

No. 647,931.

Patented Apr. 24, 1900.

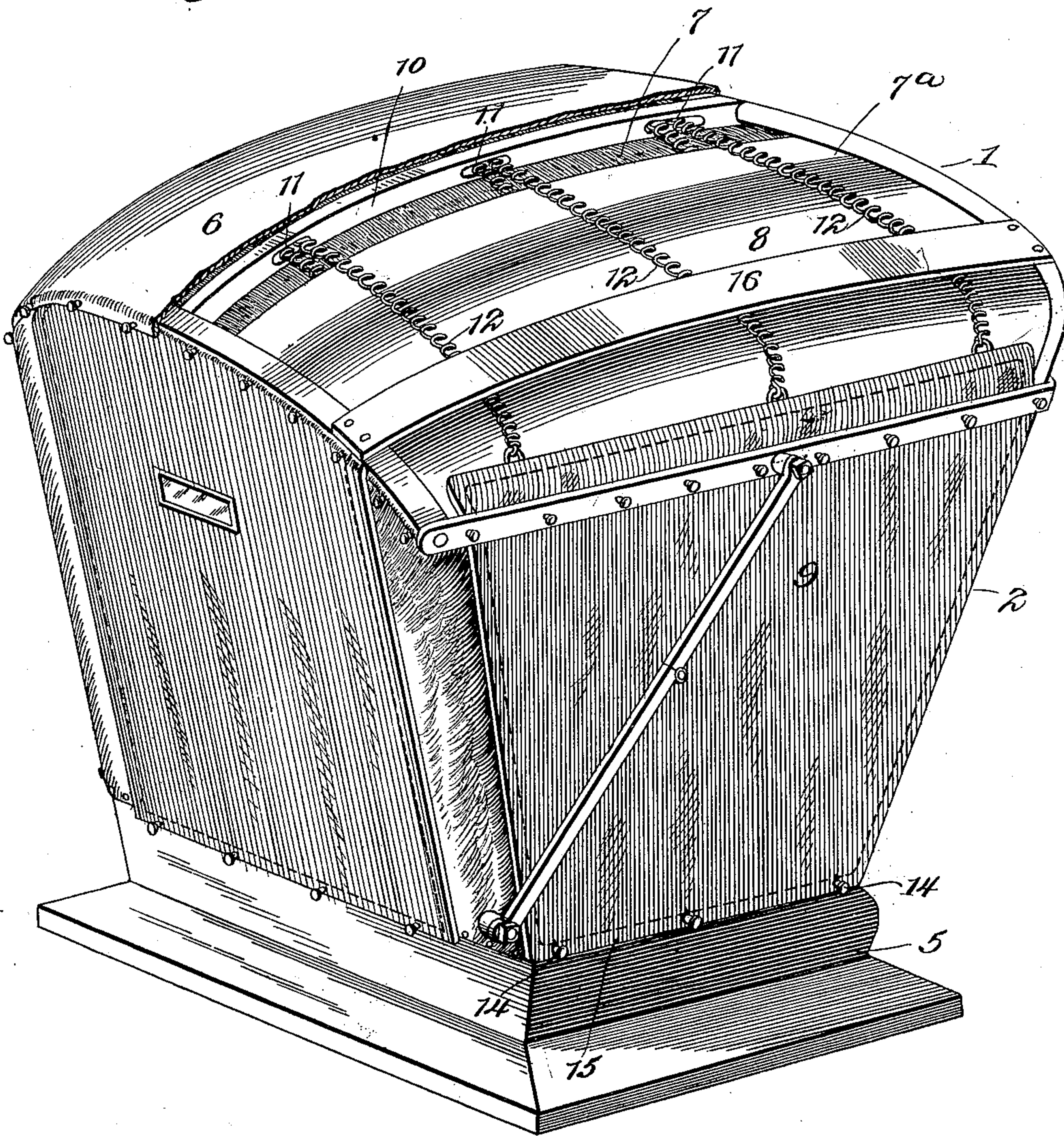
G. W. ATKINS.  
VEHICLE TOP.

(Application filed Mar. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.

*Fig. 1.*



Witnesses

*Howard D. Carr*

*H. J. Riley*

By *this* Attorneys.

*George W. Atkins*, Inventor.

*C. A. Snow & Co.*



No. 647,931.

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G. W. ATKINS.  
VEHICLE TOP.

