271.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed June 15, 1904. Renewed November 4, 1905. Serial No. 285,864.

To all whom it may concern:

Be it known that I, Charles E. De Long, a citizen of the United States, residing at South McAlester, Indian Territory, have invented a certain new and useful Improvement in Banking - Screws for Watches, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a portion of the banking-screw support, the escapement-lever, and the heads of the banking-screws. Fig. 2 is a sectional view through the banking-screw support and the escapement-lever, the banking-screws being shown in elevation; and Fig. 3 is a detail view of the different banking-screws common to the single open-

This invention relates to the escapement mechanism of watches; and the object thereof is to provide means whereby a determined stroke or swing of the escapement-lever can be maintained at all times without any liability of the stroke being changed by accidentally turning the banking-screws or from

other causes. In constructing a watch the bankingscrews are usually set for a determined stroke of the fork or lever. Heretofore the banking-screws have generally been of such a construction that the portions governing the 35 stroke of the escapement-lever were eccentric to the screw-heads and to the sockets which received the screws. In order to provide for the necessary stroke of the escapement-lever, the screws may be turned so 40 that the distance between the sides of said portions of the screws may be increased or diminished. In actual practice it has been found that during the cleaning of the watch these screws are frequently accidentally disturbed. The slightest disarrangement of the screws is sufficient to seriously change the stroke of the lever, so as to impair the timekeeping qualities of the watch. It has also been found that unskilled repairers fre-

50 quently turn the screws in an endeavor to overcome imaginary errors, the result being

that the proper adjustment of the escapement has been destroyed. In assembling the parts at the factory the proper adjustment for the stroke of the escapement-lever 55 is mathematically determined, and it is intended by the manufacturer that after the banking-screws have been set in place they are to remain permanently as placed.

It is the purpose of this invention to pro- 60 vide means whereby the adjustment which is made in the factory cannot be destroyed by accident or by any other cause.

In carrying out my invention I provide suitable sockets 1 and 2 in the banking-screw 65 support, (designated by the numeral 3.) These sockets are to be of uniform or standard sizes to receive the threaded heads 4 of the banking-screws 5, which threaded heads will also be of standard sizes. The banking 7° ends 6 of the screws, however, will be made up of various sizes, which may be properly numbered and so designated by the trade. For example, if the escapement-lever 7 is to have a determined stroke the manufacturer 75 will know that by inserting a banking-screw of a certain number or designated size the desired result will be accomplished. Inasmuch as the receiving-sockets of the banking-screw support are of a standard size, the 80 banking-screws of whatever size will be interchangeable, because the same-sized head will be provided for every screw. After the screws have been fixed in their support it will be impossible to vary the stroke of the 85 escapement-lever, for the reason that the banking portions of the screws will in every instance be concentric with the sockets and concentric with their respective heads. Therefore after the screws are in place should the 90 screws be accidentally turned the stroke of the lever will in no wise be affected.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made 95 and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Let- 100 ters Patent, is—

A banking-screw support having threaded

openings, interchangeable banking-screws having enlarged heads at one end to impinge against said support, threaded portions to engage said threaded openings, and banking portions at the opposite ends, said banking portions in different screws being of different sizes; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 26th day of May, 1904.

CHARLES E. DE LONG.

Witnesses:

JOHN B. CHALLES, FRANK SMITH.