W. M. BEALS.

TURNBUCKLE.

APPLICATION FILED DEC. 21, 1918.

1,313,450.

Patented Aug. 19, 1919.

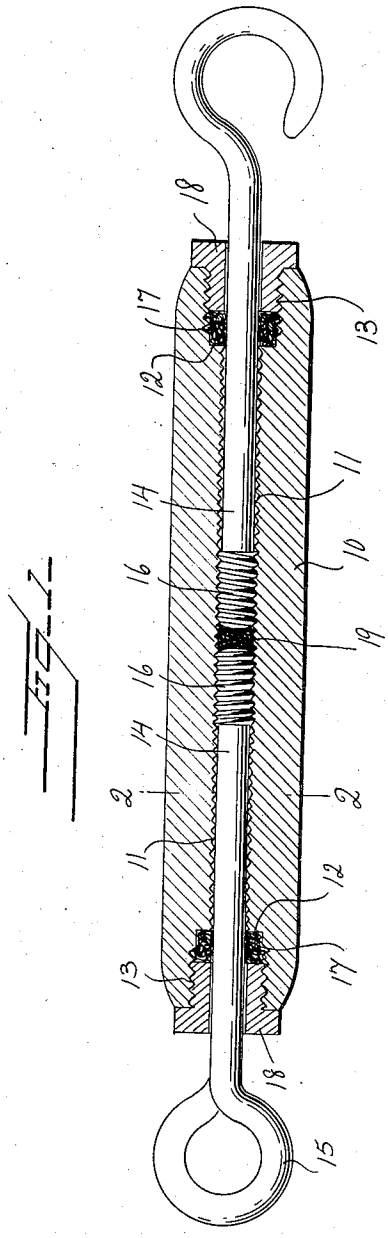


Fig. 1.

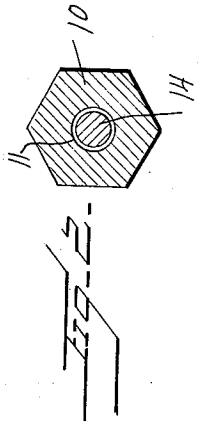


Fig. 2.

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TURNBUCKLE.

1,313,450. Specification of Letters Patent. Patented Aug. 19, 1919.

Application filed December 21, 1918. Serial No. 267,830.

To all whom it may concern:

Be it known that I, WALLACE M. BEALS, a citizen of the United States, residing at Avon, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Turnbuckles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to turn-buckles and the object of the invention is to provide a rest-proof turn-buckle, that is, a turn-buckle wherein the screw-threaded portions are so protected and shielded that the screw-threads will not rust, corrode or otherwise become clogged so as to prevent the ready expansion or contraction of the turn-buckle.

A further object is to provide a turn-buckle of the character above stated with oiled packing to lubricate the sections of the turn-buckle and at the same time act to prevent the entrance of moisture to the interior thereof.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a longitudinal sectional view of my turn-buckle; and

Fig. 2 is a section on the line 2—2 of Fig. 1.

Referring to these drawings, 10 designates the body of the turn-buckle which is tubular and interiorly screw-threaded in opposite directions as at 11. These screw-threads 11 extend from the middle of the body 10 toward the ends thereof but terminate short of these ends and at the end the bore of the body 10 is enlarged to form a packing receiving annular chamber 12. This enlarged portion of the bore is then interiorly screw-threaded as at 13.

Operating in connection with the body 10 are the draw rods 14 having eyes 15 at their outer ends, the inner end of each draw rod being enlarged and exteriorly screw-threaded as at 16 to engage the screw-threads 11. It will be understood that the draw rod on one side has right hand screw-threads and on the other side has left hand screw threads.

Disposed within the annular chambers 12 is the oil packing 17 which may be in the form of a ring of packing material saturated with oil or may be in the form of a loose wad of packing. This packing is held in place and put under compression by means of the gland nuts 18 which are exteriorly screw-threaded to engage the screw-threads 13.

It will be noted from Fig. 1, that the draw rods do not engage the body 10 except at their enlarged inner ends, and that they come in close contact with the packing 17 and that by turning up the gland nuts 18 the packing 17 may be compressed so as to tightly embrace and wipe against the draw rods. Obviously the body 10 will be many-sided so as to permit a wrench to be readily applied thereto.

Preferably a wad of oil packing 19 will be disposed within the bore of the body 10 between the inner ends of the rods 14, this wad of packing being forced into place by turning the rods in. A construction of this kind, it will be seen, provides for a perfect protection of the threads, both of the draw rods and of the body so that moisture cannot come in contact with the threads. Moisture may run down or along the draw rods but it will be prevented from access to the threads by the oil packing 17. As a consequence, the turn-buckle may be readily turned to contract or expand the draw rods and there is no danger of the turn-buckle rusting as is the case with the ordinary turn-buckle. It will be obvious that the details of construction and arrangement of parts might be varied in many ways without departing from the spirit of the invention.

I claim:

A turn-buckle comprising a body having a central bore, the bore being screw-threaded in opposite directions from the middle of the body toward its opposite ends, said screw-threaded portion of the bore terminating short of the ends of the body, draw rods inserted through the ends of the body and being smooth and uniform in diameter for the greater portion of their length but having screw-threaded inner ends adapted

to engage the threads of said bore, the ends of the body being enlarged to form annular packing chambers, and gland nuts having screw-threaded engagement with said chambers and adapted to bear against the packing disposed in said chamber and through which said draw rods snugly pass.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WALLACE M. BEALS.

Witnesses:
CHARLES EMERSON MAY,
EUGENE W. RAYMOND.