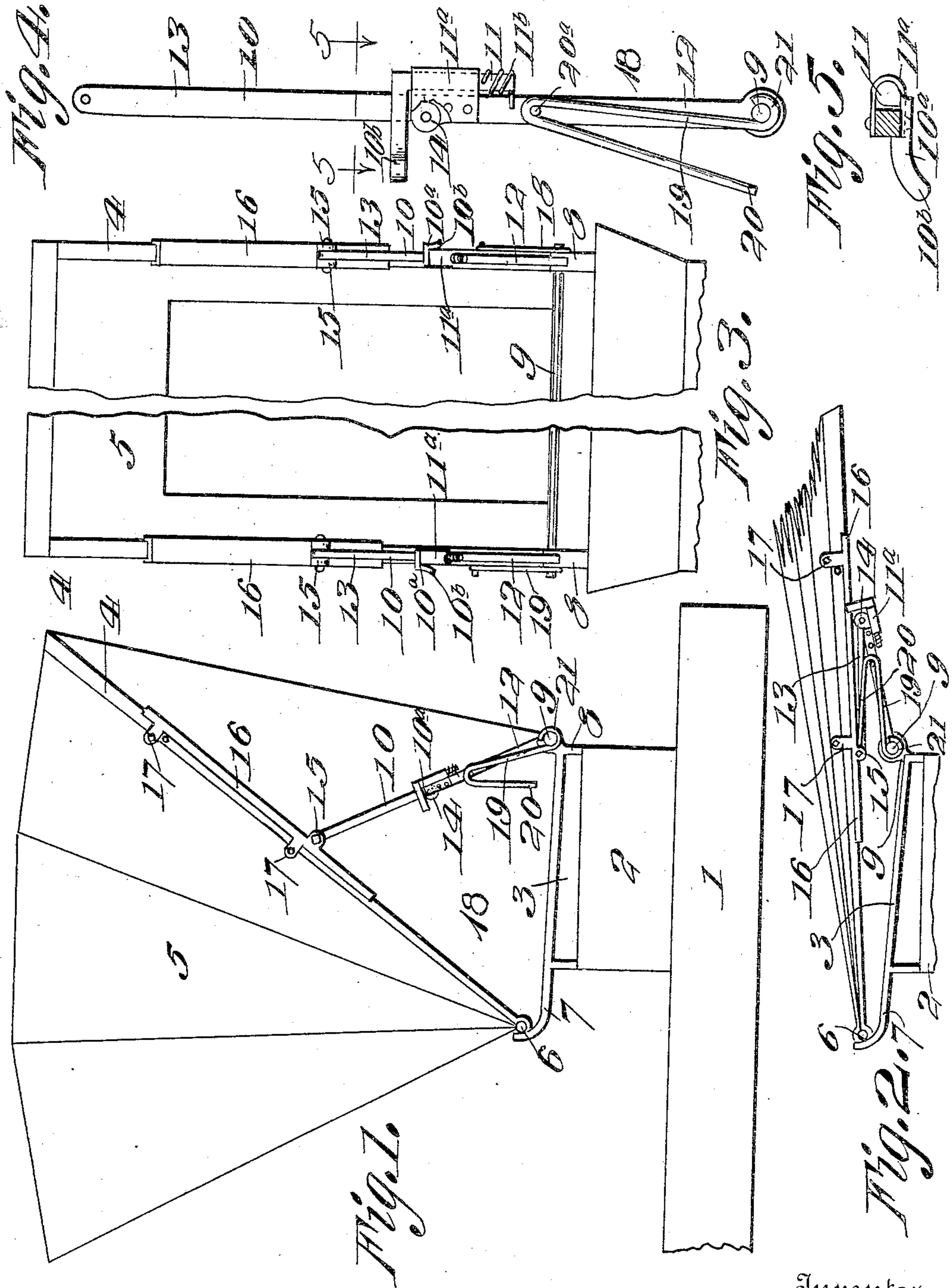


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RAISING AND LOWERING ATTACHMENT FOR BUGGY TOPS.  
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929,806.

Patented Aug. 3, 1909.



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# UNITED STATES PATENT OFFICE.

WILLIAM P. WARREN, OF SHERIDAN, ILLINOIS.

## RAISING AND LOWERING ATTACHMENT FOR BUGGY-TOPS.

No. 929,806.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed December 26, 1908. Serial No. 469,215.

*To all whom it may concern:*

Be it known that I, WILLIAM P. WARREN, a citizen of the United States, residing at Sheridan, in the county of Lasalle and State of Illinois, have invented certain new and useful Improvements in Raising and Lowering Attachments for Buggy-Tops; and I do 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.

