

1,326,008.

Patented Dec. 23, 1919.

FIG. 1.

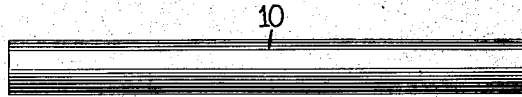


FIG. 2.

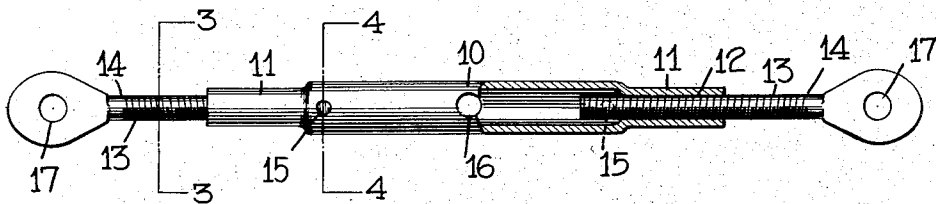


FIG. 3.

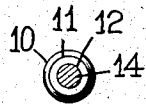
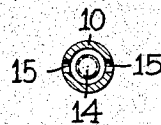


FIG. 4.



Inventor

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UNITED STATES PATENT OFFICE.

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TURNBUCKLE.

1,326,008.

Specification of Letters Patent.

Patented Dec. 23, 1919.

Application filed December 6, 1916. Serial No. 135,393.

To all whom it may concern:

Be it known that I, JOHN P. TARBOX, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Turnbuckles, of which the following is a specification.

My invention relates in general to turnbuckles and more particularly to that class of turnbuckles which are utilized in aeronautical construction. It provides a turnbuckle which combines with light weight and strength the feature of low production cost.

In the construction of my turnbuckle I use a section of metal tubing, which has its extremities swaged to a smaller diameter than that of the main tube section, to form the barrel portion. The shanks are forged, machined, or otherwise formed of any suitable material.

The swaged portions of the barrel are threaded internally to receive and engage the externally threaded portions of the shanks.

Of the drawings:

Figure 1 is a section of tube before forming;

Fig. 2 is a view of an assembled turnbuckle, a part thereof being shown in section;

Fig. 3 is a section along line 3—3;

Fig. 4 is a section along line 4—4.

The barrel wholly designated as 10 has its extremities 11 swaged as shown in Fig. 2, and carries internal threads 12 in the swaged portions which engage with threads 13 carried by the shank 14 and extending substantially throughout its length. The length of the swaged threaded portion of the barrel 10 is such that it gives a thread strength at least equal to the tensile strength of any other part of the turnbuckle.

In order that the full thread strength may

always be utilized I provide holes 15 drilled through the barrel 10 at or adjacent the point where the diameter diminishes. In the fully distended condition of the turnbuckle it is highly desirable that the length of engaged thread shall not be decreased due to screwing the shank 14 too far out of the barrel 10. If the extremity of the shank 14 is always kept visible through the aperture 15 the maximum thread length will be utilized. Approximately at the center of the barrel section I provide a hole 16 for the purpose of inserting a pin, lever or other instrument used for turning the barrel 10 while tightening or loosening the turnbuckle.

The shanks 14 of the turnbuckle are of uniform diameter throughout. This feature contributes further to economical production. The shanks may be constructed in several forms for attachment to the engaging cables or wire pulls, but are shown in Fig. 2 as comprising an eyelet 17 to which the wires or stays may be attached.

What is claimed is:

1. In a turnbuckle, a barrel comprising a main central tubular section having a swaged extremity of reduced diameter, said barrel being provided with an inspection hole which is located immediately adjacent the swaged portion thereof and extends diametrically of said barrel.

2. In a turnbuckle, a barrel having one end reduced in diameter and internally screw-threaded and having a transverse inspection aperture immediately adjacent the threaded and reduced portion, and a shank of uniform diameter and externally threaded, adapted to engage the said reduced and screw-threaded end and project into said barrel and beyond said inspection aperture.

In testimony whereof I affix my signature.

JOHN P. TARBOX.