

C. G. LUNDHOLM.

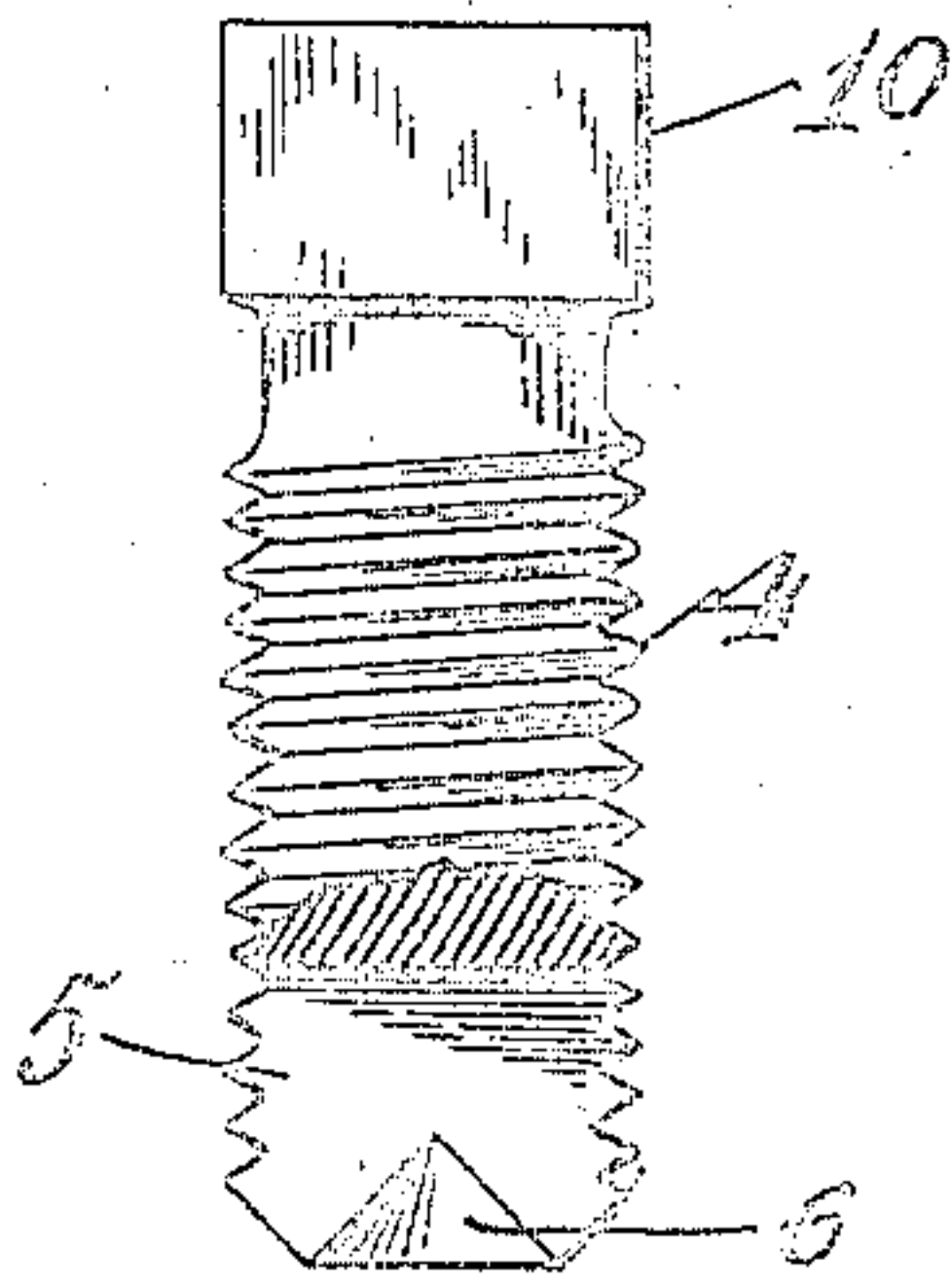
NET SCREW.

