

No. 760,366.

PATENTED MAY 17, 1904.

W. H. ZEHNER.
VEHICLE TOP.

APPLICATION FILED SEPT. 2, 1903.

NO MODEL.

3 SHEETS—SHEET 1.

Fig. 1.

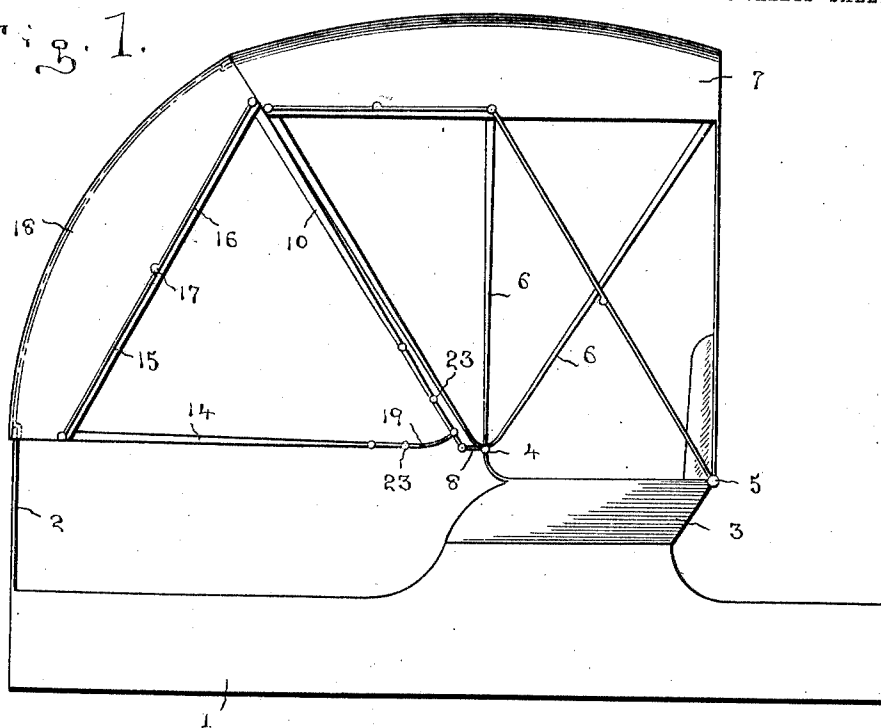
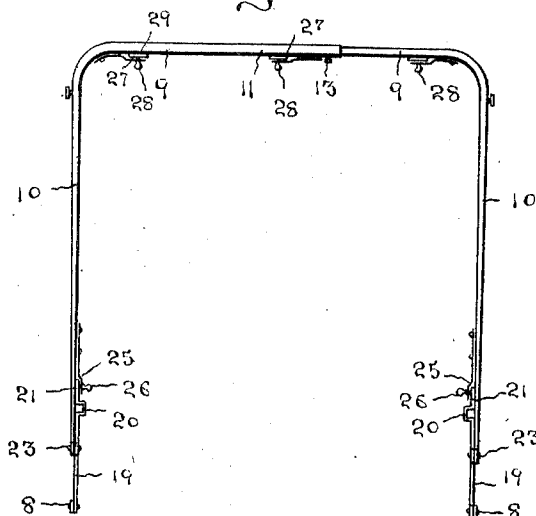


Fig. 2.



