

No. 726,323.

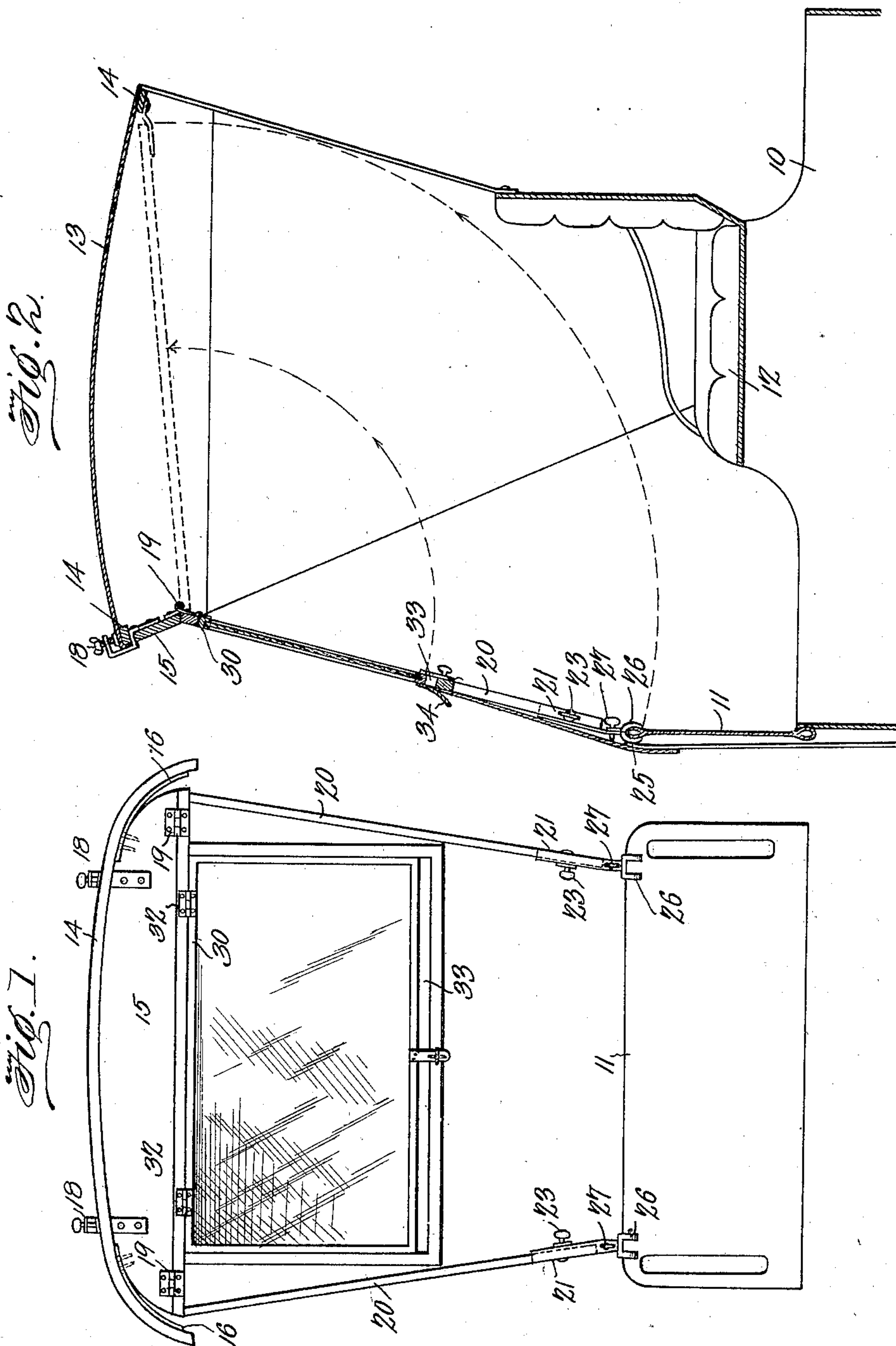
PATENTED APR. 28, 1903.

