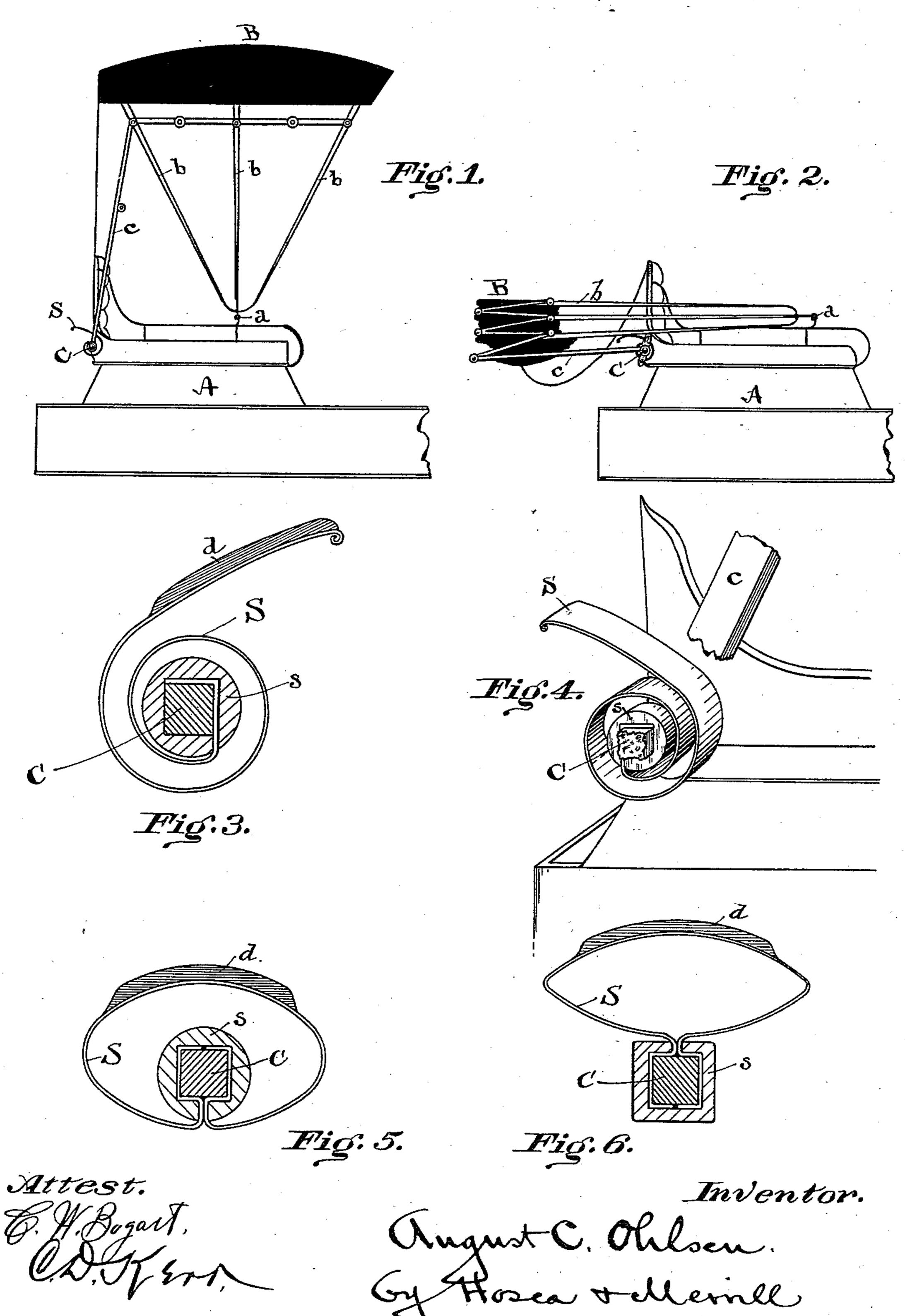
## A. C. OHLSEN.

TOP PROP SPRING.

No. 379,281.

Patented Mar. 13, 1888.



## United States Patent Office.

## AUGUST C. OHLSEN, OF CINCINNATI, OHIO.

## TOP-PROP SPRING.

SPECIFICATION forming part of Letters Patent No. 379,281, dated March 13, 1888.

Application filed October 13, 1887. Serial No. 252,224. (No model.)