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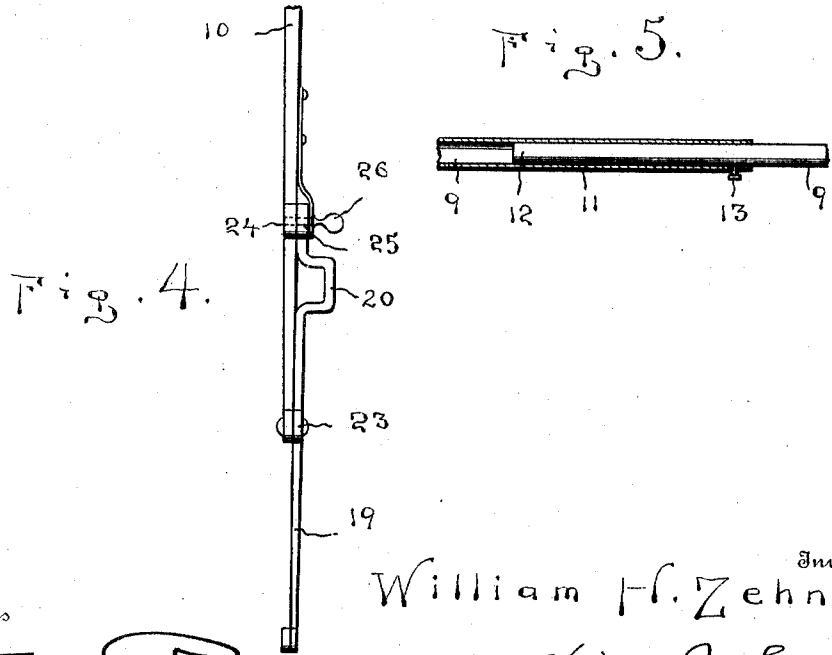
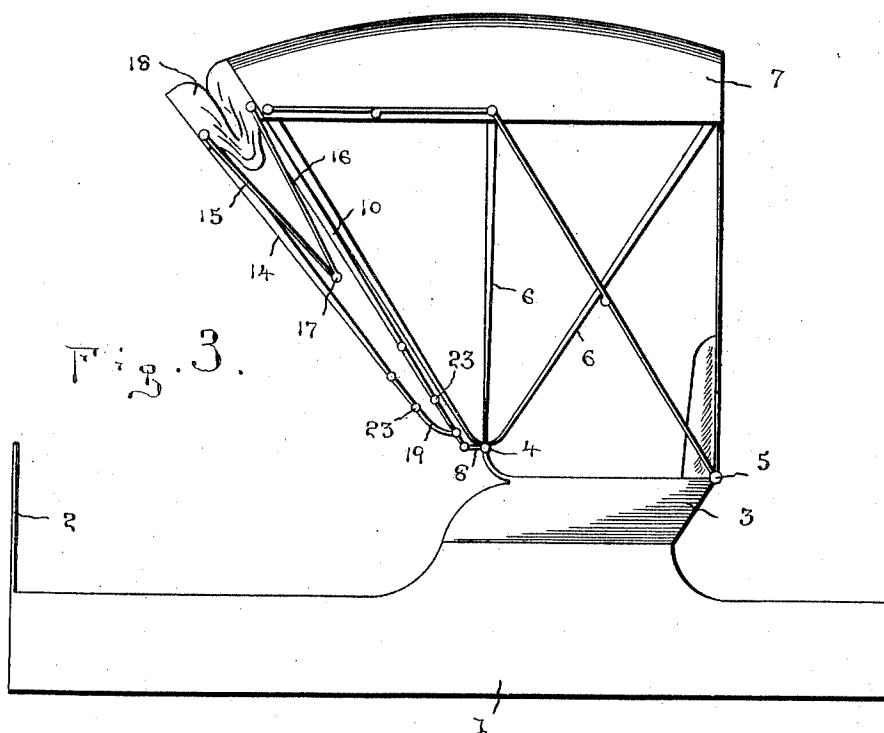
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C. H. [Signature]

