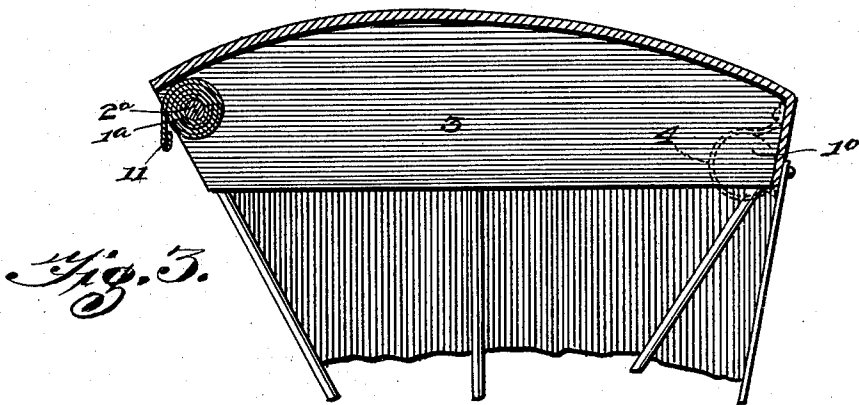
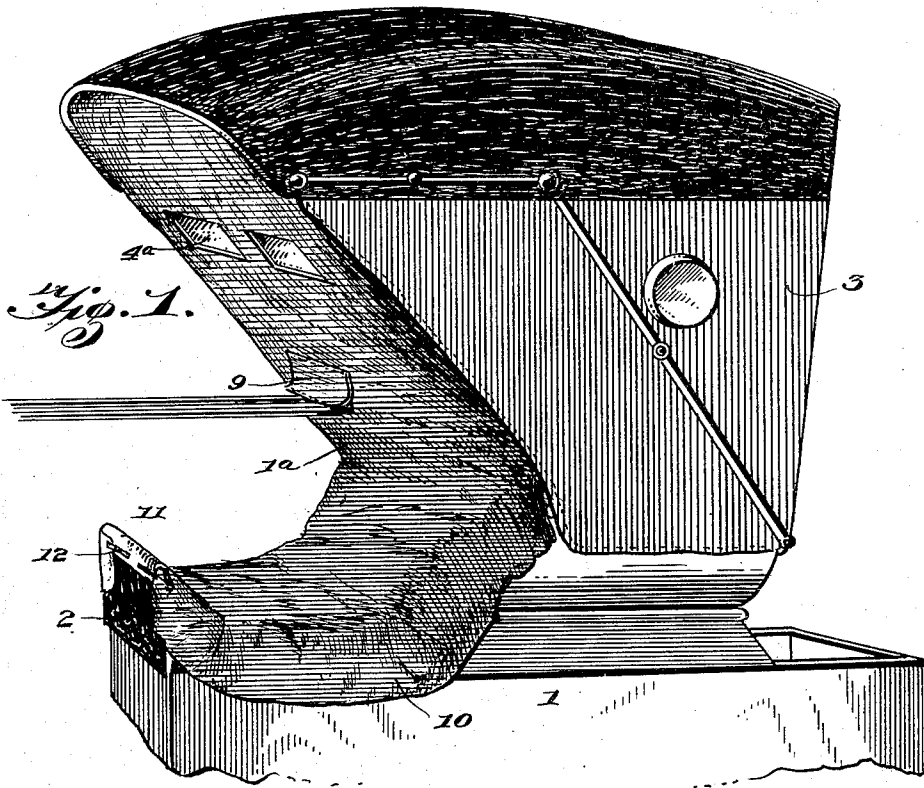


