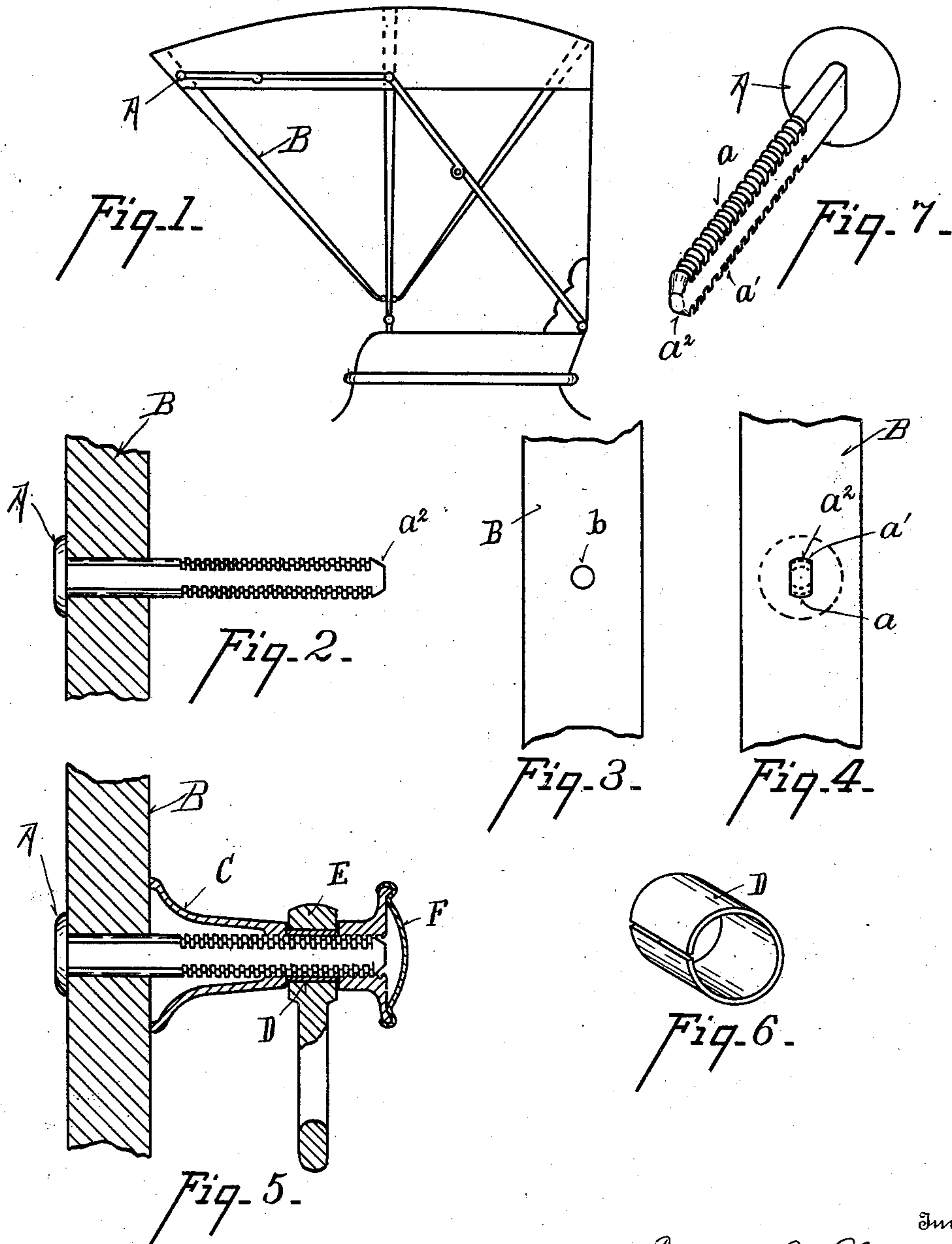


No. 744,219.

PATENTED NOV. 17, 1903.

F. A. NEIDER.  
PROP FOR CARRIAGE TOPS.  
APPLICATION FILED DEC. 31, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRED A. NEIDER, OF AUGUSTA, KENTUCKY.

