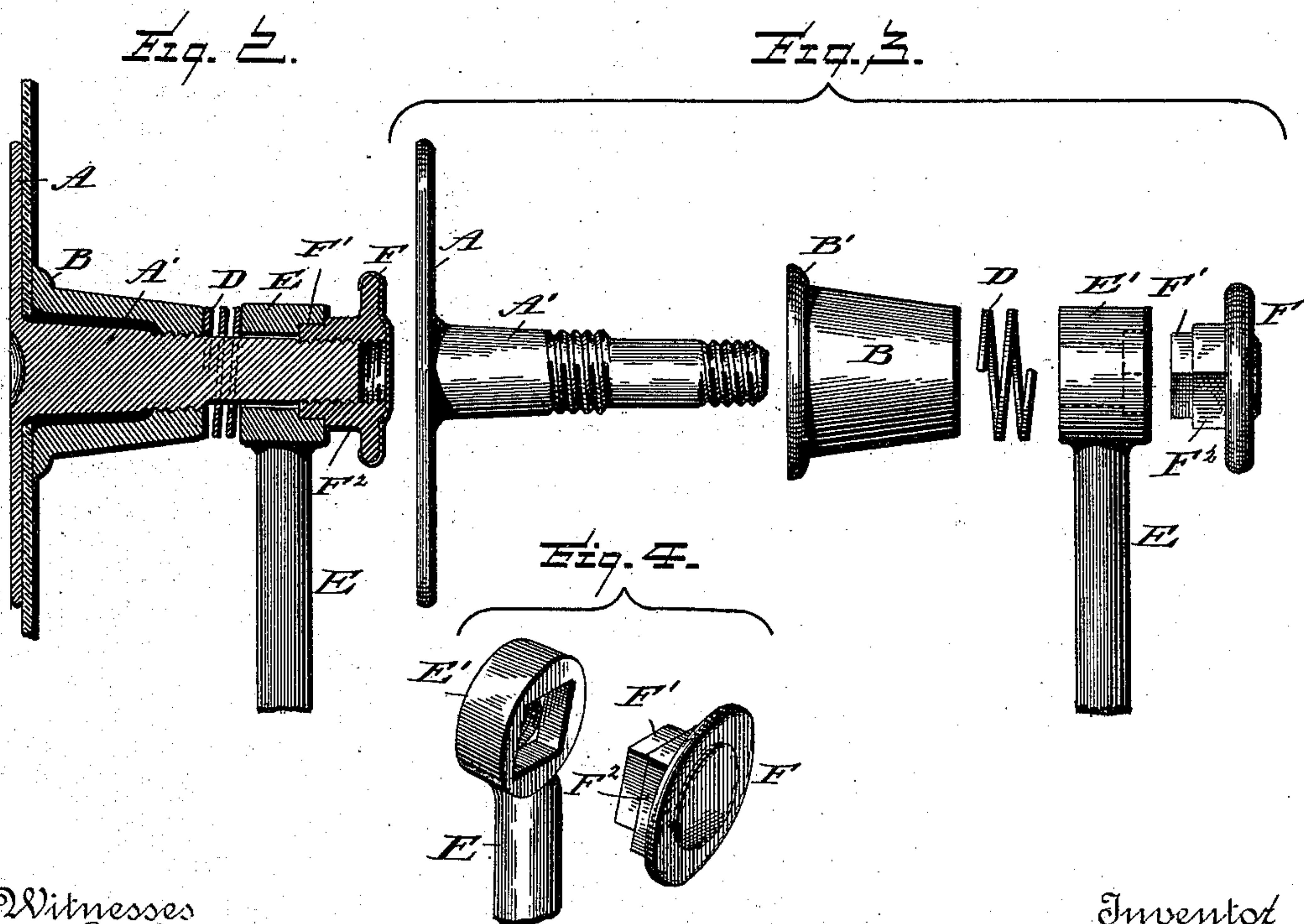