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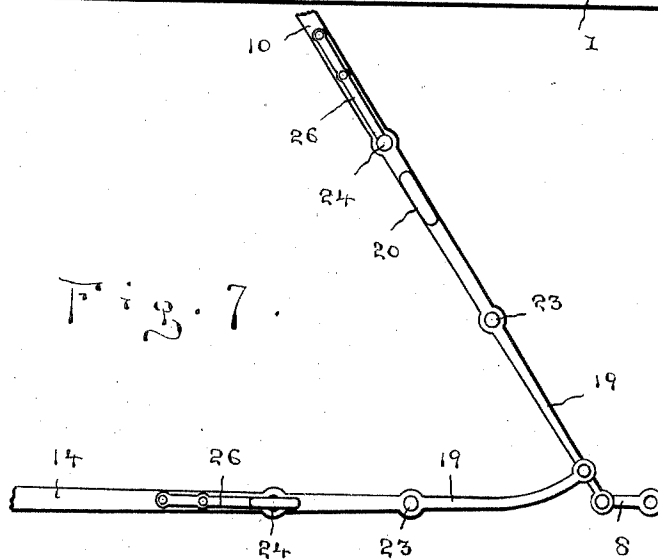
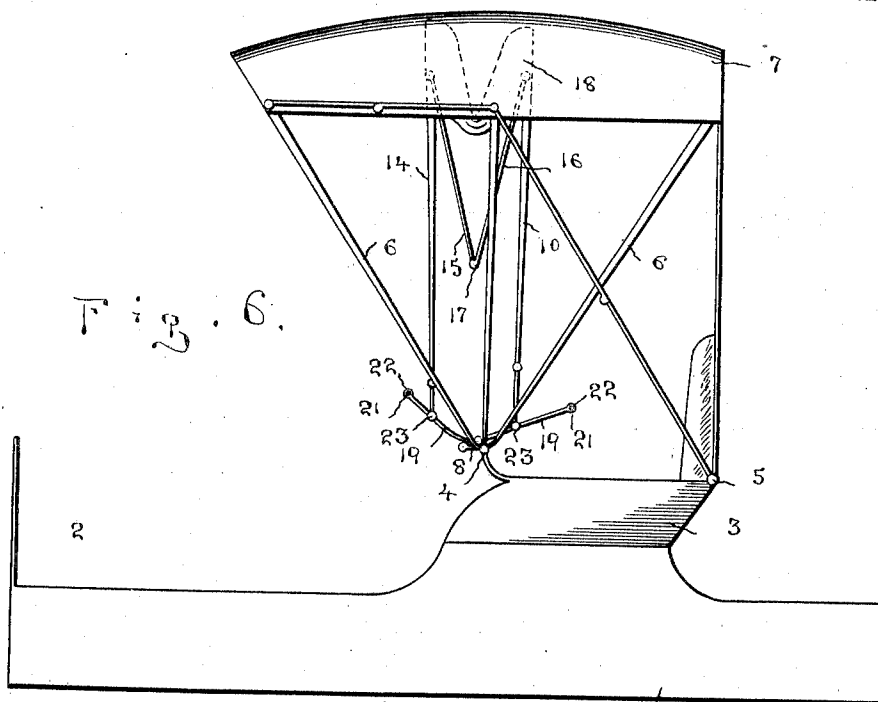
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VEHICLE TOP.

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NO MODEL.

3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

WILLIAM H. ZEHNER, OF SNYDERS, PENNSYLVANIA.

VEHICLE-TOP.

SPECIFICATION forming part of Letters Patent No. 760,366, dated May 17, 1904.

Application filed September 2, 1903. Serial No. 171,877. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. ZEHNER, a citizen of the United States, residing at Snickers, in the county of Schuylkill and State of Pennsylvania, have invented new and useful Improvements in Vehicle-Tops, of which the following is a specification.

My invention has relation to new and useful improvements in storm-shield attachments for vehicle-tops; and the primary object of the invention is to provide an attachment of the character mentioned which is simple in construction and which is especially adapted to be employed in connection with any of the well-known forms of foldable tops.

A further object is to provide an attachment which is readily adjustable or extensible to assume a position to protect the occupant of the vehicle from storm, which is collapsible to permit the occupant to alight, and which may be folded back out of the way when not in use whether the top is in its elevated or lowered position without detaching the attachment from applied position on the top.

The invention consists in providing, in combination with a vehicle-top, a folding or collapsible frame carrying a suitable storm-shield, said frame comprising a pair of bows of novel construction arranged in folding relation and being movably connected to the top in such a manner that they may be operated to place the shield in such a position as to protect the occupant of the vehicle or swung backwardly to assume a position within the buggy-top when not in use.

