

No. 864,478.

W. R. MILLER.

PATENTED AUG. 27, 1907.

EXPANSIVE NUT.

APPLICATION FILED DEC. 28, 1906.

Fig. 1.

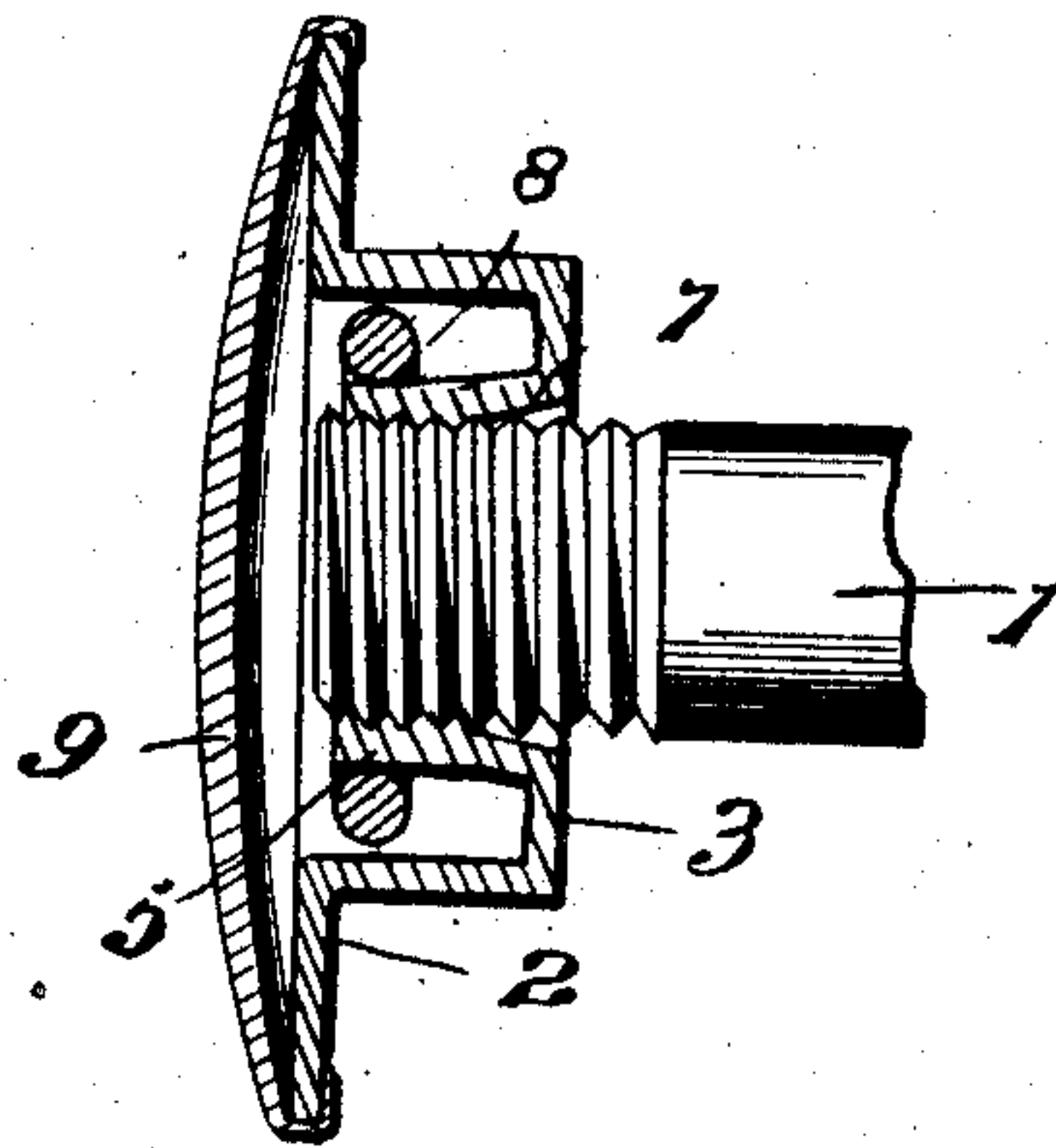


Fig. 3.