A. E. METZGER.
STORM SHIELD FOR VEHICLES.

APPLICATION FILED JAN. 22, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3.

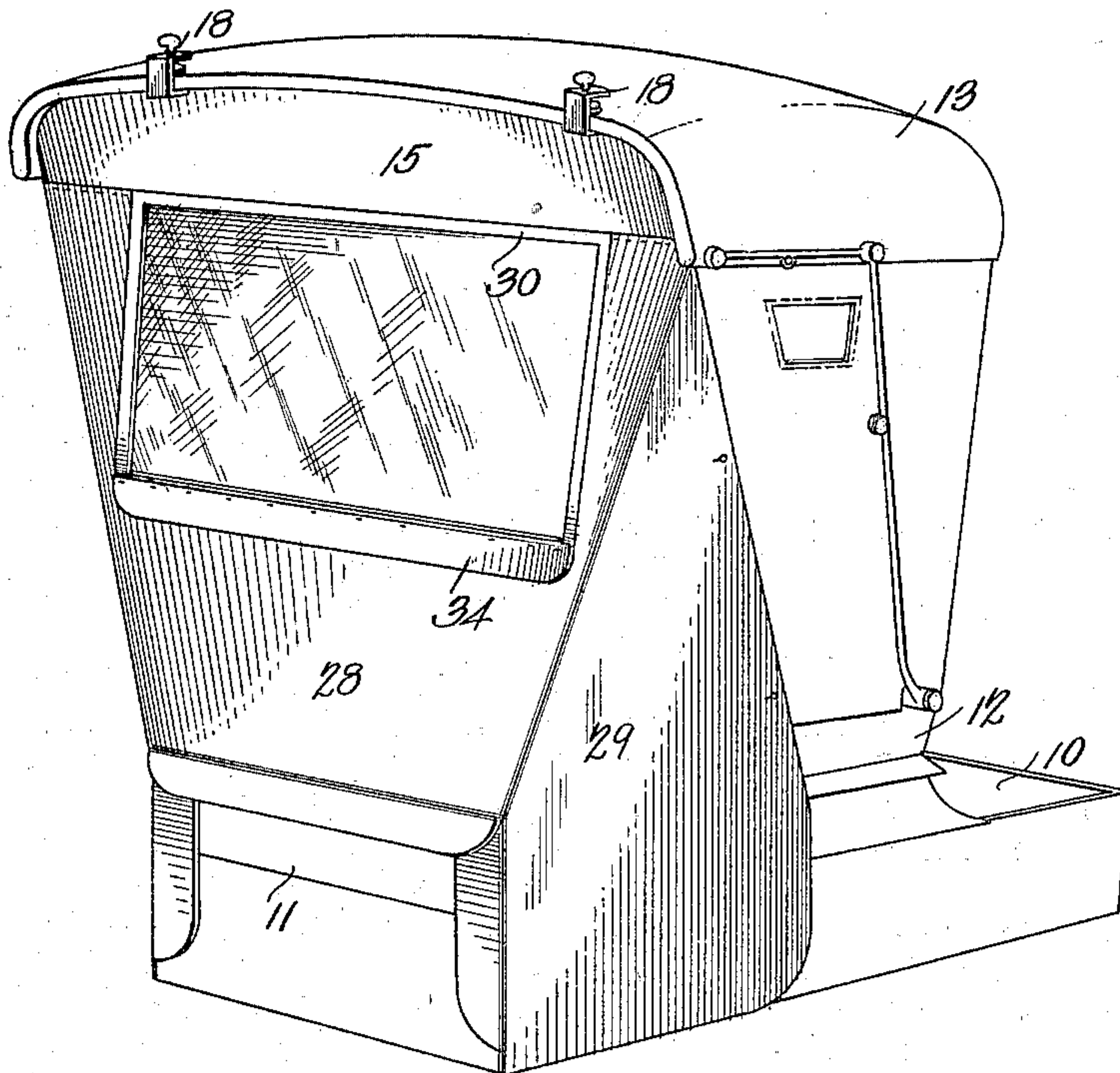


Fig. 4.