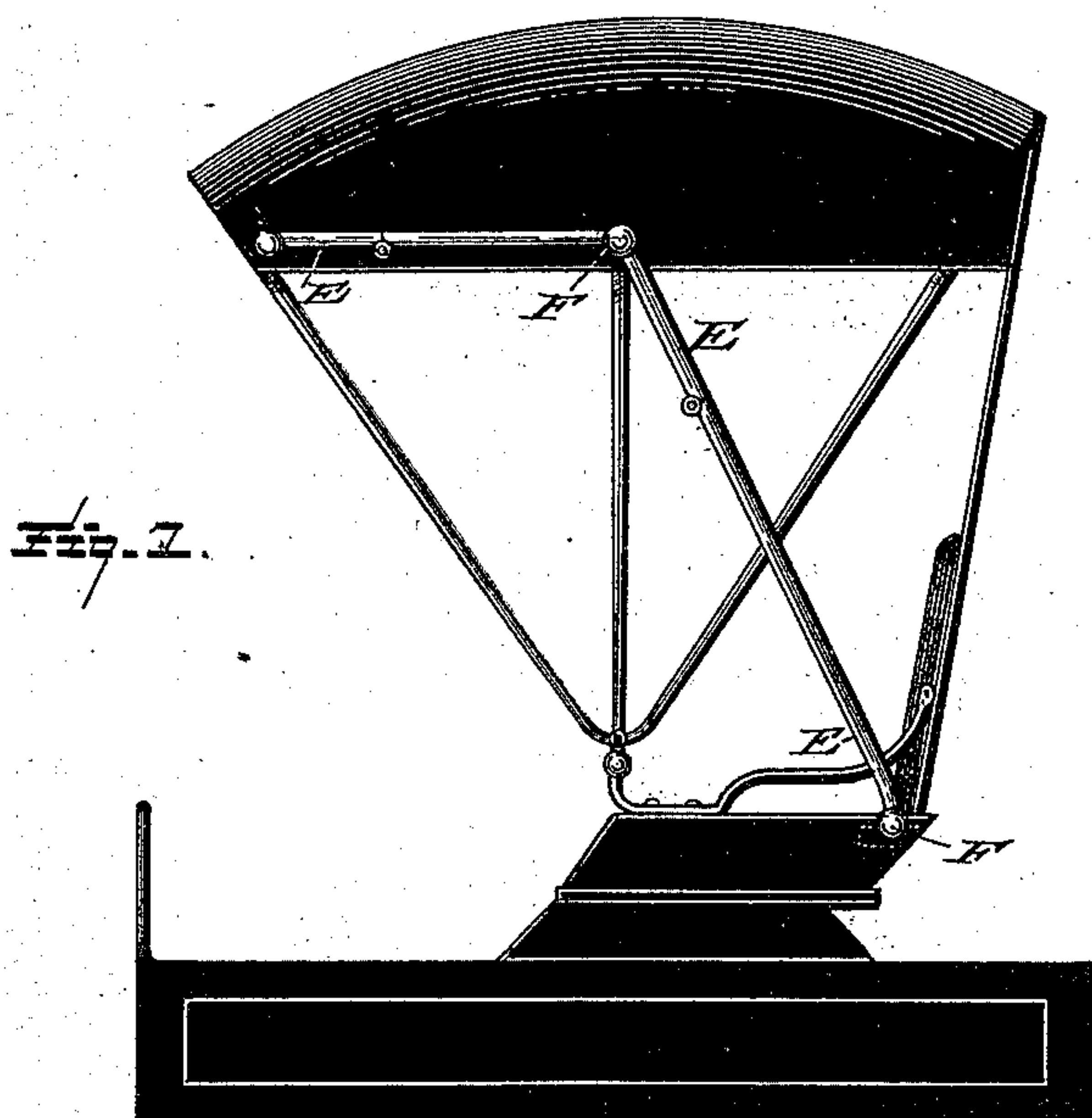