APPLICATION FILED DEC. 26, 1903.

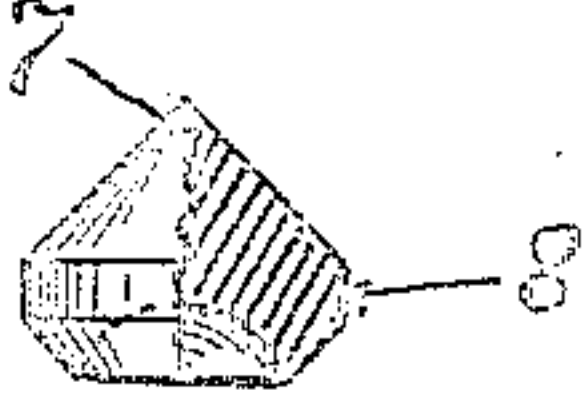
936,549.

Patented Oct. 12, 1909.

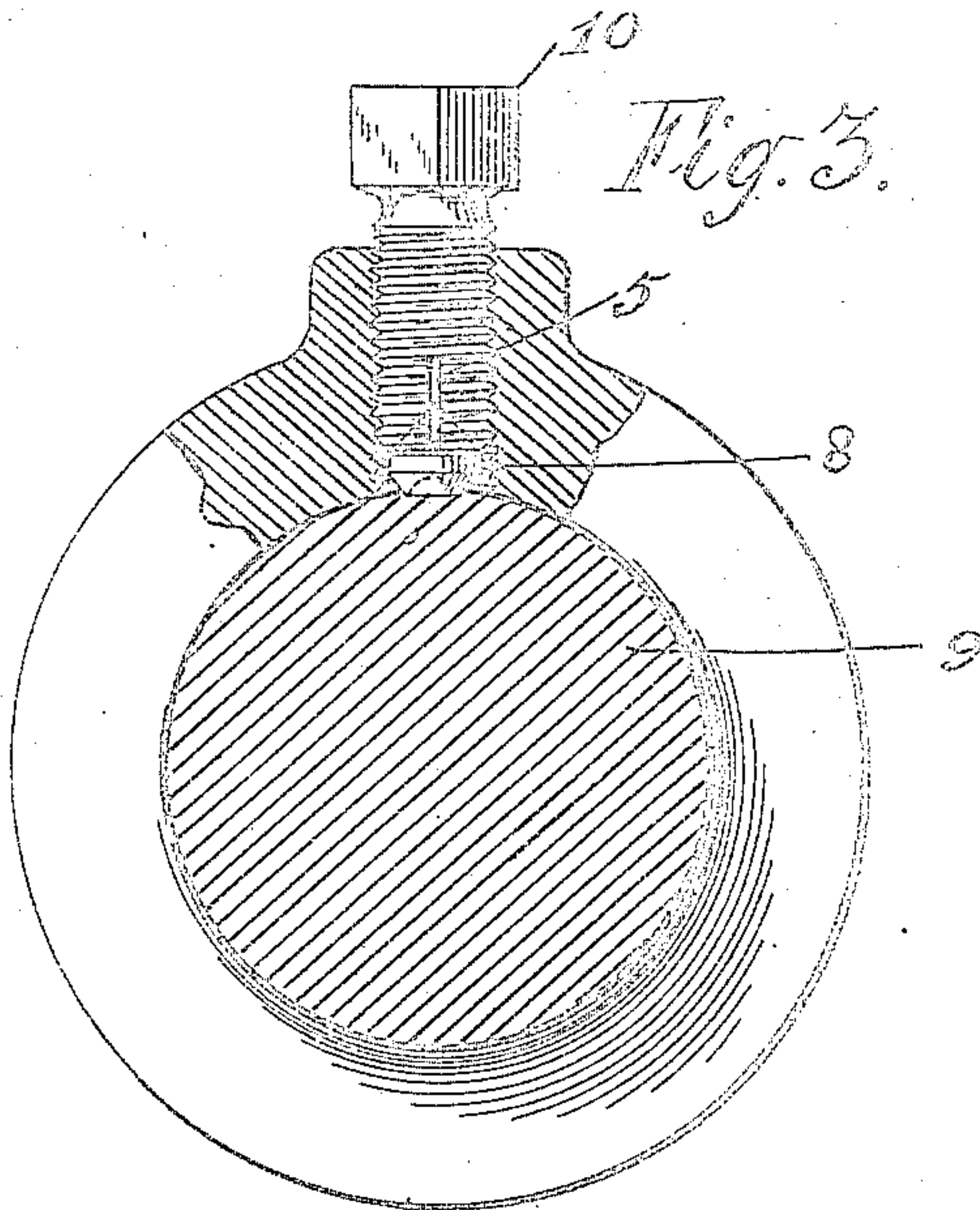
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses,  
*W. H. Montuenga*  
M. A. Palmer.