This invention relates to improvements in raising and lowering attachments for buggy tops.

The object is to provide an attachment of this character by means of which the buggy top may be quickly and easily raised and lowered by an occupant of a buggy sitting at either end of the seat, means being provided whereby the movement of one side of the top will be imparted to the other, and both sides thus moved in unison without strain on the covering material of the top.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side view of the body and top of a buggy showing the application of the invention thereto with the top in raised position; Fig. 2 is a similar view showing the top in lowered position; Fig. 3 is a rear view of the parts as shown in Fig. 1; Fig. 4 is a side view of one of the improved top raising braces on an enlarged scale, parts being broken away and in section to show the construction of the brace locking mechanism; and Fig. 5 is a cross sectional view on the line 5—5 of Fig. 4.

Referring more particularly to the drawings, 1 denotes the body, 2 the seat and 3 the top of a buggy. The top is formed with the usual bows 4 on the upper portion of which is secured the usual cover 5. The bows 4 of the top are pivotally connected at their lower ends to a pivot bolt 6 arranged on the guard rail 7 of the seat in the usual manner. Revolvably mounted in suitable bearing brackets 8 on the rear side of the seat is a rock shaft 9, to the outer ends of which are secured the lower ends of my improved top raising braces 10, said braces being formed in a lower section 12 and an upper

section 13, said sections being hingedly connected together at their inner ends by a hinge joint 14. The outer end of the upper section is pivotally connected between a pair of apertured lugs 15 arranged on a strengthening bar 16 which is secured to the rear side of the back bow of the top. The strengthening bar 16 is preferably secured to the bow by clip 17 arranged thereon and being adapted to embrace the bow and to be secured thereto by bolts, rivets or other suitable fastening means.

In order to hold the section of the brace bar rigidly when in an extended or operative position, I preferably employ a suitable locking mechanism which is here shown and is preferably in the form of an L-shaped catch 10<sup>a</sup> mounted on section 12 and having formed in one arm a squared recess adapted to engage the upper section of the brace adjacent to its hinge connection with the lower section, when the latter is in an operative position. The notched or recessed arm of the catch is also provided with an outwardly curved extension 10<sup>b</sup> which is adapted to be engaged by the upper section of the brace when the latter is being opened to an operative position on the raising of the top thus lifting the catch and permitting the upper section to move to an operative position at which time the notched portion of the catch will spring into engagement with the upper section and thereby hold the same in alinement with the lower section of the brace. The catch 10<sup>a</sup> is provided with a shank 11 which is mounted to turn in a suitable casing 11<sup>a</sup> secured to the lower section of the brace. Connected to the shank 11 is a torsion spring 11<sup>b</sup> the tension of which is exerted to turn the shank 11 in a proper direction to force the catch 10<sup>a</sup> into engagement with the upper section of the brace in the manner described. The brace bars 10 have arranged thereon a buffer spring 18 which is preferably in the form of a spring metal bar bent upon itself to form an attaching member and a bow engaging member 20. The attaching member 19 is provided on its outer end with a hook 21 which is engaged with the end of the rock shaft 9. The looped end of the spring is engaged with a stud 20<sup>a</sup> on the side of the lower member of the brace whereby the spring is held in operative position to receive the weight of the top when in a lowered po-

sition. When the top is lowered, the back bows thereof will engage the free end 20 of the spring and the top will be thus yielding supported and all jar or racking occasioned  
5 by the passage of the vehicle over rough surfaces will be eliminated.

By providing raising and lowering braces such as shown herein and described, and connecting the same together by the rock  
10 shaft 9, the movement of one of said braces will be imparted to the other so that when an occupant of the vehicle grasps the bows on one side of the top to raise or lower the latter, this raising and lowering movement  
15 will be transferred through the rock shaft to the opposite side of the top so that both sides will be moved in unison thus relieving the top from any side strain or twisting action.

20 From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

25 Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages

of the invention as defined in the appended claim. 30

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A raising and lowering mechanism for buggy tops comprising a rock shaft, braces 35 fixed to the opposite ends of said rock shaft, said braces being each composed of two hingedly connected sections, means for connecting the outer sections to a bow on the top, mechanism for locking said sections rigidly in 40 extended or operative position comprising a casing fixed to one of said sections, an L-shaped catch member having one arm rotatably mounted in said casing and provided with a torsional spring, the other arm hav- 45 ing a recess for engagement with the other section of the brace to lock said sections together.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 50 nesses.

WILLIAM P. WARREN.

Witnesses:

M. A. WARREN,  
J. D. MARSHALL.