(Application filed Mar. 20, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 2.

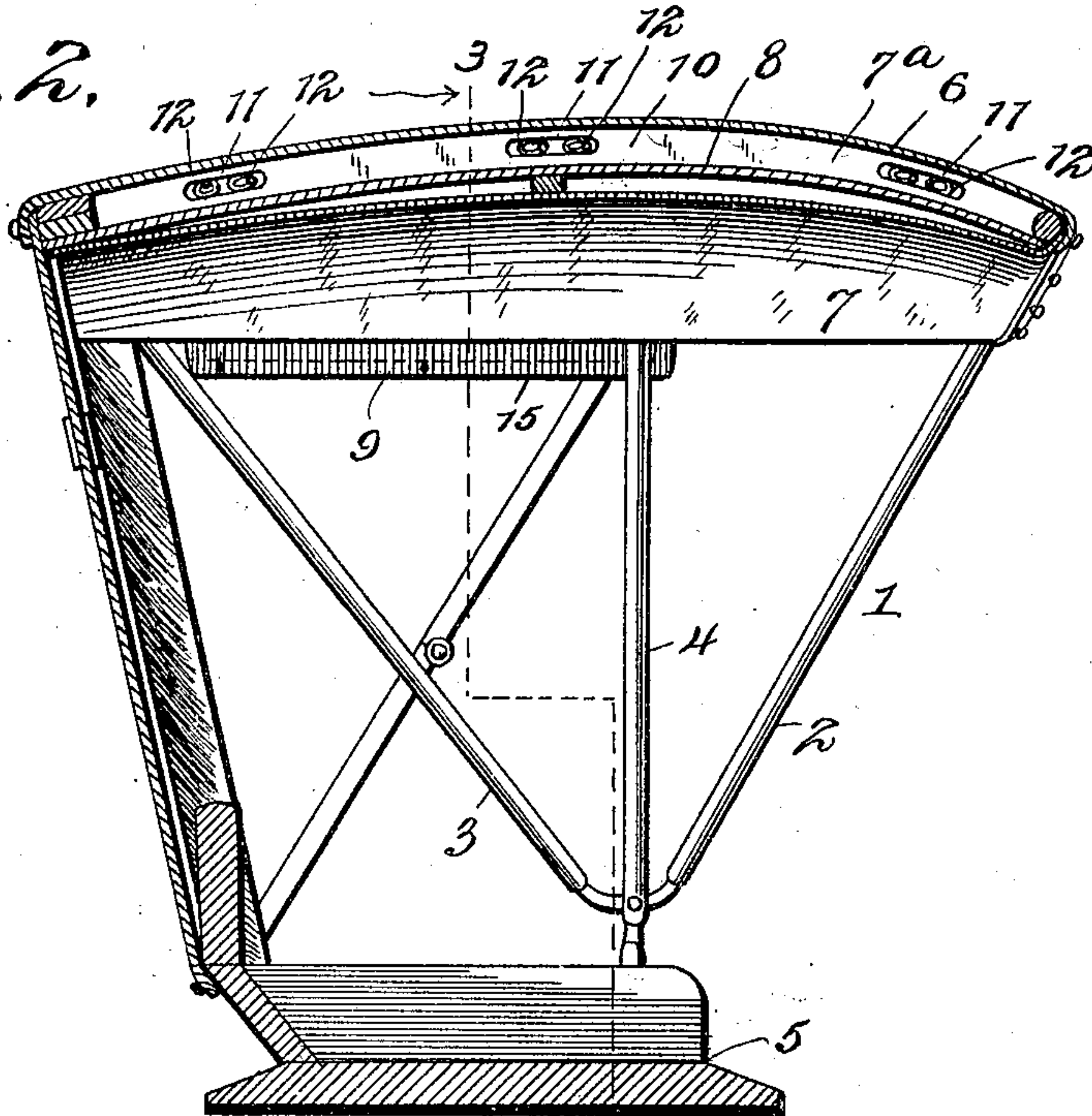
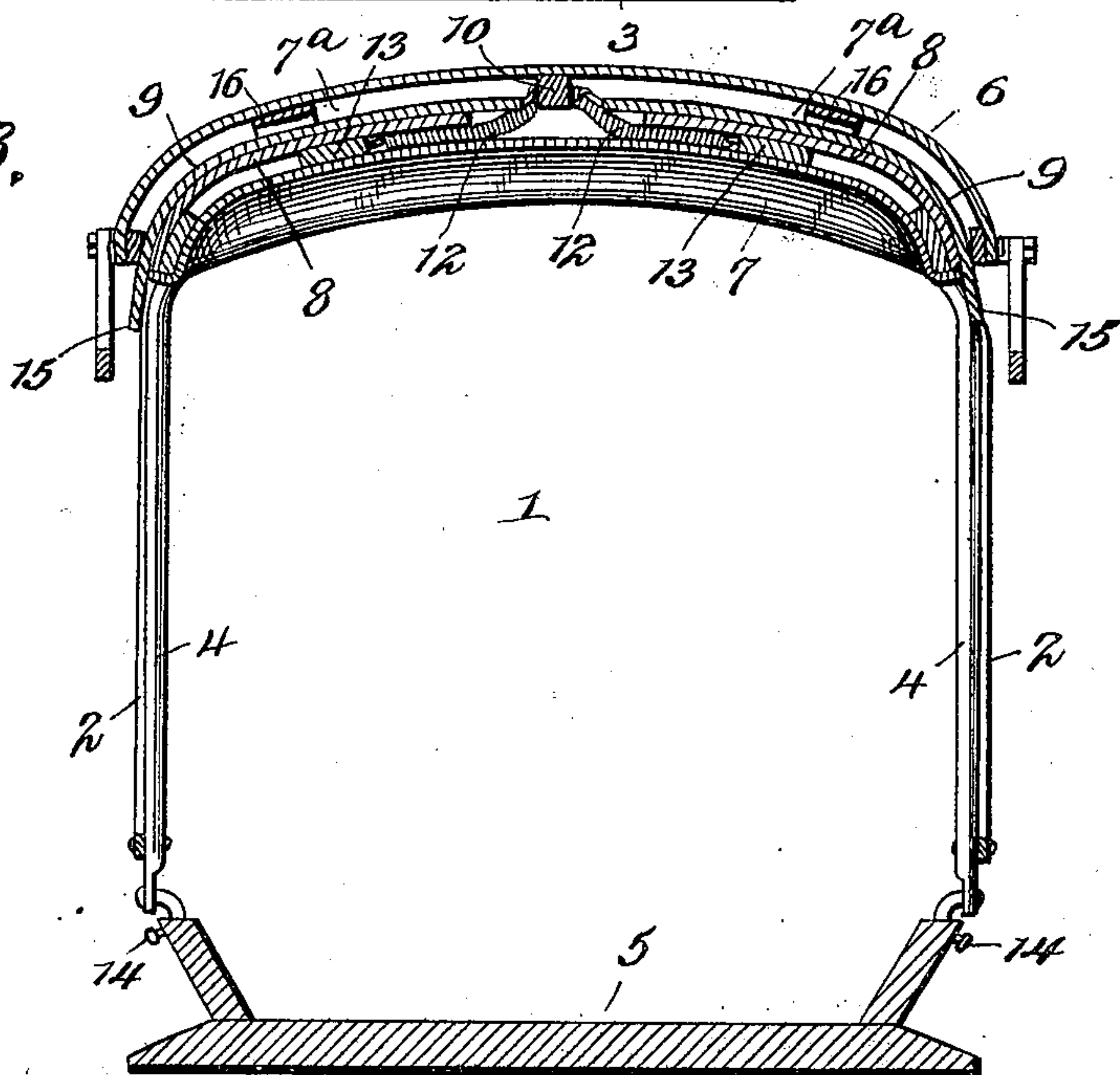


