April 15, 1924. 1,490,896

J. A. GREEN

LOCKING CLAMP

Filed July 30, 1923

Fig. 1.

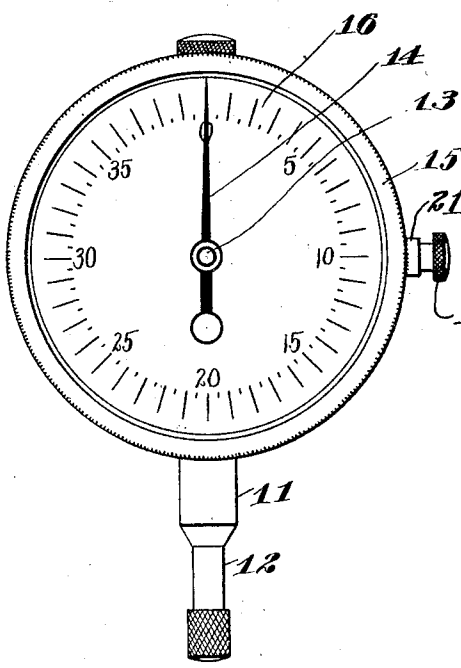
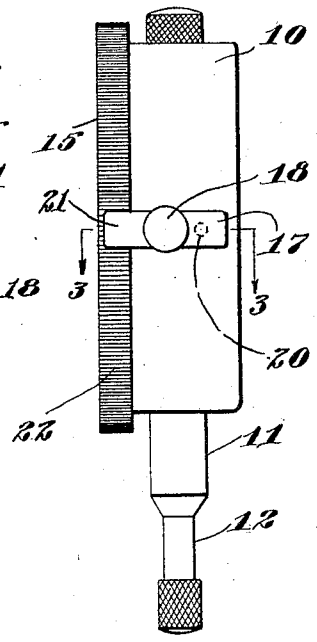


Fig. 2.



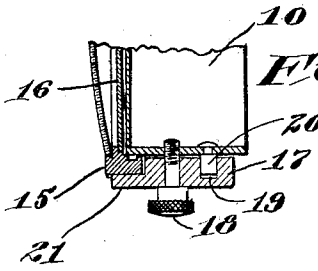


Fig. 3.

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UNITED STATES PATENT OFFICE.

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LOCKING CLAMP.

Application filed July 30, 1923. Serial No. 654,603.

To all whom it may concern:

Be it known that I, JOSEPH A. GREEN, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented an Improvement in Locking Clamps, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My present invention relates to locking devices, and more particularly to an improved locking device for clamping a bezel in adjusted position on a casing.

In prior indicating instruments, the bezel has been held in position on the casing by means of screws passing through alined holes in the bezel and casing, but this method of fastening prevented adjustment of the bezel with respect to the casing and was particularly objectionable where it was desired to immovably secure a dial in the bezel and have the same adjusted relatively to a pointer or indicating hand operated by a suitable movement enclosed in the casing. In the present invention I have obviated the objections of prior structures of this character and have provided a simple locking means for the bezel wherein the bezel may be secured in desired position relatively to the indicating hand or other means operated by devices within the casing, such improved means positively locking the dial in position. Such bezel locking clamp does not depend on frictional engagement between the bezel and the casing nor on screws passing through alined holes in the casing and bezel and is one that is easily and quickly operated for adjusting purposes.

The object of my invention, therefore, is an improved locking clamp for locking a bezel on a casing in any desired adjusted position.

In the accompanying drawings illustrating the preferred embodiment of my invention as applied to a dial indicating instrument,

Fig. 1 is a front elevation;

Fig. 2 is a side elevation, and

Fig. 3 is a sectional plan on the line 3—3 of Fig. 2.

Referring to the drawings, 10 designates an enclosing casing provided with a depending hollow shaft portion 11 in which is mounted a shaft 12, there being ordinarily a movement within the casing, such movement having formed as an integral part thereof a staff 13 on which is frictionally secured an indicating hand or pointer 14. Cooperating with the casing 10 is a bezel 15 which is provided with means on its interior that cooperates with means on the casing 10 whereby the bezel 15 may be securely held on the casing 10 while being rotatable with respect thereto. No screw threads are employed on the present instrument and therefore it will be apparent that the bezel 15 may be rotated freely with respect to such casing. The bezel 15 has secured thereto a dial plate 16 provided with a plurality of graduations on its outer face and with which the pointer or indicating hand 14 is adapted to be associated. The principal adjustment consists in bringing the zero indication or the graduations into registry with the indicating hand or pointer 14 in the normal or inoperative position of the device. As such correction has to be made frequently and as it will be apparent that the ordinary through and through screw device for holding the bezel ring in fixed relation with each other cannot be employed in this regard, I have provided a member comprising a main portion 17 secured to the side of the casing by a thumb screw 18, the member 17 being provided with a recess 19 and into which is adapted to loosely fit a projecting pin 20. This pin 20 is secured to the casing 10, the thumb screw 18 and pin 20 preventing lateral movement of the main portion 17. Formed integral with the main portion 17 is a projection 21, the inner face of which is adapted to engage with the knurling 22 on the outer periphery of the bezel 15. The inner face of such portion 21 when forced into engagement with the knurling 22 by the thumb screw 18, firmly holds the bezel ring 15 in fixed relation to the casing 10. By backing off the thumb screw 18, the inner face of the portion 21 is released from the knurling 22 and allows the bezel ring 15 to become freely rotatable with respect to the casing 10.

While I have necessarily shown and described the preferred embodiment of my invention somewhat in detail, it is to be understood that I may vary the size, shape, and arrangement of parts within wide lim-

its without departing from the spirit of the invention.

Having thus described my invention, what I claim as new is:

An improved bezel clamp for dial indicating instruments and the like comprising, in combination, a body member secured to the casing, a projection on said body member spaced apart from the casing and lying parallel to, but spaced apart from, the bezel of the instrument, a thumb screw located in the body member and passing through the wall of the casing whereby the projection on the body member may be moved toward and from the axis of rotation of the bezel ring.

In testimony whereof, I have signed my name to this specification.

JOSEPH A. GREEN.