J. E. THOMPSON.

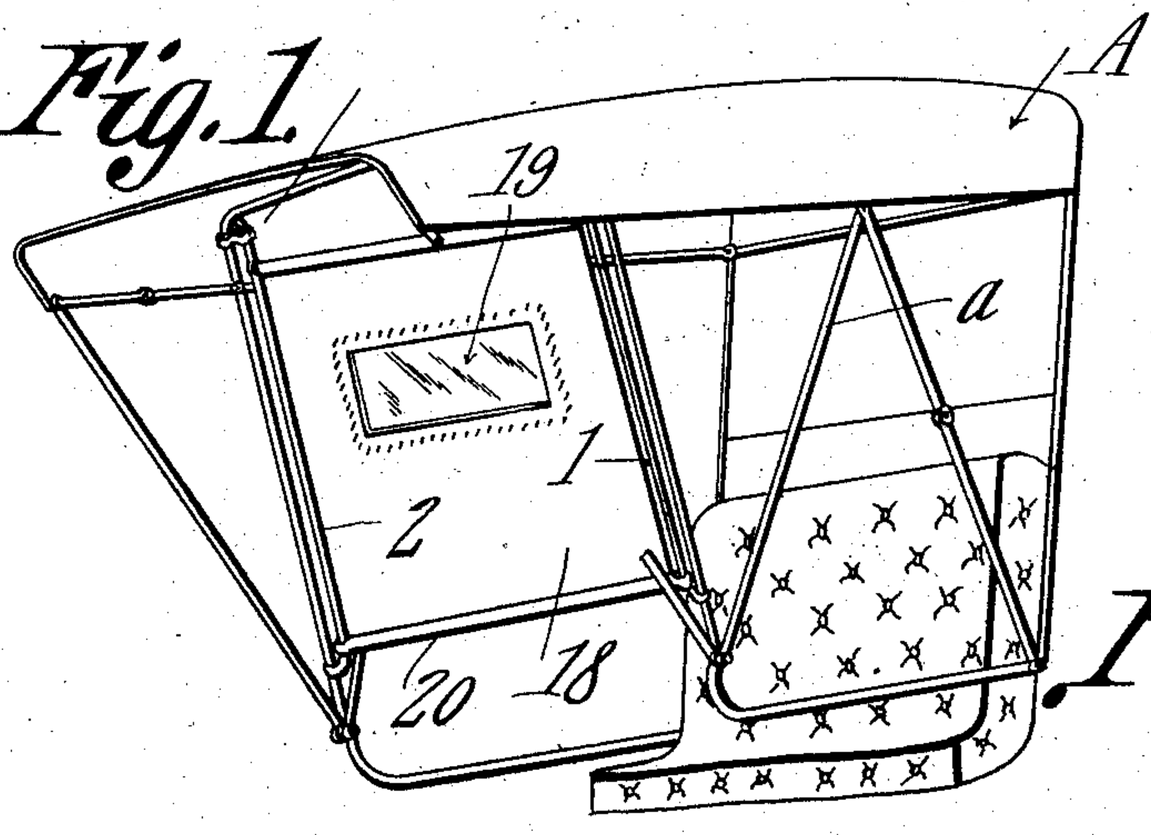
STORM SHIELD FOR VEHICLES.

APPLICATION FILED MAR. 9, 1910.

973,585.

Patented Oct. 25, 1910.

Fig. 1.



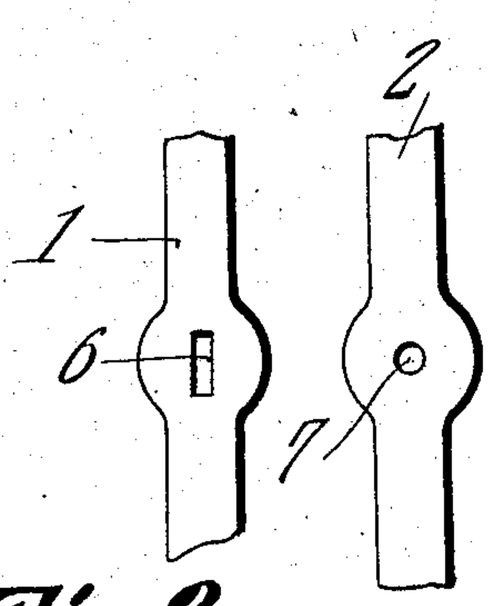


Fig. 3.

Fig. 4.

