No. 679,970. Patented Aug. 6, 1901.

H. E. KEELER.

TENSION SCREW.

(Application filed June 11, 1901.)

(No Model.)

Fig.1

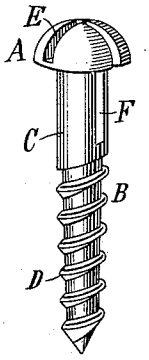


Fig.3

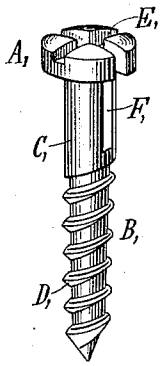


Fig.2

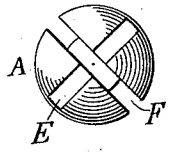
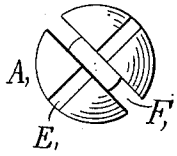


Fig.4



Witnesses:
Raphael Netter
Alexander Mitchell

Herbert E. Keeler Inventor
by Frederick S. Duncan Atty

UNITED STATES PATENT OFFICE.

HERBERT E. KEELER, OF NEW YORK, N. Y.

TENSION-SCREW.

SPECIFICATION forming part of Letters Patent No. 679,970, dated August 6, 1901.

Application filed June 11, 1901. Serial No. 64,128. (No model.)

To all whom it may concern:

Be it known that I, HERBERT E. KEELER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and useful Tension-Screw, of which the following is a specification, taken in connection with the accompanying drawings, in which the same reference characters designate similar parts in the various figures.

My invention relates to tension-screws intended to be employed in connection with window-shades to tighten the cables or cords employed in such shades to guide the curtain as it moves up and down. It is intended to be employed in substantially the same way as my adjusting device shown in Patent No. 650,328, dated May 22, 1900.

Figure 1 shows in perspective one form of my invention. Fig. 2 is a top view of the same. Fig. 3 is a perspective view of a modification. Fig. 4 is a plan view of such modification.

My tension-screw consists of a cylindrical shank C, connecting with a tapering body B, provided with a thread D of coarse pitch, as shown, adapted to secure the screw to wood or other similar material. Secured to the shank C is a hemispherical head A, in which are formed two slots, one extending along axial planes. The slot E extends into the head sufficiently so that the screw can be driven in a well-known manner by inserting a screw-driver into this slot. The slot F, which is formed, as shown, substantially at right angles to the slot E, extends entirely through the head A and also a considerable distance into the shank C.

Referring to the modified form of my device, the cylindrical shank C′ is connected to threaded extension B′ and also onto the cylindrical head A′. This head, as is shown, is very slightly curved on its upper surface; but, if desired, it may be formed square or hexagonal. The slot E′ in this screw extends in an axial plane sufficiently into the head A′ so that it can be engaged by a screw-driver, while the slot F′, substantially at right angles to E′, extends a considerable distance into the cylindrical shank.

In using this screw the threaded end of the same is inserted a slight distance into wood or other material, and then the cord or cable on which the shade is guided, or, in fact, any other cord which it is desired to tighten, is inserted into the slot of the shank. Then the screw is turned by means of a screw-driver in the shallow slot in the head, so as to wind the cord about the cylindrical shank of the screw until it is sufficiently tightened. By forming two slots in this groove and driving the screw by inserting the screw-driver in the shallow slot the screw may be turned without breaking it, while if only a single slot were used a screw-driver inserted in such slot would break the screw when it was turned. It will be noticed in this connection that the head of my tension-screw forms a shoulder at the upper end of the cylindrical shank, so that the cord wound about the shank is retained and prevented from slipping on the screw.

It will of course be understood that many variations may be made in my device by those skilled in the art and that it is not necessary to employ exactly the construction which I have disclosed.

What is claimed as new is—

1. A tension device consisting of a cylindrical shank, a threaded end and an enlarged head and having a slot extending part way through the head and also another slot extending through the head and into the shank.

2. A tension-screw comprising a threaded end, a cylindrical shank connected therewith and an enlarged head attached to said shank to form a shoulder at the end of said shank, there being a slot formed in said head and extending partly through the same and another slot, substantially at right angles to the first slot extending through said head and into said shank.

3. A tension-screw consisting of a threaded end, an unthreaded shank and an enlarged head at the end of said shank, there being a slot formed in said head extending partly through the same and another slot extending through said head and partly through said shank.

4. A tension-screw comprising a threaded body an enlarged head at the end of said body forming a shoulder in connection with the same, a slot cut in said head and a second slot cut through said head and into said body.

5. A tension-screw comprising a threaded body, an enlarged cylindrical head attached to said body, there being a slot formed in said head and a second slot extending through said head into said body at an angle to the first slot.

6. A tension-screw comprising a threaded end, a cylindrical shank coaxial therewith, an enlarged cylindrical head attached to said shank, there being an axial slot extending partly through said head and a second axial slot at right angles to the first slot extending through said head and partly through said shank.

HERBERT E. KEELER.

Witnesses:
HARRY L. DUNCAN,
ALEXANDER MITCHELL.