Aug. 28, 1945. C. C. MOSS 2,383,670

THUMB SCREW

Filed July 1, 1942

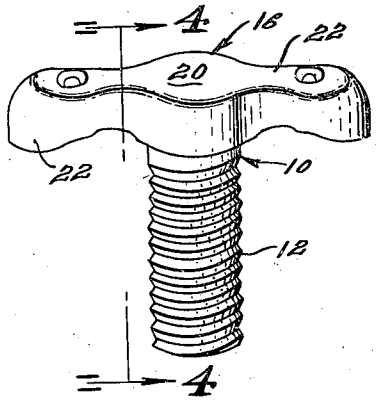

Fig. 1.

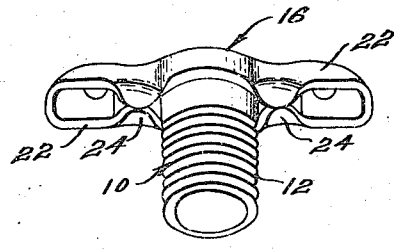

Fig. 2.

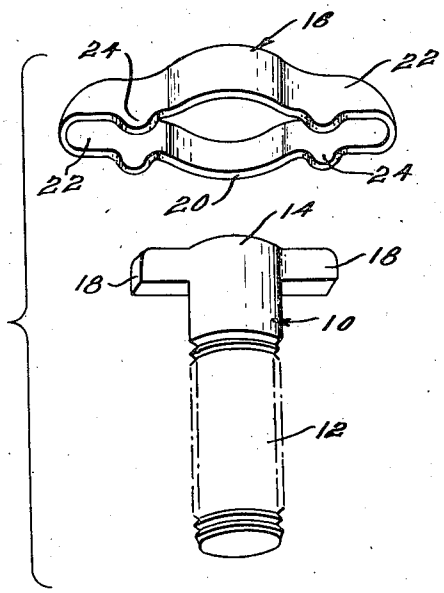

Fig. 3.

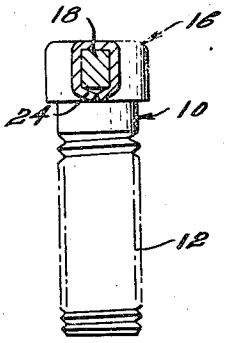

Fig. 4.

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THUMBSCREW

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Application July 1, 1942, Serial No. 449,217

2 Claims. (Cl. 85—9)

The present invention relates to thumb screws and in particular is directed to a new and improved fabricated thumb screw.

The principal objects of the present invention are to provide a simple, efficient thumb screw, of new and improved construction, which is peculiarly adapted for simple, economical and efficient production.

Having in view the above and other objects, which appear from the following description and claims, a preferred, but illustrative embodiment of the invention is shown in the accompanying drawing, throughout the several views of which corresponding reference characters are used to designate corresponding parts, and in which:

Figure 1 is a view in perspective, looking down on the complete embodiment of the invention;

Fig. 2 is a view in perspective, looking up at the same embodiment;

Fig. 3 is a view in perspective, showing the parts of the thumb screw prior to fabrication; and

Fig. 4 is a view taken along the line 4—4 of Fig. 1.

The illustrated thumb screw comprises generally a screw member 10, having a threaded shank 12, adjacent one end and a head 14 at the other end; and a cap member 16, which fits over the head 14 and is non-rotatively secured thereto.

The head 14 is provided with two diametrically opposed arms 18, perpendicularly disposed with respect to the axis of the shank 12, and of generally rectangular cross-section.

The cap 16 is drawn from sheet metal to a form resembling that of an inverted trough and is adapted to freely but snugly receive the head 14 with its arms 18, as is clearly shown in Fig. 3. At the central portion 20 of the cap 16, the trough is enlarged to receive the head 14 of the screw member 10. The end portions 22 of the cap 16 are so proportioned that the arms 18 are received therein and that the trough of said end portions 22 is substantially deeper than the corresponding thickness of the arm 18 such that the portions 24 of the sidewall of the trough extend beyond the received arms 18 and may be folded over said arms 18, as shown in Fig. 2 and in cross-section in Fig. 4.

The assembly of the cap 16 and the screw member 10 into the completed thumb screw is accomplished by inserting the headed end 14 of the screw member 10 into the trough of the trough-shaped cap 16, the head 14 being received in the central portion 20 of the cap and arms 18 in the end portions 22 of the cap. The portions 24 of the sidewalls of the troughs are then folded over the arms 18 and thereby brought into firm engagement therewith.

When the screw member 10 and cap 16 are thus assembled and the portions 24 folded tightly over the arms 18 in the manner described, the parts of the assembled thumb screw are securely held against rotary movement with respect to each other by the engagement of the arms 18 and the walls of the end portions 22, within which the arms 18 are received. The assembled relation is maintained and removal of either of the members of the thumb screw from its position with respect to the other is prevented by the engagement of the wall portions 24 and the arms 18.

The end portions 22 of the cap 16 extend considerably beyond the ends of the arms 18 when the members are in the assembled position and thereby furnish greater leverage for turning the thumb screw and facilitate manual operation thereof.

What I claim is:

1. A thumb screw comprising a T-shaped stud having a head section and a threaded section, said head section having radially-extending, diametrically-opposed arms which are formed to provide gripping edges, and a cap-piece which is generally channel-shaped in cross-section and which fits over, and seats on, said head section and said radially-extending arms, said cap-piece having a body portion which conformably engages substantial areas of opposite sides of said head section and wing extensions which fit over said radially-extending arms to provide a driving connection between said cap-piece and stud, said wing extensions overlying said edges and having portions which are deformed to engage under said edges, whereby to secure the cap-piece on said head section.

2. A thumb screw comprising a T-shaped stud having a head section and a threaded section, said head section being formed with radially-extending, diametrically-opposed arms which are relatively short, substantially rectangular in cross-section and of a width less than the diameter of said head section, and a cap-piece which is generally channel-shaped in cross-section and which fits over, and seats on, said head section and said radially-extending arms, said cap-piece having an enlarged body portion which conformably engages substantial areas of opposite sides of said head section and wing extensions which are of substantially greater length than said radially extending arms, the wing extensions fitting over said radially-extending arms to provide a driving connection between said cap-piece and stud, said wing extensions overlying the opposite sides of, and having marginal edges which are deformed to engage under, said radially-extending arms whereby to secure the cap-piece on said head section.

CHESTER C. MOSS.