I have fully and clearly illustrated my invention in the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a view in side elevation of a buggy provided with a folding top of well-known construction in connection with which my invention is shown in extended position. Fig. 2 is a view in front elevation of one of the novel bows of which the frame for the attachment is composed. Fig. 3 is a view in side elevation of the buggy body and top, showing the attachment collapsed or folded back to permit the occupant of the vehicle to alight. Fig. 4 is an enlarged detail view of

one of the side members of one of the bows of the attachment-frame. Fig. 5 is a detail longitudinal section through the cross member of the bow, showing the manner in which the side members are adjusted with relation to each other. Fig. 6 is a view in side elevation, showing the attachment folded and swung back under the top when not in use; and Fig. 7 is an enlarged detail view showing the structure of the side members of the bows comprising the attachment-frame.

Referring to the drawings, 1 designates a buggy-body provided at its front end portion with the usual vertical dashboard 2, the construction of said body and dashboard being immaterial to the purposes of this invention. Upon the body 1 is arranged a seat 3, which is provided at the front and rear of its side portions with the usual pivots 4 5, upon which the lower ends of the frame members 6 of the top 7 are movably mounted and arranged to swing when the top is raised and lowered. This top is of the folding type commonly employed on buggies and similar vehicles, and its particular structure forms no part of this invention, which is especially constructed to be employed in connection with all tops of the general type of structure shown.

Rigidly mounted on the front pivots 4 are forwardly-projecting arms or brackets 8, which extend a sufficient distance in front of said pivots to permit their free ends to be out of the way of the frame members 6 when the top is raised or lowered. To the free or front ends of these arms or brackets 8 are pivotally connected the lower ends of the side members of the rear bow of the frame attachment. This bow is composed of two side sections which are substantial duplicates in general structure, each section being -shaped—that is, comprising a horizontal member 9 and a vertical or side member 10. One of the horizontal members, 9, as shown in the drawings, is tubular at its inner end portion, as at 11, which tubular portion is constructed to receive the end 12 of the opposite horizontal member in sliding or telescopic relation, a set-screw 13 being let through the tubular member to engage the member sleeved therein to rigidly connect said members 9 to constitute

the cross-piece of the bow. It will be seen that by slidably connecting the horizontal members and providing a means for securing them rigidly together the width of the bow
5 may be adjusted to suit carriage-tops of different widths.

Pivotally connected to the side members 10 of the rear bow of the attachment are the lower ends of the side members 14 of the front
10 bow, which are formed at their upper ends with inwardly-extending horizontal members, one of which is hollow or tubular in form to receive the opposite horizontal member, which is slidably disposed in said tubular portion
15 and is rigidly secured thereto by means of a set-screw, said front bow being a substantial duplicate of the rear bow already described. The upper ends of the side members of both the front and rear bows are connected by
20 braces 15 and 16, pivotally joined, as at 17.

Stretched upon the horizontal members of the front and rear bows is the flexible shield or cover 18, which may be of any desirable waterproof material, which will effectually
25 prevent the entrance of rain or snow into the vehicle.

When the attachment is arranged in position to be operated as a storm-shield, the rear bow is swung on its pivot on the bracket 8
30 until it assumes a position coinciding with the front bow of the buggy-top proper and as near flush therewith as possible in order to prevent the rain from entering between the shield and the top. The front bow of the attachment
35 which, as it is perceived from the above description, taken in connection with the drawings, is pivotally arranged with relation to the rear bow, so that it may be swung away therefrom to rest upon the dashboard, as shown in
40 Fig. 1, to place the shield in position to protect the occupant of the vehicle from the elements, or it may be moved into close relation to the rear bow to collapse the shield to permit the occupant to alight from the vehicle,
45 as clearly shown in Fig. 3.

Under certain conditions it is obvious that circumstances or necessity will require that the attachment be dispensed with, and in order to do away with it as a shield without detaching it bodily from the vehicle-top I construct the side members 10 and 14 of the bows of the shield in a novel manner in order that the length thereof may be shortened to permit the attachment to be swung rearwardly
55 to assume a position within the top, as shown in Fig. 6, when the top is raised without engaging the under side of the top or thrown entirely back in rear of the seat when the top is lowered.

