No. 649,536. Patented May 15, 1900.

S. McE. BUCHANAN.

VEHICLE TOP SUPPORT.

(Application filed Sept. 30, 1899.)

(No Model.)

Fig. 1.

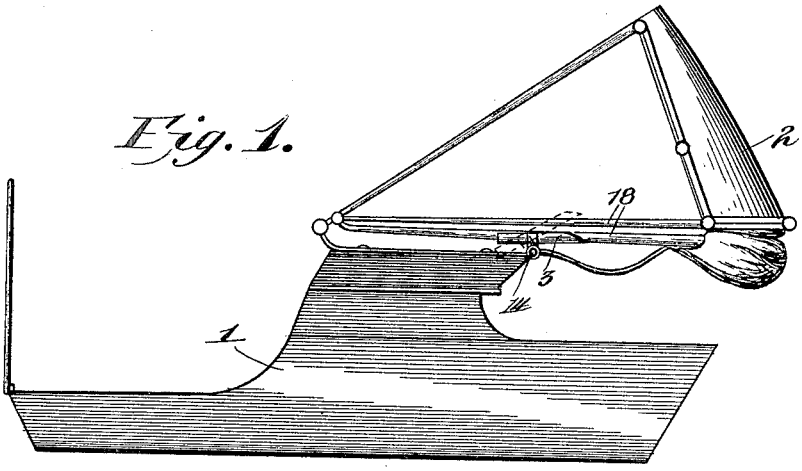


Fig. 2.

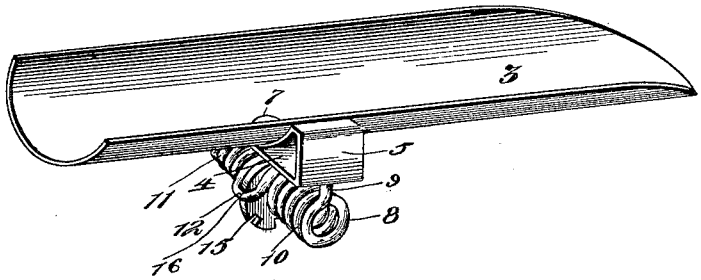


Fig. 3.

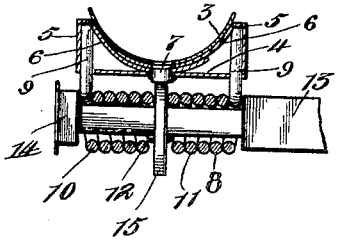
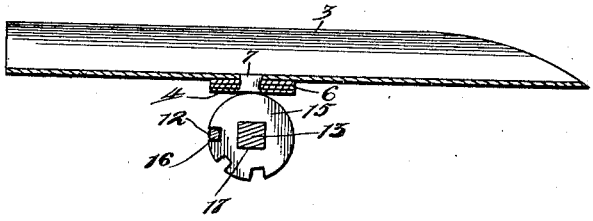


Fig. 4.



Witnesses
C. M. Walker.
C. F. Shepard.

Sanford McE. Buchanan Inventor
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

SANFORD McELORY BUCHANAN, OF YOAKUM, TEXAS, ASSIGNOR OF ONE-HALF TO JEFF. F. BUCHANAN, OF SAME PLACE.

VEHICLE-TOP SUPPORT.

SPECIFICATION forming part of Letters Patent No. 649,536, dated May 15, 1900.

Application filed September 30, 1899. Serial No. 732,227. (No model.)

To all whom it may concern:

Be it known that I, SANFORD MCELORY BUCHANAN, a citizen of the United States, residing at Yoakum, in the county of De Witt and State of Texas, have invented a new and useful Vehicle-Top Support, of which the following is a specification.

This invention relates to supports for the bows of folding vehicle-tops, and has for its object to provide an improved device of this character for application to one end of the shifting rail of the top, so as to receive the bows and cushion them against injury in folding and when the vehicle is passing over a rough roadway. It is furthermore designed to provide the device with means for taking up any looseness or wear caused by the continued use of the device.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a vehicle-top in folded position and having the present device applied thereto. Fig. 2 is a detail perspective view of a support constructed in accordance with the present invention. Fig. 3 is a transverse sectional view taken in the plane of the shifting rail of the vehicle-top. Fig. 4 is a longitudinal sectional view thereof.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates the body of a vehicle, having a folding top 2, which is supported by the present invention, and these parts are shown in the drawings to more fully illustrate the application and operation of the device.