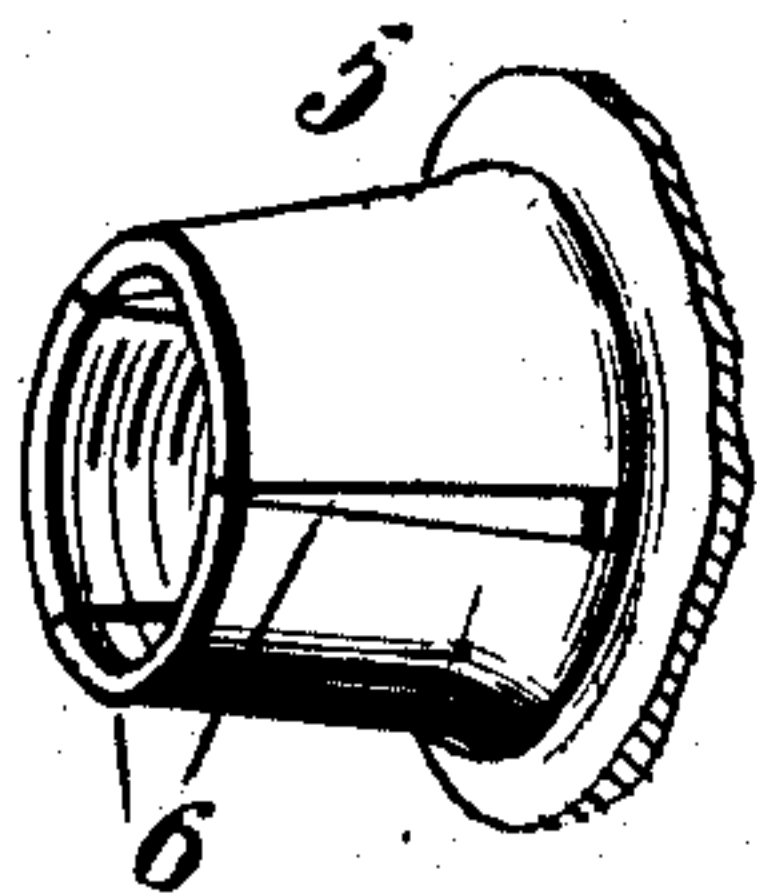


Fig. 2.

