(No Model.)

E. B. GOELET.

CARRIAGE TOP.

No. 385,454. Patented July 3, 1888.

Fig. 1.

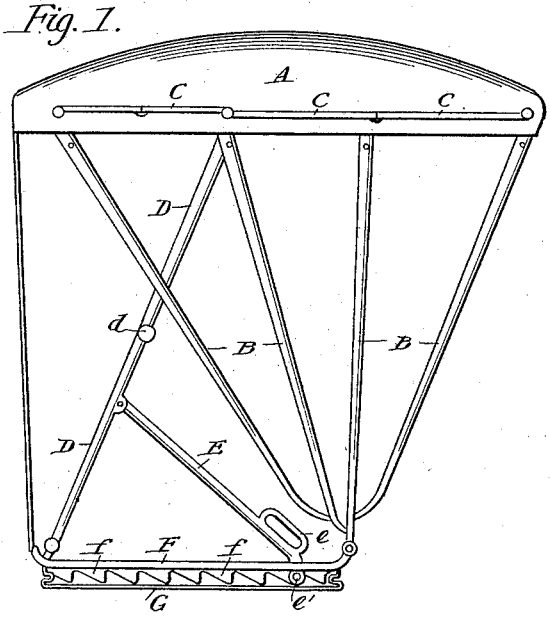


Fig. 3.

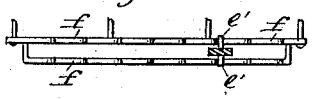


Fig. 4.

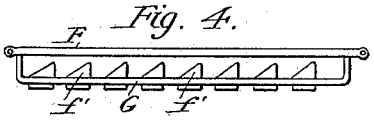


Fig. 5.

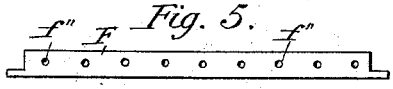


Fig. 2.

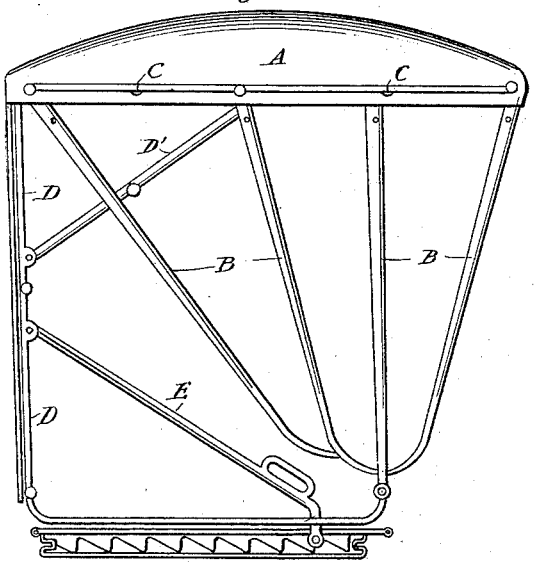


Fig. 6.

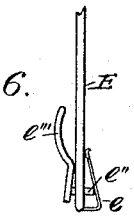
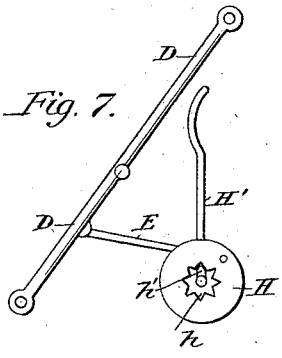


Fig. 7.



Witnesses.
Norris L. Clark
O. Pratt Knight.

Inventor.
Edwd. B. Goelet
by Lamar, Wiles & Greene.
attys.

UNITED STATES PATENT OFFICE.

EDWARD BUNCOMBE GOELET, OF FORT WORTH, TEXAS.

CARRIAGE-TOP.

SPECIFICATION forming part of Letters Patent No. 385,454, dated July 3, 1888.

Application filed April 12, 1887. Serial No. 234,522. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BUNCOMBE GOELET, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Carriage-Tops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in carriage-tops, and more particularly to the construction and arrangement of the braces for supporting the bows thereof, and is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a carriage-top embodying one form of my invention. Fig. 2 is a side elevation of a carriage-top embodying a slightly-modified form thereof; and Figs. 3, 4, 5, 6, and 7 are detail views illustrating various means for securing the braces in any desired position.

In Fig. 1, A is the carriage-top, and B the bows of an ordinary carriage-top, the bows being spaced above by the ordinary horizontal braces, C C C, having the usual breaking joints. D is an oblique brace whose lower end is pivoted at the rear edge of the seat, while its upper end is pivoted near the top of one of the bows B. This brace has the ordinary form and construction, being made in two pieces, connected by a joint, *d*, adapted to permit the brace to break backward near its center, and the position of the brace and the form of the joint are preferably such that when the top is fully raised the brace is rigid and holds the top erect unless intentionally broken backward. Instead of lying outside of the bows, however, as is usual in structures of this class, the brace illustrated in the drawings lies inside the bows and is readily accessible from the interior of the carriage, so that it may be broken or straightened and the top lowered or raised by the occupant of the carriage without reaching outside the bows, as is necessary when the brace lies outside. In order more effectually to secure the brace against accidental displacement, and also in order to permit its being secured in any desired position, I have pivoted to the lower member, D, of the brace a secondary brace or operating-lever, E, preferably having a hand-hold, *e*, and provided at its lower end with means for engaging various points of a suitable co-acting device attached to the end of the carriage-seat.