To all whom it may concern:

Be it known that I, August C. Ohlsen, a citizen of the United States, residing at Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Safety Top - Prop Springs and Bow - Protectors, of which the following is a specification.

My invention relates to folding tops of buggies and other carriages in which the top is 10 constructed and arranged to fold down out of the way when desired. These tops are usually constructed of supports termed "bows," radially pivoted to a common stud at the side of and in front of the seat, and fold back upon 15 resting supports or studs at the rear of the seat, known as "top-props." As the weight of the top is principally at the outer ends of the radial bows, when the top is folded backward and falls by gravity upon the top-props, a se-20 vere breaking strain is brought upon the bows, their pivots, and also the top-props. These strains are repeated also in the movement of the top when folded back, caused by the passage of the vehicle over rough ground.

remedy for these defective conditions; and it consists, broadly, in the application of a spring buffer, preferably combined with the top-props to receive the impact of the carriage top when thrown back, and to furnish at all times a spring or buffer support for the top while resting in said position.

My invention is embodied in mechanism, a preferable form of which is hereinafter described, and is illustrated in the accompanying drawings.

In the drawings, Figure 1 is a side elevation of a buggy top to which my invention is applied, shown with the top set up. Fig. 2 is a similar elevation shown with the top down and the bows resting upon the spring-support. Figs. 3, 4, 5, and 6 are details showing the preferred mode of construction.

Referring now to the drawings, A represents the bed of the buggy and seat; B, the top; b b, the bows; a, their common pivot-stud; c, the locking-braces, and C the top-prop.

As usually constructed, the top-prop consists of a mere projecting stud covered with lighter or other covering to prevent wear learning to prevent

back, it falls upon the top-prop with considerable force, which is largely increased by the overhanging of the folded top at the rear, frequently resulting in breaking the bows, or the pivots, or the top-props. In traveling over uneven ground the overhung position of the folded top produces a more or less constant hammering upon the top-prop, which also be tends to injure the parts in the same manner.

In carrying out my invention in its preferred form I place upon the top-prop C a coiled spring, S, of any suitable material, firmly secured thereto, with its free end projected into 65 a position convenient to receive the impact of the folded top in its descent and form a resting-support for the same at all times.

The preferred manner of securing the spring, as illustrated in detail in Figs. 3 and 4, is as 70 follows: The stud or top-prop C is squared, and the engaging end of the spring is correspondingly formed to fit snugly around it. When placed in position, a covering sleeve or box, s, of metal, suitably formed, as indi-75 cated in the details, is slipped upon the topprop and driven home over the engaging portion of the spring, thus clamping the same firmly to the exterior of the top-prop. The external form of the sleeve or box s may be 80 round or square, and the spring S may be given one or more convolutions between its engaging end upon the top-prop and its free or outer end. I may also place upon the outer end of the spring a covering, d, of leather, felt, or 85 any suitable material, to prevent abrasion of the bows b when they rest upon it.

Figs. 5 and 6 exhibit modifications in the form of the spring. In Fig. 5 the spring is formed as an oval, with its ends brought to- 90 gether at the under side of the top-prop, carried in through a central opening through the sleeve or box, and are bent thence outwardly and upwardly around the top prop. In Fig. 6 the spring is substantially in the form of an 95 ordinary carriage-spring, its ends brought together and passed through a central opening at the upper side of the top-prop. These serve to illustrate the fact that the form of the spring may be varied almost indefinitely; but 100 I prefer the form first described. Usual washers are placed at the outside and inside of the spring upon the top-prop, and the whole held

I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the top-prop of a shifting-top buggy or other vehicle, of a flat 5 spring fitted to the external contour of the prop, and an embracing sleeve or box clamping said spring in position, said spring projecting into the path of the bows of the top and forming a resilient support therefor, substantially as set forth.

2. In combination with the folding top and top-prop of a buggy or other vehicle, a spring-buffer arranged to receive the impact and form

a resilient support for the bows of said top when thrown back, a cushion, of leather, felt, 15 or other similar material, attached to the top of the spring, and an embracing sleeve or box clamping said spring to the top prop, substantially as set forth.

In testimony whereof I have hereunto set 2c my hand in the presence of two subscribing

witnesses.

AUGUST C. OHLSEN.

Witnesses:

L. M. HOSEA, HENRY OHLSEN, Jr.