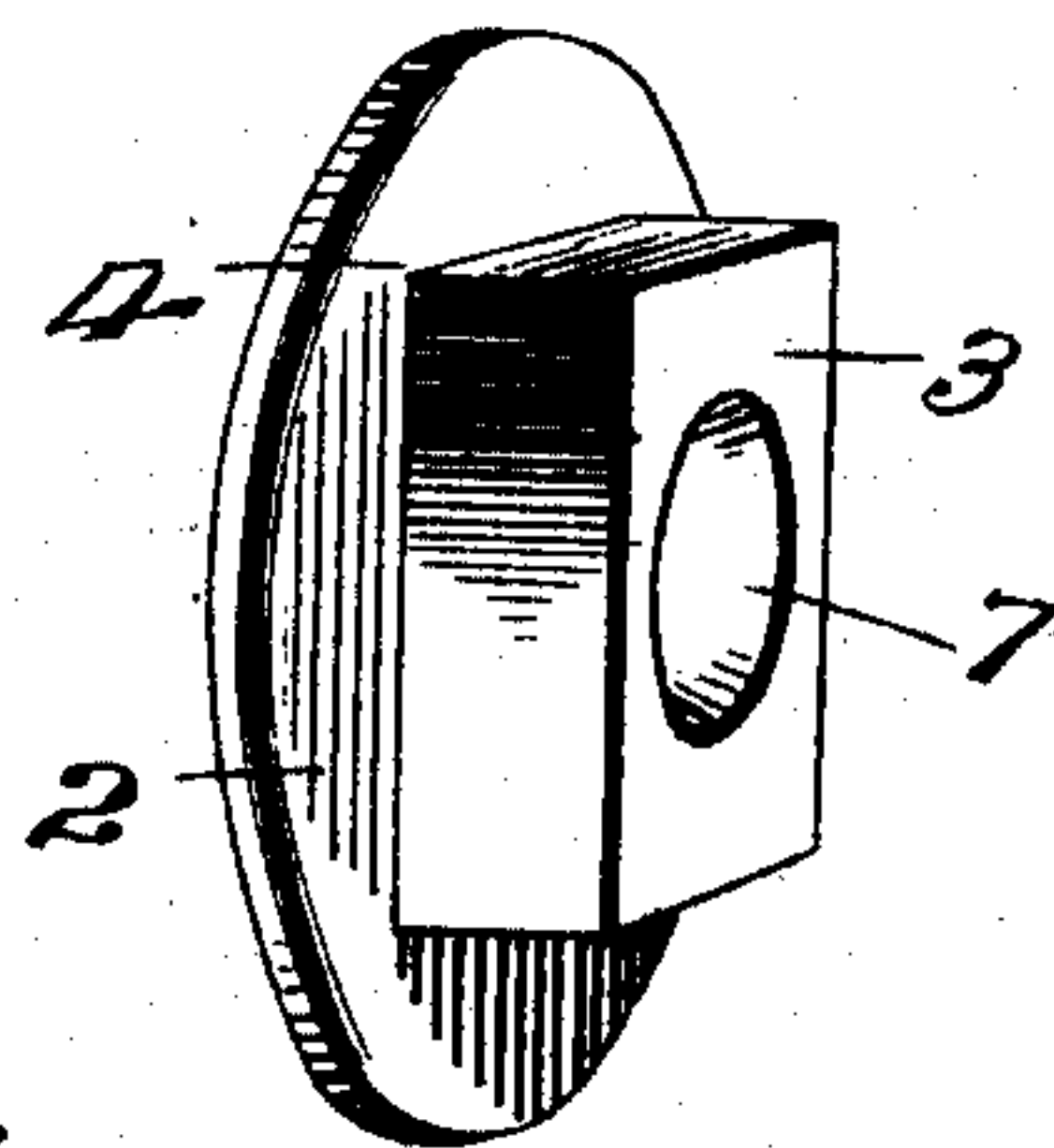
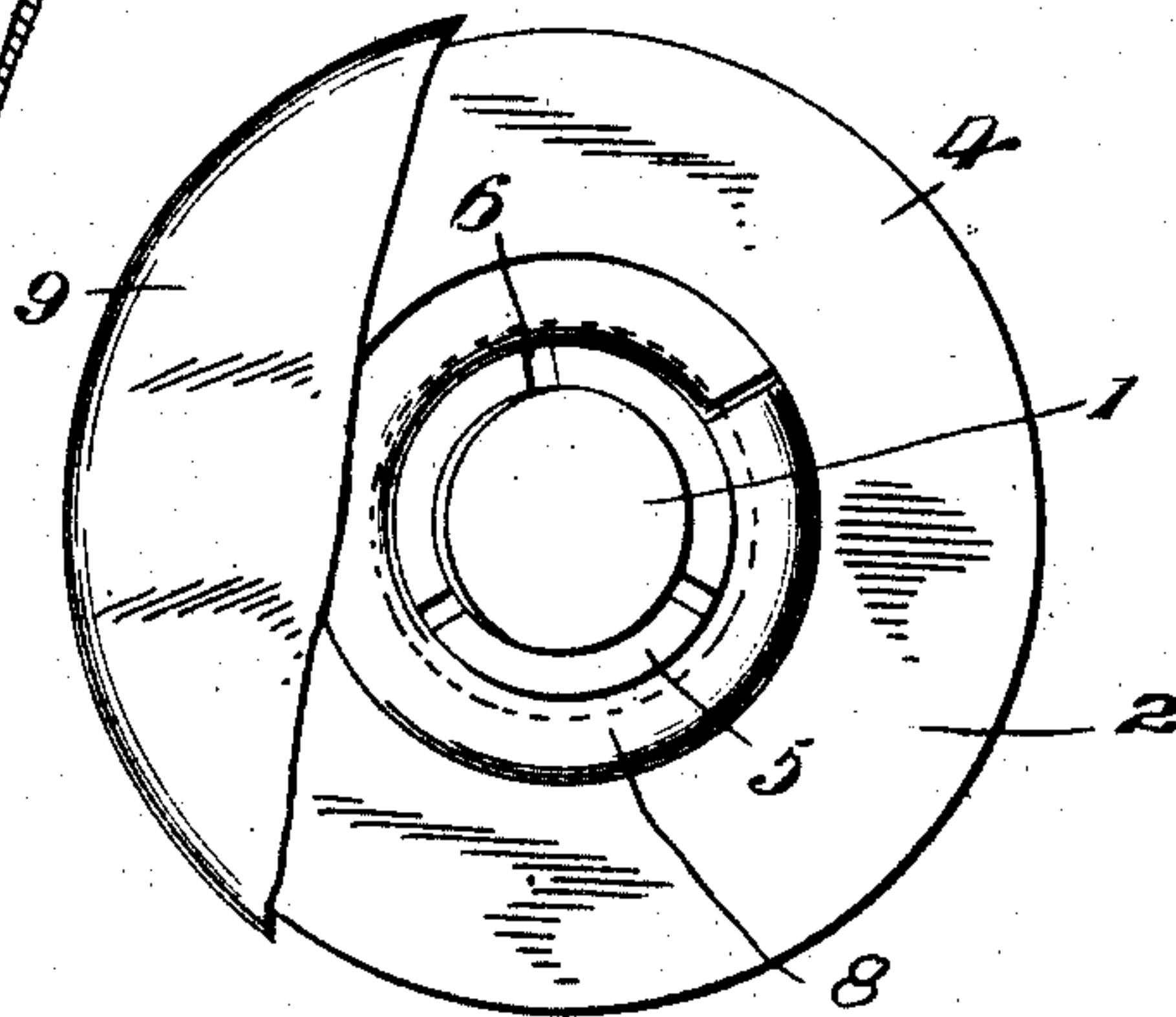