In the device shown in side elevation in Fig. 1 and in bottom plan in Fig. 3 the lower end of the lever E is provided with a transverse pin, *e'*, projecting from both of its side faces and adapted to engage with the teeth *f* of two parallel ratchet-plates, between which the end of the lever E lies. The points of the teeth *f* are downward, and the pin *e'* may be detached from its engagement with any given notch of the ratchet-bar by a downward pressure, which forces it below the end of the contiguous tooth, and when once out of engagement may be moved to any desired point of the ratchets. In order to prevent accidental disengagement of the pin *e'* from the ratchet, and at the same time to permit intentional disengagement thereof, I have placed a spring, G, immediately below the space between the two bars of the double ratchet and in contact with the end of the operating-lever E. The ends of this spring may be secured in any desired manner and may have any such form and construction as will permit sufficient depression of the body of the spring for the disengagement of the pin *e'* from the ratchet.

Fig. 4 represents a slightly-modified form of the ratchet-bar, in which *f'* are teeth set in a spring-bar, G, and adapted to be operated either by the depression of the entire bar or by the depression of the separate teeth, as may be desired.

Figs. 5 and 6 illustrate a slightly-different construction, in which the ratchet-bars are replaced by a bar, F, formed with holes *f''*, and the lower end of the lever E is provided with a loop, *e*, adapted to encircle the bar F, and with a pin, *e''*, adapted to enter the holes *f''* and to be withdrawn therefrom by the operation of a hand-lever, *e'''*, attached to or connected with the pin.

Fig. 7 illustrates another construction, in which the lower end of the lever E is pivoted to an oscillating disk, H, provided with a hand-lever, H', and the disk itself is provided

with an internal or external toothed surface, *h*, each notch of which may be brought into engagement with a suitably-actuated pawl, *h'*.

The object of all of the devices illustrated in Figs. 3, 4, 5, 6, and 7 is the same, and the forms so illustrated are only shown as suggestions of a few of the various constructions which may be used to the same end. The purpose of all of them is to provide some means by which the lower end of the operating-lever E may be secured at any desired distance from the lower pivot of the brace D, in order to fasten the top in any desired position, whether fully raised or fully lowered, or in a position intermediate between these two extremes. Any of these devices may easily be operated from the interior of the carriage, so that by means of them the top can be raised or lowered without reaching outside the bows. Their use in connection with the brace D, lying inside the bows of the top, is an improvement and an added convenience; but they are not essential to the operation of the brace when so placed, and I do not limit my invention, so far as it relates to the position of the brace, to its use in combination with any of these means for securing it in various positions.

Fig. 2 illustrates a form of top in which the main brace D occupies a vertical position at the rear edge of the carriage-seat and is connected with the top of one of the bows by an inclined brace, D', lying inside the bows and accessible from the interior of the carriage. The lower member of the vertical brace D is provided with an operating-lever, E, having the same form, construction, and operation as the similar brace already described. The lower end of the lever, as shown, is provided with the same means for regulating its position as are illustrated in Fig. 1; but these may be replaced by any of those illustrated in the detail views which have already been described.

The construction shown in Fig. 2 is in all respects the same as that shown in Fig. 1, except that the single oblique brace D of Fig. 1 is replaced by the vertical brace D and the oblique brace D' of Fig. 2.

Having now described and explained my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a vehicle-seat, a series of top-supporting bows pivoted thereto, and a jointed brace having its lower end pivoted to the seat and its upper end to one of the bows, of a rigid operating-lever having its upper end pivoted to said jointed brace and its lower end adjustably connected with the seat, whereby the position of the lower end of said lever may be varied and the brace and top secured in any desired position, substantially as and for the purpose set forth.

2. The combination, with a carriage-seat, bows pivoted to the carriage, and a brace having its lower end pivoted to the seat or an attachment thereof and its upper end to one of the bows, of a ratchet-bar secured to the end of the seat, and an operating-lever having its rear end pivoted to said brace and its front end provided with means, substantially as shown and described, for connecting it at any desired point with said ratchet-bar, substantially as and for the purpose set forth.

3. The combination of the bows B and horizontal braces C, the oblique brace D, the double ratchet-bar having teeth *f*, and the hand-lever E, having its rear end pivoted to the oblique brace and its front end provided with a transverse pin adapted to engage the teeth of the ratchet-bars.

4. The combination of the bows B, the horizontal braces C, and oblique brace D, the double ratchet-bar having teeth *f*, the operating-lever E, having its rear end pivoted to the brace D and its front end provided with the pin *e'*, adapted to engage the ratchet-bars, and the spring G, lying beneath the end of the operating-lever and adapted to prevent the accidental displacement thereof from the ratchet, substantially as shown and described, and for the purpose set forth.

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

EDWARD BUNCOMBE GOELET.

Witnesses:

H. TULLY,

J. E. MITCHELL.