(No Model.)

G. W. HARRIS.  
TOP PROP JOINT.

No. 413,754.

Patented Oct. 29, 1889.



Witnesses  
L. C. Hills.  
H. L. Luthersland.

Inventor  
Geo. W. Harris.  
E. B. Stocking  
Attorney.



# UNITED STATES PATENT OFFICE.

GEORGE W. HARRIS, OF SOUTH BEND, INDIANA.

## TOP-PROP JOINT.

SPECIFICATION forming part of Letters Patent No. 413,754, dated October 29, 1889.

Application filed March 29, 1889. Serial No. 305,269. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. HARRIS, a citizen of the United States, residing at South Bend, in the county of St. Joseph, State of Indiana, have invented certain new and useful Improvements in Vehicle-Top-Prop Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to carriage-top-prop joints, the main object being the provision of a joint so constructed that when applied to a brace of a carriage-top prop the same by its construction will prevent the nut from turning off, so common in joints of this character.

Another object of the invention is to provide a joint which shall be simple in construction, consisting of as few parts as possible, the latter being capable of being assembled at short notice, the whole being manufactured at a minimum cost.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of a vehicle-top, the joint being applied in two places, (dotted lines,) the same being constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the joint. Fig. 3 is a side elevation of the same, the parts being separated and ready for assembling; and Fig. 4 is a perspective of a portion of a brace and the securing-nut detached therefrom.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents a preferably flat plate, provided with perforations (not shown) for the reception of rivets or other suitable attaching devices by which the same can be secured to places where it is desired to be used. Projecting from the plate at a right angle, and preferably cast integral therewith, is the spindle A', provided with screw-threads at suitable distances apart, the object of which will be hereinafter apparent.

Encircling and made slightly larger than the spindle A' is the screw-threaded thimble or sleeve B, the threads being adapted to engage with those on the spindle. The thimble

B is flanged, as at B', the latter serving as a suitable base. Interposed between the plate A and thimble or sleeve B is the leather or other material used as a covering for the vehicle.

D represents a spiral spring, preferably flat, which acts as a cushion or spring-washer, being interposed between the head E' of the brace E and the thimble B. The head E' of the brace E is provided with a circular aperture merging into the polygonal aperture, (in this instance four-sided,) which is intended for the reception of the shoulder F', which registers with the polygonal aperture formed in the head E'. The nut F is provided with an additional shoulder F<sup>2</sup>, which acts to abut against the head E' to prevent its entrance too far therein.

From the above description it will be seen that the polygonal aperture formed in the head E' of the brace E, intended to receive the shoulder F' of the nut F, acts as a wrench and serves to tightly hold the nut in its place, instead of its turning off, as has heretofore been the case.

The head of the nut F is provided with a suitable covering of japanned metal or leather, which serves as an ornamentation.

Having described my invention, what I claim is—

1. A plate and spindle preferably cast integral therewith, in combination with a thimble screwing onto said spindle, substantially as specified.

2. A plate provided with a spindle, in combination with a thimble, a brace and its nut, and a spring interposed between said brace and thimble, substantially as specified.

3. A plate and spindle preferably formed integral therewith, in combination with a thimble flanged at its base, a brace and its nut, and a flat spiral spring inserted between the head of the brace and the thimble, substantially as specified.

4. A plate having a screw-threaded spindle, in combination with a flanged interiorly-screw-threaded spindle, a brace and its nut, and a flat spiral spring or washer interposed between said brace-head and thimble, substantially as specified.

5. The plate A, having screw-threaded spindle A', in combination with flanged interiorly-

screw-threaded spindle B, brace E, having head E', provided with a polygonal aperture for the reception of a similarly-constructed nut F, and a flat spiral spring D, interposed  
5 between the brace-head E' and the thimble B, substantially as specified.

6. A pivot screw-threaded at its extremity, in combination with a brace turning upon said pivot, provided with a polygonal aperture, and a nut screwing onto said pivot and  
10 provided with a shoulder fitting into said aperture, substantially as specified.

7. A pivot screw-threaded at its extremity,

in combination with a brace turning upon said pivot, a spring interposed between the  
15 base of the pivot and the brace, the brace being provided with a polygonal aperture, and a nut screwing onto the pivot and provided with a shoulder fitting into said aperture, substantially as specified.

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

GEORGE W. HARRIS.

Witnesses:

JOHN A. CHOCKELT,

CHAS. COANLEY.