The complete device has been shown in Fig. 2 and comprises a substantially-oblong dished or concaved plate 3, forming a seat for the reception of the bows of the vehicle-top. This seat is supported upon a frame comprising a flat base 4, formed from a single length of flat strap metal, having its opposite ends bent upwardly, forming upright sides 5, and the extremities are rebent and curved inward and downward, as at 6, so as to fit the under convex side of the seat 3, to which they are secured by means of a suitable rivet 7. It is preferable to locate this frame nearer to the front end of the seat than to the rear end thereof, for a purpose as will be hereinafter more fully described.

Located longitudinally beneath the supporting-frame is a coiled spring 8, having its opposite ends 9 bent upward, so as to form attaching-arms, which pass upward through the bottom of the frame and are soldered or otherwise secured to the inner sides of the opposite sides 5 of the frame. It will be observed that the spring is not a continuous coil, but comprises opposite coiled sections 10 and 11, having the intermediate connecting portion of the wire formed into a looped tongue 12.

As best shown in Fig. 3, the coiled spring is fitted to the rectangular end of the shifting rail 13 of the vehicle-top and is held thereon by means of the usual nut 14, so that the spring takes the place of the usual sleeve which is commonly placed upon the end of the shifting rail. The bore of the spring is larger in diameter than the angular end of the shifting rail in order that the spring and the seat may turn or have a rocking movement thereon.

By reference to Figs. 3 and 4 it will be seen that a key 15 in the form of a circular washer is interposed between the opposite sections of the spring and provided with a plurality of peripheral notches 16, one of which is engaged with the end of the looped tongue, and the washer is furthermore provided with an angular central opening 17, snugly fitting the angular end of the shifting rail, so as to prevent the washer from turning thereon. Thus it will be apparent that the seat 3 and the coiled spring may rock upon the shifting rail, and as the washer or key is fixed against movement and is engaged with the tongue of

the spring a torsional strain will be placed upon the latter which will tend to throw the seat back into its original position.

As hereinbefore described, the supporting-frame is located nearer the front end than the rear end of the seat for the purpose of inclining the latter rearwardly and upwardly, so that the bows 18 of the vehicle-top may first engage the rear end of the seat 3, which will turn or rock under the weight of the vehicle-top, and thereby cushion the bows against injury. It will of course be understood that a similar device is provided upon the opposite side of the vehicle, so that both sides of the top may be cushioned alike.

From the foregoing description it will be apparent that the present invention provides a complete device, which may be readily applied to a vehicle-top without the employment of skilled labor and also without changing or altering the vehicle-top. Furthermore, the parts of the device are firmly connected together, so that loss thereof is precluded and it may be changed from one vehicle to another. Also the tongue 12 may be engaged with any one of the notches in the washer 15, so as to vary the torsional strain upon the spring, and thereby take up any wear or looseness occasioned by continued use.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. A support for the bows of folding vehicle-tops, comprising a seat, a coiled spring designed to be loosely mounted upon one end of the shifting rail of the vehicle-top, having its opposite ends connected to the seat, and also provided with a tongue located intermediate of the opposite ends of the spring, and a washer normally fixed against turning upon the shifting rail, adjustable axially thereon, and provided with a notched periphery for engagement with the tongue of the spring.

2. A support for the bows of folding vehicle-tops, comprising a seat, a torsional spring formed of opposite coiled sections, and designed to be loosely mounted upon one end of the shifting rail of the vehicle-top, a looped tongue connecting the spring-sections, and a key or washer, having an angular opening for fitting snugly the angular end of the shifting rail, and provided with a peripheral notch for engagement with the tongue, said washer being located intermediate of the spring-sections, substantially as shown and described.

3. A support for the bows of folding vehicle-tops, comprising a seat, a substantially-rectangular supporting-frame for the seat, a coiled spring having its opposite ends bent in the same direction and at substantially right angles to the coil, and passed through the frame, for connecting the spring thereto, said spring being designed for mounting upon one end of the shifting rail of a vehicle-top, and having a rocking movement, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SANFORD McELORY BUCHANAN.

Witnesses:
J. W. GREER,
THOS. SMOOT.