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

WALTER R. MILLER, OF BELLVILLE, OHIO.

EXPANSIVE NUT.

No. 864,478.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed December 28, 1906. Serial No. 349,876.

To all whom it may concern;

Be it known that I, WALTER R. MILLER, a citizen of the United States, residing at Bellville, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Expansive Nuts, of which the following is a specification.

This invention contemplates certain new and useful improvements in expansive nuts particularly designed for use on the top posts of buggies or similar vehicles where the nuts are exposed to considerable jar, although the invention is manifestly not limited to this particular use, and the object of my invention is to provide an improved construction of nut of this character which will tightly hold itself upon the part to which it is attached as against accidental displacement.

With this object in view, the invention consists in certain constructions and arrangements of the parts hereinafter described and particularly pointed out in the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a sectional view of my improved expansive nut, showing it applied to the outer end of a top post of a buggy. Fig. 2 is a face view of my improved expansive nut, parts of the cap being broken away. Fig. 3 is a detail perspective view of a fragment of the nut, showing the sleeve portion of the nut and the remaining portions broken away therefrom. Fig. 4 is a detail perspective view of the nut looking at the inner end thereof.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates a bolt or similar part, the outer end of which is threaded to receive my improved expansive nut, which is in the present instance intended to embrace the outer end of a top post of a buggy. The nut 2 is preferably made of three parts, only, one of which is a hollow body, designated 3, which is preferably of pressed steel and which is polygonal as shown in Fig. 4, so as to accommodate a wrench or similar tool for turning it. From one edge of this body there projects a preferably circular flange 4. A sleeve 5 is secured centrally within the body 3, being integral with it, and said sleeve is spaced from the walls

of the body proper, as shown, and is provided with end slots 6 and is contracted towards its outer end. The sleeve 5 is provided with a tapered or enlarged entering end 7 to receive the end of the post or bolt 1. As is manifest, the slitted end of the sleeve 5 produces spring members adapted to tightly clamp upon the bolt, and in addition to the spring function of the sleeve, itself, I provide a coil spring 8 which may embody one or more convolutions, and which is spread apart so as to press over the end of the sleeve far enough to hold itself in place. After being placed in position, it is evident that the spring 8 will assist the slitted end of the sleeve 5 in its spring function, and the coil spring 8 is spaced from the walls of the outer portion of the body 3, as best illustrated in Fig. 1. In the present instance, the spring 8 is in the form of a split washer, that is, a spring with only one convolution, the ends of the spring being slightly spaced from each other so as to give the necessary play, as illustrated in Fig. 2.

9 designates a cap which is flanged around the semi-circular flange 4 of the nut so as to close the outer end thereof, as is common with the nut herein set forth.

From the foregoing description in connection with the accompanying drawing, it will be seen that I have provided a very simple construction of expansive nut, which will securely hold the side braces and other parts of the vehicle top together as against any accidental loosening which would otherwise result from the severe jarring to which these parts are subjected and which may be used in other connections for the same purpose.

Having thus described the invention, what is claimed as new is:

1. A nut, consisting of a hollow body, a sleeve secured centrally within said body and spaced from the walls thereof, said sleeve being slitted at one end to form spring members, said members converging from the base of the nut towards the opposite end of the sleeve, and a spring encircling the slitted end of the sleeve and located between the same and the walls of the hollow body.

2. A nut, consisting of a hollow body provided with a flange, a threaded sleeve secured in said body and spaced from the walls thereof, said sleeve having a slitted end, a spring encircling said slitted end and located between the same and the walls of the hollow body, and a cap secured to said flange and inclosing the slitted end of the sleeve.

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

WALTER R. MILLER. [L. S.]

Witnesses:

OLIVER H. GURNEY,

EUGENE L. BRENTLINGER.