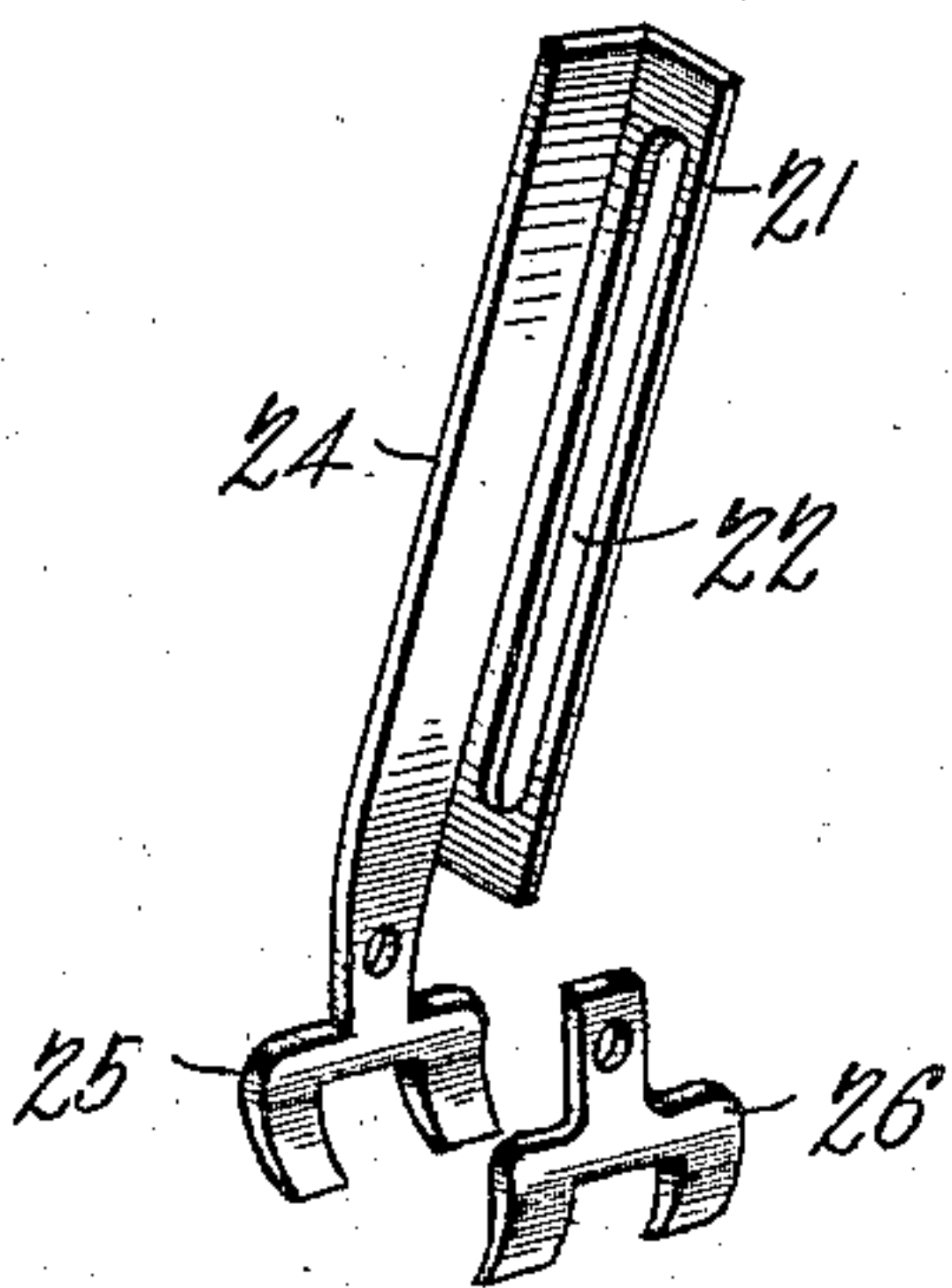