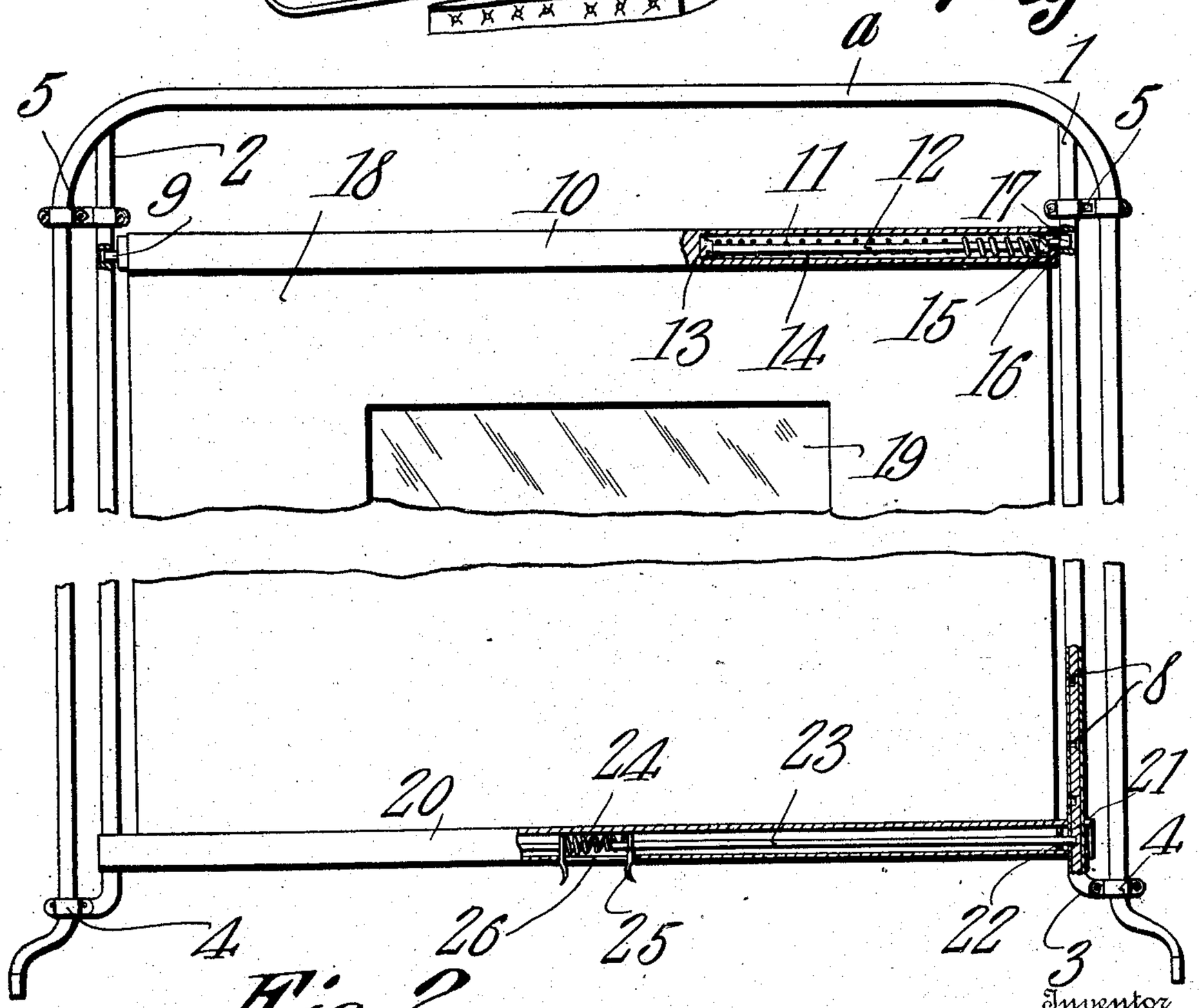


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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STORM-SHIELD FOR VEHICLES.

973,585. Specification of Letters Patent. Patented Oct. 25, 1910.

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To all whom it may concern:

Be it known that I, JAMES E. THOMPSON, a citizen of the United States, residing at Elkton, in the county of Huron and State of Michigan, have invented a new and useful Storm-Shield for Vehicles, of which the foling is a specification.

This invention relates to storm shields for use upon automobiles, carriages, etc., and is more particularly designed for use in connection with foldable vehicle tops.

One of the objects of the invention is to provide a shield which can be readily connected to the bows of a vehicle top and which, when not in use, can be stored in a small space where it is out of the way of the occupant of the vehicle.

