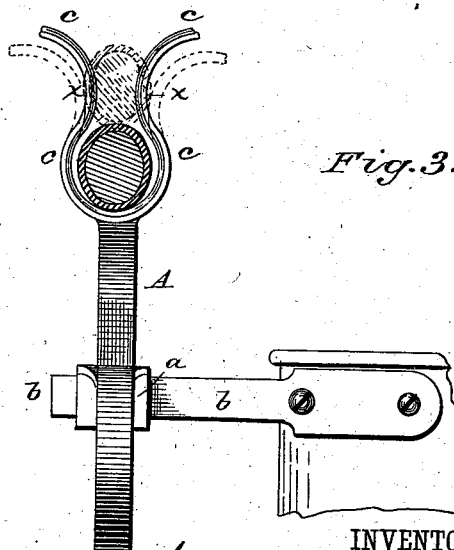
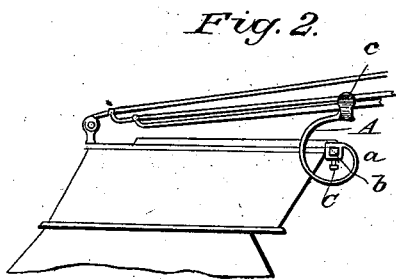
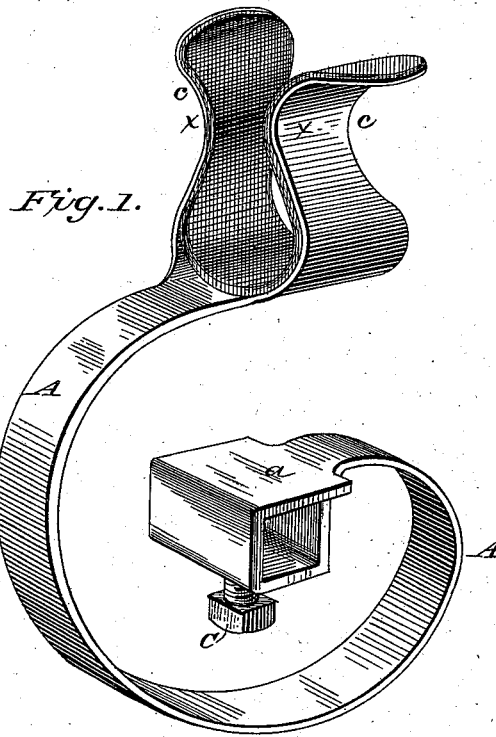


(No Model.)

I. BATEMAN.  
PROP FOR TOP BUGGIES.

No. 382,584.

Patented May 8, 1888.



WITNESSES:  
*Fred G. Deterich,*  
*Amos W. Hart,*

INVENTOR:  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ISAAC BATEMAN, OF FERN, PENNSYLVANIA.

## PROP FOR TOP-BUGGIES.

SPECIFICATION forming part of Letters Patent No. 382,584, dated May 8, 1888.

Application filed December 5, 1887. Serial No. 257,029. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC BATEMAN, of Fern, in the county of Clarion and State of Pennsylvania, have invented a new and useful Improvement in Props for Top-Buggies, of which the following is a specification.

My invention is an improvement in the class of buggy-top props which are made of plate-springs having holders or sockets for receiving the buggy-top bows.

My invention is embodied in the spring-prop having the form and other features of construction hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the spring-prop. Fig. 2 is a side view of a portion of a carriage with my improved prop applied and in use supporting a buggy-top. Fig. 3 is a vertical cross section showing the same parts enlarged.

The prop A is a forged steel-plate spring of volute or scroll shape. Its inner end is bent on itself to form a square socket or sleeve, *a*, adapted to fit loosely on the square arm *b*, Fig. 3, projecting laterally from the buggy-seat. This arm is in practice usually made three inches long, and as carriage-tops vary in width I make the sleeve one and three eighths inch wide, so that it may be adjusted on the arm, and thereby placed in exact alignment with the top bow, which rests on it when the buggy-top is lowered; and as but few buggy-tops have exactly the same width this is a feature of considerable practical importance. To secure the prop in any adjustment, I employ the clamp-screw C, which passes through the under side of the sleeve *a*, as shown in Fig. 1. The upper end of the spring-prop is in practice almost directly over and about two inches above the sleeve *a*, so that when the buggy-top is lowered its rear (or under) bow lies horizontal. The holder for the bow is formed of two broad thin spring-arms, *c c*, which are forged integrally with the prop and placed opposite each other parallel to the sides of the latter. These arms have approximately an S shape, Figs. 1 and 2—that is to say, they diverge somewhat from the body of the prop, then

bend inward at *x*, and again outward at their upper ends. Thus a socket is formed suitable in size and shape to receive the buggy-top bow, into which it passes by wedging between and pressing farther apart the inwardly-bent portions *x* of said arms. When the bow enters and rests in this socket, it is prevented from being accidentally removed therefrom by jostling, &c., in passing over rough roads, since the spring-arms close over the bow (as shown in dotted lines, Fig. 3) sufficiently to prevent this. The lateral divergence of the upper ends of the arms *c c* facilitates the entrance of the bow into the socket or holder proper. The holder is lined with leather or soft rubber to prevent abrasion of the buggy-bow.

Buggy-tops are considerably injured by lateral springing or swaying when supported by props of the usual construction. This is largely due to the fact that the upper portions of the props are made too elastic. I avoid this result by making my spring-prop thicker in its upper portion and thinner and hence more elastic in its lower portion, as shown in Fig. 1.

In practice I make all that portion of the spring which lies below the plane of the sleeve *a* thinner than the part above it, so that the required elasticity resides mainly in such lower portion.

What I claim is—

1. As a new article of manufacture, the buggy-top prop hereinbefore described, the same being made of a volute-shaped spring and having the square socket *a* formed on its inner and lower end and the curved spring-arms *b* on its outer and upper end, the whole being constructed integrally, as shown and described.

2. A buggy-top prop consisting of a spring of volute form whose lower portion—that is to say, the portion below the plane of the point of attachment—is made thinner than the upper portion, to render it more elastic, as and for the purpose specified.

ISAAC BATEMAN.

Witnesses:

DANIEL BOYER,  
J. P. SHOFFLES.