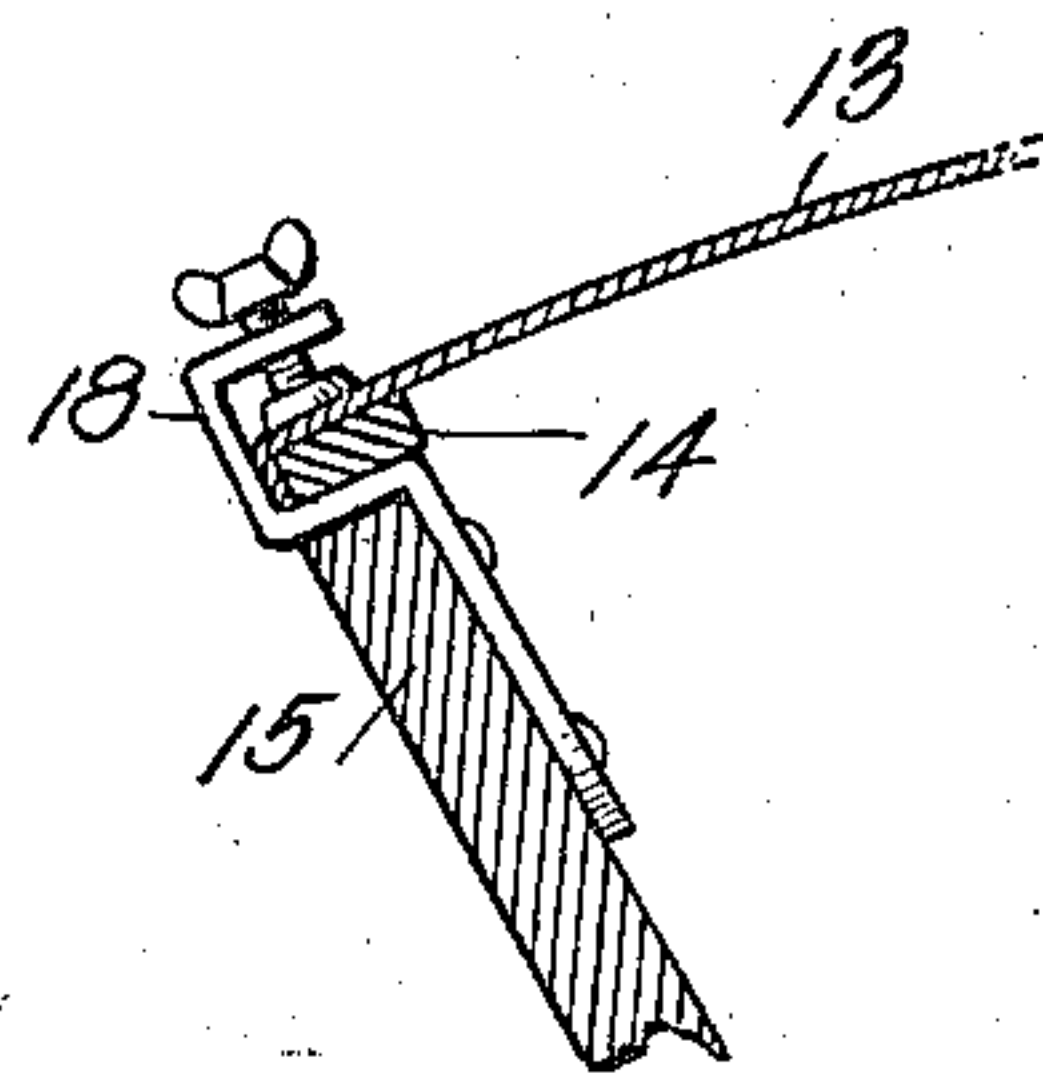