J. W. WILLIAMS.  
COMBINED STORM APRON AND SUNSHADE.

(Application filed Mar. 6, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
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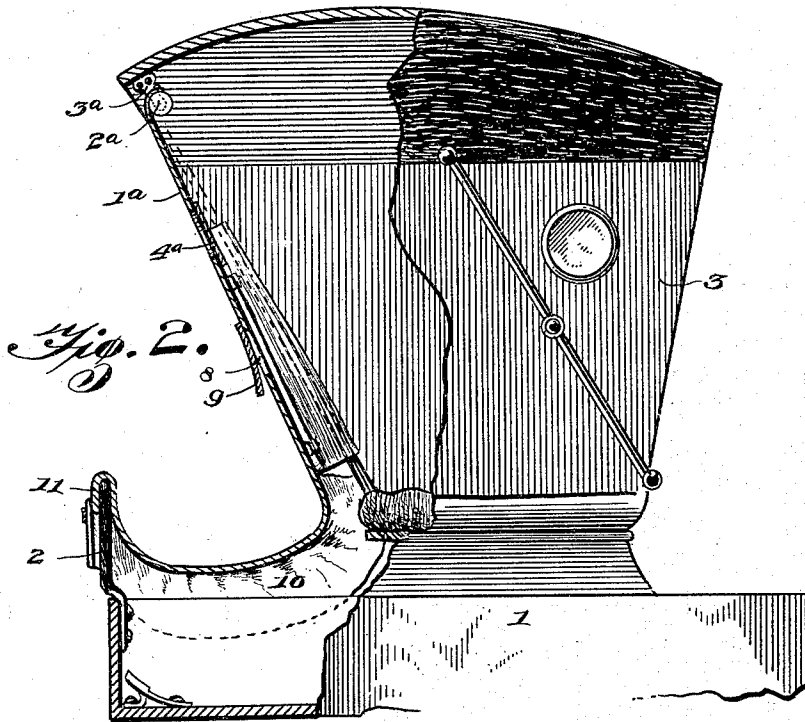


Fig. 2.

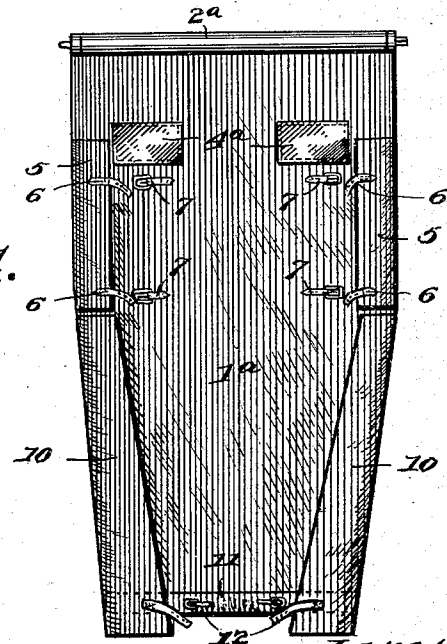


Fig. 4.

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# UNITED STATES PATENT OFFICE.

JOHN W. WILLIAMS, OF BYRON, MICHIGAN.

## COMBINED STORM-APRON AND SUNSHADE.

SPECIFICATION forming part of Letters Patent No. 686,016, dated November 5, 1901.

Application filed March 6, 1901. Serial No. 50,095. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. WILLIAMS, a citizen of the United States, residing at Byron, in the county of Shiawassee and State of Michigan, have invented a new and useful Combined Storm - Apron and Sunshade, of which the following is a specification.

This invention relates to a combined storm-apron and sunshade; and the object of the same is to provide a simple and effective device for completely covering the front portion or open side of a buggy or other vehicle top, as well as the body in advance of the same, so that the occupant of a vehicle may be fully protected from rain, snow, and mud-splashing, and also to have the improved device mounted on a spring-roller removably mounted at the upper front portion of the top, so that it may be conveniently rolled up when in disuse and as conveniently pulled down and disposed in operative position when its service is required and capable of being applied at the back of the top and be utilized as a sunshade.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a buggy-body, in part, and the top, showing the improved device applied thereto in operative position. Fig. 2 is a sectional elevation of the body and top and the improved device in operative position. Fig. 3 is a longitudinal vertical section of a portion of the buggy-top, showing the improved device rolled up and also applied at the back in dotted lines for use as a sunshade. Fig. 4 is a detail elevation of the improved device looking toward the inner side of the same.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a vehicle-body, in this instance representing that of a buggy, having a dash 2 and top 3 of any ordinary or preferred form, with an open front side, and adapted to let down, as usual, when not required to protect the occupant or occupants of the vehicle. The improved device can be applied to any top to which it may be applicable, and the showing in the accompa-

nying drawings is to illustrate a simple practical application of the same.

The improved device is in the form of an elongated apron or shield, preferably made up from oil-cloth or other waterproof material, and comprises a body 1<sup>a</sup> and a spring-roller 2<sup>a</sup>, to which it is attached, the said roller being removably mounted in suitable brackets 3<sup>a</sup>, similar to those of curtain-rollers now in use.