## PROP FOR CARRIAGE-TOPS.

SPECIFICATION forming part of Letters Patent No. 744,219, dated November 17, 1903.

Application filed December 31, 1902. Serial No. 137,230. (No model.)

*To all whom it may concern:*

Be it known that I, FRED A. NEIDER, a citizen of the United States of America, and a resident of Augusta, county of Bracken, State of Kentucky, have invented certain new and useful Improvements in Props for Carriage-Tops, of which the following is a specification.

My invention relates to top-props for carriages in which the bolt of the prop-joint passes through the bow.

The object of my invention is a bolt which does not split the bow, will not turn therein, and with which the use of reinforcing-clips to prevent the bow's splitting are dispensed with. This object is attained by the means described in the specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a carriage-top. Fig. 2 is a detail sectional view of a carriage-bow and the bolt embodying my invention upon an enlarged scale. Fig. 3 is a detail plan view of a part of a bow, showing the hole made therein through which the bolt is driven. Fig. 4 is a detail view of the same after the bolt has been driven therethrough. Fig. 5 is a sectional view showing the prop-joint complete. Fig. 6 is a perspective view of the sleeve upon which the prop-brace fits. Fig. 7 is a perspective view of the bolt.

Referring to the parts, bolt A has two of its sides cut away at diametrically opposite points, making the bolt in cross-section substantially in the shape of an elongated rectangle. The screw-threads are left upon the sides  $a a'$ . At the end  $a^2$  the bolt is reduced, so that its end consists of a circle of a diameter equal to the least diameter of the bolt. Bow B has a hole  $b$  bored through it equal in diameter to the end  $a^2$  of the bolt. The bolt is then driven through hole  $b$ , with the longer diameter of the bolt lying parallel with the grain of the bow. The effect of this is to spread hole  $b$  in the direction of the grain, while the hole in the direction counter to that of the grain is not affected. Thus there is no tendency to spread the bow apart at the grains, the expanding of the hole in a direction parallel to the grains only crowding the material

in that direction and not affecting the strength of the bow, but simply tightening the wood about the bolt, so that there is no tendency in it to slip out or to rotate in the bow. The bolt not having affected the grain of the bow and being firmly held therein by reason of the manner in which it is inserted, there is no necessity for using clips either to prevent the splitting of the bow or to hold the bolt from turning therein. After the bolt has been passed through the bow as aforedescribed thimble C, which is interiorly screw-threaded at its upper end, is screwed down over the bolt to bear against the bow, and split sleeve D is then placed over the bolt. Brace E is then placed over the sleeve E, and jam-nut F is brought to bear against the sleeve D, which is made slightly wider than the brace E, so that it is held firmly against the thimble C by the jam-nut F and affords a good journal for the brace E.

What I claim is—

1. In a prop for carriage-tops, the combination of a bow, a bolt having two of its sides cut away at diametrically opposite points driven through the bow with its longer diameter in a direction substantially parallel to the grain thereof, and a brace journaled upon the bolt, substantially as shown and described.

2. In a prop for carriage-tops the combination of a bolt having two of its sides cut away at diametrically opposite points and driven through the bow by first forming therein a hole of a diameter equal to the least diameter of the bolt, with its greatest diameter parallel to the grains of the bow, and a brace journaled upon the bolt, substantially as shown and described.

3. In a prop for carriage-tops the combination of a bolt having two of its sides cut away at diametrically opposite points, the screw-threads upon the bolt at its longer diameter, a bow with the bolt driven there-through, the longer diameter of the bolt coming parallel to the grain of the bow, a thimble upon the bolt, a sleeve adjacent to the thimble, a brace journaled upon the sleeve and a



jam-nut upon the end of the bolt bearing against the sleeve, substantially as shown and described.

4. In a prop for carriage-tops the combination of a bow, a bolt whose cross-section is a figure having a long and a short diameter at right angles to each other driven through

the bow with its long diameter parallel to the grain of the bow to form a part of the prop-joint, substantially as shown and described.

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