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALVAH EUGENE METZGER, OF CLYDE, OHIO.

STORM-SHIELD FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 726,323, dated April 28, 1903.

Application filed January 22, 1903. Serial No. 140,165. (No model.)

To all whom it may concern:

Be it known that I, ALVAH EUGENE METZGER, a citizen of the United States, residing at Clyde, in the county of Sandusky and State of Ohio, have invented a new and useful Storm-Shield for Vehicles, of which the following is a specification.

This invention relates to attachments to vehicles for protecting the occupants from the weather, and has for its object the production of a simply-constructed and easily applied and operated device which may be adjusted to any vehicle-top and foldable therewith and without the necessity for removing any part; and the invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a rear elevation of the improved device attached to a dashboard and a portion of the buggy-top. Fig. 2 is a longitudinal sectional elevation of buggy-top with the improvement applied. Fig. 3 is a perspective view of the body and foldable top of a buggy with the improved device applied. Fig. 4 is a perspective view of the parts forming the clamping means between the dashboard and frame, and Fig. 5 is a similar view of the clamping means between the head-frame and the buggy-top.

The improved device may be applied to any style of folding-top buggy or carriage, and for the purpose of illustration it is shown applied to a conventional form of buggy body and top, 10 representing the body; 11, the dashboard; 12, the seat; 13, the folding top, and 14 the "bows" or frame.

The improved device consists of an upper frame-section constructed to fit the front upper part of the top 13, a foldable section extending between the upper section and the dashboard, a movable sash member within the foldable section, and flexible curtains, preferably of waterproof material, foldable with the foldable section. The upper frame-section is indicated at 15, and conforms substantially to the inner upper part of the buggy-top beneath the forward bow 14, and will be provided with expansion-springs 16, one on

each side, the springs filling any gap which may occur between the upper frame-section and the bow 14. The upper frame-section 15 and the springs 16 will be covered with expansible fabric, such as rubber cloth, so that when placed in position a smooth surface will at all times be presented and conforming to the remainder of the carriage-top. The upper frame-section 15 will be detachably but firmly connected to the front bow 14, as by screw-clamps 18, by which means the frame-section is not only securely supported, but at the same time will be in position for ready detachment when the shield is not required.

Movably connected to the lower edge of the upper frame-section 15, as by hinges 19, is a foldable frame-section 20, the lower end of this latter frame-section provided with clamping means, whereby it may be detachably connected to the dashboard. This clamping means is shown more fully in Fig. 4, and consists in plates 21, one at each side and each provided with a longitudinal slot 22. The side members of the foldable frame-section are secured to the plates 21 by clamp-screws 23, passing through the slots into the frame members, thus providing for the longitudinal adjustment of the foldable frame-section to adapt the device to different-sized vehicle-tops. Each of the plates 21 is provided with a shoulder 24 at right angles thereto to engage one of the sides of the members of the frame 20 to increase the "grip" of the plate and prevent lateral movement. Each of the plates 21 24 is provided with spaced jaw members 25 26, adapted to enclose opposite sides of the dashboard-frame and be clamped thereon, as by thumb-screws 27, as shown.

The foldable frame-section will be covered with waterproof fabric 28 of the usual material employed for buggy or carriage curtains, and side curtains 29 of the same material will also be provided between the sides of the foldable frame-section and the front bows 14 and body 10 and detachably connected thereto, as by the usual buttons or straps.

The sash member above noted is represented at 30 and is provided with the usual transparent filling and preferably hinged, as at 32, by its upper edge to the foldable frame-section 20, so that the sash can be opened

when required. The lower edge of the sash does not reach to the frame 20, leaving an aperture 33 for the passage of the driving-reins, the aperture being covered exteriorly
5 by a weather-flap 34.