Another object is to provide a shield which can be readily drawn into position in front of the occupant of the vehicle and securely held, means being provided whereby the said shield, when unlocked, will be automatically returned to its raised position.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of a portion of a vehicle top and showing the present improvements applied thereto, the shield being shown in its lowered position and one of the bows of the top being removed. Fig. 2 is an enlarged view partly in front elevation and partly in section of the shield attachment and the bow to which it is secured, portions of the attachment and bow being removed. Fig. 3 is an inner elevation of a portion of one of the guide rods of the attachment. Fig. 4 is a similar view of a portion of the opposed guide rod.

Referring to the figures by characters of reference A designates a foldable vehicle top mounted as ordinarily upon bows *a*. The attachment constituting the present invention is especially designed to be attached to the second bow from the front of the top and consists of guide rods 1 and 2 each of which has its lower end outturned as indicated at 3 and detachably secured to the bow *a* in any preferred manner as by means of a clamp 4. The upper end of each of the guide rods 1 and 2 is also preferably detachably connected to the bow *a* by means of a clamp 5 or in any other preferred manner, the two rods 1 and 2 being thus held parallel and close to the sides of the bow. One of the rods, 1, has a rectangular opening 6 therein adjacent its upper end, and the other bow, 2, is provided with a round opening 7 adjacent its upper end. A series of notches 8 is preferably formed within each of the rods 1 and 2 adjacent its lower end and for the purpose hereinafter set forth.

The opening 7 is designed to receive a trunnion 9 extending from one end of a roller 10. The other end portion of this roller is hollow as indicated at 11 and has a stem 12 arranged centrally therein, the said stem being formed with a base 13 which may be secured to the inner end of the tubular portion of the roller in any suitable manner. A spring 14 is coiled about the stem 12 and is secured at one end to the base 13 while its other end is attached to an enlargement 15 formed at the inner end of a shank 16 adapted to rotate within the adjoining end of the roller. This shank has an angular head 17 which is removably mounted within the opening 6. It will be apparent, therefore, that when the roller is turned in one direction, the spring 14 will be placed under stress and will act, when the roller is released, to return said roller to its initial position.

The shield portion of the attachment has been indicated at 18 and may be formed of leather, canvas, or any other suitable material, and is provided, at a desired point, with a transparent portion 19 of suitable flexible material. This shield is adapted to be wound upon the roller under ordinary conditions and the lower edge of the shield is secured to a tube 20. Openings 21 extend through the end portions of the tube and the rods 1 and 2 project through these openings. It will be apparent therefore that as the shield is adjusted upwardly or downwardly, the tube 20 will be guided along the rod. Guide plugs or partitions 22 are arranged within the tubes and support locking rods 23, the outer ends of which normally bear against the guide rods 1 and 2. A spring 24 is interposed between the inner ends of these rods 23 and serves to press them apart, each of said inner ends being provided with a finger piece 25 which ex-

tends downwardly through a slot 26 in the bottom of the tube.

When it is desired to attach this device to a vehicle top, the rods 1 and 2 are first inserted through the openings 21 in tube 20 and the roller is then mounted between the rods and with the trunnion 9 and the head 17 in engagement with them. It is to be understood that when the roller is thus placed in position the shield 18 is wound thereon. After the parts have been thus assembled the rods 1 and 2 are fastened to the bow *a* by means of the clamps 4 and 5 and the said device is then ready for use. By pulling downward on the tube 20, it will be caused to slide along the rods 1 and 2 and the shield 18 will be unrolled from the roller 10, at the same time placing the spring 14 under stress. After the shield has been completely lowered the spring pressed rods 23 will automatically spring into engagement with the notches 8 alining therewith. Obviously by providing a series of notches the lower end of the shield can be held at a desired elevation. When it is desired to dispense with the use of the shield it is merely necessary to retract the rods 23 from the recesses 8 and the spring 14 will promptly slide the rod upwardly and at the same time roll the shield on the roller 10.

It will be seen that this device when not in use is entirely out of the way and it can be quickly lowered into position to protect the occupant of the vehicle.

It is to be understood that the space between the roller and the vehicle top may be closed by a flap or the like.

Various changes can of course be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

1. An attachment for vehicles including guides, a spring controlled roller supported by the guides, a shield normally wound upon the roller, a tubular member secured to the shield and slidably mounted on the guides, and a spring controlled locking device housed within said member and movable into engagement with a guide to lock the shield against movement.

2. An attachment for vehicles including guides, means for securing the same to a bow of a vehicle top, a spring controlled roller supported by the guides, a shield normally wound thereon, an element secured to the shield and slidably mounted on the guides, and spring controlled locking devices carried by said element and adapted to automatically engage the guides to lock the shield when unwound from the roller.

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

JAMES E. THOMPSON.

Witnesses:
OSCAR ROGERS,
M. L. ACKERMANN.