In order to provide for the shortening of the side members 10 and 14 of the bows, I construct the same of sections, which are so arranged with relation to each other and may be so connected and released from connection
65 as to form a break-joint, as shown. Each of

the side members 10 and 14 comprises a lower member or lever 19, the lower end of which constitutes the lower end of the side members, which, as above stated, is pivoted to the bracket 8 and at a point adjacent its upper end is provided with a handle portion 20 and a head 21,
70 formed with an opening 22. Pivoted to the member 19 at a point intermediate its ends is the lower end of the upper sections of the side member of the bow, as at 23, which member is also formed with an opening 24, arranged to register with the opening 22 in the head of the lever 19 when said member and lever are in longitudinal alinement, said apertures being arranged to receive a pin 25, carried by the end of a spring-latch 26, mounted in the side members, which pin serves to rigidly connect the sections of the members, which is the position the said sections are placed in when the attachment is employed as a shield,
85 as shown in Figs. 1 and 3.

When it is desired to dispense with the shield, the pins 24, carried by the latches 26, are withdrawn from the openings in the sections of the side members, which releases said
90 sections from their rigid connection and permits them to have a relative movement—that is, the upper sections may be moved downwardly—the sections 10 swinging on their pivots at their lower ends and the upper sections
95 on their pivots on the sections 14, so that the distance between the top portion of each bow and the pivot on the bracket 8 is diminished sufficiently to permit the attachment to swing rearwardly without scraping the under side
100 of the top.

To prevent the rear bow from falling forwardly and downwardly when the shield is in the position shown in Fig. 1, I provide detachable bracing-slats 27, the ends of which
105 are connected to the horizontal members of the bows in any suitable manner. I have shown them as secured in position by means of spring-latches 28, carrying pins 29, adapted to engage openings in the ends of said slats.
110 These slats not only serve to hold said bows from moving toward each other, but also support the flexible shield against the force of the wind and storm.

Having thus fully described my invention,
115 what I desire to secure by Letters Patent is—

1. In a storm-shield attachment, the combination of bows pivoted together, the horizontal members of said bows being adjustable, to regulate the width of the attachment, and a
120 shield carried by the bows.

2. The combination with a vehicle-top, of a storm-shield attachment comprising bows pivoted together, the side members of said bows being vertically adjustable independently of
125 said top, and a shield carried by the bows.

3. In a storm-shield attachment, the combination of bows pivoted together, the side members being composed of pivotally-connected
130 sections to permit of vertical adjustment of

the bows, means to rigidly connect the sections and a shield carried by the sections.

4. In a storm-shield attachment, the combination of bows pivoted together, the horizontal members of said bows being adjustable to regulate the width of the attachment, and the side members of the bows being adjustable vertically and a shield carried by the bows.

5. In a storm-shield attachment, the combination of bows pivoted together, the horizontal members of said bows being adjustable to regulate the width of the attachment and the side members being composed of pivotally-connected sections to permit of the vertical adjustment of the bows, means to rigidly connect the sections and a shield carried by the bows.

6. In a storm-shield attachment, the combination of bows pivoted together and having adjustable horizontal members, and vertically-adjustable side members, and a shield carried by the bows.

7. In a storm-shield attachment, the combination of bows pivoted together and having adjustable horizontal members, and side members comprising sections pivotally connected, latches to lock the sections together, and a shield carried by the bows.

8. In a storm-shield attachment, the combination of bows pivoted together, the side members of said bows comprising sections pivoted together and having alining apertures and a latch to engage said apertures to rigidly con-

nect said sections, and a shield carried by the bows.

9. In a storm-shield attachment, the combination with front and rear bows and the shield carried thereby, of slats detachably connecting said bows.

10. In a storm-shield attachment, the combination with front and rear bows and the shield carried thereby, of slats detachably connecting said bows and means to lock the slats in position.

11. In a storm-shield attachment the combination of front and rear bows comprising side members, each of which consists of a lever pivoted to a support and formed with an apertured upper end, an upper section pivoted at its lower end at a point intermediate the ends of said lever, and formed with an aperture to register with an aperture in the head thereof, a latch engaging said apertures to lock the sections together, the upper terminals of said upper sections being formed with inwardly-projecting arms, one of which is tubular to receive the opposite arm and means to secure said arms together, and a shield carried by the bows.

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

WILLIAM H. ZEHNER.

Witnesses:

ELMER WOOMER,
AARON NESTER.