The foldable frame-section 20, with the sash attached, when detached from the dashboard is foldable into the interior of the buggy or carriage top, as represented by dotted lines
10 in Fig. 2, and the top can then be folded down in the usual manner, as the presence of the storm-shield attachment does not interfere with the ordinary operation of the vehicle-top. By this simple arrangement an ordinary foldable top buggy or carriage can be
15 very quickly transformed into a closed cab or carriage and the occupants thoroughly protected from the weather, while at the same time the presence of the attachment does not interfere with the folding of the top in the
20 ordinary manner. Then, again, when desired the sash member alone may be opened and fastened open to the interior of the buggy or carriage top and the remainder of the attachment retained in its closed position. This
25 latter arrangement may be employed when traveling with the wind in the rear or "quartering" from the rear and to protect the occupants from the full force of the wind, while at the same time providing ample ventilation. The sash member also provides ample
30 light to the vehicle, while at the same time permitting the driver to look out for obstructions and to have full control of the horse or horses. The sash can be very quickly raised,
35 if required, if it becomes necessary for the driver to look out while traveling through crowded thoroughfares. This makes a very simple inexpensive attachment, easily applied, and adapted to any style or size of folding-top vehicle, readily attached or detached,
40 and foldable with the vehicle-top.

The frame members may be of any suitable material, but will generally be wood, with the
45 clamp members and springs of metal.

In the foregoing drawings and accompanying description is embodied the preferred form of the invention; but the invention is not necessarily limited thereto, as modifications may be made therein without departing from the principle of the invention or
50 sacrificing any of its advantages, and the right is therefore reserved of making all the changes which may fall within the scope of the invention.
55

Having thus described my invention, what I claim is—

1. A vehicle storm-shield consisting of an upper frame-section adapted for detachable
60 connection to the vehicle-top, a foldable frame-section movably connected to said upper frame-section and provided with means for detachably connecting it to the dashboard, and flexible curtains connected to said
65 foldable frame-section and foldable therewith, substantially as described.

2. A vehicle storm-shield consisting of an

upper frame-section adapted for detachable connection to the vehicle-top, a foldable
70 frame-section movably connected to said upper frame-section, slotted bars adjustably connected to said foldable frame-section and having clamps for detachably connecting them to the dashboard, substantially as described.
75

3. A vehicle storm-shield consisting of an upper frame-section adapted for detachable connection to the vehicle-top, a foldable
80 frame-section movably connected to said upper frame-section, bars provided with longitudinal slots and with longitudinal recesses supporting said foldable frame-section, clamping means carried by said bars and adapted for detachable connection to the dashboard,
85 and clamp-bolts operating through the slots in said bars and providing means for adjustably coupling said foldable frame-section to the dashboard, substantially as described.

4. A vehicle storm-shield consisting of an upper frame-section conforming substantially
90 to the front upper portion of the vehicle-top, expansion-springs between said upper frame-section and vehicle-top frame, an expansible flexible covering to said upper frame-section and springs, a foldable frame-section movably connected to said upper frame-section
95 and adapted for detachable connection to the dashboard, and flexible curtains connected to said foldable frame-section and foldable therewith, substantially as described.
100

5. A vehicle storm-shield consisting of an upper frame-section conforming substantially
105 to the front upper portion of the vehicle-top, clips extending from said frame-section and embracing the vehicle-top frame, clamp-screws disposed to connect said clips detachably to said vehicle-top frame, and a foldable
110 frame-section movably connected to said upper frame-section, and adapted for detachable connection to the dashboard, substantially as described.

6. A vehicle storm-shield consisting of an upper frame-section adapted for detachable
115 connection to the vehicle-top, a foldable frame-section movably connected to said upper frame-section and adapted for detachable connection to the dashboard, said foldable frame-section having an opening therein to receive a sash-frame, said sash-frame being
120 movably mounted in said opening and having its lower edge spaced from the lower edge of said opening to form an aperture for the driving-reins, an exteriorly-disposed weather-flap covering said aperture, and flexible curtains connected to said foldable frame-section.
125

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

ALVAH EUGENE METZGER.

Witnesses:

H. G. GIBLINS,

JAMES H. DAVENPORT.