The improved device may be used as a front cover, as shown by Figs. 1 and 2, or be held in the usual back-curtain straps 4, as shown in dotted lines in Fig. 3, for use as a rear sunshade, and in some instances it may also be used for a side sun-shield and be held against the upper inner portion of the top on either side. Where a top is fully provided with curtains, the improved device can remain at the front of the same ready for instant use, as indicated by Fig. 3. The upper portion of the body is formed with two transversely-alined sight-openings covered by transparent plates or panels 4<sup>a</sup>, and at opposite sides adjacent to the said panels are elongated returned flaps 5, each having connecting-straps 6 on the inner edge of the same to detachably engage buckles or analogous devices 7, secured to adjacent portions of the body. These flaps 5 are for the purpose of securing the upper portion of the device around or to the opposite side portions of the front bow of the top, so as to completely close in the front portion of the latter. A slot 8 is also formed in the upper portion of the body at the right side for free passage therethrough of driving-reins, and secured to the outer side of the body, to depend over the said slot, is a shield-flap 9, which is wide enough to normally extend considerably below the lower wall of said slot, and thereby provide a practical means for shedding water and prevent entrance of the same through the slot. At the sides of the lower portion of the body are loose folds 10 to fall over the seat-box and front of the body 1<sup>a</sup>, and at its lower end said body is formed with a slip-fold 11, which is secured at its opposite terminals and adapted to removably fit closely over the upper end of the dash 2, as clearly shown, and thus hold the lower portion of the apron in immovable relation to the dash and preserve the slant necessary to pro-

duce a proper shedding of the water at the sides and also maintain a regular suspension of said lower portion of the apron at a suitable elevation above the occupant or occupants of the vehicle. To insure a positive retention of the apron with the dash, the loose folds 10 are terminally extended beyond the slip-fold 11, so that they may be turned around the opposite edges of the dash and be secured at the front by straps and buckles or like devices 12. When the use of the device is no longer desired, the several fastenings are released, and it is wound on the roller 2<sup>a</sup>, and, as before set forth, may be transferred to the back of the top for use as a sunshade.

The panels 4<sup>a</sup> are made of suitable bendable material, such as celluloid or the like, so that no obstruction will be interposed by the same in rolling the improved device, and the flaps and folds are primarily arranged to lie in close to the inner side of the apron, so as to cause the latter to roll compactly and avoid the formation of as much bulk projection as possible. These celluloid or similar panels will not break by constant rolling and unrolling, and by this means the closure of the top front will be made complete and give clear vision to the driver. Moreover, the curtain can be moved to vary the vertical elevation of the panels 4<sup>a</sup> to suit the height of different persons occupying the seat behind the apron. The apron can also be pulled down at times a portion of its length to provide a front sunshade when facing the sun, and thus shield the eyes of the occupant or occupants from the unpleasant glare and heat of the sun. The improved device can also be used as a hood for covering portions of the vehicle while standing in storage or in the place of repository therefor, and particularly useful in protecting the upholstery of the seat and the front portion of the vehicle-body. The side folds and flaps will be preferably seamed at their folding-lines to reinforce the same and prevent cracking or breaking by continued use and always insure folding of the same point or along the same line,

and thus the side folds will more certainly retain their positions when the improved device is adjusted and disposed for use as an apron and shield, as shown by Fig. 1. Many other advantages will be apparent to those using the improved device, and, though the preferred form of the same has been shown and described, changes in the form, size, proportions, and minor details may be resorted to without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is—

In a device of the class specified, an elongated flexible waterproof apron adapted to completely cover the front of the vehicle from the dashboard to the top and comprising a body portion 1<sup>a</sup> of a width about equal to the width of the vehicle to which it is to be attached, an end slip-fold 11 adapted to fit over the dashboard, upper side flaps 5 having attaching devices for securing them to the vehicle-top, lower side flaps 10 separated from the side flaps 5 and forming loose folds adapted to fall over the front side portions of the vehicle-top, all of such flaps having seamed connections with the main body of the apron to reinforce the same and insure flat folding without breaking, the lower ends of the side flaps 10 being longitudinally extended beyond the slip-fold to be turned over the ends of the dashboard, devices for securing said ends in position, transparent bendable panels in the upper portion of the apron, and a spring-roller adapted to be removably mounted in the upper front portion of a vehicle-top and on which the apron is rolled when not in use, the said roller being applicable to other portions of the vehicle-top, substantially as specified.

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

JOHN W. WILLIAMS.

Witnesses:

L. F. LUTZ,

H. P. CHAMBERS.