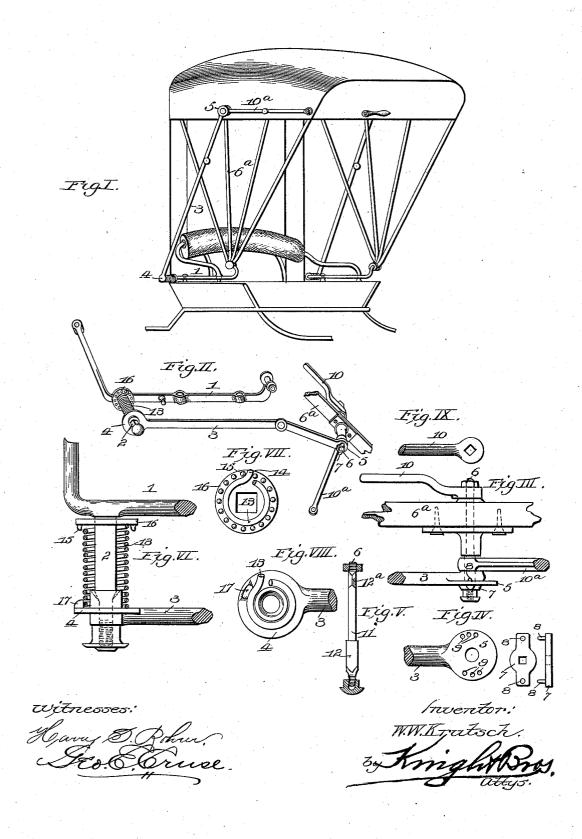
(No Model.)

## W. W. KRUTSCH. BUGGY TOP ATTACHMENT.

No. 550,624.

Patented Dec. 3, 1895.



W B.GRAHAM, PHOTO-LITHO, WASHINGTON, D.C.

# UNITED STATES PATENT OFFICE.

### WILLIS W. KRUTSCH, OF COFFEYVILLE, KANSAS, ASSIGNOR TO THE KRUTSCH-STEVENS MANUFACTURING COMPANY, OF SAME PLACE.

#### **BUGGY-TOP ATTACHMENT.**

#### SPECIFICATION forming part of Letters Patent No. 550,624, dated December 3, 1895. Application filed January 14, 1895. Serial No. 534,884. (No model.)

To all whom it may concern: Be it known that 1, WILLIS W. KRUTSCH, a citizen of the United States, residing in Coffeyville, in the county of Montgomery and

State of Kansas, have invented certain new and useful Improvements in Buggy-Top Attachments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which 10 form a part of this specification.

My invention relates to an attachment for buggy-tops whereby the top can be easily and conveniently let down and raised without alighting from the buggy; and my inven-

tion consists in certain features of novelty 15 hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure I is a view of a buggy-top provided with my im-

- 20 provements. Fig. II is a detail perspective view of the shifting rail, the top-bow, and the top-brace, and showing my improvements applied thereto. Fig. III is a detail plan view of the parts to which my improvements
- are immediately applied and with which they immediately co-operate. Fig. IV is a detail view of a portion of the top-brace and plate 25 which is held in engagement therewith. Fig. V is a view of the bolt which connects the
- 3° several parts of the attachment. Fig. VI is a detail view, partly in cross-section, of a spring for supporting the top when let down. Fig. VII is a view of the plate next the shifting rail, showing the lugs thereon to engage
- the hook at the end of the spring. Fig. VIII is a detail view of the lower end of the top-35 brace, having the plate formed integral therewith. Fig. IX is a view of the handle by which the top is let down and raised.
- Similar numerals refer to similar parts 40 throughout the several views.

1 represents the shifting rail of a buggy, and 2 the arm thereof, upon which is carried one end of the top-brace 3. The top-brace is formed in two pieces pivoted together in the 45 usual manner, and at its respective ends it is provided with the plates 4 and 5, formed integral therewith. The plate 4 is adapted to be set on the arm 2 of the shifting rail and 50 the plate 5 adapted to be set on the bolt 6,

which connects the top-brace with the top-

bow 6<sup>a</sup>. This bolt 6 is provided with the round portion 11, upon which the ends of the top-brace 3 and the horizontal section 10 are carried, and with the square portion 12, upon 55 which the plate 7 is carried. The plate 7 is placed adjacent to the plate 5 of the top-brace on the bolt, and it is provided with the lugs 8, which fit in and enter the series of openings 9, formed in the plate 5. By such an (o arrangement the plate 7 may be adjusted in any of the openings 9, so as to accommodate the device to a three or four bow top, or to a top with any number of bows, and bring the handle in each case to a substantially hori- 6: zontal position, in which position it is much more convenient for operation.

10 represents a handle carried by the square portion  $12^{a}$  of the bolt 6.

The operation of my attachment is as fol- 70 lows: By turning the handle 7 the bolt is moved, and with it the plate 7, which, owing to its being in engagement with the plate 5 on the brace, causes the brace to move and break the joint, thus permitting the top to be 75 let down. When the top is to be raised, the handle is grasped to raise the top, and when the top is in its raised position the handle is turned to lock the brace.

13 represents a coiled spring carried by the 80 arm. It is provided at one end with the hook 14, formed thereon in the direct line of the coil and adapted to engage one of the lugs 15, formed on the face of the plate 16, which is carried by the arm 2. The other end of the 85 spring is straightened, adapting it to engage the lug 17 on the plate 4. The tension of the spring is regulated and adjusted by the engagement of the hook 14 with one of the lugs 15 on the plate 16, the tension being adjusted 90 to such a degree as to relieve the top-bow from the weight of the top when it is let down.

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

95 1. In an attachment for vehicle tops, the combination with the jointed top brace, the plate 5 formed integral therewith and having the series of openings 9 therein, the plate 7 having the oppositely disposed lugs on said 1co plate and adapted to engage in said openings 9, and a handle 10 for turning said last mentioned plate whereby the joint in the brace is broken and the top let down substantially as set forth.

 In an attachment for buggy tops the com-5 bination with the shifting rail, the jointed top-brace having one end carried thereby and the other end loosely secured to the top bow, a plate 5 having oppositely disposed openings and formed integral with said top brace, a
bolt passing through the top brace and the plate 5, a plate 7 carried rigidly on said bolt and having oppositely disposed lugs 8 formed thereon and adapted to engage the openings in said plate 5, and an operating handle also

rigidly carried on said bolt substantially as 15 set forth.

3. As a new article of manufacture an attachment for buggy tops consisting of a jointed top brace, a plate formed integral therewith and having oppositely disposed 20 openings therein, a plate 7 having oppositely disposed lugs 8 adapted to fit in said openings 9, and a handle for turning said plate substantially as set forth.

WILLIS W. KRUTSCH.

Witnesses:

PELE AXER, F. GUESNIER.