Fig. 3.



Witnesses

Howard D. Orr  
J. H. Riley

By his Attorneys.

George W. Atkins, Inventor.

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

GEORGE W. ATKINS, OF MILTON, DELAWARE.

## VEHICLE-TOP.

SPECIFICATION forming part of Letters Patent No. 647,931, dated April 24, 1900.

Application filed March 20, 1900. Serial No. 9,428. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. ATKINS, a citizen of the United States, residing at the town of Milton, in the county of Sussex and State of Delaware, have invented a new and useful Vehicle-Top, of which the following is a specification.

The invention relates to improvements in vehicle-tops.

One object of the present invention is to improve the construction of the tops of buggies, carriages, wagons, and analogous vehicles and to enable the curtains to be readily operated from the interior of the vehicle to open and close them.

A further object of the invention is to enable the curtains of a vehicle-top to remain on the same at all times and to arrange them in convenient position for instant use.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a carriage-top constructed in accordance with this invention, a portion of the cover being removed to illustrate the arrangement of the springs and the curved plates which form the guides and supports for the side curtains. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view on the line 3 3 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a drop-top for carriages provided with front, rear, and middle bows 2, 3, and 4, which are hinged at opposite sides of a seat 5 in the usual manner and which are adapted to swing forward and rearward to raise and lower the top 1, as will be readily understood. The top 1 is provided with the usual outer cover 6 and the inner lining 7, and it has curved plates 8, of sheet metal or other suitable material, mounted within the top, at opposite sides of the center of the same, and conforming to the configuration of the said top. The plates 8, which are curved longitudinally and transversely, are mounted upon the said bows and are spaced from the cover 6 to provide ways 7<sup>a</sup> for the side cur-

tains 9, and they are adapted to support and guide the side curtains, which when open or raised are arranged upon the upper faces of the plates, as clearly illustrated in Fig. 3 of the accompanying drawings.

The side curtains when raised by the means hereinafter described have their inner edges abutting against or arranged contiguous to a central rib or bar 10, which is provided near its center and ends with openings 11 for coiled springs 12. The coiled springs 12 are secured at their outer ends to the upper edges of the side curtains, and they extend through the openings of the central rib or bar 10, as clearly shown in Fig. 2. The inner portions extend beneath and are interposed between the curved plates and the lining 7, being secured to longitudinal side ribs or bars 13. The outer portions of the coiled springs are adapted to be drawn over the upper face of the curved plates, as clearly shown in Fig. 1 of the accompanying drawings, when the side curtains are drawn downward, and the said springs are preferably composed of flattened coils in order to arrange them compactly between the plates and the cover 6. The side curtains are provided at their lower edges with openings or eyelets and are engaged with buttons 14 of the seat to secure them in their closed position. When the lower edges of the side curtains are unbuttoned and released, the springs will draw the said curtains upward and return them to the position illustrated in Fig. 3 of the drawings. The lower edges 15 project sufficiently beyond the top 1 when the side curtains are raised to enable them to be readily grasped by the occupant of the vehicle, and the said side curtains may be instantly drawn down and secured. By this construction the side curtains are always in position for instant use, and they are protected when not in use by being arranged in the ways of the vehicle-top.

The cover 6 is supported by longitudinal strips 16, of sheet metal or other suitable material, and the improved carriage-top presents the appearance of an ordinary carriage-top. If desired, the back curtain may be constructed similar to the side curtains, and longitudinal springs may be provided in addition to the transversely-disposed springs shown in Fig. 1. When the back curtain is con-



structed in this manner, a suitable space or way will be provided for the reception of the same and the springs for actuating it.

It will be seen that the carriage-top is simple and comparatively inexpensive in construction, that it presents the appearance of an ordinary carriage-top, and that the side curtains when not in use are concealed and protected and are arranged in convenient position, so that they may be instantly drawn down to their closed position. It will also be apparent that the improvements are readily applicable to all kinds of carriages, wagons, and analogous vehicles.

What is claimed is—

1. A carriage-top provided with curved plates concealed within it and spaced from the cover to provide ways and forming guides, the side curtains supported by and guided on the curved plates, and the transversely-disposed coiled springs secured to the top and connected with the upper edges of the side curtains and adapted to draw the same upward, and means for securing the curtains in their closed positions, substantially as described.

2. A carriage-top provided with a curved plate concealed within it and forming a cur-

tain support and guide, a curtain adapted to be raised and lowered and arranged to move over the said plate, and coiled springs secured to the top and to the upper edge of the curtain and arranged longitudinally of the line of movement of the same, substantially as described.

3. A carriage-top provided with a central rib or bar having openings, plates concealed within the carriage-top and conforming to the configuration of the same and forming curtain guides or supports, the side curtains arranged to move over the plates, and the transversely-disposed coiled springs extending through the openings of the central rib or bar, and having their outer portions arranged at the upper faces of the plates and connected with the curtains, the inner portions of the springs being secured to the top beneath the plates, substantially as described.

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

GEORGE W. ATKINS.

Witnesses:

JOHN B. WELCH,

HENRY E. BENNINGTON.