Inventor,  
Charles G. Lundholm  
by *Harold & Chase*  
Attorneys

# UNITED STATES PATENT OFFICE.

CHARLES G. LUNDHOLM, OF LAS VEGAS, NEVADA.

SET-SCREW.

936,549.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed December 28, 1908. Serial No. 469,545.

*To all whom it may concern:*

Be it known that I, CHARLES G. LUNDHOLM, a citizen of the United States, residing at Las Vegas, in the county of Lincoln and State of Nevada, have invented new and useful Improvements in Set-Screws, of which the following is a specification.

The object of my invention is to provide a set-screw which will be locked in the screw-threaded socket when screwed tightly therein and prevent the accidental removal therefrom of the set-screw, except a wrench be applied thereto for that purpose. I accomplish this object by means of the device described herein and shown in the accompanying drawings, in which:—

Figure 1— is a side view of a set-screw partly broken away embodying my invention. Fig. 2— is a side view partly broken away of a set-screw expander. Fig. 3— is a side view of a set-screw in place in the screw-threaded socket with the set-screw expander in position therein.

An ordinary set-screw 4 is provided with a longitudinal slit 5 extending from the screw-threaded end of a portion of the length of the set-screw, providing means whereby the bifurcations of the threaded ends of the screw may be spread apart and thereby securely lock the set-screw in the screw-threaded socket when it is tightly screwed therein. In order to properly expand the bifurcations of the set-screw when it is screwed home, I have caused to be made in the screw-threaded end of the set-screw, a conical recess 6 for the reception of the conical end 7 of the screw-expander 8. This conical expander is first placed into the screw-threaded socket and the set-screw is screwed thereinto and against the expander. As the expander is crowded down tightly against the shaft 9, the furcations of the set-screw will be expanded against and

tightly grasp the female threads surrounding the same and prevent the accidental unscrewing of the set-screw therefrom, and external force applied to the nut 10 by wrench or otherwise will be necessary to remove the set-screw. There may be more than one slit in the end of the set-screw and the recess in the end of the screw may be of any configuration, providing the walls thereof have inclined bearing faces which will cause the projecting furcations of the set-screw to expand when any object is crowded between them, and the screw expander may be of any configuration provided it has bearing faces adapted to contact with the inclined walls of the recess and expand the furcations when the expander is crowded therebetween.

Having described my invention what I claim as new and desire to secure by Letters Patent is:—

1. The combination of a threaded bolt provided with a vertically slotted and recessed end, and an expander having one end adapted to seat in the recessed end of the bolt, the opposite end being cupped to form an annular engaging edge.

2. The combination of a threaded bolt provided with a vertically slotted and conically recessed end, of an expanding button provided with a conical end adapted to enter the recessed end of the bolt and prevent an accidental movement of the bolt, the opposite end of the button being cupped to form an annular engaging edge, whereby to prevent movement of the object being held in place by the bolt.

In witness that I claim the foregoing I have hereunto subscribed my name this 21st day of December, 1908.

C. G. LUNDHOLM.

Witnesses:

HENRY T. HAZARD,  
EDMUND A. STRAUSE.